Internet Engineering Task Force (IETF)

Request for Comments: 5892

Category: Standards Track

ISSN: 2070-1721

P. Faltstrom, Ed. Cisco August 2010

The Unicode Code Points and Internationalized Domain Names for Applications (IDNA)

# Abstract

This document specifies rules for deciding whether a code point, considered in isolation or in context, is a candidate for inclusion in an Internationalized Domain Name (IDN).

It is part of the specification of Internationalizing Domain Names in Applications 2008 (IDNA2008).

Status of This Memo

This is an Internet Standards Track document.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has received public review and has been approved for publication by the Internet Engineering Steering Group (IESG). Further information on Internet Standards is available in Section 2 of RFC 5741.

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at <a href="http://www.rfc-editor.org/info/rfc5892">http://www.rfc-editor.org/info/rfc5892</a>.

# Copyright Notice

Copyright (c) 2010 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 (http://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 respectively.

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. Category Definitions Used to Calculate Derived Property	
Value	. 5
2.1. LetterDigits (A)	. 5
2.2. Unstable (B)	. 6
2.3. IgnorableProperties (C)	. 6
2.4. IgnorableBlocks (D)	
2.5. LDH (E)	. 7
2.6. Exceptions (F)	. 7
2.7. BackwardCompatible (G)	. 9
2.8. JoinControl (H)	
2.9. OldHangulJamo (I)	
2.10. Unassigned (J)	
3. Calculation of the Derived Property	
4. Code Points	
5. IANA Considerations	
5.1. IDNA-Derived Property Value Registry	. 11
5.2. IDNA Context Registry	
5.2.1. Template for Context Registry	
6. Security Considerations	
7. Acknowledgements	
Appendix A. Contextual Rules Registry	
Appendix A.1. ZERO WIDTH NON-JOINER	
Appendix A.2. ZERO WIDTH JOINER	
Appendix A.3. MIDDLE DOT	
Appendix A.4. GREEK LOWER NUMERAL SIGN (KERAIA)	. 17
Appendix A.5. HEBREW PUNCTUATION GERESH	
Appendix A.6. HEBREW PUNCTUATION GERSHAYIM	
Appendix A.7. KATAKANA MIDDLE DOT	
Appendix A.8. ARABIC-INDIC DIGITS	
Appendix A.9. EXTENDED ARABIC-INDIC DIGITS	. 19
Appendix B. Code Points 0x0000 - 0x10FFFF	
Appendix B.1. Code Points in Unicode Character Database (UCD)	
Format	. 20
8. References	
8.1. Normative References	
8 2 Informative References	

Faltstrom Standards Track [Page 2]

#### 1. Introduction

RFC 4690 [RFC4690] suggests an inclusion-based approach for selecting the code points from The Unicode Standard [Unicode52] that should be included in the list of code points that may be used in Internationalized Domain Names.

Specifically, RFC 4690 [RFC4690] says the following:

The IAB has concluded that there is a consensus within the broader community that lists of code points should be specified by the use of an inclusion-based mechanism (i.e., identifying the characters that are permitted), rather than by excluding a small number of characters from the total Unicode set as Stringprep [RFC3454] and Nameprep [RFC3491] do today. That conclusion should be reviewed by the IETF community and action taken as appropriate.

This document reviews and classifies the collections of code points in the Unicode character set by examining various properties of the code points. It then defines an algorithm for determining a derived property value. It specifies a procedure, and not a table, of code points so that the algorithm can be used to determine code point sets independent of the version of Unicode that is in use.

This document is not intended to specify precisely how these property values are to be applied in IDN labels. That information appears in the Protocol document [RFC5891], but it is important to understand that the assignment of a value of this property to a particular character is not sufficient to determine whether it can be used in a given label. In particular, some combinations of allowed code points are not advisable for use in IDNs due to rules specific to a script or class of characters. The requirement for such rules is linked to the operations in the Protocol document and especially to the characters designated as requiring contextual rules.

The value of the property is to be interpreted as follows.

o PROTOCOL VALID: Those that are allowed to be used in IDNs. Code points with this property value are permitted for general use in IDNs. However, that a label consists only of code points that have this property value does not imply that the label can be used in DNS. See the Protocol document for algorithms to make decisions about labels in domain names. The abbreviated term PVALID is used to refer to this value in the rest of this document.

Faltstrom Standards Track [Page 3]

- o CONTEXTUAL RULE REQUIRED: Some characteristics of the character, such as it being invisible in certain contexts or problematic in others, require that it not be used in labels unless specific other characters or properties are present. The abbreviated term CONTEXT is used to refer to this value in the rest of this document. There are two subdivisions of CONTEXTUAL RULE REQUIRED, one for Join\_controls (called CONTEXTJ) and for other characters (called CONTEXTO). These are discussed in more detail below and in the Protocol document.
- o DISALLOWED: Those that should clearly not be included in IDNs. Code points with this property value are not permitted in IDNs.
- o UNASSIGNED: Those code points that are not designated (i.e., are unassigned) in the Unicode Standard.

The mechanisms described here allow determination of the value of the property for future versions of Unicode (including characters added after Unicode 5.2). Changes in Unicode properties that do not affect the outcome of this process do not affect IDN. For example, a character can have its Unicode General\_Category value (see [Unicode52]) change from So to Sm or from Lo to Ll, without affecting the algorithm results. Moreover, even if such changes were the result, the BackwardCompatible list (Section 2.7) can be adjusted to ensure the stability of the results.

Some code points need to be allowed in exceptional circumstances but should be excluded in all other cases; these rules are also described in other documents. The most notable of these are the Join Control characters, U+200D ZERO WIDTH JOINER and U+200C ZERO WIDTH NON-JOINER. Both of them have the derived property value CONTEXTJ. A character with the derived property value CONTEXTJ or CONTEXTO (CONTEXTUAL RULE REQUIRED) is not to be used unless an appropriate rule has been established and the context of the character is consistent with that rule. It is invalid to either register a string containing these characters or even to look one up unless such a contextual rule is found and satisfied. Please see Appendix A, "The Contextual Rules Registry", for more information.

This document is part of a series that, together, constitute a proposal for updating the IDNA standards to resolve issues uncovered in recent years, cover a broader range of scripts, and provide for migration to newer versions of Unicode. See the Rationale document [RFC5894] for a broader discussion.

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 [RFC2119].

# 2. Category Definitions Used to Calculate Derived Property Value

The derived property obtains its value based on a two-step procedure. First, characters are placed in one or more character categories based on either core properties defined by the Unicode Standard or by treating the code point as an exception and addressing the code point by its code point value. These categories are not mutually exclusive.

In the second step, set operations are used with these categories to determine the values for an IDN-specific property. Those operations are specified in Section 3.

Unicode property names and property value names may have short abbreviations, such as gc for the General\_Category property, and Ll for the Lowercase\_Letter property value of the gc property.

In the following specification of categories, the operation that returns the value of a particular Unicode character property for a code point is designated by using the formal name of that property (from PropertyAliases.txt) followed by '(cp)'. For example, the value of the General\_Category property for a code point is indicated by General\_Category(cp).

# 2.1. LetterDigits (A)

A: General\_Category(cp) is in {L1, Lu, Lo, Nd, Lm, Mn, Mc}

These rules identify characters commonly used in mnemonics and often informally described as "language characters". In general, only code points assigned to this category are suitable for use in IDN.

For more information, see Section 4.5 of The Unicode Standard [Unicode].

The categories used in this rule are:

- o Ll Lowercase\_Letter
- o Lu Uppercase\_Letter
- o Lo Other\_Letter
- o Nd Decimal\_Number
- o Lm Modifier\_Letter

- o Mn Nonspacing\_Mark
- o Mc Spacing\_Mark

#### 2.2. Unstable (B)

```
B: toNFKC(toCaseFold(toNFKC(cp))) != cp
```

This category is used to group the characters that are not stable under Normalization Form K (NFKC) and case folding. In general, these code points are not suitable for use for IDN.

The toCaseFold() operation is defined in Section 3.13 of The Unicode Standard [Unicode].

The toNFKC() operation returns the code point in normalization form KC. For more information, see Section 5 of Unicode Standard Annex #15 [TR15].

It should be noted that NFKC is used, although Normalization Form C (NFC) is used in the "IDNA Protocol" document [RFC5891].

# 2.3. IgnorableProperties (C)

```
C: Default_Ignorable_Code_Point(cp) = True or
  White_Space(cp) = True or
  Noncharacter_Code_Point(cp) = True
```

This category is used to group code points that are not recommended for use in identifiers. In general, these code points are not suitable for use in an IDN.

The definition for Default\_Ignorable\_Code\_Point can be found in DerivedCoreProperties.txt [DerivedCoreProperties] and is at the time of Unicode 5.2:

```
Other_Default_Ignorable_Code_Point + Cf (Format characters) + Variation_Selector - White_Space - FFF9..FFFB (Annotation Characters) - 0600..0603, 06DD, 070F (exceptional Cf characters that should be visible)
```

# 2.4. IgnorableBlocks (D)

```
D: Block(cp) is in {Combining Diacritical Marks for Symbols, Musical Symbols, Ancient Greek Musical Notation}
```

This category is used to identify code points that are not useful in mnemonics or that are otherwise impractical for IDN use. In general, these code points are not suitable for use for IDN.

The definition of blocks can be found in Blocks.txt [BlockNames].

#### 2.5. LDH (E)

```
E: cp is in {002D, 0030..0039, 0061..007A}
```

This category is used in the second step to preserve the traditional "hostname" (LDH - as described in the Definitions document [RFC5890]) characters ('-', 0-9, and a-z). In general, these code points are suitable for use for IDN. Note that there are other rules regarding the code point U+002D HYPHEN-MINUS that are specified in the IDNA Protocol Specification [RFC5891].

#### 2.6. Exceptions (F)

```
F: cp is in {00B7, 00DF, 0375, 03C2, 05F3, 05F4, 0640, 0660, 0661, 0662, 0663, 0664, 0665, 0666, 0667, 0668, 0669, 06F0, 06F1, 06F2, 06F3, 06F4, 06F5, 06F6, 06F7, 06F8, 06F9, 06FD, 06FE, 07FA, 0F0B, 3007, 302E, 302F, 3031, 3032, 3033, 3034, 3035, 303B, 30FB}
```

This category explicitly lists code points for which the category cannot be assigned using only the core property values that exist in the Unicode standard. The values are according to the table below:

PVALID -- Would otherwise have been DISALLOWED

```
00DF; PVALID # LATIN SMALL LETTER SHARP S
03C2; PVALID # GREEK SMALL LETTER FINAL SIGMA
06FD; PVALID # ARABIC SIGN SINDHI AMPERSAND
06FE; PVALID # ARABIC SIGN SINDHI POSTPOSITION MEN
0F0B; PVALID # TIBETAN MARK INTERSYLLABIC TSHEG
3007; PVALID # IDEOGRAPHIC NUMBER ZERO
```

# CONTEXTO -- Would otherwise have been DISALLOWED 00B7; CONTEXTO # MIDDLE DOT 0375; CONTEXTO # GREEK LOWER NUMERAL SIGN (KERAIA) 05F3; CONTEXTO # HEBREW PUNCTUATION GERESH 05F4; CONTEXTO # HEBREW PUNCTUATION GERSHAYIM 30FB; CONTEXTO # KATAKANA MIDDLE DOT CONTEXTO -- Would otherwise have been PVALID 0660; CONTEXTO # ARABIC-INDIC DIGIT ZERO 0661; CONTEXTO # ARABIC-INDIC DIGIT ONE 0662; CONTEXTO # ARABIC-INDIC DIGIT TWO 0663; CONTEXTO # ARABIC-INDIC DIGIT THREE 0664; CONTEXTO # ARABIC-INDIC DIGIT FOUR 0665; CONTEXTO # ARABIC-INDIC DIGIT FIVE 0666; CONTEXTO # ARABIC-INDIC DIGIT SIX 0667; CONTEXTO # ARABIC-INDIC DIGIT SEVEN 0668; CONTEXTO # ARABIC-INDIC DIGIT EIGHT 0669; CONTEXTO # ARABIC-INDIC DIGIT NINE 06F0; CONTEXTO # EXTENDED ARABIC-INDIC DIGIT ZERO 06F1; CONTEXTO # EXTENDED ARABIC-INDIC DIGIT ONE 06F2; CONTEXTO # EXTENDED ARABIC-INDIC DIGIT TWO 06F3; CONTEXTO # EXTENDED ARABIC-INDIC DIGIT THREE 06F4; CONTEXTO # EXTENDED ARABIC-INDIC DIGIT FOUR 06F5; CONTEXTO # EXTENDED ARABIC-INDIC DIGIT FIVE 06F6; CONTEXTO # EXTENDED ARABIC-INDIC DIGIT SIX 06F7; CONTEXTO # EXTENDED ARABIC-INDIC DIGIT SEVEN 06F8; CONTEXTO # EXTENDED ARABIC-INDIC DIGIT EIGHT 06F9; CONTEXTO # EXTENDED ARABIC-INDIC DIGIT NINE DISALLOWED -- Would otherwise have been PVALID 0640; DISALLOWED # ARABIC TATWEEL 07FA; DISALLOWED # NKO LAJANYALAN 302E; DISALLOWED # HANGUL SINGLE DOT TONE MARK 302F; DISALLOWED # HANGUL DOUBLE DOT TONE MARK 3031; DISALLOWED # VERTICAL KANA REPEAT MARK 3032; DISALLOWED # VERTICAL KANA REPEAT WITH VOICED SOUND MARK 3033; DISALLOWED # VERTICAL KANA REPEAT MARK UPPER HALF

3034; DISALLOWED # VERTICAL KANA REPEAT WITH VOICED SOUND MARK UPPER HA

3035; DISALLOWED # VERTICAL KANA REPEAT MARK LOWER HALF 303B; DISALLOWED # VERTICAL IDEOGRAPHIC ITERATION MARK

# 2.7. BackwardCompatible (G)

```
G: cp is in {}
```

This category includes the code points that property values in versions of Unicode after 5.2 have changed in such a way that the derived property value would no longer be PVALID or DISALLOWED. If changes are made to future versions of Unicode so that code points might change the property value from PVALID or DISALLOWED, then this table can be updated and keep special exception values so that the property values for code points stay stable.

# 2.8. JoinControl (H)

```
H: Join_Control(cp) = True
```

This category consists of Join Control characters (i.e., they are not in LetterDigits (Section 2.1) but are still required in IDN labels under some circumstances).

#### 2.9. OldHangulJamo (I)

```
I: Hangul_Syllable_Type(cp) is in {L, V, T}
```

This category consists of all conjoining Hangul Jamo (Leading Jamo, Vowel Jamo, and Trailing Jamo).

Elimination of conjoining Hangul Jamo from the set of PVALID characters results in restricting the set of Korean PVALID characters just to preformed, modern Hangul syllable characters. Old Hangul syllables, which must be spelled with sequences of conjoining Hangul Jamo, are not PVALID for IDNs.

# 2.10. Unassigned (J)

J: General\_Category(cp) is in {Cn} and Noncharacter\_Code\_Point(cp) = False

This category consists of code points in the Unicode character set that are not (yet) assigned. It should be noted that Unicode distinguishes between "unassigned code points" and "unassigned characters". The unassigned code points are all but (Cn - Noncharacters), while the unassigned \*characters\* are all but (Cn + Cs).

# 3. Calculation of the Derived Property

As described above (Section 1) and in more detail in the IDNA Protocol document [RFC5891], possible values of the IDN property are:

- o PVALID
- o CONTEXTJ
- o CONTEXTO
- o DISALLOWED
- o UNASSIGNED

The algorithm to calculate the value of the derived property is as follows. If the name of a rule (such as Exception) is used, that implies the set of code points that the rule defines, while the same name as a function call (such as Exception(cp)) implies the value cp has in the Exceptions table.

```
If .cp. .in. Exceptions Then Exceptions(cp);
Else If .cp. .in. BackwardCompatible Then BackwardCompatible(cp);
Else If .cp. .in. Unassigned Then UNASSIGNED;
Else If .cp. .in. LDH Then PVALID;
Else If .cp. .in. JoinControl Then CONTEXTJ;
Else If .cp. .in. Unstable Then DISALLOWED;
Else If .cp. .in. IgnorableProperties Then DISALLOWED;
Else If .cp. .in. IgnorableBlocks Then DISALLOWED;
Else If .cp. .in. OldHangulJamo Then DISALLOWED;
Else If .cp. .in. LetterDigits Then PVALID;
Else DISALLOWED;
```

# 4. Code Points

The categories and rules defined in Sections 2 and 3 apply to all Unicode code points. The table in Appendix B shows, for illustrative purposes, the consequences of the categories and classification rules, and the resulting property values.

The list of code points that can be found in Appendix B is non-normative. Sections 2 and 3 are normative.

#### 5. IANA Considerations

# 5.1. IDNA-Derived Property Value Registry

IANA has created a registry with the derived properties for the versions of Unicode released after (and including) version 5.2. The derived property value is to be calculated in cooperation with a designated expert [RFC5226] according to the specifications in Sections 2 and 3 and not by copying the non-normative table found in Appendix B.

If non-backward-compatible changes or other problems arise during the creation or designated expert review of the table of derived property values, they should be flagged for the IESG. Changes to the rules (as specified in Sections 2 and 3), including BackwardCompatible (Section 2.7) (a set that is at release of this document is empty) require IETF Review, as described in RFC 5226 [RFC5226].

# 5.2. IDNA Context Registry

For characters that are defined in the IDNA derived property value registry (Section 5.1) as CONTEXTO or CONTEXTJ and that therefore require a contextual rule, IANA has created and now maintains a list of approved contextual rules. Additions or changes to these rules require IETF Review, as described in [RFC5226].

Appendix A contains further discussion and a table from which that registry can be initialized.

