Representing Tifinagh in Unicode - Unicode Technical Note (proposed draft)

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This is a work in progress. Additional information on language usage is most welcome.

Introduction

Tifinagh is encoded in the U+2D30..U+2D7F block of Unicode.

This document aims to give guidance on the encoding of *modern orthographies* using the Tifinagh script (no attempt is made to document all the variants used in ancient Tifinagh orthographies). Since the script is used for a number of orthographies covering different languages, the development of this document is ongoing. It

aims to bring together the results of consensus between experts in the encoding of the various orthographies using the script. In terms of the Unicode standard, this document is purely informative since it is concerned with issues not covered by that standard.

This document also aims to give guidance on font development for the different *modern* orthographies and languages.

To Add

- Perhaps include transliteration, where known.

- Sort orders, where known.

The Unicode Model

Basic Consonants

The basic consonants are relatively obvious and can be discovered by viewing the Unicode charts.

Design: There can be some design issues related to "dotted" characters especially when the design is similar. When these characters appear together, they can be difficult to read unless care is taken to change the size or spacing of the dots: ⁙⁛⁙⁛⁙. The Neo-Tifinagh design does not have as significant an issue: o⁛⁙⁛⁙o

Vowels

Vowels are not as clearly defined. Neo-Tifinagh does not have any special vowels. However, different traditional Tifinagh orthographies may demonstrate vowels using combining marks in different ways. These vowels are primarily used as an aid in learning to read.

SIL-Niger

Vowels						
Tfng	ⵀ̂	ⵀ̆	ⵢ̣	ⵢ̂	ⵓ̂	ⵧ̂
USV	2D30 + 0302	2D30 + 0306	2D62 + 0323	2D62 + 0302	2D53 + 0302	2D67 + 0302

APT

Vowels						
Tfng	o	<	ⵢ	--	ⵦ̂	ⵧ̂
USV	2D30	2D66	2D62	2D67	2D66 0302	2D67 0302

Hawad
Positioning of U+0308 is incorrect in most fonts

Vowels					
Tfng	ⵝ̇	ⵝ̈	ⵝ	ⵉ̇	ⵉ̈
USV	2D5D 0307	2D5D 0308	2D5D	2D49 0307	2D49 0308

Punctuation

Western-style punctuation signs are used in Tifinagh. Words are separated by a space.

A few languages use a special separator mark which has been encoded in the Tifinagh block. The languages using the separator mark will be indicated in the section on that language. Otherwise, punctuation is not listed in each section.

Punctuation								
Tfng	.	,	;	:	?	!	…	⵰
USV	002E	002C	003B	003A	003F	0021	2026	2D70

Digits

There does not seem to be any common way to write numbers using Tifinagh script. The IRCAM Tifinagh uses the usual Western-style digits.

Variant Glyphs

This chart includes a sampling of some of the possible glyph variants in current use. It does not demonstrate all of the possible historical glyph variants. In addition, because of the issues relating to Writing Direction, there are variants which are mirrored or turned for right to left text or even for vertical text. Those variants are not included here.

Because these glyphs are taken from various fonts, the height of a particular glyph may not be significant.

	2D3	2D4	2D5	2D6	2D7
0	o (• ˙)	ⵀ (⊓ ⫫)	‡ (⵰ ‡ ⵯ)	Δ	⵰
1	ⵁ (⊟ ⵁ)	ⵑ	!	ⵡ	
2	⊕	ⵒ	⵲	ⵢ (⵲ ⊓)	
3	ⵃ (ⵄ)	ⵓ	⵳ (⵴ ⵷)	ⵣ (⵳ ⵫)	
4	ⵄ (⵨ ⵥ)	ⵔ (⌒)	O (□)	ⵤ	
5	ⵅ	ⵕ	Q (Ọ)	ⵥ (⵳ ⵥ)	
6	ⵆ (ⵊ)	ⵖ	⵶	<	
7	Λ	ⵗ	⵷	-- (--)	
8	V (∪)	•••	⵸		
9	E (Ɛ)	ⵙ (Σ)	⵹ (□)		
A	Ǝ	ⵚ	⵺ (⵰ Ȯ)		
B	ⵋ (÷ Ͻ)	ⵛ (ⵋ ⵯ)	⵻ (⵻ ⵯ ⵥ)		
C	ⵌ (⨆⵿ ⵌ)	ⵜ	⵼ (⵿)		
D	ⵍ	ⵝ (‖ ⵝ ⵝ)	⵽		
E	ⵎ	ⵞ	⵾ (⵾)		
F	ⵏ	ⵟ	⵿ (Ꞙ ⵣ)	˵	⵿⵿⵿

Bi- Tri-consonants

Bi-consonants are additional letterforms used in the Tifinagh script, particularly for Tuareg, to represent a consonant cluster—a sequence of two consonants without an intervening vowel. These bi-consonants, sometimes also referred to as bigraphs, are not directly encoded as single characters in the Unicode Standard. Instead, they are represented as a sequence of the two consonant letters, separated either by U+200D ZERO WIDTH JOINER or by U+2D7F TIFINAGH CONSONANT JOINER.

When a bi-consonant is considered obligatory in text, it is represented by the two consonant letters, with U+2D7F TIFINAGH CONSONANT JOINER inserted between them. This use of U+2D7F is comparable in function to the use of U+0652 ARABIC SUKUN to indicate the absence of a vowel after a consonant in the Arabic script. However, instead of appearing as a visible mark in the text, U+2D7F TIFINAGH CONSONANT JOINER indicates the presence of a bi-consonant, which should then be rendered with a preformed glyph for the sequence.

Some of the bi-consonants have ascenders. These should ascend above the normal height of the Tifinagh consonants.

This chart does not demonstrate all of the possible historical glyph variants.

