Scheherazade New Font Features

The Scheherazade New font includes a number of optional features that provide alternative rendering that might be preferable for use in some contexts. The chart below enumerates the details of these features. Whether these features are available to users will depend on both the application and the rendering technology (Graphite or OpenType) being used. Most features are available in both Graphite and OpenType, though there may be minor differences in their implementation.

Features

When Scheherazade New is used in applications that support Graphite or OpenType, and that provide an appropriate user interface, various user-controllable font features are available allowing access to alternatively-designed glyphs.

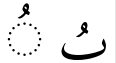
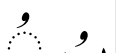
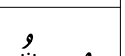
The table below gives a visual representation of the featured character glyphs in the font. Note that within each feature the top-most value is the default. The other lines show the first alternate and, if available, the second or third alternates.

List of Graphite features and OpenType Character Variants

Feature Name	**Feature ID**	**Feature Setting** (top-most in each section is default)	**Example**	**Implementation Notes**[1]
Dal (U+062F, U+0630, U+0688, U+0689, U+068A, U+068B, U+068C, U+068D, U+068E, U+068F, U+0690, U+06EE, U+0759, U+075A, U+08AE)	cv12	0=Standard	د ذ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ڑ ڒ ړ	G,O,T
		1=Alternate XeTeX: "Scheherazade New/GR:Dal=Alternate"	ﺩ ﺫ ﺪ ﺫ ﺪ ﺫ ﺪ ﺫ ﺪ ﺫ ﺪ ﺫ ﺪ ﺫ ﺪ ﺫ	
Meem (U+0645, U+0765, U+0766, U+08A7)	cv44	0=Standard	م ممم ڧ ڧڧڧ ڢ ڢڢڢ ڦ ڦڦڦ	G,O,T
		1=Sindhi-style XeTeX: "Scheherazade New/GR:Meem=Sindhi-style"	ﻣ ﻣﻣﻣ ﻧ ﻧﻧﻧ ﻢ ﻢﻢﻢ ﻣ ﻣﻣﻣ ﻧ ﻧﻧﻧ ﻢ ﻢﻢﻢ	

1 **TypeTuner legend: G**=Implemented in Graphite; **O**=Implemented in OpenType; **T**=Implemented in TypeTuner (command line version: http://scripts.sil.org/TypeTuner and web-based version: http://scripts.sil.org/ttw) .

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes
Heh (U+0647)	cv48	0=Standard	ه ههه	G,O,T
		3=Kurdish-style XeTeX: "Scheherazade New/GR:Heh=Kurdish-style"	ه ههه	
		1=Sindhi-style XeTeX: "Scheherazade New/GR:Heh=Sindhi-style"	ه ههه	
		2=Urdu-style XeTeX: "Scheherazade New/GR:Heh=Urdu-style"	ه ہہ	
Kirghiz OE (U+06C5)	cv51	0=Loop	ۇ	G,O,T
		1=Bar XeTeX: "Scheherazade New/GR:Kirghiz OE=Bar"	ۇ	
Yeh hamza (U+0626)	cv54	0=Standard	ئ ئئئ	G,O,T
		1=Right hamza XeTeX: "Scheherazade New/GR:Yeh hamza=Right hamza"	ئ ئئئ	

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes
Maddah (U+0622, U+0627+U+0653, U+0653)	cv60	0=Small		G,O,T
		1=Large XeTeX: "Scheherazade New/GR:Maddah=Large"		
Shadda+kasra placement (U+064D, U+0650 with U+0651)	cv62	0=Default (Raised)		G,O,T
		1=Lowered XeTeX: "Scheherazade New/GR:Shadda+kasra placement=Lowered"		
		2=Raised		
Damma (U+064F)	cv70	0=Standard		G,O,T
		1=Filled XeTeX: "Scheherazade New/GR:Damma=Short"		
		2=Short XeTeX: "Scheherazade New/GR:Damma=Filled"		