# 5.2.1. Template for Context Registry

The following information is to be given when a new rule is created.

Name: Unique name of the rule

Code point: Rule that should be applied when this code point exists in the label

Overview: Description in plain English on what the rule verifies

Lookup: Should the rule be applied at time of lookup?

Rule Set: The set of rules, with a reference to the defining document.

# 6. Security Considerations

Security Considerations for this version of IDNA, except for the special issues associated with right-to-left scripts and characters, are described in the Definitions document [RFC5890]. Specific issues for labels containing characters associated with scripts written right to left appear in the Bidi document [RFC5893].

# 7. Acknowledgements

This document would not have been possible to produce without input from many people. The main contributors are (in alphabetical order) Harald Alvestrand, Vint Cerf, Tina Dam, Mark Davis, Gihan Dias, Mouhammet Diop, Michael Everson, Asmus Freytag, Debbie Garside, Paul Hoffman, Kent Karlsson, Cary Karp, Jaeyoun Kim, John Klensin, Olaf Kolkman, Gervase Markham, Ram Mohan, Lisa Moore, Yngve Pettersen, Erik van der Poel, Hualin Qian, Rick Reed, Pete Resnick, Lakmal Silva, Michel Suignard, Andrew Sullivan, Wil Tan, Kenneth Whistler, Chris Wright, and Yoshiro Yoneya.

Faltstrom Standards Track [Page 12]

# Appendix A. Contextual Rules Registry

As discussed in Section 5.2 and in the IANA Considerations section of the Rationale document [RFC5894], a registry of rules that define the contexts in which particular PROTOCOL-VALID characters, characters associated with a requirement for Contextual Information, are permitted. These rules are expressed as tests on the label in which the characters appear (all, or any part of, the label may be tested).

The grammatical rules are expressed in pseudo-code. The conventions used for that pseudo-code are explained here.

Each rule is constructed as a Boolean expression that evaluates to either True or False. A simple "True;" or "False;" rule sets the default result value for the rule set. Subsequent conditional rules that evaluate to True or False may re-set the result value.

A special value "Undefined" is used to deal with any error conditions, such as an attempt to test a character before the start of a label or after the end of a label. If any term of a rule evaluates to Undefined, further evaluation of the rule immediately terminates, as the result value of the rule will itself be Undefined.

cp represents the code point to be tested.

FirstChar is a special term that denotes the first code point in a label.

LastChar is a special term that denotes the last code point in a label

- .eq. represents the equality relation.
  - A .eq. B evaluates to True if A equals B.
- .is. represents checking the position in a label.
  - A .is. B evaluates to True if A and B have same position in the same label.
- .ne. represents the non-equality relation.
  - A .ne. B evaluates to True if A is not equal to B.
- .in. represents the set inclusion relation.
  - A .in. B evaluates to True if A is a member of the set B.

Faltstrom Standards Track [Page 13]

A functional notation, Function\_Name(cp), is used to express either string positions within a label, Boolean character property tests of a code point, or a regular expression match. When such function names refer to Boolean character property tests, the function names use the exact Unicode character property name for the property in question, and "cp" is evaluated as the Unicode value of the code point to be tested, rather than as its position in the label. When such function names refer to string positions within a label, "cp" is evaluated as its position in the label.

RegExpMatch(X) takes as its parameter X a schematic regular expression consisting of a mix of Unicode character property values and literal Unicode code points.

Script(cp) returns the value of the Unicode Script property, as defined in Scripts.txt in the Unicode Character Database.

Canonical\_Combining\_Class(cp) returns the value of the Unicode Canonical\_Combining\_Class property, as defined in UnicodeData.txt in the Unicode Character Database.

Before(cp) returns the code point of the character immediately preceding cp in logical order in the string representing the label. Before(FirstChar) evaluates to Undefined.

After(cp) returns the code point of the character immediately following cp in logical order in the string representing the label. After(LastChar) evaluates to Undefined.

Note that "Before" and "After" do not refer to the visual display order of the character in a label, which may be reversed or otherwise modified by the bidirectional algorithm for labels including characters from scripts written right to left. Instead, "Before" and "After" refer to the network order of the character in the label.

The clauses "Then True" and "Then False" imply exit from the pseudo-code routine with the corresponding result.

Repeated evaluation for all characters in a label makes use of the special construct:

For All Characters:

Expression;

End For;

This construct requires repeated evaluation of "Expression" for each code point in the label, starting from FirstChar and proceeding to LastChar.

The different fields in the rules are to be interpreted as follows:

#### Code point:

The code point, or code points, to which this rule is to be applied. Normally, this implies that if any of the code points in a label is as defined, then the rules should be applied. If evaluated to True, the code point is OK as used; if evaluated to False, it is not OK.

#### Overview:

A description of the goal with the rule, in plain English.

#### Lookup:

True if application of this rule is recommended at lookup time; False otherwise.

#### Rule Set:

The rule set itself, as described above.

# Appendix A.1. ZERO WIDTH NON-JOINER

# Code point:

U+200C

#### Overview:

This may occur in a formally cursive script (such as Arabic) in a context where it breaks a cursive connection as required for orthographic rules, as in the Persian language, for example. It also may occur in Indic scripts in a consonant-conjunct context (immediately following a virama), to control required display of such conjuncts.

# Lookup:

True

#### Rule Set:

False;

```
If Canonical_Combining_Class(Before(cp)) .eq. Virama Then True;
```

```
If RegExpMatch((Joining_Type:{L,D})(Joining_Type:T)*\u200C
```

(Joining\_Type:T)\*(Joining\_Type:{R,D})) Then True;

Faltstrom Standards Track [Page 15]

```
Appendix A.2. ZERO WIDTH JOINER
   Code point:
     U+200D
   Overview:
     This may occur in Indic scripts in a consonant-conjunct context
      (immediately following a virama), to control required display of
      such conjuncts.
   Lookup:
     True
   Rule Set:
     False;
      If Canonical_Combining_Class(Before(cp)) .eq. Virama Then True;
Appendix A.3. MIDDLE DOT
   Code point:
     U+00B7
   Overview:
      Between 'l' (U+006C) characters only, used to permit the Catalan
      character ela geminada to be expressed.
   Lookup:
     False
   Rule Set:
     False;
      If Before(cp) .eq. U+006C And
         After(cp) .eq. U+006C Then True;
```

```
Appendix A.4. GREEK LOWER NUMERAL SIGN (KERAIA)
   Code point:
     U+0375
   Overview:
     The script of the following character MUST be Greek.
   Lookup:
     False
   Rule Set:
     False;
      If Script(After(cp)) .eq. Greek Then True;
Appendix A.5. HEBREW PUNCTUATION GERESH
   Code point:
     U+05F3
   Overview:
     The script of the preceding character MUST be Hebrew.
   Lookup:
     False
   Rule Set:
     False;
      If Script(Before(cp)) .eq. Hebrew Then True;
```

```
Appendix A.6. HEBREW PUNCTUATION GERSHAYIM
   Code point:
     U+05F4
   Overview:
      The script of the preceding character MUST be Hebrew.
   Lookup:
     False
   Rule Set:
     False;
      If Script(Before(cp)) .eq. Hebrew Then True;
Appendix A.7. KATAKANA MIDDLE DOT
   Code point:
     U+30FB
   Overview:
     Note that the Script of Katakana Middle Dot is not any of
      "Hiragana", "Katakana", or "Han". The effect of this rule is to
     require at least one character in the label to be in one of those
     scripts.
   Lookup:
     False
   Rule Set:
     False;
      For All Characters:
         If Script(cp) .in. {Hiragana, Katakana, Han} Then True;
      End For;
```

```
Appendix A.8. ARABIC-INDIC DIGITS
   Code point:
     0660..0669
   Overview:
     Can not be mixed with Extended Arabic-Indic Digits.
   Lookup:
     False
   Rule Set:
     True;
     For All Characters:
         If cp .in. 06F0..06F9 Then False;
     End For;
Appendix A.9. EXTENDED ARABIC-INDIC DIGITS
   Code point:
     06F0..06F9
   Overview:
     Can not be mixed with Arabic-Indic Digits.
   Lookup:
     False
   Rule Set:
     True;
     For All Characters:
         If cp .in. 0660..0669 Then False;
      End For;
```

#### Appendix B. Code Points 0x0000 - 0x10FFFF

If one applies the rules (Section 3) to the code points 0x0000 to 0x10FFFF to Unicode 5.2, the result is as follows.

This list is non-normative, and only included for illustrative purposes. Specifically, what is displayed in the third column is not the formal name of the code point (as defined in Section 4.8 of The Unicode Standard [Unicode52]). The differences exist, for example, for the code points that have the code point value as part of the name (for example, CJK UNIFIED IDEOGRAPH-4E00) and the naming of Hangul syllables. For many code points, what you see is the official name.

Appendix B.1. Code Points in Unicode Character Database (UCD) Format

```
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
          ; DISALLOWED # LATIN CAPITAL LETTER A WITH BREVE
0102
          ; PVALID
                       # LATIN SMALL LETTER A WITH BREVE
0103
          ; DISALLOWED # LATIN CAPITAL LETTER A WITH OGONEK
0104
          ; PVALID
0105
                       # LATIN SMALL LETTER A WITH OGONEK
0106
          ; DISALLOWED # LATIN CAPITAL LETTER C WITH ACUTE
0107
         ; PVALID # LATIN SMALL LETTER C WITH ACUTE
          ; DISALLOWED # LATIN CAPITAL LETTER C WITH CIRCUMFLEX
0108
0109
          ; PVALID # LATIN SMALL LETTER C WITH CIRCUMFLEX
          ; DISALLOWED # LATIN CAPITAL LETTER C WITH DOT ABOVE
010A
          ; PVALID # LATIN SMALL LETTER C WITH DOT ABOVE
010B
          ; DISALLOWED # LATIN CAPITAL LETTER C WITH CARON
010C
010D
          ; PVALID # LATIN SMALL LETTER C WITH CARON
010E
          ; DISALLOWED # LATIN CAPITAL LETTER D WITH CARON
010F
         ; PVALID # LATIN SMALL LETTER D WITH CARON
         ; DISALLOWED # LATIN CAPITAL LETTER D WITH STROKE
0110
0111
         ; PVALID # LATIN SMALL LETTER D WITH STROKE
          ; DISALLOWED # LATIN CAPITAL LETTER E WITH MACRON
0112
0113
          ; PVALID
                      # LATIN SMALL LETTER E WITH MACRON
```

