

Network Working Group
Internet-Draft
Intended status: Standards Track
Expires: September 12, 2019

P. Faltstrom
Netnod
March 11, 2019

IDNA2008 and Unicode 12.0.0
draft-faltstrom-unicode12-00

Abstract

This document describes the changes between Unicode 6.3.0 and Unicode 12.0.0 in the context of IDNA2008. Some additions and changes have been made in the Unicode Standard that affect the values produced by the algorithm IDNA2008 specifies. Although IDNA2008 allows adding exceptions to the algorithm for backward compatibility; however, this document does not add any such exceptions. This document provides the necessary tables to IANA to make its database consistent with Unicode 12.0.0.

To improve understanding, this document describes systems that are being used as alternatives to those that conform to IDNA2008.

TO BE REMOVED AT TIME OF PUBLICATION AS AN RFC:

This document is discussed on the il8nrp@ietf.org mailing list of the IETF.

Status of This Memo

This Internet-Draft is submitted in full conformance with the provisions of [BCP 78](#) and [BCP 79](#).

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF). Note that other groups may also distribute working documents as Internet-Drafts. The list of current Internet-Drafts is at <https://datatracker.ietf.org/drafts/current/>.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

This Internet-Draft will expire on September 12, 2019.

Internet-Draft

IDNA2008 and Unicode 12

March 2019

Copyright Notice

Copyright (c) 2019 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to [BCP 78](#) and the IETF Trust's Legal Provisions Relating to IETF Documents (<https://trustee.ietf.org/license-info>) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Table of Contents

1.	Introduction	3
2.	Keywords for Requirement Levels	4
3.	Background	4
3.1.	IDNA2008 Documents	4
3.2.	Additional important IDNA2008-related documents	5
3.3.	Deployment	5
4.	Notable Changes Between Unicode 6.2.0 and 12.0.0	7
4.1.	Changes between Unicode 6.2.0 and 7.0.0	7
4.2.	Changes between Unicode 7.0.0 and 10.0.0	8
4.3.	Changes between Unicode 10.0.0 and 11.0.0	8
4.4.	Changes between Unicode 11.0.0 and 12.0.0	9
5.	U+111C9 SHARADA SANDHI MARK	10
6.	Conclusion	10
7.	IANA Considerations	11
8.	Security Considerations	11
9.	Acknowledgements	11
10.	References	11
10.1.	Normative References	11
10.2.	Non-normative references	12
Appendix A.	Changes from Unicode 6.3.0 to Unicode 7.0.0	15
Appendix B.	Changes from Unicode 7.0.0 to Unicode 8.0.0	18
Appendix C.	Changes from Unicode 8.0.0 to Unicode 9.0.0	19
Appendix D.	Changes from Unicode 9.0.0 to Unicode 10.0.0	20
Appendix E.	Changes from Unicode 10.0.0 to Unicode 11.0.0	21
Appendix F.	Changes from Unicode 11.0.0 to Unicode 12.0.0	23
Appendix G.	Code points in Unicode Character Database (UCD)	

format for Unicode 12.0.0	24
Author's Address	84

[1.](#) Introduction

The current version of Internationalized Domain Names for Applications (IDNA) was initiated in 2008, and despite not being completed until 2010, is widely known as "IDNA2008". It is specified in the series of documents listed in [Section 3.1](#). The IDNA2008 standard includes an algorithm by which a derived property value is calculated based on the properties defined from the Unicode Standard.

When the Unicode Standard is updated, new code points are assigned and already-assigned code points can have their property values changed.

- o Assigning code points can create problems if the newly-assigned code points are compositions of existing code points and because of that the normalization relationships associated with those code points should have been changed.
- o Changing properties for already-assigned code points can create problems if the property change results in changes to the derived property value. This might make an earlier allowed code point whose derived property value is PVALID to then not be allowed anymore if its derived property value changes to DISALLOWED. The problem can also happen the other way around: a code point that was not allowed (and thus is prohibited) can suddenly end up being allowed.
- o Problems can also be created if the properties assigned to those code points are inconsistent with IDNA2008 assumptions about how properties are assigned and/or about how code points with those properties are used or behave.

There was three incompatible changes in the Unicode standard after Unicode 5.2 up to including Unicode 6.0, as described in [RFC 6452](#) [[RFC6452](#)]. The code points U+0CF1 and U+0CF2 had a derived property value change from DISALLOWED to PVALID while U+19DA had a change in

derived property value from PVALID to DISSALLOWED. They were examined in great detail and IETF concluded that the consensus is that no update was needed to [RFC 5892](#) [[RFC5892](#)] based on the changes made to the Unicode standard.

As described in [Section 4](#), more changes have been made to code points between Unicode version 6.0 and 12.0.0 so that the derived property value have been changed in an incompatible way. This document concludes that no exceptions are to be added to IDNA2008 even though there are changes in the derived property value is a result of the changes made in Unicode between version 6.2.0 and 12.0.0.

Further, in 2015, the Internet Architecture Board (IAB) issued a statement [[IAB](#)] which requested the IETF to resolve the issues related to the code point ARABIC LETTER BEH WITH HAMZA ABOVE (U+08A1) that was introduced in Unicode 7.0.0 [[Unicode-7.0.0](#)]. This document concludes that this code point is not to be added to the exception list either. It should be noted that the review on U+08A1 indicated that it is not an isolated case and that a number of PVALID code points of long standing may have similar issues. The problem is described in more detail in a document in progress, [draft-klensin-idna-5892upd-unicode70](#) [[I-D.klensin-idna-5892upd-unicode70](#)]. A fuller resolution of this issue may require future changes to IDNA2008 or additional specifications, but there is insufficient understanding yet of what would constitute the best approach.

[2.](#) Keywords for Requirement Levels

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [BCP 14 RFC2119](#) [[RFC2119](#)] [RFC8174](#) [[RFC8174](#)] when, and only when, they appear in all capitals, as shown here.

[3.](#) Background

[3.1.](#) IDNA2008 Documents

IDNA2008 consists of the following documents. The documents in the set have informal names.

- o Internationalized Domain Names for Applications (IDNA): Definitions and Document Framework [[RFC5890](#)], informally called "Defs" or "Definitions", contains definitions and other material that are needed for understanding other documents in the set.
- o Internationalized Domain Names in Applications (IDNA): Protocol [[RFC5891](#)], informally called "Protocol", describes the core IDNA2008 protocol and its operations. It needs to be interpreted in combination with the Bidi document (described below).
- o The Unicode Code Points and Internationalized Domain Names for Applications (IDNA) [[RFC5892](#)], informally called "Tables", lists the categories and rules that identify the code points allowed in a label written in native character form (called a "U-label"), and is based on Unicode 5.2.0 [[Unicode-5.2.0](#)] code point assignments and additional rules unique to IDNA2008. The Unicode-based rules in [RFC 4892](#) are expected to be stable across Unicode updates and hence independent of Unicode versions. [RFC 5892](#) [[RFC5892](#)]

obsoletes [RFC 3491](#) [[RFC3491](#)], and in particular the use of the tables to which [RFC 3491](#) [[RFC3491](#)] refers.

- o Right-to-Left Scripts for Internationalized Domain Names for Applications (IDNA) [[RFC5893](#)], informally called "Bidi", specifies special rules for labels that contain characters that are written from right to left.
- o Internationalized Domain Names for Applications (IDNA): Background, Explanation, and Rationale [[RFC5894](#)], informally called "Rationale", provides an overview of the protocol and associated tables, and gives explanatory material and some rationale for the decisions that led to IDNA2008. It also contains advice for DNS registry operators and others who use Internationalized Domain Names (IDNs).
- o Mapping Characters for Internationalized Domain Names in Applications (IDNA) 2008 [[RFC5895](#)], informally called "Mapping", discusses the issue of mapping characters into other characters and provides guidance for doing so when that is appropriate. [RFC 5895](#) provides advice only and is not a required part of IDNA.

[3.2.](#) Additional important IDNA2008-related documents

There are other documents important for the understanding and functioning of IDNA2008, for example this.

- o The Unicode Code Points and Internationalized Domain Names for Applications (IDNA) – Unicode 6.0 [[RFC6452](#)] describes some changes made to Unicode 6.0.0 [[Unicode-6.0.0](#)] that resulted in derived property value change for the code points U+0CF1, U+0CF2 and U+19DA. U+0CF1 and U+0CF2 changed from DISALLOWED to PVALID, while U+19DA changed from PVALID to DISALLOWED. The IETF concluded that no update to [RFC 5892](#) [[RFC5892](#)] was needed based on the changes made in Unicode 6.0.0 [[Unicode-6.0.0](#)]. As a result, the derived property value remained aligned with the Unicode Standard. Specifically, no exception was added.

[3.3.](#) Deployment

There are many variations on the general IDNA model in use in the various parts of the community. The following lists some of the strategies that implementations that claim to be IDNA compliant are known to use, but it should be noted the list is not complete:

- o IDNA2003 as specified in [RFC 3490](#) [[RFC3490](#)] and [RFC 3491](#) [[RFC3491](#)]. Those specifications are dependent on case folding and NFKC normalization and on tables that specify for each code point

whether it is allowed to be used or not, with a distinction made between use for "stored strings" and "query strings". The tables themselves are dependent on version 3.2 of The Unicode Standard [[Unicode-3.2.0](#)].

- o A number of variations on IDNA2003, sometimes presented as "updated IDNA2003" or the like, which follow the principles of IDNA2003 as understood by the implementers but that use tables that represent how the implementers believe Stringprep [[RFC3454](#)] and Nameprep [[RFC3491](#)] would have evolved had the IETF not moved in the direction of IDNA2008 instead.
- o A mix between IDNA2003 and IDNA2008 where code points assigned to Unicode after Unicode 3.2.0 [[Unicode-3.2.0](#)] have derived property value calculated according to the algorithm specified in IDNA2008.

- o A mix between IDNA2003 and IDNA2008 according to the Unicode Technical Standard #46 [[UTS-46](#)]. Because that document specifies different profiles, there are several different variations that leave users with no guarantee that two applications claiming conformance to UTS#46 will interoperate well with each other much less with conforming IDNA2008 implementations. UTS#46 is ultimately based on a normative table very much like the one used by Stringprep [[RFC3454](#)] but updated for each new version of Unicode.
- o The (normative) IDNA2008 algorithm applied to whatever version of Unicode Standard exists in the operating system and/or libraries used, independent of whatever version of tables appears in the (non-normative) IANA database.

In practice, the Unicode Consortium creates a maximum set of code points by assigning code points in the Unicode Standard. The IDNA2008 rules use the Unicode Standard to create a further subset of code points and context that are permitted in DNS labels associated with its PVALID, CONTEXTJ, and CONTEXTO derived property values. DNS registries and other organizations that deal with IDNs are supposed to create their own subsets from IDNA2008 for use by those registries and organizations.

This progressing subsetting and narrowing of the repertoire of code points that can be used in labels is an implementation of the principles of being conservative when deciding what code points to include in such a subset. SAC-084 [[SAC-084](#)] and [RFC 6912](#) [[RFC6912](#)] recommend to DNS registries and other organizations to be conservative when creating their subsets, and to use the principle of creating subsets by inclusion.

[4.](#) Notable Changes Between Unicode 6.2.0 and 12.0.0

[4.1.](#) Changes between Unicode 6.2.0 and 7.0.0

Change in number of chacters in each category:

Code points that changed derived property value: 0

PVALID changed from 97946 to 99867 (+1921)

UNASSIGNED changed from 864348 to 861509 (-2839)

CONTEXTJ did not change, at 2

CONTEXT0 did not change, at 25

DISALLOWED changed from 151791 to 152709 (+918)

TOTAL did not change, at 1114112

There are no changes made to Unicode between version 6.2.0 and 7.0.0 that impact IDNA2008 calculation of the derived property values.

The character ARABIC LETTER BEH WITH HAMZA ABOVE (U+08A1) was introduced in Unicode 7.0.0. This was discussed extensively in the IETF, and by the IAB in their statement [[IAB](#)] requesting the IETF to investigate the issue. Specifically, the IAB stated:

On the same precautionary principle, the IAB recommends that the Internationalized Domain Names for Applications (IDNA) Parameters registry (<http://www.iana.org/assignments/idna-tables/>) not be updated to Unicode 7.0.0 until the IETF has consensus on a solution to this problem.

The discussion in the IETF concluded that although it is possible to create "the same" character in multiple ways, the issue with U+08A1 is not unique. The character U+08A1 (ARABIC LETTER BEH WITH HAMZA ABOVE) can be represented with the sequence ARABIC LETTER BEH (U+0628) and ARABIC HAMZA ABOVE (U+0654). This is identical to LATIN SMALL LETTER O WITH STROKE (U+00F8), which can be represented with the sequence LATIN SMALL LETTER O (U+006F) followed by COMBINING SHORT SOLIDUS OVERLAY (U+0337).

Although the discussion about this specific code point resulted in acceptance of the derived property value of PVALID, the underlying problem with combining sequences is not understood fully. Therefore

it cannot be claimed that this case can be extrapolated to other

situations and other code points.

[4.2.](#) Changes between Unicode 7.0.0 and 10.0.0

Change in number of characters in each category:

Code points that changed derived property value: 0

PVALID changed from 99867 to 122411 (+22544)

UNASSIGNED changed from 861509 to 837775 (-23734)

CONTEXTJ did not change, at 2

CONTEXT0 did not change, at 25

DISALLOWED changed from 152709 to 153899 (+1190)

TOTAL did not change, at 1114112

There are no changes made to Unicode between version 7.0.0 and 10.0.0 that impact IDNA2008 calculation of the derived property values.

[4.3.](#) Changes between Unicode 10.0.0 and 11.0.0

Change in number of characters in each category:

Code points that changed derived property value: 1

PVALID changed from 122411 to 122734 (+323)

UNASSIGNED changed from 837775 to 837091 (-684)

CONTEXTJ did not change, at 2

CONTEXT0 did not change, at 25

DISALLOWED changed from 153899 to 154260 (+361)

TOTAL did not change, at 1114112

Georgian letters in the ranges U+10D0..U+10FA and U+10FD..U+10FF had their General Properties changed from Lo to Ll, to reflect their status as the lowercase of new Georgian case pairs. Case mappings were also added.

SHARADA SANDHI MARK (U+111C9) was changed from Po to Mn, and from bc=L to bc=NSM.

The properties for ZANABAZAR SQUARE VOWEL SIGN AI (U+11A07) and ZANABZAR SQUARE VOWEL SIGN AU (U+11A08) were corrected from Mc to Mn.

SPHERICAL ANGLE OPENING UP (U+29A1) was changed to Bidi_M=N.

These changes to the Unicode Standard have the following implications for these code points:

- o The newly assigned 684 characters are assigned a derived property value as of a result of applying the IDNA2008 algorithm.
- o The Georgian letters in the ranges U+10D0..U+10FA and U+10FD..U+10FF existed before IDNA2008 was created. Applying the IDNA2008 algorithm to the code points assigned the derived property value PVALID, and that value is unchanged even if the underlying Unicode properties have changed. The newly encoded Mtavruli letters have general category "Lu" and are therefore DISALLOWED.
- o The U+111C9 SHARADA SANDHI MARK was added to Unicode 8.0.0 [[Unicode-8.0.0](#)]. Applying the IDNA2008 algorithm to the code point assigned the derived property value DISALLOWED. The changes in the underlying properties in the Unicode Standard Version 11.0.0 [[Unicode-11.0.0](#)] caused the derived property value to change to PVALID.
- o The characters ZANABAZAR SQUARE VOWEL SIGN AI (U+11A07) and ZANABZAR SQUARE VOWEL SIGN AU (U+11A08) were added to Unicode 10.0.0 [[Unicode-10.0.0](#)]. Applying the IDNA2008 algorithm to the code points assigned the derived property value PVALID, and that value is unchanged even if the underlying Unicode properties have changed.
- o SPHERICAL ANGLE OPENING UP (U+29A1) existed before IDNA2008 was created. Applying the IDNA2008 algorithm to the code point assigned the derived property value DISALLOWED, and that value is unchanged even if the underlying Unicode properties have changed.

[4.4.](#) Changes between Unicode 11.0.0 and 12.0.0

Change in number of chacters in each category:

Code points that changed derived property value: 0

PVALID changed from 122734 to 123006 (+272)

UNASSIGNED changed from 837091 to 836537 (-554)

CONTEXTJ did not change, at 2

CONTEXT0 did not change, at 25

DISALLOWED changed from 154260 to 154542 (+282)

TOTAL did not change, at 1114112

[5.](#) U+111C9 SHARADA SANDHI MARK

As one can see in [Section 4](#), there is one incompatible change made between Unicode 6.2.0 and 12.0.0, the code point U+111C9. It has changed derived property value from DISALLOWED to PVALID. In situations like these, IDNA2008 allow for addition of rules to [RFC 5892 \[RFC5892\] section 2.7](#). (BackwardCompatible (G)). The code point if being accepted might due to implementations of IDNA2008 based on older versions of Unicode than 11.0.0 be rejected. As the character is rarely used outside of the group of Sharada specialist, and used in some records for indicating sandhi breaks, the conclusion is that it could be added as an exception as well as change property value as the use of the code point is limited outside a special community. As including an exception would require implementation changes in deployed implementations of IDNA2008, the editor proposes that such a BackwardCompatible rule NOT to be added to IDNA2008.

[6.](#) Conclusion

As described in [Section 4](#) and [Section 5](#), changes have been made to Unicode between version 6.2.0 and 12.0.0. Some changes to specific characters changed their derived property value, while other changes did not. Given what is described in [Section 3.3](#) and the changes described, including implications to normalization, the conclusion of this document is to not add any exception rules to IDNA2008.

This does not preclude any such updates to [RFC 5892 \[RFC5892\]](#) or any

other IDNA2008 related document in the future when new versions of the Unicode Standard is released, and it might also happen that it is found the algorithm specified in IDNA2008 is not suitable for DNS without additional rules, categories, or tuning.

[7.](#) IANA Considerations

IANA is requested to update the IDNA Parameters registry of derived property values, after the expert reviewer validates that the derived property values are calculated correctly.

[8.](#) Security Considerations

This document makes recommendations regarding the use of the IDNA2008 algorithm for calculation of derived property values, based on the Unicode version 12.0.0. This recommendation do not say anything about what recommendations to make for future versions of the Unicode Standard.

Not following these recommendations can lead to various security issues. Specifically, allowing confusable characters may lead to various phishing attacks, as described in the Security Consideration Sections in the documents listed in section [Section 3.1](#).

[9.](#) Acknowledgements

Thanks to Harald Alvestrand, Marc Blanchet, Martin Duerst, Asmus Freytag, Ted Hardie, John Klensin, Erik Nordmark, Pete Resnick, Peter Saint-Andre, Michel Suignard, Andrew Sullivan and Suzanne Woolf for input to this document.

[10.](#) References

[10.1.](#) Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#),

DOI 10.17487/RFC2119, March 1997,
<<https://www.rfc-editor.org/info/rfc2119>>.

[RFC3491] Hoffman, P. and M. Blanchet, "Nameprep: A Stringprep Profile for Internationalized Domain Names (IDN)", [RFC 3491](#), DOI 10.17487/RFC3491, March 2003, <<https://www.rfc-editor.org/info/rfc3491>>.

[RFC5890] Klensin, J., "Internationalized Domain Names for Applications (IDNA): Definitions and Document Framework", [RFC 5890](#), DOI 10.17487/RFC5890, August 2010, <<https://www.rfc-editor.org/info/rfc5890>>.

Faltstrom

Expires September 12, 2019

[Page 11]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

[RFC5891] Klensin, J., "Internationalized Domain Names in Applications (IDNA): Protocol", [RFC 5891](#), DOI 10.17487/RFC5891, August 2010, <<https://www.rfc-editor.org/info/rfc5891>>.

[RFC5892] Faltstrom, P., Ed., "The Unicode Code Points and Internationalized Domain Names for Applications (IDNA)", [RFC 5892](#), DOI 10.17487/RFC5892, August 2010, <<https://www.rfc-editor.org/info/rfc5892>>.

[RFC5893] Alvestrand, H., Ed. and C. Karp, "Right-to-Left Scripts for Internationalized Domain Names for Applications (IDNA)", [RFC 5893](#), DOI 10.17487/RFC5893, August 2010, <<https://www.rfc-editor.org/info/rfc5893>>.

[RFC6452] Faltstrom, P., Ed. and P. Hoffman, Ed., "The Unicode Code Points and Internationalized Domain Names for Applications (IDNA) - Unicode 6.0", [RFC 6452](#), DOI 10.17487/RFC6452, November 2011, <<https://www.rfc-editor.org/info/rfc6452>>.

[RFC8174] Leiba, B., "Ambiguity of Uppercase vs Lowercase in [RFC 2119](#) Key Words", [BCP 14](#), [RFC 8174](#), DOI 10.17487/RFC8174, May 2017, <<https://www.rfc-editor.org/info/rfc8174>>.

[10.2](#). Non-normative references

[Changes-11.0.0]

The Unicode Consortium, "Unicode Standard Annex #44", Unicode Standard Annex #44, UNICODE CHARACTER DATABASE, Change History https://www.unicode.org/reports/tr44/tr44-21d4.html#Change_History, May 2018.

[I-D.freytag-troublesome-characters]

Freytag, A., Klensin, J., and A. Sullivan, "Those Troublesome Characters: A Registry of Unicode Code Points Needing Special Consideration When Used in Network Identifiers", [draft-freytag-troublesome-characters-02](#) (work in progress), June 2018.

[I-D.klensin-idna-5892upd-unicode70]

Klensin, J. and P. Faltstrom, "IDNA Update for Unicode 7.0 and Later Versions", [draft-klensin-idna-5892upd-unicode70-05](#) (work in progress), October 2017.

Faltstrom

Expires September 12, 2019

[Page 12]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

[IAB] Internet Architecture Board, "IAB Statement on Identifiers and Unicode 7.0.0", IAB Statement on Identifiers and Unicode 7.0.0

<https://www.iab.org/documents/correspondence-reports-documents/2015-2/iab-statement-on-identifiers-and-unicode-7-0-0/>, January 2015.

[N4330] Pandey, A., "Proposal to Encode the SANDHI MARK for Sharada", Proposal to Encode the SANDHI MARK for Sharada <https://www.unicode.org/L2/L2012/12322-n4330-sharada-sandhi-mark.pdf>, September 2012.

[RFC3454] Hoffman, P. and M. Blanchet, "Preparation of Internationalized Strings ("stringprep")", [RFC 3454](#), DOI 10.17487/RFC3454, December 2002, <<https://www.rfc-editor.org/info/rfc3454>>.

[RFC3490] Faltstrom, P., Hoffman, P., and A. Costello,

"Internationalizing Domain Names in Applications (IDNA)",
[RFC 3490](#), DOI 10.17487/RFC3490, March 2003,
<<https://www.rfc-editor.org/info/rfc3490>>.

- [RFC5894] Klensin, J., "Internationalized Domain Names for Applications (IDNA): Background, Explanation, and Rationale", [RFC 5894](#), DOI 10.17487/RFC5894, August 2010, <<https://www.rfc-editor.org/info/rfc5894>>.
- [RFC5895] Resnick, P. and P. Hoffman, "Mapping Characters for Internationalized Domain Names in Applications (IDNA) 2008", [RFC 5895](#), DOI 10.17487/RFC5895, September 2010, <<https://www.rfc-editor.org/info/rfc5895>>.
- [RFC6912] Sullivan, A., Thaler, D., Klensin, J., and O. Kolkman, "Principles for Unicode Code Point Inclusion in Labels in the DNS", [RFC 6912](#), DOI 10.17487/RFC6912, April 2013, <<https://www.rfc-editor.org/info/rfc6912>>.
- [SAC-084] The Security and Stability Advisory Committee, "SAC084", SSAC Comments on Guidelines for the Extended Process Similarity Review Panel for the IDN ccTLD Fast Track Process <https://www.icann.org/en/system/files/files/sac-084-en.pdf>, August 2016.
- [Unicode-10.0.0]
The Unicode Consortium, "The Unicode Standard, Version 10.0.0", The Unicode Standard, Version 10.0.0 ISBN 978-1-936213-16-0, June 2017.

Faltstrom

Expires September 12, 2019

[Page 13]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

- [Unicode-11.0.0]
The Unicode Consortium, "The Unicode Standard, Version 11.0.0", The Unicode Standard, Version 11.0.0 ISBN 978-1-936213-19-1, June 2018.

- [Unicode-12.0.0]
The Unicode Consortium, "The Unicode Standard, Version 12.0.0", The Unicode Standard, Version 12.0.0 ISBN 978-1-936213-22-1, March 2019.

- [Unicode-3.2.0]

The Unicode Consortium, "The Unicode Standard, Version 3.2.0", The Unicode Standard, Version 3.2.0 ISBN 0-201-61633-5, March 2002.

[Unicode-5.2.0]

The Unicode Consortium, "The Unicode Standard, Version 5.2.0", The Unicode Standard, Version 5.2 ISBN 978-1-936213-00-9, October 2009.

[Unicode-6.0.0]

The Unicode Consortium, "The Unicode Standard, Version 6.0.0", The Unicode Standard, Version 6.0.0 ISBN 978-1-936213-01-6, October 2011.

[Unicode-6.3.0]

The Unicode Consortium, "The Unicode Standard, Version 6.3.0", The Unicode Standard, Version 6.3.0 ISBN 978-1-936213-08-5, September 2013.

[Unicode-7.0.0]

The Unicode Consortium, "The Unicode Standard, Version 7.0.0", The Unicode Standard, Version 7.0.0 ISBN 978-1-936213-09-2, June 2014.

[Unicode-8.0.0]

The Unicode Consortium, "The Unicode Standard, Version 8.0.0", The Unicode Standard, Version 8.0.0 ISBN 978-1-936213-10-8, June 2015.

[Unicode-9.0.0]

The Unicode Consortium, "The Unicode Standard, Version 9.0.0", The Unicode Standard, Version 9.0.0 ISBN 978-1-936213-13-9, June 2016.

[UTS-46] The Unicode Consortium, "Unicode Technical Standard #46, Version 12.0.0", UNICODE IDNA COMPATIBILITY PROCESSING <http://www.unicode.org/reports/tr46/>, March 2019.

[Appendix A](#). Changes from Unicode 6.3.0 to Unicode 7.0.0

Changes from derived property value UNASSIGNED to either PVALID or DISALLOWED.

037F	; DISALLOWED	# GREEK CAPITAL LETTER YOT
0528..052F	; DISALLOWED	# CYRILLIC CAPITAL LETTER EN WITH LEFT HOOK..C
058D..058E	; DISALLOWED	# RIGHT-FACING ARMENIAN ETERNITY SIGN..LEFT-FA
0605	; DISALLOWED	# ARABIC NUMBER MARK ABOVE
08A1	; PVALID	# ARABIC LETTER BEH WITH HAMZA ABOVE
08AD..08B2	; PVALID	# ARABIC LETTER LOW ALEF..ARABIC LETTER ZAIN W
08FF	; PVALID	# ARABIC MARK SIDEWAYS NOON GHUNNA
0978	; PVALID	# DEVANAGARI LETTER MARWARI DDA
0980	; PVALID	# BENGALI ANJI
0C00	; PVALID	# TELUGU SIGN COMBINING CANDRABINDU ABOVE
0C34	; PVALID	# TELUGU LETTER LLLA
0C81	; PVALID	# KANNADA SIGN CANDRABINDU
0D01	; PVALID	# MALAYALAM SIGN CANDRABINDU
0DE6..0DEF	; PVALID	# SINHALA LITH DIGIT ZERO..SINHALA LITH DIGIT
16F1..16F8	; PVALID	# Runic LETTER K..Runic LETTER FRANKS CASKET A
191D..191E	; PVALID	# LIMBU LETTER GYAN..LIMBU LETTER TRA
1AB0..1ABE	; PVALID	# COMBINING DOUBLED CIRCUMFLEX ACCENT..COMBINI
1CF8..1CF9	; PVALID	# VEDIC TONE RING ABOVE..VEDIC TONE DOUBLE RIN
1DE7..1DF5	; PVALID	# COMBINING LATIN SMALL LETTER ALPHA..COMBININ
20BB..20BD	; DISALLOWED	# NORDIC MARK SIGN..RUBLE SIGN
23F4..23FA	; DISALLOWED	# BLACK MEDIUM LEFT-POINTING TRIANGLE..BLACK C
2700	; DISALLOWED	# BLACK SAFETY SCISSORS
2B4D..2B4F	; DISALLOWED	# DOWNWARDS TRIANGLE-HEADED ZIGZAG ARROW..SHOR
2B5A..2B73	; DISALLOWED	# SLANTED NORTH ARROW WITH HOOKED HEAD..DOWNWA
2B76..2B95	; DISALLOWED	# NORTH WEST TRIANGLE-HEADED ARROW TO BAR..RIG
2B98..2BB9	; DISALLOWED	# THREE-D TOP-LIGHTED LEFTWARDS EQUILATERAL AR
2BBD..2BC8	; DISALLOWED	# BALLOT BOX WITH LIGHT X..BLACK MEDIUM RIGHT-
2BCA..2BD1	; DISALLOWED	# TOP HALF BLACK CIRCLE..UNCERTAINTY SIGN
2E3C..2E42	; DISALLOWED	# STENOGRAPHIC FULL STOP..DOUBLE LOW-REVERSED-
A698..A69D	; DISALLOWED	# CYRILLIC CAPITAL LETTER DOUBLE O..MODIFIER L
A794..A79F	; PVALID	# LATIN SMALL LETTER C WITH PALATAL HOOK..LATI
A7AB..A7AD	; DISALLOWED	# LATIN CAPITAL LETTER REVERSED OPEN E..LATIN
A7B0..A7B1	; DISALLOWED	# LATIN CAPITAL LETTER TURNED K..LATIN CAPITAL
A7F7	; PVALID	# LATIN EPIGRAPHIC LETTER SIDEWAYS I
A9E0..A9FE	; PVALID	# MYANMAR LETTER SHAN GHA..MYANMAR LETTER TAI
AA7C..AA7F	; PVALID	# MYANMAR SIGN TAI LAING TONE-2..MYANMAR LETTE
AB30..AB5F	; PVALID	# LATIN SMALL LETTER BARRED ALPHA..MODIFIER LE
AB64..AB65	; PVALID	# LATIN SMALL LETTER INVERTED ALPHA..GREEK LET

FE27..FE2D	; PVALID	# COMBINING LIGATURE LEFT HALF BELOW..COMBININ
1018B..1018C	; DISALLOWED	# GREEK ONE QUARTER SIGN..GREEK SINUSOID SIGN
101A0	; DISALLOWED	# GREEK SYMBOL TAU RHO
102E0..102FB	; PVALID	# COPTIC EPACT THOUSANDS MARK..COPTIC EPACT NU
1031F	; PVALID	# OLD ITALIC LETTER ESS
10350..1037A	; PVALID	# OLD PERMIC LETTER AN..COMBINING OLD PERMIC L
10500..10527	; PVALID	# ELBASAN LETTER A..ELBASAN LETTER KHE
10530..10563	; PVALID	# CAUCASIAN ALBANIAN LETTER ALT..CAUCASIAN ALB
1056F	; DISALLOWED	# CAUCASIAN ALBANIAN CITATION MARK
10600..10736	; PVALID	# LINEAR A SIGN AB001..LINEAR A SIGN A664
10740..10755	; PVALID	# LINEAR A SIGN A701 A..LINEAR A SIGN A732 JE
10760..10767	; PVALID	# LINEAR A SIGN A800..LINEAR A SIGN A807
10860..1089E	; PVALID	# PALMYRENE LETTER ALEPH..NABATAEAN LETTER TAW
108A7..108AF	; DISALLOWED	# NABATAEAN NUMBER ONE..NABATAEAN NUMBER ONE H
10A80..10A9F	; PVALID	# OLD NORTH ARABIAN LETTER HEH..OLD NORTH ARAB
10AC0..10AE6	; PVALID	# MANICHAEAN LETTER ALEPH..MANICHAEAN ABBREVIA
10AEB..10AF6	; DISALLOWED	# MANICHAEAN NUMBER ONE..MANICHAEAN PUNCTUATIO
10B80..10B91	; PVALID	# PSALTER PAHLAVI LETTER ALEPH..PSALTER PAHLAV
10B99..10B9C	; DISALLOWED	# PSALTER PAHLAVI SECTION MARK..PSALTER PAHLAV
10BA9..10BAF	; DISALLOWED	# PSALTER PAHLAVI NUMBER ONE..PSALTER PAHLAVI
1107F	; PVALID	# BRAHMI NUMBER JOINER
11150..11176	; PVALID	# MAHAJANI LETTER A..MAHAJANI LIGATURE SHRI
111CD	; DISALLOWED	# SHARADA SUTRA MARK
111DA	; PVALID	# SHARADA EKAM
111E1..111F4	; DISALLOWED	# SINHALA ARCHAIC DIGIT ONE..SINHALA ARCHAIC N
11200..11211	; PVALID	# KHOJKI LETTER A..KHOJKI LETTER JJA
11213..1123D	; PVALID	# KHOJKI LETTER NYA..KHOJKI ABBREVIATION SIGN
112B0..112EA	; PVALID	# KHUDAWADI LETTER A..KHUDAWADI SIGN VIRAMA
112F0..112F9	; PVALID	# KHUDAWADI DIGIT ZERO..KHUDAWADI DIGIT NINE
11301..11303	; PVALID	# GRANTHA SIGN CANDRABINDU..GRANTHA SIGN VISAR
11305..1130C	; PVALID	# GRANTHA LETTER A..GRANTHA LETTER VOCALIC L
1130F..11310	; PVALID	# GRANTHA LETTER EE..GRANTHA LETTER AI
11313..11328	; PVALID	# GRANTHA LETTER OO..GRANTHA LETTER NA
1132A..11330	; PVALID	# GRANTHA LETTER PA..GRANTHA LETTER RA
11332..11333	; PVALID	# GRANTHA LETTER LA..GRANTHA LETTER LLA
11335..11339	; PVALID	# GRANTHA LETTER VA..GRANTHA LETTER HA
1133C..11344	; PVALID	# GRANTHA SIGN NUKTA..GRANTHA VOWEL SIGN VOCAL
11347..11348	; PVALID	# GRANTHA VOWEL SIGN EE..GRANTHA VOWEL SIGN AI
1134B..1134D	; PVALID	# GRANTHA VOWEL SIGN OO..GRANTHA SIGN VIRAMA
11357	; PVALID	# GRANTHA AU LENGTH MARK
1135D..11363	; PVALID	# GRANTHA SIGN PLUTA..GRANTHA VOWEL SIGN VOCAL
11366..1136C	; PVALID	# COMBINING GRANTHA DIGIT ZERO..COMBINING GRAN
11370..11374	; PVALID	# COMBINING GRANTHA LETTER A..COMBINING GRANTH
11480..114C7	; PVALID	# TIRHUTA ANJI..TIRHUTA OM
114D0..114D9	; PVALID	# TIRHUTA DIGIT ZERO..TIRHUTA DIGIT NINE
11580..115B5	; PVALID	# SIDDHAM LETTER A..SIDDHAM VOWEL SIGN VOCALIC
115B8..115C9	; PVALID	# SIDDHAM VOWEL SIGN E..SIDDHAM END OF TEXT MA

11600..11644; PVALID # MODI LETTER A..MODI SIGN HUVA

Faltstrom

Expires September 12, 2019

[Page 16]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

11650..11659; PVALID # MODI DIGIT ZERO..MODI DIGIT NINE
118A0..118F2; DISALLOWED # WARANG CITI CAPITAL LETTER NGAA..WARANG CITI
118FF ; PVALID # WARANG CITI OM
11AC0..11AF8; PVALID # PAU CIN HAU LETTER PA..PAU CIN HAU GLOTTAL S
1236F..12398; PVALID # CUNEIFORM SIGN KAP ELAMITE..CUNEIFORM SIGN U
12463..1246E; DISALLOWED # CUNEIFORM NUMERIC SIGN ONE QUARTER GUR..CUNE
[12474](#) ; DISALLOWED # CUNEIFORM PUNCTUATION SIGN DIAGONAL QUADCOLO
16A40..16A5E; PVALID # MRO LETTER TA..MRO LETTER TEK
16A60..16A69; PVALID # MRO DIGIT ZERO..MRO DIGIT NINE
16A6E..16A6F; DISALLOWED # MRO DANDA..MRO DOUBLE DANDA
16AD0..16AED; PVALID # BASSA VAH LETTER ENNI..BASSA VAH LETTER I
16AF0..16AF5; PVALID # BASSA VAH COMBINING HIGH TONE..BASSA VAH FUL
16B00..16B45; PVALID # PAHAHW HMONG VOWEL KEEB..PAHAHW HMONG SIGN C
16B50..16B59; PVALID # PAHAHW HMONG DIGIT ZERO..PAHAHW HMONG DIGIT
16B5B..16B61; DISALLOWED # PAHAHW HMONG NUMBER TENS..PAHAHW HMONG NUMBE
16B63..16B77; PVALID # PAHAHW HMONG SIGN VOS LUB..PAHAHW HMONG SIGN
16B7D..16B8F; PVALID # PAHAHW HMONG CLAN SIGN TSHEEJ..PAHAHW HMONG
1BC00..1BC6A; PVALID # DUPLOYAN LETTER H..DUPLOYAN LETTER VOCALIC M
1BC70..1BC7C; PVALID # DUPLOYAN AFFIX LEFT HORIZONTAL SECANT..DUPLO
1BC80..1BC88; PVALID # DUPLOYAN AFFIX HIGH ACUTE..DUPLOYAN AFFIX HI
1BC90..1BC99; PVALID # DUPLOYAN AFFIX LOW ACUTE..DUPLOYAN AFFIX LOW
1BC9C..1BCA3; DISALLOWED # DUPLOYAN SIGN O WITH CROSS..SHORTHAND FORMAT
1E800..1E8C4; PVALID # MENDE KIKAKUI SYLLABLE M001 KI..MENDE KIKAKU
1E8C7..1E8D6; DISALLOWED # MENDE KIKAKUI DIGIT ONE..MENDE KIKAKUI COMBI
1F0BF ; DISALLOWED # PLAYING CARD RED JOKER
1F0E0..1F0F5; DISALLOWED # PLAYING CARD FOOL..PLAYING CARD TRUMP-21
1F10B..1F10C; DISALLOWED # DINGBAT CIRCLED SANS-SERIF DIGIT ZERO..DINGB
1F321..1F32C; DISALLOWED # THERMOMETER..WIND BLOWING FACE
1F336 ; DISALLOWED # HOT PEPPER
1F37D ; DISALLOWED # FORK AND KNIFE WITH PLATE
1F394..1F39F; DISALLOWED # HEART WITH TIP ON THE LEFT..ADMISSION TICKET
1F3C5 ; DISALLOWED # SPORTS MEDAL
1F3CB..1F3CE; DISALLOWED # WEIGHT LIFTER..RACING CAR
1F3D4..1F3DF; DISALLOWED # SNOW CAPPED MOUNTAIN..STADIUM
1F3F1..1F3F7; DISALLOWED # WHITE PENNANT..LABEL
1F43F ; DISALLOWED # CHIPMUNK
1F441 ; DISALLOWED # EYE
1F4F8 ; DISALLOWED # CAMERA WITH FLASH
1F4FD..1F4FE; DISALLOWED # FILM PROJECTOR..PORTABLE STEREO
1F53E..1F53F; DISALLOWED # LOWER RIGHT SHADOWED WHITE CIRCLE..UPPER RIG

1F544..1F54A;	DISALLOWED	# NOTCHED RIGHT SEMICIRCLE WITH THREE DOTS..DO
1F568..1F579;	DISALLOWED	# RIGHT SPEAKER..JOYSTICK
1F57B..1F5A3;	DISALLOWED	# LEFT HAND TELEPHONE RECEIVER..BLACK DOWN POI
1F5A5..1F5FA;	DISALLOWED	# DESKTOP COMPUTER..WORLD MAP
1F641..1F642;	DISALLOWED	# SLIGHTLY FROWNING FACE..SLIGHTLY SMILING FAC
1F650..1F67F;	DISALLOWED	# NORTH WEST POINTING LEAF..REVERSE CHECKER BO
1F6C6..1F6CF;	DISALLOWED	# TRIANGLE WITH ROUNDED CORNERS..BED
1F6E0..1F6EC;	DISALLOWED	# HAMMER AND WRENCH..AIRPLANE ARRIVING

Faltstrom

Expires September 12, 2019

[Page 17]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

1F6F0..1F6F3;	DISALLOWED	# SATELLITE..PASSENGER SHIP
1F780..1F7D4;	DISALLOWED	# BLACK LEFT-POINTING ISOSCELES RIGHT TRIANGLE
1F800..1F80B;	DISALLOWED	# LEFTWARDS ARROW WITH SMALL TRIANGLE ARROWHEA
1F810..1F847;	DISALLOWED	# LEFTWARDS ARROW WITH SMALL EQUILATERAL ARROW
1F850..1F859;	DISALLOWED	# LEFTWARDS SANS-SERIF ARROW..UP DOWN SANS-SER
1F860..1F887;	DISALLOWED	# WIDE-HEADED LEFTWARDS LIGHT BARB ARROW..WIDE

[Appendix B](#). Changes from Unicode 7.0.0 to Unicode 8.0.0

Changes from derived property value UNASSIGNED to either PVALID or DISALLOWED.