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes
Dammatan (U+064C)	cv72	0=Standard	بٌ	G,O,T
		1=Six-nine XeTeX: "Scheherazade New/GR:Dammatan=Six-nine"	بٌ	
Inverted Damma (U+0657)	cv74	0=Standard (Filled)	بُ	G,O,T
		1=Hollow XeTeX: "Scheherazade New/GR:Inverted Damma=Hollow"	بُ	
		2=Filled XeTeX: "Scheherazade New/GR:Inverted Damma=Filled"	بُ	
Superscript Alef (U+0670 on all yeh, sad and seen-like characters U+0649 U+064A U+06D0 U+06D1 U+0777 U+06CC U+0635 U+0636 U+069D U+069E U+06FB U+08AF U+0633 U+0634 U+069A U+069B U+069C U+06FA U+075C U+076D U+0770 U+077D U+077E)	cv76	0=Small	ىٰ ئٰئٰئٰ ىٰ ىٰ ى

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes
		1=Large XeTeX: "Scheherazade New/GR:Superscript Alef=Large"	ئٰ ئٰئٰ ىٰ ىٰىٰ يٰ يٰيٰ ىٰ ىٰىٰ يٰ يٰيٰ يٰ يٰيٰ يٰ يٰيٰ يٰ يٰيٰ يٰ يٰيٰ ىٰ ىٰىٰ ىٰ ىٰىٰ ىٰ ىٰىٰ ىٰ ىٰىٰ ىٰ ىٰىٰ ىٰ ىٰىٰ ىٰ ىٰىٰ صٰ صٰصٰ ضٰ ضٰضٰ ضٰ ضٰضٰ ضٰ ضٰضٰ ضٰ ضٰضٰ ضٰضٰ ضٰ ضٰضٰ سٰ سٰسٰ شٰ شٰشٰ ښٰ ښٰښٰ ښٰ ښٰښٰ ښٰ ښٰښٰ ښٰ ښٰښٰ ڼٰ ڼٰڼٰ ڼٰ ڼٰڼٰ ڼٰ ڼٰڼٰ ڼٰ ڼٰڼٰ ڼٰ ڼٰڼٰ	
Sukun (U+0652)	cv78	0=Closed	بْ ◌ْ	G,O,T
		1=Open down XeTeX: "Scheherazade New/GR:Sukun=Open down"	بْ ◌ْ	
		2=Open left XeTeX: "Scheherazade New/GR:Sukun=Open left"	بْ ◌ْ	

Feature Name	Feature ID	Feature Setting (top-most in each section is default)	Example	Implementation Notes
End of ayah (U+06DD)	cv80	0=Standard	١٢٣ ٣٤٥	G,O,T
		1=Simplified A XeTeX: "Scheherazade New/GR:End of ayah=Simplified A"	١٢٣ ٣٤٥	
		2=Simplified B XeTeX: "Scheherazade New/GR:End of ayah=Simplified B"	١٢٣ ٣٤٥	
Honorific ligatures (U+06F4, U+06F6, U+06F7)	cv81	0=Calligraphic	عَلَيْهِمَا السَّلَامُ عَلَيْهِمُ السَّلَامُ عَلَيْهِ السَّلَامُ رَضِيَ اللّٰهُ عَنْهُنَّ رَضِيَ اللّٰهُ عَنْهُمَا رَضِيَ اللّٰهُ عَنْهُمْ رَضِيَ اللّٰهُ عَنْهَا رَضِيَ اللّٰهُ عَنْهُ عَلَيْهَا السَّلَامُ وَتَعَالَىٰ تَبَارَكَ عَلَيْهِمُ السَّلَامُ قُدِّسَ سِرُّهُ صَلَّى اللّٰهُ وَسَلَّمَ جَلَّ جَلَالُهُ وَعَزَّ وَجَلَّ سُبْحَانَهُ وَتَعَالَىٰ	G,O,T
		1=Simplified	عَلَيْهِ السَّلَام صَلَّى اللّٰهُ عَلَيْهِ وَآلِهِ رَضِيَ اللّٰهُ عَنْهُنَّ رَضِيَ اللّٰهُ عَنْهُمَا رَضِيَ اللّٰهُ عَنْهُمْ رَضِيَ اللّٰهُ عَنْهَا رَضِيَ اللّٰهُ عَنْهُ رَحِمَهُ اللّٰه سَلَامُهُ عَلَيْنَا تَبَارَكَ وَتَعَالَىٰ عَلَيْهَا السَّلَام وَسَلَّمَ عَلَيْهِ وَآلِهِ صَلَّى اللّٰهُ قُدِّسَ سِرُّهُ وَالصَّلَاةُ وَالسَّلَام عَلَيْهِمَا السَّلَام عَلَيْهِمُ السَّلَام صَلَّى اللّٰهُ عَلَيْهِ وَسَلَّمَ جَلَّ جَلَالُهُ بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِيمِ وَعَزَّ وَجَلَّ سُبْحَانَهُ وَتَعَالَىٰ	
Eastern digits (U+06F4, U+06F6, U+06F7)	cv82	0=Standard	۴۵۶۷	G,O,T
		1=Sindhi-style XeTeX: "Scheherazade New/GR:Eastern digits=Sindhi-style"	۴۵٦۷	
		2=Urdu-style XeTeX: "Scheherazade New/GR:Eastern digits=Urdu-style"	۴۵٦۷	
		4=Rohingya-style XeTeX: "Scheherazade New/GR:Eastern digits=Rohingya-style"	٤۵٦۷	