Faltstrom Standards Track [Page 20]

```
0114
          ; DISALLOWED # LATIN CAPITAL LETTER E WITH BREVE
          ; PVALID # LATIN SMALL LETTER E WITH BREVE
0115
0116
          ; DISALLOWED # LATIN CAPITAL LETTER E WITH DOT ABOVE
          ; PVALID # LATIN SMALL LETTER E WITH DOT ABOVE
0117
          ; DISALLOWED # LATIN CAPITAL LETTER E WITH OGONEK
0118
0119
          ; PVALID # LATIN SMALL LETTER E WITH OGONEK
          ; DISALLOWED # LATIN CAPITAL LETTER E WITH CARON
; PVALID # LATIN SMALL LETTER E WITH CARON
011A
011B
          ; DISALLOWED # LATIN CAPITAL LETTER G WITH CIRCUMFLEX
011C
          ; PVALID # LATIN SMALL LETTER G WITH CIRCUMFLEX
011D
          ; DISALLOWED # LATIN CAPITAL LETTER G WITH BREVE
011E
011F
          ; PVALID # LATIN SMALL LETTER G WITH BREVE
0120
          ; DISALLOWED # LATIN CAPITAL LETTER G WITH DOT ABOVE
          ; PVALID
                        # LATIN SMALL LETTER G WITH DOT ABOVE
0121
          ; DISALLOWED # LATIN CAPITAL LETTER G WITH CEDILLA
0122
          ; PVALID
0123
                        # LATIN SMALL LETTER G WITH CEDILLA
0124
          ; DISALLOWED # LATIN CAPITAL LETTER H WITH CIRCUMFLEX
          ; PVALID # LATIN SMALL LETTER H WITH CIRCUMFLEX
0125
0126
          ; DISALLOWED # LATIN CAPITAL LETTER H WITH STROKE
0127
          ; PVALID # LATIN SMALL LETTER H WITH STROKE
          ; DISALLOWED # LATIN CAPITAL LETTER I WITH TILDE
0129
          ; PVALID # LATIN SMALL LETTER I WITH TILDE
          ; DISALLOWED # LATIN CAPITAL LETTER I WITH MACRON
012A
          ; PVALID # LATIN SMALL LETTER I WITH MACRON
012B
          ; DISALLOWED # LATIN CAPITAL LETTER I WITH BREVE
012C
012D
          ; PVALID # LATIN SMALL LETTER I WITH BREVE
          ; DISALLOWED # LATIN CAPITAL LETTER I WITH OGONEK
012E
          ; PVALID # LATIN SMALL LETTER I WITH OGONEK
012F
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
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
          ; PVALID # LATIN SMALL LETTER L WITH CEDILLA
          ; DISALLOWED # LATIN CAPITAL LETTER L WITH CARON
013D
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
          ; DISALLOWED # LATIN CAPITAL LETTER N WITH ACUTE
0143
          ; PVALID # LATIN SMALL LETTER N WITH ACUTE
0144
0145
          ; DISALLOWED # LATIN CAPITAL LETTER N WITH CEDILLA
          ; PVALID # LATIN SMALL LETTER N WITH CEDILLA
          ; DISALLOWED # LATIN CAPITAL LETTER N WITH CARON
0147
0148
          ; PVALID # LATIN SMALL LETTER N WITH CARON
```

```
0149..014A ; DISALLOWED # LATIN SMALL LETTER N PRECEDED BY APOSTROPHE.
014B ; PVALID # LATIN SMALL LETTER ENG
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH MACRON
          ; PVALID # LATIN SMALL LETTER O WITH MACRON
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH BREVE
014E
014F
          ; PVALID # LATIN SMALL LETTER O WITH BREVE
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH DOUBLE ACUTE
; PVALID # LATIN SMALL LETTER O WITH DOUBLE ACUTE
0150
0151
          ; DISALLOWED # LATIN CAPITAL LIGATURE OE
0152
          ; PVALID # LATIN SMALL LIGATURE OE
0153
          ; DISALLOWED # LATIN CAPITAL LETTER R WITH ACUTE
0154
0155
          ; PVALID # LATIN SMALL LETTER R WITH ACUTE
0156
          ; DISALLOWED # LATIN CAPITAL LETTER R WITH CEDILLA
          ; PVALID
                        # LATIN SMALL LETTER R WITH CEDILLA
0157
          ; DISALLOWED # LATIN CAPITAL LETTER R WITH CARON
0158
          ; PVALID
0159
                        # LATIN SMALL LETTER R WITH CARON
015A
          ; DISALLOWED # LATIN CAPITAL LETTER S WITH ACUTE
          ; PVALID # LATIN SMALL LETTER S WITH ACUTE
015B
015C
          ; DISALLOWED # LATIN CAPITAL LETTER S WITH CIRCUMFLEX
015D
          ; PVALID # LATIN SMALL LETTER S WITH CIRCUMFLEX
          ; DISALLOWED # LATIN CAPITAL LETTER S WITH CEDILLA
015F
          ; PVALID # LATIN SMALL LETTER S WITH CEDILLA
          ; DISALLOWED # LATIN CAPITAL LETTER S WITH CARON
0160
          ; PVALID # LATIN SMALL LETTER S WITH CARON
0161
          ; DISALLOWED # LATIN CAPITAL LETTER T WITH CEDILLA
0162
0163
          ; PVALID # LATIN SMALL LETTER T WITH CEDILLA
          ; DISALLOWED # LATIN CAPITAL LETTER T WITH CARON
0164
          ; PVALID # LATIN SMALL LETTER T WITH CARON
0165
0166
          ; DISALLOWED # LATIN CAPITAL LETTER T WITH STROKE
0167
          ; PVALID # LATIN SMALL LETTER T WITH STROKE
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH TILDE
0168
          ; PVALID
                        # LATIN SMALL LETTER U WITH TILDE
0169
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH MACRON
016A
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
          ; PVALID # LATIN SMALL LETTER U WITH RING ABOVE
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH DOUBLE ACUTE
0170
          ; PVALID # LATIN SMALL LETTER U WITH DOUBLE ACUTE
0171
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH OGONEK
0172
          ; PVALID # LATIN SMALL LETTER U WITH OGONEK
0173
          ; DISALLOWED # LATIN CAPITAL LETTER W WITH CIRCUMFLEX
0174
0175
          ; PVALID # LATIN SMALL LETTER W WITH CIRCUMFLEX
      ; DISALLOWED # LATIN CAPITAL LETTER Y WITH CIRCUMFLEX ; PVALID # LATIN SMALL LETTER Y WITH CIRCUMFLEX
0176
0178..0179 ; DISALLOWED # LATIN CAPITAL LETTER Y WITH DIAERESIS..LATIN
          ; PVALID # LATIN SMALL LETTER Z WITH ACUTE
017A
```

```
017B
         ; DISALLOWED # LATIN CAPITAL LETTER Z WITH DOT ABOVE
         ; PVALID # LATIN SMALL LETTER Z WITH DOT ABOVE
017C
         ; DISALLOWED # LATIN CAPITAL LETTER Z WITH CARON
         ; PVALID # LATIN SMALL LETTER Z WITH CARON
017E
          ; DISALLOWED # LATIN SMALL LETTER LONG S
017F
      ; PVALID # LATIN SMALL LETTER B WITH STROKE
0180
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
          ; PVALID
0192
                       # 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
         ; DISALLOWED # LATIN CAPITAL LETTER OI
01A2
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
         ; DISALLOWED # LATIN CAPITAL LETTER ESH
01A9
01AA..01AB ; PVALID
                       # LATIN LETTER REVERSED ESH LOOP..LATIN SMALL
01AC ; DISALLOWED # LATIN CAPITAL LETTER T WITH HOOK
          ; PVALID # LATIN SMALL LETTER T WITH HOOK
01AE..01AF ; DISALLOWED # LATIN CAPITAL LETTER T WITH RETROFLEX HOOK..
01BO ; PVALID # LATIN SMALL LETTER U WITH HORN
01B1..01B3 ; DISALLOWED # LATIN CAPITAL LETTER UPSILON..LATIN CAPITAL
01B4 ; PVALID # LATIN SMALL LETTER Y WITH HOOK
          ; DISALLOWED # LATIN CAPITAL LETTER Z WITH STROKE
01B5
      ; PVALID # LATIN SMALL LETTER Z WITH STROKE
01B6
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
          ; DISALLOWED # LATIN CAPITAL LETTER I WITH CARON
01CF
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
01DC01DD	;	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
01EF01F0	;	PVALID	#	LATIN	SMALL LETTER EZH WITH CARONLATIN SMA
01F101F4	;	DISALLOWED	#	LATIN	CAPITAL LETTER DZLATIN CAPITAL LETTE
01F5	;	PVALID	#	LATIN	SMALL LETTER G WITH ACUTE
01F601F8	;	DISALLOWED	#	LATIN	CAPITAL LETTER HWAIRLATIN 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					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
         ; PVALID # LATIN SMALL LETTER I WITH DOUBLE GRAVE
0209
         ; DISALLOWED # LATIN CAPITAL LETTER I WITH INVERTED BREVE
         ; PVALID # LATIN SMALL LETTER I WITH INVERTED BREVE
         ; DISALLOWED # LATIN CAPITAL LETTER O WITH DOUBLE GRAVE
020C
          ; PVALID # LATIN SMALL LETTER O WITH DOUBLE GRAVE
020D
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH INVERTED BREVE
020E
          ; PVALID # LATIN SMALL LETTER O WITH INVERTED BREVE
020F
         ; DISALLOWED # LATIN CAPITAL LETTER R WITH DOUBLE GRAVE
0210
         ; PVALID # LATIN SMALL LETTER R WITH DOUBLE GRAVE
0211
         ; DISALLOWED # LATIN CAPITAL LETTER R WITH INVERTED BREVE
0212
         ; PVALID # LATIN SMALL LETTER R WITH INVERTED BREVE
0214
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH DOUBLE GRAVE
          ; PVALID
                       # LATIN SMALL LETTER U WITH DOUBLE GRAVE
0215
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH INVERTED BREVE
0216
          ; PVALID
0217
                       # LATIN SMALL LETTER U WITH INVERTED BREVE
0218
          ; DISALLOWED # LATIN CAPITAL LETTER S WITH COMMA BELOW
         ; PVALID # LATIN SMALL LETTER S WITH COMMA BELOW
0219
021A
         ; DISALLOWED # LATIN CAPITAL LETTER T WITH COMMA BELOW
021B
         ; PVALID # LATIN SMALL LETTER T WITH COMMA BELOW
         ; DISALLOWED # LATIN CAPITAL LETTER YOGH
021D
         ; PVALID # LATIN SMALL LETTER YOGH
         ; DISALLOWED # LATIN CAPITAL LETTER H WITH CARON
021E
         ; PVALID
021F
                       # LATIN SMALL LETTER H WITH CARON
         ; DISALLOWED # LATIN CAPITAL LETTER N WITH LONG RIGHT LEG
0220
0221
         ; PVALID # LATIN SMALL LETTER D WITH CURL
         ; DISALLOWED # LATIN CAPITAL LETTER OU
0222
         ; PVALID # LATIN SMALL LETTER OU
0223
0224
         ; DISALLOWED # LATIN CAPITAL LETTER Z WITH HOOK
0225
         ; PVALID # LATIN SMALL LETTER Z WITH HOOK
         ; DISALLOWED # LATIN CAPITAL LETTER A WITH DOT ABOVE
0226
          ; PVALID
                       # LATIN SMALL LETTER A WITH DOT ABOVE
0227
          ; DISALLOWED # LATIN CAPITAL LETTER E WITH CEDILLA
0228
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
         ; PVALID # LATIN SMALL LETTER O WITH TILDE AND MACRON
         ; DISALLOWED # LATIN CAPITAL LETTER O WITH DOT ABOVE
022E
         ; PVALID # LATIN SMALL LETTER O WITH DOT ABOVE
022F
         ; DISALLOWED # LATIN CAPITAL LETTER O WITH DOT ABOVE AND MA
0230
          ; PVALID
                       # LATIN SMALL LETTER O WITH DOT ABOVE AND MACR
0231
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
         ; PVALID # LATIN SMALL LETTER GLOTTAL STOP
0242
0243..0246 ; DISALLOWED # LATIN CAPITAL LETTER B WITH STROKE..LATIN CA
         ; PVALID # LATIN SMALL LETTER E WITH STROKE
0247
         ; DISALLOWED # LATIN CAPITAL LETTER J WITH STROKE
0248
         ; PVALID # LATIN SMALL LETTER J WITH STROKE
0249
         ; DISALLOWED # LATIN CAPITAL LETTER SMALL Q WITH HOOK TAIL
024A
          ; PVALID # LATIN SMALL LETTER Q WITH HOOK TAIL
024B
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..02Cl ; 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
      ; 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
           ; PVALID # COMBINING GREEK PERISPOMENI
0342
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
         ; PVALID # GREEK SMALL LETTER HETA
0371
         ; DISALLOWED # GREEK CAPITAL LETTER ARCHAIC SAMPI
0372
          ; PVALID
                       # GREEK SMALL LETTER ARCHAIC SAMPI
0373
          ; DISALLOWED # GREEK NUMERAL SIGN
0374
          ; CONTEXTO # GREEK LOWER NUMERAL SIGN
0375
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 ; DISALLOWED # GREEK QUESTION MARK
037F...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
          ; DISALLOWED # GREEK LETTER ARCHAIC KOPPA
03D8
          ; PVALID # GREEK SMALL LETTER ARCHAIC KOPPA
; DISALLOWED # GREEK LETTER STIGMA
03D9
03DA
          ; PVALID # GREEK SMALL LETTER STIGMA
03DB
03DC
          ; DISALLOWED # GREEK LETTER DIGAMMA
          ; PVALID # GREEK SMALL LETTER DIGAMMA
03DD
          ; DISALLOWED # GREEK LETTER KOPPA
03DF
          ; PVALID # GREEK SMALL LETTER KOPPA
          ; DISALLOWED # GREEK LETTER SAMPI
03E0
          ; PVALID
                        # GREEK SMALL LETTER SAMPI
03E1
          ; DISALLOWED # COPTIC CAPITAL LETTER SHEI
03E2
          ; PVALID # COPTIC SMALL LETTER SHEI
03E3
          ; DISALLOWED # COPTIC CAPITAL LETTER FEI
03E4
03E5
          ; PVALID # COPTIC SMALL LETTER FEI
03E6
          ; DISALLOWED # COPTIC CAPITAL LETTER KHEI
          ; PVALID # COPTIC SMALL LETTER KHEI
          ; DISALLOWED # COPTIC CAPITAL LETTER HORI
03E8
          ; PVALID # COPTIC SMALL LETTER HORI
03E9
          ; DISALLOWED # COPTIC CAPITAL LETTER GANGIA
03EA
          ; PVALID # COPTIC SMALL LETTER GANGIA
03EB
          ; DISALLOWED # COPTIC CAPITAL LETTER SHIMA
03EC
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
           ; PVALID
                        # GREEK SMALL LETTER SHO
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
          ; DISALLOWED # CYRILLIC CAPITAL LETTER OMEGA
          ; PVALID # CYRILLIC SMALL LETTER OMEGA
0461
          ; DISALLOWED # CYRILLIC CAPITAL LETTER YAT
0462
          ; PVALID # CYRILLIC SMALL LETTER YAT
0463
          ; DISALLOWED # CYRILLIC CAPITAL LETTER IOTIFIED E
          ; PVALID # CYRILLIC SMALL LETTER IOTIFIED E
0465
          ; DISALLOWED # CYRILLIC CAPITAL LETTER LITTLE YUS
0466
          ; PVALID # CYRILLIC SMALL LETTER LITTLE YUS
0467
          ; DISALLOWED # CYRILLIC CAPITAL LETTER IOTIFIED LITTLE YUS
0468
          ; PVALID # CYRILLIC SMALL LETTER IOTIFIED LITTLE YUS
0469
046A
          ; DISALLOWED # CYRILLIC CAPITAL LETTER BIG YUS
```

```
046B
         ; PVALID
                      # CYRILLIC SMALL LETTER BIG YUS
046C
         ; DISALLOWED # CYRILLIC CAPITAL LETTER IOTIFIED BIG YUS
         ; PVALID # CYRILLIC SMALL LETTER IOTIFIED BIG YUS
         ; DISALLOWED # CYRILLIC CAPITAL LETTER KSI
046F
         ; PVALID # CYRILLIC SMALL LETTER KSI
         ; DISALLOWED # CYRILLIC CAPITAL LETTER PSI
0470
         ; PVALID # CYRILLIC SMALL LETTER PSI
; DISALLOWED # CYRILLIC CAPITAL LETTER FITA
0471
0472
0473
         ; PVALID # CYRILLIC SMALL LETTER FITA
         ; DISALLOWED # CYRILLIC CAPITAL LETTER IZHITSA
0474
         ; PVALID # CYRILLIC SMALL LETTER IZHITSA
0475
0476
         ; DISALLOWED # CYRILLIC CAPITAL LETTER IZHITSA WITH DOUBLE
0477
         ; PVALID # CYRILLIC SMALL LETTER IZHITSA WITH DOUBLE GR
          ; DISALLOWED # CYRILLIC CAPITAL LETTER UK
0478
                       # CYRILLIC SMALL LETTER UK
          ; PVALID
0479
          ; DISALLOWED # CYRILLIC CAPITAL LETTER ROUND OMEGA
047A
          ; PVALID # CYRILLIC SMALL LETTER ROUND OMEGA
047B
         ; DISALLOWED # CYRILLIC CAPITAL LETTER OMEGA WITH TITLO
047C
047D
         ; PVALID # CYRILLIC SMALL LETTER OMEGA WITH TITLO
047E
         ; DISALLOWED # CYRILLIC CAPITAL LETTER OT
         ; PVALID # CYRILLIC SMALL LETTER OT
0480
         ; DISALLOWED # CYRILLIC CAPITAL LETTER KOPPA
          ; PVALID # CYRILLIC SMALL LETTER KOPPA
0481
    ; DISALLOWED # CYRILLIC THOUSANDS SIGN
0482
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
         ; DISALLOWED # CYRILLIC CAPITAL LETTER SEMISOFT SIGN
048C
048D
         ; PVALID # CYRILLIC SMALL LETTER SEMISOFT SIGN
         ; DISALLOWED # CYRILLIC CAPITAL LETTER ER WITH TICK
         ; PVALID # CYRILLIC SMALL LETTER ER WITH TICK
048F
         ; DISALLOWED # CYRILLIC CAPITAL LETTER GHE WITH UPTURN
0490
         ; PVALID
0491
                       # CYRILLIC SMALL LETTER GHE WITH UPTURN
         ; DISALLOWED # CYRILLIC CAPITAL LETTER GHE WITH STROKE
0492
0493
         ; PVALID # CYRILLIC SMALL LETTER GHE WITH STROKE
0494
         ; DISALLOWED # CYRILLIC CAPITAL LETTER GHE WITH MIDDLE HOOK
         ; PVALID # CYRILLIC SMALL LETTER GHE WITH MIDDLE HOOK
0495
         ; DISALLOWED # CYRILLIC CAPITAL LETTER ZHE WITH DESCENDER
0497
         ; PVALID # CYRILLIC SMALL LETTER ZHE WITH DESCENDER
         ; DISALLOWED # CYRILLIC CAPITAL LETTER ZE WITH DESCENDER
0498
         ; PVALID # CYRILLIC SMALL LETTER ZE WITH DESCENDER
0499
         ; DISALLOWED # CYRILLIC CAPITAL LETTER KA WITH DESCENDER
049A
         ; PVALID # CYRILLIC SMALL LETTER KA WITH DESCENDER
049B
         ; DISALLOWED # CYRILLIC CAPITAL LETTER KA WITH VERTICAL STR
049C
         ; PVALID # CYRILLIC SMALL LETTER KA WITH VERTICAL STROK
049D
         ; DISALLOWED # CYRILLIC CAPITAL LETTER KA WITH STROKE
049E
         ; PVALID # CYRILLIC SMALL LETTER KA WITH STROKE
049F
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	#	_	CAPITAL LIGATURE TE TSE
04B5	; PVALID	#		SMALL LIGATURE TE TSE
04B6	; DISALLOWED	#		CAPITAL LETTER CHE WITH DESCENDER
04B7	; PVALID	#	_	SMALL LETTER CHE WITH DESCENDER
04B8	; DISALLOWED	#		CAPITAL LETTER CHE WITH VERTICAL ST
04B9	; PVALID	#	_	SMALL LETTER CHE WITH VERTICAL STRO
04BA	; DISALLOWED	#		CAPITAL LETTER SHHA
04BB	; PVALID	#	_	SMALL LETTER SHHA
04BC	; DISALLOWED	#	_	CAPITAL LETTER ABKHASIAN CHE
04BD	; PVALID	#	_	SMALL LETTER ABKHASIAN CHE
04BE	; DISALLOWED	#	_	CAPITAL LETTER ABKHASIAN CHE WITH D
04BF	; PVALID	#	_	SMALL LETTER ABKHASIAN CHE WITH DES
04C004C1	; DISALLOWED	#		LETTER PALOCHKACYRILLIC CAPITAL L
04C2	; PVALID	#	CYRILLIC	SMALL LETTER ZHE WITH BREVE
04C3	; DISALLOWED	#		CAPITAL LETTER KA WITH HOOK
04C4	; PVALID	#	CYRILLIC	SMALL LETTER KA WITH HOOK
04C5	; DISALLOWED	#		CAPITAL LETTER EL WITH TAIL
04C6	; PVALID	#		SMALL LETTER EL WITH TAIL
04C7	; DISALLOWED			CAPITAL LETTER EN WITH HOOK
04C8	; PVALID		_	SMALL LETTER EN WITH HOOK
04C9	; DISALLOWED			CAPITAL LETTER EN WITH TAIL
04CA	; PVALID		_	SMALL LETTER EN WITH TAIL
04CB	; DISALLOWED			CAPITAL LETTER KHAKASSIAN CHE
04CC	; PVALID	#	CYRILLIC	SMALL LETTER KHAKASSIAN CHE
04CD	; DISALLOWED	#	CYRILLIC	CAPITAL LETTER EM WITH TAIL
04CE04CF	; PVALID	#	CYRILLIC	SMALL LETTER EM WITH TAILCYRILLIC
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		CYRILLIC SMALL LETTER A WITH DIAERESIS
04D4		CYRILLIC CAPITAL LIGATURE A IE
04D5		CYRILLIC SMALL LIGATURE A IE
04D6		CYRILLIC CAPITAL LETTER IE WITH BREVE
04D7		CYRILLIC SMALL LETTER IE WITH BREVE
04D8		CYRILLIC CAPITAL LETTER SCHWA
04D9		CYRILLIC SMALL LETTER SCHWA
04DA	••	CYRILLIC CAPITAL LETTER SCHWA WITH DIAERESIS
04DB		CYRILLIC SMALL LETTER SCHWA WITH DIAERESIS
04DC		CYRILLIC CAPITAL LETTER ZHE WITH DIAERESIS
04DD		CYRILLIC SMALL LETTER ZHE WITH DIAERESIS
04DE		CYRILLIC CAPITAL LETTER ZE WITH DIAERESIS
04DF		CYRILLIC SMALL LETTER ZE WITH DIAERESIS
04E0		CYRILLIC CAPITAL LETTER ABKHASIAN DZE
04E1		CYRILLIC SMALL LETTER ABKHASIAN DZE
04E2		CYRILLIC CAPITAL LETTER I WITH MACRON
04E3		CYRILLIC SMALL LETTER I WITH MACRON
04E4		CYRILLIC CAPITAL LETTER I WITH DIAERESIS
04E5		CYRILLIC SMALL LETTER I WITH DIAERESIS
04E6		CYPILLIC CAPITAL LETTER O WITH DIAERESIS
04E7	••	CYRILLIC SMALL LETTER O WITH DIAERESIS
04E8		CYRILLIC CAPITAL LETTER BARRED O
04E9		CYRILLIC SMALL LETTER BARRED O
04EA	••	CYRILLIC CAPITAL LETTER BARRED O WITH DIAERE
04EB		CYRILLIC SMALL LETTER BARRED O WITH DIAERESI
04EC 04ED		CYRILLIC CAPITAL LETTER E WITH DIAERESIS CYRILLIC SMALL LETTER E WITH DIAERESIS
04ED 04EE		CYRILLIC CAPITAL LETTER U WITH MACRON
04EF 04F0		CYRILLIC SMALL LETTER U WITH MACRON CYRILLIC CAPITAL LETTER U WITH DIAERESIS
04F0 04F1		CYRILLIC SMALL LETTER U WITH DIAERESIS
04F1 04F2		CYRILLIC CAPITAL LETTER U WITH DOUBLE ACUTE
04F2 04F3		
04F3 04F4		CYRILLIC SMALL LETTER U WITH DOUBLE ACUTE CYRILLIC CAPITAL LETTER CHE WITH DIAERESIS
04F4 04F5		CYRILLIC SMALL LETTER CHE WITH DIAERESIS
04F5		CYRILLIC CAPITAL LETTER GHE WITH DESCENDER
04F0 04F7		CYRILLIC SMALL LETTER GHE WITH DESCENDER
04F7 04F8		
04F9		CYRILLIC CAPITAL LETTER YERU WITH DIAERESIS CYRILLIC SMALL LETTER YERU WITH DIAERESIS
04F3		CYRILLIC CAPITAL LETTER GHE WITH STROKE AND
04FB		CYRILLIC SMALL LETTER GHE WITH STROKE AND HO
04FC		CYRILLIC CAPITAL LETTER HA WITH HOOK
04FD		CYRILLIC SMALL LETTER HA WITH HOOK
04FE		CYRILLIC CAPITAL LETTER HA WITH STROKE
04FE		CYRILLIC SMALL LETTER HA WITH STROKE
0500		CYRILLIC CAPITAL LETTER KOMI DE
0501		CYRILLIC SMALL LETTER KOMI DE
0502		CYRILLIC CAPITAL LETTER KOMI DJE
0000	, 51011110001110 # (	OTHER DOTATION DUTTING HOME DOD