08B3..08B4	; PVALID	# ARABIC LETTER AIN WITH THREE DOTS BELOW..ARA
08E3	; PVALID	# ARABIC TURNED DAMMA BELOW
0AF9	; PVALID	# GUJARATI LETTER ZHA
0C5A	; PVALID	# TELUGU LETTER RRA
0D5F	; PVALID	# MALAYALAM LETTER ARCHAIC II
13F5	; PVALID	# CHEROKEE LETTER MV
13F8..13FD	; DISALLOWED	# CHEROKEE SMALL LETTER YE..CHEROKEE SMALL LET
20BE	; DISALLOWED	# LARI SIGN
218A..218B	; DISALLOWED	# TURNED DIGIT TWO..TURNED DIGIT THREE
2BEC..2BEF	; DISALLOWED	# LEFTWARDS TWO-HEADED ARROW WITH TRIANGLE ARR
9FCD..9FD5	; PVALID	# <CJK Ideograph>..<CJK Ideograph>
A69E	; PVALID	# COMBINING CYRILLIC LETTER EF
A78F	; PVALID	# LATIN LETTER SINOLOGICAL DOT
A7B2..A7B7	; DISALLOWED	# LATIN CAPITAL LETTER J WITH CROSSED-TAIL..LA
A8FC..A8FD	; DISALLOWED	# DEVANAGARI SIGN SIDDHAM..DEVANAGARI JAIN OM
AB60..AB63	; PVALID	# LATIN SMALL LETTER SAKHA YAT..LATIN SMALL LE
AB70..ABBF	; DISALLOWED	# CHEROKEE SMALL LETTER A..CHEROKEE SMALL LETT
FE2E..FE2F	; PVALID	# COMBINING CYRILLIC TITLO LEFT HALF..COMBININ
108E0..108F2;	PVALID	# HATRAN LETTER ALEPH..HATRAN LETTER QOPH
108F4..108F5;	PVALID	# HATRAN LETTER SHIN..HATRAN LETTER TAW
108FB..108FF;	DISALLOWED	# HATRAN NUMBER ONE..HATRAN NUMBER ONE HUNDRED

109BC..109BD;	DISALLOWED	# MEROITIC CURSIVE FRACTION ELEVEN TWELFTHS..M
109C0..109CF;	DISALLOWED	# MEROITIC CURSIVE NUMBER ONE..MEROITIC CURSIV
109D2..109FF;	DISALLOWED	# MEROITIC CURSIVE NUMBER ONE HUNDRED..MEROITI
10C80..10CB2;	DISALLOWED	# OLD HUNGARIAN CAPITAL LETTER A..OLD HUNGARIA
10CC0..10CF2;	PVALID	# OLD HUNGARIAN SMALL LETTER A..OLD HUNGARIAN
10CFA..10CFF;	DISALLOWED	# OLD HUNGARIAN NUMBER ONE..OLD HUNGARIAN NUMB
111C9..111CC;	DISALLOWED	# SHARADA SANDHI MARK..SHARADA EXTRA SHORT VOW
111DB..111DF;	DISALLOWED	# SHARADA SIGN SIDDHAM..SHARADA SECTION MARK-2
11280..11286;	PVALID	# MULTANI LETTER A..MULTANI LETTER GA
11288	; PVALID	# MULTANI LETTER GHA
1128A..1128D;	PVALID	# MULTANI LETTER CA..MULTANI LETTER JJA
1128F..1129D;	PVALID	# MULTANI LETTER NYA..MULTANI LETTER BA
1129F..112A9;	PVALID	# MULTANI LETTER BHA..MULTANI SECTION MARK
11300	; PVALID	# GRANTHA SIGN COMBINING ANUSVARA ABOVE
11350	; PVALID	# GRANTHA OM

Faltstrom

Expires September 12, 2019

[Page 18]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

115CA..115DD;	DISALLOWED	# SIDDHAM SECTION MARK WITH TRIDENT AND U-SHAP
11700..11719;	PVALID	# AHOM LETTER KA..AHOM LETTER JHA
1171D..1172B;	PVALID	# AHOM CONSONANT SIGN MEDIAL LA..AHOM SIGN KIL
11730..1173F;	PVALID	# AHOM DIGIT ZERO..AHOM SYMBOL VI
12399	; PVALID	# CUNEIFORM SIGN U U
12480..12543;	PVALID	# CUNEIFORM SIGN AB TIMES NUN TENU..CUNEIFORM
14400..14646;	PVALID	# ANATOLIAN HIEROGLYPH A001..ANATOLIAN HIEROGL
1D1DE..1D1E8;	DISALLOWED	# MUSICAL SYMBOL KIEVAN C CLEF..MUSICAL SYMBOL
1D800..1DA8B;	DISALLOWED	# SIGNWRITING HAND-FIST INDEX..SIGNWRITING PAR
1DA9B..1DA9F;	PVALID	# SIGNWRITING FILL MODIFIER-2..SIGNWRITING FIL
1DAA1..1DAAF;	PVALID	# SIGNWRITING ROTATION MODIFIER-2..SIGNWRITING
1F32D..1F32F;	DISALLOWED	# HOT DOG..BURRITO
1F37E..1F37F;	DISALLOWED	# BOTTLE WITH POPPING CORK..POPCORN
1F3CF..1F3D3;	DISALLOWED	# CRICKET BAT AND BALL..TABLE TENNIS PADDLE AN
1F3F8..1F3FF;	DISALLOWED	# BADMINTON RACQUET AND SHUTTLECOCK..EMOJI MOD
1F4FF	; DISALLOWED	# PRAYER BEADS
1F54B..1F54F;	DISALLOWED	# KAABA..BOWL OF HYGIEIA
1F643..1F644;	DISALLOWED	# UPSIDE-DOWN FACE..FACE WITH ROLLING EYES
1F6D0	; DISALLOWED	# PLACE OF WORSHIP
1F910..1F918;	DISALLOWED	# ZIPPER-MOUTH FACE..SIGN OF THE HORNS
1F980..1F984;	DISALLOWED	# CRAB..UNICORN FACE
1F9C0	; DISALLOWED	# CHEESE WEDGE

[Appendix C](#). Changes from Unicode 8.0.0 to Unicode 9.0.0

Changes from derived property value UNASSIGNED to either PVALID or

DISALLOWED.

08B6..08BD	; PVALID	# ARABIC LETTER BEH WITH SMALL MEEM ABOVE..ARA
08D4..08E2	; PVALID	# ARABIC SMALL HIGH WORD AR-RUB..ARABIC DISPUT
0C80	; PVALID	# KANNADA SIGN SPACING CANDRABINDU
0D4F	; DISALLOWED	# MALAYALAM SIGN PARA
0D54..0D56	; PVALID	# MALAYALAM LETTER CHILLU M..MALAYALAM LETTER
0D58..0D5E	; DISALLOWED	# MALAYALAM FRACTION ONE ONE-HUNDRED-AND-SIXTI
0D76..0D78	; DISALLOWED	# MALAYALAM FRACTION ONE SIXTEENTH..MALAYALAM
1C80..1C88	; DISALLOWED	# CYRILLIC SMALL LETTER ROUNDED VE..CYRILLIC S
1DFB	; PVALID	# COMBINING DELETION MARK
23FB..23FE	; DISALLOWED	# POWER SYMBOL..POWER SLEEP SYMBOL
2E43..2E44	; DISALLOWED	# DASH WITH LEFT UPTURN..DOUBLE SUSPENSION MAR
A7AE	; DISALLOWED	# LATIN CAPITAL LETTER SMALL CAPITAL I
A8C5	; PVALID	# SAURASHTRA SIGN CANDRABINDU
1018D..1018E	; DISALLOWED	# GREEK INDICTION SIGN..NOMISMA SIGN
104B0..104D3	; DISALLOWED	# OSAGE CAPITAL LETTER A..OSAGE CAPITAL LETTER
104D8..104FB	; PVALID	# OSAGE SMALL LETTER A..OSAGE SMALL LETTER ZHA
1123E	; PVALID	# KHOJKI SIGN SUKUN
11400..11459	; PVALID	# NEWA LETTER A..NEWA DIGIT NINE
1145B	; DISALLOWED	# NEWA PLACEHOLDER MARK
1145D	; DISALLOWED	# NEWA INSERTION SIGN

Faltstrom

Expires September 12, 2019

[Page 19]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

11660..1166C	; DISALLOWED	# MONGOLIAN BIRGA WITH ORNAMENT..MONGOLIAN TUR
11C00..11C08	; PVALID	# BHAIKSUKI LETTER A..BHAIKSUKI LETTER VOCALIC
11C0A..11C36	; PVALID	# BHAIKSUKI LETTER E..BHAIKSUKI VOWEL SIGN VOC
11C38..11C45	; PVALID	# BHAIKSUKI VOWEL SIGN E..BHAIKSUKI GAP FILLER
11C50..11C6C	; PVALID	# BHAIKSUKI DIGIT ZERO..BHAIKSUKI HUNDREDS UNI
11C70..11C8F	; DISALLOWED	# MARCHEN HEAD MARK..MARCHEN LETTER A
11C92..11CA7	; PVALID	# MARCHEN SUBJOINED LETTER KA..MARCHEN SUBJOIN
11CA9..11CB6	; PVALID	# MARCHEN SUBJOINED LETTER YA..MARCHEN SIGN CA
16FE0	; PVALID	# TANGUT ITERATION MARK
17000..187EC	; PVALID	# <Tangut Ideograph>..<Tangut Ideograph>
18800..18AF2	; PVALID	# TANGUT COMPONENT-001..TANGUT COMPONENT-755
1E000..1E006	; PVALID	# COMBINING GLAGOLITIC LETTER AZU..COMBINING G
1E008..1E018	; PVALID	# COMBINING GLAGOLITIC LETTER ZEMLJA..COMBININ
1E01B..1E021	; PVALID	# COMBINING GLAGOLITIC LETTER SHTA..COMBINING
1E023..1E024	; PVALID	# COMBINING GLAGOLITIC LETTER YU..COMBINING GL
1E026..1E02A	; PVALID	# COMBINING GLAGOLITIC LETTER YO..COMBINING GL
1E900..1E94A	; DISALLOWED	# ADLAM CAPITAL LETTER ALIF..ADLAM NUKTA
1E950..1E959	; PVALID	# ADLAM DIGIT ZERO..ADLAM DIGIT NINE
1E95E..1E95F	; DISALLOWED	# ADLAM INITIAL EXCLAMATION MARK..ADLAM INITIA

```

1F19B..1F1AC; DISALLOWED # SQUARED THREE D..SQUARED VOD
1F23B      ; DISALLOWED # SQUARED CJK UNIFIED IDEOGRAPH-914D
1F57A      ; DISALLOWED # MAN DANCING
1F5A4      ; DISALLOWED # BLACK HEART
1F6D1..1F6D2; DISALLOWED # OCTAGONAL SIGN..SHOPPING TROLLEY
1F6F4..1F6F6; DISALLOWED # SCOOTER..CANOE
1F919..1F91E; DISALLOWED # CALL ME HAND..HAND WITH INDEX AND MIDDLE FIN
1F920..1F927; DISALLOWED # FACE WITH COWBOY HAT..SNEEZING FACE
1F930      ; DISALLOWED # PREGNANT WOMAN
1F933..1F93E; DISALLOWED # SELFIE..HANDBALL
1F940..1F94B; DISALLOWED # WILTED FLOWER..MARTIAL ARTS UNIFORM
1F950..1F95E; DISALLOWED # CROISSANT..PANCAKES

```

[Appendix D](#). Changes from Unicode 9.0.0 to Unicode 10.0.0

Changes from derived property value UNASSIGNED to either PVALID or DISALLOWED.

```

0860..086A ; PVALID # SYRIAC LETTER MALAYALAM NGA..SYRIAC LETTER M
09FC..09FD ; PVALID # BENGALI LETTER VEDIC ANUSVARA..BENGALI ABBRE
0AFA..0AFF ; PVALID # GUJARATI SIGN SUKUN..GUJARATI SIGN TWO-CIRCL
0D00      ; PVALID # MALAYALAM SIGN COMBINING ANUSVARA ABOVE
0D3B..0D3C ; PVALID # MALAYALAM SIGN VERTICAL BAR VIRAMA..MALAYALA
1CF7      ; PVALID # VEDIC SIGN ATIKRAMA
1DF6..1DF9 ; PVALID # COMBINING KAVYKA ABOVE RIGHT..COMBINING WIDE
20BF      ; DISALLOWED # BITCOIN SIGN
23FF      ; DISALLOWED # OBSERVER EYE SYMBOL
2BD2      ; DISALLOWED # GROUP MARK
2E45..2E49 ; DISALLOWED # INVERTED LOW KAVYKA..DOUBLE STACKED COMMA
312E      ; PVALID # BOPOMOFO LETTER O WITH DOT ABOVE

```

9FD6..9FEA	; PVALID	# <CJK Ideograph>..<CJK Ideograph>
1032D..1032F	; PVALID	# OLD ITALIC LETTER YE..OLD ITALIC LETTER SOUT
11A00..11A47	; PVALID	# ZANABAZAR SQUARE LETTER A..ZANABAZAR SQUARE
11A50..11A83	; PVALID	# SOYOMBO LETTER A..SOYOMBO LETTER KSSA
11A86..11A9C	; PVALID	# SOYOMBO CLUSTER-INITIAL LETTER RA..SOYOMBO M
11A9E..11AA2	; DISALLOWED	# SOYOMBO HEAD MARK WITH MOON AND SUN AND TRIP
11D00..11D06	; PVALID	# MASARAM GONDI LETTER A..MASARAM GONDI LETTER
11D08..11D09	; PVALID	# MASARAM GONDI LETTER AI..MASARAM GONDI LETTE
11D0B..11D36	; PVALID	# MASARAM GONDI LETTER AU..MASARAM GONDI VOWEL
11D3A	; PVALID	# MASARAM GONDI VOWEL SIGN E
11D3C..11D3D	; PVALID	# MASARAM GONDI VOWEL SIGN AI..MASARAM GONDI V
11D3F..11D47	; PVALID	# MASARAM GONDI VOWEL SIGN AU..MASARAM GONDI R
11D50..11D59	; PVALID	# MASARAM GONDI DIGIT ZERO..MASARAM GONDI DIGI
16FE1	; PVALID	# NUSHU ITERATION MARK
1B002..1B11E	; PVALID	# HENTAIGANA LETTER A-1..HENTAIGANA LETTER N-M
1B170..1B2FB	; PVALID	# NUSHU CHARACTER-1B170..NUSHU CHARACTER-1B2FB
1F260..1F265	; DISALLOWED	# ROUNDED SYMBOL FOR FU..ROUNDED SYMBOL FOR CA
1F6D3..1F6D4	; DISALLOWED	# STUPA..PAGODA
1F6F7..1F6F8	; DISALLOWED	# SLED..FLYING SAUCER
1F900..1F90B	; DISALLOWED	# CIRCLED CROSS FORMEE WITH FOUR DOTS..DOWNWAR
1F91F	; DISALLOWED	# I LOVE YOU HAND SIGN
1F928..1F92F	; DISALLOWED	# FACE WITH ONE EYEBROW RAISED..SHOCKED FACE W
1F931..1F932	; DISALLOWED	# BREAST-FEEDING..PALMS UP TOGETHER
1F94C	; DISALLOWED	# CURLING STONE
1F95F..1F96B	; DISALLOWED	# DUMPLING..CANNED FOOD
1F992..1F997	; DISALLOWED	# GIRAFFE FACE..CRICKET
1F9D0..1F9E6	; DISALLOWED	# FACE WITH MONOCLE..SOCKS

[Appendix E](#). Changes from Unicode 10.0.0 to Unicode 11.0.0

Changes from derived property value DISALLOWED to PVALID.

111C9	; PVALID	# SHARADA SANDHI MARK
-------	----------	-----------------------

Changes from derived property value UNASSIGNED to either PVALID or DISALLOWED.

0560	; PVALID	# ARMENIAN SMALL LETTER TURNED AYB
0588	; PVALID	# ARMENIAN SMALL LETTER YI WITH STROKE
05EF	; PVALID	# HEBREW YOD TRIANGLE
07FD..07FF	; PVALID	# NKO DANTAYALAN..NKO TAMAN SIGN
08D3	; PVALID	# ARABIC SMALL LOW WAW

09FE	; PVALID	# BENGALI SANDHI MARK
0A76	; DISALLOWED	# GURMUKHI ABBREVIATION SIGN
0C04	; PVALID	# TELUGU SIGN COMBINING ANUSVARA ABOVE
0C84	; DISALLOWED	# KANNADA SIGN SIDDHAM
1878	; PVALID	# MONGOLIAN LETTER CHA WITH TWO DOTS
1C90..1CBA	; DISALLOWED	# GEORGIAN MTAVRULI CAPITAL LETTER AN..GEORGIA
1CBD..1CBF	; DISALLOWED	# GEORGIAN MTAVRULI CAPITAL LETTER AEN..GEORGI
2BBA..2BBC	; DISALLOWED	# OVERLAPPING WHITE SQUARES..OVERLAPPING BLACK
2BD3..2BEB	; DISALLOWED	# PLUTO FORM TWO..STAR WITH RIGHT HALF BLACK
2BF0..2BFE	; DISALLOWED	# ERIS FORM ONE..REVERSED RIGHT ANGLE
2E4A..2E4E	; DISALLOWED	# DOTTED SOLIDUS..PUNCTUS ELEVATUS MARK
312F	; PVALID	# BOPOMOFO LETTER NN
9FEB..9FEF	; PVALID	# <CJK Ideograph>..<CJK Ideograph>
A7AF	; PVALID	# LATIN LETTER SMALL CAPITAL Q
A7B8..A7B9	; DISALLOWED	# LATIN CAPITAL LETTER U WITH STROKE..LATIN SM
A8FE..A8FF	; PVALID	# DEVANAGARI LETTER AY..DEVANAGARI VOWEL SIGN
10A34..10A35	; PVALID	# KHAROSHTHI LETTER TTTA..KHAROSHTHI LETTER VH
10A48	; DISALLOWED	# KHAROSHTHI FRACTION ONE HALF
10D00..10D27	; PVALID	# HANIFI ROHINGYA LETTER A..HANIFI ROHINGYA SI
10D30..10D39	; PVALID	# HANIFI ROHINGYA DIGIT ZERO..HANIFI ROHINGYA
10F00..10F27	; PVALID	# OLD SOGDIAN LETTER ALEPH..OLD SOGDIAN LIGATU
10F30..10F59	; PVALID	# SOGDIAN LETTER ALEPH..SOGDIAN PUNCTUATION HA
110CD	; DISALLOWED	# KAITHI NUMBER SIGN ABOVE
11144..11146	; PVALID	# CHAKMA LETTER LHAA..CHAKMA VOWEL SIGN EI
1133B	; PVALID	# COMBINING BINDU BELOW
1145E	; PVALID	# NEWA SANDHI MARK
1171A	; PVALID	# AHOM LETTER ALTERNATE BA
11800..1183B	; PVALID	# DOGRA LETTER A..DOGRA ABBREVIATION SIGN
11A9D	; PVALID	# SOYOMBO MARK PLUTA
11D60..11D65	; PVALID	# GUNJALA GONDI LETTER A..GUNJALA GONDI LETTER
11D67..11D68	; PVALID	# GUNJALA GONDI LETTER EE..GUNJALA GONDI LETTE
11D6A..11D8E	; PVALID	# GUNJALA GONDI LETTER OO..GUNJALA GONDI VOWEL
11D90..11D91	; PVALID	# GUNJALA GONDI VOWEL SIGN EE..GUNJALA GONDI V
11D93..11D98	; PVALID	# GUNJALA GONDI VOWEL SIGN OO..GUNJALA GONDI O
11DA0..11DA9	; PVALID	# GUNJALA GONDI DIGIT ZERO..GUNJALA GONDI DIGI
11EE0..11EF8	; PVALID	# MAKASAR LETTER KA..MAKASAR END OF SECTION
16E40 ..16E9A	; DISALLOWED	# MEDEFAIDRIN CAPITAL LETTER M..MEDEFAIDRIN EX
187ED..187F1	; PVALID	# <Tangut Ideograph>..<Tangut Ideograph>
1D2E0..1D2F3	; DISALLOWED	# MAYAN NUMERAL ZERO..MAYAN NUMERAL NINETEEN
1D372..1D378	; DISALLOWED	# IDEOGRAPHIC TALLY MARK ONE..TALLY MARK FIVE
1EC71..1ECB4	; DISALLOWED	# INDIC SIYAQ NUMBER ONE..INDIC SIYAQ ALTERNAT
1F12F	; DISALLOWED	# COPYLEFT SYMBOL
1F6F9	; DISALLOWED	# SKATEBOARD

1F7D5..1F7D8;	DISALLOWED	# CIRCLED TRIANGLE..NEGATIVE CIRCLED SQUARE
1F94D..1F94F;	DISALLOWED	# LACROSSE STICK AND BALL..FLYING DISC
1F96C..1F970;	DISALLOWED	# LEAFY GREEN..SMILING FACE WITH SMILING EYES
1F973..1F976;	DISALLOWED	# FACE WITH PARTY HORN AND PARTY HAT..FREEZING
1F97A	; DISALLOWED	# FACE WITH PLEADING EYES
1F97C..1F97F;	DISALLOWED	# LAB COAT..FLAT SHOE
1F998..1F9A2;	DISALLOWED	# KANGAROO..SWAN
1F9B0..1F9B9;	DISALLOWED	# EMOJI COMPONENT RED HAIR..SUPERVILLAIN
1F9C1..1F9C2;	DISALLOWED	# CUPCAKE..SALT SHAKER
1F9E7..1F9FF;	DISALLOWED	# RED GIFT ENVELOPE..NAZAR AMULET

[Appendix F](#). Changes from Unicode 11.0.0 to Unicode 12.0.0

Changes from derived property value UNASSIGNED to either PVALID or DISALLOWED.

0C77..0C7F	; DISALLOWED	# TELUGU SIGN SIDDHAM..TELUGU SIGN TUUMU
0E86..0E8A	; PVALID	# LAO LETTER PALI GHA..LAO LETTER SO TAM
0E8C..0EA3	; PVALID	# LAO LETTER PALI JHA..LAO LETTER LO LING
0EA7..0EB2	; PVALID	# LAO LETTER WO..LAO VOWEL SIGN AA
0EB4..0EBD	; PVALID	# LAO VOWEL SIGN I..LAO SEMIVOWEL SIGN NYO
1CD4..1CFA	; PVALID	# VEDIC SIGN YAJURVEDIC MIDLINE SVARITA..VEDIC
2B98..2C2E	; DISALLOWED	# THREE-D TOP-LIGHTED LEFTWARDS EQUILATERAL AR
2E30..2E4F	; DISALLOWED	# RING POINT..CORNISH VERSE DIVIDER
A7BA	; DISALLOWED	# LATIN CAPITAL LETTER GLOTTAL A
A7BB	; PVALID	# LATIN SMALL LETTER GLOTTAL A
A7BC	; DISALLOWED	# LATIN CAPITAL LETTER GLOTTAL I
A7BD	; PVALID	# LATIN SMALL LETTER GLOTTAL I
A7BE	; DISALLOWED	# LATIN CAPITAL LETTER GLOTTAL U
A7BF	; PVALID	# LATIN SMALL LETTER GLOTTAL U
A7C2	; DISALLOWED	# LATIN CAPITAL LETTER ANGLICANA W
A7C3	; PVALID	# LATIN SMALL LETTER ANGLICANA W
A7C4..A7C6	; DISALLOWED	# LATIN CAPITAL LETTER C WITH PALATAL HOOK..LA
AB60..AB67	; PVALID	# LATIN SMALL LETTER SAKHA YAT..LATIN SMALL LE
10FE0..10FF6;	PVALID	# ELYMAIC LETTER ALEPH..ELYMAIC LIGATURE ZAYIN
1145E..1145F;	PVALID	# NEWA SANDHI MARK..NEWA LETTER VEDIC ANUSVARA
11680..116B8;	PVALID	# TAKRI LETTER A..TAKRI LETTER ARCHAIC KHA
119A0..119A7;	PVALID	# NANDINAGARI LETTER A..NANDINAGARI LETTER VOC
119AA..119D7;	PVALID	# NANDINAGARI LETTER E..NANDINAGARI VOWEL SIGN
119DA..119E1;	PVALID	# NANDINAGARI VOWEL SIGN E..NANDINAGARI SIGN A
119E2	; DISALLOWED	# NANDINAGARI SIGN SIDDHAM
119E3..119E4;	PVALID	# NANDINAGARI HEADSTROKE..NANDINAGARI VOWEL SI
11A50..11A99;	PVALID	# SOYOMBO LETTER A..SOYOMBO SUBJOINER
11FC0..11FF1;	DISALLOWED	# TAMIL FRACTION ONE THREE-HUNDRED-AND-TWENTIE
11FFF	; DISALLOWED	# TAMIL PUNCTUATION END OF TEXT
13430..13438;	DISALLOWED	# EGYPTIAN HIEROGLYPH VERTICAL JOINER..EGYPTIA
16F00..16F4A;	PVALID	# MIAO LETTER PA..MIAO LETTER RTE
16F4F..16F87;	PVALID	# MIAO SIGN CONSONANT MODIFIER BAR..MIAO VOWEL

Internet-Draft

IDNA2008 and Unicode 12

March 2019

```

16FE2      ; DISALLOWED # OLD CHINESE HOOK MARK
16FE3      ; PVALID     # OLD CHINESE ITERATION MARK
17000..187F7; PVALID     # <Tangut Ideograph>..<Tangut Ideograph>
1B150..1B152; PVALID     # HIRAGANA LETTER SMALL WI..HIRAGANA LETTER SM
1B164..1B167; PVALID     # KATAKANA LETTER SMALL WI..KATAKANA LETTER SM
1E100..1E12C; PVALID     # NYIAKENG PUACHUE HMONG LETTER MA..NYIAKENG P
1E130..1E13D; PVALID     # NYIAKENG PUACHUE HMONG TONE-B..NYIAKENG PUAC
1E140..1E149; PVALID     # NYIAKENG PUACHUE HMONG DIGIT ZERO..NYIAKENG
1E14E      ; PVALID     # NYIAKENG PUACHUE HMONG LOGOGRAM NYAJ
1E14F      ; DISALLOWED # NYIAKENG PUACHUE HMONG CIRCLED CA
1E2C0..1E2F9; PVALID     # WANCHO LETTER AA..WANCHO DIGIT NINE
1E2FF      ; DISALLOWED # WANCHO NGUN SIGN
1E922..1E94B; PVALID     # ADLAM SMALL LETTER ALIF..ADLAM NASALIZATION
1ED01..1ED3D; DISALLOWED # OTTOMAN SIYAQ NUMBER ONE..OTTOMAN SIYAQ FRAC
1F110..1F16C; DISALLOWED # PARENTHESESIZED LATIN CAPITAL LETTER A..RAISED
1F300..1F6D5; DISALLOWED # CYCLONE..HINDU TEMPLE
1F6F0..1F6FA; DISALLOWED # SATELLITE..AUTO RICKSHAW
1F7E0..1F7EB; DISALLOWED # LARGE ORANGE CIRCLE..LARGE BROWN SQUARE
1F90D..1F971; DISALLOWED # WHITE HEART..YAWNING FACE
1F97A..1F9A2; DISALLOWED # FACE WITH PLEADING EYES..SWAN
1F9A5..1F9AA; DISALLOWED # SLOTH..OYSTER
1F9AE..1F9CA; DISALLOWED # GUIDE DOG..ICE CUBE
1F9CD..1FA53; DISALLOWED # STANDING PERSON..BLACK CHESS KNIGHT-BISHOP
1FA70..1FA73; DISALLOWED # BALLET SHOES..SHORTS
1FA78..1FA7A; DISALLOWED # DROP OF BLOOD..STETHOSCOPE
1FA80..1FA82; DISALLOWED # YO-YO..PARACHUTE
1FA90..1FA95; DISALLOWED # RINGED PLANET..BANJO

```

[Appendix G](#). Code points in Unicode Character Database (UCD) format for Unicode 12.0.0

```

0000..002C ; DISALLOWED # <control>..COMMA
002D      ; PVALID     # HYPHEN-MINUS
002E..002F ; DISALLOWED # FULL STOP..SOLIDUS
0030..0039 ; PVALID     # DIGIT ZERO..DIGIT NINE
003A..0060 ; DISALLOWED # COLON..GRAVE ACCENT
0061..007A ; PVALID     # LATIN SMALL LETTER A..LATIN SMALL LETTER Z
007B..00B6 ; DISALLOWED # LEFT CURLY BRACKET..PILCROW SIGN
00B7      ; CONTEXTO   # MIDDLE DOT
00B8..00DE ; DISALLOWED # CEDILLA..LATIN CAPITAL LETTER THORN
00DF..00F6 ; PVALID     # LATIN SMALL LETTER SHARP S..LATIN SMALL LETT
00F7      ; DISALLOWED # DIVISION SIGN

```

00F8..00FF	; PVALID	# LATIN SMALL LETTER O WITH STROKE..LATIN SMAL
0100	; DISALLOWED	# LATIN CAPITAL LETTER A WITH MACRON
0101	; PVALID	# LATIN SMALL LETTER A WITH MACRON
0102	; DISALLOWED	# LATIN CAPITAL LETTER A WITH BREVE
0103	; PVALID	# LATIN SMALL LETTER A WITH BREVE
0104	; DISALLOWED	# LATIN CAPITAL LETTER A WITH OGONEK

0105	; PVALID	# LATIN SMALL LETTER A WITH OGONEK
0106	; DISALLOWED	# LATIN CAPITAL LETTER C WITH ACUTE
0107	; PVALID	# LATIN SMALL LETTER C WITH ACUTE
0108	; DISALLOWED	# LATIN CAPITAL LETTER C WITH CIRCUMFLEX
0109	; PVALID	# LATIN SMALL LETTER C WITH CIRCUMFLEX
010A	; DISALLOWED	# LATIN CAPITAL LETTER C WITH DOT ABOVE
010B	; PVALID	# LATIN SMALL LETTER C WITH DOT ABOVE
010C	; DISALLOWED	# LATIN CAPITAL LETTER C WITH CARON
010D	; PVALID	# LATIN SMALL LETTER C WITH CARON
010E	; DISALLOWED	# LATIN CAPITAL LETTER D WITH CARON
010F	; PVALID	# LATIN SMALL LETTER D WITH CARON
0110	; DISALLOWED	# LATIN CAPITAL LETTER D WITH STROKE
0111	; PVALID	# LATIN SMALL LETTER D WITH STROKE
0112	; DISALLOWED	# LATIN CAPITAL LETTER E WITH MACRON
0113	; PVALID	# LATIN SMALL LETTER E WITH MACRON
0114	; DISALLOWED	# LATIN CAPITAL LETTER E WITH BREVE
0115	; PVALID	# LATIN SMALL LETTER E WITH BREVE
0116	; DISALLOWED	# LATIN CAPITAL LETTER E WITH DOT ABOVE
0117	; PVALID	# LATIN SMALL LETTER E WITH DOT ABOVE
0118	; DISALLOWED	# LATIN CAPITAL LETTER E WITH OGONEK
0119	; PVALID	# LATIN SMALL LETTER E WITH OGONEK
011A	; DISALLOWED	# LATIN CAPITAL LETTER E WITH CARON
011B	; PVALID	# LATIN SMALL LETTER E WITH CARON
011C	; DISALLOWED	# LATIN CAPITAL LETTER G WITH CIRCUMFLEX
011D	; PVALID	# LATIN SMALL LETTER G WITH CIRCUMFLEX
011E	; DISALLOWED	# LATIN CAPITAL LETTER G WITH BREVE
011F	; PVALID	# LATIN SMALL LETTER G WITH BREVE
0120	; DISALLOWED	# LATIN CAPITAL LETTER G WITH DOT ABOVE
0121	; PVALID	# LATIN SMALL LETTER G WITH DOT ABOVE
0122	; DISALLOWED	# LATIN CAPITAL LETTER G WITH CEDILLA
0123	; PVALID	# LATIN SMALL LETTER G WITH CEDILLA
0124	; DISALLOWED	# LATIN CAPITAL LETTER H WITH CIRCUMFLEX
0125	; PVALID	# LATIN SMALL LETTER H WITH CIRCUMFLEX
0126	; DISALLOWED	# LATIN CAPITAL LETTER H WITH STROKE
0127	; PVALID	# LATIN SMALL LETTER H WITH STROKE

0128	; DISALLOWED	# LATIN CAPITAL LETTER I WITH TILDE
0129	; PVALID	# LATIN SMALL LETTER I WITH TILDE
012A	; DISALLOWED	# LATIN CAPITAL LETTER I WITH MACRON
012B	; PVALID	# LATIN SMALL LETTER I WITH MACRON
012C	; DISALLOWED	# LATIN CAPITAL LETTER I WITH BREVE
012D	; PVALID	# LATIN SMALL LETTER I WITH BREVE
012E	; DISALLOWED	# LATIN CAPITAL LETTER I WITH OGONEK
012F	; PVALID	# LATIN SMALL LETTER I WITH OGONEK
0130	; DISALLOWED	# LATIN CAPITAL LETTER I WITH DOT ABOVE
0131	; PVALID	# LATIN SMALL LETTER DOTLESS I
0132..0134	; DISALLOWED	# LATIN CAPITAL LIGATURE IJ..LATIN CAPITAL LET
0135	; PVALID	# LATIN SMALL LETTER J WITH CIRCUMFLEX
0136	; DISALLOWED	# LATIN CAPITAL LETTER K WITH CEDILLA

Faltstrom

Expires September 12, 2019

[Page 25]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

0137..0138	; PVALID	# LATIN SMALL LETTER K WITH CEDILLA..LATIN SMA
0139	; DISALLOWED	# LATIN CAPITAL LETTER L WITH ACUTE
013A	; PVALID	# LATIN SMALL LETTER L WITH ACUTE
013B	; DISALLOWED	# LATIN CAPITAL LETTER L WITH CEDILLA
013C	; PVALID	# LATIN SMALL LETTER L WITH CEDILLA
013D	; DISALLOWED	# LATIN CAPITAL LETTER L WITH CARON
013E	; PVALID	# LATIN SMALL LETTER L WITH CARON
013F..0141	; DISALLOWED	# LATIN CAPITAL LETTER L WITH MIDDLE DOT..LATI
0142	; PVALID	# LATIN SMALL LETTER L WITH STROKE
0143	; DISALLOWED	# LATIN CAPITAL LETTER N WITH ACUTE
0144	; PVALID	# LATIN SMALL LETTER N WITH ACUTE
0145	; DISALLOWED	# LATIN CAPITAL LETTER N WITH CEDILLA
0146	; PVALID	# LATIN SMALL LETTER N WITH CEDILLA
0147	; DISALLOWED	# LATIN CAPITAL LETTER N WITH CARON
0148	; PVALID	# LATIN SMALL LETTER N WITH CARON
0149..014A	; DISALLOWED	# LATIN SMALL LETTER N PRECEDED BY APOSTROPHE.
014B	; PVALID	# LATIN SMALL LETTER ENG
014C	; DISALLOWED	# LATIN CAPITAL LETTER O WITH MACRON
014D	; PVALID	# LATIN SMALL LETTER O WITH MACRON
014E	; DISALLOWED	# LATIN CAPITAL LETTER O WITH BREVE
014F	; PVALID	# LATIN SMALL LETTER O WITH BREVE
0150	; DISALLOWED	# LATIN CAPITAL LETTER O WITH DOUBLE ACUTE
0151	; PVALID	# LATIN SMALL LETTER O WITH DOUBLE ACUTE
0152	; DISALLOWED	# LATIN CAPITAL LIGATURE OE
0153	; PVALID	# LATIN SMALL LIGATURE OE
0154	; DISALLOWED	# LATIN CAPITAL LETTER R WITH ACUTE
0155	; PVALID	# LATIN SMALL LETTER R WITH ACUTE
0156	; DISALLOWED	# LATIN CAPITAL LETTER R WITH CEDILLA

0157	; PVALID	# LATIN SMALL LETTER R WITH CEDILLA
0158	; DISALLOWED	# LATIN CAPITAL LETTER R WITH CARON
0159	; PVALID	# LATIN SMALL LETTER R WITH CARON
015A	; DISALLOWED	# LATIN CAPITAL LETTER S WITH ACUTE
015B	; PVALID	# LATIN SMALL LETTER S WITH ACUTE
015C	; DISALLOWED	# LATIN CAPITAL LETTER S WITH CIRCUMFLEX
015D	; PVALID	# LATIN SMALL LETTER S WITH CIRCUMFLEX
015E	; DISALLOWED	# LATIN CAPITAL LETTER S WITH CEDILLA
015F	; PVALID	# LATIN SMALL LETTER S WITH CEDILLA
0160	; DISALLOWED	# LATIN CAPITAL LETTER S WITH CARON
0161	; PVALID	# LATIN SMALL LETTER S WITH CARON
0162	; DISALLOWED	# LATIN CAPITAL LETTER T WITH CEDILLA
0163	; PVALID	# LATIN SMALL LETTER T WITH CEDILLA
0164	; DISALLOWED	# LATIN CAPITAL LETTER T WITH CARON
0165	; PVALID	# LATIN SMALL LETTER T WITH CARON
0166	; DISALLOWED	# LATIN CAPITAL LETTER T WITH STROKE
0167	; PVALID	# LATIN SMALL LETTER T WITH STROKE
0168	; DISALLOWED	# LATIN CAPITAL LETTER U WITH TILDE
0169	; PVALID	# LATIN SMALL LETTER U WITH TILDE
016A	; DISALLOWED	# LATIN CAPITAL LETTER U WITH MACRON

016B	; PVALID	# LATIN SMALL LETTER U WITH MACRON
016C	; DISALLOWED	# LATIN CAPITAL LETTER U WITH BREVE
016D	; PVALID	# LATIN SMALL LETTER U WITH BREVE
016E	; DISALLOWED	# LATIN CAPITAL LETTER U WITH RING ABOVE
016F	; PVALID	# LATIN SMALL LETTER U WITH RING ABOVE
0170	; DISALLOWED	# LATIN CAPITAL LETTER U WITH DOUBLE ACUTE
0171	; PVALID	# LATIN SMALL LETTER U WITH DOUBLE ACUTE
0172	; DISALLOWED	# LATIN CAPITAL LETTER U WITH OGONEK
0173	; PVALID	# LATIN SMALL LETTER U WITH OGONEK
0174	; DISALLOWED	# LATIN CAPITAL LETTER W WITH CIRCUMFLEX
0175	; PVALID	# LATIN SMALL LETTER W WITH CIRCUMFLEX
0176	; DISALLOWED	# LATIN CAPITAL LETTER Y WITH CIRCUMFLEX
0177	; PVALID	# LATIN SMALL LETTER Y WITH CIRCUMFLEX
0178..0179	; DISALLOWED	# LATIN CAPITAL LETTER Y WITH DIAERESIS..LATIN
017A	; PVALID	# LATIN SMALL LETTER Z WITH ACUTE
017B	; DISALLOWED	# LATIN CAPITAL LETTER Z WITH DOT ABOVE
017C	; PVALID	# LATIN SMALL LETTER Z WITH DOT ABOVE
017D	; DISALLOWED	# LATIN CAPITAL LETTER Z WITH CARON
017E	; PVALID	# LATIN SMALL LETTER Z WITH CARON
017F	; DISALLOWED	# LATIN SMALL LETTER LONG S
0180	; PVALID	# LATIN SMALL LETTER B WITH STROKE

0181..0182	; DISALLOWED	# LATIN CAPITAL LETTER B WITH HOOK..LATIN CAPI
0183	; PVALID	# LATIN SMALL LETTER B WITH TOPBAR
0184	; DISALLOWED	# LATIN CAPITAL LETTER TONE SIX
0185	; PVALID	# LATIN SMALL LETTER TONE SIX
0186..0187	; DISALLOWED	# LATIN CAPITAL LETTER OPEN O..LATIN CAPITAL L
0188	; PVALID	# LATIN SMALL LETTER C WITH HOOK
0189..018B	; DISALLOWED	# LATIN CAPITAL LETTER AFRICAN D..LATIN CAPITA
018C..018D	; PVALID	# LATIN SMALL LETTER D WITH TOPBAR..LATIN SMAL
018E..0191	; DISALLOWED	# LATIN CAPITAL LETTER REVERSED E..LATIN CAPIT
0192	; PVALID	# LATIN SMALL LETTER F WITH HOOK
0193..0194	; DISALLOWED	# LATIN CAPITAL LETTER G WITH HOOK..LATIN CAPI
0195	; PVALID	# LATIN SMALL LETTER HV
0196..0198	; DISALLOWED	# LATIN CAPITAL LETTER IOTA..LATIN CAPITAL LET
0199..019B	; PVALID	# LATIN SMALL LETTER K WITH HOOK..LATIN SMALL
019C..019D	; DISALLOWED	# LATIN CAPITAL LETTER TURNED M..LATIN CAPITAL
019E	; PVALID	# LATIN SMALL LETTER N WITH LONG RIGHT LEG
019F..01A0	; DISALLOWED	# LATIN CAPITAL LETTER O WITH MIDDLE TILDE..LA
01A1	; PVALID	# LATIN SMALL LETTER O WITH HORN
01A2	; DISALLOWED	# LATIN CAPITAL LETTER OI
01A3	; PVALID	# LATIN SMALL LETTER OI
01A4	; DISALLOWED	# LATIN CAPITAL LETTER P WITH HOOK
01A5	; PVALID	# LATIN SMALL LETTER P WITH HOOK
01A6..01A7	; DISALLOWED	# LATIN LETTER YR..LATIN CAPITAL LETTER TONE T
01A8	; PVALID	# LATIN SMALL LETTER TONE TWO
01A9	; DISALLOWED	# LATIN CAPITAL LETTER ESH
01AA..01AB	; PVALID	# LATIN LETTER REVERSED ESH LOOP..LATIN SMALL
01AC	; DISALLOWED	# LATIN CAPITAL LETTER T WITH HOOK