USV	2D7F between characters	→	Glyph (2D7F)	Glyph (ZWJ)
1 2D31 2D5C	⵱ +....+ +	→	⵱�⵱	⵱ⵜ
2 2D33 2D5C	⵳ +....+ +	→	⵳ⵜ	⵳ⵜ
3 2D34 2D5C	⵴ +....+ +	→	⵴ⵜ	
4 2D36 2D5C	⵶ +....+ +	→	⵶ⵜ	
5 2D3C 2D5C	⵼ +....+ +	→	⵼⵼ ⵼ ⵼ⵜ ⵼ⵜ ⵼⵼ ⵼⵼	⵼⵼
6 2D40 2D5C	ⵀ +....+ +	→	ⵀⵜ	ⵀⵜ
7 2D49 2D5C	ⵉ +....+ +	→	ⵉⵜ	
8 2D4B 2D5C	ⵋ +....+ +	→	ⵋⵜ	
9 2D4C 2D5C	ⵌ +....+ +	→	ⵌ ⵌⵜ ⵌⵜ	
10 2D4D 2D3E	ⵍ +....+ ⵾	→	ⵍⵍ	
11 2D4D 2D5C	ⵍ +....+ +	→	ⵍⵜ ⵍⵜ ⵍⵜ ⵍⵜ ⵝ	
12 2D4E 2D40	ⵎ +....+ ⵀ	→	ⵎⵀ ⵱	
13 2D4E 2D59	ⵎ +....+ ⵙ	→	ⵎⵙ	
14 2D4E 2D5C	ⵎ +....+ +	→	ⵎⵜ ⵎⵜ ⵎⵜ ⵎⵜ ⵎⵜ ⵎⵜ	
15 2D4F 2D31	ⵏ +....+ ⵱	→	⵱	
16 2D4F 2D34	ⵏ +....+ ⵴	→	⵴⵴	
17 2D4F 2D36	ⵏ +....+ ⵶	→	⵶ ⵶ ⵶	
18 2D4F 2D37	ⵏ +....+ ⵷	→	⵷ⵝ	
19 2D4F 2D38	ⵏ +....+ ⵸	→	⵸⵸	
20 2D4F 2D39	ⵏ +....+ ⵹	→	⵹ ⵍ	

USV	2D7F between characters	→	Glyph (2D7F)	Glyph (ZWJ)
21 2D4F 2D3C	ⵏ +....+ ⵼	→	⵼ ⵼ ⵼ ⵼	
22 2D4F 2D3C 2D5C	ⵏ +....+ ⵼ +....+ ✝	→	⵼	
23 2D4F 2D3E	ⵏ +....+ ⵾	→	ⵏ̤ ⵏ̂	
24 2D4F 2D40	ⵏ +....+ ⵀ	→	ⵀ	
25 2D4F 2D4C	ⵏ +....+ ⵌ	→	�ⵌ ⵌ	
26 2D4F 2D57	ⵏ +....+ ⵗ	→	ⵏ.	
27 2D4F 2D59	ⵏ +....+ ⵙ	→	ⵙ ⵙ	
28 2D4F 2D5B	ⵏ +....+ ⵛ	→	ⵛ	
29 2D4F 2D5C	ⵏ +....+ ✝	→	ⵟ ⵟ ⵟ	
30 2D4F 2D5E	ⵏ +....+ ⵞ	→	ⵞ	
31 2D4F 2D63	ⵏ +....+ ⵣ	→	ⵣ	
32 2D4F 2D64	ⵏ +....+ ⵤ	→	ⵤ	
33 2D53 2D5C	ⵓ +....+ ✝	→	ⵟ ⵟ ⵟ ⵟ	
34 2D54 2D31	ⵔ +....+ ⵁ	→	ⵔ	
35 2D54 2D36	ⵔ +....+ ⵖ	→	ⵖ	
36 2D54 2D37	ⵔ +....+ ⵷	→	ⵔ	
37 2D54 2D3D	ⵔ +....+ ⵽	→	ⵔ	
38 2D54 2D3E	ⵔ +....+ ⵾	→	ⵔ̈ ⵔ̈	
39 2D54 2D4F	ⵔ +....+ ⵏ	→	ⵔ ⵔ	
40 2D54 2D59	ⵔ +....+ ⵙ	→	ⵔ	

USV	2D7F between characters	→	Glyph (2D7F)	Glyph (ZWJ)
41 2D54 2D5C	O +....+ +	→	O+ ⊕ ⊕	
42 2D56 2D5C	Ⴠ +....+ +	→	ⵗ	
43 2D59 2D3E	⊙ +....+ ∴	→	Ȯ	
44 2D59 2D4F	⊙ +....+ I	→	ⵡ	
45 2D59 2D5C	⊙ +....+ +	→	⊙+ ⊕ ⊕ ⊕	
46 2D5B 2D3E	ⵛ +....+ ∴	→	ⵛ̇ ⵛ̣ ⵛ̊ ⵛ̥	
47 2D5B 2D4F	ⵛ +....+ I	→	ⵛ	
48 2D5B 2D5C	ⵛ +....+ +	→	ⵛ+ ⵛ+ ⵛ	
49 2D5C 2D59	+ +....+ ⊙	→	Ⱶ	
50 2D61 2D5C	Ц +....+ +	→	ⵢ	
51 2D62 2D5C	Ƨ +....+ +	→	ⵢ ⵢ	
52 2D63 2D5C	ⵝ +....+ +	→	ⵝ	
53 2D65 2D5C	ⵝ +....+ +	→	ⵕ	

This should not be considered an exhaustive list of all bi-consonants used for Tifinagh, nor are the shapes of the bi-consonants necessarily definitive. There are a wide range of glyph variants.

Bi-consonants will only be included in each language section when there are known variants.

Contextual Shaping

Contextual Shaping						
‖	+	‖	+	‖	→	‖ˡˡ‖ or ‖⟍‖
2D4D		2D4D		2D4D		
‖	+	‖	+	‖	→	‖ˡ‖ or ‖\‖
2D4D		2D4F		2D4D		
‖	+	‖	+	‖	→	‖ˡˡ‖ or ‖⟍‖
2D4F		2D4D		2D4F		
‖	+	‖	+	‖	→	‖ˡ‖ or ‖\‖
2D4F		2D4F		2D4F		

Contextual shaping will only be included in each language section when there is known shaping.