```
0503
          ; PVALID # CYRILLIC SMALL LETTER KOMI DJE
          ; DISALLOWED # CYRILLIC CAPITAL LETTER KOMI ZJE
0504
          ; PVALID # CYRILLIC SMALL LETTER KOMI ZJE
0505
          ; DISALLOWED # CYRILLIC CAPITAL LETTER KOMI DZJE
0507
          ; PVALID # CYRILLIC SMALL LETTER KOMI DZJE
          ; DISALLOWED # CYRILLIC CAPITAL LETTER KOMI LJE
0508
          ; PVALID # CYRILLIC SMALL LETTER KOMI LJE
; DISALLOWED # CYRILLIC CAPITAL LETTER KOMI NJE
0509
050A
050B
          ; PVALID # CYRILLIC SMALL LETTER KOMI NJE
050C
          ; DISALLOWED # CYRILLIC CAPITAL LETTER KOMI SJE
         ; PVALID # CYRILLIC SMALL LETTER KOMI SJE
050D
050E
          ; DISALLOWED # CYRILLIC CAPITAL LETTER KOMI TJE
050F
          ; PVALID # CYRILLIC SMALL LETTER KOMI TJE
          ; DISALLOWED # CYRILLIC CAPITAL LETTER REVERSED ZE
0510
                       # CYRILLIC SMALL LETTER REVERSED ZE
          ; PVALID
0511
          ; DISALLOWED # CYRILLIC CAPITAL LETTER EL WITH HOOK
0512
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
          ; PVALID # CYRILLIC SMALL LETTER RHA
0517
          ; DISALLOWED # CYRILLIC CAPITAL LETTER YAE
0518
          ; PVALID # CYRILLIC SMALL LETTER YAE
0519
          ; DISALLOWED # CYRILLIC CAPITAL LETTER QA
051A
          ; PVALID # CYRILLIC SMALL LETTER QA
051B
          ; DISALLOWED # CYRILLIC CAPITAL LETTER WE
051C
051D
          ; PVALID # CYRILLIC SMALL LETTER WE
         ; DISALLOWED # CYRILLIC CAPITAL LETTER ALEUT KA
051E
051F
          ; PVALID # CYRILLIC SMALL LETTER ALEUT KA
          ; DISALLOWED # CYRILLIC CAPITAL LETTER EL WITH MIDDLE HOOK
0520
          ; PVALID # CYRILLIC SMALL LETTER EL WITH MIDDLE HOOK
0521
          ; DISALLOWED # CYRILLIC CAPITAL LETTER EN WITH MIDDLE HOOK
0522
         ; PVALID
0523
                        # CYRILLIC SMALL LETTER EN WITH MIDDLE HOOK
0524
          ; DISALLOWED # CYRILLIC CAPITAL LETTER PE WITH DESCENDER
0525
          ; PVALID # CYRILLIC SMALL LETTER PE WITH DESCENDER
0526..0530 ; UNASSIGNED # <reserved>..<reserved>
0531..0556 ; DISALLOWED # ARMENIAN CAPITAL LETTER AYB..ARMENIAN CAPITA
0557..0558 ; UNASSIGNED # <reserved>..<reserved>
0559 ; PVALID # ARMENIAN MODIFIER LETTER LEFT HALF RING
055A..055F ; DISALLOWED # ARMENIAN APOSTROPHE..ARMENIAN ABBREVIATION M
0560 ; UNASSIGNED # <reserved>
0561..0586 ; PVALID # ARMENIAN SMALL LETTER AYB..ARMENIAN SMALL LE
0587 ; DISALLOWED # ARMENIAN SMALL LIGATURE ECH YIWN
0588 : INNASSIGNED # CROSCOVICES
          ; UNASSIGNED # <reserved>
0588
0589..058A ; DISALLOWED # ARMENIAN FULL STOP..ARMENIAN HYPHEN
058B..0590 ; UNASSIGNED # <reserved>..<reserved>
0591..05BD ; PVALID # HEBREW ACCENT ETNAHTA..HEBREW POINT METEG
05BE
          ; DISALLOWED # HEBREW PUNCTUATION MAQAF
```

```
05BF
          ; PVALID
                       # HEBREW POINT RAFE
          ; DISALLOWED # HEBREW PUNCTUATION PASEQ
05C0
05C1..05C2 ; PVALID # HEBREW POINT SHIN DOT..HEBREW POINT SIN DOT
05C3 ; DISALLOWED # HEBREW PUNCTUATION SOF PASUO
05C4..05C5 ; PVALID # HEBREW MARK UPPER DOT..HEBREW MARK LOWER DOT
           ; DISALLOWED # HEBREW PUNCTUATION NUN HAFUKHA
05C6
05C7 ; PVALID # HEBREW POINT QAMATS QATAN 05C8..05CF ; UNASSIGNED # <reserved>..<reserved>
05D0..05EA ; PVALID # HEBREW LETTER ALEF..HEBREW LETTER TAV
05EB..05EF ; UNASSIGNED # <reserved>..<reserved>
05F0..05F2 ; PVALID # HEBREW LIGATURE YIDDISH DOUBLE VAV..HEBREW L
05F3..05F4 ; CONTEXTO
                       # HEBREW PUNCTUATION GERESH..HEBREW PUNCTUATIO
05F5..05FF ; UNASSIGNED # <reserved>..<reserved>
0600..0603 ; DISALLOWED # ARABIC NUMBER SIGN..ARABIC SIGN SAFHA
0604..0605 ; UNASSIGNED # <reserved>..<reserved>
0606..060F ; DISALLOWED # ARABIC-INDIC CUBE ROOT..ARABIC SIGN MISRA
0610..061A ; PVALID # ARABIC SIGN SALLALLAHOU ALAYHE WASSALLAM..AR
          ; DISALLOWED # ARABIC SEMICOLON
061B
061C..061D ; UNASSIGNED # <reserved>..<reserved>
061E..061F ; DISALLOWED # ARABIC TRIPLE DOT PUNCTUATION MARK..ARABIC Q
0620 ; UNASSIGNED # <reserved>
0621..063F ; PVALID # ARABIC LETTER HAMZA..ARABIC LETTER FARSI YEH
0640 ; DISALLOWED # ARABIC TATWEEL
0641..065E ; PVALID # ARABIC LETTER FEH..ARABIC FATHA WITH TWO DOT
065F ; UNASSIGNED # <reserved>
0660..0669 ; CONTEXTO # ARABIC-INDIC DIGIT ZERO..ARABIC-INDIC DIGIT
066A..066D ; DISALLOWED # ARABIC PERCENT SIGN..ARABIC FIVE POINTED STA
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
           ; DISALLOWED # ARABIC FULL STOP
06D4
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
          ; UNASSIGNED # <reserved>
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..07FF ; UNASSIGNED # <reserved>..<reserved>
```

```
0800..082D ; PVALID
                       # SAMARITAN LETTER ALAF..SAMARITAN MARK NEQUDA
082E..082F ; UNASSIGNED # <reserved>..<reserved>
0830..083E ; DISALLOWED # SAMARITAN PUNCTUATION NEQUDAA..SAMARITAN PUN
083F..08FF ; UNASSIGNED # <reserved>..<reserved>
0900..0939 ; PVALID # DEVANAGARI SIGN INVERTED CANDRABINDU..DEVANA
093A..093B ; UNASSIGNED # <reserved>..<reserved>
093C..094E ; PVALID # DEVANAGARI SIGN NUKTA..DEVANAGARI VOWEL SIGN
          ; UNASSIGNED # <reserved>
094F
0950..0955 ; PVALID # DEVANAGARI OM..DEVANAGARI VOWEL SIGN CANDRA
0956..0957 ; UNASSIGNED # <reserved>..<reserved>
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
          ; DISALLOWED # DEVANAGARI ABBREVIATION SIGN
0970
0971..0972 ; PVALID
                       # DEVANAGARI SIGN HIGH SPACING DOT..DEVANAGARI
0973..0978 ; UNASSIGNED # <reserved>..<reserved>
0979..097F ; PVALID # DEVANAGARI LETTER ZHA..DEVANAGARI LETTER BBA
0980
          ; UNASSIGNED # <reserved>
0981..0983 ; PVALID # BENGALI SIGN CANDRABINDU..BENGALI SIGN VISAR
         ; UNASSIGNED # <reserved>
0984
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>
          ; PVALID # BENGALI AU LENGTH MARK
09D7
09D8..09DB ; UNASSIGNED # <reserved>..<reserved>
09DC..09DD ; DISALLOWED # BENGALI LETTER RRA..BENGALI LETTER RHA
       ; UNASSIGNED # <reserved>
09DE
          ; DISALLOWED # BENGALI LETTER YYA
09DF
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..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>
         ; PVALID # GURMUKHI LETTER LA
0A33
         ; DISALLOWED # GURMUKHI LETTER LLA
         ; UNASSIGNED # <reserved>
0A34
          ; PVALID
                       # GURMUKHI LETTER VA
0A35
          ; DISALLOWED # GURMUKHI LETTER SHA
0A36
0A37
          ; UNASSIGNED # <reserved>
0A38..0A39 ; PVALID # GURMUKHI LETTER SA..GURMUKHI LETTER HA
0A3A..0A3B ; UNASSIGNED # <reserved>..<reserved>
0A3C ; PVALID # GURMUKHI SIGN NUKTA
         ; UNASSIGNED # <reserved>
0A3D
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
          ; UNASSIGNED # <reserved>
0A5D
          ; DISALLOWED # GURMUKHI LETTER FA
0A5F..0A65 ; UNASSIGNED # <reserved>..<reserved>
0A66..0A75 ; PVALID # GURMUKHI DIGIT ZERO..GURMUKHI SIGN YAKASH
0A76..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..0ABO ; PVALID # GUJARATI LETTER PA..GUJARATI LETTER RA
OAB1 ; UNASSIGNED # <reserved>
OAB2..OAB3 ; PVALID # GUJARATI LETTER LA..GUJARATI LETTER LLA
         ; UNASSIGNED # <reserved>
0AB4
```

```
OAB5..OAB9 ; PVALID
                      # GUJARATI LETTER VA..GUJARATI LETTER HA
0ABA..0ABB ; UNASSIGNED # <reserved>..<reserved>
OABC..OAC5 ; 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>
0AD0
    ; PVALID # GUJARATI OM
0AD1..0ADF ; UNASSIGNED # <reserved>..<reserved>
0AE0..0AE3 ; PVALID # GUJARATI LETTER VOCALIC RR..GUJARATI VOWEL S
0AE4..0AE5 ; UNASSIGNED # <reserved>..<reserved>
OAE6..OAEF ; PVALID # GUJARATI DIGIT ZERO..GUJARATI DIGIT NINE
         ; UNASSIGNED # <reserved>
0AF0
         ; DISALLOWED # GUJARATI RUPEE SIGN
0AF1
0AF2..0B00 ; UNASSIGNED # <reserved>..<reserved>
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>
OB13..OB28 ; PVALID # ORIYA LETTER O..ORIYA LETTER NA
          ; UNASSIGNED # <reserved>
0B29
0B2A..0B30 ; PVALID # ORIYA LETTER PA..ORIYA LETTER RA
OB31 ; UNASSIGNED # <reserved>
OB32..OB33 ; PVALID # ORIYA LETTER LA..ORIYA LETTER LLA
OB34 ; UNASSIGNED # <reserved>
0B35..0B39 ; PVALID # ORIYA LETTER VA..ORIYA LETTER HA
OB3A..OB3B ; UNASSIGNED # <reserved>..<reserved>
0B3C..0B44 ; PVALID
                      # ORIYA SIGN NUKTA..ORIYA VOWEL SIGN VOCALIC R
0B45..0B46 ; UNASSIGNED # <reserved>..<reserved>
OB47..OB48 ; 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>
OB66..OB6F ; PVALID # ORIYA DIGIT ZERO..ORIYA DIGIT NINE
0B70 ; DISALLOWED # ORIYA ISSHAR
0B71
         ; PVALID # ORIYA LETTER WA
0B72..0B81 ; UNASSIGNED # <reserved>..<reserved>
0B82..0B83 ; PVALID # TAMIL SIGN ANUSVARA..TAMIL SIGN VISARGA
         ; UNASSIGNED # <reserved>
0B84
```

```
OB85..OB8A ; PVALID
                      # TAMIL LETTER A..TAMIL LETTER UU
0B8B..0B8D ; UNASSIGNED # <reserved>..<reserved>
OB8E..OB90 ; 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>
OB9E..OB9F ; PVALID # TAMIL LETTER NYA..TAMIL LETTER TTA
0BA0..0BA2 ; UNASSIGNED # <reserved>..<reserved>
OBA3..OBA4 ; PVALID # TAMIL LETTER NNA..TAMIL LETTER TA
0BA5..0BA7 ; UNASSIGNED # <reserved>..<reserved>
OBA8..OBAA ; PVALID
                       # TAMIL LETTER NA..TAMIL LETTER PA
0BAB..0BAD ; UNASSIGNED # <reserved>..<reserved>
OBAE..OBB9 ; PVALID
                      # TAMIL LETTER MA..TAMIL LETTER HA
0BBA..0BBD ; UNASSIGNED # <reserved>..<reserved>
OBBE..OBC2 ; PVALID # TAMIL VOWEL SIGN AA..TAMIL VOWEL SIGN UU
0BC3..0BC5 ; UNASSIGNED # <reserved>..<reserved>
OBC6..OBC8 ; PVALID # TAMIL VOWEL SIGN E..TAMIL VOWEL SIGN AI
OBC9 ; UNASSIGNED # <reserved>
OBCA..OBCD ; PVALID # TAMIL VOWEL SIGN O..TAMIL SIGN VIRAMA
0BCE..0BCF ; UNASSIGNED # <reserved>..<reserved>
          ; PVALID # TAMIL OM
0BD1..0BD6 ; UNASSIGNED # <reserved>..<reserved>
0BD7 ; PVALID # TAMIL AU LENGTH MARK
0BD8..0BE5 ; UNASSIGNED # <reserved>..<reserved>
OBE6..OBEF ; PVALID # TAMIL DIGIT ZERO..TAMIL DIGIT NINE
OBFO..OBFA ; DISALLOWED # TAMIL NUMBER TEN..TAMIL NUMBER SIGN
0BFB..0C00 ; UNASSIGNED # <reserved>..<reserved>
0C01..0C03 ; PVALID
                       # TELUGU SIGN CANDRABINDU..TELUGU SIGN VISARGA
          ; UNASSIGNED # <reserved>
0C05..0C0C ; PVALID
                       # TELUGU LETTER A..TELUGU LETTER VOCALIC L
0C0D
         ; UNASSIGNED # <reserved>
OCOE..OC10 ; PVALID # TELUGU LETTER E..TELUGU LETTER AI
OC12..0C28 ; PVALID # TELUGU LETTER O..TELUGU LETTER NA
OC29 ; UNASSIGNED # <reserved>
OC2A..OC33 ; PVALID # TELUGU LETTER PA..TELUGU LETTER LLA
          ; UNASSIGNED # <reserved>
0C34
OC35..OC39 ; PVALID # TELUGU LETTER VA..TELUGU LETTER HA
0C3A..0C3C ; UNASSIGNED # <reserved>..<reserved>
0C3D..0C44 ; PVALID # TELUGU SIGN AVAGRAHA..TELUGU VOWEL SIGN VOCA
OC45 ; UNASSIGNED # <reserved>
0C46..0C48 ; PVALID # TELUGU VOWEL SIGN E..TELUGU VOWEL SIGN AI
OC49 ; UNASSIGNED # <reserved>
OC4A..OC4D ; PVALID
                      # TELUGU VOWEL SIGN O..TELUGU SIGN VIRAMA
```