01AD	; PVALID	# LATIN SMALL LETTER T WITH HOOK
01AE..01AF	; DISALLOWED	# LATIN CAPITAL LETTER T WITH RETROFLEX HOOK..
01B0	; PVALID	# LATIN SMALL LETTER U WITH HORN
01B1..01B3	; DISALLOWED	# LATIN CAPITAL LETTER UPSILON..LATIN CAPITAL
01B4	; PVALID	# LATIN SMALL LETTER Y WITH HOOK
01B5	; DISALLOWED	# LATIN CAPITAL LETTER Z WITH STROKE
01B6	; PVALID	# LATIN SMALL LETTER Z WITH STROKE
01B7..01B8	; DISALLOWED	# LATIN CAPITAL LETTER EZH..LATIN CAPITAL LETT
01B9..01BB	; PVALID	# LATIN SMALL LETTER EZH REVERSED..LATIN LETTE
01BC	; DISALLOWED	# LATIN CAPITAL LETTER TONE FIVE
01BD..01C3	; PVALID	# LATIN SMALL LETTER TONE FIVE..LATIN LETTER R
01C4..01CD	; DISALLOWED	# LATIN CAPITAL LETTER DZ WITH CARON..LATIN CA
01CE	; PVALID	# LATIN SMALL LETTER A WITH CARON
01CF	; DISALLOWED	# LATIN CAPITAL LETTER I WITH CARON

01D0	; PVALID	# LATIN SMALL LETTER I WITH CARON
01D1	; DISALLOWED	# LATIN CAPITAL LETTER O WITH CARON
01D2	; PVALID	# LATIN SMALL LETTER O WITH CARON
01D3	; DISALLOWED	# LATIN CAPITAL LETTER U WITH CARON
01D4	; PVALID	# LATIN SMALL LETTER U WITH CARON
01D5	; DISALLOWED	# LATIN CAPITAL LETTER U WITH DIAERESIS AND MA
01D6	; PVALID	# LATIN SMALL LETTER U WITH DIAERESIS AND MACR
01D7	; DISALLOWED	# LATIN CAPITAL LETTER U WITH DIAERESIS AND AC
01D8	; PVALID	# LATIN SMALL LETTER U WITH DIAERESIS AND ACUT
01D9	; DISALLOWED	# LATIN CAPITAL LETTER U WITH DIAERESIS AND CA
01DA	; PVALID	# LATIN SMALL LETTER U WITH DIAERESIS AND CARO
01DB	; DISALLOWED	# LATIN CAPITAL LETTER U WITH DIAERESIS AND GR
01DC..01DD	; PVALID	# LATIN SMALL LETTER U WITH DIAERESIS AND GRAV
01DE	; DISALLOWED	# LATIN CAPITAL LETTER A WITH DIAERESIS AND MA
01DF	; PVALID	# LATIN SMALL LETTER A WITH DIAERESIS AND MACR
01E0	; DISALLOWED	# LATIN CAPITAL LETTER A WITH DOT ABOVE AND MA
01E1	; PVALID	# LATIN SMALL LETTER A WITH DOT ABOVE AND MACR
01E2	; DISALLOWED	# LATIN CAPITAL LETTER AE WITH MACRON
01E3	; PVALID	# LATIN SMALL LETTER AE WITH MACRON
01E4	; DISALLOWED	# LATIN CAPITAL LETTER G WITH STROKE
01E5	; PVALID	# LATIN SMALL LETTER G WITH STROKE
01E6	; DISALLOWED	# LATIN CAPITAL LETTER G WITH CARON
01E7	; PVALID	# LATIN SMALL LETTER G WITH CARON
01E8	; DISALLOWED	# LATIN CAPITAL LETTER K WITH CARON
01E9	; PVALID	# LATIN SMALL LETTER K WITH CARON
01EA	; DISALLOWED	# LATIN CAPITAL LETTER O WITH OGONEK
01EB	; PVALID	# LATIN SMALL LETTER O WITH OGONEK
01EC	; DISALLOWED	# LATIN CAPITAL LETTER O WITH OGONEK AND MACRO
01ED	; PVALID	# LATIN SMALL LETTER O WITH OGONEK AND MACRON
01EE	; DISALLOWED	# LATIN CAPITAL LETTER EZH WITH CARON
01EF..01F0	; PVALID	# LATIN SMALL LETTER EZH WITH CARON..LATIN SMA
01F1..01F4	; DISALLOWED	# LATIN CAPITAL LETTER DZ..LATIN CAPITAL LETTE
01F5	; PVALID	# LATIN SMALL LETTER G WITH ACUTE
01F6..01F8	; DISALLOWED	# LATIN CAPITAL LETTER HWAIR..LATIN CAPITAL LE

01F9	; PVALID	# LATIN SMALL LETTER N WITH GRAVE
01FA	; DISALLOWED	# LATIN CAPITAL LETTER A WITH RING ABOVE AND A
01FB	; PVALID	# LATIN SMALL LETTER A WITH RING ABOVE AND ACU
01FC	; DISALLOWED	# LATIN CAPITAL LETTER AE WITH ACUTE
01FD	; PVALID	# LATIN SMALL LETTER AE WITH ACUTE
01FE	; DISALLOWED	# LATIN CAPITAL LETTER O WITH STROKE AND ACUTE
01FF	; PVALID	# LATIN SMALL LETTER O WITH STROKE AND ACUTE

0200	; DISALLOWED	# LATIN CAPITAL LETTER A WITH DOUBLE GRAVE
0201	; PVALID	# LATIN SMALL LETTER A WITH DOUBLE GRAVE
0202	; DISALLOWED	# LATIN CAPITAL LETTER A WITH INVERTED BREVE
0203	; PVALID	# LATIN SMALL LETTER A WITH INVERTED BREVE
0204	; DISALLOWED	# LATIN CAPITAL LETTER E WITH DOUBLE GRAVE
0205	; PVALID	# LATIN SMALL LETTER E WITH DOUBLE GRAVE
0206	; DISALLOWED	# LATIN CAPITAL LETTER E WITH INVERTED BREVE
0207	; PVALID	# LATIN SMALL LETTER E WITH INVERTED BREVE
0208	; DISALLOWED	# LATIN CAPITAL LETTER I WITH DOUBLE GRAVE
0209	; PVALID	# LATIN SMALL LETTER I WITH DOUBLE GRAVE
020A	; DISALLOWED	# LATIN CAPITAL LETTER I WITH INVERTED BREVE
020B	; PVALID	# LATIN SMALL LETTER I WITH INVERTED BREVE
020C	; DISALLOWED	# LATIN CAPITAL LETTER O WITH DOUBLE GRAVE
020D	; PVALID	# LATIN SMALL LETTER O WITH DOUBLE GRAVE
020E	; DISALLOWED	# LATIN CAPITAL LETTER O WITH INVERTED BREVE
020F	; PVALID	# LATIN SMALL LETTER O WITH INVERTED BREVE
0210	; DISALLOWED	# LATIN CAPITAL LETTER R WITH DOUBLE GRAVE
0211	; PVALID	# LATIN SMALL LETTER R WITH DOUBLE GRAVE
0212	; DISALLOWED	# LATIN CAPITAL LETTER R WITH INVERTED BREVE
0213	; PVALID	# LATIN SMALL LETTER R WITH INVERTED BREVE
0214	; DISALLOWED	# LATIN CAPITAL LETTER U WITH DOUBLE GRAVE
0215	; PVALID	# LATIN SMALL LETTER U WITH DOUBLE GRAVE
0216	; DISALLOWED	# LATIN CAPITAL LETTER U WITH INVERTED BREVE
0217	; PVALID	# LATIN SMALL LETTER U WITH INVERTED BREVE
0218	; DISALLOWED	# LATIN CAPITAL LETTER S WITH COMMA BELOW
0219	; PVALID	# LATIN SMALL LETTER S WITH COMMA BELOW
021A	; DISALLOWED	# LATIN CAPITAL LETTER T WITH COMMA BELOW
021B	; PVALID	# LATIN SMALL LETTER T WITH COMMA BELOW
021C	; DISALLOWED	# LATIN CAPITAL LETTER YOGH
021D	; PVALID	# LATIN SMALL LETTER YOGH
021E	; DISALLOWED	# LATIN CAPITAL LETTER H WITH CARON
021F	; PVALID	# LATIN SMALL LETTER H WITH CARON
0220	; DISALLOWED	# LATIN CAPITAL LETTER N WITH LONG RIGHT LEG
0221	; PVALID	# LATIN SMALL LETTER D WITH CURL
0222	; DISALLOWED	# LATIN CAPITAL LETTER OU
0223	; PVALID	# LATIN SMALL LETTER OU
0224	; DISALLOWED	# LATIN CAPITAL LETTER Z WITH HOOK
0225	; PVALID	# LATIN SMALL LETTER Z WITH HOOK
0226	; DISALLOWED	# LATIN CAPITAL LETTER A WITH DOT ABOVE
0227	; PVALID	# LATIN SMALL LETTER A WITH DOT ABOVE
0228	; DISALLOWED	# LATIN CAPITAL LETTER E WITH CEDILLA

0229	; PVALID	# LATIN SMALL LETTER E WITH CEDILLA
022A	; DISALLOWED	# LATIN CAPITAL LETTER O WITH DIAERESIS AND MA
022B	; PVALID	# LATIN SMALL LETTER O WITH DIAERESIS AND MACR
022C	; DISALLOWED	# LATIN CAPITAL LETTER O WITH TILDE AND MACRON
022D	; PVALID	# LATIN SMALL LETTER O WITH TILDE AND MACRON
022E	; DISALLOWED	# LATIN CAPITAL LETTER O WITH DOT ABOVE
022F	; PVALID	# LATIN SMALL LETTER O WITH DOT ABOVE
0230	; DISALLOWED	# LATIN CAPITAL LETTER O WITH DOT ABOVE AND MA
0231	; PVALID	# LATIN SMALL LETTER O WITH DOT ABOVE AND MACR
0232	; DISALLOWED	# LATIN CAPITAL LETTER Y WITH MACRON
0233..0239	; PVALID	# LATIN SMALL LETTER Y WITH MACRON..LATIN SMAL
023A..023B	; DISALLOWED	# LATIN CAPITAL LETTER A WITH STROKE..LATIN CA
023C	; PVALID	# LATIN SMALL LETTER C WITH STROKE
023D..023E	; DISALLOWED	# LATIN CAPITAL LETTER L WITH BAR..LATIN CAPIT
023F..0240	; PVALID	# LATIN SMALL LETTER S WITH SWASH TAIL..LATIN
0241	; DISALLOWED	# LATIN CAPITAL LETTER GLOTTAL STOP
0242	; PVALID	# LATIN SMALL LETTER GLOTTAL STOP
0243..0246	; DISALLOWED	# LATIN CAPITAL LETTER B WITH STROKE..LATIN CA
0247	; PVALID	# LATIN SMALL LETTER E WITH STROKE
0248	; DISALLOWED	# LATIN CAPITAL LETTER J WITH STROKE
0249	; PVALID	# LATIN SMALL LETTER J WITH STROKE
024A	; DISALLOWED	# LATIN CAPITAL LETTER SMALL Q WITH HOOK TAIL
024B	; PVALID	# LATIN SMALL LETTER Q WITH HOOK TAIL
024C	; DISALLOWED	# LATIN CAPITAL LETTER R WITH STROKE
024D	; PVALID	# LATIN SMALL LETTER R WITH STROKE
024E	; DISALLOWED	# LATIN CAPITAL LETTER Y WITH STROKE
024F..02AF	; PVALID	# LATIN SMALL LETTER Y WITH STROKE..LATIN SMAL
02B0..02B8	; DISALLOWED	# MODIFIER LETTER SMALL H..MODIFIER LETTER SMA
02B9..02C1	; PVALID	# MODIFIER LETTER PRIME..MODIFIER LETTER REVER
02C2..02C5	; DISALLOWED	# MODIFIER LETTER LEFT ARROWHEAD..MODIFIER LET
02C6..02D1	; PVALID	# MODIFIER LETTER CIRCUMFLEX ACCENT..MODIFIER
02D2..02EB	; DISALLOWED	# MODIFIER LETTER CENTRED RIGHT HALF RING..MOD
02EC	; PVALID	# MODIFIER LETTER VOICING
02ED	; DISALLOWED	# MODIFIER LETTER UNASPIRATED
02EE	; PVALID	# MODIFIER LETTER DOUBLE APOSTROPHE
02EF..02FF	; DISALLOWED	# MODIFIER LETTER LOW DOWN ARROWHEAD..MODIFIER
0300..033F	; PVALID	# COMBINING GRAVE ACCENT..COMBINING DOUBLE OVE
0340..0341	; DISALLOWED	# COMBINING GRAVE TONE MARK..COMBINING ACUTE T
0342	; PVALID	# COMBINING GREEK PERISPOMENI
0343..0345	; DISALLOWED	# COMBINING GREEK KORONIS..COMBINING GREEK YPO
0346..034E	; PVALID	# COMBINING BRIDGE ABOVE..COMBINING UPWARDS AR
034F	; DISALLOWED	# COMBINING GRAPHEME JOINER
0350..036F	; PVALID	# COMBINING RIGHT ARROWHEAD ABOVE..COMBINING L
0370	; DISALLOWED	# GREEK CAPITAL LETTER HETA
0371	; PVALID	# GREEK SMALL LETTER HETA
0372	; DISALLOWED	# GREEK CAPITAL LETTER ARCHAIC SAMPI
0373	; PVALID	# GREEK SMALL LETTER ARCHAIC SAMPI
0374	; DISALLOWED	# GREEK NUMERAL SIGN

Internet-Draft

IDNA2008 and Unicode 12

March 2019

0375	; CONTEXT0	# GREEK LOWER NUMERAL SIGN
0376	; DISALLOWED	# GREEK CAPITAL LETTER PAMPHYLIAN DIGAMMA
0377	; PVALID	# GREEK SMALL LETTER PAMPHYLIAN DIGAMMA
0378..0379	; UNASSIGNED	# <reserved>..<reserved>
037A	; DISALLOWED	# GREEK YPOGEGRAMMENI
037B..037D	; PVALID	# GREEK SMALL REVERSED LUNATE SIGMA SYMBOL..GR
037E..037F	; DISALLOWED	# GREEK QUESTION MARK..GREEK CAPITAL LETTER YO
0380..0383	; UNASSIGNED	# <reserved>..<reserved>
0384..038A	; DISALLOWED	# GREEK TONOS..GREEK CAPITAL LETTER IOTA WITH
038B	; UNASSIGNED	# <reserved>
038C	; DISALLOWED	# GREEK CAPITAL LETTER OMICRON WITH TONOS
038D	; UNASSIGNED	# <reserved>
038E..038F	; DISALLOWED	# GREEK CAPITAL LETTER UPSILON WITH TONOS..GRE
0390	; PVALID	# GREEK SMALL LETTER IOTA WITH DIALYTIKA AND T
0391..03A1	; DISALLOWED	# GREEK CAPITAL LETTER ALPHA..GREEK CAPITAL LE
03A2	; UNASSIGNED	# <reserved>
03A3..03AB	; DISALLOWED	# GREEK CAPITAL LETTER SIGMA..GREEK CAPITAL LE
03AC..03CE	; PVALID	# GREEK SMALL LETTER ALPHA WITH TONOS..GREEK S
03CF..03D6	; DISALLOWED	# GREEK CAPITAL KAI SYMBOL..GREEK PI SYMBOL
03D7	; PVALID	# GREEK KAI SYMBOL
03D8	; DISALLOWED	# GREEK LETTER ARCHAIC KOPPA
03D9	; PVALID	# GREEK SMALL LETTER ARCHAIC KOPPA
03DA	; DISALLOWED	# GREEK LETTER STIGMA
03DB	; PVALID	# GREEK SMALL LETTER STIGMA
03DC	; DISALLOWED	# GREEK LETTER DIGAMMA
03DD	; PVALID	# GREEK SMALL LETTER DIGAMMA
03DE	; DISALLOWED	# GREEK LETTER KOPPA
03DF	; PVALID	# GREEK SMALL LETTER KOPPA
03E0	; DISALLOWED	# GREEK LETTER SAMPI
03E1	; PVALID	# GREEK SMALL LETTER SAMPI
03E2	; DISALLOWED	# COPTIC CAPITAL LETTER SHEI
03E3	; PVALID	# COPTIC SMALL LETTER SHEI
03E4	; DISALLOWED	# COPTIC CAPITAL LETTER FEI
03E5	; PVALID	# COPTIC SMALL LETTER FEI
03E6	; DISALLOWED	# COPTIC CAPITAL LETTER KHEI
03E7	; PVALID	# COPTIC SMALL LETTER KHEI
03E8	; DISALLOWED	# COPTIC CAPITAL LETTER HORI
03E9	; PVALID	# COPTIC SMALL LETTER HORI
03EA	; DISALLOWED	# COPTIC CAPITAL LETTER GANGIA
03EB	; PVALID	# COPTIC SMALL LETTER GANGIA
03EC	; DISALLOWED	# COPTIC CAPITAL LETTER SHIMA
03ED	; PVALID	# COPTIC SMALL LETTER SHIMA
03EE	; DISALLOWED	# COPTIC CAPITAL LETTER DEI

03EF	; PVALID	# COPTIC SMALL LETTER DEI
03F0..03F2	; DISALLOWED	# GREEK KAPPA SYMBOL..GREEK LUNATE SIGMA SYMBO
03F3	; PVALID	# GREEK LETTER YOT
03F4..03F7	; DISALLOWED	# GREEK CAPITAL THETA SYMBOL..GREEK CAPITAL LE
03F8	; PVALID	# GREEK SMALL LETTER SHO

Faltstrom

Expires September 12, 2019

[Page 31]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

03F9..03FA	; DISALLOWED	# GREEK CAPITAL LUNATE SIGMA SYMBOL..GREEK CAP
03FB..03FC	; PVALID	# GREEK SMALL LETTER SAN..GREEK RHO WITH STROK
03FD..042F	; DISALLOWED	# GREEK CAPITAL REVERSED LUNATE SIGMA SYMBOL..
0430..045F	; PVALID	# CYRILLIC SMALL LETTER A..CYRILLIC SMALL LETT
0460	; DISALLOWED	# CYRILLIC CAPITAL LETTER OMEGA
0461	; PVALID	# CYRILLIC SMALL LETTER OMEGA
0462	; DISALLOWED	# CYRILLIC CAPITAL LETTER YAT
0463	; PVALID	# CYRILLIC SMALL LETTER YAT
0464	; DISALLOWED	# CYRILLIC CAPITAL LETTER IOTIFIED E
0465	; PVALID	# CYRILLIC SMALL LETTER IOTIFIED E
0466	; DISALLOWED	# CYRILLIC CAPITAL LETTER LITTLE YUS
0467	; PVALID	# CYRILLIC SMALL LETTER LITTLE YUS
0468	; DISALLOWED	# CYRILLIC CAPITAL LETTER IOTIFIED LITTLE YUS
0469	; PVALID	# CYRILLIC SMALL LETTER IOTIFIED LITTLE YUS
046A	; DISALLOWED	# CYRILLIC CAPITAL LETTER BIG YUS
046B	; PVALID	# CYRILLIC SMALL LETTER BIG YUS
046C	; DISALLOWED	# CYRILLIC CAPITAL LETTER IOTIFIED BIG YUS
046D	; PVALID	# CYRILLIC SMALL LETTER IOTIFIED BIG YUS
046E	; DISALLOWED	# CYRILLIC CAPITAL LETTER KSI
046F	; PVALID	# CYRILLIC SMALL LETTER KSI
0470	; DISALLOWED	# CYRILLIC CAPITAL LETTER PSI
0471	; PVALID	# CYRILLIC SMALL LETTER PSI
0472	; DISALLOWED	# CYRILLIC CAPITAL LETTER FITA
0473	; PVALID	# CYRILLIC SMALL LETTER FITA
0474	; DISALLOWED	# CYRILLIC CAPITAL LETTER IZHITSA
0475	; PVALID	# CYRILLIC SMALL LETTER IZHITSA
0476	; DISALLOWED	# CYRILLIC CAPITAL LETTER IZHITSA WITH DOUBLE
0477	; PVALID	# CYRILLIC SMALL LETTER IZHITSA WITH DOUBLE GR
0478	; DISALLOWED	# CYRILLIC CAPITAL LETTER UK
0479	; PVALID	# CYRILLIC SMALL LETTER UK
047A	; DISALLOWED	# CYRILLIC CAPITAL LETTER ROUND OMEGA
047B	; PVALID	# CYRILLIC SMALL LETTER ROUND OMEGA
047C	; DISALLOWED	# CYRILLIC CAPITAL LETTER OMEGA WITH TITLO
047D	; PVALID	# CYRILLIC SMALL LETTER OMEGA WITH TITLO
047E	; DISALLOWED	# CYRILLIC CAPITAL LETTER OT
047F	; PVALID	# CYRILLIC SMALL LETTER OT

0480	; DISALLOWED	# CYRILLIC CAPITAL LETTER KOPPA
0481	; PVALID	# CYRILLIC SMALL LETTER KOPPA
0482	; DISALLOWED	# CYRILLIC THOUSANDS SIGN
0483..0487	; PVALID	# COMBINING CYRILLIC TITLO..COMBINING CYRILLIC
0488..048A	; DISALLOWED	# COMBINING CYRILLIC HUNDRED THOUSANDS SIGN..C
048B	; PVALID	# CYRILLIC SMALL LETTER SHORT I WITH TAIL
048C	; DISALLOWED	# CYRILLIC CAPITAL LETTER SEMISOFT SIGN
048D	; PVALID	# CYRILLIC SMALL LETTER SEMISOFT SIGN
048E	; DISALLOWED	# CYRILLIC CAPITAL LETTER ER WITH TICK
048F	; PVALID	# CYRILLIC SMALL LETTER ER WITH TICK
0490	; DISALLOWED	# CYRILLIC CAPITAL LETTER GHE WITH UPTURN
0491	; PVALID	# CYRILLIC SMALL LETTER GHE WITH UPTURN

Faltstrom

Expires September 12, 2019

[Page 32]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

0492	; DISALLOWED	# CYRILLIC CAPITAL LETTER GHE WITH STROKE
0493	; PVALID	# CYRILLIC SMALL LETTER GHE WITH STROKE
0494	; DISALLOWED	# CYRILLIC CAPITAL LETTER GHE WITH MIDDLE HOOK
0495	; PVALID	# CYRILLIC SMALL LETTER GHE WITH MIDDLE HOOK
0496	; DISALLOWED	# CYRILLIC CAPITAL LETTER ZHE WITH DESCENDER
0497	; PVALID	# CYRILLIC SMALL LETTER ZHE WITH DESCENDER
0498	; DISALLOWED	# CYRILLIC CAPITAL LETTER ZE WITH DESCENDER
0499	; PVALID	# CYRILLIC SMALL LETTER ZE WITH DESCENDER
049A	; DISALLOWED	# CYRILLIC CAPITAL LETTER KA WITH DESCENDER
049B	; PVALID	# CYRILLIC SMALL LETTER KA WITH DESCENDER
049C	; DISALLOWED	# CYRILLIC CAPITAL LETTER KA WITH VERTICAL STR
049D	; PVALID	# CYRILLIC SMALL LETTER KA WITH VERTICAL STROK
049E	; DISALLOWED	# CYRILLIC CAPITAL LETTER KA WITH STROKE
049F	; PVALID	# CYRILLIC SMALL LETTER KA WITH STROKE
04A0	; DISALLOWED	# CYRILLIC CAPITAL LETTER BASHKIR KA
04A1	; PVALID	# CYRILLIC SMALL LETTER BASHKIR KA
04A2	; DISALLOWED	# CYRILLIC CAPITAL LETTER EN WITH DESCENDER
04A3	; PVALID	# CYRILLIC SMALL LETTER EN WITH DESCENDER
04A4	; DISALLOWED	# CYRILLIC CAPITAL LIGATURE EN GHE
04A5	; PVALID	# CYRILLIC SMALL LIGATURE EN GHE
04A6	; DISALLOWED	# CYRILLIC CAPITAL LETTER PE WITH MIDDLE HOOK
04A7	; PVALID	# CYRILLIC SMALL LETTER PE WITH MIDDLE HOOK
04A8	; DISALLOWED	# CYRILLIC CAPITAL LETTER ABKHASIAN HA
04A9	; PVALID	# CYRILLIC SMALL LETTER ABKHASIAN HA
04AA	; DISALLOWED	# CYRILLIC CAPITAL LETTER ES WITH DESCENDER
04AB	; PVALID	# CYRILLIC SMALL LETTER ES WITH DESCENDER
04AC	; DISALLOWED	# CYRILLIC CAPITAL LETTER TE WITH DESCENDER
04AD	; PVALID	# CYRILLIC SMALL LETTER TE WITH DESCENDER
04AE	; DISALLOWED	# CYRILLIC CAPITAL LETTER STRAIGHT U

04AF	; PVALID	# CYRILLIC SMALL LETTER STRAIGHT U
04B0	; DISALLOWED	# CYRILLIC CAPITAL LETTER STRAIGHT U WITH STRO
04B1	; PVALID	# CYRILLIC SMALL LETTER STRAIGHT U WITH STROKE
04B2	; DISALLOWED	# CYRILLIC CAPITAL LETTER HA WITH DESCENDER
04B3	; PVALID	# CYRILLIC SMALL LETTER HA WITH DESCENDER
04B4	; DISALLOWED	# CYRILLIC CAPITAL LIGATURE TE TSE
04B5	; PVALID	# CYRILLIC SMALL LIGATURE TE TSE
04B6	; DISALLOWED	# CYRILLIC CAPITAL LETTER CHE WITH DESCENDER
04B7	; PVALID	# CYRILLIC SMALL LETTER CHE WITH DESCENDER
04B8	; DISALLOWED	# CYRILLIC CAPITAL LETTER CHE WITH VERTICAL ST
04B9	; PVALID	# CYRILLIC SMALL LETTER CHE WITH VERTICAL STRO
04BA	; DISALLOWED	# CYRILLIC CAPITAL LETTER SHHA
04BB	; PVALID	# CYRILLIC SMALL LETTER SHHA
04BC	; DISALLOWED	# CYRILLIC CAPITAL LETTER ABKHASIAN CHE
04BD	; PVALID	# CYRILLIC SMALL LETTER ABKHASIAN CHE
04BE	; DISALLOWED	# CYRILLIC CAPITAL LETTER ABKHASIAN CHE WITH D
04BF	; PVALID	# CYRILLIC SMALL LETTER ABKHASIAN CHE WITH DES
04C0..04C1	; DISALLOWED	# CYRILLIC LETTER PALOCHKA..CYRILLIC CAPITAL L
04C2	; PVALID	# CYRILLIC SMALL LETTER ZHE WITH BREVE

04C3	; DISALLOWED	# CYRILLIC CAPITAL LETTER KA WITH HOOK
04C4	; PVALID	# CYRILLIC SMALL LETTER KA WITH HOOK
04C5	; DISALLOWED	# CYRILLIC CAPITAL LETTER EL WITH TAIL
04C6	; PVALID	# CYRILLIC SMALL LETTER EL WITH TAIL
04C7	; DISALLOWED	# CYRILLIC CAPITAL LETTER EN WITH HOOK
04C8	; PVALID	# CYRILLIC SMALL LETTER EN WITH HOOK
04C9	; DISALLOWED	# CYRILLIC CAPITAL LETTER EN WITH TAIL
04CA	; PVALID	# CYRILLIC SMALL LETTER EN WITH TAIL
04CB	; DISALLOWED	# CYRILLIC CAPITAL LETTER KHAKASSIAN CHE
04CC	; PVALID	# CYRILLIC SMALL LETTER KHAKASSIAN CHE
04CD	; DISALLOWED	# CYRILLIC CAPITAL LETTER EM WITH TAIL
04CE..04CF	; PVALID	# CYRILLIC SMALL LETTER EM WITH TAIL..CYRILLIC
04D0	; DISALLOWED	# CYRILLIC CAPITAL LETTER A WITH BREVE
04D1	; PVALID	# CYRILLIC SMALL LETTER A WITH BREVE
04D2	; DISALLOWED	# CYRILLIC CAPITAL LETTER A WITH DIAERESIS
04D3	; PVALID	# CYRILLIC SMALL LETTER A WITH DIAERESIS
04D4	; DISALLOWED	# CYRILLIC CAPITAL LIGATURE A IE
04D5	; PVALID	# CYRILLIC SMALL LIGATURE A IE
04D6	; DISALLOWED	# CYRILLIC CAPITAL LETTER IE WITH BREVE
04D7	; PVALID	# CYRILLIC SMALL LETTER IE WITH BREVE
04D8	; DISALLOWED	# CYRILLIC CAPITAL LETTER SCHWA
04D9	; PVALID	# CYRILLIC SMALL LETTER SCHWA

04DA	; DISALLOWED	# CYRILLIC CAPITAL LETTER SCHWA WITH DIAERESIS
04DB	; PVALID	# CYRILLIC SMALL LETTER SCHWA WITH DIAERESIS
04DC	; DISALLOWED	# CYRILLIC CAPITAL LETTER ZHE WITH DIAERESIS
04DD	; PVALID	# CYRILLIC SMALL LETTER ZHE WITH DIAERESIS
04DE	; DISALLOWED	# CYRILLIC CAPITAL LETTER ZE WITH DIAERESIS
04DF	; PVALID	# CYRILLIC SMALL LETTER ZE WITH DIAERESIS
04E0	; DISALLOWED	# CYRILLIC CAPITAL LETTER ABKHASIAN DZE
04E1	; PVALID	# CYRILLIC SMALL LETTER ABKHASIAN DZE
04E2	; DISALLOWED	# CYRILLIC CAPITAL LETTER I WITH MACRON
04E3	; PVALID	# CYRILLIC SMALL LETTER I WITH MACRON
04E4	; DISALLOWED	# CYRILLIC CAPITAL LETTER I WITH DIAERESIS
04E5	; PVALID	# CYRILLIC SMALL LETTER I WITH DIAERESIS
04E6	; DISALLOWED	# CYRILLIC CAPITAL LETTER O WITH DIAERESIS
04E7	; PVALID	# CYRILLIC SMALL LETTER O WITH DIAERESIS
04E8	; DISALLOWED	# CYRILLIC CAPITAL LETTER BARRED O
04E9	; PVALID	# CYRILLIC SMALL LETTER BARRED O
04EA	; DISALLOWED	# CYRILLIC CAPITAL LETTER BARRED O WITH DIAERE
04EB	; PVALID	# CYRILLIC SMALL LETTER BARRED O WITH DIAERESI
04EC	; DISALLOWED	# CYRILLIC CAPITAL LETTER E WITH DIAERESIS
04ED	; PVALID	# CYRILLIC SMALL LETTER E WITH DIAERESIS
04EE	; DISALLOWED	# CYRILLIC CAPITAL LETTER U WITH MACRON
04EF	; PVALID	# CYRILLIC SMALL LETTER U WITH MACRON
04F0	; DISALLOWED	# CYRILLIC CAPITAL LETTER U WITH DIAERESIS
04F1	; PVALID	# CYRILLIC SMALL LETTER U WITH DIAERESIS
04F2	; DISALLOWED	# CYRILLIC CAPITAL LETTER U WITH DOUBLE ACUTE
04F3	; PVALID	# CYRILLIC SMALL LETTER U WITH DOUBLE ACUTE

04F4	; DISALLOWED	# CYRILLIC CAPITAL LETTER CHE WITH DIAERESIS
04F5	; PVALID	# CYRILLIC SMALL LETTER CHE WITH DIAERESIS
04F6	; DISALLOWED	# CYRILLIC CAPITAL LETTER GHE WITH DESCENDER
04F7	; PVALID	# CYRILLIC SMALL LETTER GHE WITH DESCENDER
04F8	; DISALLOWED	# CYRILLIC CAPITAL LETTER YERU WITH DIAERESIS
04F9	; PVALID	# CYRILLIC SMALL LETTER YERU WITH DIAERESIS
04FA	; DISALLOWED	# CYRILLIC CAPITAL LETTER GHE WITH STROKE AND
04FB	; PVALID	# CYRILLIC SMALL LETTER GHE WITH STROKE AND HO
04FC	; DISALLOWED	# CYRILLIC CAPITAL LETTER HA WITH HOOK
04FD	; PVALID	# CYRILLIC SMALL LETTER HA WITH HOOK
04FE	; DISALLOWED	# CYRILLIC CAPITAL LETTER HA WITH STROKE
04FF	; PVALID	# CYRILLIC SMALL LETTER HA WITH STROKE
0500	; DISALLOWED	# CYRILLIC CAPITAL LETTER KOMI DE
0501	; PVALID	# CYRILLIC SMALL LETTER KOMI DE
0502	; DISALLOWED	# CYRILLIC CAPITAL LETTER KOMI DJE

0503	; PVALID	# CYRILLIC SMALL LETTER KOMI DJE
0504	; DISALLOWED	# CYRILLIC CAPITAL LETTER KOMI ZJE
0505	; PVALID	# CYRILLIC SMALL LETTER KOMI ZJE
0506	; DISALLOWED	# CYRILLIC CAPITAL LETTER KOMI DZJE
0507	; PVALID	# CYRILLIC SMALL LETTER KOMI DZJE
0508	; DISALLOWED	# CYRILLIC CAPITAL LETTER KOMI LJE
0509	; PVALID	# CYRILLIC SMALL LETTER KOMI LJE
050A	; DISALLOWED	# CYRILLIC CAPITAL LETTER KOMI NJE
050B	; PVALID	# CYRILLIC SMALL LETTER KOMI NJE
050C	; DISALLOWED	# CYRILLIC CAPITAL LETTER KOMI SJE
050D	; PVALID	# CYRILLIC SMALL LETTER KOMI SJE
050E	; DISALLOWED	# CYRILLIC CAPITAL LETTER KOMI TJE
050F	; PVALID	# CYRILLIC SMALL LETTER KOMI TJE
0510	; DISALLOWED	# CYRILLIC CAPITAL LETTER REVERSED ZE
0511	; PVALID	# CYRILLIC SMALL LETTER REVERSED ZE
0512	; DISALLOWED	# CYRILLIC CAPITAL LETTER EL WITH HOOK
0513	; PVALID	# CYRILLIC SMALL LETTER EL WITH HOOK
0514	; DISALLOWED	# CYRILLIC CAPITAL LETTER LHA
0515	; PVALID	# CYRILLIC SMALL LETTER LHA
0516	; DISALLOWED	# CYRILLIC CAPITAL LETTER RHA
0517	; PVALID	# CYRILLIC SMALL LETTER RHA
0518	; DISALLOWED	# CYRILLIC CAPITAL LETTER YAE
0519	; PVALID	# CYRILLIC SMALL LETTER YAE
051A	; DISALLOWED	# CYRILLIC CAPITAL LETTER QA
051B	; PVALID	# CYRILLIC SMALL LETTER QA
051C	; DISALLOWED	# CYRILLIC CAPITAL LETTER WE
051D	; PVALID	# CYRILLIC SMALL LETTER WE
051E	; DISALLOWED	# CYRILLIC CAPITAL LETTER ALEUT KA
051F	; PVALID	# CYRILLIC SMALL LETTER ALEUT KA
0520	; DISALLOWED	# CYRILLIC CAPITAL LETTER EL WITH MIDDLE HOOK
0521	; PVALID	# CYRILLIC SMALL LETTER EL WITH MIDDLE HOOK
0522	; DISALLOWED	# CYRILLIC CAPITAL LETTER EN WITH MIDDLE HOOK
0523	; PVALID	# CYRILLIC SMALL LETTER EN WITH MIDDLE HOOK

0524	; DISALLOWED	# CYRILLIC CAPITAL LETTER PE WITH DESCENDER
0525	; PVALID	# CYRILLIC SMALL LETTER PE WITH DESCENDER
0526	; DISALLOWED	# CYRILLIC CAPITAL LETTER SHHA WITH DESCENDER
0527	; PVALID	# CYRILLIC SMALL LETTER SHHA WITH DESCENDER
0528	; DISALLOWED	# CYRILLIC CAPITAL LETTER EN WITH LEFT HOOK
0529	; PVALID	# CYRILLIC SMALL LETTER EN WITH LEFT HOOK
052A	; DISALLOWED	# CYRILLIC CAPITAL LETTER DZZHE
052B	; PVALID	# CYRILLIC SMALL LETTER DZZHE

052C	; DISALLOWED	# CYRILLIC CAPITAL LETTER DCHE
052D	; PVALID	# CYRILLIC SMALL LETTER DCHE
052E	; DISALLOWED	# CYRILLIC CAPITAL LETTER EL WITH DESCENDER
052F	; PVALID	# CYRILLIC SMALL LETTER EL WITH DESCENDER
0530	; UNASSIGNED	# <reserved>
0531..0556	; DISALLOWED	# ARMENIAN CAPITAL LETTER AYB..ARMENIAN CAPITAL LETTER
0557..0558	; UNASSIGNED	# <reserved>..<reserved>
0559	; PVALID	# ARMENIAN MODIFIER LETTER LEFT HALF RING
055A..055F	; DISALLOWED	# ARMENIAN APOSTROPHE..ARMENIAN ABBREVIATION MARK
0560..0586	; PVALID	# ARMENIAN SMALL LETTER TURNED AYB..ARMENIAN SMALL LETTER
0587	; DISALLOWED	# ARMENIAN SMALL LIGATURE ECH YIWN
0588	; PVALID	# ARMENIAN SMALL LETTER YI WITH STROKE
0589..058A	; DISALLOWED	# ARMENIAN FULL STOP..ARMENIAN HYPHEN
058B..058C	; UNASSIGNED	# <reserved>..<reserved>
058D..058F	; DISALLOWED	# RIGHT-FACING ARMENIAN ETERNITY SIGN..ARMENIAN SIGN
0590	; UNASSIGNED	# <reserved>
0591..05BD	; PVALID	# HEBREW ACCENT ETNAHTA..HEBREW POINT METEG
05BE	; DISALLOWED	# HEBREW PUNCTUATION MAQAF
05BF	; PVALID	# HEBREW POINT RAFE
05C0	; DISALLOWED	# HEBREW PUNCTUATION PASEQ
05C1..05C2	; PVALID	# HEBREW POINT SHIN DOT..HEBREW POINT SIN DOT
05C3	; DISALLOWED	# HEBREW PUNCTUATION SOF PASUQ
05C4..05C5	; PVALID	# HEBREW MARK UPPER DOT..HEBREW MARK LOWER DOT
05C6	; DISALLOWED	# HEBREW PUNCTUATION NUN HAFUKHA
05C7	; PVALID	# HEBREW POINT QAMATS QATAN
05C8..05CF	; UNASSIGNED	# <reserved>..<reserved>
05D0..05EA	; PVALID	# HEBREW LETTER ALEF..HEBREW LETTER TAV
05EB..05EE	; UNASSIGNED	# <reserved>..<reserved>
05EF..05F2	; PVALID	# HEBREW YOD TRIANGLE..HEBREW LIGATURE YIDDISH
05F3..05F4	; CONTEXTO	# HEBREW PUNCTUATION GERESH..HEBREW PUNCTUATION MARK
05F5..05FF	; UNASSIGNED	# <reserved>..<reserved>
0600..060F	; DISALLOWED	# ARABIC NUMBER SIGN..ARABIC SIGN MISRA
0610..061A	; PVALID	# ARABIC SIGN SALLALLAHOU ALAYHE WASSALLAM..ARABIC LETTER
061B..061C	; DISALLOWED	# ARABIC SEMICOLON..ARABIC LETTER MARK
061D	; UNASSIGNED	# <reserved>
061E..061F	; DISALLOWED	# ARABIC TRIPLE DOT PUNCTUATION MARK..ARABIC LETTER
0620..063F	; PVALID	# ARABIC LETTER KASHMIRI YEH..ARABIC LETTER FA
0640	; DISALLOWED	# ARABIC TATWEEL
0641..065F	; PVALID	# ARABIC LETTER FEH..ARABIC WAVY HAMZA BELOW
0660..0669	; CONTEXTO	# ARABIC-INDIC DIGIT ZERO..ARABIC-INDIC DIGIT