Feature Name	**Feature ID**	**Feature Setting** (top-most in each section is default)	**Example**	**Implementation Notes**
Comma (U+060C, U+061B)	cv84	0=Upward	؛ ،	G,O,T
		1=Downward XeTeX: "Scheherazade New/GR:Comma=Downward"	؛ ،	
Line spacing		Tight Normal Loose	Allows for adjustment of the default line spacing in the font (values shown are ordered in increasing line spacing).	T

List of Language-specific features

The language-specific features that are in the font are demonstrated below:

Language	Lang ID	**Feature Setting** (top-most in each section is default)	Character Shapes	Implementation Notes[2]
Default			د ذ ڈ ډ ڊ ڋ ڌ ډ ڈ ډ ډ م ممم ۾ ڻ ڼ ھ ھھ ۽ ئ ئئ ◌ً ◌ٌ ◌ٍ ◌ّ ۴۵۶۷ ؛،	G,O,T
Kurdish (Northern)	ku	Language set to Kurdish XeTeX: "Scheherazade New/GR:language=ku" (Graphite) XeTeX: "Scheherazade New:language=ku" (OpenType) HTML: lang="ku"	د ذ ڈ ډ ڊ ڋ ڌ ډ ڈ ډ ډ م ممم ۾ ڻ ڼ ھ ھھ ۽ ئ ئئ ◌ً ◌ٌ ◌ٍ ◌ّ ۴۵۶۷ ؛،	
Kyrgyz	ky	Language set to Kyrgyz XeTeX: "Scheherazade New/GR:language=ky" (Graphite) XeTeX: "Scheherazade New:language=ky" (OpenType) HTML: lang="ky"	د ذ ڈ ډ ڊ ڋ ڌ ډ ڈ ډ ډ م ممم ۾ ڻ ڼ ھ ھھ ۽ ئ ئئ ◌ً ◌ٌ ◌ٍ ◌ّ ۴۵۶۷ ؛،	
Rohingya	rhg	Language set to Rohingya XeTeX: "Scheherazade New/GR:language=rhg" (Graphite) XeTeX: "Scheherazade New:language=rhg" (OpenType) HTML: lang="rhg"	د ذ ڈ ډ ڊ ڋ ڌ ډ ڈ ډ ډ م ممم ۾ ڻ ڼ ھ ھھ ۽ ئ ئئ ◌ً ◌ٌ ◌ٍ ◌ّ ٤٥٦٧ ؛،	
Sindhi	sd	Language set to Sindhi XeTeX: "Scheherazade New/GR:language=sd" (Graphite) XeTeX: "Scheherazade New:language=sd" (OpenType) HTML: lang="sd"	د ذ ڈ ډ ڊ ڋ ڌ ډ ڈ ډ ډ م ممم ۾ ڻ ڼ ھ ھھ ۽ ئ ئئ ◌ً ◌ٌ ◌ٍ ◌ّ ۴۵٦٧ ؛،	
Urdu	ur	Language set to Urdu XeTeX: "Scheherazade New/GR:language=ur" (Graphite) XeTeX: "Scheherazade New:language=ur" (OpenType) HTML: lang="ur"	د ذ ڈ ډ ڊ ڋ ڌ ډ ڈ ډ ډ م ممم ۾ ڻ ڼ ھ ھھ ۽ ئ ئئ ◌ً ◌ٌ ◌ٍ ◌ّ ۴۵٦٧ ؛،	
Wolof	wo	Language set to Wolof XeTeX: "Scheherazade New/GR:language=wo" (Graphite) XeTeX: "Scheherazade New:language=wo" (OpenType) HTML: lang="wo"	د ذ ڈ ډ ڊ ڋ ڌ ډ ڈ ډ ډ م ممم ۾ ڻ ڼ ھ ھھ ۽ ئ ئئ ◌ً ◌ٌ ◌ٍ ◌ّ ۴۵۶۷ ؛،	