```
0C4E..0C54 ; UNASSIGNED # <reserved>..<reserved>
0C55..0C56 ; PVALID # TELUGU LENGTH MARK..TELUGU AI LENGTH MARK
OC57 ; UNASSIGNED # <reserved>
OC58..OC59 ; PVALID # TELUGU LETTER TSA..TELUGU LETTER DZA
0C5A..0C5F ; UNASSIGNED # <reserved>..<reserved>
OC60..OC63 ; PVALID # TELUGU LETTER VOCALIC RR..TELUGU VOWEL SIGN
0C64..0C65 ; UNASSIGNED # <reserved>..<reserved>
OC66..OC6F ; PVALID # TELUGU DIGIT ZERO..TELUGU DIGIT NINE
0C70..0C77 ; UNASSIGNED # <reserved>..<reserved>
0C78..0C7F ; DISALLOWED # TELUGU FRACTION DIGIT ZERO FOR ODD POWERS OF
0C80..0C81 ; UNASSIGNED # <reserved>..<reserved>
OC82..OC83 ; PVALID # KANNADA SIGN ANUSVARA..KANNADA SIGN VISARGA
         ; UNASSIGNED # <reserved>
0C84
0C85..0C8C ; PVALID
                       # KANNADA LETTER A..KANNADA LETTER VOCALIC L
          ; UNASSIGNED # <reserved>
0C8D
OC8E..OC90 ; PVALID
                       # KANNADA LETTER E..KANNADA LETTER AI
0C91
         ; UNASSIGNED # <reserved>
OC92..OCA8 ; PVALID # KANNADA LETTER O..KANNADA LETTER NA
         ; UNASSIGNED # <reserved>
0CA9
OCAA..OCB3 ; PVALID # KANNADA LETTER PA..KANNADA LETTER LLA
         ; UNASSIGNED # <reserved>
OCB5..0CB9 ; PVALID # KANNADA LETTER VA..KANNADA LETTER HA
0CBA..0CBB ; UNASSIGNED # <reserved>..<reserved>
OCBC..OCC4 ; PVALID # KANNADA SIGN NUKTA..KANNADA VOWEL SIGN VOCAL
          ; UNASSIGNED # <reserved>
0CC5
OCC6..OCC8 ; PVALID # KANNADA VOWEL SIGN E..KANNADA VOWEL SIGN AI
OCC9 ; UNASSIGNED # <reserved>
OCCA..OCCD ; PVALID # KANNADA VOWEL SIGN O..KANNADA SIGN VIRAMA
0CCE..0CD4  ; UNASSIGNED # <reserved>..<reserved>
OCD5..OCD6 ; PVALID # KANNADA LENGTH MARK..KANNADA AI LENGTH MARK
0CD7..0CDD ; UNASSIGNED # <reserved>..<reserved>
                       # KANNADA LETTER FA
0CDE
          ; PVALID
          ; UNASSIGNED # <reserved>
OCEO..OCE3 ; PVALID
                       # KANNADA LETTER VOCALIC RR..KANNADA VOWEL SIG
0CE4..0CE5 ; UNASSIGNED # <reserved>..<reserved>
OCE6..OCEF ; PVALID # KANNADA DIGIT ZERO..KANNADA DIGIT NINE
0CF0
         ; UNASSIGNED # <reserved>
OCF1..OCF2 ; DISALLOWED # KANNADA SIGN JIHVAMULIYA..KANNADA SIGN UPADH
0CF3..0D01  ; UNASSIGNED # <reserved>..<reserved>
0D02..0D03 ; PVALID # MALAYALAM SIGN ANUSVARA..MALAYALAM SIGN VISA
          ; UNASSIGNED # <reserved>
0D04
ODO5..ODOC ; PVALID
                       # MALAYALAM LETTER A..MALAYALAM LETTER VOCALIC
0D0D
     ; UNASSIGNED # <reserved>
ODOE..OD10 ; PVALID # MALAYALAM LETTER E..MALAYALAM LETTER AI
OD12..OD28 ; PVALID # MALAYALAM LETTER O..MALAYALAM LETTER NA
OD29 ; UNASSIGNED # <reserved>
0D2A..0D39 ; PVALID
                      # MALAYALAM LETTER PA..MALAYALAM LETTER HA
```

```
0D3A..0D3C ; UNASSIGNED # <reserved>..<reserved>
0D3D..0D44 ; PVALID # MALAYALAM SIGN AVAGRAHA..MALAYALAM VOWEL SIG
0D46..0D48 ; PVALID # MALAYALAM VOWEL SIGN E..MALAYALAM VOWEL SIGN
         ; UNASSIGNED # <reserved>
0D49
0D4A..0D4D ; PVALID # MALAYALAM VOWEL SIGN O..MALAYALAM SIGN VIRAM
0D4E..0D56  ; UNASSIGNED # <reserved>..<reserved>
          ; PVALID # MALAYALAM AU LENGTH MARK
0D57
0D58..0D5F ; UNASSIGNED # <reserved>..<reserved>
0D60..0D63 ; PVALID # MALAYALAM LETTER VOCALIC RR..MALAYALAM VOWEL
0D64..0D65 ; UNASSIGNED # <reserved>..<reserved>
OD66..OD6F ; PVALID # MALAYALAM DIGIT ZERO..MALAYALAM DIGIT NINE
0D70..0D75 ; DISALLOWED # MALAYALAM NUMBER TEN..MALAYALAM FRACTION THR
0D76..0D78  ; UNASSIGNED # <reserved>..<reserved>
          ; DISALLOWED # MALAYALAM DATE MARK
0D79
OD7A..OD7F ; PVALID
                       # MALAYALAM LETTER CHILLU NN..MALAYALAM LETTER
0D80..0D81 ; UNASSIGNED # <reserved>..<reserved>
OD82..OD83 ; PVALID # SINHALA SIGN ANUSVARAYA..SINHALA SIGN VISARG
0D84
          ; UNASSIGNED # <reserved>
OD85..OD96 ; PVALID # SINHALA LETTER AYANNA..SINHALA LETTER AUYANN
0D97..0D99 ; UNASSIGNED # <reserved>..<reserved>
OD9A..ODB1 ; PVALID # SINHALA LETTER ALPAPRAANA KAYANNA..SINHALA L
          ; UNASSIGNED # <reserved>
0DB2
ODB3..ODBB ; PVALID # SINHALA LETTER SANYAKA DAYANNA..SINHALA LETT
ODBC ; UNASSIGNED # <reserved>
ODBD ; PVALID # SINHALA LE
          ; PVALID # SINHALA LETTER DANTAJA LAYANNA
0DBD
ODBE..ODBF ; UNASSIGNED # <reserved>..<reserved>
ODCO..ODC6 ; PVALID # SINHALA LETTER VAYANNA..SINHALA LETTER FAYAN
0DC7..0DC9 ; UNASSIGNED # <reserved>..<reserved>
         ; PVALID # SINHALA SIGN AL-LAKUNA
ODCB..ODCE ; UNASSIGNED # <reserved>..<reserved>
ODCF..ODD4 ; PVALID
                       # SINHALA VOWEL SIGN AELA-PILLA..SINHALA VOWEL
         ; UNASSIGNED # <reserved>
0DD5
0DD6
          ; PVALID
                       # SINHALA VOWEL SIGN DIGA PAA-PILLA
          ; UNASSIGNED # <reserved>
0DD7
ODD8..ODDF ; PVALID # SINHALA VOWEL SIGN GAETTA-PILLA..SINHALA VOW
ODE0..ODF1 ; UNASSIGNED # <reserved>..<reserved>
ODF2..ODF3 ; PVALID # SINHALA VOWEL SIGN DIGA GAETTA-PILLA..SINHAL
         ; DISALLOWED # SINHALA PUNCTUATION KUNDDALIYA
ODF4
ODF5..0E00 ; UNASSIGNED # <reserved>..<reserved>
0E01..0E32 ; PVALID # THAI CHARACTER KO KAI..THAI CHARACTER SARA A
          ; 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
         ; UNASSIGNED # <reserved>
0E83
0E84
         ; PVALID # LAO LETTER KHO TAM
0E85..0E86  ; UNASSIGNED # <reserved>..<reserved>
0E87..0E88 ; PVALID # LAO LETTER NGO..LAO LETTER CO
0E89 ; UNASSIGNED # <reserved>
0E8A ; PVALID # LAO LETTER CO TAM
0E8A
          ; PVALID # LAO LETTER SO TAM
0E8B..0E8C ; UNASSIGNED # <reserved>..<reserved>
0E8D ; PVALID # LAO LETTER NYO
0E8E..0E93 ; UNASSIGNED # <reserved>..<reserved>
0E94..0E97 ; PVALID # LAO LETTER DO..LAO LETTER THO TAM
          ; UNASSIGNED # <reserved>
0E99..0E9F ; PVALID
                       # LAO LETTER NO..LAO LETTER FO SUNG
          ; UNASSIGNED # <reserved>
OEA1..OEA3 ; PVALID
                       # LAO LETTER MO..LAO LETTER LO LING
; PVALID # LAO LETTER LO LOOT
0EA5
         ; UNASSIGNED # <reserved>
         ; PVALID # LAO LETTER WO
0EA8..0EA9 ; UNASSIGNED # <reserved>..<reserved>
OEAA..OEAB ; PVALID # LAO LETTER SO SUNG..LAO LETTER HO SUNG
0EAC
          ; UNASSIGNED # <reserved>
0EAD..0EB2 ; PVALID # LAO LETTER O..LAO VOWEL SIGN AA
0EB3 ; DISALLOWED # LAO VOWEL SIGN AM
OEB4..OEB9 ; PVALID # LAO VOWEL SIGN I..LAO VOWEL SIGN UU
0EBB..0EBD ; PVALID # LAO VOWEL SIGN MAI KON..LAO SEMIVOWEL SIGN N
0EBE..0EBF ; UNASSIGNED # <reserved>..<reserved>
OECO..OEC4 ; PVALID
                       # LAO VOWEL SIGN E..LAO VOWEL SIGN AI
          ; UNASSIGNED # <reserved>
0EC5
          ; PVALID
0EC6
                       # LAO KO LA
          ; UNASSIGNED # <reserved>
0EC7
                      # LAO TONE MAI EK..LAO NIGGAHITA
OEC8..OECD ; PVALID
0ECE..0ECF ; UNASSIGNED # <reserved>..<reserved>
0ED0..0ED9 ; PVALID # LAO DIGIT ZERO..LAO DIGIT NINE
0EDA..0EDB ; UNASSIGNED # <reserved>..<reserved>
OEDC..OEDD ; DISALLOWED # LAO HO NO..LAO HO MO
0EDE..0EFF ; UNASSIGNED # <reserved>..<reserved>
0F00 ; PVALID # TIBETAN SYLLABLE OM
0F01..0F0A ; DISALLOWED # TIBETAN MARK GTER YIG MGO TRUNCATED A..TIBET
     ; PVALID # TIBETAN MARK INTERSYLLABIC TSHEG
0F0B
0F0C..0F17 ; DISALLOWED # TIBETAN MARK DELIMITER TSHEG BSTAR..TIBETAN
0F18..0F19 ; PVALID # TIBETAN ASTROLOGICAL SIGN -KHYUD PA..TIBETAN
OF1A..OF1F ; 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
```

```
; PVALID
0F35
                       # TIBETAN MARK NGAS BZUNG NYI ZLA
          ; DISALLOWED # TIBETAN MARK CARET -DZUD RTAGS BZHI MIG CAN
0F36
         ; PVALID # TIBETAN MARK NGAS BZUNG SGOR RTAGS
          ; 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 TSHES..TIBETAN LETTER GA
0F43 ; DISALLOWED # TIBETAN LETTER GHA
0F44..0F47 ; PVALID # TIBETAN LETTER NGA..TIBETAN LETTER JA
OF48 ; UNASSIGNED # <reserved>
0F49..0F4C ; PVALID # TIBETAN LETTER NYA..TIBETAN LETTER DDA
0F4D ; DISALLOWED # TIBETAN LETTER DDHA
OF4E..OF51 ; PVALID # TIBETAN LETTER NNA..TIBETAN LETTER DA
          ; DISALLOWED # TIBETAN LETTER DHA
0F53..0F56 ; PVALID
                       # TIBETAN LETTER NA..TIBETAN LETTER BA
          ; DISALLOWED # TIBETAN LETTER BHA
OF58..OF5B ; PVALID
                       # TIBETAN LETTER MA..TIBETAN LETTER DZA
         ; DISALLOWED # TIBETAN LETTER DZHA
0F5C
OF5D..OF68 ; 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
          ; 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..0F8B ; PVALID
                       # TIBETAN SIGN LCI RTAGS..TIBETAN SIGN GRU MED
0F8C..0F8F ; UNASSIGNED # <reserved>..<reserved>
0F90..0F92 ; PVALID
                       # TIBETAN SUBJOINED LETTER KA..TIBETAN SUBJOIN
          ; DISALLOWED # TIBETAN SUBJOINED LETTER GHA
0F93
0F94..0F97 ; PVALID # TIBETAN SUBJOINED LETTER NGA..TIBETAN SUBJOI
OF98 ; 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
OFA3..OFA6 ; PVALID # TIBETAN SUBJOINED LETTER NA..TIBETAN SUBJOIN
0FA7 ; DISALLOWED # TIBETAN SUBJOINED LETTER BHA
OFA8..OFAB ; PVALID # TIBETAN SUBJOINED LETTER MA..TIBETAN SUBJOIN
OFAC ; DISALLOWED # TIBETAN SUBJOINED LETTER DZHA
OFAD..OFB8 ; PVALID # TIBETAN SUBJOINED LETTER WA..TIBETAN SUBJOIN
OFB9 ; DISALLOWED # TIBETAN SUBJOINED LETTER KSSA
OFBA..OFBC ; PVALID # TIBETAN SUBJOINED LETTER FIXED-FORM WA..TIBE
         ; UNASSIGNED # <reserved>
OFBD
```

```
OFBE..OFC5 ; DISALLOWED # TIBETAN KU RU KHA..TIBETAN SYMBOL RDO RJE
0FC6 ; PVALID # TIBETAN SYMBOL PADMA GDAN
OFC7..OFCC ; DISALLOWED # TIBETAN SYMBOL RDO RJE RGYA GRAM..TIBETAN SY
         ; UNASSIGNED # <reserved>
OFCD
OFCE..OFD8 ; DISALLOWED # TIBETAN SIGN RDEL NAG RDEL DKAR..LEFT-FACING
0FD9..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..10CF ; UNASSIGNED # <reserved>..<reserved>
10D0..10FA ; PVALID # GEORGIAN LETTER AN..GEORGIAN LETTER AIN
10FB..10FC ; DISALLOWED # GEORGIAN PARAGRAPH SEPARATOR..MODIFIER LETTE
10FD..10FF ; UNASSIGNED # <reserved>..<reserved>
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
         ; UNASSIGNED # <reserved>
1258
          ; PVALID # ETHIOPIC SYLLABLE OHWA
    ; UNASSIGNED # <reserved>
1259
125A..125D ; PVALID # ETHIOPIC SYLLABLE QHWI..ETHIOPIC SYLLABLE QH
125E..125F ; UNASSIGNED # <reserved>..<reserved>
1260..1288 ; PVALID # ETHIOPIC SYLLABLE BA..ETHIOPIC SYLLABLE XWA
128A..128D ; PVALID # ETHIOPIC SYLLABLE XWI..ETHIOPIC SYLLABLE XWE
128E..128F ; UNASSIGNED # <reserved>..<reserved>
1290..12B0 ; PVALID # ETHIOPIC SYLLABLE NA..ETHIOPIC SYLLABLE KWA
          ; UNASSIGNED # <reserved>
12B1
12B2..12B5 ; PVALID
                       # ETHIOPIC SYLLABLE KWI..ETHIOPIC SYLLABLE KWE
12B6..12B7 ; UNASSIGNED # <reserved>..<reserved>
12B8..12BE ; PVALID
                       # ETHIOPIC SYLLABLE KXA..ETHIOPIC SYLLABLE KXO
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
          ; UNASSIGNED # <reserved>
12D7
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..135E ; UNASSIGNED # <reserved>..<reserved>
                      # ETHIOPIC COMBINING GEMINATION MARK
135F
          ; PVALID
```