066A..066D	; DISALLOWED	# ARABIC PERCENT SIGN..ARABIC FIVE POINTED STAR
------------	--------------	---

066E..0674	; PVALID	# ARABIC LETTER DOTLESS BEH..ARABIC LETTER HIG
0675..0678	; DISALLOWED	# ARABIC LETTER HIGH HAMZA ALEF..ARABIC LETTER
0679..06D3	; PVALID	# ARABIC LETTER TTEH..ARABIC LETTER YEH BARREE
06D4	; DISALLOWED	# ARABIC FULL STOP
06D5..06DC	; PVALID	# ARABIC LETTER AE..ARABIC SMALL HIGH SEEN
06DD..06DE	; DISALLOWED	# ARABIC END OF AYAH..ARABIC START OF RUB EL H
06DF..06E8	; PVALID	# ARABIC SMALL HIGH ROUNDED ZERO..ARABIC SMALL
06E9	; DISALLOWED	# ARABIC PLACE OF SAJDAH
06EA..06EF	; PVALID	# ARABIC EMPTY CENTRE LOW STOP..ARABIC LETTER
06F0..06F9	; CONTEXTO	# EXTENDED ARABIC-INDIC DIGIT ZERO..EXTENDED A
06FA..06FF	; PVALID	# ARABIC LETTER SHEEN WITH DOT BELOW..ARABIC L
0700..070D	; DISALLOWED	# SYRIAC END OF PARAGRAPH..SYRIAC HARKLEAN AST
070E	; UNASSIGNED	# <reserved>
070F	; DISALLOWED	# SYRIAC ABBREVIATION MARK
0710..074A	; PVALID	# SYRIAC LETTER ALAPH..SYRIAC BARREKH
074B..074C	; UNASSIGNED	# <reserved>..<reserved>
074D..07B1	; PVALID	# SYRIAC LETTER SOGDIAN ZHAIN..THAANA LETTER N
07B2..07BF	; UNASSIGNED	# <reserved>..<reserved>
07C0..07F5	; PVALID	# NKO DIGIT ZERO..NKO LOW TONE APOSTROPHE
07F6..07FA	; DISALLOWED	# NKO SYMBOL OO DENNEN..NKO LAJANYALAN
07FB..07FC	; UNASSIGNED	# <reserved>..<reserved>
07FD	; PVALID	# NKO DANTAYALAN
07FE..07FF	; DISALLOWED	# NKO DOROME SIGN..NKO TAMAN SIGN
0800..082D	; PVALID	# SAMARITAN LETTER ALAF..SAMARITAN MARK NEQUDA
082E..082F	; UNASSIGNED	# <reserved>..<reserved>
0830..083E	; DISALLOWED	# SAMARITAN PUNCTUATION NEQUDAA..SAMARITAN PUN
083F	; UNASSIGNED	# <reserved>
0840..085B	; PVALID	# MANDAIC LETTER HALQA..MANDAIC GEMINATION MAR
085C..085D	; UNASSIGNED	# <reserved>..<reserved>
085E	; DISALLOWED	# MANDAIC PUNCTUATION
085F	; UNASSIGNED	# <reserved>
0860..086A	; PVALID	# SYRIAC LETTER MALAYALAM NGA..SYRIAC LETTER M
086B..089F	; UNASSIGNED	# <reserved>..<reserved>
08A0..08B4	; PVALID	# ARABIC LETTER BEH WITH SMALL V BELOW..ARABIC
08B5	; UNASSIGNED	# <reserved>
08B6..08BD	; PVALID	# ARABIC LETTER BEH WITH SMALL MEEM ABOVE..ARA
08BE..08D2	; UNASSIGNED	# <reserved>..<reserved>
08D3..08E1	; PVALID	# ARABIC SMALL LOW WAW..ARABIC SMALL HIGH SIGN
08E2	; DISALLOWED	# ARABIC DISPUTED END OF AYAH
08E3..0957	; PVALID	# ARABIC TURNED DAMMA BELOW..DEVANAGARI VOWEL
0958..095F	; DISALLOWED	# DEVANAGARI LETTER QA..DEVANAGARI LETTER YYA
0960..0963	; PVALID	# DEVANAGARI LETTER VOCALIC RR..DEVANAGARI VOW
0964..0965	; DISALLOWED	# DEVANAGARI DANDA..DEVANAGARI DOUBLE DANDA
0966..096F	; PVALID	# DEVANAGARI DIGIT ZERO..DEVANAGARI DIGIT NINE
0970	; DISALLOWED	# DEVANAGARI ABBREVIATION SIGN
0971..0983	; PVALID	# DEVANAGARI SIGN HIGH SPACING DOT..BENGALI SI
0984	; UNASSIGNED	# <reserved>

0985..098C	; PVALID	# BENGALI LETTER A..BENGALI LETTER VOCALIC L
098D..098E	; UNASSIGNED	# <reserved>..<reserved>
098F..0990	; PVALID	# BENGALI LETTER E..BENGALI LETTER AI
0991..0992	; UNASSIGNED	# <reserved>..<reserved>
0993..09A8	; PVALID	# BENGALI LETTER O..BENGALI LETTER NA
09A9	; UNASSIGNED	# <reserved>
09AA..09B0	; PVALID	# BENGALI LETTER PA..BENGALI LETTER RA
09B1	; UNASSIGNED	# <reserved>
09B2	; PVALID	# BENGALI LETTER LA
09B3..09B5	; UNASSIGNED	# <reserved>..<reserved>
09B6..09B9	; PVALID	# BENGALI LETTER SHA..BENGALI LETTER HA
09BA..09BB	; UNASSIGNED	# <reserved>..<reserved>
09BC..09C4	; PVALID	# BENGALI SIGN NUKTA..BENGALI VOWEL SIGN VOCAL
09C5..09C6	; UNASSIGNED	# <reserved>..<reserved>
09C7..09C8	; PVALID	# BENGALI VOWEL SIGN E..BENGALI VOWEL SIGN AI
09C9..09CA	; UNASSIGNED	# <reserved>..<reserved>
09CB..09CE	; PVALID	# BENGALI VOWEL SIGN O..BENGALI LETTER KHANDA
09CF..09D6	; UNASSIGNED	# <reserved>..<reserved>
09D7	; PVALID	# BENGALI AU LENGTH MARK
09D8..09DB	; UNASSIGNED	# <reserved>..<reserved>
09DC..09DD	; DISALLOWED	# BENGALI LETTER RRA..BENGALI LETTER RHA
09DE	; UNASSIGNED	# <reserved>
09DF	; DISALLOWED	# BENGALI LETTER YYA
09E0..09E3	; PVALID	# BENGALI LETTER VOCALIC RR..BENGALI VOWEL SIG
09E4..09E5	; UNASSIGNED	# <reserved>..<reserved>
09E6..09F1	; PVALID	# BENGALI DIGIT ZERO..BENGALI LETTER RA WITH L
09F2..09FB	; DISALLOWED	# BENGALI RUPEE MARK..BENGALI GANDA MARK
09FC	; PVALID	# BENGALI LETTER VEDIC ANUSVARA
09FD	; DISALLOWED	# BENGALI ABBREVIATION SIGN
09FE	; PVALID	# BENGALI SANDHI MARK
09FF..0A00	; UNASSIGNED	# <reserved>..<reserved>
0A01..0A03	; PVALID	# GURMUKHI SIGN ADAK BINDI..GURMUKHI SIGN VISA
0A04	; UNASSIGNED	# <reserved>
0A05..0A0A	; PVALID	# GURMUKHI LETTER A..GURMUKHI LETTER UU
0A0B..0A0E	; UNASSIGNED	# <reserved>..<reserved>
0A0F..0A10	; PVALID	# GURMUKHI LETTER EE..GURMUKHI LETTER AI
0A11..0A12	; UNASSIGNED	# <reserved>..<reserved>
0A13..0A28	; PVALID	# GURMUKHI LETTER OO..GURMUKHI LETTER NA
0A29	; UNASSIGNED	# <reserved>
0A2A..0A30	; PVALID	# GURMUKHI LETTER PA..GURMUKHI LETTER RA
0A31	; UNASSIGNED	# <reserved>
0A32	; PVALID	# GURMUKHI LETTER LA
0A33	; DISALLOWED	# GURMUKHI LETTER LLA
0A34	; UNASSIGNED	# <reserved>
0A35	; PVALID	# GURMUKHI LETTER VA
0A36	; DISALLOWED	# GURMUKHI LETTER SHA

0A37 ; UNASSIGNED # <reserved>
0A38..0A39 ; PVALID # GURMUKHI LETTER SA..GURMUKHI LETTER HA

Faltstrom

Expires September 12, 2019

[Page 38]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

0A3A..0A3B ; UNASSIGNED # <reserved>..<reserved>
0A3C ; PVALID # GURMUKHI SIGN NUKTA
0A3D ; UNASSIGNED # <reserved>
0A3E..0A42 ; PVALID # GURMUKHI VOWEL SIGN AA..GURMUKHI VOWEL SIGN
0A43..0A46 ; UNASSIGNED # <reserved>..<reserved>
0A47..0A48 ; PVALID # GURMUKHI VOWEL SIGN EE..GURMUKHI VOWEL SIGN
0A49..0A4A ; UNASSIGNED # <reserved>..<reserved>
0A4B..0A4D ; PVALID # GURMUKHI VOWEL SIGN OO..GURMUKHI SIGN VIRAMA
0A4E..0A50 ; UNASSIGNED # <reserved>..<reserved>
0A51 ; PVALID # GURMUKHI SIGN UDAAT
0A52..0A58 ; UNASSIGNED # <reserved>..<reserved>
0A59..0A5B ; DISALLOWED # GURMUKHI LETTER KHHA..GURMUKHI LETTER ZA
0A5C ; PVALID # GURMUKHI LETTER RRA
0A5D ; UNASSIGNED # <reserved>
0A5E ; DISALLOWED # GURMUKHI LETTER FA
0A5F..0A65 ; UNASSIGNED # <reserved>..<reserved>
0A66..0A75 ; PVALID # GURMUKHI DIGIT ZERO..GURMUKHI SIGN YAKASH
0A76 ; DISALLOWED # GURMUKHI ABBREVIATION SIGN
0A77..0A80 ; UNASSIGNED # <reserved>..<reserved>
0A81..0A83 ; PVALID # GUJARATI SIGN CANDRABINDU..GUJARATI SIGN VIS
0A84 ; UNASSIGNED # <reserved>
0A85..0A8D ; PVALID # GUJARATI LETTER A..GUJARATI VOWEL CANDRA E
0A8E ; UNASSIGNED # <reserved>
0A8F..0A91 ; PVALID # GUJARATI LETTER E..GUJARATI VOWEL CANDRA O
0A92 ; UNASSIGNED # <reserved>
0A93..0AA8 ; PVALID # GUJARATI LETTER O..GUJARATI LETTER NA
0AA9 ; UNASSIGNED # <reserved>
0AAA..0AB0 ; PVALID # GUJARATI LETTER PA..GUJARATI LETTER RA
0AB1 ; UNASSIGNED # <reserved>
0AB2..0AB3 ; PVALID # GUJARATI LETTER LA..GUJARATI LETTER LLA
0AB4 ; UNASSIGNED # <reserved>
0AB5..0AB9 ; PVALID # GUJARATI LETTER VA..GUJARATI LETTER HA
0ABA..0ABB ; UNASSIGNED # <reserved>..<reserved>
0ABC..0AC5 ; PVALID # GUJARATI SIGN NUKTA..GUJARATI VOWEL SIGN CAN
0AC6 ; UNASSIGNED # <reserved>
0AC7..0AC9 ; PVALID # GUJARATI VOWEL SIGN E..GUJARATI VOWEL SIGN C
0ACA ; UNASSIGNED # <reserved>
0ACB..0ACD ; PVALID # GUJARATI VOWEL SIGN O..GUJARATI SIGN VIRAMA
0ACE..0ACF ; UNASSIGNED # <reserved>..<reserved>

0AD0	; PVALID	# GUJARATI OM
0AD1..0ADF	; UNASSIGNED	# <reserved>..<reserved>
0AE0..0AE3	; PVALID	# GUJARATI LETTER VOCALIC RR..GUJARATI VOWEL S
0AE4..0AE5	; UNASSIGNED	# <reserved>..<reserved>
0AE6..0AEF	; PVALID	# GUJARATI DIGIT ZERO..GUJARATI DIGIT NINE
0AF0..0AF1	; DISALLOWED	# GUJARATI ABBREVIATION SIGN..GUJARATI RUPEE S
0AF2..0AF8	; UNASSIGNED	# <reserved>..<reserved>
0AF9..0AFF	; PVALID	# GUJARATI LETTER ZHA..GUJARATI SIGN TWO-CIRCL
0B00	; UNASSIGNED	# <reserved>

Faltstrom

Expires September 12, 2019

[Page 39]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

0B01..0B03	; PVALID	# ORIYA SIGN CANDRABINDU..ORIYA SIGN VISARGA
0B04	; UNASSIGNED	# <reserved>
0B05..0B0C	; PVALID	# ORIYA LETTER A..ORIYA LETTER VOCALIC L
0B0D..0B0E	; UNASSIGNED	# <reserved>..<reserved>
0B0F..0B10	; PVALID	# ORIYA LETTER E..ORIYA LETTER AI
0B11..0B12	; UNASSIGNED	# <reserved>..<reserved>
0B13..0B28	; PVALID	# ORIYA LETTER O..ORIYA LETTER NA
0B29	; UNASSIGNED	# <reserved>
0B2A..0B30	; PVALID	# ORIYA LETTER PA..ORIYA LETTER RA
0B31	; UNASSIGNED	# <reserved>
0B32..0B33	; PVALID	# ORIYA LETTER LA..ORIYA LETTER LLA
0B34	; UNASSIGNED	# <reserved>
0B35..0B39	; PVALID	# ORIYA LETTER VA..ORIYA LETTER HA
0B3A..0B3B	; UNASSIGNED	# <reserved>..<reserved>
0B3C..0B44	; PVALID	# ORIYA SIGN NUKTA..ORIYA VOWEL SIGN VOCALIC R
0B45..0B46	; UNASSIGNED	# <reserved>..<reserved>
0B47..0B48	; PVALID	# ORIYA VOWEL SIGN E..ORIYA VOWEL SIGN AI
0B49..0B4A	; UNASSIGNED	# <reserved>..<reserved>
0B4B..0B4D	; PVALID	# ORIYA VOWEL SIGN O..ORIYA SIGN VIRAMA
0B4E..0B55	; UNASSIGNED	# <reserved>..<reserved>
0B56..0B57	; PVALID	# ORIYA AI LENGTH MARK..ORIYA AU LENGTH MARK
0B58..0B5B	; UNASSIGNED	# <reserved>..<reserved>
0B5C..0B5D	; DISALLOWED	# ORIYA LETTER RRA..ORIYA LETTER RHA
0B5E	; UNASSIGNED	# <reserved>
0B5F..0B63	; PVALID	# ORIYA LETTER YYA..ORIYA VOWEL SIGN VOCALIC L
0B64..0B65	; UNASSIGNED	# <reserved>..<reserved>
0B66..0B6F	; PVALID	# ORIYA DIGIT ZERO..ORIYA DIGIT NINE
0B70	; DISALLOWED	# ORIYA ISSHAR
0B71	; PVALID	# ORIYA LETTER WA
0B72..0B77	; DISALLOWED	# ORIYA FRACTION ONE QUARTER..ORIYA FRACTION T
0B78..0B81	; UNASSIGNED	# <reserved>..<reserved>
0B82..0B83	; PVALID	# TAMIL SIGN ANUSVARA..TAMIL SIGN VISARGA

0B84	; UNASSIGNED	# <reserved>
0B85..0B8A	; PVALID	# TAMIL LETTER A..TAMIL LETTER UU
0B8B..0B8D	; UNASSIGNED	# <reserved>..<reserved>
0B8E..0B90	; PVALID	# TAMIL LETTER E..TAMIL LETTER AI
0B91	; UNASSIGNED	# <reserved>
0B92..0B95	; PVALID	# TAMIL LETTER O..TAMIL LETTER KA
0B96..0B98	; UNASSIGNED	# <reserved>..<reserved>
0B99..0B9A	; PVALID	# TAMIL LETTER NGA..TAMIL LETTER CA
0B9B	; UNASSIGNED	# <reserved>
0B9C	; PVALID	# TAMIL LETTER JA
0B9D	; UNASSIGNED	# <reserved>
0B9E..0B9F	; PVALID	# TAMIL LETTER NYA..TAMIL LETTER TTA
0BA0..0BA2	; UNASSIGNED	# <reserved>..<reserved>
0BA3..0BA4	; PVALID	# TAMIL LETTER NNA..TAMIL LETTER TA
0BA5..0BA7	; UNASSIGNED	# <reserved>..<reserved>
0BA8..0BAA	; PVALID	# TAMIL LETTER NA..TAMIL LETTER PA

0BAB..0BAD	; UNASSIGNED	# <reserved>..<reserved>
0BAE..0BB9	; PVALID	# TAMIL LETTER MA..TAMIL LETTER HA
0BBA..0BBD	; UNASSIGNED	# <reserved>..<reserved>
0BBE..0BC2	; PVALID	# TAMIL VOWEL SIGN AA..TAMIL VOWEL SIGN UU
0BC3..0BC5	; UNASSIGNED	# <reserved>..<reserved>
0BC6..0BC8	; PVALID	# TAMIL VOWEL SIGN E..TAMIL VOWEL SIGN AI
0BC9	; UNASSIGNED	# <reserved>
0BCA..0BCD	; PVALID	# TAMIL VOWEL SIGN O..TAMIL SIGN VIRAMA
0BCE..0BCF	; UNASSIGNED	# <reserved>..<reserved>
0BD0	; PVALID	# TAMIL OM
0BD1..0BD6	; UNASSIGNED	# <reserved>..<reserved>
0BD7	; PVALID	# TAMIL AU LENGTH MARK
0BD8..0BE5	; UNASSIGNED	# <reserved>..<reserved>
0BE6..0BEF	; PVALID	# TAMIL DIGIT ZERO..TAMIL DIGIT NINE
0BF0..0BFA	; DISALLOWED	# TAMIL NUMBER TEN..TAMIL NUMBER SIGN
0BFB..0BFF	; UNASSIGNED	# <reserved>..<reserved>
0C00..0C0C	; PVALID	# TELUGU SIGN COMBINING CANDRABINDU ABOVE..TEL
0C0D	; UNASSIGNED	# <reserved>
0C0E..0C10	; PVALID	# TELUGU LETTER E..TELUGU LETTER AI
0C11	; UNASSIGNED	# <reserved>
0C12..0C28	; PVALID	# TELUGU LETTER O..TELUGU LETTER NA
0C29	; UNASSIGNED	# <reserved>
0C2A..0C39	; PVALID	# TELUGU LETTER PA..TELUGU LETTER HA
0C3A..0C3C	; UNASSIGNED	# <reserved>..<reserved>
0C3D..0C44	; PVALID	# TELUGU SIGN AVAGRAHA..TELUGU VOWEL SIGN VOCA

0C45	; UNASSIGNED	# <reserved>
0C46..0C48	; PVALID	# TELUGU VOWEL SIGN E..TELUGU VOWEL SIGN AI
0C49	; UNASSIGNED	# <reserved>
0C4A..0C4D	; PVALID	# TELUGU VOWEL SIGN O..TELUGU SIGN VIRAMA
0C4E..0C54	; UNASSIGNED	# <reserved>.. <reserved>
0C55..0C56	; PVALID	# TELUGU LENGTH MARK..TELUGU AI LENGTH MARK
0C57	; UNASSIGNED	# <reserved>
0C58..0C5A	; PVALID	# TELUGU LETTER TSA..TELUGU LETTER RRA
0C5B..0C5F	; UNASSIGNED	# <reserved>.. <reserved>
0C60..0C63	; PVALID	# TELUGU LETTER VOCALIC RR..TELUGU VOWEL SIGN
0C64..0C65	; UNASSIGNED	# <reserved>.. <reserved>
0C66..0C6F	; PVALID	# TELUGU DIGIT ZERO..TELUGU DIGIT NINE
0C70..0C76	; UNASSIGNED	# <reserved>.. <reserved>
0C77..0C7F	; DISALLOWED	# TELUGU SIGN SIDDHAM..TELUGU SIGN TUUMU
0C80..0C83	; PVALID	# KANNADA SIGN SPACING CANDRABINDU..KANNADA SI
0C84	; DISALLOWED	# KANNADA SIGN SIDDHAM
0C85..0C8C	; PVALID	# KANNADA LETTER A..KANNADA LETTER VOCALIC L
0C8D	; UNASSIGNED	# <reserved>
0C8E..0C90	; PVALID	# KANNADA LETTER E..KANNADA LETTER AI
0C91	; UNASSIGNED	# <reserved>
0C92..0CA8	; PVALID	# KANNADA LETTER O..KANNADA LETTER NA
0CA9	; UNASSIGNED	# <reserved>
0CAA..0CB3	; PVALID	# KANNADA LETTER PA..KANNADA LETTER LLA

0CB4	; UNASSIGNED	# <reserved>
0CB5..0CB9	; PVALID	# KANNADA LETTER VA..KANNADA LETTER HA
0CBA..0CBB	; UNASSIGNED	# <reserved>.. <reserved>
0CBC..0CC4	; PVALID	# KANNADA SIGN NUKTA..KANNADA VOWEL SIGN VOCAL
0CC5	; UNASSIGNED	# <reserved>
0CC6..0CC8	; PVALID	# KANNADA VOWEL SIGN E..KANNADA VOWEL SIGN AI
0CC9	; UNASSIGNED	# <reserved>
0CCA..0CCD	; PVALID	# KANNADA VOWEL SIGN O..KANNADA SIGN VIRAMA
0CCE..0CD4	; UNASSIGNED	# <reserved>.. <reserved>
0CD5..0CD6	; PVALID	# KANNADA LENGTH MARK..KANNADA AI LENGTH MARK
0CD7..0CDD	; UNASSIGNED	# <reserved>.. <reserved>
0CDE	; PVALID	# KANNADA LETTER FA
0CDF	; UNASSIGNED	# <reserved>
0CE0..0CE3	; PVALID	# KANNADA LETTER VOCALIC RR..KANNADA VOWEL SIG
0CE4..0CE5	; UNASSIGNED	# <reserved>.. <reserved>
0CE6..0CEF	; PVALID	# KANNADA DIGIT ZERO..KANNADA DIGIT NINE
0CF0	; UNASSIGNED	# <reserved>
0CF1..0CF2	; PVALID	# KANNADA SIGN JIHVAMULIYA..KANNADA SIGN UPADH

0CF3..0CFF	; UNASSIGNED	# <reserved>..<reserved>
0D00..0D03	; PVALID	# MALAYALAM SIGN COMBINING ANUSVARA ABOVE..MAL
0D04	; UNASSIGNED	# <reserved>
0D05..0D0C	; PVALID	# MALAYALAM LETTER A..MALAYALAM LETTER VOCALIC
0D0D	; UNASSIGNED	# <reserved>
0D0E..0D10	; PVALID	# MALAYALAM LETTER E..MALAYALAM LETTER AI
0D11	; UNASSIGNED	# <reserved>
0D12..0D44	; PVALID	# MALAYALAM LETTER O..MALAYALAM VOWEL SIGN VOC
0D45	; UNASSIGNED	# <reserved>
0D46..0D48	; PVALID	# MALAYALAM VOWEL SIGN E..MALAYALAM VOWEL SIGN
0D49	; UNASSIGNED	# <reserved>
0D4A..0D4E	; PVALID	# MALAYALAM VOWEL SIGN O..MALAYALAM LETTER DOT
0D4F	; DISALLOWED	# MALAYALAM SIGN PARA
0D50..0D53	; UNASSIGNED	# <reserved>..<reserved>
0D54..0D57	; PVALID	# MALAYALAM LETTER CHILLU M..MALAYALAM AU LENG
0D58..0D5E	; DISALLOWED	# MALAYALAM FRACTION ONE ONE-HUNDRED-AND-SIXTI
0D5F..0D63	; PVALID	# MALAYALAM LETTER ARCHAIC II..MALAYALAM VOWEL
0D64..0D65	; UNASSIGNED	# <reserved>..<reserved>
0D66..0D6F	; PVALID	# MALAYALAM DIGIT ZERO..MALAYALAM DIGIT NINE
0D70..0D79	; DISALLOWED	# MALAYALAM NUMBER TEN..MALAYALAM DATE MARK
0D7A..0D7F	; PVALID	# MALAYALAM LETTER CHILLU NN..MALAYALAM LETTER
0D80..0D81	; UNASSIGNED	# <reserved>..<reserved>
0D82..0D83	; PVALID	# SINHALA SIGN ANUSVARAYA..SINHALA SIGN VISARG
0D84	; UNASSIGNED	# <reserved>
0D85..0D96	; PVALID	# SINHALA LETTER AYANNA..SINHALA LETTER AUYANN
0D97..0D99	; UNASSIGNED	# <reserved>..<reserved>
0D9A..0DB1	; PVALID	# SINHALA LETTER ALPAPRAANA KAYANNA..SINHALA L
0DB2	; UNASSIGNED	# <reserved>
0DB3..0DBB	; PVALID	# SINHALA LETTER SANYAKA DAYANNA..SINHALA LETT
0DBC	; UNASSIGNED	# <reserved>

0DBD	; PVALID	# SINHALA LETTER DANTAJA LAYANNA
0DBE..0DBF	; UNASSIGNED	# <reserved>..<reserved>
0DC0..0DC6	; PVALID	# SINHALA LETTER VAYANNA..SINHALA LETTER FAYAN
0DC7..0DC9	; UNASSIGNED	# <reserved>..<reserved>
0DCA	; PVALID	# SINHALA SIGN AL-LAKUNA
0DCB..0DCE	; UNASSIGNED	# <reserved>..<reserved>
0DCF..0DD4	; PVALID	# SINHALA VOWEL SIGN AELA-PILLA..SINHALA VOWEL
0DD5	; UNASSIGNED	# <reserved>
0DD6	; PVALID	# SINHALA VOWEL SIGN DIGA PAA-PILLA
0DD7	; UNASSIGNED	# <reserved>
0DD8..0DDF	; PVALID	# SINHALA VOWEL SIGN GAETTA-PILLA..SINHALA VOW

0DE0..0DE5	; UNASSIGNED	# <reserved>..<reserved>
0DE6..0DEF	; PVALID	# SINHALA LITH DIGIT ZERO..SINHALA LITH DIGIT
0DF0..0DF1	; UNASSIGNED	# <reserved>..<reserved>
0DF2..0DF3	; PVALID	# SINHALA VOWEL SIGN DIGA GAETTA-PILLA..SINHAL
0DF4	; DISALLOWED	# SINHALA PUNCTUATION KUNDDALIYA
0DF5..0E00	; UNASSIGNED	# <reserved>..<reserved>
0E01..0E32	; PVALID	# THAI CHARACTER KO KAI..THAI CHARACTER SARA A
0E33	; DISALLOWED	# THAI CHARACTER SARA AM
0E34..0E3A	; PVALID	# THAI CHARACTER SARA I..THAI CHARACTER PHINTH
0E3B..0E3E	; UNASSIGNED	# <reserved>..<reserved>
0E3F	; DISALLOWED	# THAI CURRENCY SYMBOL BAHT
0E40..0E4E	; PVALID	# THAI CHARACTER SARA E..THAI CHARACTER YAMAKK
0E4F	; DISALLOWED	# THAI CHARACTER FONGMAN
0E50..0E59	; PVALID	# THAI DIGIT ZERO..THAI DIGIT NINE
0E5A..0E5B	; DISALLOWED	# THAI CHARACTER ANGKHANKHU..THAI CHARACTER KH
0E5C..0E80	; UNASSIGNED	# <reserved>..<reserved>
0E81..0E82	; PVALID	# LAO LETTER KO..LAO LETTER KHO SUNG
0E83	; UNASSIGNED	# <reserved>
0E84	; PVALID	# LAO LETTER KHO TAM
0E85	; UNASSIGNED	# <reserved>
0E86..0E8A	; PVALID	# LAO LETTER PALI GHA..LAO LETTER SO TAM
0E8B	; UNASSIGNED	# <reserved>
0E8C..0EA3	; PVALID	# LAO LETTER PALI JHA..LAO LETTER LO LING
0EA4	; UNASSIGNED	# <reserved>
0EA5	; PVALID	# LAO LETTER LO LOOT
0EA6	; UNASSIGNED	# <reserved>
0EA7..0EB2	; PVALID	# LAO LETTER WO..LAO VOWEL SIGN AA
0EB3	; DISALLOWED	# LAO VOWEL SIGN AM
0EB4..0EBD	; PVALID	# LAO VOWEL SIGN I..LAO SEMIVOWEL SIGN NYO
0EBE..0EBF	; UNASSIGNED	# <reserved>..<reserved>
0EC0..0EC4	; PVALID	# LAO VOWEL SIGN E..LAO VOWEL SIGN AI
0EC5	; UNASSIGNED	# <reserved>
0EC6	; PVALID	# LAO KO LA
0EC7	; UNASSIGNED	# <reserved>
0EC8..0ECD	; PVALID	# LAO TONE MAI EK..LAO NIGGAHITA
0ECE..0ECF	; UNASSIGNED	# <reserved>..<reserved>
0ED0..0ED9	; PVALID	# LAO DIGIT ZERO..LAO DIGIT NINE

0EDA..0EDB	; UNASSIGNED	# <reserved>..<reserved>
0EDC..0EDD	; DISALLOWED	# LAO HO NO..LAO HO MO
0EDE..0EDF	; PVALID	# LAO LETTER KHMU GO..LAO LETTER KHMU NYO
0EE0..0EFF	; UNASSIGNED	# <reserved>..<reserved>

0F00	; PVALID	# TIBETAN SYLLABLE OM
0F01..0F0A	; DISALLOWED	# TIBETAN MARK GTER YIG MGO TRUNCATED A..TIBET
0F0B	; PVALID	# TIBETAN MARK INTERSYLLABIC TSHEG
0F0C..0F17	; DISALLOWED	# TIBETAN MARK DELIMITER TSHEG BSTAR..TIBETAN
0F18..0F19	; PVALID	# TIBETAN ASTROLOGICAL SIGN -KHYUD PA..TIBETAN
0F1A..0F1F	; DISALLOWED	# TIBETAN SIGN RDEL DKAR GCIG..TIBETAN SIGN RD
0F20..0F29	; PVALID	# TIBETAN DIGIT ZERO..TIBETAN DIGIT NINE
0F2A..0F34	; DISALLOWED	# TIBETAN DIGIT HALF ONE..TIBETAN MARK BSDUS R
0F35	; PVALID	# TIBETAN MARK NGAS BZUNG NYI ZLA
0F36	; DISALLOWED	# TIBETAN MARK CARET -DZUD RTAGS BZHI MIG CAN
0F37	; PVALID	# TIBETAN MARK NGAS BZUNG SGOR RTAGS
0F38	; DISALLOWED	# TIBETAN MARK CHE MGO
0F39	; PVALID	# TIBETAN MARK TSA -PHRU
0F3A..0F3D	; DISALLOWED	# TIBETAN MARK GUG RTAGS GYON..TIBETAN MARK AN
0F3E..0F42	; PVALID	# TIBETAN SIGN YAR TSHE..TIBETAN LETTER GA
0F43	; DISALLOWED	# TIBETAN LETTER GHA
0F44..0F47	; PVALID	# TIBETAN LETTER NGA..TIBETAN LETTER JA
0F48	; UNASSIGNED	# <reserved>
0F49..0F4C	; PVALID	# TIBETAN LETTER NYA..TIBETAN LETTER DDA
0F4D	; DISALLOWED	# TIBETAN LETTER DDHA
0F4E..0F51	; PVALID	# TIBETAN LETTER NNA..TIBETAN LETTER DA
0F52	; DISALLOWED	# TIBETAN LETTER DHA
0F53..0F56	; PVALID	# TIBETAN LETTER NA..TIBETAN LETTER BA
0F57	; DISALLOWED	# TIBETAN LETTER BHA
0F58..0F5B	; PVALID	# TIBETAN LETTER MA..TIBETAN LETTER DZA
0F5C	; DISALLOWED	# TIBETAN LETTER DZHA
0F5D..0F68	; PVALID	# TIBETAN LETTER WA..TIBETAN LETTER A
0F69	; DISALLOWED	# TIBETAN LETTER KSSA
0F6A..0F6C	; PVALID	# TIBETAN LETTER FIXED-FORM RA..TIBETAN LETTER
0F6D..0F70	; UNASSIGNED	# <reserved>..<reserved>
0F71..0F72	; PVALID	# TIBETAN VOWEL SIGN AA..TIBETAN VOWEL SIGN I
0F73	; DISALLOWED	# TIBETAN VOWEL SIGN II
0F74	; PVALID	# TIBETAN VOWEL SIGN U
0F75..0F79	; DISALLOWED	# TIBETAN VOWEL SIGN UU..TIBETAN VOWEL SIGN VO
0F7A..0F80	; PVALID	# TIBETAN VOWEL SIGN E..TIBETAN VOWEL SIGN REV
0F81	; DISALLOWED	# TIBETAN VOWEL SIGN REVERSED II
0F82..0F84	; PVALID	# TIBETAN SIGN NYI ZLA NAA DA..TIBETAN MARK HA
0F85	; DISALLOWED	# TIBETAN MARK PALUTA
0F86..0F92	; PVALID	# TIBETAN SIGN LCI RTAGS..TIBETAN SUBJOINED LE
0F93	; DISALLOWED	# TIBETAN SUBJOINED LETTER GHA
0F94..0F97	; PVALID	# TIBETAN SUBJOINED LETTER NGA..TIBETAN SUBJOI
0F98	; UNASSIGNED	# <reserved>
0F99..0F9C	; PVALID	# TIBETAN SUBJOINED LETTER NYA..TIBETAN SUBJOI
0F9D	; DISALLOWED	# TIBETAN SUBJOINED LETTER DDHA

0F9E..0FA1	; PVALID	# TIBETAN SUBJOINED LETTER NNA..TIBETAN SUBJOI
0FA2	; DISALLOWED	# TIBETAN SUBJOINED LETTER DHA
0FA3..0FA6	; PVALID	# TIBETAN SUBJOINED LETTER NA..TIBETAN SUBJOIN
0FA7	; DISALLOWED	# TIBETAN SUBJOINED LETTER BHA
0FA8..0FAB	; PVALID	# TIBETAN SUBJOINED LETTER MA..TIBETAN SUBJOIN
0FAC	; DISALLOWED	# TIBETAN SUBJOINED LETTER DZHA
0FAD..0FB8	; PVALID	# TIBETAN SUBJOINED LETTER WA..TIBETAN SUBJOIN
0FB9	; DISALLOWED	# TIBETAN SUBJOINED LETTER KSSA
0FBA..0FBC	; PVALID	# TIBETAN SUBJOINED LETTER FIXED-FORM WA..TIBE
0FBD	; UNASSIGNED	# <reserved>
0FBE..0FC5	; DISALLOWED	# TIBETAN KU RU KHA..TIBETAN SYMBOL RDO RJE
0FC6	; PVALID	# TIBETAN SYMBOL PADMA GDAN
0FC7..0FCC	; DISALLOWED	# TIBETAN SYMBOL RDO RJE RGYA GRAM..TIBETAN SY
0FCD	; UNASSIGNED	# <reserved>
0FCE..0FDA	; DISALLOWED	# TIBETAN SIGN RDEL NAG RDEL DKAR..TIBETAN MAR
0FDB..0FFF	; UNASSIGNED	# <reserved>.. <reserved>
1000..1049	; PVALID	# MYANMAR LETTER KA..MYANMAR DIGIT NINE
104A..104F	; DISALLOWED	# MYANMAR SIGN LITTLE SECTION..MYANMAR SYMBOL
1050..109D	; PVALID	# MYANMAR LETTER SHA..MYANMAR VOWEL SIGN AITON
109E..10C5	; DISALLOWED	# MYANMAR SYMBOL SHAN ONE..GEORGIAN CAPITAL LE
10C6	; UNASSIGNED	# <reserved>
10C7	; DISALLOWED	# GEORGIAN CAPITAL LETTER YN
10C8..10CC	; UNASSIGNED	# <reserved>.. <reserved>
10CD	; DISALLOWED	# GEORGIAN CAPITAL LETTER AEN
10CE..10CF	; UNASSIGNED	# <reserved>.. <reserved>
10D0..10FA	; PVALID	# GEORGIAN LETTER AN..GEORGIAN LETTER AIN
10FB..10FC	; DISALLOWED	# GEORGIAN PARAGRAPH SEPARATOR..MODIFIER LETTE
10FD..10FF	; PVALID	# GEORGIAN LETTER AEN..GEORGIAN LETTER LABIAL
1100..11FF	; DISALLOWED	# HANGUL CHOSEONG KIYEOK..HANGUL JONGSEONG SSA
1200..1248	; PVALID	# ETHIOPIC SYLLABLE HA..ETHIOPIC SYLLABLE QWA
1249	; UNASSIGNED	# <reserved>
124A..124D	; PVALID	# ETHIOPIC SYLLABLE QWI..ETHIOPIC SYLLABLE QWE
124E..124F	; UNASSIGNED	# <reserved>.. <reserved>
1250..1256	; PVALID	# ETHIOPIC SYLLABLE QHA..ETHIOPIC SYLLABLE QHO
1257	; UNASSIGNED	# <reserved>
1258	; PVALID	# ETHIOPIC SYLLABLE QHWA
1259	; UNASSIGNED	# <reserved>
125A..125D	; PVALID	# ETHIOPIC SYLLABLE QHWI..ETHIOPIC SYLLABLE QH
125E..125F	; UNASSIGNED	# <reserved>.. <reserved>
1260..1288	; PVALID	# ETHIOPIC SYLLABLE BA..ETHIOPIC SYLLABLE XWA
1289	; UNASSIGNED	# <reserved>
128A..128D	; PVALID	# ETHIOPIC SYLLABLE XWI..ETHIOPIC SYLLABLE XWE
128E..128F	; UNASSIGNED	# <reserved>.. <reserved>
1290..12B0	; PVALID	# ETHIOPIC SYLLABLE NA..ETHIOPIC SYLLABLE KWA
12B1	; UNASSIGNED	# <reserved>
12B2..12B5	; PVALID	# ETHIOPIC SYLLABLE KWI..ETHIOPIC SYLLABLE KWE
12B6..12B7	; UNASSIGNED	# <reserved>.. <reserved>

12B8..12BE ; PVALID # ETHIOPIC SYLLABLE KXA..ETHIOPIC SYLLABLE KXO

Faltstrom

Expires September 12, 2019

[Page 45]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

12BF ; UNASSIGNED # <reserved>
12C0 ; PVALID # ETHIOPIC SYLLABLE KXWA
12C1 ; UNASSIGNED # <reserved>
12C2..12C5 ; PVALID # ETHIOPIC SYLLABLE KXWI..ETHIOPIC SYLLABLE KX
12C6..12C7 ; UNASSIGNED # <reserved>..<reserved>
12C8..12D6 ; PVALID # ETHIOPIC SYLLABLE WA..ETHIOPIC SYLLABLE PHAR
12D7 ; UNASSIGNED # <reserved>
12D8..1310 ; PVALID # ETHIOPIC SYLLABLE ZA..ETHIOPIC SYLLABLE GWA
[1311](#) ; UNASSIGNED # <reserved>
1312..1315 ; PVALID # ETHIOPIC SYLLABLE GWI..ETHIOPIC SYLLABLE GWE
1316..1317 ; UNASSIGNED # <reserved>..<reserved>
1318..135A ; PVALID # ETHIOPIC SYLLABLE GGA..ETHIOPIC SYLLABLE FYA
135B..135C ; UNASSIGNED # <reserved>..<reserved>
135D..135F ; PVALID # ETHIOPIC COMBINING GEMINATION AND VOWEL LENG
1360..137C ; DISALLOWED # ETHIOPIC SECTION MARK..ETHIOPIC NUMBER TEN T
137D..137F ; UNASSIGNED # <reserved>..<reserved>
1380..138F ; PVALID # ETHIOPIC SYLLABLE SEBATBEIT MWA..ETHIOPIC SY
1390..1399 ; DISALLOWED # ETHIOPIC TONAL MARK YIZET..ETHIOPIC TONAL MA
139A..139F ; UNASSIGNED # <reserved>..<reserved>
13A0..13F5 ; PVALID # CHEROKEE LETTER A..CHEROKEE LETTER MV
13F6..13F7 ; UNASSIGNED # <reserved>..<reserved>
13F8..13FD ; DISALLOWED # CHEROKEE SMALL LETTER YE..CHEROKEE SMALL LET
13FE..13FF ; UNASSIGNED # <reserved>..<reserved>
[1400](#) ; DISALLOWED # CANADIAN SYLLABICS HYPHEN
1401..166C ; PVALID # CANADIAN SYLLABICS E..CANADIAN SYLLABICS CAR
166D..166E ; DISALLOWED # CANADIAN SYLLABICS CHI SIGN..CANADIAN SYLLAB
166F..167F ; PVALID # CANADIAN SYLLABICS QAI..CANADIAN SYLLABICS B
[1680](#) ; DISALLOWED # OGHAM SPACE MARK
1681..169A ; PVALID # OGHAM LETTER BEITH..OGHAM LETTER PEITH
169B..169C ; DISALLOWED # OGHAM FEATHER MARK..OGHAM REVERSED FEATHER M
169D..169F ; UNASSIGNED # <reserved>..<reserved>
16A0..16EA ; PVALID # Runic LETTER FEHU FE OH FE F..Runic LETTER X
16EB..16F0 ; DISALLOWED # Runic SINGLE PUNCTUATION..Runic BELGTHOR SYM
16F1..16F8 ; PVALID # Runic LETTER K..Runic LETTER FRANKS CASKET A
16F9..16FF ; UNASSIGNED # <reserved>..<reserved>
1700..170C ; PVALID # TAGALOG LETTER A..TAGALOG LETTER YA
170D ; UNASSIGNED # <reserved>
170E..1714 ; PVALID # TAGALOG LETTER LA..TAGALOG SIGN VIRAMA
1715..171F ; UNASSIGNED # <reserved>..<reserved>
1720..1734 ; PVALID # HANUNOO LETTER A..HANUNOO SIGN PAMUDPOD

1735..1736	; DISALLOWED	# PHILIPPINE SINGLE PUNCTUATION..PHILIPPINE DO
1737..173F	; UNASSIGNED	# <reserved>..<reserved>
1740..1753	; PVALID	# BUHID LETTER A..BUHID VOWEL SIGN U
1754..175F	; UNASSIGNED	# <reserved>..<reserved>
1760..176C	; PVALID	# TAGBANWA LETTER A..TAGBANWA LETTER YA
176D	; UNASSIGNED	# <reserved>
176E..1770	; PVALID	# TAGBANWA LETTER LA..TAGBANWA LETTER SA
1771	; UNASSIGNED	# <reserved>