Writing Direction

Historically, in early inscriptions, Tifinagh was written horizontally from left to right, from right to left, vertically (bottom to top, top to bottom) or even in boustrophedon. However, the most frequently used directionality in the modern-day Tifinagh script is horizontal from left to right.

Given that left-to-right directionality seems to be the most widely used one in the Maghreb and in Niger, the strong directionality of Tifinagh is defined to be left-to-right. If needed, it is possible to explicitly declare a right-to-left directionality. The glyphs will then have to be mirrored, if needed, according to the rules in effect for the specified variant. If the glyphs are to be mirrored, then this must be implemented in the font.

The following text demonstrates Tifinagh left-to-right behaviour:

ⵙⵉⵜⵜ ⵜⵙ∶‖ˡ ∶ⵙ ⵜⵉ⋮ⵉⵜ ⵏⵥ

The following text demonstrates Tifinagh right-to-left behaviour using the U+202E character:

ⵥⵏ ⵜⵉ⋮ⵉⵜ ⵙ∶ ‖ˡˡ∶ⵙⵜ ⵜⵜⵉⵙ

The following text demonstrates both Tifinagh directional behaviours using the U+202E and U+202C characters:

ⵙⵉⵜⵜ ⵜⵙ∶‖ˡ ∶ⵙ ⵜⵉ⋮ⵉⵜ ⵏⵥ ⵥⵏ ⵜⵉ⋮ⵉⵜ ⵙ∶ ‖ˡˡ∶ⵙⵜ ⵜⵜⵉⵙ

Resources

It is important to realize that a keyboard only outputs codepoints. A font will support codepoints; but a font may also include variant glyphs for specific languages. A carefully chosen keyboard *and* font are required in order to display the correct behavior for a particular language.

Keyboarding

The only standard keyboard known at the moment is the Moroccan standard keyboard for Neo-Tiginagh. A keyboard based on the Moroccan standard keyboard is supported in Microsoft Windows.

Keyman is a cross-platform keyboarding application. Four keyboards are available for the Tifinagh script:

- Tifinagh (Basic) Basic [tzm]

- Tifinagh (Full) Basic [tzm, thz, tda, thv, kab, mzb, shi, shy, rif, tmh, zen, zgh]

- Tawallammat Tifinagh (SIL) [ttq, tzm]

- Tuareg Tifinagh [taq, thv]

lexilogos.com input

Neo-Tifinagh Character Picker

Tifinagh Character Picker

Fonts

These fonts provide support for some or all of the Tifinagh block.

- Noto Sans Tifinagh
- Akatab - currently only covers part of the Tifinagh block for Tamahaq, Tamashek, and Tawallammat languages
- Tagmukay - only covers part of the Tifinagh block for the Tawallammat Tamajaq language
- Catrinity
- IRCAM Tifinagh fonts - supports Neo-Tifinagh
- Hapax font set
- MPH 2B Damase
- DejaVu

Languages Using Neo-Tifinagh script

Central Atlas Tamazight, Standard Moroccan Tamazight

Source: Tifinaghe-IRCAM, Omniglot, Tamazight: Neo-Tifinagh orthography notes

Language tag: `tzm-Tfng`, `zgh`

Opentype language system tag: `BBR`

SLDR: zgh

Keyman keyboard: Tifinagh (Basic) Basic [tzm]

Characters									
Tfng	o	Θ	ⵝ	Ʌ	E	ⵛ	Ж	Ʀ	ⵀ
USV	2D30	2D31	2D33	2D37	2D39	2D3B	2D3C	2D3D	2D40
Latn	/a/	/b/	/g/	/d/	/ḍ/	/e/	/f/	/k/	/h/
Tfng	ⵃ	ⵄ	X	ⵇ	Ɛ	I	И	ⵎ	I
USV	2D43	2D44	2D45	2D47	2D49	2D4A	2D4D	2D4E	2D4F
Latn	/ḥ/	/ɛ/	/x/	/q/	/i/	/j/	/l/	/m/	/n/
Tfng	ⵓ	O	Q	ⵖ	ⵙ	ⵚ	ⵛ	+	Ɇ
USV	2D53	2D54	2D55	2D56	2D59	2D5A	2D5B	2D5C	2D5F
Latn	/u/	/r/	/ṛ/	/ɣ/	/s/	/ṣ/	/c/	/t/	/ṭ/
Tfng	ⵡ	ⵢ	Ж	Ж	ⵯ				
USV	2D61	2D62	2D63	2D65	2D6F				
Latn	/w/	/y/	/z/	/ẓ/	/ʷ/				

Known glyph variants

The Tifinagh script was encoded based on Neo-Tifinagh shapes. It seems unlikely that there would be glyph variants.

Bi-consonants

Bi-consonants are not "required" in Neo-Tifinagh. If a font supports bi-consonants, the two consonants separated by the ZWJ should thus form a bi-consonant. If a font does not support bi-consonants, they should simply appear as separate consonants.

Contextual Shaping

Neo-Tifinagh does not use contextual shaping for the "l" and "n". This is because the glyphs are distinguishable from each other when side by side.