```
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..13F4 ; PVALID # CHEROKEE LETTER A..CHEROKEE LETTER YV
13F5..13FF ; UNASSIGNED # <reserved>..<reserved>
          ; DISALLOWED # CANADIAN SYLLABICS HYPHEN
1400
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
         ; 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 FEOH FE F..RUNIC LETTER X
16EB..16F0 ; DISALLOWED # RUNIC SINGLE PUNCTUATION..RUNIC BELGTHOR SYM
16F1..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
1772..1773 ; PVALID
                       # TAGBANWA VOWEL SIGN I..TAGBANWA VOWEL SIGN U
1774..177F ; UNASSIGNED # <reserved>..<reserved>
1780..1783 ; 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
          ; 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..1877 ; PVALID # MONGOLIAN LETTER A..MONGOLIAN LETTER MANCHU
1878..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..191C ; PVALID # LIMBU VOWEL-CARRIER LETTER..LIMBU LETTER HA
191D..191F ; UNASSIGNED # <reserved>..<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>
          ; DISALLOWED # LIMBU SIGN LOO
1940
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..19DA ; PVALID # NEW TAI LUE DIGIT ZERO..NEW TAI LUE THAM DIG
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
1A20..1A5E ; PVALID
                        # TAI THAM LETTER HIGH KA..TAI THAM CONSONANT
           ; UNASSIGNED # <reserved>
1A5F
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>
1AAO..1AA6 ; DISALLOWED # TAI THAM SIGN WIANG..TAI THAM SIGN REVERSED
1AA7
          ; PVALID # TAI THAM SIGN MAI YAMOK
1AA8..1AAD ; DISALLOWED # TAI THAM SIGN KAAN..TAI THAM SIGN CAANG
1AAE..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..1BAA ; PVALID # SUNDANESE SIGN PANYECEK..SUNDANESE SIGN PAMA
1BAB..1BAD ; UNASSIGNED # <reserved>..<reserved>
1BAE..1BB9 ; PVALID # SUNDANESE LETTER KHA..SUNDANESE DIGIT NINE
1BBA..1BFF ; UNASSIGNED # <reserved>..<reserved>
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..1C7F ; DISALLOWED # OL CHIKI PUNCTUATION MUCAAD..OL CHIKI PUNCTU
1C80..1CCF ; UNASSIGNED # <reserved>..<reserved>
1CD0..1CD2 ; PVALID
                       # VEDIC TONE KARSHANA..VEDIC TONE PRENKHA
          ; DISALLOWED # VEDIC SIGN NIHSHVASA
1CD3
1CD4..1CF2 ; PVALID
                       # VEDIC SIGN YAJURVEDIC MIDLINE SVARITA..VEDIC
1CF3..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
          ; PVALID # MODIFIER LETTER SMALL TURNED I
1D4E
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..1DE6 ; PVALID # COMBINING DOTTED GRAVE ACCENT..COMBINING LAT
1DE7..1DFC ; UNASSIGNED # <reserved>..<reserved>
1DFD..1DFF ; PVALID
                       # COMBINING ALMOST EQUAL TO BELOW..COMBINING R
         ; DISALLOWED # LATIN CAPITAL LETTER A WITH RING BELOW
1E00
          ; PVALID
1E01
                       # 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
         ; PVALID # LATIN SMALL LETTER B WITH DOT BELOW
1E05
         ; DISALLOWED # LATIN CAPITAL LETTER B WITH LINE BELOW
1E06
         ; PVALID # LATIN SMALL LETTER B WITH LINE BELOW
1E07
         ; DISALLOWED # LATIN CAPITAL LETTER C WITH CEDILLA AND ACUT
1E08
         ; PVALID # LATIN SMALL LETTER C WITH CEDILLA AND ACUTE
1E09
         ; DISALLOWED # LATIN CAPITAL LETTER D WITH DOT ABOVE
1E0A
         ; PVALID # LATIN SMALL LETTER D WITH DOT ABOVE
1E0B
         ; DISALLOWED # LATIN CAPITAL LETTER D WITH DOT BELOW
1E0C
         ; PVALID # LATIN SMALL LETTER D WITH DOT BELOW
1E0D
         ; DISALLOWED # LATIN CAPITAL LETTER D WITH LINE BELOW
1E0E
1EOF
         ; 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	
1E3C	
1E3C 1E3D	
1E3E	; PVALID  # LATIN SMALL LETTER L WITH CIRCUMFLEX BELOW ; DISALLOWED # LATIN CAPITAL LETTER M WITH ACUTE
1E3F	
TEOF	; 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
          ; DISALLOWED # LATIN CAPITAL LETTER M WITH DOT BELOW
          ; PVALID # LATIN SMALL LETTER M WITH DOT BELOW
          ; DISALLOWED # LATIN CAPITAL LETTER N WITH DOT ABOVE
1E44
          ; PVALID # LATIN SMALL LETTER N WITH DOT ABOVE
1E45
          ; DISALLOWED # LATIN CAPITAL LETTER N WITH DOT BELOW ; PVALID # LATIN SMALL LETTER N WITH DOT BELOW
1E46
1E47
          ; DISALLOWED # LATIN CAPITAL LETTER N WITH LINE BELOW
1E48
          ; PVALID # LATIN SMALL LETTER N WITH LINE BELOW
1E49
          ; DISALLOWED # LATIN CAPITAL LETTER N WITH CIRCUMFLEX BELOW
1E4A
          ; PVALID # LATIN SMALL LETTER N WITH CIRCUMFLEX BELOW
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH TILDE AND ACUTE
1E4C
          ; PVALID
                        # LATIN SMALL LETTER O WITH TILDE AND ACUTE
1E4D
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH TILDE AND DIAERE
1E4E
          ; PVALID
1E4F
                        # LATIN SMALL LETTER O WITH TILDE AND DIAERESI
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH MACRON AND GRAVE
1E50
          ; PVALID # LATIN SMALL LETTER O WITH MACRON AND GRAVE
1E51
1E52
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH MACRON AND ACUTE
1E53
          ; PVALID # LATIN SMALL LETTER O WITH MACRON AND ACUTE
          ; DISALLOWED # LATIN CAPITAL LETTER P WITH ACUTE
1E55
          ; PVALID # LATIN SMALL LETTER P WITH ACUTE
          ; DISALLOWED # LATIN CAPITAL LETTER P WITH DOT ABOVE
1E56
1E57
          ; PVALID # LATIN SMALL LETTER P WITH DOT ABOVE
          ; DISALLOWED # LATIN CAPITAL LETTER R WITH DOT ABOVE
1E58
         ; PVALID # LATIN SMALL LETTER R WITH DOT ABOVE
1E59
         ; DISALLOWED # LATIN CAPITAL LETTER R WITH DOT BELOW
1E5A
1E5B
          ; PVALID # LATIN SMALL LETTER R WITH DOT BELOW
          ; DISALLOWED # LATIN CAPITAL LETTER R WITH DOT BELOW AND MA
          ; PVALID # LATIN SMALL LETTER R WITH DOT BELOW AND MACR
1E5E
          ; DISALLOWED # LATIN CAPITAL LETTER R WITH LINE BELOW
          ; PVALID
                        # LATIN SMALL LETTER R WITH LINE BELOW
1E5F
          ; DISALLOWED # LATIN CAPITAL LETTER S WITH DOT ABOVE
1E60
          ; PVALID
1E61
                        # 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
          ; PVALID # LATIN SMALL LETTER S WITH ACUTE AND DOT ABOV
          ; DISALLOWED # LATIN CAPITAL LETTER S WITH CARON AND DOT AB
1E66
          ; PVALID # LATIN SMALL LETTER S WITH CARON AND DOT ABOV
1E67
          ; DISALLOWED # LATIN CAPITAL LETTER S WITH DOT BELOW AND DO
1E68
          ; PVALID
                        # LATIN SMALL LETTER S WITH DOT BELOW AND DOT
1E69
1E6A
          ; DISALLOWED # LATIN CAPITAL LETTER T WITH DOT ABOVE
          ; PVALID # LATIN SMALL LETTER T WITH DOT ABOVE
1E6B
1E6C
          ; DISALLOWED # LATIN CAPITAL LETTER T WITH DOT BELOW
          ; PVALID # LATIN SMALL LETTER T WITH DOT BELOW
1E6D
          ; DISALLOWED # LATIN CAPITAL LETTER T WITH LINE BELOW
1E6E
1E6F
          ; PVALID
                       # LATIN SMALL LETTER T WITH LINE BELOW
```

1E70	;	DISALLOWED	#		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	#		CAPITAL LETTER W WITH GRAVE
1E81	;	PVALID	#	LATIN	SMALL LETTER W WITH GRAVE
1E82	;	DISALLOWED	#		CAPITAL LETTER W WITH ACUTE
1E83	;	PVALID	#		SMALL LETTER W WITH ACUTE
1E84	;	DISALLOWED	#		CAPITAL LETTER W WITH DIAERESIS
1E85	;	PVALID	#		SMALL LETTER W WITH DIAERESIS
1E86	;	DISALLOWED	#		CAPITAL LETTER W WITH DOT ABOVE
1E87	;	PVALID	#		SMALL LETTER W WITH DOT ABOVE
1E88	;	DISALLOWED	#		CAPITAL LETTER W WITH DOT BELOW
1E89	;	PVALID	#		SMALL LETTER W WITH DOT BELOW
1E8A	;	DISALLOWED	#		CAPITAL LETTER X WITH DOT ABOVE
1E8B	;	PVALID	#	LATIN	SMALL LETTER X WITH DOT ABOVE
1E8C	;	DISALLOWED	#		CAPITAL LETTER X WITH DIAERESIS
1E8D	;	PVALID	#		SMALL LETTER X WITH DIAERESIS
1E8E	į	DISALLOWED	#		CAPITAL LETTER Y WITH DOT ABOVE
1E8F	;	PVALID	#	LATIN	
1E90	;	DISALLOWED	#		CAPITAL LETTER Z WITH CIRCUMFLEX
1E91	;	PVALID	#		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
1E951E99	;	PVALID	#	LATIN	SMALL LETTER Z WITH LINE BELOWLATIN
1E9A1E9B	;	DISALLOWED	#	LATIN	SMALL LETTER A WITH RIGHT HALF RINGL
1E9C1E9D	;	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
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 CAPITAL LETTER O WITH DOT BELOW
1ECE	; DISALLOWED # LATIN CAPITAL LETTER O WITH HOOK ABOVE
1ECF	; PVALID # LATIN SMALL LETTER O WITH HOOK ABOVE ; DISALLOWED # LATIN CAPITAL LETTER O WITH CIRCUMFLEX AND A
1ED0	
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

```
1 ED6
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH CIRCUMFLEX AND T
          ; PVALID # LATIN SMALL LETTER O WITH CIRCUMFLEX AND TIL
1ED7
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH CIRCUMFLEX AND D
          ; PVALID # LATIN SMALL LETTER O WITH CIRCUMFLEX AND DOT
1ED9
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH HORN AND ACUTE
1EDA
          ; PVALID # LATIN SMALL LETTER O WITH HORN AND ACUTE
1EDB
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH HORN AND GRAVE
1EDC
          ; PVALID
                        # LATIN SMALL LETTER O WITH HORN AND GRAVE
1 EDD
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH HORN AND HOOK AB
1EDE
          ; PVALID # LATIN SMALL LETTER O WITH HORN AND HOOK ABOV
1EDF
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH HORN AND TILDE
1 \text{EE} 0
1EE1
          ; PVALID # LATIN SMALL LETTER O WITH HORN AND TILDE
          ; DISALLOWED # LATIN CAPITAL LETTER O WITH HORN AND DOT BEL
1EE2
          ; PVALID
                        # LATIN SMALL LETTER O WITH HORN AND DOT BELOW
1EE3
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH DOT BELOW
1EE4
          ; PVALID
1EE5
                        # LATIN SMALL LETTER U WITH DOT BELOW
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH HOOK ABOVE
1EE6
          ; PVALID # LATIN SMALL LETTER U WITH HOOK ABOVE
1 E E 7
1EE8
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH HORN AND ACUTE
1EE9
          ; PVALID # LATIN SMALL LETTER U WITH HORN AND ACUTE
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH HORN AND GRAVE
1 EEA
1EEB
          ; PVALID # LATIN SMALL LETTER U WITH HORN AND GRAVE
1EEC
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH HORN AND HOOK AB
          ; PVALID
1EED
                        # LATIN SMALL LETTER U WITH HORN AND HOOK ABOV
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH HORN AND TILDE
1EEE
          ; PVALID # LATIN SMALL LETTER U WITH HORN AND TILDE
1EEF
          ; DISALLOWED # LATIN CAPITAL LETTER U WITH HORN AND DOT BEL
1EF0
          ; PVALID # LATIN SMALL LETTER U WITH HORN AND DOT BELOW
1EF1
          ; DISALLOWED # LATIN CAPITAL LETTER Y WITH GRAVE
1EF3
          ; PVALID # LATIN SMALL LETTER Y WITH GRAVE
1EF4
          ; DISALLOWED # LATIN CAPITAL LETTER Y WITH DOT BELOW
          ; PVALID
                        # LATIN SMALL LETTER Y WITH DOT BELOW
1EF5
          ; DISALLOWED # LATIN CAPITAL LETTER Y WITH HOOK ABOVE
1EF6
          ; PVALID
1EF7
                        # LATIN SMALL LETTER Y WITH HOOK ABOVE
          ; DISALLOWED # LATIN CAPITAL LETTER Y WITH TILDE
1EF8
1EF9
          ; PVALID # LATIN SMALL LETTER Y WITH TILDE
1EFA
          ; DISALLOWED # LATIN CAPITAL LETTER MIDDLE-WELSH LL
          ; PVALID # LATIN SMALL LETTER MIDDLE-WELSH LL
1EFB
          ; DISALLOWED # LATIN CAPITAL LETTER MIDDLE-WELSH V
1EFC
          ; PVALID # LATIN SMALL LETTER MIDDLE-WELSH V
1 EFD
      ; DISALLOWED # LATIN CAPITAL LETTER Y WITH LOOP
1EFE
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 UPS
                       # GREEK SMALL LETTER UPSILON WITH PSILI..GREEK
1F58 ; UNASSIGNED # <reserved>
1F59
          ; DISALLOWED # GREEK CAPITAL LETTER UPSILON WITH DASIA
1F5A
         ; UNASSIGNED # <reserved>
          ; DISALLOWED # GREEK CAPITAL LETTER UPSILON WITH DASIA AND
1F5C
          ; UNASSIGNED # <reserved>
          ; DISALLOWED # GREEK CAPITAL LETTER UPSILON WITH DASIA AND
1F5D
          ; UNASSIGNED # <reserved>
1F5E
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
         ; PVALID # GREEK SMALL LETTER ALPHA WITH VARIA
1F70
          ; DISALLOWED # GREEK SMALL LETTER ALPHA WITH OXIA
          ; PVALID # GREEK SMALL LETTER EPSILON WITH VARIA
          ; DISALLOWED # GREEK SMALL LETTER EPSILON WITH OXIA
1F73
          ; PVALID # GREEK SMALL LETTER ETA WITH VARIA
1F74
          ; DISALLOWED # GREEK SMALL LETTER ETA WITH OXIA
1F75
          ; PVALID # GREEK SMALL LETTER IOTA WITH VARIA
1F76
         ; DISALLOWED # GREEK SMALL LETTER IOTA WITH OXIA
1F77
1F78
          ; PVALID # GREEK SMALL LETTER OMICRON WITH VARIA
          ; DISALLOWED # GREEK SMALL LETTER OMICRON WITH OXIA
1F79
          ; PVALID # GREEK SMALL LETTER UPSILON WITH VARIA
          ; DISALLOWED # GREEK SMALL LETTER UPSILON WITH OXIA
1F7B
          ; PVALID # GREEK SMALL LETTER OMEGA WITH VARIA
1F7C
           ; DISALLOWED # GREEK SMALL LETTER OMEGA WITH OXIA
1F7D
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>
         ; PVALID # GREEK SMALL LETTER ALPHA WITH PERISPOMENI
1FB7..1FC4 ; DISALLOWED # GREEK SMALL LETTER ALPHA WITH PERISPOMENI AN
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
     ; UNASSIGNED # <reserved>
1FF5
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..2069 ; UNASSIGNED # <reserved>..<reserved>
206A..2071 ; DISALLOWED # INHIBIT SYMMETRIC SWAPPING..SUPERSCRIPT LATI
2072..2073 ; UNASSIGNED # <reserved>..<reserved>
2074..208E ; DISALLOWED # SUPERSCRIPT FOUR..SUBSCRIPT RIGHT PARENTHESI
208F
          ; UNASSIGNED # <reserved>
2090..2094 ; DISALLOWED # LATIN SUBSCRIPT SMALL LETTER A..LATIN SUBSCR
2095..209F ; UNASSIGNED # <reserved>..<reserved>
20A0...20B8 ; DISALLOWED # EURO-CURRENCY SIGN..TENGE SIGN
20B9..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..2189 ; DISALLOWED # ROMAN NUMERAL SIX LATE FORM..VULGAR FRACTION
218A..218F ; UNASSIGNED # <reserved>..<reserved>
2190..23E8 ; DISALLOWED # LEFTWARDS ARROW..DECIMAL EXPONENT SYMBOL
23E9..23FF
          ; UNASSIGNED # <reserved>..<reserved>
2400..2426 ; DISALLOWED # SYMBOL FOR NULL..SYMBOL FOR SUBSTITUTE FORM
2427..243F ; UNASSIGNED # <reserved>..<reserved>
2440..244A ; DISALLOWED # OCR HOOK..OCR DOUBLE BACKSLASH
244B..245F ; UNASSIGNED # <reserved>..<reserved>
2460..26CD ; DISALLOWED # CIRCLED DIGIT ONE..DISABLED CAR
26CE ; UNASSIGNED # <reserved>
26CF..26E1 ; DISALLOWED # PICK..RESTRICTED LEFT ENTRY-2
           ; UNASSIGNED # <reserved>
26E2
           ; DISALLOWED # HEAVY CIRCLE WITH STROKE AND TWO DOTS ABOVE
26E3
26E4..26E7 ; UNASSIGNED # <reserved>..<reserved>
26E8..26FF ; DISALLOWED # BLACK CROSS ON SHIELD..WHITE FLAG WITH HORIZ
2700
          ; UNASSIGNED # <reserved>
2701...2704 ; DISALLOWED # UPPER BLADE SCISSORS..WHITE SCISSORS
2705 ; UNASSIGNED # <reserved>
2706..2709 ; DISALLOWED # TELEPHONE LOCATION SIGN..ENVELOPE
```