2 **Implementation Notes: G**=Implemented in Graphite; **O**=Implemented in OpenType; **T**=Implemented in TypeTuner (command line version: http://scripts.sil.org/TypeTuner and web-based version: http://scripts.sil.org/ttw) .

Special rules for rendering Allah

In certain types of literature, the name *Allah* and words related to this name are given unique rendering. Unicode has a *presentation form* character (U+FDF2 ARABIC LIGATURE ALLAH ISOLATED FORM) that implements this rendering and, while this can work (in some fonts) for the word in isolation, it doesn't help users obtain special rendering in other contexts where it is desired.

Starting with v2.200, Scheherazade New provides the special rendering for sequences of Arabic letters that meet specific patterns, giving much more flexibility to document authors. To obtain the special rendering, all of the following must be true:

- The basic sequence of letters is either:
  - lam-lam-heh
    - Preceded by some Arabic letter (joining or not, with or without diacritic marks)
    - The second lam *must* be followed (in either order) by shadda and either superscript alef or fatha
  - alef-lam-lam-heh
    - alef is the *isolate* form (with or without diacritic marks)
    - The second lam *may* be followed (in either order) by shadda and either superscript alef or fatha
- The heh used is the *final* form of either *heh goal* (U+06C1 ہ) final OR *heh* (U+0647 ه) final
- There are no diacritic marks between the two *lam* characters

FEH	ALEF	LAM	LAM	SHADDA	FATHA	SUPERSCRIPT ALEF	HEH			
	ا	+ ل	+ ل	+			ه	→	اللّٰه	Ligature is formed (U+0647)
	ا	+ ل	+ ل	+			ه	→	اللّٰہ	Ligature is formed (U+06C1)
	ا	+ ل	+ ل	+ ّ	+ َ	+	ه	→	اللَّه	Ligature is formed
	ا	+ ل	+ ل	+ ّ	+	ا +	ه	→	اللّٰه	Ligature is formed
ف +		ل	+ ل	+ ّ	+ َ	+	ه	→	فللَّه	Ligature is formed
ف +		ل	+ ل	+			ه	→	فلله	Ligature is not formed

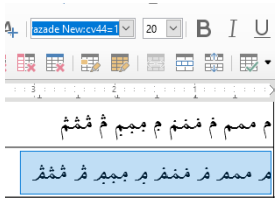
Users may find these rules cause the special rendering when it is not desired. The rendering can be suppressed by inserting U+200D ZERO WIDTH JOINER after either *lam*.

Use of Graphite Features, OpenType Character Variants, and Language-specific features

LibreOffice

In LibreOffice 3.4+[3] there are a few steps the user may need to do before using Arabic script and language support. The font would be set to "Scheherazade New" and then the language must be selected in the application. In LibreOffice, first enable complex text layout (**Tools / Options / Language Settings / Languages** and then select **Enabled for complex text layout (CTL).** Then, select the text, click on the status bar to change the language, select the language (if it is not displayed, click on "More...").

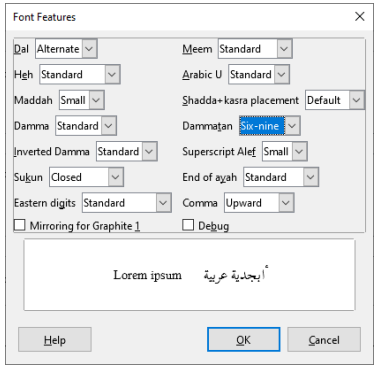
The font features can be turned on by choosing the font (ie Scheherazade New), followed by a colon, followed by the feature ID, and then followed by the feature setting. So, for example, if the "Meem" Sindhi-style variant is desired, the font selection would be "**Scheherazade New:cv44=1**".