Collation

o ‹ Θ ‹ ⵝ ‹‹ ⵝ̈ ‹ Ʌ ‹ E ‹ ⵛ ‹ Ж ‹ Ʀ ‹‹ Ʀ̈ ‹ ⵀ ‹ X ‹ ⵄ ‹ X ‹ ⵇ ‹ Ɛ ‹ I ‹ И ‹ ⵎ ‹ I ‹ ⵓ ‹ O ‹ Q ‹ ⵖ ‹ ⵙ ‹ Ø ‹ ⵛ ‹ + ‹ Ɇ ‹ ⵡ ‹ ⵢ ‹ Ж ‹ Ж

Kabyle, Amazigh

Language Tag: `kab-Tfng`

Characters									
Tfng	o	Ɵ	ⵝ	ⵥ	ⵗ	ⴹ	ⴻ	Ⱶ	ⵍ
USV	2D30	2D31	2D33	2D35	2D37	2D39	2D3B	2D3C	2D3D
Latn	/a/	/b/	/g/	/ǧ/	/d/	/ḍ/	/e/	/f/	/k/
Tfng	Ø	ⴼ	ⵒ	Ⅹ	ⵇ	Ɛ	Ⅰ	ⴽ	Ⲏ
USV	2D41	2D43	2D44	2D45	2D47	2D49	2D4A	2D4D	2D4E
Latn	/h/	/ḥ/	/ɛ/	/x/	/q/	/i/	/j/	/l/	/m/
Tfng	I	ⴸ	O	Q	ⴼ	ⵙ	Ø	ⵛ	+
USV	2D4F	2D53	2D54	2D55	2D56	2D59	2D5A	2D5B	2D5C
Latn	/n/	/u/	/r/	/ṛ/	/ɣ/	/s/	/ṣ/	/c/	/t/
Tfng	ⵞ	Ⴇ	ⵡ	ⵢ	ⵣ	ⵥ	ⴽ		
USV	2D5E	2D5F	2D61	2D62	2D63	2D65	2D6F		
Latn	/č/	/ṭ/	/w/	/y/	/z/	/ẓ/	/ʷ/		

Known glyph variants

A variant of U+2D4d is used: Ⱶ

Bi-consonants

Bi-consonants are not "required" in Neo-Tifinagh. If a font supports bi-consonants, the two consonants separated by the ZWJ should thus form a bi-consonant. If a font does not support bi-consonants, they should simply appear as separate consonants.

Collation

o ‹ Ɵ ‹‹ Ɵ̈ ‹ ⵞ ‹ ⵞ ‹ Ⴧ ‹‹ Ⴧⵣ ‹ Ⴇ ‹ ⴸ ‹ ⵒ ‹ Ⱶ ‹ ⵝ ‹‹ ⵝ̈ ‹ ⵥ ‹ ⴼ ‹‹ ⴼ̈ ‹ Ø ‹ ⴼ ‹ Ɛ ‹ Ⅰ ‹ ⴽ ‹‹ ⴽ̈ ‹ Ⲏ ‹ Ⴇ ‹ I ‹ ⵇ ‹‹ ⵇ̈ ‹ O ‹ Q ‹ ⵙ ‹ Ø ‹ + ‹‹ +ⵙ ‹ Ⴇ ‹ ⴸ ‹ ⵡ ‹ Ⅹ ‹‹ Ⅹ̈ ‹ ⵢ ‹ ⵣ ‹ ⵥ

Languages Using Traditional Tifinagh script

Ghomara, Shilha

Source: Omniglot

Language Tag: `gho-Tfng`

Characters									
Tfng	o	Ө	Ӿ	Λ	E	Ӈ	Ҡ	Ⴔ	Ⴟ
USV	2D30	2D31	2D33	2D37	2D39	203C	2D3D	2D40	2D43
Latn	/a/	/b/	/g/	/d/	/ḍ/	/f/	/k/	/h/	/ḥ/
Tfng	ⵄ	Ӿ	Ⴇ	Ɛ	I	И	Ⴀ	I	ⵓ
USV	2D44	2D45	2D47	2D49	204A	2D4D	2D4E	2D4F	2D53
Latn	/ɛ/	/x/	/q/	/i/	/ž/	/l/	/m/	/n/	/u/
Tfng	O	Q	Ⴠ	ⵙ	Ø	ⵛ	+	Ɛ	Ⴂ
USV	2D54	2D55	2D56	2D59	205A	2D5B	2D5C	2D5F	2D61
Latn	/r/	/ṛ/	/ɣ/	/s/	/ṣ/	/š/	/t/	/ṭ/	/w/
Tfng	Ƨ	Ӂ	Ӝ	ˮ					
USV	2D62	2D63	2D65	2D6F					
Latn	/y/	/z/	/ẓ/	/ʷ/					

Known glyph variants

A variant of U+2D4d is used: Ӈ

Bi-consonants
Unknown.

Collation

o < Ө < Ӿ << Ӿ˵ < Λ < E < Ӈ < Ҡ << Ҡ˵ < Ⴔ < Ⴟ < ⵄ < Ӿ << Ӿ˵ < Ⴇ < Ɛ < I < И < Ⴀ < I < ⵓ < O < Q < Ⴠ << Ⴠ˵ < ⵙ < Ø < ⵛ < + < Ɛ < Ⴂ < Ƨ < Ӂ < Ӝ

Tarifit, Riffian

Characters									
Tfng	ⵀ	Ɵ	ⵝ	ⵗ	ⵟ	ⵛ	Ⴭ	ⵀ	ⵍ
Tfng	o	Ɵ	ⵝ	Λ	E	ⵛ	Ⴭ	ⵕ	ⵀ
USV	2D30	2D31	2D33	2D37	2D39	2D3B	2D3C	2D3D	2D40
Latn	/a/	/b/	/g/	/d/	/ḍ/	/ə/	f	k	/h/
Tfng	ⵗ	ⵀ	X	Ⴭ	ⵣ	ⵉ	ⵍ	ⵂ	I
USV	2D43	2D44	2D45	2D47	2D49	2D4A	2D4D	2D4E	2D4F
Latn	/ḥ/	/ɛ/	/x/	/q/	/i/	/j/	/l/	/m/	/n/
Tfng	ⵓ	O	Q	ⵖ	ⵙ	ⵚ	ⵛ	ⵛ	✛
USV	2D53	2D54	2D55	2D56	2D59	2D5A	2D5B	2D5E	2D5C
Latn	/u/	/r/	/ṛ/	/ɣ/	/s/	/ṣ/	/c/	/č/	/t/
Tfng	Ɇ	ⵡ	Ϛ	ⵥ	ⵦ	˵			
USV	2D5F	2D61	2D62	2D63	2D65	2D6F			
Latn	/ṭ/	/w/	/y/	/z/	/ẓ/	/ʷ/			