```
270A..270B ; UNASSIGNED # <reserved>..<reserved>
270C..2727 ; DISALLOWED # VICTORY HAND..WHITE FOUR POINTED STAR
2729..274B ; DISALLOWED # STRESS OUTLINED WHITE STAR..HEAVY EIGHT TEAR
274C
         ; UNASSIGNED # <reserved>
          ; DISALLOWED # SHADOWED WHITE CIRCLE
274D
      ; UNASSIGNED # <reserved>
274E
274F..2752 ; DISALLOWED # LOWER RIGHT DROP-SHADOWED WHITE SQUARE..UPPE
2753..2755 ; UNASSIGNED # <reserved>..<reserved>
2756..275E ; DISALLOWED # BLACK DIAMOND MINUS WHITE X..HEAVY DOUBLE CO
275F..2760 ; UNASSIGNED # <reserved>..<reserved>
2761...2794 ; DISALLOWED # CURVED STEM PARAGRAPH SIGN ORNAMENT...HEAVY W
2795..2797 ; UNASSIGNED # <reserved>..<reserved>
2798..27AF ; DISALLOWED # HEAVY SOUTH EAST ARROW..NOTCHED LOWER RIGHT-
          ; UNASSIGNED # <reserved>
27B0
27B1..27BE ; DISALLOWED # NOTCHED UPPER RIGHT-SHADOWED WHITE RIGHTWARD
         ; UNASSIGNED # <reserved>
27BF
27C0..27CA ; DISALLOWED # THREE DIMENSIONAL ANGLE..VERTICAL BAR WITH H
27CB ; UNASSIGNED # <reserved>
         ; DISALLOWED # LONG DIVISION
27CD..27CF ; UNASSIGNED # <reserved>..<reserved>
27D0..2B4C ; DISALLOWED # WHITE DIAMOND WITH CENTRED DOT..RIGHTWARDS A
2B4D..2B4F ; UNASSIGNED # <reserved>..<reserved>
2B50..2B59 ; DISALLOWED # WHITE MEDIUM STAR..HEAVY CIRCLED SALTIRE
2B5A..2BFF ; UNASSIGNED # <reserved>..<reserved>
2C00..2C2E ; DISALLOWED # GLAGOLITIC CAPITAL LETTER AZU..GLAGOLITIC CA
2C2F ; UNASSIGNED # <reserved>
2C30..2C5E ; PVALID # GLAGOLITIC SMALL LETTER AZU..GLAGOLITIC SMAL
2060
         ; DISALLOWED # LATIN CAPITAL LETTER L WITH DOUBLE BAR
                       # LATIN SMALL LETTER L WITH DOUBLE BAR
2C61
          ; PVALID
2C62..2C64 ; DISALLOWED # LATIN CAPITAL LETTER L WITH MIDDLE TILDE..LA
2C65..2C66 ; PVALID
                       # LATIN SMALL LETTER A WITH STROKE..LATIN SMAL
         ; DISALLOWED # LATIN CAPITAL LETTER H WITH DESCENDER
2C67
         ; PVALID # LATIN SMALL LETTER H WITH DESCENDER
2C68
2C69
         ; DISALLOWED # LATIN CAPITAL LETTER K WITH DESCENDER
2C6A
         ; PVALID # LATIN SMALL LETTER K WITH DESCENDER
          ; DISALLOWED # LATIN CAPITAL LETTER Z WITH DESCENDER
         ; PVALID # LATIN SMALL LETTER Z WITH DESCENDER
2C6C
2C6D..2C70 ; DISALLOWED # LATIN CAPITAL LETTER ALPHA..LATIN CAPITAL LE
          ; PVALID # LATIN SMALL LETTER V WITH RIGHT HOOK
2C71
          ; DISALLOWED # LATIN CAPITAL LETTER W WITH HOOK
2C72
2C73..2C74 ; PVALID # LATIN SMALL LETTER W WITH HOOK..LATIN SMALL
       ; DISALLOWED # LATIN CAPITAL LETTER HALF H
2C75
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
         ; DISALLOWED # COPTIC CAPITAL LETTER VIDA
2C82
```

0.700		
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
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC AIN
2CB4
         ; PVALID # COPTIC SMALL LETTER OLD COPTIC AIN
         ; DISALLOWED # COPTIC CAPITAL LETTER CRYPTOGRAMMIC EIE
2CB7
         ; PVALID # COPTIC SMALL LETTER CRYPTOGRAMMIC EIE
         ; DISALLOWED # COPTIC CAPITAL LETTER DIALECT-P KAPA
2CB8
         ; PVALID # COPTIC SMALL LETTER DIALECT-P KAPA
; DISALLOWED # COPTIC CAPITAL LETTER DIALECT-P NI
2CB9
2CBA
         ; PVALID # COPTIC SMALL LETTER DIALECT-P NI
2CBB
2CBC
         ; DISALLOWED # COPTIC CAPITAL LETTER CRYPTOGRAMMIC NI
         ; PVALID # COPTIC SMALL LETTER CRYPTOGRAMMIC NI
2CBD
2CBE
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC OOU
         ; PVALID # COPTIC SMALL LETTER OLD COPTIC OOU
2CBF
         ; DISALLOWED # COPTIC CAPITAL LETTER SAMPI
2CC0
                       # COPTIC SMALL LETTER SAMPI
          ; PVALID
2CC1
          ; DISALLOWED # COPTIC CAPITAL LETTER CROSSED SHEI
2CC2
          ; PVALID # COPTIC SMALL LETTER CROSSED SHEI
2CC3
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC SHEI
2CC4
         ; PVALID # COPTIC SMALL LETTER OLD COPTIC SHEI
2CC5
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC ESH
         ; PVALID # COPTIC SMALL LETTER OLD COPTIC ESH
         ; DISALLOWED # COPTIC CAPITAL LETTER AKHMIMIC KHEI
2CC8
         ; PVALID # COPTIC SMALL LETTER AKHMIMIC KHEI
2CC9
         ; DISALLOWED # COPTIC CAPITAL LETTER DIALECT-P HORI
2CCA
         ; PVALID # COPTIC SMALL LETTER DIALECT-P HORI
2CCB
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC HORI
2CCC
2CCD
         ; PVALID # COPTIC SMALL LETTER OLD COPTIC HORI
2CCE
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC HA
         ; PVALID # COPTIC SMALL LETTER OLD COPTIC HA
2CCF
         ; DISALLOWED # COPTIC CAPITAL LETTER L-SHAPED HA
2CD0
                       # COPTIC SMALL LETTER L-SHAPED HA
         ; PVALID
2CD1
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC HEI
2CD2
         ; PVALID
2CD3
                       # COPTIC SMALL LETTER OLD COPTIC HEI
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC HAT
2CD4
         ; PVALID # COPTIC SMALL LETTER OLD COPTIC HAT
2CD5
2CD6
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC GANGIA
         ; PVALID # COPTIC SMALL LETTER OLD COPTIC GANGIA
2CD7
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC DJA
         ; PVALID # COPTIC SMALL LETTER OLD COPTIC DJA
2CD9
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD COPTIC SHIMA
2CDA
         ; PVALID # COPTIC SMALL LETTER OLD COPTIC SHIMA
2CDB
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD NUBIAN SHIMA
2CDC
         ; PVALID # COPTIC SMALL LETTER OLD NUBIAN SHIMA
2CDD
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD NUBIAN NGI
2CDE
         ; PVALID # COPTIC SMALL LETTER OLD NUBIAN NGI
2CDF
         ; DISALLOWED # COPTIC CAPITAL LETTER OLD NUBIAN NYI
2CE0
         ; PVALID # COPTIC SMALL LETTER OLD NUBIAN NYI
2CE1
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
          ; DISALLOWED # COPTIC CAPITAL LETTER CRYPTOGRAMMIC GANGIA
2CED
2CEE..2CF1 ; PVALID # COPTIC SMALL LETTER CRYPTOGRAMMIC GANGIA..CO
2CF2..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..2D2F ; UNASSIGNED # <reserved>..<reserved>
2D30..2D65 ; PVALID # TIFINAGH LETTER YA..TIFINAGH LETTER YAZZ
2D66..2D6E ; UNASSIGNED # <reserved>..<reserved>
         ; DISALLOWED # TIFINAGH MODIFIER LETTER LABIALIZATION MARK
2D70..2D7F ; UNASSIGNED # <reserved>..<reserved>
2D80..2D96 ; PVALID
                       # ETHIOPIC SYLLABLE LOA..ETHIOPIC SYLLABLE GGW
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
           ; UNASSIGNED # <reserved>
2DDF
2DE0..2DFF ; PVALID
                        # COMBINING CYRILLIC LETTER BE..COMBINING CYRI
2E00..2E2E ; DISALLOWED # RIGHT ANGLE SUBSTITUTION MARKER..REVERSED QU
          ; PVALID
                       # VERTICAL TILDE
2E30..2E31 ; DISALLOWED # RING POINT..WORD SEPARATOR MIDDLE DOT
2E32..2E7F ; UNASSIGNED # <reserved>..<reserved>
2E80..2E99 ; DISALLOWED # CJK RADICAL REPEAT..CJK RADICAL RAP
          ; 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>
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..312D ; PVALID
                        # BOPOMOFO LETTER B..BOPOMOFO LETTER IH
312E..3130 ; UNASSIGNED # <reserved>..<reserved>
3131..318E ; DISALLOWED # HANGUL LETTER KIYEOK..HANGUL LETTER ARAEAE
3190...319F ; DISALLOWED # IDEOGRAPHIC ANNOTATION LINKING MARK...IDEOGRA
31A0..31B7 ; PVALID # BOPOMOFO LETTER BU..BOPOMOFO FINAL LETTER H
31B8..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 # PARENTHESIZED HANGUL KIYEOK..PARENTHESIZED K
3220...32FE ; DISALLOWED # PARENTHESIZED 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..9FCB ; PVALID
                       # <CJK Ideograph>..<CJK Ideograph>
9FCC..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>
A4DO..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>
      ; DISALLOWED # CYRILLIC CAPITAL LETTER ZEMLYA
A641
          ; PVALID # CYRILLIC SMALL LETTER ZEMLYA
          ; DISALLOWED # CYRILLIC CAPITAL LETTER DZELO
A642
```

```
A643
          ; PVALID # CYRILLIC SMALL LETTER DZELO
          ; DISALLOWED # CYRILLIC CAPITAL LETTER REVERSED DZE
A644
          ; PVALID # CYRILLIC SMALL LETTER REVERSED DZE
         ; DISALLOWED # CYRILLIC CAPITAL LETTER IOTA
A647
          ; PVALID # CYRILLIC SMALL LETTER IOTA
         ; DISALLOWED # CYRILLIC CAPITAL LETTER DJERV
A648
         ; PVALID # CYRILLIC SMALL LETTER DJERV
; DISALLOWED # CYRILLIC CAPITAL LETTER MONOGRAPH UK
A649
A64A
A64B
         ; PVALID # CYRILLIC SMALL LETTER MONOGRAPH UK
         ; DISALLOWED # CYRILLIC CAPITAL LETTER BROAD OMEGA
A64C
         ; PVALID # CYRILLIC SMALL LETTER BROAD OMEGA
A64D
         ; DISALLOWED # CYRILLIC CAPITAL LETTER NEUTRAL YER
A64F
          ; PVALID # CYRILLIC SMALL LETTER NEUTRAL YER
          ; DISALLOWED # CYRILLIC CAPITAL LETTER YERU WITH BACK YER
A650
          ; PVALID
                       # CYRILLIC SMALL LETTER YERU WITH BACK YER
A651
          ; DISALLOWED # CYRILLIC CAPITAL LETTER IOTIFIED YAT
A652
A653
          ; PVALID # CYRILLIC SMALL LETTER IOTIFIED YAT
         ; DISALLOWED # CYRILLIC CAPITAL LETTER REVERSED YU
A654
A655
         ; PVALID # CYRILLIC SMALL LETTER REVERSED YU
         ; DISALLOWED # CYRILLIC CAPITAL LETTER IOTIFIED A
         ; PVALID # CYRILLIC SMALL LETTER IOTIFIED A
A657
A658
         ; DISALLOWED # CYRILLIC CAPITAL LETTER CLOSED LITTLE YUS
         ; PVALID # CYRILLIC SMALL LETTER CLOSED LITTLE YUS
A659
         ; DISALLOWED # CYRILLIC CAPITAL LETTER BLENDED YUS
A65A
          ; PVALID # CYRILLIC SMALL LETTER BLENDED YUS
A65B
A65C
         ; DISALLOWED # CYRILLIC CAPITAL LETTER IOTIFIED CLOSED LITT
         ; PVALID # CYRILLIC SMALL LETTER IOTIFIED CLOSED LITTLE
A65D
         ; DISALLOWED # CYRILLIC CAPITAL LETTER YN
A65E
          ; PVALID # CYRILLIC SMALL LETTER YN
A660..A661 ; UNASSIGNED # <reserved>..<reserved>
A662
         ; DISALLOWED # CYRILLIC CAPITAL LETTER SOFT DE
                       # CYRILLIC SMALL LETTER SOFT DE
          ; PVALID
A663
          ; DISALLOWED # CYRILLIC CAPITAL LETTER SOFT EL
A664
          ; PVALID # CYRILLIC SMALL LETTER SOFT EL
A665
A666
         ; DISALLOWED # CYRILLIC CAPITAL LETTER SOFT EM
         ; PVALID # CYRILLIC SMALL LETTER SOFT EM
A667
         ; DISALLOWED # CYRILLIC CAPITAL LETTER MONOCULAR O
A668
         ; PVALID # CYRILLIC SMALL LETTER MONOCULAR O
A669
         ; DISALLOWED # CYRILLIC CAPITAL LETTER BINOCULAR O
A66A
          ; PVALID # CYRILLIC SMALL LETTER BINOCULAR O
A66B
      ; DISALLOWED # CYRILLIC CAPITAL LETTER DOUBLE MONOCULAR O
A66C
A66D..A66F ; PVALID # CYRILLIC SMALL LETTER DOUBLE MONOCULAR O..CO
A670..A673 ; DISALLOWED # COMBINING CYRILLIC TEN MILLIONS SIGN..SLAVON
A674..A67B ; UNASSIGNED # <reserved>..<reserved>
A67C..A67D ; PVALID # COMBINING CYRILLIC KAVYKA..COMBINING CYRILLI
A67E ; DISALLOWED # CYRILLIC KAVYKA
          ; PVALID # CYRILLIC PAYEROK
A67F
A680
          ; DISALLOWED # CYRILLIC CAPITAL LETTER DWE
```

```
A681
          ; PVALID
                       # CYRILLIC SMALL LETTER DWE
          ; DISALLOWED # CYRILLIC CAPITAL LETTER DZWE
A682
          ; PVALID # CYRILLIC SMALL LETTER DZWE
          ; DISALLOWED # CYRILLIC CAPITAL LETTER ZHWE
A685
          ; PVALID # CYRILLIC SMALL LETTER ZHWE
          ; DISALLOWED # CYRILLIC CAPITAL LETTER CCHE
A686
          ; PVALID # CYRILLIC SMALL LETTER CCHE
; DISALLOWED # CYRILLIC CAPITAL LETTER DZZE
A687
A688
A689
          ; PVALID # CYRILLIC SMALL LETTER DZZE
A68A
          ; DISALLOWED # CYRILLIC CAPITAL LETTER TE WITH MIDDLE HOOK
          ; PVALID # CYRILLIC SMALL LETTER TE WITH MIDDLE HOOK
A68B
A68C
          ; DISALLOWED # CYRILLIC CAPITAL LETTER TWE
          ; PVALID # CYRILLIC SMALL LETTER TWE
A68D
          ; DISALLOWED # CYRILLIC CAPITAL LETTER TSWE
A68E
                       # CYRILLIC SMALL LETTER TSWE
          ; PVALID
A68F
          ; DISALLOWED # CYRILLIC CAPITAL LETTER TSSE
A690
A691
          ; PVALID # CYRILLIC SMALL LETTER TSSE
          ; DISALLOWED # CYRILLIC CAPITAL LETTER TCHE
A692
A693
          ; PVALID # CYRILLIC SMALL LETTER TCHE
          ; DISALLOWED # CYRILLIC CAPITAL LETTER HWE
          ; PVALID # CYRILLIC SMALL LETTER HWE
A695
          ; DISALLOWED # CYRILLIC CAPITAL LETTER SHWE
A696
A697 ; PVALID # CYRILLIC SMALL LETTER SHWE
A698..A69F ; UNASSIGNED # <reserved>..<reserved>
A6A0..A6E5 ; PVALID # BAMUM LETTER A..BAMUM LETTER KI
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
          ; PVALID # LATIN SMALL LETTER HENG
A727
          ; DISALLOWED # LATIN CAPITAL LETTER TZ
A728
          ; PVALID # LATIN SMALL LETTER TZ
A729
          ; DISALLOWED # LATIN CAPITAL LETTER TRESILLO
A72A
          ; PVALID # LATIN SMALL LETTER TRESILLO
A72B
          ; DISALLOWED # LATIN CAPITAL LETTER CUATRILLO
A72C
      ; PVALID # LATIN SMALL LETTER CUATRILLO
; DISALLOWED # LATIN CAPITAL LETTER CUATRILLO WITH COMMA
A72D
A72E
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
```

```
; PVALID
A735
                      # LATIN SMALL LETTER AO
         ; DISALLOWED # LATIN CAPITAL LETTER AU
A736
         ; PVALID # LATIN SMALL LETTER AU
         ; DISALLOWED # LATIN CAPITAL LETTER AV
A738
A739
         ; PVALID # LATIN SMALL LETTER AV
         ; DISALLOWED # LATIN CAPITAL LETTER AV WITH HORIZONTAL BAR
A73A
         A73B
A73C
A73D
         ; PVALID # LATIN SMALL LETTER AY
A73E
         ; DISALLOWED # LATIN CAPITAL LETTER REVERSED C WITH DOT
         ; PVALID # LATIN SMALL LETTER REVERSED C WITH DOT
A73F
         ; DISALLOWED # LATIN CAPITAL LETTER K WITH STROKE
A741
         ; PVALID # LATIN SMALL LETTER K WITH STROKE
         ; DISALLOWED # LATIN CAPITAL LETTER K WITH DIAGONAL STROKE
A742
         ; PVALID
                      # LATIN SMALL LETTER K WITH DIAGONAL STROKE
A743
         ; DISALLOWED # LATIN CAPITAL LETTER K WITH STROKE AND DIAGO
A744
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
         ; PVALID # LATIN SMALL LETTER L WITH HIGH STROKE
         ; DISALLOWED # LATIN CAPITAL LETTER O WITH LONG STROKE OVER
A74A
         ; PVALID # LATIN SMALL LETTER O WITH LONG STROKE OVERLA
A74B
         ; DISALLOWED # LATIN CAPITAL LETTER O WITH LOOP
A74C
         ; PVALID # LATIN SMALL LETTER O WITH LOOP
A74D
A74E
         ; DISALLOWED # LATIN CAPITAL LETTER OO
A74F
         ; PVALID # LATIN SMALL LETTER OO
A750
         ; DISALLOWED # LATIN CAPITAL LETTER P WITH STROKE THROUGH D
         ; PVALID # LATIN SMALL LETTER P WITH STROKE THROUGH DES
         ; DISALLOWED # LATIN CAPITAL LETTER P WITH FLOURISH
         ; PVALID # LATIN SMALL LETTER P WITH FLOURISH
A753
         ; DISALLOWED # LATIN CAPITAL LETTER P WITH SQUIRREL TAIL
A754
         ; PVALID # LATIN SMALL LETTER P WITH SQUIRREL TAIL
A755
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
         ; PVALID # LATIN SMALL LETTER Q WITH DIAGONAL STROKE
A759
         ; DISALLOWED # LATIN CAPITAL LETTER R ROTUNDA
A75A
         ; PVALID # LATIN SMALL LETTER R ROTUNDA
A75B
         ; DISALLOWED # LATIN CAPITAL LETTER RUM ROTUNDA
A75C
         ; PVALID # LATIN SMALL LETTER RUM ROTUNDA
A75D
         ; DISALLOWED # LATIN CAPITAL LETTER V WITH DIAGONAL STROKE
A75E
         ; PVALID # LATIN SMALL LETTER V WITH DIAGONAL STROKE
A75F
A760
         ; DISALLOWED # LATIN CAPITAL LETTER VY
         ; PVALID # LATIN SMALL LETTER VY
A761
         ; DISALLOWED # LATIN CAPITAL LETTER VISIGOTHIC Z
         ; PVALID # LATIN SMALL LETTER VISIGOTHIC Z
A763
A764
         ; DISALLOWED # LATIN CAPITAL LETTER THORN WITH STROKE
```

```
; PVALID
A765
                        # LATIN SMALL LETTER THORN WITH STROKE
          ; DISALLOWED # LATIN CAPITAL LETTER THORN WITH STROKE THROU
A766
          ; PVALID # LATIN SMALL LETTER THORN WITH STROKE THROUGH
          ; DISALLOWED # LATIN CAPITAL LETTER VEND
A768
A769
          ; PVALID # LATIN SMALL LETTER VEND
          ; DISALLOWED # LATIN CAPITAL LETTER ET
A76A
          ; PVALID # LATIN SMALL LETTER ET ; DISALLOWED # LATIN CAPITAL LETTER IS
A76B
A76C
          ; PVALID # LATIN SMALL LETTER IS
A76D
          ; DISALLOWED # LATIN CAPITAL LETTER CON
A76E
          ; PVALID # LATIN SMALL LETTER CON
A76F
          ; DISALLOWED # MODIFIER LETTER US
A771..A778 ; PVALID # LATIN SMALL LETTER DUM..LATIN SMALL LETTER U
          ; DISALLOWED # LATIN CAPITAL LETTER INSULAR D
A779
           ; PVALID
                        # LATIN SMALL LETTER INSULAR D
A77A
           ; DISALLOWED # LATIN CAPITAL LETTER INSULAR F
А77В
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
          ; PVALID # LATIN SMALL LETTER TURNED L
A781
          ; DISALLOWED # LATIN CAPITAL LETTER INSULAR R
A782
          ; PVALID # LATIN SMALL LETTER INSULAR R
A783
          ; DISALLOWED # LATIN CAPITAL LETTER INSULAR S
A784
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..A7FA ; UNASSIGNED # <reserved>..<reserved>
A7FB..A827 ; PVALID # LATIN EPIGRAPHIC LETTER REVERSED F..SYLOTI N
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 INDIC
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..A8C4 ; PVALID # SAURASHTRA SIGN ANUSVARA..SAURASHTRA SIGN VI
A8C5..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..A8FF ; UNASSIGNED # <reserved>..<reserved>
A900..A92D ; PVALID # KAYAH LI DIGIT ZERO..KAYAH LI TONE CALYA PLO
```

```
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
           ; UNASSIGNED # <reserved>
A9CE
A9CF..A9D9 ; PVALID # JAVANESE PANGRANGKEP..JAVANESE DIGIT NINE
A9DA..A9DD ; UNASSIGNED # <reserved>..<reserved>
A9DE..A9DF ; DISALLOWED # JAVANESE PADA TIRTA TUMETES..JAVANESE PADA I
A9E0..A9FF ; UNASSIGNED # <reserved>..<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..AA7B ; PVALID # MYANMAR LETTER AITON RA..MYANMAR SIGN PAO KA
AA7C..AA7F ; UNASSIGNED # <reserved>..<reserved>
AA80..AAC2 ; PVALID # TAI VIET LETTER LOW KO..TAI VIET TONE MAI SO
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
AAEO...ABBF ; UNASSIGNED # <reserved>..<reserved>
ABCO..ABEA ; PVALID # MEETEI MAYEK LETTER KOK..MEETEI MAYEK VOWEL
          ; 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
          ; PVALID # CJK COMPATIBILITY IDEOGRAPH-FA21
FA21
          ; 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..FA2D ; DISALLOWED # CJK COMPATIBILITY IDEOGRAPH-FA2A..CJK COMPAT
FA2E..FA2F ; UNASSIGNED # <reserved>..<reserved>
FA30..FA6D ; DISALLOWED # CJK COMPATIBILITY IDEOGRAPH-FA30..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>
          ; DISALLOWED # HEBREW LETTER YOD WITH HIRIO
FB1D
          ; PVALID # HEBREW POINT JUDEO-SPANISH VARIKA
FB1E
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..FBB1 ; DISALLOWED # HEBREW LETTER TSADI WITH DAGESH..ARABIC LETT
FBB2..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
FDC8..FDCF ; UNASSIGNED # <reserved>..<reserved>
FDDO..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..FE26 ; PVALID # COMBINING LIGATURE LEFT HALF..COMBINING CONJ
FE27..FE2F ; UNASSIGNED # <reserved>..<reserved>
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
          ; DISALLOWED # ARABIC KASRATAN ISOLATED FORM
          ; UNASSIGNED # <reserved>
FE75
FE76..FEFC ; DISALLOWED # ARABIC FATHA ISOLATED FORM..ARABIC LIGATURE
FEFD..FEFE ; UNASSIGNED # <reserved>..<reserved>
FEFF
FF00
          ; DISALLOWED # ZERO WIDTH NO-BREAK SPACE
           ; 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>
FFEO..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
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>
                        # LINEAR B SYLLABLE B020 ZO..LINEAR B SYLLABLE
1003F...1004D; PVALID
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 IDEOGRA
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...1018A; DISALLOWED # AEGEAN WEIGHT BASE UNIT..GREEK ZERO SIGN
1018B..1018F; UNASSIGNED # <reserved>..<reserved>
10190...1019B; DISALLOWED # ROMAN SEXTANS SIGN..ROMAN CENTURIAL SIGN
1019C..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..102FF; UNASSIGNED # <reserved>..<reserved>
10300..1031E; PVALID # OLD ITALIC LETTER A..OLD ITALIC LETTER UU
1031F ; UNASSIGNED # <reserved>
10320...10323; DISALLOWED # OLD ITALIC NUMERAL ONE..OLD ITALIC NUMERAL F
10324..1032F; UNASSIGNED # <reserved>..<reserved>
10330...10340; PVALID # GOTHIC LETTER AHSA..GOTHIC LETTER PAIRTHRA
10341 ; DISALLOWED # GOTHIC LETTER NINETY
10342...10349; PVALID # GOTHIC LETTER RAIDA..GOTHIC LETTER OTHAL
1034A ; DISALLOWED # GOTHIC LETTER NINE HUNDRED
1034B..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..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
          ; UNASSIGNED # <reserved>
10857..1085F; DISALLOWED # IMPERIAL ARAMAIC SECTION SIGN..IMPERIAL ARAM
10860..108FF; UNASSIGNED # <reserved>..<reserved>
10900..10915; PVALID # PHOENICIAN LETTER ALF..PHOENICIAN LETTER TAU
10916...1091B; DISALLOWED # PHOENICIAN NUMBER ONE...PHOENICIAN NUMBER THR
1091C..1091E; UNASSIGNED # <reserved>..<reserved>
      ; DISALLOWED # PHOENICIAN WORD SEPARATOR
1091F
10920..10939; PVALID # LYDIAN LETTER A..LYDIAN LETTER C
1093A..1093E; UNASSIGNED # <reserved>..<reserved>
1093F ; DISALLOWED # LYDIAN TRIANGULAR MARK
10940..109FF; UNASSIGNED # <reserved>..<reserved>
```

```
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...10A33; PVALID # KHAROSHTHI LETTER NYA..KHAROSHTHI LETTER TTT
10A34..10A37; UNASSIGNED # <reserved>..<reserved>
10A38..10A3A; PVALID # KHAROSHTHI SIGN BAR ABOVE..KHAROSHTHI SIGN D
10A3B..10A3E; UNASSIGNED # <reserved>..<reserved>
10A3F ; PVALID # KHAROSHTHI VIRAMA
10A40...10A47; DISALLOWED # KHAROSHTHI DIGIT ONE...KHAROSHTHI NUMBER ONE
10A48..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..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..10BFF; UNASSIGNED # <reserved>..<reserved>
                        # OLD TURKIC LETTER ORKHON A..OLD TURKIC LETTE
10C00..10C48; PVALID
10C49..10E5F; UNASSIGNED # <reserved>..<reserved>
10E60..10E7E; DISALLOWED # RUMI DIGIT ONE..RUMI FRACTION TWO THIRDS
10E7F...1107F; UNASSIGNED # <reserved>...<reserved>
11080...110BA; PVALID # KAITHI SIGN CANDRABINDU...KAITHI SIGN NUKTA
110BB..110C1; DISALLOWED # KAITHI ABBREVIATION SIGN..KAITHI DOUBLE DAND
110C2..11FFF; UNASSIGNED # <reserved>..<reserved>
12000..1236E; PVALID
                    # CUNEIFORM SIGN A..CUNEIFORM SIGN ZUM
1236F...123FF; UNASSIGNED # <reserved>...<reserved>
12400..12462; DISALLOWED # CUNEIFORM NUMERIC SIGN TWO ASH..CUNEIFORM NU
12463..1246F; UNASSIGNED # <reserved>..<reserved>
12470...12473; DISALLOWED # CUNEIFORM PUNCTUATION SIGN OLD ASSYRIAN WORD
12474...12FFF; UNASSIGNED # <reserved>...<reserved>
13000...1342E; PVALID # EGYPTIAN HIEROGLYPH A001..EGYPTIAN HIEROGLYP
1342F...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..1D1DD; DISALLOWED # MUSICAL SYMBOL MULTIPLE MEASURE REST..MUSICA
1D1DE..1D1FF; UNASSIGNED # <reserved>..<reserved>
1D200..1D245; DISALLOWED # GREEK VOCAL NOTATION SYMBOL-1..GREEK MUSICAL
1D246..1D2FF; UNASSIGNED # <reserved>..<reserved>
1D300..1D356; DISALLOWED # MONOGRAM FOR EARTH..TETRAGRAM FOR FOSTERING
1D357..1D35F; UNASSIGNED # <reserved>..<reserved>
1D360..1D371; DISALLOWED # COUNTING ROD UNIT DIGIT ONE..COUNTING ROD TE
1D372..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>
          ; DISALLOWED # MATHEMATICAL SCRIPT SMALL F
1D4BB
     ; UNASSIGNED # <reserved>
1D4BC
1D4BD..1D4C3; DISALLOWED # MATHEMATICAL SCRIPT SMALL H..MATHEMATICAL SC
1D4C4 ; UNASSIGNED # <reserved>
1D4C5..1D5O5; DISALLOWED # MATHEMATICAL SCRIPT SMALL P..MATHEMATICAL FR
1D507..1D50A; DISALLOWED # MATHEMATICAL FRAKTUR CAPITAL D..MATHEMATICAL
1D50B..1D50C; UNASSIGNED # <reserved>..<reserved>
1D50D..1D514; DISALLOWED # MATHEMATICAL FRAKTUR CAPITAL J..MATHEMATICAL
1D516..1D51C; DISALLOWED # MATHEMATICAL FRAKTUR CAPITAL S..MATHEMATICAL
1D51E..1D539; DISALLOWED # MATHEMATICAL FRAKTUR SMALL A..MATHEMATICAL D
1D53B..1D53E; DISALLOWED # MATHEMATICAL DOUBLE-STRUCK CAPITAL D..MATHEM
1D540..1D544; DISALLOWED # MATHEMATICAL DOUBLE-STRUCK CAPITAL I..MATHEM
1D545 ; UNASSIGNED # <reserved>
       ; 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..1D7FF; DISALLOWED # MATHEMATICAL BOLD DIGIT ZERO..MATHEMATICAL M
1D800..1EFFF; UNASSIGNED # <reserved>..<reserved>
1F000..1F02B; DISALLOWED # MAHJONG TILE EAST WIND..MAHJONG TILE BACK
1F02C..1F02F; UNASSIGNED # <reserved>..<reserved>
1F030..1F093; DISALLOWED # DOMINO TILE HORIZONTAL BACK..DOMINO TILE VER
1F094..1F0FF; UNASSIGNED # <reserved>..<reserved>
1F100..1F10A; DISALLOWED # DIGIT ZERO FULL STOP..DIGIT NINE COMMA
1F10B..1F10F; UNASSIGNED # <reserved>..<reserved>
1F110..1F12E; DISALLOWED # PARENTHESIZED LATIN CAPITAL LETTER A..CIRCLE
1F12F..1F130; UNASSIGNED # <reserved>..<reserved>
1F131 ; DISALLOWED # SQUARED LATIN CAPITAL LETTER B
1F132..1F13C; UNASSIGNED # <reserved>..<reserved>
1F13D ; DISALLOWED # SQUARED LATIN CAPITAL LETTER N
1F13E
          ; UNASSIGNED # <reserved>
1F13F
          ; DISALLOWED # SQUARED LATIN CAPITAL LETTER P
1F140..1F141; UNASSIGNED # <reserved>..<reserved>
1F142 ; DISALLOWED # SQUARED LATIN CAPITAL LETTER S
1F143..1F145; UNASSIGNED # <reserved>..<reserved>
1F146 ; DISALLOWED # SQUARED LATIN CAPITAL LETTER W
1F147..1F149; UNASSIGNED # <reserved>..<reserved>
1F14A..1F14E; DISALLOWED # SQUARED HV..SQUARED PPV
1F14F..1F156; UNASSIGNED # <reserved>..<reserved>
1F157 ; DISALLOWED # NEGATIVE CIRCLED LATIN CAPITAL LETTER H
1F158..1F15E; UNASSIGNED # <reserved>..<reserved>
1F15F ; DISALLOWED # NEGATIVE CIRCLED LATIN CAPITAL LETTER P
1F160..1F178; UNASSIGNED # <reserved>..<reserved>
1F179 ; DISALLOWED # NEGATIVE SQUARED LATIN CAPITAL LETTER J
1F17A ; UNASSIGNED # <reserved>
1F17B..1F17C; DISALLOWED # NEGATIVE SQUARED LATIN CAPITAL LETTER L..NEG
1F17D..1F17E; UNASSIGNED # <reserved>..<reserved>
1F17F ; DISALLOWED # NEGATIVE SQUARED LATIN CAPITAL LETTER P
1F180..1F189; UNASSIGNED # <reserved>..<reserved>
1F18A..1F18D; DISALLOWED # CROSSED NEGATIVE SQUARED LATIN CAPITAL LETTE
1F18E..1F18F; UNASSIGNED # <reserved>..<reserved>
1F190 ; DISALLOWED # SQUARE DJ
1F191..1F1FF; UNASSIGNED # <reserved>..<reserved>
1F200 ; DISALLOWED # SQUARE HIRAGANA HOKA
1F201..1F20F; UNASSIGNED # <reserved>..<reserved>
1F210..1F231; DISALLOWED # SQUARED CJK UNIFIED IDEOGRAPH-624B..SQUARED
1F232..1F23F; UNASSIGNED # <reserved>..<reserved>
1F240..1F248; DISALLOWED # TORTOISE SHELL BRACKETED CJK UNIFIED IDEOGRA
1F249..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..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>
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..EFFFD; UNASSIGNED # <reserved>..<reserved>
EFFFE..10FFFF; DISALLOWED # <noncharacter>...<noncharacter>
```