Faltstrom

Expires September 12, 2019

[Page 46]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

1772..1773	; PVALID	# TAGBANWA VOWEL SIGN I..TAGBANWA VOWEL SIGN U
1774..177F	; UNASSIGNED	# <reserved>..<reserved>
1780..17B3	; PVALID	# KHMER LETTER KA..KHMER INDEPENDENT VOWEL QAU
17B4..17B5	; DISALLOWED	# KHMER VOWEL INHERENT AQ..KHMER VOWEL INHEREN
17B6..17D3	; PVALID	# KHMER VOWEL SIGN AA..KHMER SIGN BATHAMASAT
17D4..17D6	; DISALLOWED	# KHMER SIGN KHAN..KHMER SIGN CAMNUC PII KUUH
17D7	; PVALID	# KHMER SIGN LEK TOO
17D8..17DB	; DISALLOWED	# KHMER SIGN BEYYAL..KHMER CURRENCY SYMBOL RIE
17DC..17DD	; PVALID	# KHMER SIGN AVAKRAHASANYA..KHMER SIGN ATTHACA
17DE..17DF	; UNASSIGNED	# <reserved>..<reserved>
17E0..17E9	; PVALID	# KHMER DIGIT ZERO..KHMER DIGIT NINE
17EA..17EF	; UNASSIGNED	# <reserved>..<reserved>
17F0..17F9	; DISALLOWED	# KHMER SYMBOL LEK ATTAK SON..KHMER SYMBOL LEK
17FA..17FF	; UNASSIGNED	# <reserved>..<reserved>
1800..180E	; DISALLOWED	# MONGOLIAN BIRGA..MONGOLIAN VOWEL SEPARATOR
180F	; UNASSIGNED	# <reserved>
1810..1819	; PVALID	# MONGOLIAN DIGIT ZERO..MONGOLIAN DIGIT NINE
181A..181F	; UNASSIGNED	# <reserved>..<reserved>
1820..1878	; PVALID	# MONGOLIAN LETTER A..MONGOLIAN LETTER CHA WIT
1879..187F	; UNASSIGNED	# <reserved>..<reserved>
1880..18AA	; PVALID	# MONGOLIAN LETTER ALI GALI ANUSVARA ONE..MONG
18AB..18AF	; UNASSIGNED	# <reserved>..<reserved>
18B0..18F5	; PVALID	# CANADIAN SYLLABICS OY..CANADIAN SYLLABICS CA
18F6..18FF	; UNASSIGNED	# <reserved>..<reserved>
1900..191E	; PVALID	# LIMBU VOWEL-CARRIER LETTER..LIMBU LETTER TRA
191F	; UNASSIGNED	# <reserved>
1920..192B	; PVALID	# LIMBU VOWEL SIGN A..LIMBU SUBJOINED LETTER W
192C..192F	; UNASSIGNED	# <reserved>..<reserved>
1930..193B	; PVALID	# LIMBU SMALL LETTER KA..LIMBU SIGN SA-I
193C..193F	; UNASSIGNED	# <reserved>..<reserved>
1940	; DISALLOWED	# LIMBU SIGN LOO
1941..1943	; UNASSIGNED	# <reserved>..<reserved>
1944..1945	; DISALLOWED	# LIMBU EXCLAMATION MARK..LIMBU QUESTION MARK

1946..196D	; PVALID	# LIMBU DIGIT ZERO..TAI LE LETTER AI
196E..196F	; UNASSIGNED	# <reserved>..<reserved>
1970..1974	; PVALID	# TAI LE LETTER TONE-2..TAI LE LETTER TONE-6
1975..197F	; UNASSIGNED	# <reserved>..<reserved>
1980..19AB	; PVALID	# NEW TAI LUE LETTER HIGH QA..NEW TAI LUE LETT
19AC..19AF	; UNASSIGNED	# <reserved>..<reserved>
19B0..19C9	; PVALID	# NEW TAI LUE VOWEL SIGN VOWEL SHORTENER..NEW
19CA..19CF	; UNASSIGNED	# <reserved>..<reserved>
19D0..19D9	; PVALID	# NEW TAI LUE DIGIT ZERO..NEW TAI LUE DIGIT NI
19DA	; DISALLOWED	# NEW TAI LUE THAM DIGIT ONE
19DB..19DD	; UNASSIGNED	# <reserved>..<reserved>
19DE..19FF	; DISALLOWED	# NEW TAI LUE SIGN LAE..KHMER SYMBOL DAP-PRAM
1A00..1A1B	; PVALID	# BUGINESE LETTER KA..BUGINESE VOWEL SIGN AE
1A1C..1A1D	; UNASSIGNED	# <reserved>..<reserved>
1A1E..1A1F	; DISALLOWED	# BUGINESE PALLAWA..BUGINESE END OF SECTION

Faltstrom

Expires September 12, 2019

[Page 47]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

1A20..1A5E	; PVALID	# TAI THAM LETTER HIGH KA..TAI THAM CONSONANT
1A5F	; UNASSIGNED	# <reserved>
1A60..1A7C	; PVALID	# TAI THAM SIGN SAKOT..TAI THAM SIGN KHUEN-LUE
1A7D..1A7E	; UNASSIGNED	# <reserved>..<reserved>
1A7F..1A89	; PVALID	# TAI THAM COMBINING CRYPTOGRAMMIC DOT..TAI TH
1A8A..1A8F	; UNASSIGNED	# <reserved>..<reserved>
1A90..1A99	; PVALID	# TAI THAM THAM DIGIT ZERO..TAI THAM THAM DIGI
1A9A..1A9F	; UNASSIGNED	# <reserved>..<reserved>
1AA0..1AA6	; DISALLOWED	# TAI THAM SIGN WIANG..TAI THAM SIGN REVERSED
1AA7	; PVALID	# TAI THAM SIGN MAI YAMOK
1AA8..1AAD	; DISALLOWED	# TAI THAM SIGN KAN..TAI THAM SIGN CAANG
1AAE..1AAF	; UNASSIGNED	# <reserved>..<reserved>
1AB0..1ABD	; PVALID	# COMBINING DOUBLED CIRCUMFLEX ACCENT..COMBINI
1ABE	; DISALLOWED	# COMBINING PARENTHESES OVERLAY
1ABF..1AFF	; UNASSIGNED	# <reserved>..<reserved>
1B00..1B4B	; PVALID	# BALINESE SIGN ULU RICEM..BALINESE LETTER ASY
1B4C..1B4F	; UNASSIGNED	# <reserved>..<reserved>
1B50..1B59	; PVALID	# BALINESE DIGIT ZERO..BALINESE DIGIT NINE
1B5A..1B6A	; DISALLOWED	# BALINESE PANTI..BALINESE MUSICAL SYMBOL DANG
1B6B..1B73	; PVALID	# BALINESE MUSICAL SYMBOL COMBINING TEGEH..BAL
1B74..1B7C	; DISALLOWED	# BALINESE MUSICAL SYMBOL RIGHT-HAND OPEN DUG.
1B7D..1B7F	; UNASSIGNED	# <reserved>..<reserved>
1B80..1BF3	; PVALID	# SUNDANESE SIGN PANYECEK..BATAK PANONGONAN
1BF4..1BFB	; UNASSIGNED	# <reserved>..<reserved>
1BFC..1BFF	; DISALLOWED	# BATAK SYMBOL BINDU NA METEK..BATAK SYMBOL BI
1C00..1C37	; PVALID	# LEPCHA LETTER KA..LEPCHA SIGN NUKTA

1C38..1C3A	; UNASSIGNED	# <reserved>..<reserved>
1C3B..1C3F	; DISALLOWED	# LEPCHA PUNCTUATION TA-ROL..LEPCHA PUNCTUATIO
1C40..1C49	; PVALID	# LEPCHA DIGIT ZERO..LEPCHA DIGIT NINE
1C4A..1C4C	; UNASSIGNED	# <reserved>..<reserved>
1C4D..1C7D	; PVALID	# LEPCHA LETTER TTA..OL CHIKI AHAD
1C7E..1C88	; DISALLOWED	# OL CHIKI PUNCTUATION MUCAAD..CYRILLIC SMALL
1C89..1C8F	; UNASSIGNED	# <reserved>..<reserved>
1C90..1CBA	; DISALLOWED	# GEORGIAN MTAVRULI CAPITAL LETTER AN..GEORGIA
1CBB..1CBC	; UNASSIGNED	# <reserved>..<reserved>
1CBD..1CC7	; DISALLOWED	# GEORGIAN MTAVRULI CAPITAL LETTER AEN..SUNDAN
1CC8..1CCF	; UNASSIGNED	# <reserved>..<reserved>
1CD0..1CD2	; PVALID	# VEDIC TONE KARSHANA..VEDIC TONE PRENKHA
1CD3	; DISALLOWED	# VEDIC SIGN NIHSHVASA
1CD4..1CFA	; PVALID	# VEDIC SIGN YAJURVEDIC MIDLINE SVARITA..VEDIC
1CFB..1CFF	; UNASSIGNED	# <reserved>..<reserved>
1D00..1D2B	; PVALID	# LATIN LETTER SMALL CAPITAL A..CYRILLIC LETTE
1D2C..1D2E	; DISALLOWED	# MODIFIER LETTER CAPITAL A..MODIFIER LETTER C
1D2F	; PVALID	# MODIFIER LETTER CAPITAL BARRED B
1D30..1D3A	; DISALLOWED	# MODIFIER LETTER CAPITAL D..MODIFIER LETTER C
1D3B	; PVALID	# MODIFIER LETTER CAPITAL REVERSED N
1D3C..1D4D	; DISALLOWED	# MODIFIER LETTER CAPITAL O..MODIFIER LETTER S
1D4E	; PVALID	# MODIFIER LETTER SMALL TURNED I

1D4F..1D6A	; DISALLOWED	# MODIFIER LETTER SMALL K..GREEK SUBSCRIPT SMA
1D6B..1D77	; PVALID	# LATIN SMALL LETTER UE..LATIN SMALL LETTER TU
1D78	; DISALLOWED	# MODIFIER LETTER CYRILLIC EN
1D79..1D9A	; PVALID	# LATIN SMALL LETTER INSULAR G..LATIN SMALL LE
1D9B..1DBF	; DISALLOWED	# MODIFIER LETTER SMALL TURNED ALPHA..MODIFIER
1DC0..1DF9	; PVALID	# COMBINING DOTTED GRAVE ACCENT..COMBINING WID
1DFA	; UNASSIGNED	# <reserved>
1DFB..1DFF	; PVALID	# COMBINING DELETION MARK..COMBINING RIGHT ARR
1E00	; DISALLOWED	# LATIN CAPITAL LETTER A WITH RING BELOW
1E01	; PVALID	# LATIN SMALL LETTER A WITH RING BELOW
1E02	; DISALLOWED	# LATIN CAPITAL LETTER B WITH DOT ABOVE
1E03	; PVALID	# LATIN SMALL LETTER B WITH DOT ABOVE
1E04	; DISALLOWED	# LATIN CAPITAL LETTER B WITH DOT BELOW
1E05	; PVALID	# LATIN SMALL LETTER B WITH DOT BELOW
1E06	; DISALLOWED	# LATIN CAPITAL LETTER B WITH LINE BELOW
1E07	; PVALID	# LATIN SMALL LETTER B WITH LINE BELOW
1E08	; DISALLOWED	# LATIN CAPITAL LETTER C WITH CEDILLA AND ACUT
1E09	; PVALID	# LATIN SMALL LETTER C WITH CEDILLA AND ACUTE
1E0A	; DISALLOWED	# LATIN CAPITAL LETTER D WITH DOT ABOVE

1E0B	; PVALID	# LATIN SMALL LETTER D WITH DOT ABOVE
1E0C	; DISALLOWED	# LATIN CAPITAL LETTER D WITH DOT BELOW
1E0D	; PVALID	# LATIN SMALL LETTER D WITH DOT BELOW
1E0E	; DISALLOWED	# LATIN CAPITAL LETTER D WITH LINE BELOW
1E0F	; PVALID	# LATIN SMALL LETTER D WITH LINE BELOW
1E10	; DISALLOWED	# LATIN CAPITAL LETTER D WITH CEDILLA
1E11	; PVALID	# LATIN SMALL LETTER D WITH CEDILLA
1E12	; DISALLOWED	# LATIN CAPITAL LETTER D WITH CIRCUMFLEX BELOW
1E13	; PVALID	# LATIN SMALL LETTER D WITH CIRCUMFLEX BELOW
1E14	; DISALLOWED	# LATIN CAPITAL LETTER E WITH MACRON AND GRAVE
1E15	; PVALID	# LATIN SMALL LETTER E WITH MACRON AND GRAVE
1E16	; DISALLOWED	# LATIN CAPITAL LETTER E WITH MACRON AND ACUTE
1E17	; PVALID	# LATIN SMALL LETTER E WITH MACRON AND ACUTE
1E18	; DISALLOWED	# LATIN CAPITAL LETTER E WITH CIRCUMFLEX BELOW
1E19	; PVALID	# LATIN SMALL LETTER E WITH CIRCUMFLEX BELOW
1E1A	; DISALLOWED	# LATIN CAPITAL LETTER E WITH TILDE BELOW
1E1B	; PVALID	# LATIN SMALL LETTER E WITH TILDE BELOW
1E1C	; DISALLOWED	# LATIN CAPITAL LETTER E WITH CEDILLA AND BREV
1E1D	; PVALID	# LATIN SMALL LETTER E WITH CEDILLA AND BREVE
1E1E	; DISALLOWED	# LATIN CAPITAL LETTER F WITH DOT ABOVE
1E1F	; PVALID	# LATIN SMALL LETTER F WITH DOT ABOVE
1E20	; DISALLOWED	# LATIN CAPITAL LETTER G WITH MACRON
1E21	; PVALID	# LATIN SMALL LETTER G WITH MACRON
1E22	; DISALLOWED	# LATIN CAPITAL LETTER H WITH DOT ABOVE
1E23	; PVALID	# LATIN SMALL LETTER H WITH DOT ABOVE
1E24	; DISALLOWED	# LATIN CAPITAL LETTER H WITH DOT BELOW
1E25	; PVALID	# LATIN SMALL LETTER H WITH DOT BELOW
1E26	; DISALLOWED	# LATIN CAPITAL LETTER H WITH DIAERESIS
1E27	; PVALID	# LATIN SMALL LETTER H WITH DIAERESIS

1E28	; DISALLOWED	# LATIN CAPITAL LETTER H WITH CEDILLA
1E29	; PVALID	# LATIN SMALL LETTER H WITH CEDILLA
1E2A	; DISALLOWED	# LATIN CAPITAL LETTER H WITH BREVE BELOW
1E2B	; PVALID	# LATIN SMALL LETTER H WITH BREVE BELOW
1E2C	; DISALLOWED	# LATIN CAPITAL LETTER I WITH TILDE BELOW
1E2D	; PVALID	# LATIN SMALL LETTER I WITH TILDE BELOW
1E2E	; DISALLOWED	# LATIN CAPITAL LETTER I WITH DIAERESIS AND AC
1E2F	; PVALID	# LATIN SMALL LETTER I WITH DIAERESIS AND ACUT
1E30	; DISALLOWED	# LATIN CAPITAL LETTER K WITH ACUTE
1E31	; PVALID	# LATIN SMALL LETTER K WITH ACUTE
1E32	; DISALLOWED	# LATIN CAPITAL LETTER K WITH DOT BELOW
1E33	; PVALID	# LATIN SMALL LETTER K WITH DOT BELOW

1E34	; DISALLOWED	# LATIN CAPITAL LETTER K WITH LINE BELOW
1E35	; PVALID	# LATIN SMALL LETTER K WITH LINE BELOW
1E36	; DISALLOWED	# LATIN CAPITAL LETTER L WITH DOT BELOW
1E37	; PVALID	# LATIN SMALL LETTER L WITH DOT BELOW
1E38	; DISALLOWED	# LATIN CAPITAL LETTER L WITH DOT BELOW AND MA
1E39	; PVALID	# LATIN SMALL LETTER L WITH DOT BELOW AND MACR
1E3A	; DISALLOWED	# LATIN CAPITAL LETTER L WITH LINE BELOW
1E3B	; PVALID	# LATIN SMALL LETTER L WITH LINE BELOW
1E3C	; DISALLOWED	# LATIN CAPITAL LETTER L WITH CIRCUMFLEX BELOW
1E3D	; PVALID	# LATIN SMALL LETTER L WITH CIRCUMFLEX BELOW
1E3E	; DISALLOWED	# LATIN CAPITAL LETTER M WITH ACUTE
1E3F	; PVALID	# LATIN SMALL LETTER M WITH ACUTE
1E40	; DISALLOWED	# LATIN CAPITAL LETTER M WITH DOT ABOVE
1E41	; PVALID	# LATIN SMALL LETTER M WITH DOT ABOVE
1E42	; DISALLOWED	# LATIN CAPITAL LETTER M WITH DOT BELOW
1E43	; PVALID	# LATIN SMALL LETTER M WITH DOT BELOW
1E44	; DISALLOWED	# LATIN CAPITAL LETTER N WITH DOT ABOVE
1E45	; PVALID	# LATIN SMALL LETTER N WITH DOT ABOVE
1E46	; DISALLOWED	# LATIN CAPITAL LETTER N WITH DOT BELOW
1E47	; PVALID	# LATIN SMALL LETTER N WITH DOT BELOW
1E48	; DISALLOWED	# LATIN CAPITAL LETTER N WITH LINE BELOW
1E49	; PVALID	# LATIN SMALL LETTER N WITH LINE BELOW
1E4A	; DISALLOWED	# LATIN CAPITAL LETTER N WITH CIRCUMFLEX BELOW
1E4B	; PVALID	# LATIN SMALL LETTER N WITH CIRCUMFLEX BELOW
1E4C	; DISALLOWED	# LATIN CAPITAL LETTER O WITH TILDE AND ACUTE
1E4D	; PVALID	# LATIN SMALL LETTER O WITH TILDE AND ACUTE
1E4E	; DISALLOWED	# LATIN CAPITAL LETTER O WITH TILDE AND DIAERE
1E4F	; PVALID	# LATIN SMALL LETTER O WITH TILDE AND DIAERESI
1E50	; DISALLOWED	# LATIN CAPITAL LETTER O WITH MACRON AND GRAVE
1E51	; PVALID	# LATIN SMALL LETTER O WITH MACRON AND GRAVE
1E52	; DISALLOWED	# LATIN CAPITAL LETTER O WITH MACRON AND ACUTE
1E53	; PVALID	# LATIN SMALL LETTER O WITH MACRON AND ACUTE
1E54	; DISALLOWED	# LATIN CAPITAL LETTER P WITH ACUTE
1E55	; PVALID	# LATIN SMALL LETTER P WITH ACUTE
1E56	; DISALLOWED	# LATIN CAPITAL LETTER P WITH DOT ABOVE
1E57	; PVALID	# LATIN SMALL LETTER P WITH DOT ABOVE

1E58	; DISALLOWED	# LATIN CAPITAL LETTER R WITH DOT ABOVE
1E59	; PVALID	# LATIN SMALL LETTER R WITH DOT ABOVE
1E5A	; DISALLOWED	# LATIN CAPITAL LETTER R WITH DOT BELOW
1E5B	; PVALID	# LATIN SMALL LETTER R WITH DOT BELOW
1E5C	; DISALLOWED	# LATIN CAPITAL LETTER R WITH DOT BELOW AND MA

1E5D	; PVALID	# LATIN SMALL LETTER R WITH DOT BELOW AND MACR
1E5E	; DISALLOWED	# LATIN CAPITAL LETTER R WITH LINE BELOW
1E5F	; PVALID	# LATIN SMALL LETTER R WITH LINE BELOW
1E60	; DISALLOWED	# LATIN CAPITAL LETTER S WITH DOT ABOVE
1E61	; PVALID	# LATIN SMALL LETTER S WITH DOT ABOVE
1E62	; DISALLOWED	# LATIN CAPITAL LETTER S WITH DOT BELOW
1E63	; PVALID	# LATIN SMALL LETTER S WITH DOT BELOW
1E64	; DISALLOWED	# LATIN CAPITAL LETTER S WITH ACUTE AND DOT AB
1E65	; PVALID	# LATIN SMALL LETTER S WITH ACUTE AND DOT ABOV
1E66	; DISALLOWED	# LATIN CAPITAL LETTER S WITH CARON AND DOT AB
1E67	; PVALID	# LATIN SMALL LETTER S WITH CARON AND DOT ABOV
1E68	; DISALLOWED	# LATIN CAPITAL LETTER S WITH DOT BELOW AND DO
1E69	; PVALID	# LATIN SMALL LETTER S WITH DOT BELOW AND DOT
1E6A	; DISALLOWED	# LATIN CAPITAL LETTER T WITH DOT ABOVE
1E6B	; PVALID	# LATIN SMALL LETTER T WITH DOT ABOVE
1E6C	; DISALLOWED	# LATIN CAPITAL LETTER T WITH DOT BELOW
1E6D	; PVALID	# LATIN SMALL LETTER T WITH DOT BELOW
1E6E	; DISALLOWED	# LATIN CAPITAL LETTER T WITH LINE BELOW
1E6F	; PVALID	# LATIN SMALL LETTER T WITH LINE BELOW
1E70	; DISALLOWED	# LATIN CAPITAL LETTER T WITH CIRCUMFLEX BELOW
1E71	; PVALID	# LATIN SMALL LETTER T WITH CIRCUMFLEX BELOW
1E72	; DISALLOWED	# LATIN CAPITAL LETTER U WITH DIAERESIS BELOW
1E73	; PVALID	# LATIN SMALL LETTER U WITH DIAERESIS BELOW
1E74	; DISALLOWED	# LATIN CAPITAL LETTER U WITH TILDE BELOW
1E75	; PVALID	# LATIN SMALL LETTER U WITH TILDE BELOW
1E76	; DISALLOWED	# LATIN CAPITAL LETTER U WITH CIRCUMFLEX BELOW
1E77	; PVALID	# LATIN SMALL LETTER U WITH CIRCUMFLEX BELOW
1E78	; DISALLOWED	# LATIN CAPITAL LETTER U WITH TILDE AND ACUTE
1E79	; PVALID	# LATIN SMALL LETTER U WITH TILDE AND ACUTE
1E7A	; DISALLOWED	# LATIN CAPITAL LETTER U WITH MACRON AND DIAER
1E7B	; PVALID	# LATIN SMALL LETTER U WITH MACRON AND DIAERES
1E7C	; DISALLOWED	# LATIN CAPITAL LETTER V WITH TILDE
1E7D	; PVALID	# LATIN SMALL LETTER V WITH TILDE
1E7E	; DISALLOWED	# LATIN CAPITAL LETTER V WITH DOT BELOW
1E7F	; PVALID	# LATIN SMALL LETTER V WITH DOT BELOW
1E80	; DISALLOWED	# LATIN CAPITAL LETTER W WITH GRAVE
1E81	; PVALID	# LATIN SMALL LETTER W WITH GRAVE
1E82	; DISALLOWED	# LATIN CAPITAL LETTER W WITH ACUTE
1E83	; PVALID	# LATIN SMALL LETTER W WITH ACUTE
1E84	; DISALLOWED	# LATIN CAPITAL LETTER W WITH DIAERESIS
1E85	; PVALID	# LATIN SMALL LETTER W WITH DIAERESIS
1E86	; DISALLOWED	# LATIN CAPITAL LETTER W WITH DOT ABOVE
1E87	; PVALID	# LATIN SMALL LETTER W WITH DOT ABOVE

1E88	; DISALLOWED	# LATIN CAPITAL LETTER W WITH DOT BELOW
1E89	; PVALID	# LATIN SMALL LETTER W WITH DOT BELOW
1E8A	; DISALLOWED	# LATIN CAPITAL LETTER X WITH DOT ABOVE
1E8B	; PVALID	# LATIN SMALL LETTER X WITH DOT ABOVE
1E8C	; DISALLOWED	# LATIN CAPITAL LETTER X WITH DIAERESIS
1E8D	; PVALID	# LATIN SMALL LETTER X WITH DIAERESIS
1E8E	; DISALLOWED	# LATIN CAPITAL LETTER Y WITH DOT ABOVE
1E8F	; PVALID	# LATIN SMALL LETTER Y WITH DOT ABOVE
1E90	; DISALLOWED	# LATIN CAPITAL LETTER Z WITH CIRCUMFLEX
1E91	; PVALID	# LATIN SMALL LETTER Z WITH CIRCUMFLEX
1E92	; DISALLOWED	# LATIN CAPITAL LETTER Z WITH DOT BELOW
1E93	; PVALID	# LATIN SMALL LETTER Z WITH DOT BELOW
1E94	; DISALLOWED	# LATIN CAPITAL LETTER Z WITH LINE BELOW
1E95..1E99	; PVALID	# LATIN SMALL LETTER Z WITH LINE BELOW..LATIN
1E9A..1E9B	; DISALLOWED	# LATIN SMALL LETTER A WITH RIGHT HALF RING..L
1E9C..1E9D	; PVALID	# LATIN SMALL LETTER LONG S WITH DIAGONAL STRO
1E9E	; DISALLOWED	# LATIN CAPITAL LETTER SHARP S
1E9F	; PVALID	# LATIN SMALL LETTER DELTA
1EA0	; DISALLOWED	# LATIN CAPITAL LETTER A WITH DOT BELOW
1EA1	; PVALID	# LATIN SMALL LETTER A WITH DOT BELOW
1EA2	; DISALLOWED	# LATIN CAPITAL LETTER A WITH HOOK ABOVE
1EA3	; PVALID	# LATIN SMALL LETTER A WITH HOOK ABOVE
1EA4	; DISALLOWED	# LATIN CAPITAL LETTER A WITH CIRCUMFLEX AND A
1EA5	; PVALID	# LATIN SMALL LETTER A WITH CIRCUMFLEX AND ACU
1EA6	; DISALLOWED	# LATIN CAPITAL LETTER A WITH CIRCUMFLEX AND G
1EA7	; PVALID	# LATIN SMALL LETTER A WITH CIRCUMFLEX AND GRA
1EA8	; DISALLOWED	# LATIN CAPITAL LETTER A WITH CIRCUMFLEX AND H
1EA9	; PVALID	# LATIN SMALL LETTER A WITH CIRCUMFLEX AND HOO
1EAA	; DISALLOWED	# LATIN CAPITAL LETTER A WITH CIRCUMFLEX AND T
1EAB	; PVALID	# LATIN SMALL LETTER A WITH CIRCUMFLEX AND TIL
1EAC	; DISALLOWED	# LATIN CAPITAL LETTER A WITH CIRCUMFLEX AND D
1EAD	; PVALID	# LATIN SMALL LETTER A WITH CIRCUMFLEX AND DOT
1EAE	; DISALLOWED	# LATIN CAPITAL LETTER A WITH BREVE AND ACUTE
1EAF	; PVALID	# LATIN SMALL LETTER A WITH BREVE AND ACUTE
1EB0	; DISALLOWED	# LATIN CAPITAL LETTER A WITH BREVE AND GRAVE
1EB1	; PVALID	# LATIN SMALL LETTER A WITH BREVE AND GRAVE
1EB2	; DISALLOWED	# LATIN CAPITAL LETTER A WITH BREVE AND HOOK A
1EB3	; PVALID	# LATIN SMALL LETTER A WITH BREVE AND HOOK ABO
1EB4	; DISALLOWED	# LATIN CAPITAL LETTER A WITH BREVE AND TILDE
1EB5	; PVALID	# LATIN SMALL LETTER A WITH BREVE AND TILDE
1EB6	; DISALLOWED	# LATIN CAPITAL LETTER A WITH BREVE AND DOT BE
1EB7	; PVALID	# LATIN SMALL LETTER A WITH BREVE AND DOT BELO
1EB8	; DISALLOWED	# LATIN CAPITAL LETTER E WITH DOT BELOW
1EB9	; PVALID	# LATIN SMALL LETTER E WITH DOT BELOW
1EBA	; DISALLOWED	# LATIN CAPITAL LETTER E WITH HOOK ABOVE
1EBB	; PVALID	# LATIN SMALL LETTER E WITH HOOK ABOVE
1EBC	; DISALLOWED	# LATIN CAPITAL LETTER E WITH TILDE
1EBD	; PVALID	# LATIN SMALL LETTER E WITH TILDE

Internet-Draft

IDNA2008 and Unicode 12

March 2019

1EBE	; DISALLOWED	# LATIN CAPITAL LETTER E WITH CIRCUMFLEX AND A
1EBF	; PVALID	# LATIN SMALL LETTER E WITH CIRCUMFLEX AND ACU
1EC0	; DISALLOWED	# LATIN CAPITAL LETTER E WITH CIRCUMFLEX AND G
1EC1	; PVALID	# LATIN SMALL LETTER E WITH CIRCUMFLEX AND GRA
1EC2	; DISALLOWED	# LATIN CAPITAL LETTER E WITH CIRCUMFLEX AND H
1EC3	; PVALID	# LATIN SMALL LETTER E WITH CIRCUMFLEX AND HOO
1EC4	; DISALLOWED	# LATIN CAPITAL LETTER E WITH CIRCUMFLEX AND T
1EC5	; PVALID	# LATIN SMALL LETTER E WITH CIRCUMFLEX AND TIL
1EC6	; DISALLOWED	# LATIN CAPITAL LETTER E WITH CIRCUMFLEX AND D
1EC7	; PVALID	# LATIN SMALL LETTER E WITH CIRCUMFLEX AND DOT
1EC8	; DISALLOWED	# LATIN CAPITAL LETTER I WITH HOOK ABOVE
1EC9	; PVALID	# LATIN SMALL LETTER I WITH HOOK ABOVE
1ECA	; DISALLOWED	# LATIN CAPITAL LETTER I WITH DOT BELOW
1ECB	; PVALID	# LATIN SMALL LETTER I WITH DOT BELOW
1ECC	; DISALLOWED	# LATIN CAPITAL LETTER O WITH DOT BELOW
1ECD	; PVALID	# LATIN SMALL LETTER O WITH DOT BELOW
1ECE	; DISALLOWED	# LATIN CAPITAL LETTER O WITH HOOK ABOVE
1ECF	; PVALID	# LATIN SMALL LETTER O WITH HOOK ABOVE
1ED0	; DISALLOWED	# LATIN CAPITAL LETTER O WITH CIRCUMFLEX AND A
1ED1	; PVALID	# LATIN SMALL LETTER O WITH CIRCUMFLEX AND ACU
1ED2	; DISALLOWED	# LATIN CAPITAL LETTER O WITH CIRCUMFLEX AND G
1ED3	; PVALID	# LATIN SMALL LETTER O WITH CIRCUMFLEX AND GRA
1ED4	; DISALLOWED	# LATIN CAPITAL LETTER O WITH CIRCUMFLEX AND H
1ED5	; PVALID	# LATIN SMALL LETTER O WITH CIRCUMFLEX AND HOO
1ED6	; DISALLOWED	# LATIN CAPITAL LETTER O WITH CIRCUMFLEX AND T
1ED7	; PVALID	# LATIN SMALL LETTER O WITH CIRCUMFLEX AND TIL
1ED8	; DISALLOWED	# LATIN CAPITAL LETTER O WITH CIRCUMFLEX AND D
1ED9	; PVALID	# LATIN SMALL LETTER O WITH CIRCUMFLEX AND DOT
1EDA	; DISALLOWED	# LATIN CAPITAL LETTER O WITH HORN AND ACUTE
1EDB	; PVALID	# LATIN SMALL LETTER O WITH HORN AND ACUTE
1EDC	; DISALLOWED	# LATIN CAPITAL LETTER O WITH HORN AND GRAVE
1EDD	; PVALID	# LATIN SMALL LETTER O WITH HORN AND GRAVE
1EDE	; DISALLOWED	# LATIN CAPITAL LETTER O WITH HORN AND HOOK AB
1EDF	; PVALID	# LATIN SMALL LETTER O WITH HORN AND HOOK ABOV
1EE0	; DISALLOWED	# LATIN CAPITAL LETTER O WITH HORN AND TILDE
1EE1	; PVALID	# LATIN SMALL LETTER O WITH HORN AND TILDE
1EE2	; DISALLOWED	# LATIN CAPITAL LETTER O WITH HORN AND DOT BEL
1EE3	; PVALID	# LATIN SMALL LETTER O WITH HORN AND DOT BELOW
1EE4	; DISALLOWED	# LATIN CAPITAL LETTER U WITH DOT BELOW
1EE5	; PVALID	# LATIN SMALL LETTER U WITH DOT BELOW
1EE6	; DISALLOWED	# LATIN CAPITAL LETTER U WITH HOOK ABOVE
1EE7	; PVALID	# LATIN SMALL LETTER U WITH HOOK ABOVE

1EE8	; DISALLOWED	# LATIN CAPITAL LETTER U WITH HORN AND ACUTE
1EE9	; PVALID	# LATIN SMALL LETTER U WITH HORN AND ACUTE
1EEA	; DISALLOWED	# LATIN CAPITAL LETTER U WITH HORN AND GRAVE
1EEB	; PVALID	# LATIN SMALL LETTER U WITH HORN AND GRAVE
1EEC	; DISALLOWED	# LATIN CAPITAL LETTER U WITH HORN AND HOOK AB
1EED	; PVALID	# LATIN SMALL LETTER U WITH HORN AND HOOK ABOVE

1EEE	; DISALLOWED	# LATIN CAPITAL LETTER U WITH HORN AND TILDE
1EEF	; PVALID	# LATIN SMALL LETTER U WITH HORN AND TILDE
1EF0	; DISALLOWED	# LATIN CAPITAL LETTER U WITH HORN AND DOT BELOW
1EF1	; PVALID	# LATIN SMALL LETTER U WITH HORN AND DOT BELOW
1EF2	; DISALLOWED	# LATIN CAPITAL LETTER Y WITH GRAVE
1EF3	; PVALID	# LATIN SMALL LETTER Y WITH GRAVE
1EF4	; DISALLOWED	# LATIN CAPITAL LETTER Y WITH DOT BELOW
1EF5	; PVALID	# LATIN SMALL LETTER Y WITH DOT BELOW
1EF6	; DISALLOWED	# LATIN CAPITAL LETTER Y WITH HOOK ABOVE
1EF7	; PVALID	# LATIN SMALL LETTER Y WITH HOOK ABOVE
1EF8	; DISALLOWED	# LATIN CAPITAL LETTER Y WITH TILDE
1EF9	; PVALID	# LATIN SMALL LETTER Y WITH TILDE
1EFA	; DISALLOWED	# LATIN CAPITAL LETTER MIDDLE-WELSH LL
1EFB	; PVALID	# LATIN SMALL LETTER MIDDLE-WELSH LL
1EFC	; DISALLOWED	# LATIN CAPITAL LETTER MIDDLE-WELSH V
1EFD	; PVALID	# LATIN SMALL LETTER MIDDLE-WELSH V
1EFE	; DISALLOWED	# LATIN CAPITAL LETTER Y WITH LOOP
1EFF..1F07	; PVALID	# LATIN SMALL LETTER Y WITH LOOP..GREEK SMALL
1F08..1F0F	; DISALLOWED	# GREEK CAPITAL LETTER ALPHA WITH PSILI..GREEK
1F10..1F15	; PVALID	# GREEK SMALL LETTER EPSILON WITH PSILI..GREEK
1F16..1F17	; UNASSIGNED	# <reserved>..<reserved>
1F18..1F1D	; DISALLOWED	# GREEK CAPITAL LETTER EPSILON WITH PSILI..GRE
1F1E..1F1F	; UNASSIGNED	# <reserved>..<reserved>
1F20..1F27	; PVALID	# GREEK SMALL LETTER ETA WITH PSILI..GREEK SMA
1F28..1F2F	; DISALLOWED	# GREEK CAPITAL LETTER ETA WITH PSILI..GREEK C
1F30..1F37	; PVALID	# GREEK SMALL LETTER IOTA WITH PSILI..GREEK SM
1F38..1F3F	; DISALLOWED	# GREEK CAPITAL LETTER IOTA WITH PSILI..GREEK
1F40..1F45	; PVALID	# GREEK SMALL LETTER OMICRON WITH PSILI..GREEK
1F46..1F47	; UNASSIGNED	# <reserved>..<reserved>
1F48..1F4D	; DISALLOWED	# GREEK CAPITAL LETTER OMICRON WITH PSILI..GRE
1F4E..1F4F	; UNASSIGNED	# <reserved>..<reserved>
1F50..1F57	; PVALID	# GREEK SMALL LETTER UPSILON WITH PSILI..GREEK
1F58	; UNASSIGNED	# <reserved>
1F59	; DISALLOWED	# GREEK CAPITAL LETTER UPSILON WITH DASIA
1F5A	; UNASSIGNED	# <reserved>

1F5B	; DISALLOWED	# GREEK CAPITAL LETTER UPSILON WITH DASIA AND
1F5C	; UNASSIGNED	# <reserved>
1F5D	; DISALLOWED	# GREEK CAPITAL LETTER UPSILON WITH DASIA AND
1F5E	; UNASSIGNED	# <reserved>
1F5F	; DISALLOWED	# GREEK CAPITAL LETTER UPSILON WITH DASIA AND
1F60..1F67	; PVALID	# GREEK SMALL LETTER OMEGA WITH PSILI..GREEK S
1F68..1F6F	; DISALLOWED	# GREEK CAPITAL LETTER OMEGA WITH PSILI..GREEK
1F70	; PVALID	# GREEK SMALL LETTER ALPHA WITH VARIA
1F71	; DISALLOWED	# GREEK SMALL LETTER ALPHA WITH OXIA
1F72	; PVALID	# GREEK SMALL LETTER EPSILON WITH VARIA
1F73	; DISALLOWED	# GREEK SMALL LETTER EPSILON WITH OXIA
1F74	; PVALID	# GREEK SMALL LETTER ETA WITH VARIA
1F75	; DISALLOWED	# GREEK SMALL LETTER ETA WITH OXIA

1F76	; PVALID	# GREEK SMALL LETTER IOTA WITH VARIA
1F77	; DISALLOWED	# GREEK SMALL LETTER IOTA WITH OXIA
1F78	; PVALID	# GREEK SMALL LETTER OMICRON WITH VARIA
1F79	; DISALLOWED	# GREEK SMALL LETTER OMICRON WITH OXIA
1F7A	; PVALID	# GREEK SMALL LETTER UPSILON WITH VARIA
1F7B	; DISALLOWED	# GREEK SMALL LETTER UPSILON WITH OXIA
1F7C	; PVALID	# GREEK SMALL LETTER OMEGA WITH VARIA
1F7D	; DISALLOWED	# GREEK SMALL LETTER OMEGA WITH OXIA
1F7E..1F7F	; UNASSIGNED	# <reserved>..<reserved>
1F80..1FAF	; DISALLOWED	# GREEK SMALL LETTER ALPHA WITH PSILI AND YPOG
1FB0..1FB1	; PVALID	# GREEK SMALL LETTER ALPHA WITH VRACHY..GREEK
1FB2..1FB4	; DISALLOWED	# GREEK SMALL LETTER ALPHA WITH VARIA AND YPOG
1FB5	; UNASSIGNED	# <reserved>
1FB6	; PVALID	# GREEK SMALL LETTER ALPHA WITH PERISPOMENI
1FB7..1FC4	; DISALLOWED	# GREEK SMALL LETTER ALPHA WITH PERISPOMENI AN
1FC5	; UNASSIGNED	# <reserved>
1FC6	; PVALID	# GREEK SMALL LETTER ETA WITH PERISPOMENI
1FC7..1FCF	; DISALLOWED	# GREEK SMALL LETTER ETA WITH PERISPOMENI AND
1FD0..1FD2	; PVALID	# GREEK SMALL LETTER IOTA WITH VRACHY..GREEK S
1FD3	; DISALLOWED	# GREEK SMALL LETTER IOTA WITH DIALYTIKA AND O
1FD4..1FD5	; UNASSIGNED	# <reserved>..<reserved>
1FD6..1FD7	; PVALID	# GREEK SMALL LETTER IOTA WITH PERISPOMENI..GR
1FD8..1FDB	; DISALLOWED	# GREEK CAPITAL LETTER IOTA WITH VRACHY..GREEK
1FDC	; UNASSIGNED	# <reserved>
1FDD..1FDF	; DISALLOWED	# GREEK DASIA AND VARIA..GREEK DASIA AND PERIS
1FE0..1FE2	; PVALID	# GREEK SMALL LETTER UPSILON WITH VRACHY..GREE
1FE3	; DISALLOWED	# GREEK SMALL LETTER UPSILON WITH DIALYTIKA AN
1FE4..1FE7	; PVALID	# GREEK SMALL LETTER RHO WITH PSILI..GREEK SMA

1FE8..1FEF	; DISALLOWED	# GREEK CAPITAL LETTER UPSILON WITH VRACHY..GR
1FF0..1FF1	; UNASSIGNED	# <reserved>..<reserved>
1FF2..1FF4	; DISALLOWED	# GREEK SMALL LETTER OMEGA WITH VARIA AND YPOG
1FF5	; UNASSIGNED	# <reserved>
1FF6	; PVALID	# GREEK SMALL LETTER OMEGA WITH PERISPOMENI
1FF7..1FFE	; DISALLOWED	# GREEK SMALL LETTER OMEGA WITH PERISPOMENI AN
1FFF	; UNASSIGNED	# <reserved>
2000..200B	; DISALLOWED	# EN QUAD..ZERO WIDTH SPACE
200C..200D	; CONTEXTJ	# ZERO WIDTH NON-JOINER..ZERO WIDTH JOINER
200E..2064	; DISALLOWED	# LEFT-TO-RIGHT MARK..INVISIBLE PLUS
2065	; UNASSIGNED	# <reserved>
2066..2071	; DISALLOWED	# LEFT-TO-RIGHT ISOLATE..SUPERSCRIPT LATIN SMA
2072..2073	; UNASSIGNED	# <reserved>..<reserved>
2074..208E	; DISALLOWED	# SUPERSCRIPT FOUR..SUBSCRIPT RIGHT PARENTHESE
208F	; UNASSIGNED	# <reserved>
2090..209C	; DISALLOWED	# LATIN SUBSCRIPT SMALL LETTER A..LATIN SUBSCR
209D..209F	; UNASSIGNED	# <reserved>..<reserved>
20A0..20BF	; DISALLOWED	# EURO-CURRENCY SIGN..BITCOIN SIGN
20C0..20CF	; UNASSIGNED	# <reserved>..<reserved>
20D0..20F0	; DISALLOWED	# COMBINING LEFT HARPOON ABOVE..COMBINING ASTE