If you wish to apply two (or more) features, you can separate them with an "&". Thus, "Scheherazade New:cv44=1&cv48=1" would apply the "Meem" plus the "Sindhi-style" of the "Heh" feature.

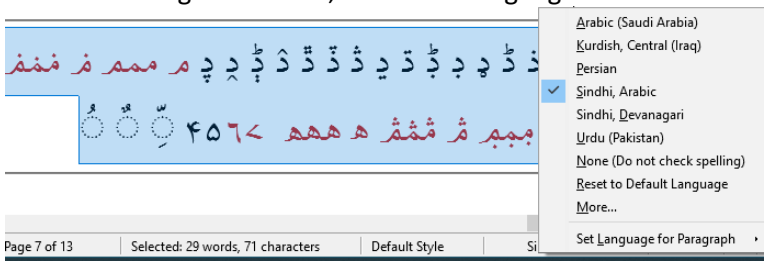
Newer versions of LibreOffice have a user interface which allows selection of the Font Features. Select your text (or style) and go to **Format / Character**. Choose the Scheherazade New font and click on **Features**. Then select the features you wish to turn on.

3 Download here: http://www.libreoffice.org/download.



LibreOffice allows the user to select languages (or even add a language); the default glyphs will change based on the language preferences. Currently LibreOffice allow for the selection of Kurdish, Sindhi, and Urdu. If an application allows you to select any of the languages, the default glyphs will change based on the language preferences.

In the following screenshot, the Sindhi language has been selected.



It is also possible to choose the language through the font menu in LibreOffice:

Wolof: ڊ ڏ ڍ ڊ ڊ ڌ ڌ ڌ ڌ ڍ ڊ (Scheherazade New:lang=wo)

Sindhi: م ممم ڧ ڧڧڧ ۾ ۾۾۾ ڦ ڦڦڦ (Scheherazade New:lang=sd)

Microsoft Word

Word does not allow for the selection of Character Variants. However, it does support language selection of Urdu and Sindhi.

Before opening Word, go to **Start / All Programs / Microsoft Office / Microsoft Office 2016 Tools / Microsoft Office 2016 Language Preferences** and add any editing languages you want to use.

XeTeX

For XeTeX[4], Graphite Feature IDs are not used. Use the **Feature Name** and **Feature setting**, e.g., if Character Variant 12 was desired, the font selection would be: "Scheherazade New/GR:Dal=Alternate" at 12pt

Languages in XeTeX can be accessed by using: "Scheherazade New/GR:language=ur" (for Graphite) or "Scheherazade New:Arab:language=URD" (for OpenType).

OpenType Character Variants

Currently there are very few applications which support OpenType Character Variants.

For applications which do support OpenType Character Variants, such as in CSS, the Character Variant ID and setting is chosen. For example, in CSS, if cv32, is desired, you might have this code in your .css:

```
...
@font-face {
  font-family: ScheherazadeNew;
  src: url(ScheherazadeNew-Regular.woff);
}
.cv120 {
  font-family: ScheherazadeNew;
  font-feature-settings: "cv12" 0;
}
.cv121 {
  font-family: ScheherazadeNew;
  font-feature-settings: "cv12" 1;
}
...
```

and this in your .html:

```
<p class=cv120>ډ ډ ډ ډ ډ ډ ډ ډ ډ</cv120></p>
<p class=cv121>ډ ډ ډ ډ ډ ډ ډ ډ ډ</cv121></p>
```

4 http://tug.org/xetex/

Which would produce this:

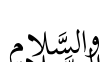
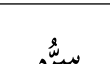
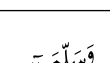
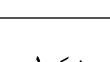
TypeTuner

At this point, most applications do not make use of these features (neither Graphite or OpenType Character Variants nor language features) so another solution is needed to use the variant characters. TypeTuner creates tuned fonts that use the variant glyph in place of the standard glyph. The TypeTuner Web site is http://scripts.sil.org/ttw/fonts2go.cgi.

Honorific Ligatures

Unicode has a number of honorific ligatures. Recently, more have been approved for release in Unicode 14.0. These are included in this version of the font. However, the ones in the “pipeline” have been encoded in the Private Use Area of Unicode until the codepoints are considered “stable”.