# 8. References

# 8.1. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.
- [Unicode] The Unicode Consortium, "The Unicode Standard, Version 5.0", 2007. Boston, MA, USA: Addison-Wesley. ISBN 0-321-48091-0. This printed reference has now been updated online to reflect additional code points. For code points, the reference at the time this document was published is to Unicode 5.2.
- [Unicode52] The Unicode Consortium. The Unicode Standard, Version 5.2.0, defined by: "The Unicode Standard, Version 5.2.0", (Mountain View, CA: The Unicode Consortium, 2009. ISBN 978-1-936213-00-9). <a href="http://www.unicode.org/versions/Unicode5.2.0/">http://www.unicode.org/versions/Unicode5.2.0/</a>.

# 8.2. Informative References

# [DerivedCoreProperties]

"DerivedCoreProperties-5.2.0.txt", Unicode Character Database, August 2009, <a href="http://unicode.org/Public/5.2.0/ucd/DerivedCoreProperties.txt">http://unicode.org/Public/5.2.0/ucd/DerivedCoreProperties.txt</a>.

- [RFC3454] Hoffman, P. and M. Blanchet, "Preparation of Internationalized Strings ("stringprep")", RFC 3454, December 2002.
- [RFC3491] Hoffman, P. and M. Blanchet, "Nameprep: A Stringprep Profile for Internationalized Domain Names (IDN)", RFC 3491, March 2003.
- [RFC4690] Klensin, J., Faltstrom, P., Karp, C., and IAB, "Review and Recommendations for Internationalized Domain Names (IDNs)", RFC 4690, September 2006.

- [RFC5226] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", BCP 26, RFC 5226, May 2008.
- [RFC5890] Klensin, J., "Internationalized Domain Names for Applications (IDNA): Definitions and Document Framework", RFC 5890, August 2010.
- [RFC5891] Klensin, J., "Internationalized Domain Names in Applications (IDNA): Protocol", RFC 5891, August 2010.
- [RFC5893] Alvestrand, H., Ed. and C. Karp, "Right-to-Left Scripts for Internationalized Domain Names for Applications (IDNA)", RFC 5893, August 2010.
- [RFC5894] Klensin, J., "Internationalized Domain Names for Applications (IDNA): Background, Explanation, and Rationale", RFC 5894, August 2010.

# Author's Address

Patrik Faltstrom (editor) Cisco

EMail: paf@cisco.com