20F1..20FF	; UNASSIGNED	# <reserved>..<reserved>
2100..214D	; DISALLOWED	# ACCOUNT OF..AKTIESELSKAB
214E	; PVALID	# TURNED SMALL F
214F..2183	; DISALLOWED	# SYMBOL FOR SAMARITAN SOURCE..ROMAN NUMERAL R
2184	; PVALID	# LATIN SMALL LETTER REVERSED C
2185..218B	; DISALLOWED	# ROMAN NUMERAL SIX LATE FORM..TURNED DIGIT TH
218C..218F	; UNASSIGNED	# <reserved>..<reserved>
2190..2426	; DISALLOWED	# LEFTWARDS ARROW..SYMBOL FOR SUBSTITUTE FORM
2427..243F	; UNASSIGNED	# <reserved>..<reserved>
2440..244A	; DISALLOWED	# OCR HOOK..OCR DOUBLE BACKSLASH
244B..245F	; UNASSIGNED	# <reserved>..<reserved>
2460..2B73	; DISALLOWED	# CIRCLED DIGIT ONE..DOWNWARDS TRIANGLE-HEADED
2B74..2B75	; UNASSIGNED	# <reserved>..<reserved>
2B76..2B95	; DISALLOWED	# NORTH WEST TRIANGLE-HEADED ARROW TO BAR..RIG
2B96..2B97	; UNASSIGNED	# <reserved>..<reserved>
2B98..2C2E	; DISALLOWED	# THREE-D TOP-LIGHTED LEFTWARDS EQUILATERAL AR
2C2F	; UNASSIGNED	# <reserved>
2C30..2C5E	; PVALID	# GLAGOLITIC SMALL LETTER AZU..GLAGOLITIC SMAL
2C5F	; UNASSIGNED	# <reserved>
2C60	; DISALLOWED	# LATIN CAPITAL LETTER L WITH DOUBLE BAR
2C61	; PVALID	# LATIN SMALL LETTER L WITH DOUBLE BAR

2C62..2C64	; DISALLOWED	# LATIN CAPITAL LETTER L WITH MIDDLE TILDE..LA
2C65..2C66	; PVALID	# LATIN SMALL LETTER A WITH STROKE..LATIN SMAL
2C67	; DISALLOWED	# LATIN CAPITAL LETTER H WITH DESCENDER
2C68	; PVALID	# LATIN SMALL LETTER H WITH DESCENDER
2C69	; DISALLOWED	# LATIN CAPITAL LETTER K WITH DESCENDER
2C6A	; PVALID	# LATIN SMALL LETTER K WITH DESCENDER
2C6B	; DISALLOWED	# LATIN CAPITAL LETTER Z WITH DESCENDER
2C6C	; PVALID	# LATIN SMALL LETTER Z WITH DESCENDER
2C6D..2C70	; DISALLOWED	# LATIN CAPITAL LETTER ALPHA..LATIN CAPITAL LE
2C71	; PVALID	# LATIN SMALL LETTER V WITH RIGHT HOOK
2C72	; DISALLOWED	# LATIN CAPITAL LETTER W WITH HOOK
2C73..2C74	; PVALID	# LATIN SMALL LETTER W WITH HOOK..LATIN SMALL
2C75	; DISALLOWED	# LATIN CAPITAL LETTER HALF H
2C76..2C7B	; PVALID	# LATIN SMALL LETTER HALF H..LATIN LETTER SMAL
2C7C..2C80	; DISALLOWED	# LATIN SUBSCRIPT SMALL LETTER J..COPTIC CAPIT
2C81	; PVALID	# COPTIC SMALL LETTER ALFA
2C82	; DISALLOWED	# COPTIC CAPITAL LETTER VIDA
2C83	; PVALID	# COPTIC SMALL LETTER VIDA
2C84	; DISALLOWED	# COPTIC CAPITAL LETTER GAMMA
2C85	; PVALID	# COPTIC SMALL LETTER GAMMA
2C86	; DISALLOWED	# COPTIC CAPITAL LETTER DALDA
2C87	; PVALID	# COPTIC SMALL LETTER DALDA
2C88	; DISALLOWED	# COPTIC CAPITAL LETTER EIE
2C89	; PVALID	# COPTIC SMALL LETTER EIE
2C8A	; DISALLOWED	# COPTIC CAPITAL LETTER SOU
2C8B	; PVALID	# COPTIC SMALL LETTER SOU
2C8C	; DISALLOWED	# COPTIC CAPITAL LETTER ZATA

2C8D	; PVALID	# COPTIC SMALL LETTER ZATA
2C8E	; DISALLOWED	# COPTIC CAPITAL LETTER HATE
2C8F	; PVALID	# COPTIC SMALL LETTER HATE
2C90	; DISALLOWED	# COPTIC CAPITAL LETTER THETHE
2C91	; PVALID	# COPTIC SMALL LETTER THETHE
2C92	; DISALLOWED	# COPTIC CAPITAL LETTER IAUDA
2C93	; PVALID	# COPTIC SMALL LETTER IAUDA
2C94	; DISALLOWED	# COPTIC CAPITAL LETTER KAPA
2C95	; PVALID	# COPTIC SMALL LETTER KAPA
2C96	; DISALLOWED	# COPTIC CAPITAL LETTER LAULA
2C97	; PVALID	# COPTIC SMALL LETTER LAULA
2C98	; DISALLOWED	# COPTIC CAPITAL LETTER MI
2C99	; PVALID	# COPTIC SMALL LETTER MI
2C9A	; DISALLOWED	# COPTIC CAPITAL LETTER NI

2C9B	; PVALID	# COPTIC SMALL LETTER NI
2C9C	; DISALLOWED	# COPTIC CAPITAL LETTER KSI
2C9D	; PVALID	# COPTIC SMALL LETTER KSI
2C9E	; DISALLOWED	# COPTIC CAPITAL LETTER O
2C9F	; PVALID	# COPTIC SMALL LETTER O
2CA0	; DISALLOWED	# COPTIC CAPITAL LETTER PI
2CA1	; PVALID	# COPTIC SMALL LETTER PI
2CA2	; DISALLOWED	# COPTIC CAPITAL LETTER RO
2CA3	; PVALID	# COPTIC SMALL LETTER RO
2CA4	; DISALLOWED	# COPTIC CAPITAL LETTER SIMA
2CA5	; PVALID	# COPTIC SMALL LETTER SIMA
2CA6	; DISALLOWED	# COPTIC CAPITAL LETTER TAU
2CA7	; PVALID	# COPTIC SMALL LETTER TAU
2CA8	; DISALLOWED	# COPTIC CAPITAL LETTER UA
2CA9	; PVALID	# COPTIC SMALL LETTER UA
2CAA	; DISALLOWED	# COPTIC CAPITAL LETTER FI
2CAB	; PVALID	# COPTIC SMALL LETTER FI
2CAC	; DISALLOWED	# COPTIC CAPITAL LETTER KHI
2CAD	; PVALID	# COPTIC SMALL LETTER KHI
2CAE	; DISALLOWED	# COPTIC CAPITAL LETTER PSI
2CAF	; PVALID	# COPTIC SMALL LETTER PSI
2CB0	; DISALLOWED	# COPTIC CAPITAL LETTER OOU
2CB1	; PVALID	# COPTIC SMALL LETTER OOU
2CB2	; DISALLOWED	# COPTIC CAPITAL LETTER DIALECT-P ALEF
2CB3	; PVALID	# COPTIC SMALL LETTER DIALECT-P ALEF
2CB4	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC AIN
2CB5	; PVALID	# COPTIC SMALL LETTER OLD COPTIC AIN
2CB6	; DISALLOWED	# COPTIC CAPITAL LETTER CRYPTOGRAMMIC EIE
2CB7	; PVALID	# COPTIC SMALL LETTER CRYPTOGRAMMIC EIE
2CB8	; DISALLOWED	# COPTIC CAPITAL LETTER DIALECT-P KAPA
2CB9	; PVALID	# COPTIC SMALL LETTER DIALECT-P KAPA
2CBA	; DISALLOWED	# COPTIC CAPITAL LETTER DIALECT-P NI
2CBB	; PVALID	# COPTIC SMALL LETTER DIALECT-P NI
2CBC	; DISALLOWED	# COPTIC CAPITAL LETTER CRYPTOGRAMMIC NI

2CBD	; PVALID	# COPTIC SMALL LETTER CRYPTOGRAMMIC NI
2CBE	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC OOU
2CBF	; PVALID	# COPTIC SMALL LETTER OLD COPTIC OOU
2CC0	; DISALLOWED	# COPTIC CAPITAL LETTER SAMPI
2CC1	; PVALID	# COPTIC SMALL LETTER SAMPI
2CC2	; DISALLOWED	# COPTIC CAPITAL LETTER CROSSED SHEI
2CC3	; PVALID	# COPTIC SMALL LETTER CROSSED SHEI

2CC4	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC SHEI
2CC5	; PVALID	# COPTIC SMALL LETTER OLD COPTIC SHEI
2CC6	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC ESH
2CC7	; PVALID	# COPTIC SMALL LETTER OLD COPTIC ESH
2CC8	; DISALLOWED	# COPTIC CAPITAL LETTER AKHMIMIC KHEI
2CC9	; PVALID	# COPTIC SMALL LETTER AKHMIMIC KHEI
2CCA	; DISALLOWED	# COPTIC CAPITAL LETTER DIALECT-P HORI
2CCB	; PVALID	# COPTIC SMALL LETTER DIALECT-P HORI
2CCC	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC HORI
2CCD	; PVALID	# COPTIC SMALL LETTER OLD COPTIC HORI
2CCE	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC HA
2CCF	; PVALID	# COPTIC SMALL LETTER OLD COPTIC HA
2CD0	; DISALLOWED	# COPTIC CAPITAL LETTER L-SHAPED HA
2CD1	; PVALID	# COPTIC SMALL LETTER L-SHAPED HA
2CD2	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC HEI
2CD3	; PVALID	# COPTIC SMALL LETTER OLD COPTIC HEI
2CD4	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC HAT
2CD5	; PVALID	# COPTIC SMALL LETTER OLD COPTIC HAT
2CD6	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC GANGIA
2CD7	; PVALID	# COPTIC SMALL LETTER OLD COPTIC GANGIA
2CD8	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC DJA
2CD9	; PVALID	# COPTIC SMALL LETTER OLD COPTIC DJA
2CDA	; DISALLOWED	# COPTIC CAPITAL LETTER OLD COPTIC SHIMA
2CDB	; PVALID	# COPTIC SMALL LETTER OLD COPTIC SHIMA
2CDC	; DISALLOWED	# COPTIC CAPITAL LETTER OLD NUBIAN SHIMA
2CDD	; PVALID	# COPTIC SMALL LETTER OLD NUBIAN SHIMA
2CDE	; DISALLOWED	# COPTIC CAPITAL LETTER OLD NUBIAN NGI
2CDF	; PVALID	# COPTIC SMALL LETTER OLD NUBIAN NGI
2CE0	; DISALLOWED	# COPTIC CAPITAL LETTER OLD NUBIAN NYI
2CE1	; PVALID	# COPTIC SMALL LETTER OLD NUBIAN NYI
2CE2	; DISALLOWED	# COPTIC CAPITAL LETTER OLD NUBIAN WAU
2CE3..2CE4	; PVALID	# COPTIC SMALL LETTER OLD NUBIAN WAU..COPTIC S
2CE5..2CEB	; DISALLOWED	# COPTIC SYMBOL MI RO..COPTIC CAPITAL LETTER C
2CEC	; PVALID	# COPTIC SMALL LETTER CRYPTOGRAMMIC SHEI
2CED	; DISALLOWED	# COPTIC CAPITAL LETTER CRYPTOGRAMMIC GANGIA
2CEE..2CF1	; PVALID	# COPTIC SMALL LETTER CRYPTOGRAMMIC GANGIA..CO
2CF2	; DISALLOWED	# COPTIC CAPITAL LETTER BOHAIRIC KHEI
2CF3	; PVALID	# COPTIC SMALL LETTER BOHAIRIC KHEI
2CF4..2CF8	; UNASSIGNED	# <reserved>..<reserved>
2CF9..2CFF	; DISALLOWED	# COPTIC OLD NUBIAN FULL STOP..COPTIC MORPHOLO
2D00..2D25	; PVALID	# GEORGIAN SMALL LETTER AN..GEORGIAN SMALL LET

2D26	; UNASSIGNED	# <reserved>
2D27	; PVALID	# GEORGIAN SMALL LETTER YN
2D28..2D2C	; UNASSIGNED	# <reserved>..<reserved>
2D2D	; PVALID	# GEORGIAN SMALL LETTER AEN
2D2E..2D2F	; UNASSIGNED	# <reserved>..<reserved>
2D30..2D67	; PVALID	# TIFINAGH LETTER YA..TIFINAGH LETTER YO
2D68..2D6E	; UNASSIGNED	# <reserved>..<reserved>
2D6F..2D70	; DISALLOWED	# TIFINAGH MODIFIER LETTER LABIALIZATION MARK.
2D71..2D7E	; UNASSIGNED	# <reserved>..<reserved>
2D7F..2D96	; PVALID	# TIFINAGH CONSONANT JOINER..ETHIOPIC SYLLABLE
2D97..2D9F	; UNASSIGNED	# <reserved>..<reserved>
2DA0..2DA6	; PVALID	# ETHIOPIC SYLLABLE SSA..ETHIOPIC SYLLABLE SSO
2DA7	; UNASSIGNED	# <reserved>
2DA8..2DAE	; PVALID	# ETHIOPIC SYLLABLE CCA..ETHIOPIC SYLLABLE CCO
2DAF	; UNASSIGNED	# <reserved>
2DB0..2DB6	; PVALID	# ETHIOPIC SYLLABLE ZZA..ETHIOPIC SYLLABLE ZZO
2DB7	; UNASSIGNED	# <reserved>
2DB8..2DBE	; PVALID	# ETHIOPIC SYLLABLE CCHA..ETHIOPIC SYLLABLE CC
2DBF	; UNASSIGNED	# <reserved>
2DC0..2DC6	; PVALID	# ETHIOPIC SYLLABLE QYA..ETHIOPIC SYLLABLE QYO
2DC7	; UNASSIGNED	# <reserved>
2DC8..2DCE	; PVALID	# ETHIOPIC SYLLABLE KYA..ETHIOPIC SYLLABLE KYO
2DCF	; UNASSIGNED	# <reserved>
2DD0..2DD6	; PVALID	# ETHIOPIC SYLLABLE XYA..ETHIOPIC SYLLABLE XYO
2DD7	; UNASSIGNED	# <reserved>
2DD8..2DDE	; PVALID	# ETHIOPIC SYLLABLE GYA..ETHIOPIC SYLLABLE GYO
2DDF	; UNASSIGNED	# <reserved>
2DE0..2DFF	; PVALID	# COMBINING CYRILLIC LETTER BE..COMBINING CYRI
2E00..2E2E	; DISALLOWED	# RIGHT ANGLE SUBSTITUTION MARKER..REVERSED QU
2E2F	; PVALID	# VERTICAL TILDE
2E30..2E4F	; DISALLOWED	# RING POINT..CORNISH VERSE DIVIDER
2E50..2E7F	; UNASSIGNED	# <reserved>..<reserved>
2E80..2E99	; DISALLOWED	# CJK RADICAL REPEAT..CJK RADICAL RAP
2E9A	; UNASSIGNED	# <reserved>
2E9B..2EF3	; DISALLOWED	# CJK RADICAL CHOKE..CJK RADICAL C-SIMPLIFIED
2EF4..2EFF	; UNASSIGNED	# <reserved>..<reserved>
2F00..2FD5	; DISALLOWED	# KANGXI RADICAL ONE..KANGXI RADICAL FLUTE
2FD6..2FEF	; UNASSIGNED	# <reserved>..<reserved>
2FF0..2FFB	; DISALLOWED	# IDEOGRAPHIC DESCRIPTION CHARACTER LEFT TO RI
2FFC..2FFF	; UNASSIGNED	# <reserved>..<reserved>
3000..3004	; DISALLOWED	# IDEOGRAPHIC SPACE..JAPANESE INDUSTRIAL STAND
3005..3007	; PVALID	# IDEOGRAPHIC ITERATION MARK..IDEOGRAPHIC NUMB
3008..3029	; DISALLOWED	# LEFT ANGLE BRACKET..HANGZHOU NUMERAL NINE
302A..302D	; PVALID	# IDEOGRAPHIC LEVEL TONE MARK..IDEOGRAPHIC ENT
302E..303B	; DISALLOWED	# HANGUL SINGLE DOT TONE MARK..VERTICAL IDEOGR
303C	; PVALID	# MASU MARK
303D..303F	; DISALLOWED	# PART ALTERNATION MARK..IDEOGRAPHIC HALF FILL
3040	; UNASSIGNED	# <reserved>

Internet-Draft

IDNA2008 and Unicode 12

March 2019

```
3041..3096 ; PVALID      # HIRAGANA LETTER SMALL A..HIRAGANA LETTER SMA
3097..3098 ; UNASSIGNED  # <reserved>..<reserved>
3099..309A ; PVALID      # COMBINING KATAKANA-HIRAGANA VOICED SOUND MAR
309B..309C ; DISALLOWED  # KATAKANA-HIRAGANA VOICED SOUND MARK..KATAKAN
309D..309E ; PVALID      # HIRAGANA ITERATION MARK..HIRAGANA VOICED ITE
309F..30A0 ; DISALLOWED  # HIRAGANA DIGRAPH YORI..KATAKANA-HIRAGANA DOU
30A1..30FA ; PVALID      # KATAKANA LETTER SMALL A..KATAKANA LETTER VO
30FB      ; CONTEXTO    # KATAKANA MIDDLE DOT
30FC..30FE ; PVALID      # KATAKANA-HIRAGANA PROLONGED SOUND MARK..KATA
30FF      ; DISALLOWED  # KATAKANA DIGRAPH KOTO
3100..3104 ; UNASSIGNED  # <reserved>..<reserved>
3105..312F ; PVALID      # BOPOMOFO LETTER B..BOPOMOFO LETTER NN
3130      ; UNASSIGNED  # <reserved>
3131..318E ; DISALLOWED  # HANGUL LETTER KIYEOK..HANGUL LETTER ARAEAE
318F      ; UNASSIGNED  # <reserved>
3190..319F ; DISALLOWED  # IDEOGRAPHIC ANNOTATION LINKING MARK..IDEOGRA
31A0..31BA ; PVALID      # BOPOMOFO LETTER BU..BOPOMOFO LETTER ZY
31BB..31BF ; UNASSIGNED  # <reserved>..<reserved>
31C0..31E3 ; DISALLOWED  # CJK STROKE T..CJK STROKE Q
31E4..31EF ; UNASSIGNED  # <reserved>..<reserved>
31F0..31FF ; PVALID      # KATAKANA LETTER SMALL KU..KATAKANA LETTER SM
3200..321E ; DISALLOWED  # PARENTHESES HANGUL KIYEOK..PARENTHESES K
321F      ; UNASSIGNED  # <reserved>
3220..32FE ; DISALLOWED  # PARENTHESES IDEOGRAPH ONE..CIRCLED KATAKAN
32FF      ; UNASSIGNED  # <reserved>
3300..33FF ; DISALLOWED  # SQUARE APAATO..SQUARE GAL
3400..4DB5 ; PVALID      # <CJK Ideograph Extension A>..<CJK Ideograph
4DB6..4DBF ; UNASSIGNED  # <reserved>..<reserved>
4DC0..4DFF ; DISALLOWED  # HEXAGRAM FOR THE CREATIVE HEAVEN..HEXAGRAM F
4E00..9FEF ; PVALID      # <CJK Ideograph>..<CJK Ideograph>
9FF0..9FFF ; UNASSIGNED  # <reserved>..<reserved>
A000..A48C ; PVALID      # YI SYLLABLE IT..YI SYLLABLE YYR
A48D..A48F ; UNASSIGNED  # <reserved>..<reserved>
A490..A4C6 ; DISALLOWED  # YI RADICAL QOT..YI RADICAL KE
A4C7..A4CF ; UNASSIGNED  # <reserved>..<reserved>
A4D0..A4FD ; PVALID      # LISU LETTER BA..LISU LETTER TONE MYA JEU
A4FE..A4FF ; DISALLOWED  # LISU PUNCTUATION COMMA..LISU PUNCTUATION FUL
A500..A60C ; PVALID      # VAI SYLLABLE EE..VAI SYLLABLE LENGTHENER
A60D..A60F ; DISALLOWED  # VAI COMMA..VAI QUESTION MARK
A610..A62B ; PVALID      # VAI SYLLABLE NDOLE FA..VAI SYLLABLE NDOLE DO
A62C..A63F ; UNASSIGNED  # <reserved>..<reserved>
A640      ; DISALLOWED  # CYRILLIC CAPITAL LETTER ZEMLYA
A641      ; PVALID      # CYRILLIC SMALL LETTER ZEMLYA
```

A642	; DISALLOWED	# CYRILLIC CAPITAL LETTER DZELO
A643	; PVALID	# CYRILLIC SMALL LETTER DZELO
A644	; DISALLOWED	# CYRILLIC CAPITAL LETTER REVERSED DZE
A645	; PVALID	# CYRILLIC SMALL LETTER REVERSED DZE
A646	; DISALLOWED	# CYRILLIC CAPITAL LETTER IOTA

Faltstrom

Expires September 12, 2019

[Page 60]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

A647	; PVALID	# CYRILLIC SMALL LETTER IOTA
A648	; DISALLOWED	# CYRILLIC CAPITAL LETTER DJERV
A649	; PVALID	# CYRILLIC SMALL LETTER DJERV
A64A	; DISALLOWED	# CYRILLIC CAPITAL LETTER MONOGRAPH UK
A64B	; PVALID	# CYRILLIC SMALL LETTER MONOGRAPH UK
A64C	; DISALLOWED	# CYRILLIC CAPITAL LETTER BROAD OMEGA
A64D	; PVALID	# CYRILLIC SMALL LETTER BROAD OMEGA
A64E	; DISALLOWED	# CYRILLIC CAPITAL LETTER NEUTRAL YER
A64F	; PVALID	# CYRILLIC SMALL LETTER NEUTRAL YER
A650	; DISALLOWED	# CYRILLIC CAPITAL LETTER YERU WITH BACK YER
A651	; PVALID	# CYRILLIC SMALL LETTER YERU WITH BACK YER
A652	; DISALLOWED	# CYRILLIC CAPITAL LETTER IOTIFIED YAT
A653	; PVALID	# CYRILLIC SMALL LETTER IOTIFIED YAT
A654	; DISALLOWED	# CYRILLIC CAPITAL LETTER REVERSED YU
A655	; PVALID	# CYRILLIC SMALL LETTER REVERSED YU
A656	; DISALLOWED	# CYRILLIC CAPITAL LETTER IOTIFIED A
A657	; PVALID	# CYRILLIC SMALL LETTER IOTIFIED A
A658	; DISALLOWED	# CYRILLIC CAPITAL LETTER CLOSED LITTLE YUS
A659	; PVALID	# CYRILLIC SMALL LETTER CLOSED LITTLE YUS
A65A	; DISALLOWED	# CYRILLIC CAPITAL LETTER BLENDED YUS
A65B	; PVALID	# CYRILLIC SMALL LETTER BLENDED YUS
A65C	; DISALLOWED	# CYRILLIC CAPITAL LETTER IOTIFIED CLOSED LITT
A65D	; PVALID	# CYRILLIC SMALL LETTER IOTIFIED CLOSED LITTLE
A65E	; DISALLOWED	# CYRILLIC CAPITAL LETTER YN
A65F	; PVALID	# CYRILLIC SMALL LETTER YN
A660	; DISALLOWED	# CYRILLIC CAPITAL LETTER REVERSED TSE
A661	; PVALID	# CYRILLIC SMALL LETTER REVERSED TSE
A662	; DISALLOWED	# CYRILLIC CAPITAL LETTER SOFT DE
A663	; PVALID	# CYRILLIC SMALL LETTER SOFT DE
A664	; DISALLOWED	# CYRILLIC CAPITAL LETTER SOFT EL
A665	; PVALID	# CYRILLIC SMALL LETTER SOFT EL
A666	; DISALLOWED	# CYRILLIC CAPITAL LETTER SOFT EM
A667	; PVALID	# CYRILLIC SMALL LETTER SOFT EM
A668	; DISALLOWED	# CYRILLIC CAPITAL LETTER MONOCULAR O
A669	; PVALID	# CYRILLIC SMALL LETTER MONOCULAR O
A66A	; DISALLOWED	# CYRILLIC CAPITAL LETTER BINOCULAR O

A66B	; PVALID	# CYRILLIC SMALL LETTER BINOCULAR O
A66C	; DISALLOWED	# CYRILLIC CAPITAL LETTER DOUBLE MONOCULAR O
A66D..A66F	; PVALID	# CYRILLIC SMALL LETTER DOUBLE MONOCULAR O..CO
A670..A673	; DISALLOWED	# COMBINING CYRILLIC TEN MILLIONS SIGN..SLAVON
A674..A67D	; PVALID	# COMBINING CYRILLIC LETTER UKRAINIAN IE..COMB
A67E	; DISALLOWED	# CYRILLIC KAVYKA
A67F	; PVALID	# CYRILLIC PAYEROK
A680	; DISALLOWED	# CYRILLIC CAPITAL LETTER DWE
A681	; PVALID	# CYRILLIC SMALL LETTER DWE
A682	; DISALLOWED	# CYRILLIC CAPITAL LETTER DZWE
A683	; PVALID	# CYRILLIC SMALL LETTER DZWE
A684	; DISALLOWED	# CYRILLIC CAPITAL LETTER ZHWE

Faltstrom

Expires September 12, 2019

[Page 61]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

A685	; PVALID	# CYRILLIC SMALL LETTER ZHWE
A686	; DISALLOWED	# CYRILLIC CAPITAL LETTER CCHE
A687	; PVALID	# CYRILLIC SMALL LETTER CCHE
A688	; DISALLOWED	# CYRILLIC CAPITAL LETTER DZZE
A689	; PVALID	# CYRILLIC SMALL LETTER DZZE
A68A	; DISALLOWED	# CYRILLIC CAPITAL LETTER TE WITH MIDDLE HOOK
A68B	; PVALID	# CYRILLIC SMALL LETTER TE WITH MIDDLE HOOK
A68C	; DISALLOWED	# CYRILLIC CAPITAL LETTER TWE
A68D	; PVALID	# CYRILLIC SMALL LETTER TWE
A68E	; DISALLOWED	# CYRILLIC CAPITAL LETTER TSWE
A68F	; PVALID	# CYRILLIC SMALL LETTER TSWE
A690	; DISALLOWED	# CYRILLIC CAPITAL LETTER TSSE
A691	; PVALID	# CYRILLIC SMALL LETTER TSSE
A692	; DISALLOWED	# CYRILLIC CAPITAL LETTER TCHE
A693	; PVALID	# CYRILLIC SMALL LETTER TCHE
A694	; DISALLOWED	# CYRILLIC CAPITAL LETTER HWE
A695	; PVALID	# CYRILLIC SMALL LETTER HWE
A696	; DISALLOWED	# CYRILLIC CAPITAL LETTER SHWE
A697	; PVALID	# CYRILLIC SMALL LETTER SHWE
A698	; DISALLOWED	# CYRILLIC CAPITAL LETTER DOUBLE O
A699	; PVALID	# CYRILLIC SMALL LETTER DOUBLE O
A69A	; DISALLOWED	# CYRILLIC CAPITAL LETTER CROSSED O
A69B	; PVALID	# CYRILLIC SMALL LETTER CROSSED O
A69C..A69D	; DISALLOWED	# MODIFIER LETTER CYRILLIC HARD SIGN..MODIFIER
A69E..A6E5	; PVALID	# COMBINING CYRILLIC LETTER EF..BAMUM LETTER K
A6E6..A6EF	; DISALLOWED	# BAMUM LETTER MO..BAMUM LETTER KOGHOM
A6F0..A6F1	; PVALID	# BAMUM COMBINING MARK KOQNDON..BAMUM COMBININ
A6F2..A6F7	; DISALLOWED	# BAMUM NJAEMLI..BAMUM QUESTION MARK
A6F8..A6FF	; UNASSIGNED	# <reserved>..<reserved>

A700..A716	; DISALLOWED	# MODIFIER LETTER CHINESE TONE YIN PING..MODIF
A717..A71F	; PVALID	# MODIFIER LETTER DOT VERTICAL BAR..MODIFIER L
A720..A722	; DISALLOWED	# MODIFIER LETTER STRESS AND HIGH TONE..LATIN
A723	; PVALID	# LATIN SMALL LETTER EGYPTOLOGICAL ALEF
A724	; DISALLOWED	# LATIN CAPITAL LETTER EGYPTOLOGICAL AIN
A725	; PVALID	# LATIN SMALL LETTER EGYPTOLOGICAL AIN
A726	; DISALLOWED	# LATIN CAPITAL LETTER HENG
A727	; PVALID	# LATIN SMALL LETTER HENG
A728	; DISALLOWED	# LATIN CAPITAL LETTER TZ
A729	; PVALID	# LATIN SMALL LETTER TZ
A72A	; DISALLOWED	# LATIN CAPITAL LETTER TRESILLO
A72B	; PVALID	# LATIN SMALL LETTER TRESILLO
A72C	; DISALLOWED	# LATIN CAPITAL LETTER CUATRILLO
A72D	; PVALID	# LATIN SMALL LETTER CUATRILLO
A72E	; DISALLOWED	# LATIN CAPITAL LETTER CUATRILLO WITH COMMA
A72F..A731	; PVALID	# LATIN SMALL LETTER CUATRILLO WITH COMMA..LAT
A732	; DISALLOWED	# LATIN CAPITAL LETTER AA
A733	; PVALID	# LATIN SMALL LETTER AA
A734	; DISALLOWED	# LATIN CAPITAL LETTER AO

A735	; PVALID	# LATIN SMALL LETTER AO
A736	; DISALLOWED	# LATIN CAPITAL LETTER AU
A737	; PVALID	# LATIN SMALL LETTER AU
A738	; DISALLOWED	# LATIN CAPITAL LETTER AV
A739	; PVALID	# LATIN SMALL LETTER AV
A73A	; DISALLOWED	# LATIN CAPITAL LETTER AV WITH HORIZONTAL BAR
A73B	; PVALID	# LATIN SMALL LETTER AV WITH HORIZONTAL BAR
A73C	; DISALLOWED	# LATIN CAPITAL LETTER AY
A73D	; PVALID	# LATIN SMALL LETTER AY
A73E	; DISALLOWED	# LATIN CAPITAL LETTER REVERSED C WITH DOT
A73F	; PVALID	# LATIN SMALL LETTER REVERSED C WITH DOT
A740	; DISALLOWED	# LATIN CAPITAL LETTER K WITH STROKE
A741	; PVALID	# LATIN SMALL LETTER K WITH STROKE
A742	; DISALLOWED	# LATIN CAPITAL LETTER K WITH DIAGONAL STROKE
A743	; PVALID	# LATIN SMALL LETTER K WITH DIAGONAL STROKE
A744	; DISALLOWED	# LATIN CAPITAL LETTER K WITH STROKE AND DIAGO
A745	; PVALID	# LATIN SMALL LETTER K WITH STROKE AND DIAGONA
A746	; DISALLOWED	# LATIN CAPITAL LETTER BROKEN L
A747	; PVALID	# LATIN SMALL LETTER BROKEN L
A748	; DISALLOWED	# LATIN CAPITAL LETTER L WITH HIGH STROKE
A749	; PVALID	# LATIN SMALL LETTER L WITH HIGH STROKE
A74A	; DISALLOWED	# LATIN CAPITAL LETTER O WITH LONG STROKE OVER

A74B	; PVALID	# LATIN SMALL LETTER O WITH LONG STROKE OVERLA
A74C	; DISALLOWED	# LATIN CAPITAL LETTER O WITH LOOP
A74D	; PVALID	# LATIN SMALL LETTER O WITH LOOP
A74E	; DISALLOWED	# LATIN CAPITAL LETTER OO
A74F	; PVALID	# LATIN SMALL LETTER OO
A750	; DISALLOWED	# LATIN CAPITAL LETTER P WITH STROKE THROUGH D
A751	; PVALID	# LATIN SMALL LETTER P WITH STROKE THROUGH DES
A752	; DISALLOWED	# LATIN CAPITAL LETTER P WITH FLOURISH
A753	; PVALID	# LATIN SMALL LETTER P WITH FLOURISH
A754	; DISALLOWED	# LATIN CAPITAL LETTER P WITH SQUIRREL TAIL
A755	; PVALID	# LATIN SMALL LETTER P WITH SQUIRREL TAIL
A756	; DISALLOWED	# LATIN CAPITAL LETTER Q WITH STROKE THROUGH D
A757	; PVALID	# LATIN SMALL LETTER Q WITH STROKE THROUGH DES
A758	; DISALLOWED	# LATIN CAPITAL LETTER Q WITH DIAGONAL STROKE
A759	; PVALID	# LATIN SMALL LETTER Q WITH DIAGONAL STROKE
A75A	; DISALLOWED	# LATIN CAPITAL LETTER R ROTUNDA
A75B	; PVALID	# LATIN SMALL LETTER R ROTUNDA
A75C	; DISALLOWED	# LATIN CAPITAL LETTER RUM ROTUNDA
A75D	; PVALID	# LATIN SMALL LETTER RUM ROTUNDA
A75E	; DISALLOWED	# LATIN CAPITAL LETTER V WITH DIAGONAL STROKE
A75F	; PVALID	# LATIN SMALL LETTER V WITH DIAGONAL STROKE
A760	; DISALLOWED	# LATIN CAPITAL LETTER VY
A761	; PVALID	# LATIN SMALL LETTER VY
A762	; DISALLOWED	# LATIN CAPITAL LETTER VISIGOTHIC Z
A763	; PVALID	# LATIN SMALL LETTER VISIGOTHIC Z
A764	; DISALLOWED	# LATIN CAPITAL LETTER THORN WITH STROKE

A765	; PVALID	# LATIN SMALL LETTER THORN WITH STROKE
A766	; DISALLOWED	# LATIN CAPITAL LETTER THORN WITH STROKE THROU
A767	; PVALID	# LATIN SMALL LETTER THORN WITH STROKE THROUGH
A768	; DISALLOWED	# LATIN CAPITAL LETTER VEND
A769	; PVALID	# LATIN SMALL LETTER VEND
A76A	; DISALLOWED	# LATIN CAPITAL LETTER ET
A76B	; PVALID	# LATIN SMALL LETTER ET
A76C	; DISALLOWED	# LATIN CAPITAL LETTER IS
A76D	; PVALID	# LATIN SMALL LETTER IS
A76E	; DISALLOWED	# LATIN CAPITAL LETTER CON
A76F	; PVALID	# LATIN SMALL LETTER CON
A770	; DISALLOWED	# MODIFIER LETTER US
A771..A778	; PVALID	# LATIN SMALL LETTER DUM..LATIN SMALL LETTER U
A779	; DISALLOWED	# LATIN CAPITAL LETTER INSULAR D
A77A	; PVALID	# LATIN SMALL LETTER INSULAR D

A77B	; DISALLOWED	# LATIN CAPITAL LETTER INSULAR F
A77C	; PVALID	# LATIN SMALL LETTER INSULAR F
A77D..A77E	; DISALLOWED	# LATIN CAPITAL LETTER INSULAR G..LATIN CAPITA
A77F	; PVALID	# LATIN SMALL LETTER TURNED INSULAR G
A780	; DISALLOWED	# LATIN CAPITAL LETTER TURNED L
A781	; PVALID	# LATIN SMALL LETTER TURNED L
A782	; DISALLOWED	# LATIN CAPITAL LETTER INSULAR R
A783	; PVALID	# LATIN SMALL LETTER INSULAR R
A784	; DISALLOWED	# LATIN CAPITAL LETTER INSULAR S
A785	; PVALID	# LATIN SMALL LETTER INSULAR S
A786	; DISALLOWED	# LATIN CAPITAL LETTER INSULAR T
A787..A788	; PVALID	# LATIN SMALL LETTER INSULAR T..MODIFIER LETTE
A789..A78B	; DISALLOWED	# MODIFIER LETTER COLON..LATIN CAPITAL LETTER
A78C	; PVALID	# LATIN SMALL LETTER SALTILLO
A78D	; DISALLOWED	# LATIN CAPITAL LETTER TURNED H
A78E..A78F	; PVALID	# LATIN SMALL LETTER L WITH RETROFLEX HOOK AND
A790	; DISALLOWED	# LATIN CAPITAL LETTER N WITH DESCENDER
A791	; PVALID	# LATIN SMALL LETTER N WITH DESCENDER
A792	; DISALLOWED	# LATIN CAPITAL LETTER C WITH BAR
A793..A795	; PVALID	# LATIN SMALL LETTER C WITH BAR..LATIN SMALL L
A796	; DISALLOWED	# LATIN CAPITAL LETTER B WITH FLOURISH
A797	; PVALID	# LATIN SMALL LETTER B WITH FLOURISH
A798	; DISALLOWED	# LATIN CAPITAL LETTER F WITH STROKE
A799	; PVALID	# LATIN SMALL LETTER F WITH STROKE
A79A	; DISALLOWED	# LATIN CAPITAL LETTER VOLAPUK AE
A79B	; PVALID	# LATIN SMALL LETTER VOLAPUK AE
A79C	; DISALLOWED	# LATIN CAPITAL LETTER VOLAPUK OE
A79D	; PVALID	# LATIN SMALL LETTER VOLAPUK OE
A79E	; DISALLOWED	# LATIN CAPITAL LETTER VOLAPUK UE
A79F	; PVALID	# LATIN SMALL LETTER VOLAPUK UE
A7A0	; DISALLOWED	# LATIN CAPITAL LETTER G WITH OBLIQUE STROKE
A7A1	; PVALID	# LATIN SMALL LETTER G WITH OBLIQUE STROKE
A7A2	; DISALLOWED	# LATIN CAPITAL LETTER K WITH OBLIQUE STROKE

A7A3	; PVALID	# LATIN SMALL LETTER K WITH OBLIQUE STROKE
A7A4	; DISALLOWED	# LATIN CAPITAL LETTER N WITH OBLIQUE STROKE
A7A5	; PVALID	# LATIN SMALL LETTER N WITH OBLIQUE STROKE
A7A6	; DISALLOWED	# LATIN CAPITAL LETTER R WITH OBLIQUE STROKE
A7A7	; PVALID	# LATIN SMALL LETTER R WITH OBLIQUE STROKE
A7A8	; DISALLOWED	# LATIN CAPITAL LETTER S WITH OBLIQUE STROKE
A7A9	; PVALID	# LATIN SMALL LETTER S WITH OBLIQUE STROKE
A7AA..A7AE	; DISALLOWED	# LATIN CAPITAL LETTER H WITH HOOK..LATIN CAPI

A7AF	; PVALID	# LATIN LETTER SMALL CAPITAL Q
A7B0..A7B4	; DISALLOWED	# LATIN CAPITAL LETTER TURNED K..LATIN CAPITAL
A7B5	; PVALID	# LATIN SMALL LETTER BETA
A7B6	; DISALLOWED	# LATIN CAPITAL LETTER OMEGA
A7B7	; PVALID	# LATIN SMALL LETTER OMEGA
A7B8	; DISALLOWED	# LATIN CAPITAL LETTER U WITH STROKE
A7B9	; PVALID	# LATIN SMALL LETTER U WITH STROKE
A7BA	; DISALLOWED	# LATIN CAPITAL LETTER GLOTTAL A
A7BB	; PVALID	# LATIN SMALL LETTER GLOTTAL A
A7BC	; DISALLOWED	# LATIN CAPITAL LETTER GLOTTAL I
A7BD	; PVALID	# LATIN SMALL LETTER GLOTTAL I
A7BE	; DISALLOWED	# LATIN CAPITAL LETTER GLOTTAL U
A7BF	; PVALID	# LATIN SMALL LETTER GLOTTAL U
A7C0..A7C1	; UNASSIGNED	# <reserved>..<reserved>
A7C2	; DISALLOWED	# LATIN CAPITAL LETTER ANGLICANA W
A7C3	; PVALID	# LATIN SMALL LETTER ANGLICANA W
A7C4..A7C6	; DISALLOWED	# LATIN CAPITAL LETTER C WITH PALATAL HOOK..LA
A7C7..A7F6	; UNASSIGNED	# <reserved>..<reserved>
A7F7	; PVALID	# LATIN EPIGRAPHIC LETTER SIDEWAYS I
A7F8..A7F9	; DISALLOWED	# MODIFIER LETTER CAPITAL H WITH STROKE..MODIF
A7FA..A827	; PVALID	# LATIN LETTER SMALL CAPITAL TURNED M..SYLOTI
A828..A82B	; DISALLOWED	# SYLOTI NAGRI POETRY MARK-1..SYLOTI NAGRI POE
A82C..A82F	; UNASSIGNED	# <reserved>..<reserved>
A830..A839	; DISALLOWED	# NORTH INDIC FRACTION ONE QUARTER..NORTH INDI
A83A..A83F	; UNASSIGNED	# <reserved>..<reserved>
A840..A873	; PVALID	# PHAGS-PA LETTER KA..PHAGS-PA LETTER CANDRABI
A874..A877	; DISALLOWED	# PHAGS-PA SINGLE HEAD MARK..PHAGS-PA MARK DOU
A878..A87F	; UNASSIGNED	# <reserved>..<reserved>
A880..A8C5	; PVALID	# SAURASHTRA SIGN ANUSVARA..SAURASHTRA SIGN CA
A8C6..A8CD	; UNASSIGNED	# <reserved>..<reserved>
A8CE..A8CF	; DISALLOWED	# SAURASHTRA DANDA..SAURASHTRA DOUBLE DANDA
A8D0..A8D9	; PVALID	# SAURASHTRA DIGIT ZERO..SAURASHTRA DIGIT NINE
A8DA..A8DF	; UNASSIGNED	# <reserved>..<reserved>
A8E0..A8F7	; PVALID	# COMBINING DEVANAGARI DIGIT ZERO..DEVANAGARI
A8F8..A8FA	; DISALLOWED	# DEVANAGARI SIGN PUSHPIKA..DEVANAGARI CARET
A8FB	; PVALID	# DEVANAGARI HEADSTROKE
A8FC	; DISALLOWED	# DEVANAGARI SIGN SIDDHAM
A8FD..A92D	; PVALID	# DEVANAGARI JAIN OM..KAYAH LI TONE CALYA PLOP
A92E..A92F	; DISALLOWED	# KAYAH LI SIGN CWI..KAYAH LI SIGN SHYA
A930..A953	; PVALID	# REJANG LETTER KA..REJANG VIRAMA