Unicode Name (ARABIC LIGATURE...)	USV	Glyph	Glyph simplified	Meaning
RAHIMAHU ALLAAH	E006 (pipeline FD40)		رَحِمَهُ ٱللَّهُ	May God have mercy upon him / you. (Used for companions of the prophet or other widely recognized scholars.)
RADI ALLAAHU ANH	E007 (pipeline FD41)	رَضِيَ ٱللَّهُ عَنْهُ	رَضِيَ ٱللَّهُ عَنْهُ	May God be pleased with him. (Used for companions of the prophet.)
RADI ALLAAHU ANHAA	E008 (pipeline FD42)	رَضِيَ ٱللَّهُ عَنْهَا	رَضِيَ ٱللَّهُ عَنْهَا	May God be pleased with her. (Used for companions of the prophet.)
RADI ALLAAHU ANHUM	E009 (pipeline FD43)	رَضِيَ ٱللَّهُ عَنْهُمْ	رَضِيَ ٱللَّهُ عَنْهُمْ	May God be pleased with them (masculine). (Used for companions of the prophet.)
RADI ALLAAHU ANHUMAA	E00A (pipeline FD44)	رَضِيَ ٱللَّهُ عَنْهُمَا	رَضِيَ ٱللَّهُ عَنْهُمَا	May God be pleased with them (both). (Used for companions of the prophet.)
RADI ALLAAHU ANHUNNA	E00B (pipeline FD45)	رَضِيَ ٱللَّهُ عَنْهُنَّ	رَضِيَ ٱللَّهُ عَنْهُنَّ	May God be pleased with them (feminine). (Used for companions of the prophet.)

SALLALLAAHU ALAYHI WA-AALIH	E00C (pipeline FD46)			Blessings of God be upon Him and his progeny. (Used particularly in Shia Islam for leaders who come from the bloodline of the prophet.)
ALAYHI AS-SALAAM	E003 (pipeline FD47)			Peace be upon him. (The normal honorific used after a prophet's or an Archangel's name.)
ALAYHIM AS-SALAAM	E004 (pipeline FD48)			Peace be upon them. (Used for two or more prophets.)
ALAYHIMAA AS-SALAAM	E00D (pipeline FD49)			Peace be upon them (both). (Used for prophets and angels.)
ALAYHI AS-SALAATU WAS-SALAAM	E00E (pipeline FD4A)			Blessings and Peace be upon him. (A lesser used honorific used after a prophet's or an Archangel's name.)
QUDDISA SIRRAH	E00F (pipeline FD4B)			May his resting place remain pure. (Used for Sufi saints, and refers to their shrines where people come to worship.)
SALLALLAHU ALAYHI WA-AALIHEE WA-SALLAM	E010 (pipeline FD4C)			Blessings of God be upon him as well as peace. (Used by all Muslims, but particularly in Shia Islam for the prophet Muhammad.)
ALAYHAA AS-SALAAM	E005 (pipeline FD4D)			Peace be upon her. (Used after the name of a woman who was the mother of a prophet.)

TABAARAKA WA-TAAALAA	E013 (pipeline FD4E)			May he be blessed and exalted (Blessed and Lofty). (One of the honorifics used only for God himself.)
RAHIMAHUM ALLAAH	E014 (pipeline FD4F)			God have mercy upon them (masculine). (Used for widely recognized scholars.)
SALAAMUHU ALAYNAA	E002 (pipeline FDCF)			His peace be upon us. (Used by some followers of Jesus to give special honor to him.)
SALLALLAHOU ALAYHEWASALLAM	FDFA			Peace be upon him. (Used after the name of God.)
JALLAJALALOUHOU	FDFB			May His glory be glorified. (Used after the name of God).
BISMILLAH AR-RAHMAN AR-RAHEEM	FDFD			In the name of God, the most merciful, the most compassionate. (Used as the opening of each action in order to receive blessing from God.)
SUBHAANAHU WA TAAALAA	E011 (pipeline FDFE)			May He be praised and exalted (Glorified and Lofty). (The most common honorific for God.)
AZZA WA JALL	E012 (pipeline FDFF)			The Glorified/Exalted/Mighty and Sublime (Prestigious and Magestic). (The second most common honorific for God.)