Collation

ⵀ ‹ Ɵ ‹ ⵝ ‹‹ ⵝ˵ ‹ Λ ‹ E ‹ ⵛ ‹ Ⴭ ‹ ⵕ ‹‹ ⵕ˵ ‹ ⵀ ‹ ⵗ ‹ ⵀ ‹ X ‹ Ⴭ ‹ ⵣ ‹ ⵉ ‹ ⵂ ‹ ⵍ ‹ I ‹ ⵓ ‹ O ‹ Q ‹ ⵖ ‹ ⵙ ‹ ⵚ ‹ ⵛ ‹ ⵛ ‹ ✛ ‹ Ɇ ‹ ⵡ ‹ Ϛ ‹ ⵥ ‹ ⵦ

Characters									
Tfng	o	ⵝ	Λ	E	ⵛ	Ⴭ	ⵕ	ⵀ	ⵗ
USV	2D30	2D33	2D37	2D39	2D3B	2D3C	2D3D	2D40	2D43
Latn	/a/	/g/	/d/	/dˤ/	/ə/	/f/	/k/	/b, β, p/	/h, ħ/
Tfng	X	Ⴭ	ⵣ	ⵉ	ⵂ	ⵍ	I	ⵒ	ⵛ
USV	2D45	2D47	2D49	2D4A	2D4D	2D4E	2D4F	2D52	2D53
Latn	/x/	/q/	/i/	/ʒ/	/l/	/m/	/n, ŋ/	/ʕ/	/u/
Tfng	O	ⵖ	ⵙ	ⵛ	✛	X	Δ	ⵡ	Ϛ
USV	2D54	2D56	2D59	2D5B	2D5C	2D5D	2D60	2D61	2D62
Latn	/r, rˤ/	/ɣ/	/s, sˤ/	/ʃ/	/t, tˤ/	/θ/	/ð, ðˤ/	/w/	/y/
Tfng	ⵥ								
USV	2D63								
Latn									

Characters
/z, zˤ/

Glyph variants and Bi-consonants

Unknown.

Tachelhit

Language tag: `shi`

Opentype language system tag: BBR

SLDR: shi

Characters									
Tfng	ⵀ	ⵁ	ⵃ	ⵇ	ⵉ	ⵋ	ⵌ	ⵍ	ⵀ
USV	2D30	2D31	2D33	2D37	2D39	2D3B	2D3C	2D3D	2D40
Tfng	ⵃ	ⵄ	ⵅ	ⵇ	ⵉ	ⵊ	ⵍ	ⵎ	ⵏ
USV	2D43	2D44	2D45	2D47	2D49	2D4A	2D4D	2D4E	2D4F
Tfng	ⵓ	ⵔ	ⵕ	ⵖ	ⵙ	ⵚ	ⵛ	ⵜ	ⵟ
USV	2D53	2D54	2D55	2D56	2D59	2D5A	2D5B	2D5C	2D5F
Tfng	ⵡ	ⵢ	ⵣ	ⵥ	ⵯ				
USV	2D61	2D62	2D63	2D65	2D6F				

Glyph variants and Bi-consonants

Unknown.

Collation

ⵀ ‹ ⵁ ‹ ⵃ ‹‹ ⵃ̈ ‹ ⵇ ‹ ⵉ ‹ ⵋ ‹ ⵌ ‹ ⵍ ‹‹ ⵍ̈ ‹ ⵀ ‹ ⵃ ‹ ⵄ ‹ ⵅ ‹ ⵇ ‹ ⵉ ‹ ⵊ ‹ ⵍ ‹ ⵎ ‹ ⵏ ‹ ⵓ ‹ ⵔ ‹ ⵕ ‹ ⵖ ‹
ⵙ ‹ ⵚ ‹ ⵛ ‹ ⵜ ‹ ⵟ ‹ ⵡ ‹ ⵢ ‹ ⵣ ‹ ⵥ

Siwi

Source: Omniglot

Language Tag: `siz-Tfng`

Characters									
Tfng	ⵀ	ⴱ	ⴳ	ⴶ	ⴷ	ⴹ	ⴻ	ⴼ	ⴽ
USV	2D30	2D31	2D33	2D36	2D37	2D39	2D3B	2D3C	2D3D
Latn	/a/	/b/	/g/	/j/	/d/	/ḍ/	/ə/	/f/	/k/
Tfng	ⵀ	ⴳ	ⵂ	ⵅ	ⵇ	ⵉ	ⵍ	ⵎ	ⵏ
USV	2D40	2D43	2D44	2D45	2D47	2D49	2D4D	2D4E	2D4F
Latn	/h/	/ḥ/	/ʻ/	/x/	/q/	/i/	/l/	/m/	/n/
Tfng	ⵓ	ⵔ	ⵕ	ⵖ	ⵙ	ⵚ	ⵛ	ⵜ	ⵞ
USV	2D53	2D54	2D55	2D56	2D59	2D5A	2D5B	2D5C	2D5E
Latn	/u/	/r/	/ṛ/	/ğ/	/s/	/ṣ/	/š/	/t/	/č/
Tfng	ⵟ	ⵡ	ⵢ	ⵣ	ⵥ	ⵯ			
USV	2D5F	2D61	2D62	2D63	2D65	2D6F			
Latn	/ṭ/	/w/	/y/	/z/	/ẓ/	/ʷ/			

Other characters			
Tfng	ⵀⵉ	ⵀⵓ	ⵔⵔ
USV	2D30 2D49	2D30 2D53	2D54 2D54
Latin	/ai/ /e/	/au/ /o/	/rr/

Glyph variants and Bi-consonants
Unknown.