A954..A95E ; UNASSIGNED # <reserved>..<reserved>

A95F..A97C	; DISALLOWED	# REJANG SECTION MARK..HANGUL CHOSEONG SSANGYE
A97D..A97F	; UNASSIGNED	# <reserved>..<reserved>
A980..A9C0	; PVALID	# JAVANESE SIGN PANYANGGA..JAVANESE PANGKON
A9C1..A9CD	; DISALLOWED	# JAVANESE LEFT RERENGGAN..JAVANESE TURNED PAD
A9CE	; UNASSIGNED	# <reserved>
A9CF..A9D9	; PVALID	# JAVANESE PANGRANGKEP..JAVANESE DIGIT NINE
A9DA..A9DD	; UNASSIGNED	# <reserved>..<reserved>
A9DE..A9DF	; DISALLOWED	# JAVANESE PADA TIRTA TUMETES..JAVANESE PADA I
A9E0..A9FE	; PVALID	# MYANMAR LETTER SHAN GHA..MYANMAR LETTER TAI
A9FF	; UNASSIGNED	# <reserved>
AA00..AA36	; PVALID	# CHAM LETTER A..CHAM CONSONANT SIGN WA
AA37..AA3F	; UNASSIGNED	# <reserved>..<reserved>
AA40..AA4D	; PVALID	# CHAM LETTER FINAL K..CHAM CONSONANT SIGN FIN
AA4E..AA4F	; UNASSIGNED	# <reserved>..<reserved>
AA50..AA59	; PVALID	# CHAM DIGIT ZERO..CHAM DIGIT NINE
AA5A..AA5B	; UNASSIGNED	# <reserved>..<reserved>
AA5C..AA5F	; DISALLOWED	# CHAM PUNCTUATION SPIRAL..CHAM PUNCTUATION TR
AA60..AA76	; PVALID	# MYANMAR LETTER KHAMTI GA..MYANMAR LOGOGRAM K
AA77..AA79	; DISALLOWED	# MYANMAR SYMBOL AITON EXCLAMATION..MYANMAR SY
AA7A..AAC2	; PVALID	# MYANMAR LETTER AITON RA..TAI VIET TONE MAI S
AAC3..AADA	; UNASSIGNED	# <reserved>..<reserved>
AADB..AADD	; PVALID	# TAI VIET SYMBOL KON..TAI VIET SYMBOL SAM
AADE..AADF	; DISALLOWED	# TAI VIET SYMBOL HO HOI..TAI VIET SYMBOL KOI
AAE0..AAEF	; PVALID	# MEETEI MAYEK LETTER E..MEETEI MAYEK VOWEL SI
AAF0..AAF1	; DISALLOWED	# MEETEI MAYEK CHEIKHAN..MEETEI MAYEK AHANG KH
AAF2..AAF6	; PVALID	# MEETEI MAYEK ANJI..MEETEI MAYEK VIRAMA
AAF7..AB00	; UNASSIGNED	# <reserved>..<reserved>
AB01..AB06	; PVALID	# ETHIOPIC SYLLABLE TTHU..ETHIOPIC SYLLABLE TT
AB07..AB08	; UNASSIGNED	# <reserved>..<reserved>
AB09..AB0E	; PVALID	# ETHIOPIC SYLLABLE DDHU..ETHIOPIC SYLLABLE DD
AB0F..AB10	; UNASSIGNED	# <reserved>..<reserved>
AB11..AB16	; PVALID	# ETHIOPIC SYLLABLE DZU..ETHIOPIC SYLLABLE DZO
AB17..AB1F	; UNASSIGNED	# <reserved>..<reserved>
AB20..AB26	; PVALID	# ETHIOPIC SYLLABLE CCHHA..ETHIOPIC SYLLABLE C
AB27	; UNASSIGNED	# <reserved>
AB28..AB2E	; PVALID	# ETHIOPIC SYLLABLE BBA..ETHIOPIC SYLLABLE BBO
AB2F	; UNASSIGNED	# <reserved>
AB30..AB5A	; PVALID	# LATIN SMALL LETTER BARRED ALPHA..LATIN SMALL
AB5B..AB5F	; DISALLOWED	# MODIFIER BREVE WITH INVERTED BREVE..MODIFIER
AB60..AB67	; PVALID	# LATIN SMALL LETTER SAKHA YAT..LATIN SMALL LE
AB68..AB6F	; UNASSIGNED	# <reserved>..<reserved>
AB70..ABBF	; DISALLOWED	# CHEROKEE SMALL LETTER A..CHEROKEE SMALL LETT
ABC0..ABEA	; PVALID	# MEETEI MAYEK LETTER KOK..MEETEI MAYEK VOWEL
ABEB	; DISALLOWED	# MEETEI MAYEK CHEIKHEI
ABEC..ABED	; PVALID	# MEETEI MAYEK LUM IYEK..MEETEI MAYEK APUN IYE
ABEE..ABEF	; UNASSIGNED	# <reserved>..<reserved>
ABF0..ABF9	; PVALID	# MEETEI MAYEK DIGIT ZERO..MEETEI MAYEK DIGIT

ABFA..ABFF	; UNASSIGNED	# <reserved>..<reserved>
AC00..D7A3	; PVALID	# <Hangul Syllable>..<Hangul Syllable>
D7A4..D7AF	; UNASSIGNED	# <reserved>..<reserved>
D7B0..D7C6	; DISALLOWED	# HANGUL JUNGSEONG O-YEO..HANGUL JUNGSEONG ARA
D7C7..D7CA	; UNASSIGNED	# <reserved>..<reserved>
D7CB..D7FB	; DISALLOWED	# HANGUL JONGSEONG NIEUN-RIEUL..HANGUL JONGSEO
D7FC..D7FF	; UNASSIGNED	# <reserved>..<reserved>
D800..FA0D	; DISALLOWED	# <Non Private Use High Surrogate>..CJK COMPAT
FA0E..FA0F	; PVALID	# CJK COMPATIBILITY IDEOGRAPH-FA0E..CJK COMPAT
FA10	; DISALLOWED	# CJK COMPATIBILITY IDEOGRAPH-FA10
FA11	; PVALID	# CJK COMPATIBILITY IDEOGRAPH-FA11
FA12	; DISALLOWED	# CJK COMPATIBILITY IDEOGRAPH-FA12
FA13..FA14	; PVALID	# CJK COMPATIBILITY IDEOGRAPH-FA13..CJK COMPAT
FA15..FA1E	; DISALLOWED	# CJK COMPATIBILITY IDEOGRAPH-FA15..CJK COMPAT
FA1F	; PVALID	# CJK COMPATIBILITY IDEOGRAPH-FA1F
FA20	; DISALLOWED	# CJK COMPATIBILITY IDEOGRAPH-FA20
FA21	; PVALID	# CJK COMPATIBILITY IDEOGRAPH-FA21
FA22	; DISALLOWED	# CJK COMPATIBILITY IDEOGRAPH-FA22
FA23..FA24	; PVALID	# CJK COMPATIBILITY IDEOGRAPH-FA23..CJK COMPAT
FA25..FA26	; DISALLOWED	# CJK COMPATIBILITY IDEOGRAPH-FA25..CJK COMPAT
FA27..FA29	; PVALID	# CJK COMPATIBILITY IDEOGRAPH-FA27..CJK COMPAT
FA2A..FA6D	; DISALLOWED	# CJK COMPATIBILITY IDEOGRAPH-FA2A..CJK COMPAT
FA6E..FA6F	; UNASSIGNED	# <reserved>..<reserved>
FA70..FAD9	; DISALLOWED	# CJK COMPATIBILITY IDEOGRAPH-FA70..CJK COMPAT
FADA..FAFF	; UNASSIGNED	# <reserved>..<reserved>
FB00..FB06	; DISALLOWED	# LATIN SMALL LIGATURE FF..LATIN SMALL LIGATUR
FB07..FB12	; UNASSIGNED	# <reserved>..<reserved>
FB13..FB17	; DISALLOWED	# ARMENIAN SMALL LIGATURE MEN NOW..ARMENIAN SM
FB18..FB1C	; UNASSIGNED	# <reserved>..<reserved>
FB1D	; DISALLOWED	# HEBREW LETTER YOD WITH HIRIQ
FB1E	; PVALID	# HEBREW POINT JUDEO-SPANISH VARIKA
FB1F..FB36	; DISALLOWED	# HEBREW LIGATURE YIDDISH YOD YOD PATAH..HEBRE
FB37	; UNASSIGNED	# <reserved>
FB38..FB3C	; DISALLOWED	# HEBREW LETTER TET WITH DAGESH..HEBREW LETTER
FB3D	; UNASSIGNED	# <reserved>
FB3E	; DISALLOWED	# HEBREW LETTER MEM WITH DAGESH
FB3F	; UNASSIGNED	# <reserved>
FB40..FB41	; DISALLOWED	# HEBREW LETTER NUN WITH DAGESH..HEBREW LETTER
FB42	; UNASSIGNED	# <reserved>
FB43..FB44	; DISALLOWED	# HEBREW LETTER FINAL PE WITH DAGESH..HEBREW L
FB45	; UNASSIGNED	# <reserved>
FB46..FBC1	; DISALLOWED	# HEBREW LETTER TSADI WITH DAGESH..ARABIC SYMB
FBC2..FBD2	; UNASSIGNED	# <reserved>..<reserved>
FBD3..FD3F	; DISALLOWED	# ARABIC LETTER NG ISOLATED FORM..ORNATE RIGHT
FD40..FD4F	; UNASSIGNED	# <reserved>..<reserved>
FD50..FD8F	; DISALLOWED	# ARABIC LIGATURE TEH WITH JEEM WITH MEEM INIT

FD90..FD91 ; UNASSIGNED # <reserved>..<reserved>
FD92..FDC7 ; DISALLOWED # ARABIC LIGATURE MEEM WITH JEEM WITH KHAH INI

Faltstrom

Expires September 12, 2019

[Page 67]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

FDC8..FDCF ; UNASSIGNED # <reserved>..<reserved>
FDD0..FDFD ; DISALLOWED # <noncharacter>..ARABIC LIGATURE BISMILLAH AR
FDFE..FDFF ; UNASSIGNED # <reserved>..<reserved>
FE00..FE19 ; DISALLOWED # VARIATION SELECTOR-1..PRESENTATION FORM FOR
FE1A..FE1F ; UNASSIGNED # <reserved>..<reserved>
FE20..FE2F ; PVALID # COMBINING LIGATURE LEFT HALF..COMBINING CYRI
FE30..FE52 ; DISALLOWED # PRESENTATION FORM FOR VERTICAL TWO DOT LEADE
FE53 ; UNASSIGNED # <reserved>
FE54..FE66 ; DISALLOWED # SMALL SEMICOLON..SMALL EQUALS SIGN
FE67 ; UNASSIGNED # <reserved>
FE68..FE6B ; DISALLOWED # SMALL REVERSE SOLIDUS..SMALL COMMERCIAL AT
FE6C..FE6F ; UNASSIGNED # <reserved>..<reserved>
FE70..FE72 ; DISALLOWED # ARABIC FATHATAN ISOLATED FORM..ARABIC DAMMAT
FE73 ; PVALID # ARABIC TAIL FRAGMENT
FE74 ; DISALLOWED # ARABIC KASRATAN ISOLATED FORM
FE75 ; UNASSIGNED # <reserved>
FE76..FEFC ; DISALLOWED # ARABIC FATHA ISOLATED FORM..ARABIC LIGATURE
FEFD..FEFE ; UNASSIGNED # <reserved>..<reserved>
FEFF ; DISALLOWED # ZERO WIDTH NO-BREAK SPACE
FF00 ; UNASSIGNED # <reserved>
FF01..FFBE ; DISALLOWED # FULLWIDTH EXCLAMATION MARK..HALFWIDTH HANGUL
FFBF..FFC1 ; UNASSIGNED # <reserved>..<reserved>
FFC2..FFC7 ; DISALLOWED # HALFWIDTH HANGUL LETTER A..HALFWIDTH HANGUL
FFC8..FFC9 ; UNASSIGNED # <reserved>..<reserved>
FFCA..FFCF ; DISALLOWED # HALFWIDTH HANGUL LETTER YEO..HALFWIDTH HANGU
FFD0..FFD1 ; UNASSIGNED # <reserved>..<reserved>
FFD2..FFD7 ; DISALLOWED # HALFWIDTH HANGUL LETTER YO..HALFWIDTH HANGUL
FFD8..FFD9 ; UNASSIGNED # <reserved>..<reserved>
FFDA..FFDC ; DISALLOWED # HALFWIDTH HANGUL LETTER EU..HALFWIDTH HANGUL
FFDD..FFDF ; UNASSIGNED # <reserved>..<reserved>
FFE0..FFE6 ; DISALLOWED # FULLWIDTH CENT SIGN..FULLWIDTH WON SIGN
FFE7 ; UNASSIGNED # <reserved>
FFE8..FFEE ; DISALLOWED # HALFWIDTH FORMS LIGHT VERTICAL..HALFWIDTH WH
FFEF..FFF8 ; UNASSIGNED # <reserved>..<reserved>
FFF9..FFFF ; DISALLOWED # INTERLINEAR ANNOTATION ANCHOR..<noncharacter>
10000..1000B; PVALID # LINEAR B SYLLABLE B008 A..LINEAR B SYLLABLE
1000C ; UNASSIGNED # <reserved>
1000D..10026; PVALID # LINEAR B SYLLABLE B036 JO..LINEAR B SYLLABLE
[10027](#) ; UNASSIGNED # <reserved>

10028..1003A;	PVALID	# LINEAR B SYLLABLE B060 RA..LINEAR B SYLLABLE
1003B	; UNASSIGNED	# <reserved>
1003C..1003D;	PVALID	# LINEAR B SYLLABLE B017 ZA..LINEAR B SYLLABLE
1003E	; UNASSIGNED	# <reserved>
1003F..1004D;	PVALID	# LINEAR B SYLLABLE B020 ZO..LINEAR B SYLLABLE
1004E..1004F;	UNASSIGNED	# <reserved>..<reserved>
10050..1005D;	PVALID	# LINEAR B SYMBOL B018..LINEAR B SYMBOL B089
1005E..1007F;	UNASSIGNED	# <reserved>..<reserved>
10080..100FA;	PVALID	# LINEAR B IDEOGRAM B100 MAN..LINEAR B IDEOGRAM

Faltstrom

Expires September 12, 2019

[Page 68]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

100FB..100FF;	UNASSIGNED	# <reserved>..<reserved>
10100..10102;	DISALLOWED	# AEGEAN WORD SEPARATOR LINE..AEGEAN CHECK MAR
10103..10106;	UNASSIGNED	# <reserved>..<reserved>
10107..10133;	DISALLOWED	# AEGEAN NUMBER ONE..AEGEAN NUMBER NINETY THOU
10134..10136;	UNASSIGNED	# <reserved>..<reserved>
10137..1018E;	DISALLOWED	# AEGEAN WEIGHT BASE UNIT..NOMISMA SIGN
1018F	; UNASSIGNED	# <reserved>
10190..1019B;	DISALLOWED	# ROMAN SEXTANS SIGN..ROMAN CENTURIAL SIGN
1019C..1019F;	UNASSIGNED	# <reserved>..<reserved>
101A0	; DISALLOWED	# GREEK SYMBOL TAU RHO
101A1..101CF;	UNASSIGNED	# <reserved>..<reserved>
101D0..101FC;	DISALLOWED	# PHAISTOS DISC SIGN PEDESTRIAN..PHAISTOS DISC
101FD	; PVALID	# PHAISTOS DISC SIGN COMBINING OBLIQUE STROKE
101FE..1027F;	UNASSIGNED	# <reserved>..<reserved>
10280..1029C;	PVALID	# LYCIAN LETTER A..LYCIAN LETTER X
1029D..1029F;	UNASSIGNED	# <reserved>..<reserved>
102A0..102D0;	PVALID	# CARIAN LETTER A..CARIAN LETTER UUU3
102D1..102DF;	UNASSIGNED	# <reserved>..<reserved>
102E0	; PVALID	# COPTIC EPACT THOUSANDS MARK
102E1..102FB;	DISALLOWED	# COPTIC EPACT DIGIT ONE..COPTIC EPACT NUMBER
102FC..102FF;	UNASSIGNED	# <reserved>..<reserved>
10300..1031F;	PVALID	# OLD ITALIC LETTER A..OLD ITALIC LETTER ESS
10320..10323;	DISALLOWED	# OLD ITALIC NUMERAL ONE..OLD ITALIC NUMERAL F
10324..1032C;	UNASSIGNED	# <reserved>..<reserved>
1032D..10340;	PVALID	# OLD ITALIC LETTER YE..GOTHIC LETTER PAIRTHRA
10341	; DISALLOWED	# GOTHIC LETTER NINETY
10342..10349;	PVALID	# GOTHIC LETTER RAIDAL..GOTHIC LETTER OTHAL
1034A	; DISALLOWED	# GOTHIC LETTER NINE HUNDRED
1034B..1034F;	UNASSIGNED	# <reserved>..<reserved>
10350..1037A;	PVALID	# OLD PERMIC LETTER AN..COMBINING OLD PERMIC L
1037B..1037F;	UNASSIGNED	# <reserved>..<reserved>
10380..1039D;	PVALID	# UGARITIC LETTER ALPA..UGARITIC LETTER SSU

1039E	; UNASSIGNED	# <reserved>
1039F	; DISALLOWED	# UGARITIC WORD DIVIDER
103A0..103C3	; PVALID	# OLD PERSIAN SIGN A..OLD PERSIAN SIGN HA
103C4..103C7	; UNASSIGNED	# <reserved>.. <reserved>
103C8..103CF	; PVALID	# OLD PERSIAN SIGN AURAMAZDAA..OLD PERSIAN SIG
103D0..103D5	; DISALLOWED	# OLD PERSIAN WORD DIVIDER..OLD PERSIAN NUMBER
103D6..103FF	; UNASSIGNED	# <reserved>.. <reserved>
10400..10427	; DISALLOWED	# DESERET CAPITAL LETTER LONG I..DESERET CAPIT
10428..1049D	; PVALID	# DESERET SMALL LETTER LONG I..OSMANYA LETTER
1049E..1049F	; UNASSIGNED	# <reserved>.. <reserved>
104A0..104A9	; PVALID	# OSMANYA DIGIT ZERO..OSMANYA DIGIT NINE
104AA..104AF	; UNASSIGNED	# <reserved>.. <reserved>
104B0..104D3	; DISALLOWED	# OSAGE CAPITAL LETTER A..OSAGE CAPITAL LETTER
104D4..104D7	; UNASSIGNED	# <reserved>.. <reserved>
104D8..104FB	; PVALID	# OSAGE SMALL LETTER A..OSAGE SMALL LETTER ZHA
104FC..104FF	; UNASSIGNED	# <reserved>.. <reserved>

Faltstrom

Expires September 12, 2019

[Page 69]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

10500..10527	; PVALID	# ELBASAN LETTER A..ELBASAN LETTER KHE
10528..1052F	; UNASSIGNED	# <reserved>.. <reserved>
10530..10563	; PVALID	# CAUCASIAN ALBANIAN LETTER ALT..CAUCASIAN ALB
10564..1056E	; UNASSIGNED	# <reserved>.. <reserved>
1056F	; DISALLOWED	# CAUCASIAN ALBANIAN CITATION MARK
10570..105FF	; UNASSIGNED	# <reserved>.. <reserved>
10600..10736	; PVALID	# LINEAR A SIGN AB001..LINEAR A SIGN A664
10737..1073F	; UNASSIGNED	# <reserved>.. <reserved>
10740..10755	; PVALID	# LINEAR A SIGN A701 A..LINEAR A SIGN A732 JE
10756..1075F	; UNASSIGNED	# <reserved>.. <reserved>
10760..10767	; PVALID	# LINEAR A SIGN A800..LINEAR A SIGN A807
10768..107FF	; UNASSIGNED	# <reserved>.. <reserved>
10800..10805	; PVALID	# CYPRIOT SYLLABLE A..CYPRIOT SYLLABLE JA
10806..10807	; UNASSIGNED	# <reserved>.. <reserved>
10808	; PVALID	# CYPRIOT SYLLABLE JO
10809	; UNASSIGNED	# <reserved>
1080A..10835	; PVALID	# CYPRIOT SYLLABLE KA..CYPRIOT SYLLABLE WO
10836	; UNASSIGNED	# <reserved>
10837..10838	; PVALID	# CYPRIOT SYLLABLE XA..CYPRIOT SYLLABLE XE
10839..1083B	; UNASSIGNED	# <reserved>.. <reserved>
1083C	; PVALID	# CYPRIOT SYLLABLE ZA
1083D..1083E	; UNASSIGNED	# <reserved>.. <reserved>
1083F..10855	; PVALID	# CYPRIOT SYLLABLE ZO..IMPERIAL ARAMAIC LETTER
10856	; UNASSIGNED	# <reserved>
10857..1085F	; DISALLOWED	# IMPERIAL ARAMAIC SECTION SIGN..IMPERIAL ARAM

10860..10876;	PVALID	# PALMYRENE LETTER ALEPH..PALMYRENE LETTER TAW
10877..1087F;	DISALLOWED	# PALMYRENE LEFT-POINTING FLEURON..PALMYRENE N
10880..1089E;	PVALID	# NABATAEAN LETTER FINAL ALEPH..NABATAEAN LETT
1089F..108A6;	UNASSIGNED	# <reserved>..<reserved>
108A7..108AF;	DISALLOWED	# NABATAEAN NUMBER ONE..NABATAEAN NUMBER ONE H
108B0..108DF;	UNASSIGNED	# <reserved>..<reserved>
108E0..108F2;	PVALID	# HATRAN LETTER ALEPH..HATRAN LETTER QOPH
108F3	; UNASSIGNED	# <reserved>
108F4..108F5;	PVALID	# HATRAN LETTER SHIN..HATRAN LETTER TAW
108F6..108FA;	UNASSIGNED	# <reserved>..<reserved>
108FB..108FF;	DISALLOWED	# HATRAN NUMBER ONE..HATRAN NUMBER ONE HUNDRED
10900..10915;	PVALID	# PHOENICIAN LETTER ALF..PHOENICIAN LETTER TAU
10916..1091B;	DISALLOWED	# PHOENICIAN NUMBER ONE..PHOENICIAN NUMBER THR
1091C..1091E;	UNASSIGNED	# <reserved>..<reserved>
1091F	; DISALLOWED	# PHOENICIAN WORD SEPARATOR
10920..10939;	PVALID	# LYDIAN LETTER A..LYDIAN LETTER C
1093A..1093E;	UNASSIGNED	# <reserved>..<reserved>
1093F	; DISALLOWED	# LYDIAN TRIANGULAR MARK
10940..1097F;	UNASSIGNED	# <reserved>..<reserved>
10980..109B7;	PVALID	# MEROITIC HIEROGLYPHIC LETTER A..MEROITIC CUR
109B8..109BB;	UNASSIGNED	# <reserved>..<reserved>
109BC..109BD;	DISALLOWED	# MEROITIC CURSIVE FRACTION ELEVEN TWELFTHS..M
109BE..109BF;	PVALID	# MEROITIC CURSIVE LOGOGRAM RMT..MEROITIC CURS

109C0..109CF;	DISALLOWED	# MEROITIC CURSIVE NUMBER ONE..MEROITIC CURSIV
109D0..109D1;	UNASSIGNED	# <reserved>..<reserved>
109D2..109FF;	DISALLOWED	# MEROITIC CURSIVE NUMBER ONE HUNDRED..MEROITI
10A00..10A03;	PVALID	# KHAROSHTHI LETTER A..KHAROSHTHI VOWEL SIGN V
10A04	; UNASSIGNED	# <reserved>
10A05..10A06;	PVALID	# KHAROSHTHI VOWEL SIGN E..KHAROSHTHI VOWEL SI
10A07..10A0B;	UNASSIGNED	# <reserved>..<reserved>
10A0C..10A13;	PVALID	# KHAROSHTHI VOWEL LENGTH MARK..KHAROSHTHI LET
10A14	; UNASSIGNED	# <reserved>
10A15..10A17;	PVALID	# KHAROSHTHI LETTER CA..KHAROSHTHI LETTER JA
10A18	; UNASSIGNED	# <reserved>
10A19..10A35;	PVALID	# KHAROSHTHI LETTER NYA..KHAROSHTHI LETTER VHA
10A36..10A37;	UNASSIGNED	# <reserved>..<reserved>
10A38..10A3A;	PVALID	# KHAROSHTHI SIGN BAR ABOVE..KHAROSHTHI SIGN D
10A3B..10A3E;	UNASSIGNED	# <reserved>..<reserved>
10A3F	; PVALID	# KHAROSHTHI VIRAMA
10A40..10A48;	DISALLOWED	# KHAROSHTHI DIGIT ONE..KHAROSHTHI FRACTION ON
10A49..10A4F;	UNASSIGNED	# <reserved>..<reserved>

10A50..10A58;	DISALLOWED	# KHAROSHTHI PUNCTUATION DOT..KHAROSHTHI PUNCT
10A59..10A5F;	UNASSIGNED	# <reserved>..<reserved>
10A60..10A7C;	PVALID	# OLD SOUTH ARABIAN LETTER HE..OLD SOUTH ARABI
10A7D..10A7F;	DISALLOWED	# OLD SOUTH ARABIAN NUMBER ONE..OLD SOUTH ARAB
10A80..10A9C;	PVALID	# OLD NORTH ARABIAN LETTER HEH..OLD NORTH ARAB
10A9D..10A9F;	DISALLOWED	# OLD NORTH ARABIAN NUMBER ONE..OLD NORTH ARAB
10AA0..10ABF;	UNASSIGNED	# <reserved>..<reserved>
10AC0..10AC7;	PVALID	# MANICHAEAN LETTER ALEPH..MANICHAEAN LETTER W
10AC8	; DISALLOWED	# MANICHAEAN SIGN UD
10AC9..10AE6;	PVALID	# MANICHAEAN LETTER ZAYIN..MANICHAEAN ABBREVIA
10AE7..10AEA;	UNASSIGNED	# <reserved>..<reserved>
10AEB..10AF6;	DISALLOWED	# MANICHAEAN NUMBER ONE..MANICHAEAN PUNCTUATIO
10AF7..10AFF;	UNASSIGNED	# <reserved>..<reserved>
10B00..10B35;	PVALID	# AVESTAN LETTER A..AVESTAN LETTER HE
10B36..10B38;	UNASSIGNED	# <reserved>..<reserved>
10B39..10B3F;	DISALLOWED	# AVESTAN ABBREVIATION MARK..LARGE ONE RING OV
10B40..10B55;	PVALID	# INSCRIPTIONAL PARTHIAN LETTER ALEPH..INSCRIP
10B56..10B57;	UNASSIGNED	# <reserved>..<reserved>
10B58..10B5F;	DISALLOWED	# INSCRIPTIONAL PARTHIAN NUMBER ONE..INSCRIPTI
10B60..10B72;	PVALID	# INSCRIPTIONAL PAHLAVI LETTER ALEPH..INSCRIPT
10B73..10B77;	UNASSIGNED	# <reserved>..<reserved>
10B78..10B7F;	DISALLOWED	# INSCRIPTIONAL PAHLAVI NUMBER ONE..INSCRIPTIO
10B80..10B91;	PVALID	# PSALTER PAHLAVI LETTER ALEPH..PSALTER PAHLAV
10B92..10B98;	UNASSIGNED	# <reserved>..<reserved>
10B99..10B9C;	DISALLOWED	# PSALTER PAHLAVI SECTION MARK..PSALTER PAHLAV
10B9D..10BA8;	UNASSIGNED	# <reserved>..<reserved>
10BA9..10BAF;	DISALLOWED	# PSALTER PAHLAVI NUMBER ONE..PSALTER PAHLAVI
10BB0..10BFF;	UNASSIGNED	# <reserved>..<reserved>
10C00..10C48;	PVALID	# OLD TURKIC LETTER ORKHON A..OLD TURKIC LETTE
10C49..10C7F;	UNASSIGNED	# <reserved>..<reserved>

10C80..10CB2;	DISALLOWED	# OLD HUNGARIAN CAPITAL LETTER A..OLD HUNGARIA
10CB3..10CBF;	UNASSIGNED	# <reserved>..<reserved>
10CC0..10CF2;	PVALID	# OLD HUNGARIAN SMALL LETTER A..OLD HUNGARIAN
10CF3..10CF9;	UNASSIGNED	# <reserved>..<reserved>
10CFA..10CFF;	DISALLOWED	# OLD HUNGARIAN NUMBER ONE..OLD HUNGARIAN NUMB
10D00..10D27;	PVALID	# HANIFI ROHINGYA LETTER A..HANIFI ROHINGYA SI
10D28..10D2F;	UNASSIGNED	# <reserved>..<reserved>
10D30..10D39;	PVALID	# HANIFI ROHINGYA DIGIT ZERO..HANIFI ROHINGYA
10D3A..10E5F;	UNASSIGNED	# <reserved>..<reserved>
10E60..10E7E;	DISALLOWED	# RUMI DIGIT ONE..RUMI FRACTION TWO THIRDS
10E7F..10EFF;	UNASSIGNED	# <reserved>..<reserved>

10F00..10F1C;	PVALID	# OLD SOGDIAN LETTER ALEPH..OLD SOGDIAN LETTER
10F1D..10F26;	DISALLOWED	# OLD SOGDIAN NUMBER ONE..OLD SOGDIAN FRACTION
10F27	; PVALID	# OLD SOGDIAN LIGATURE AYIN-DALETH
10F28..10F2F;	UNASSIGNED	# <reserved>..<reserved>
10F30..10F50;	PVALID	# SOGDIAN LETTER ALEPH..SOGDIAN COMBINING STRO
10F51..10F59;	DISALLOWED	# SOGDIAN NUMBER ONE..SOGDIAN PUNCTUATION HALF
10F5A..10FDF;	UNASSIGNED	# <reserved>..<reserved>
10FE0..10FF6;	PVALID	# ELYMAIC LETTER ALEPH..ELYMAIC LIGATURE ZAYIN
10FF7..10FFF;	UNASSIGNED	# <reserved>..<reserved>
11000..11046;	PVALID	# BRAHMI SIGN CANDRABINDU..BRAHMI VIRAMA
11047..1104D;	DISALLOWED	# BRAHMI DANDA..BRAHMI PUNCTUATION LOTUS
1104E..11051;	UNASSIGNED	# <reserved>..<reserved>
11052..11065;	DISALLOWED	# BRAHMI NUMBER ONE..BRAHMI NUMBER ONE THOUSAN
11066..1106F;	PVALID	# BRAHMI DIGIT ZERO..BRAHMI DIGIT NINE
11070..1107E;	UNASSIGNED	# <reserved>..<reserved>
1107F..110BA;	PVALID	# BRAHMI NUMBER JOINER..KAITHI SIGN NUKTA
110BB..110C1;	DISALLOWED	# KAITHI ABBREVIATION SIGN..KAITHI DOUBLE DAND
110C2..110CC;	UNASSIGNED	# <reserved>..<reserved>
110CD	; DISALLOWED	# KAITHI NUMBER SIGN ABOVE
110CE..110CF;	UNASSIGNED	# <reserved>..<reserved>
110D0..110E8;	PVALID	# SORA SOMPENG LETTER SAH..SORA SOMPENG LETTER
110E9..110EF;	UNASSIGNED	# <reserved>..<reserved>
110F0..110F9;	PVALID	# SORA SOMPENG DIGIT ZERO..SORA SOMPENG DIGIT
110FA..110FF;	UNASSIGNED	# <reserved>..<reserved>
11100..11134;	PVALID	# CHAKMA SIGN CANDRABINDU..CHAKMA MAAYYAA
11135	; UNASSIGNED	# <reserved>
11136..1113F;	PVALID	# CHAKMA DIGIT ZERO..CHAKMA DIGIT NINE
11140..11143;	DISALLOWED	# CHAKMA SECTION MARK..CHAKMA QUESTION MARK
11144..11146;	PVALID	# CHAKMA LETTER LHAA..CHAKMA VOWEL SIGN EI
11147..1114F;	UNASSIGNED	# <reserved>..<reserved>
11150..11173;	PVALID	# MAHAJANI LETTER A..MAHAJANI SIGN NUKTA
11174..11175;	DISALLOWED	# MAHAJANI ABBREVIATION SIGN..MAHAJANI SECTION
11176	; PVALID	# MAHAJANI LIGATURE SHRI
11177..1117F;	UNASSIGNED	# <reserved>..<reserved>
11180..111C4;	PVALID	# SHARADA SIGN CANDRABINDU..SHARADA OM
111C5..111C8;	DISALLOWED	# SHARADA DANDA..SHARADA SEPARATOR
111C9..111CC;	PVALID	# SHARADA SANDHI MARK..SHARADA EXTRA SHORT VOW

111CD	; DISALLOWED	# SHARADA SUTRA MARK
111CE..111CF;	UNASSIGNED	# <reserved>..<reserved>
111D0..111DA;	PVALID	# SHARADA DIGIT ZERO..SHARADA EKAM
111DB	; DISALLOWED	# SHARADA SIGN SIDDHAM

111DC	; PVALID	# SHARADA HEADSTROKE
111DD..111DF	; DISALLOWED	# SHARADA CONTINUATION SIGN..SHARADA SECTION M
111E0	; UNASSIGNED	# <reserved>
111E1..111F4	; DISALLOWED	# SINHALA ARCHAIC DIGIT ONE..SINHALA ARCHAIC N
111F5..111FF	; UNASSIGNED	# <reserved>.. <reserved>
11200..11211	; PVALID	# KHOJKI LETTER A..KHOJKI LETTER JJA
11212	; UNASSIGNED	# <reserved>
11213..11237	; PVALID	# KHOJKI LETTER NYA..KHOJKI SIGN SHADDA
11238..1123D	; DISALLOWED	# KHOJKI DANDA..KHOJKI ABBREVIATION SIGN
1123E	; PVALID	# KHOJKI SIGN SUKUN
1123F..1127F	; UNASSIGNED	# <reserved>.. <reserved>
11280..11286	; PVALID	# MULTANI LETTER A..MULTANI LETTER GA
11287	; UNASSIGNED	# <reserved>
11288	; PVALID	# MULTANI LETTER GHA
11289	; UNASSIGNED	# <reserved>
1128A..1128D	; PVALID	# MULTANI LETTER CA..MULTANI LETTER JJA
1128E	; UNASSIGNED	# <reserved>
1128F..1129D	; PVALID	# MULTANI LETTER NYA..MULTANI LETTER BA
1129E	; UNASSIGNED	# <reserved>
1129F..112A8	; PVALID	# MULTANI LETTER BHA..MULTANI LETTER RHA
112A9	; DISALLOWED	# MULTANI SECTION MARK
112AA..112AF	; UNASSIGNED	# <reserved>.. <reserved>
112B0..112EA	; PVALID	# KHUDAWADI LETTER A..KHUDAWADI SIGN VIRAMA
112EB..112EF	; UNASSIGNED	# <reserved>.. <reserved>
112F0..112F9	; PVALID	# KHUDAWADI DIGIT ZERO..KHUDAWADI DIGIT NINE
112FA..112FF	; UNASSIGNED	# <reserved>.. <reserved>
11300..11303	; PVALID	# GRANTHA SIGN COMBINING ANUSVARA ABOVE..GRANT
11304	; UNASSIGNED	# <reserved>
11305..1130C	; PVALID	# GRANTHA LETTER A..GRANTHA LETTER VOCALIC L
1130D..1130E	; UNASSIGNED	# <reserved>.. <reserved>
1130F..11310	; PVALID	# GRANTHA LETTER EE..GRANTHA LETTER AI
11311..11312	; UNASSIGNED	# <reserved>.. <reserved>
11313..11328	; PVALID	# GRANTHA LETTER OO..GRANTHA LETTER NA
11329	; UNASSIGNED	# <reserved>
1132A..11330	; PVALID	# GRANTHA LETTER PA..GRANTHA LETTER RA
11331	; UNASSIGNED	# <reserved>
11332..11333	; PVALID	# GRANTHA LETTER LA..GRANTHA LETTER LLA
11334	; UNASSIGNED	# <reserved>
11335..11339	; PVALID	# GRANTHA LETTER VA..GRANTHA LETTER HA
1133A	; UNASSIGNED	# <reserved>
1133B..11344	; PVALID	# COMBINING BINDU BELOW..GRANTHA VOWEL SIGN VO
11345..11346	; UNASSIGNED	# <reserved>.. <reserved>
11347..11348	; PVALID	# GRANTHA VOWEL SIGN EE..GRANTHA VOWEL SIGN AI
11349..1134A	; UNASSIGNED	# <reserved>.. <reserved>

1134B..1134D; PVALID # GRANTHA VOWEL SIGN OO..GRANTHA SIGN VIRAMA
1134E..1134F; UNASSIGNED # <reserved>..
[11350](#) ; PVALID # GRANTHA OM
11351..11356; UNASSIGNED # <reserved>..
[11357](#) ; PVALID # GRANTHA AU LENGTH MARK
11358..1135C; UNASSIGNED # <reserved>..
1135D..11363; PVALID # GRANTHA SIGN PLUTA..GRANTHA VOWEL SIGN VOCAL
11364..11365; UNASSIGNED # <reserved>..
11366..1136C; PVALID # COMBINING GRANTHA DIGIT ZERO..COMBINING GRAN
1136D..1136F; UNASSIGNED # <reserved>..
11370..11374; PVALID # COMBINING GRANTHA LETTER A..COMBINING GRANTH
11375..113FF; UNASSIGNED # <reserved>..
11400..1144A; PVALID # NEWA LETTER A..NEWA SIDDHI
1144B..1144F; DISALLOWED # NEWA DANDA..NEWA ABBREVIATION SIGN
11450..11459; PVALID # NEWA DIGIT ZERO..NEWA DIGIT NINE
1145A ; UNASSIGNED # <reserved>
1145B ; DISALLOWED # NEWA PLACEHOLDER MARK
1145C ; UNASSIGNED # <reserved>
1145D ; DISALLOWED # NEWA INSERTION SIGN
1145E..1145F; PVALID # NEWA SANDHI MARK..NEWA LETTER VEDIC ANUSVARA
11460..1147F; UNASSIGNED # <reserved>..
11480..114C5; PVALID # TIRHUTA ANJI..TIRHUTA GVANG
114C6 ; DISALLOWED # TIRHUTA ABBREVIATION SIGN
114C7 ; PVALID # TIRHUTA OM
114C8..114CF; UNASSIGNED # <reserved>..
114D0..114D9; PVALID # TIRHUTA DIGIT ZERO..TIRHUTA DIGIT NINE
114DA..1157F; UNASSIGNED # <reserved>..
11580..115B5; PVALID # SIDDHAM LETTER A..SIDDHAM VOWEL SIGN VOCALIC
115B6..115B7; UNASSIGNED # <reserved>..
115B8..115C0; PVALID # SIDDHAM VOWEL SIGN E..SIDDHAM SIGN NUKTA
115C1..115D7; DISALLOWED # SIDDHAM SIGN SIDDHAM..SIDDHAM SECTION MARK W
115D8..115DD; PVALID # SIDDHAM LETTER THREE-CIRCLE ALTERNATE I..SID
115DE..115FF; UNASSIGNED # <reserved>..
11600..11640; PVALID # MODI LETTER A..MODI SIGN ARDHACANDRA
11641..11643; DISALLOWED # MODI DANDA..MODI ABBREVIATION SIGN
[11644](#) ; PVALID # MODI SIGN HUVA
11645..1164F; UNASSIGNED # <reserved>..
11650..11659; PVALID # MODI DIGIT ZERO..MODI DIGIT NINE
1165A..1165F; UNASSIGNED # <reserved>..
11660..1166C; DISALLOWED # MONGOLIAN BIRGA WITH ORNAMENT..MONGOLIAN TUR
1166D..1167F; UNASSIGNED # <reserved>..
11680..116B8; PVALID # TAKRI LETTER A..TAKRI LETTER ARCHAIC KHA
116B9..116BF; UNASSIGNED # <reserved>..
116C0..116C9; PVALID # TAKRI DIGIT ZERO..TAKRI DIGIT NINE
116CA..116FF; UNASSIGNED # <reserved>..
11700..1171A; PVALID # AHOM LETTER KA..AHOM LETTER ALTERNATE BA
1171B..1171C; UNASSIGNED # <reserved>..

1171D..1172B; PVALID # AHOM CONSONANT SIGN MEDIAL LA..AHOM SIGN KIL

Faltstrom

Expires September 12, 2019

[Page 74]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

1172C..1172F; UNASSIGNED # <reserved>..<reserved>
11730..11739; PVALID # AHOM DIGIT ZERO..AHOM DIGIT NINE
1173A..1173F; DISALLOWED # AHOM NUMBER TEN..AHOM SYMBOL VI
11740..117FF; UNASSIGNED # <reserved>..<reserved>
11800..1183A; PVALID # DOGRA LETTER A..DOGRA SIGN NUKTA
1183B ; DISALLOWED # DOGRA ABBREVIATION SIGN
1183C..1189F; UNASSIGNED # <reserved>..<reserved>
118A0..118BF; DISALLOWED # WARANG CITI CAPITAL LETTER NGAA..WARANG CITI
118C0..118E9; PVALID # WARANG CITI SMALL LETTER NGAA..WARANG CITI D
118EA..118F2; DISALLOWED # WARANG CITI NUMBER TEN..WARANG CITI NUMBER N
118F3..118FE; UNASSIGNED # <reserved>..<reserved>
118FF ; PVALID # WARANG CITI OM
11900..1199F; UNASSIGNED # <reserved>..<reserved>
119A0..119A7; PVALID # NANDINAGARI LETTER A..NANDINAGARI LETTER VOC
119A8..119A9; UNASSIGNED # <reserved>..<reserved>
119AA..119D7; PVALID # NANDINAGARI LETTER E..NANDINAGARI VOWEL SIGN
119D8..119D9; UNASSIGNED # <reserved>..<reserved>
119DA..119E1; PVALID # NANDINAGARI VOWEL SIGN E..NANDINAGARI SIGN A
119E2 ; DISALLOWED # NANDINAGARI SIGN SIDDHAM
119E3..119E4; PVALID # NANDINAGARI HEADSTROKE..NANDINAGARI VOWEL SI
119E5..119FF; UNASSIGNED # <reserved>..<reserved>
11A00..11A3E; PVALID # ZANABAZAR SQUARE LETTER A..ZANABAZAR SQUARE
11A3F..11A46; DISALLOWED # ZANABAZAR SQUARE INITIAL HEAD MARK..ZANABAZA
11A47 ; PVALID # ZANABAZAR SQUARE SUBJOINER
11A48..11A4F; UNASSIGNED # <reserved>..<reserved>
11A50..11A99; PVALID # SOYOMBO LETTER A..SOYOMBO SUBJOINER
11A9A..11A9C; DISALLOWED # SOYOMBO MARK TSHEG..SOYOMBO MARK DOUBLE SHAD
11A9D ; PVALID # SOYOMBO MARK PLUTA
11A9E..11AA2; DISALLOWED # SOYOMBO HEAD MARK WITH MOON AND SUN AND TRIP
11AA3..11ABF; UNASSIGNED # <reserved>..<reserved>
11AC0..11AF8; PVALID # PAU CIN HAU LETTER PA..PAU CIN HAU GLOTTAL S
11AF9..11BFF; UNASSIGNED # <reserved>..<reserved>
11C00..11C08; PVALID # BHAIKSUKI LETTER A..BHAIKSUKI LETTER VOCALIC
11C09 ; UNASSIGNED # <reserved>
11C0A..11C36; PVALID # BHAIKSUKI LETTER E..BHAIKSUKI VOWEL SIGN VOC
11C37 ; UNASSIGNED # <reserved>
11C38..11C40; PVALID # BHAIKSUKI VOWEL SIGN E..BHAIKSUKI SIGN AVAGR
11C41..11C45; DISALLOWED # BHAIKSUKI DANDA..BHAIKSUKI GAP FILLER-2
11C46..11C4F; UNASSIGNED # <reserved>..<reserved>
11C50..11C59; PVALID # BHAIKSUKI DIGIT ZERO..BHAIKSUKI DIGIT NINE

11C5A..11C6C;	DISALLOWED	# BHAIKSUKI NUMBER ONE..BHAIKSUKI HUNDREDS UNI
11C6D..11C6F;	UNASSIGNED	# <reserved>..<reserved>
11C70..11C71;	DISALLOWED	# MARCHEN HEAD MARK..MARCHEN MARK SHAD
11C72..11C8F;	PVALID	# MARCHEN LETTER KA..MARCHEN LETTER A
11C90..11C91;	UNASSIGNED	# <reserved>..<reserved>
11C92..11CA7;	PVALID	# MARCHEN SUBJOINED LETTER KA..MARCHEN SUBJOIN
11CA8	; UNASSIGNED	# <reserved>
11CA9..11CB6;	PVALID	# MARCHEN SUBJOINED LETTER YA..MARCHEN SIGN CA

Faltstrom

Expires September 12, 2019

[Page 75]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

11CB7..11CFF;	UNASSIGNED	# <reserved>..<reserved>
11D00..11D06;	PVALID	# MASARAM GONDI LETTER A..MASARAM GONDI LETTER
11D07	; UNASSIGNED	# <reserved>
11D08..11D09;	PVALID	# MASARAM GONDI LETTER AI..MASARAM GONDI LETTE
11D0A	; UNASSIGNED	# <reserved>
11D0B..11D36;	PVALID	# MASARAM GONDI LETTER AU..MASARAM GONDI VOWEL
11D37..11D39;	UNASSIGNED	# <reserved>..<reserved>
11D3A	; PVALID	# MASARAM GONDI VOWEL SIGN E
11D3B	; UNASSIGNED	# <reserved>
11D3C..11D3D;	PVALID	# MASARAM GONDI VOWEL SIGN AI..MASARAM GONDI V
11D3E	; UNASSIGNED	# <reserved>
11D3F..11D47;	PVALID	# MASARAM GONDI VOWEL SIGN AU..MASARAM GONDI R
11D48..11D4F;	UNASSIGNED	# <reserved>..<reserved>
11D50..11D59;	PVALID	# MASARAM GONDI DIGIT ZERO..MASARAM GONDI DIGI
11D5A..11D5F;	UNASSIGNED	# <reserved>..<reserved>
11D60..11D65;	PVALID	# GUNJALA GONDI LETTER A..GUNJALA GONDI LETTER
11D66	; UNASSIGNED	# <reserved>
11D67..11D68;	PVALID	# GUNJALA GONDI LETTER EE..GUNJALA GONDI LETTE
11D69	; UNASSIGNED	# <reserved>
11D6A..11D8E;	PVALID	# GUNJALA GONDI LETTER OO..GUNJALA GONDI VOWEL
11D8F	; UNASSIGNED	# <reserved>
11D90..11D91;	PVALID	# GUNJALA GONDI VOWEL SIGN EE..GUNJALA GONDI V
11D92	; UNASSIGNED	# <reserved>
11D93..11D98;	PVALID	# GUNJALA GONDI VOWEL SIGN OO..GUNJALA GONDI O
11D99..11D9F;	UNASSIGNED	# <reserved>..<reserved>
11DA0..11DA9;	PVALID	# GUNJALA GONDI DIGIT ZERO..GUNJALA GONDI DIGI
11DAA..11EDF;	UNASSIGNED	# <reserved>..<reserved>
11EE0..11EF6;	PVALID	# MAKASAR LETTER KA..MAKASAR VOWEL SIGN O
11EF7..11EF8;	DISALLOWED	# MAKASAR PASSIMBANG..MAKASAR END OF SECTION
11EF9 ..11FBF;	UNASSIGNED	# <reserved>..<reserved>
11FC0..11FF1;	DISALLOWED	# TAMIL FRACTION ONE THREE-HUNDRED-AND-TWENTIE
11FF2..11FFE;	UNASSIGNED	# <reserved>..<reserved>
11FFF	; DISALLOWED	# TAMIL PUNCTUATION END OF TEXT

12000..12399;	PVALID	# CUNEIFORM SIGN A..CUNEIFORM SIGN U U
1239A..123FF;	UNASSIGNED	# <reserved>..<reserved>
12400..1246E;	DISALLOWED	# CUNEIFORM NUMERIC SIGN TWO ASH..CUNEIFORM NU
1246F	; UNASSIGNED	# <reserved>
12470..12474;	DISALLOWED	# CUNEIFORM PUNCTUATION SIGN OLD ASSYRIAN WORD
12475..1247F;	UNASSIGNED	# <reserved>..<reserved>
12480..12543;	PVALID	# CUNEIFORM SIGN AB TIMES NUN TENU..CUNEIFORM
12544..12FFF;	UNASSIGNED	# <reserved>..<reserved>
13000..1342E;	PVALID	# EGYPTIAN HIEROGLYPH A001..EGYPTIAN HIEROGLYP
1342F	; UNASSIGNED	# <reserved>
13430..13438;	DISALLOWED	# EGYPTIAN HIEROGLYPH VERTICAL JOINER..EGYPTIA
13439..143FF;	UNASSIGNED	# <reserved>..<reserved>
14400..14646;	PVALID	# ANATOLIAN HIEROGLYPH A001..ANATOLIAN HIEROGL
14647..167FF;	UNASSIGNED	# <reserved>..<reserved>
16800..16A38;	PVALID	# BAMUM LETTER PHASE-A NGKUE MFON..BAMUM LETTE

Faltstrom

Expires September 12, 2019

[Page 76]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

16A39..16A3F;	UNASSIGNED	# <reserved>..<reserved>
16A40..16A5E;	PVALID	# MRO LETTER TA..MRO LETTER TEK
16A5F	; UNASSIGNED	# <reserved>
16A60..16A69;	PVALID	# MRO DIGIT ZERO..MRO DIGIT NINE
16A6A..16A6D;	UNASSIGNED	# <reserved>..<reserved>
16A6E..16A6F;	DISALLOWED	# MRO DANDA..MRO DOUBLE DANDA
16A70..16ACF;	UNASSIGNED	# <reserved>..<reserved>
16AD0..16AED;	PVALID	# BASSA VAH LETTER ENNI..BASSA VAH LETTER I
16AEE..16AEF;	UNASSIGNED	# <reserved>..<reserved>
16AF0..16AF4;	PVALID	# BASSA VAH COMBINING HIGH TONE..BASSA VAH COM
16AF5	; DISALLOWED	# BASSA VAH FULL STOP
16AF6..16AFF;	UNASSIGNED	# <reserved>..<reserved>
16B00..16B36;	PVALID	# PAHAHWMONG VOWEL KEEB..PAHAHWMONG MARK C
16B37..16B3F;	DISALLOWED	# PAHAHWMONG SIGN VOS THOM..PAHAHWMONG SIG
16B40..16B43;	PVALID	# PAHAHWMONG SIGN VOS SEEV..PAHAHWMONG SIG
16B44..16B45;	DISALLOWED	# PAHAHWMONG SIGN XAUS..PAHAHWMONG SIGN CI
16B46..16B4F;	UNASSIGNED	# <reserved>..<reserved>
16B50..16B59;	PVALID	# PAHAHWMONG DIGIT ZERO..PAHAHWMONG DIGIT
16B5A	; UNASSIGNED	# <reserved>
16B5B..16B61;	DISALLOWED	# PAHAHWMONG NUMBER TENS..PAHAHWMONG NUMBE
16B62	; UNASSIGNED	# <reserved>
16B63..16B77;	PVALID	# PAHAHWMONG SIGN VOS LUB..PAHAHWMONG SIGN
16B78..16B7C;	UNASSIGNED	# <reserved>..<reserved>
16B7D..16B8F;	PVALID	# PAHAHWMONG CLAN SIGN TSHEEJ..PAHAHWMONG
16B90..16E3F;	UNASSIGNED	# <reserved>..<reserved>
16E40..16E5F;	DISALLOWED	# MEDEFAIDRIN CAPITAL LETTER M..MEDEFAIDRIN CA

16E60..16E7F;	PVALID	# MEDEFAIDRIN SMALL LETTER M..MEDEFAIDRIN SMAL
16E80..16E9A;	DISALLOWED	# MEDEFAIDRIN DIGIT ZERO..MEDEFAIDRIN EXCLAMAT
16E9B..16EFF;	UNASSIGNED	# <reserved>..<reserved>
16F00..16F4A;	PVALID	# MIAO LETTER PA..MIAO LETTER RTE
16F4B..16F4E;	UNASSIGNED	# <reserved>..<reserved>
16F4F..16F87;	PVALID	# MIAO SIGN CONSONANT MODIFIER BAR..MIAO VOWEL
16F88..16F8E;	UNASSIGNED	# <reserved>..<reserved>
16F8F..16F9F;	PVALID	# MIAO TONE RIGHT..MIAO LETTER REFORMED TONE-8
16FA0..16FDF;	UNASSIGNED	# <reserved>..<reserved>
16FE0..16FE1;	PVALID	# TANGUT ITERATION MARK..NUSHU ITERATION MARK
16FE2	; DISALLOWED	# OLD CHINESE HOOK MARK
16FE3	; PVALID	# OLD CHINESE ITERATION MARK
16FE4..16FFF;	UNASSIGNED	# <reserved>..<reserved>
17000..187F7;	PVALID	# <Tangut Ideograph>..<Tangut Ideograph>
187F8..187FF;	UNASSIGNED	# <reserved>..<reserved>
18800..18AF2;	PVALID	# TANGUT COMPONENT-001..TANGUT COMPONENT-755
18AF3..1AFFF;	UNASSIGNED	# <reserved>..<reserved>
1B000..1B11E;	PVALID	# KATAKANA LETTER ARCHAIC E..HENTAIGANA LETTER
1B11F..1B14F;	UNASSIGNED	# <reserved>..<reserved>
1B150..1B152;	PVALID	# HIRAGANA LETTER SMALL WI..HIRAGANA LETTER SM
1B153..1B163;	UNASSIGNED	# <reserved>..<reserved>
1B164..1B167;	PVALID	# KATAKANA LETTER SMALL WI..KATAKANA LETTER SM

1B168..1B16F;	UNASSIGNED	# <reserved>..<reserved>
1B170..1B2FB;	PVALID	# NUSHU CHARACTER-1B170..NUSHU CHARACTER-1B2FB
1B2FC..1BBFF;	UNASSIGNED	# <reserved>..<reserved>
1BC00..1BC6A;	PVALID	# DUPLOYAN LETTER H..DUPLOYAN LETTER VOCALIC M
1BC6B..1BC6F;	UNASSIGNED	# <reserved>..<reserved>
1BC70..1BC7C;	PVALID	# DUPLOYAN AFFIX LEFT HORIZONTAL SECANT..DUPLO
1BC7D..1BC7F;	UNASSIGNED	# <reserved>..<reserved>
1BC80..1BC88;	PVALID	# DUPLOYAN AFFIX HIGH ACUTE..DUPLOYAN AFFIX HI
1BC89..1BC8F;	UNASSIGNED	# <reserved>..<reserved>
1BC90..1BC99;	PVALID	# DUPLOYAN AFFIX LOW ACUTE..DUPLOYAN AFFIX LOW
1BC9A..1BC9B;	UNASSIGNED	# <reserved>..<reserved>
1BC9C	; DISALLOWED	# DUPLOYAN SIGN O WITH CROSS
1BC9D..1BC9E;	PVALID	# DUPLOYAN THICK LETTER SELECTOR..DUPLOYAN DOU
1BC9F..1BCA3;	DISALLOWED	# DUPLOYAN PUNCTUATION CHINOOK FULL STOP..SHOR
1BCA4..1CFFF;	UNASSIGNED	# <reserved>..<reserved>
1D000..1D0F5;	DISALLOWED	# BYZANTINE MUSICAL SYMBOL PSILI..BYZANTINE MU
1D0F6..1D0FF;	UNASSIGNED	# <reserved>..<reserved>
1D100..1D126;	DISALLOWED	# MUSICAL SYMBOL SINGLE BARLINE..MUSICAL SYMBO
1D127..1D128;	UNASSIGNED	# <reserved>..<reserved>

1D129..1D1E8;	DISALLOWED	# MUSICAL SYMBOL MULTIPLE MEASURE REST..MUSICA
1D1E9..1D1FF;	UNASSIGNED	# <reserved>..<reserved>
1D200..1D245;	DISALLOWED	# GREEK VOCAL NOTATION SYMBOL-1..GREEK MUSICAL
1D246..1D2DF;	UNASSIGNED	# <reserved>..<reserved>
1D2E0..1D2F3;	DISALLOWED	# MAYAN NUMERAL ZERO..MAYAN NUMERAL NINETEEN
1D2F4..1D2FF;	UNASSIGNED	# <reserved>..<reserved>
1D300..1D356;	DISALLOWED	# MONOGRAM FOR EARTH..TETRAGRAM FOR FOSTERING
1D357..1D35F;	UNASSIGNED	# <reserved>..<reserved>
1D360..1D378;	DISALLOWED	# COUNTING ROD UNIT DIGIT ONE..TALLY MARK FIVE
1D379..1D3FF;	UNASSIGNED	# <reserved>..<reserved>
1D400..1D454;	DISALLOWED	# MATHEMATICAL BOLD CAPITAL A..MATHEMATICAL IT
1D455	; UNASSIGNED	# <reserved>
1D456..1D49C;	DISALLOWED	# MATHEMATICAL ITALIC SMALL I..MATHEMATICAL SC
1D49D	; UNASSIGNED	# <reserved>
1D49E..1D49F;	DISALLOWED	# MATHEMATICAL SCRIPT CAPITAL C..MATHEMATICAL
1D4A0..1D4A1;	UNASSIGNED	# <reserved>..<reserved>
1D4A2	; DISALLOWED	# MATHEMATICAL SCRIPT CAPITAL G
1D4A3..1D4A4;	UNASSIGNED	# <reserved>..<reserved>
1D4A5..1D4A6;	DISALLOWED	# MATHEMATICAL SCRIPT CAPITAL J..MATHEMATICAL
1D4A7..1D4A8;	UNASSIGNED	# <reserved>..<reserved>
1D4A9..1D4AC;	DISALLOWED	# MATHEMATICAL SCRIPT CAPITAL N..MATHEMATICAL
1D4AD	; UNASSIGNED	# <reserved>
1D4AE..1D4B9;	DISALLOWED	# MATHEMATICAL SCRIPT CAPITAL S..MATHEMATICAL
1D4BA	; UNASSIGNED	# <reserved>
1D4BB	; DISALLOWED	# MATHEMATICAL SCRIPT SMALL F
1D4BC	; UNASSIGNED	# <reserved>
1D4BD..1D4C3;	DISALLOWED	# MATHEMATICAL SCRIPT SMALL H..MATHEMATICAL SC
1D4C4	; UNASSIGNED	# <reserved>
1D4C5..1D505;	DISALLOWED	# MATHEMATICAL SCRIPT SMALL P..MATHEMATICAL FR

1D506	; UNASSIGNED	# <reserved>
1D507..1D50A;	DISALLOWED	# MATHEMATICAL FRAKTUR CAPITAL D..MATHEMATICAL
1D50B..1D50C;	UNASSIGNED	# <reserved>..<reserved>
1D50D..1D514;	DISALLOWED	# MATHEMATICAL FRAKTUR CAPITAL J..MATHEMATICAL
1D515	; UNASSIGNED	# <reserved>
1D516..1D51C;	DISALLOWED	# MATHEMATICAL FRAKTUR CAPITAL S..MATHEMATICAL
1D51D	; UNASSIGNED	# <reserved>
1D51E..1D539;	DISALLOWED	# MATHEMATICAL FRAKTUR SMALL A..MATHEMATICAL D
1D53A	; UNASSIGNED	# <reserved>
1D53B..1D53E;	DISALLOWED	# MATHEMATICAL DOUBLE-STRUCK CAPITAL D..MATHEM
1D53F	; UNASSIGNED	# <reserved>
1D540..1D544;	DISALLOWED	# MATHEMATICAL DOUBLE-STRUCK CAPITAL I..MATHEM

1D545	; UNASSIGNED	# <reserved>
1D546	; DISALLOWED	# MATHEMATICAL DOUBLE-STRUCK CAPITAL O
1D547..1D549	; UNASSIGNED	# <reserved>..<reserved>
1D54A..1D550	; DISALLOWED	# MATHEMATICAL DOUBLE-STRUCK CAPITAL S..MATHEM
1D551	; UNASSIGNED	# <reserved>
1D552..1D6A5	; DISALLOWED	# MATHEMATICAL DOUBLE-STRUCK SMALL A..MATHEMAT
1D6A6..1D6A7	; UNASSIGNED	# <reserved>..<reserved>
1D6A8..1D7CB	; DISALLOWED	# MATHEMATICAL BOLD CAPITAL ALPHA..MATHEMATICA
1D7CC..1D7CD	; UNASSIGNED	# <reserved>..<reserved>
1D7CE..1D9FF	; DISALLOWED	# MATHEMATICAL BOLD DIGIT ZERO..SIGNWRITING HE
1DA00..1DA36	; PVALID	# SIGNWRITING HEAD RIM..SIGNWRITING AIR SUCKIN
1DA37..1DA3A	; DISALLOWED	# SIGNWRITING AIR BLOW SMALL ROTATIONS..SIGNWR
1DA3B..1DA6C	; PVALID	# SIGNWRITING MOUTH CLOSED NEUTRAL..SIGNWRITIN
1DA6D..1DA74	; DISALLOWED	# SIGNWRITING SHOULDER HIP SPINE..SIGNWRITING
1DA75	; PVALID	# SIGNWRITING UPPER BODY TILTING FROM HIP JOIN
1DA76..1DA83	; DISALLOWED	# SIGNWRITING LIMB COMBINATION..SIGNWRITING LO
1DA84	; PVALID	# SIGNWRITING LOCATION HEAD NECK
1DA85..1DA8B	; DISALLOWED	# SIGNWRITING LOCATION TORSO..SIGNWRITING PARE
1DA8C..1DA9A	; UNASSIGNED	# <reserved>..<reserved>
1DA9B..1DA9F	; PVALID	# SIGNWRITING FILL MODIFIER-2..SIGNWRITING FIL
1DAA0	; UNASSIGNED	# <reserved>
1DAA1..1DAAF	; PVALID	# SIGNWRITING ROTATION MODIFIER-2..SIGNWRITING
1DAB0..1DFFF	; UNASSIGNED	# <reserved>..<reserved>
1E000..1E006	; PVALID	# COMBINING GLAGOLITIC LETTER AZU..COMBINING G
1E007	; UNASSIGNED	# <reserved>
1E008..1E018	; PVALID	# COMBINING GLAGOLITIC LETTER ZEMLJA..COMBININ
1E019..1E01A	; UNASSIGNED	# <reserved>..<reserved>
1E01B..1E021	; PVALID	# COMBINING GLAGOLITIC LETTER SHTA..COMBINING
1E022	; UNASSIGNED	# <reserved>
1E023..1E024	; PVALID	# COMBINING GLAGOLITIC LETTER YU..COMBINING GL
1E025	; UNASSIGNED	# <reserved>
1E026..1E02A	; PVALID	# COMBINING GLAGOLITIC LETTER YO..COMBINING GL
1E02B..1E0FF	; UNASSIGNED	# <reserved>..<reserved>
1E100..1E12C	; PVALID	# NYIAKENG PUACHUE HMONG LETTER MA..NYIAKENG P
1E12D..1E12F	; UNASSIGNED	# <reserved>..<reserved>
1E130..1E13D	; PVALID	# NYIAKENG PUACHUE HMONG TONE-B..NYIAKENG PUAC

1E13E..1E13F	; UNASSIGNED	# <reserved>..<reserved>
1E140..1E149	; PVALID	# NYIAKENG PUACHUE HMONG DIGIT ZERO..NYIAKENG
1E14A..1E14D	; UNASSIGNED	# <reserved>..<reserved>
1E14E	; PVALID	# NYIAKENG PUACHUE HMONG LOGOGRAM NYAJ
1E14F	; DISALLOWED	# NYIAKENG PUACHUE HMONG CIRCLED CA

1E150..1E2BF;	UNASSIGNED	# <reserved>..<reserved>
1E2C0..1E2F9;	PVALID	# WANCHO LETTER AA..WANCHO DIGIT NINE
1E2FA..1E2FE;	UNASSIGNED	# <reserved>..<reserved>
1E2FF	; DISALLOWED	# WANCHO NGUN SIGN
1E300..1E7FF;	UNASSIGNED	# <reserved>..<reserved>
1E800..1E8C4;	PVALID	# MENDE KIKAKUI SYLLABLE M001 KI..MENDE KIKAKUI
1E8C5..1E8C6;	UNASSIGNED	# <reserved>..<reserved>
1E8C7..1E8CF;	DISALLOWED	# MENDE KIKAKUI DIGIT ONE..MENDE KIKAKUI DIGIT
1E8D0..1E8D6;	PVALID	# MENDE KIKAKUI COMBINING NUMBER TEENS..MENDE
1E8D7..1E8FF;	UNASSIGNED	# <reserved>..<reserved>
1E900..1E921;	DISALLOWED	# ADLAM CAPITAL LETTER ALIF..ADLAM CAPITAL LET
1E922..1E94B;	PVALID	# ADLAM SMALL LETTER ALIF..ADLAM NASALIZATION
1E94C..1E94F;	UNASSIGNED	# <reserved>..<reserved>
1E950..1E959;	PVALID	# ADLAM DIGIT ZERO..ADLAM DIGIT NINE
1E95A..1E95D;	UNASSIGNED	# <reserved>..<reserved>
1E95E..1E95F;	DISALLOWED	# ADLAM INITIAL EXCLAMATION MARK..ADLAM INITIA
1E960..1EC70;	UNASSIGNED	# <reserved>..<reserved>
1EC71..1ECB4;	DISALLOWED	# INDIC SIYaq NUMBER ONE..INDIC SIYaq ALTERNAT
1ECB5..1ED00;	UNASSIGNED	# <reserved>..<reserved>
1ED01..1ED3D;	DISALLOWED	# OTTOMAN SIYaq NUMBER ONE..OTTOMAN SIYaq FRAC
1ED3E..1EDFF;	UNASSIGNED	# <reserved>..<reserved>
1EE00..1EE03;	DISALLOWED	# ARABIC MATHEMATICAL ALEF..ARABIC MATHEMATICA
1EE04	; UNASSIGNED	# <reserved>
1EE05..1EE1F;	DISALLOWED	# ARABIC MATHEMATICAL WAW..ARABIC MATHEMATICAL
1EE20	; UNASSIGNED	# <reserved>
1EE21..1EE22;	DISALLOWED	# ARABIC MATHEMATICAL INITIAL BEH..ARABIC MATH
1EE23	; UNASSIGNED	# <reserved>
1EE24	; DISALLOWED	# ARABIC MATHEMATICAL INITIAL HEH
1EE25..1EE26;	UNASSIGNED	# <reserved>..<reserved>
1EE27	; DISALLOWED	# ARABIC MATHEMATICAL INITIAL HAH
1EE28	; UNASSIGNED	# <reserved>
1EE29..1EE32;	DISALLOWED	# ARABIC MATHEMATICAL INITIAL YEH..ARABIC MATH
1EE33	; UNASSIGNED	# <reserved>
1EE34..1EE37;	DISALLOWED	# ARABIC MATHEMATICAL INITIAL SHEEN..ARABIC MA
1EE38	; UNASSIGNED	# <reserved>
1EE39	; DISALLOWED	# ARABIC MATHEMATICAL INITIAL DAD
1EE3A	; UNASSIGNED	# <reserved>
1EE3B	; DISALLOWED	# ARABIC MATHEMATICAL INITIAL GHAIN
1EE3C..1EE41;	UNASSIGNED	# <reserved>..<reserved>
1EE42	; DISALLOWED	# ARABIC MATHEMATICAL TAILED JEEM
1EE43..1EE46;	UNASSIGNED	# <reserved>..<reserved>
1EE47	; DISALLOWED	# ARABIC MATHEMATICAL TAILED HAH
1EE48	; UNASSIGNED	# <reserved>

1EE49	; DISALLOWED	# ARABIC MATHEMATICAL TAILED YEH
1EE4A	; UNASSIGNED	# <reserved>
1EE4B	; DISALLOWED	# ARABIC MATHEMATICAL TAILED LAM
1EE4C	; UNASSIGNED	# <reserved>
1EE4D..1EE4F	; DISALLOWED	# ARABIC MATHEMATICAL TAILED NOON..ARABIC MATH
1EE50	; UNASSIGNED	# <reserved>
1EE51..1EE52	; DISALLOWED	# ARABIC MATHEMATICAL TAILED SAD..ARABIC MATHE
1EE53	; UNASSIGNED	# <reserved>
1EE54	; DISALLOWED	# ARABIC MATHEMATICAL TAILED SHEEN
1EE55..1EE56	; UNASSIGNED	# <reserved>..<reserved>
1EE57	; DISALLOWED	# ARABIC MATHEMATICAL TAILED KHAH
1EE58	; UNASSIGNED	# <reserved>
1EE59	; DISALLOWED	# ARABIC MATHEMATICAL TAILED DAD
1EE5A	; UNASSIGNED	# <reserved>
1EE5B	; DISALLOWED	# ARABIC MATHEMATICAL TAILED GHAIN
1EE5C	; UNASSIGNED	# <reserved>
1EE5D	; DISALLOWED	# ARABIC MATHEMATICAL TAILED DOTLESS NOON
1EE5E	; UNASSIGNED	# <reserved>
1EE5F	; DISALLOWED	# ARABIC MATHEMATICAL TAILED DOTLESS QAF
1EE60	; UNASSIGNED	# <reserved>
1EE61..1EE62	; DISALLOWED	# ARABIC MATHEMATICAL STRETCHED BEH..ARABIC MA
1EE63	; UNASSIGNED	# <reserved>
1EE64	; DISALLOWED	# ARABIC MATHEMATICAL STRETCHED HEH
1EE65..1EE66	; UNASSIGNED	# <reserved>..<reserved>
1EE67..1EE6A	; DISALLOWED	# ARABIC MATHEMATICAL STRETCHED HAH..ARABIC MA
1EE6B	; UNASSIGNED	# <reserved>
1EE6C..1EE72	; DISALLOWED	# ARABIC MATHEMATICAL STRETCHED MEEM..ARABIC M
1EE73	; UNASSIGNED	# <reserved>
1EE74..1EE77	; DISALLOWED	# ARABIC MATHEMATICAL STRETCHED SHEEN..ARABIC
1EE78	; UNASSIGNED	# <reserved>
1EE79..1EE7C	; DISALLOWED	# ARABIC MATHEMATICAL STRETCHED DAD..ARABIC MA
1EE7D	; UNASSIGNED	# <reserved>
1EE7E	; DISALLOWED	# ARABIC MATHEMATICAL STRETCHED DOTLESS FEH
1EE7F	; UNASSIGNED	# <reserved>
1EE80..1EE89	; DISALLOWED	# ARABIC MATHEMATICAL LOOPED ALEF..ARABIC MATH
1EE8A	; UNASSIGNED	# <reserved>
1EE8B..1EE9B	; DISALLOWED	# ARABIC MATHEMATICAL LOOPED LAM..ARABIC MATHE
1EE9C..1EEA0	; UNASSIGNED	# <reserved>..<reserved>
1EEA1..1EEA3	; DISALLOWED	# ARABIC MATHEMATICAL DOUBLE-STRUCK BEH..ARABI
1EEA4	; UNASSIGNED	# <reserved>
1EEA5..1EEA9	; DISALLOWED	# ARABIC MATHEMATICAL DOUBLE-STRUCK WAW..ARABI
1EEAA	; UNASSIGNED	# <reserved>
1EEAB..1EEBB	; DISALLOWED	# ARABIC MATHEMATICAL DOUBLE-STRUCK LAM..ARABI
1EEBC..1EEEF	; UNASSIGNED	# <reserved>..<reserved>
1EEF0..1EEF1	; DISALLOWED	# ARABIC MATHEMATICAL OPERATOR MEEM WITH HAH W
1EEF2..1EFFF	; UNASSIGNED	# <reserved>..<reserved>
1F000..1F02B	; DISALLOWED	# MAHJONG TILE EAST WIND..MAHJONG TILE BACK
1F02C..1F02F	; UNASSIGNED	# <reserved>..<reserved>

Internet-Draft

IDNA2008 and Unicode 12

March 2019

```
1F030..1F093; DISALLOWED # DOMINO TILE HORIZONTAL BACK..DOMINO TILE VER
1F094..1F09F; UNASSIGNED # <reserved>..<reserved>
1F0A0..1F0AE; DISALLOWED # PLAYING CARD BACK..PLAYING CARD KING OF SPAD
1F0AF..1F0B0; UNASSIGNED # <reserved>..<reserved>
1F0B1..1F0BF; DISALLOWED # PLAYING CARD ACE OF HEARTS..PLAYING CARD RED
1F0C0      ; UNASSIGNED # <reserved>
1F0C1..1F0CF; DISALLOWED # PLAYING CARD ACE OF DIAMONDS..PLAYING CARD B
1F0D0      ; UNASSIGNED # <reserved>
1F0D1..1F0F5; DISALLOWED # PLAYING CARD ACE OF CLUBS..PLAYING CARD TRUM
1F0F6..1F0FF; UNASSIGNED # <reserved>..<reserved>
1F100..1F10C; DISALLOWED # DIGIT ZERO FULL STOP..DINGBAT NEGATIVE CIRCL
1F10D..1F10F; UNASSIGNED # <reserved>..<reserved>
1F110..1F16C; DISALLOWED # PARENTHESESIZED LATIN CAPITAL LETTER A..RAISED
1F16D..1F16F; UNASSIGNED # <reserved>..<reserved>
1F170..1F1AC; DISALLOWED # NEGATIVE SQUARED LATIN CAPITAL LETTER A..SQU
1F1AD..1F1E5; UNASSIGNED # <reserved>..<reserved>
1F1E6..1F202; DISALLOWED # REGIONAL INDICATOR SYMBOL LETTER A..SQUARED
1F203..1F20F; UNASSIGNED # <reserved>..<reserved>
1F210..1F23B; DISALLOWED # SQUARED CJK UNIFIED IDEOGRAPH-624B..SQUARED
1F23C..1F23F; UNASSIGNED # <reserved>..<reserved>
1F240..1F248; DISALLOWED # TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRA
1F249..1F24F; UNASSIGNED # <reserved>..<reserved>
1F250..1F251; DISALLOWED # CIRCLED IDEOGRAPH ADVANTAGE..CIRCLED IDEOGRA
1F252..1F25F; UNASSIGNED # <reserved>..<reserved>
1F260..1F265; DISALLOWED # ROUNDED SYMBOL FOR FU..ROUNDED SYMBOL FOR CA
1F266..1F2FF; UNASSIGNED # <reserved>..<reserved>
1F300..1F6D5; DISALLOWED # CYCLONE..HINDU TEMPLE
1F6D6..1F6DF; UNASSIGNED # <reserved>..<reserved>
1F6E0..1F6EC; DISALLOWED # HAMMER AND WRENCH..AIRPLANE ARRIVING
1F6ED..1F6EF; UNASSIGNED # <reserved>..<reserved>
1F6F0..1F6FA; DISALLOWED # SATELLITE..AUTO RICKSHAW
1F6FB..1F6FF; UNASSIGNED # <reserved>..<reserved>
1F700..1F773; DISALLOWED # ALCHEMICAL SYMBOL FOR QUINTESSENCE..ALCHEMIC
1F774..1F77F; UNASSIGNED # <reserved>..<reserved>
1F780..1F7D8; DISALLOWED # BLACK LEFT-POINTING ISOSCELES RIGHT TRIANGLE
1F7D9..1F7DF; UNASSIGNED # <reserved>..<reserved>
1F7E0..1F7EB; DISALLOWED # LARGE ORANGE CIRCLE..LARGE BROWN SQUARE
1F7EC..1F7FF; UNASSIGNED # <reserved>..<reserved>
1F800..1F80B; DISALLOWED # LEFTWARDS ARROW WITH SMALL TRIANGLE ARROWHEA
1F80C..1F80F; UNASSIGNED # <reserved>..<reserved>
1F810..1F847; DISALLOWED # LEFTWARDS ARROW WITH SMALL EQUILATERAL ARROW
1F848..1F84F; UNASSIGNED # <reserved>..<reserved>
```

1F850..1F859; DISALLOWED # LEFTWARDS SANS-SERIF ARROW..UP DOWN SANS-SER
 1F85A..1F85F; UNASSIGNED # <reserved>..<reserved>
 1F860..1F887; DISALLOWED # WIDE-HEADED LEFTWARDS LIGHT BARB ARROW..WIDE
 1F888..1F88F; UNASSIGNED # <reserved>..<reserved>
 1F890..1F8AD; DISALLOWED # LEFTWARDS TRIANGLE ARROWHEAD..WHITE ARROW SH
 1F8AE..1F8FF; UNASSIGNED # <reserved>..<reserved>

1F900..1F90B; DISALLOWED # CIRCLED CROSS FORMEE WITH FOUR DOTS..DOWNWAR
 1F90C ; UNASSIGNED # <reserved>
 1F90D..1F971; DISALLOWED # WHITE HEART..YAWNING FACE
 1F972 ; UNASSIGNED # <reserved>
 1F973..1F976; DISALLOWED # FACE WITH PARTY HORN AND PARTY HAT..FREEZING
 1F977..1F979; UNASSIGNED # <reserved>..<reserved>
 1F97A..1F9A2; DISALLOWED # FACE WITH PLEADING EYES..SWAN
 1F9A3..1F9A4; UNASSIGNED # <reserved>..<reserved>
 1F9A5..1F9AA; DISALLOWED # SLOTH..OYSTER
 1F9AB..1F9AD; UNASSIGNED # <reserved>..<reserved>
 1F9AE..1F9CA; DISALLOWED # GUIDE DOG..ICE CUBE
 1F9CB..1F9CC; UNASSIGNED # <reserved>..<reserved>
 1F9CD..1FA53; DISALLOWED # STANDING PERSON..BLACK CHESS KNIGHT-BISHOP
 1FA54..1FA5F; UNASSIGNED # <reserved>..<reserved>
 1FA60..1FA6D; DISALLOWED # XIANGQI RED GENERAL..XIANGQI BLACK SOLDIER
 1FA6E..1FA6F; UNASSIGNED # <reserved>..<reserved>
 1FA70..1FA73; DISALLOWED # BALLET SHOES..SHORTS
 1FA74..1FA77; UNASSIGNED # <reserved>..<reserved>
 1FA78..1FA7A; DISALLOWED # DROP OF BLOOD..STETHOSCOPE
 1FA7B..1FA7F; UNASSIGNED # <reserved>..<reserved>
 1FA80..1FA82; DISALLOWED # YO-YO..PARACHUTE
 1FA83..1FA8F; UNASSIGNED # <reserved>..<reserved>
 1FA90..1FA95; DISALLOWED # RINGED PLANET..BANJO
 1FA96..1FFFD; UNASSIGNED # <reserved>..<reserved>
 1FFFE..1FFFF; DISALLOWED # <noncharacter>..<noncharacter>
 20000..2A6D6; PVALID # <CJK Ideograph Extension B>..<CJK Ideograph
 2A6D7..2A6FF; UNASSIGNED # <reserved>..<reserved>
 2A700..2B734; PVALID # <CJK Ideograph Extension C>..<CJK Ideograph
 2B735..2B73F; UNASSIGNED # <reserved>..<reserved>
 2B740..2B81D; PVALID # <CJK Ideograph Extension D>..<CJK Ideograph
 2B81E..2B81F; UNASSIGNED # <reserved>..<reserved>
 2B820..2CEA1; PVALID # <CJK Ideograph Extension E>..<CJK Ideograph
 2CEA2..2CEAF; UNASSIGNED # <reserved>..<reserved>
 2CEB0..2EBE0; PVALID # <CJK Ideograph Extension F>..<CJK Ideograph
 2EBE1..2F7FF; UNASSIGNED # <reserved>..<reserved>

```

2F800..2FA1D; DISALLOWED # CJK COMPATIBILITY IDEOGRAPH-2F800..CJK COMPA
2FA1E..2FFFD; UNASSIGNED # <reserved>..<reserved>
2FFFE..2FFFF; DISALLOWED # <noncharacter>..<noncharacter>
30000..3FFFD; UNASSIGNED # <reserved>..<reserved>
3FFFE..3FFFF; DISALLOWED # <noncharacter>..<noncharacter>
40000..4FFFD; UNASSIGNED # <reserved>..<reserved>
4FFFE..4FFFF; DISALLOWED # <noncharacter>..<noncharacter>
50000..5FFFD; UNASSIGNED # <reserved>..<reserved>
5FFFE..5FFFF; DISALLOWED # <noncharacter>..<noncharacter>
60000..6FFFD; UNASSIGNED # <reserved>..<reserved>
6FFFE..6FFFF; DISALLOWED # <noncharacter>..<noncharacter>
70000..7FFFD; UNASSIGNED # <reserved>..<reserved>
7FFFE..7FFFF; DISALLOWED # <noncharacter>..<noncharacter>

```

Faltstrom

Expires September 12, 2019

[Page 83]

Internet-Draft

IDNA2008 and Unicode 12

March 2019

```

80000..8FFFD; UNASSIGNED # <reserved>..<reserved>
8FFFE..8FFFF; DISALLOWED # <noncharacter>..<noncharacter>
90000..9FFFD; UNASSIGNED # <reserved>..<reserved>
9FFFE..9FFFF; DISALLOWED # <noncharacter>..<noncharacter>
A0000..AFFFD; UNASSIGNED # <reserved>..<reserved>
AFFFE..AFFFF; DISALLOWED # <noncharacter>..<noncharacter>
B0000..BFFFD; UNASSIGNED # <reserved>..<reserved>
BFFFE..BFFFF; DISALLOWED # <noncharacter>..<noncharacter>
C0000..CFFFD; UNASSIGNED # <reserved>..<reserved>
CFFFE..CFFFF; DISALLOWED # <noncharacter>..<noncharacter>
D0000..DFFFD; UNASSIGNED # <reserved>..<reserved>
DFFFE..DFFFF; DISALLOWED # <noncharacter>..<noncharacter>
E0000      ; UNASSIGNED # <reserved>
E0001      ; DISALLOWED # LANGUAGE TAG
E0002..E001F; UNASSIGNED # <reserved>..<reserved>
E0020..E007F; DISALLOWED # TAG SPACE..CANCEL TAG
E0080..E00FF; UNASSIGNED # <reserved>..<reserved>
E0100..E01EF; DISALLOWED # VARIATION SELECTOR-17..VARIATION SELECTOR-25
E01F0..EFFFF; UNASSIGNED # <reserved>..<reserved>
EFFFE..10FFFF; DISALLOWED # <noncharacter>..<noncharacter>

```

Author's Address

Patrik Faltstrom
Netnod

Email: paf@netnod.se