Collation
ⵀ ⪡ ⵀⵉ ⪡ ⵀⵓ ⪡ ⴱ ⪡ ⴱ̈ ⪡ ⴳ ⪡ ⴳ̈ ⪡ ⴶ ⪡ ⴷ ⪡ ⴹ ⪡ ⴻ ⪡ ⴼ ⪡ ⴽ ⪡ ⴽ̈ ⪡ ⴽ ⪡ ⴽ̈ ⪡ ⵀ ⪡ ⴳ ⪡ ⵂ ⪡ ⵅ ⪡ ⵅ̈ ⪡ ⵇ ⪡ ⵉ ⪡ ⵍ ⪡ ⵍ̈ ⪡ ⵎ ⪡ ⵎ̈ ⪡ ⵏ ⪡ ⵓ ⪡ ⵔ ⪡ ⵔⵔ ⪡ ⵕ ⪡ ⵖ ⪡ ⵖ̈ ⪡ ⵙ ⪡ ⵚ ⪡ ⵛ ⪡ ⵜ ⪡ ⵞ ⪡ ⵟ ⪡ ⵡ ⪡ ⵢ ⪡ ⵣ ⪡ ⵥ

Tamasheq

Characters									
Tfng	o	Ɵ	ⵝ	ⵏ	Ʌ / V	E	Ⱨ	ⵜ	ⵞ
USV	2D30	2D31	2D34	2D36	2D37 or 2D38	2D39	2D3C	2D3E	2D42
Latn	/a/	/b/	/g/	/j/	/d/	/ḍ/	/f/	/k/	/h/
Tfng	ⵃ	ⵄ	::	ⵈ	Ɛ	ⵋ or ♯	И	ⵇ	I
USV	2D43	2D44	2D46	2D48	2D49	2D4B or 2D4C	2D4D	2D4E	2D4F
Latn	/ḥ/	/ɛ/	/x/	/q/	/i/	/ž/	/l/	/m/	/n/
Tfng	!	ⵓ	O	ⵗ	ⵙ	Ø	Ⴚ	+	Ɇ
USV	2D51	2D53	2D54	2D57	2D59	2D5A	2D5B	2D5C	2D5F
Latn	/ŋ/	/o/ / u/	/r/	/ɣ/	/s/	/ṣ/	/š/	/t/	/ṭ/
Tfng	ⵡ	ⵢ	Ж	Ӂ	<				
USV	2D61	2D62	2D63	2D65	2D66				
Latn	/w/	/y/	/z/	/ẓ/	/e/ / ə/				

Glyph variants and Bi-consonants

Unknown.

Collation

o ‹ Ɵ ‹ ⵝ ‹ ⵏ ‹ Ʌ / V ‹ E ‹ Ⱨ ‹ ⵜ ‹ ⵞ ‹ ⵃ ‹ ⵄ ‹ :: ‹ ⵈ ‹ Ɛ ‹ ♯ or ⵋ ‹ И ‹ ⵇ ‹ I ‹ ! ‹ ⵓ ‹ O ‹ ⵗ ‹ ⵙ ‹ Ø ‹ Ⴚ ‹ + ‹ Ɇ ‹ ⵡ ‹ ⵢ ‹ Ж ‹ Ӂ ‹ <

Tamasheq (Mali)

Source: Savage, 2000

Language Tag: `taq-Tfng-ML`

Opentype language system tag: TMH and BBR

Two of these characters are possibly not right. The second U+2D4D is wrong, but I do not know what it should be. U+2D49 is also possibly not correct. In the source it is reversed.

Characters
Tfng

Characters

Characters									
	ⵀ	Ɵ	ⵖ	Λ	E	I	ⵞ	‖	‖ ???
USV	2D30	2D31	2D36	2D37	2D39	2D3C	2D3E	2D4D	2D4D ???
Latn	/ɑ/	/b/	/g/	/d/	/ḍ/	/f/	/k/	/l/	/ļ/
Tfng	ⵂ	ⵆ	ⵈ	ⵉ	ⵊ	ⵋ	ⵌ	ⵍ	ⵓ
USV	2D42	2D46	2D48	2D49	2D4B	2D4C	2D4E	2D4F	2D53
Latn	/h/	/x/	/q/	/y/	/ž/	/ẓ/	/m/	/n/	/w/
Tfng	O	ⵗ	ⵘ	ⵙ	ⵚ	ⵛ	+	F	ⵣ
USV	2D54	2D57	2D58	2D59	2D5A	2D5B	2D5C	2D5F	2D63
Latn	/r/	/ɣ/	/ǰ/	/s/	/ṣ/	/š/	/t/	/ṭ/	/z/

Glyph variants

USV			
2D30	ⵔ	>	ⵀ
2D3C	Ħ	>	I
2D4D	И	>	‖
2D5C	+	>	+
2D5A	Ø	>	ⵚ
2D5F	Ɇ	>	F
2D63	Ж	>	ⵣ

Bi-Consonants

USV	2D7F between characters	→	Glyph
2D4F 2D37	Ɩ + ＋ + Λ	→	ⵗ
2D59 2D4F	ⵙ + ＋ + Ɩ	→	ⵙ̣
2D4F 2D5C	Ɩ + ＋ + ＋	→	ⵝ
2D4F 2D3E	Ɩ + ＋ + ⵾	→	ⵝ̣
2D4F 2D3C	Ɩ + ＋ +][	→	Ⲏ
2D54 2D5C	Ο + ＋ + ＋	→	⊕
2D59 2D5C	ⵙ + ＋ + ＋	→	⊕
2D49 2D5C	ⵉ + ＋ + ＋	→	ⵉ
2D4D 2D5C	‖ + ＋ + ＋	→	ⵌ
2D53 2D5C	ⵓ + ＋ + ＋	→	ⵌ
2D4C 2D5C	ⵌ + ＋ + ＋	→	ⵌ
2D4E 2D5C	ⵐ + ＋ + ＋	→	ⵐ
2D3C 2D5C	][+ ＋ + ＋	→	ⵥ

Contextual Shaping

Contextual Shaping						
‖	+	‖	+	‖	→	‖″‖
2D4D		2D4D		2D4D		
‖	+	Ɩ	+	‖	→	‖′‖
2D4D		2D4F		2D4D		
Ɩ	+	‖	+	Ɩ	→	Ɩ″Ɩ
2D4F		2D4D		2D4F		
Ɩ	+	Ɩ	+	Ɩ	→	Ɩ′Ɩ
2D4F		2D4F		2D4F		

Collation

˚ < ⵀ < ＋ < Ⴢ < Λ < ⴺ < ⵂ < ⵏ̈ < ⵗ < ⴺ < Ɩ < Ο < ⵊ < ⵙ < ⵌ < ⵅ < ⵌ < 8 < ⵅ < ⵮ < ⵮ < ⵮ < ⵮ < ‖ < ‖ ???
< ⵂ < ⵉ

Tuareg (Azawagh dialect of Niger-Mali), Tagdal

Source: L2/04-142 (pages 8 & 31)

Language Tag: `tda-Tfng`

Tahaggart Tamahaq

Language tag: `thv-Tfng`

Opentype language system tag: `TMH` and `BBR`

Keyman keyboard: Tuareg Tifinagh [taq, thv]

Font: Akatab

Source: Possibly from keyboard?

Characters									
Tfng	ⵀ	ⵁ	ⵔ	ⵖ	ⵗ	ⵙ	ⵜ	ⵞ	ⵢ
USV	2D30	2D31	2D34	2D36	2D37	2D39	2D3C	2D3E	2D42
Latn	/a/	/b/	/g/	/ǧ/	/d/	ḍ	/f/	/k/	/h/
Tfng	ⵆ	ⵈ	ⵉ	ⵋ	ⵌ	ⵍ	ⵎ	ⵏ	ⵐ
USV	2D46	2D48	2D49	2D4B	2D4C	2D4D	2D4E	2D4F	2D50
Latn	/x/	/q/	/ɣ/	/j/	/ẓ/	/d/	/m/	/n/	/ŋ/
Tfng	ⵓ	ⵔ	ⵗ	ⵙ	ⵛ	ⵜ	ⵟ	ⵣ	
USV	2D53	2D54	2D57	2D59	2D5B	2D5C	2D5F	2D63	
Latn	/u/	/r/	/ɣ/	/s/	/š/	/t/	/ṭ/	/z/	

Glyph variants

USV			
2D30	o	>	•
2D34	ⵝ	>	ⵔ
2D3C	ⵝ	>	ⵜ
2D4B	ⵝ	>	ⵋ
2D4D	ⵝ	>	ⵍ
2D50	‡	>	ⵐ
2D53	ⵝ	>	ⵓ
2D5B	ⵝ	>	ⵛ
2D63	ⵝ	>	ⵣ

Bi-consonants

Unknown.

Tayart Tamajeq, Tuareg (Aïr dialect of Niger)

Source: Omniglot and L2/04-142 (pages 8 & 31)

Language Tag: `thz-Tfng`

Opentype language system tag: `TMH` and `BBR`

The order of these characters is based on Unicode codepoints, not on the order listed in the sources. The two sources have an inconsistent character set. This is a combination of the two.

Characters									
Tfng	o	ⵝ	ⵞ	Λ	E	ⵙ̊	Ж	ⵞ	ⵀ
USV	2D30	2D33	2D36	2D37	2D39	203B	2D3C	2D3E	2D40
Latn	/a/	/g/	/ǧ/	/d/	/ḍ/	/ə/	/f/	/k/	/b/
Tfng	ⵂ	ⵆ	•••	ⵉ	#	И	ⵎ	I	!
USV	2D42	2D46	2D48	2D49	2D4C	2D4D	2D4E	2D4F	2D51
Latn	/h/	/x/	/q/	/i/	/j/	/l/	/m/	/n/	/ŋ/
Tfng	ⵓ	O	Q	ⵗ	ⵙ	Ø	ⵛ	+	Ɛ
USV	2D53	2D54	2D55	2D57	2D59	2D5A	2D5B	2D5C	2D5F
Latn	/w/ / u/	/r/	/ṛ/	/ɣ/	/s/	/ṣ/	/š/	/t/	/ṭ/
Tfng	ⵢ	Ж / ⵤ	Ж	<	--	⵰			
USV	2D62	2D63 / 2D64	2D65	2D66	2D67	2D70			
Latn	/y/	/z/	/ẓ/	/e/	/o/				

It is unclear if this is meant to be a required bi-consonant.

Other "letters"	
Tfng	+ⵛ
USV	2D5C 2D5B
Latn	č

Punctuation

All punctuation required for Neo-Tifinagh is also required for `thz`. In addition, the separator mark is used:

U+2D70 ⵰.

Glyph variants

o	>	•
Ⱨ	>	Ɦ
И	>	‖
⁝	>	:
ɕ	>	ꞓ
--	>	--

Bi-consonants
Unknown.

Collation

o ‹ ⵁ ‹ ⵝ ‹ Ɦ ‹ Ʌ ‹ ⴹ ‹ ⁝ ‹ ‹ ‹ Ⱨ ‹ ⵞ ‹ ⵟ ‹ ∷ ‹ ⵨ ‹ ⵉ ‹ ⵌ ‹ И ‹ ⵎ ‹ I ‹ ! ‹ -- ‹ ⵔ ‹ ⵕ ‹ ⵖ ‹ ⵙ ‹ ⵛ ‹
ɕ ‹ ⵜ ‹‹ ⵜɕ ‹ ⴻ ‹ ⁝ ‹ ⵣ ‹ ⵥ ‹ ⵧ ‹ ⵯ

Tawallammat Tamajaq

Language Tag: `ttq-Tfng`, `tmh-Tfng` (macrolanguage)

Opentype language system tag: `TMH` and `BBR`

Keyman keyboard: Tawallammat Tifinagh (SIL) [ttq, tzm]

Font: Tagmukay

Source: Possibly from keyboard or Tagmukay font?

Characters									
Tfng	•	ⵞ	E	Ɦ	ⴹ	ⴹ	⁝	∷	⋯
USV	2D30	2D36	2D39	2D3C	2D3E	2D40	2D42	2D46	2D48
Latn	/a/	/g/	/d/	/f/	/k/	/b/	/h/	/q/	/x/
Tfng	⵨	ⵞ	‖	ⵎ	I	ǃ	:	○	⁝
USV	2D49	2D4C	2D4D	2D4E	2D4F	2D51	2D53	2D54	2D57
Latn	/i/ / y/	/j/	/l/	/m/	/n/	/ŋ/	/w/	/r/	/c/
Tfng	ⵙ	ɕ	+	ⵢ	ⵥ	ⵧ	··		
USV	2D59	2D5B	2D5C	2D62	2D63	2D64	2D67		
Latn	/s/	/š/	/t/	/y/	/z/	/z/	/o/		

Vowels
SIL and APT have differing orthographies for the same language

Vowels						
Tfng	⌢	⌣	⚡	⚡̂	⦙̂	⌢̈
USV	2D30 + 0302	2D30 + 0306	2D62 + 0323	2D62 + 0302	2D53 + 0302	2D67 + 0302
Latn	/ɑ/	/ə/	/i/	/e/	/u/	/o/

APT

Vowels						
Tfng	•	<	⚡	--		
USV	2D30	2D66	2D62	2D67		
Latn	/ɑ/	/ə/	/i/	/e/	/u/	/o/

Punctuation

All punctuation required for Neo-Tifinagh is also required for `ttq`. In addition, the separator mark is used:

U+2D70 ⟋.

Glyph variants

USV			
2D30	o	>	•
2D3C	Ⴡ	>	Ⴡ
2D4D	И	>	‖
2D53	⚬	>	⦙
2D5B	Ɠ	>	Ɣ
2D63	Ж	>	ⵣ

Tri- Bi-Consonants

USV	2D7F between characters	→	Glyph
2D3C 2D5C	Ⴡ + ... + +	→	ⵣ
2D4D 2D5C	‖ + ... + +	→	Ⲭ
2D4E 2D40	Ⲉ + ... + ⵘ	→	⊖
2D4E 2D59	Ⲉ + ... + ⊙	→	⦾
2D4E 2D5C		→	ⴱ

USV	2D7F between characters	→	Glyph
	ᴦ + ⸯ + +		
2D4F 2D36	ǀ + ⸯ + ᴶ	→	ᴵᴵ
2D4F 2D39	ǀ + ⸯ + Ɛ	→	ш
2D4F 2D3C	ǀ + ⸯ + ᴴ	→	ᴵᴱ
2D4F 2D3C 2D5C	ǀ + ⸯ + ᴴ + ⸯ + +	→	ᴴᴱ
2D4F 2D3E	ǀ + ⸯ + ∴	→	ᴶ
2D4F 2D4C	ǀ + ⸯ + #	→	ǂ
2D4F 2D57	ǀ + ⸯ + ⋮	→	ᴵ
2D4F 2D59	ǀ + ⸯ + ⊙	→	⊙
2D4F 2D5C	ǀ + ⸯ + +	→	⊢
2D4F 2D64	ǀ + ⸯ + ↑	→	→
2D54 2D5C	○ + ⸯ + +	→	⊕
2D59 2D5C	⊙ + ⸯ + +	→	⊕
2D5B 2D5C	ᶜ + ⸯ + +	→	ᶜ

Contextual Shaping

Contextual Shaping						
‖ 2D4D	+	‖ 2D4D	+	‖ 2D4D	→	‖\‖
‖ 2D4D	+	ǀ 2D4F	+	‖ 2D4D	→	‖\‖
ǀ 2D4F	+	‖ 2D4D	+	ǀ 2D4F	→	ǀ\ǀ
ǀ 2D4F	+	ǀ 2D4F	+	ǀ 2D4F	→	ǀ\ǀ

Other languages with little or no information

These language are reported to have used or are using Tifinagh script. However, no further information is available.

Awjilah

Language Tag: `auj-Tfng`

Ghadamès

Language Tag: `gha-Tfng`

Taznatit

Language Tag: `grr-Tfng`

Nafusi, Zuwara

Source: Omniglot

Language Tag: `jbn-Tfng`

Omniglot indicates this language can be written with Tifinagh, but no further information is given.

Tumzabt

Language Tags: `mzb-Tfng`

Source: Savage, 2003. p. 2.

This source lists a set of characters that are used in a Algerian school text book entitled "Adlis" printed in 1988 (pp 12,13). It is unknown how widely used this book (or the characters) are actually used.

Numidian

Language Tag: `nxm-Tfng`

Tachawit, Tacawit

Language Tags: `shy-Tfng`

Source: Savage, 2003. p. 2.

This source lists a set of characters that are used in a Algerian school text book entitled "Adlis" printed in 1988 (pp 12,13). It is unknown how widely used this book (or the characters) are actually used.

Tetserret

Language Tag: `tez-Tfng`

Zenaga

Language Tag: `zen-Tfng`

Other Berber languages

These are Berber languages which do not appear to have ever used the Tifinagh script:

- Chenoua `[cnu]`
- Judeo-Berber `[jbe]`
- Tagargrent, Ouargli `[oua]`
- Sened `[sds]`
- Senhaja Berber `[sjs]`
- Sawknah `[swn]`

- Tidikelt Tamazight `[tia]`
- Temacine Tamazight `[tjo]`

Acknowledgements

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Omniglot - Central Atlas Tamazight (Tamaziɣt / +ₒⵍₒⵊⵢⵏ+) [tzm]

Omniglot - Kabyle (Taqbaylit / +ₒⵥⴱₒⵎⵏ+) [kab]

Omniglot - Riffian (Tarifit / +ₒⵔⵏⵏ+ / تاريفيت) [rif]

Omniglot - Shilha (Tašəlḥiyt / +ₒⵛⵏⵣⵏ+) [gho]

Omniglot - Siwi (ⵜⵏₒⵍⵏⵎⵓⵢⵍₒⵍ / Jlan n isiwan) [siz]

Omniglot - Tamasheq (Tafaghist) [taq] (but could be other languages?)

Omniglot - Tayart Tamajeq (Tamajeq, +ⵍ⋕∴, ثمجق) [thz]

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1. Projet de norme marocaine: Alphabet tifinaghe