Rule No.	String (input)	Hexadecimal	String (output)	Hexadecimal	Rule	Example	Notes	Reference http://www.loc.gov/catdir/cpso/romanization/arabic.pdf
1a)	Ṯ / ṯ	1E6E / 1E6F	th	0074&0068				See p.1 in LoC for Rules 1a)-1f)
1b)	Ḫ / ḫ	1E2A / 1E2B	kh	006B&0068				
1c)	Ḏ / ḏ	1E0E / 1E0F	dh	0064&0068				
1d)	Š / š	0160 / 0161	sh	0073&0068				
1e)	Ġ / ġ	0120 / 0121	gh	0067&0068				
1f)	ỳ	1EF3	á	00E1				

2a)	*[Not beginnig with: al-]* Xẗ al-X	X + 1E97 + 20&61&6C&2D + X	Xt al-X	X + 0074 + 20&61&6C&2D + X	When the word ending in ẗ is in the construct state [muḍāf wa-muḍāf ilayh], ẗ is normalized t.	Mir'āt al-zamān	Rule 2a) has priority over rule 2b).	In LoC: rule no. 7 (b)
2b)	Xẗ *[Not followed by: al-X]*	X + 1E97&20	Xh	X +0068&20	When the noun or adjective (X) ending in ẗ is indefinite, ẗ is normalized h.	ṣalāh		In LoC: rule no. 7 (a)
2c)	Al-Xẗ	20&61&6C&2D + X + 1E97	Al-Xh	20&61&6C&2D + X +0068	When the noun or adjective (X) is ending in ẗ is preceded by the definite article (Al-), ẗ is normalized h.	Al-Risālah al-bahiyyah	Rule 2c) has priority over	In LoC: rule no. 7 (a)

							rule 2a).	
2d)	Xẗan	X+1E97+ 61&6E	Xtan	X+0074+ 61&6E	When the word ending in ẗan, ẗ is normalized t (tan).	Faj'atan		In LoC: rule no. 7 (c)
3a)	P al-X; P=[bi; wa; ka]	[20&62&69/ 20&77&61/ 20&6B&61] + 20&61&6C&2 D + X	P-al-X	[20&62&69/ 20&77&61/ 20&6B&61] + 2D&61&6C&2D + X	Inseparable prepositions, conjunctions, and other prefixes are connected with the article of the following word by a hyphen.	bi-al-tamām wa-al-kamāl		In Loc: Rule no. 17 (a)
3b)	P X; P=[bi; wa; ka]	[20&62&69/ 20&77&61/ 20&6B&61] +SPACE+X	P-X	[20&62&69/ 20&77&61/ 20&6B&61] + 2D+ X	Inseparable prepositions, conjunctions, and other prefixes are connected with what follows by a hyphen.	bi-tarīq		Rule no. 16 (b)
4a)	li	20&6C&69	li-	20&6C&69&2D	See rule above	li-tajrīd		In LoC: rule no. 16 (b)

4b)	li al-X / li'l-X / li-'l-X/ li-l-X	20&6C&69+20&61&6C&2D + X/ 20&6C&69&27&6C&2D + X/ 20&6C&2D&27&6C&2D + X/ 20&6C&2D&6C&2D + X	lil-X	20&6C&69&6C&2D + X	exceptional treatment of the preposition li followed by the article (al-)	lil-Shirbīnī	Rule 4b) has priority over rule 4a) and 5a).	In LoC: rule no. 17 (b)
5a)	'l-X / X-'l-X	20&27&6C&2D + X/ X + 2D&27&6C&2D + X	al-X	20&61&6C&2D +X	When *al* is initial in the word, and when it follows an inseparable preposition or conjunction, it is always normalized *al* regardless of whether the preceding word, as romanized, ends in a vowel or a consonant.	fī al-kitāb	Rule 5a) has priority over 3a)	In LoC: rule no. 17 (b)

| 5b) | aY-YX; Y=Sun letters[t; ṯ; d; ḏ; r; z; s; š; ṣ; ḍ; ṭ; ẓ; l; n] | 20&61&[74/ 1E6F/ 64/ 1E0F/ 72/ 7A/ 73/ 0161/ 1E63/ 1E0D/ 1E6D/ 1E93/ 6C/ 6E]&2D&[74/ 1E6F/ 64/ 1E0F/ 72/ 7A/ 73/ 0161/ 1E63/ 1E0D/ 1E6D/ 1E93/ 6C/ 6E] + X | al-YX | 20&61&6C&2D &[74/ 1E6F/ 64/ 1E0F/ 72/ 7A/ 73/ 0161/ 1E63/ 1E0D/ 1E6D/ 1E93/ 6C/ 6E] + X | The l of the article is always normalized l, whether it is followed by a „sun letter" or not/ regardless of whether or not it is assimilated in pronounciation to the initial consonant of the word to which it is attached. | al-šams (instead of: aš-šams) | | In LoC: rule no. 17 (c) |
| 6) | λh; λ= [t; k; d; s; g] | [74/ 6B/ 64/ 73/ 67]&68 | λ'h | [74/ 6B/ 64/ 73/ 67]&27&68 | (′) is used to separate two letters representing two distinct consonantal sounds, when the combination might otherwise be read as a digraph. | Ad'ham | | In LoC: rule no. 21 (a) |

7a)	X[illāh; ullāh; allah; allāh; - Allāh; Allah; ullah]	X+ [69&6C&6C&101&68/ 75&6C&6C&101&68/ 61&6C&6C&61&68/ 61&6C&6C&101&68/ 2D&41&6C&6C&101&68/ 20&41&6C&6C&61&68/ 75&6C&6C&61&68]	X Allāh	X + 20&41&6C&6C&101&68		’Abd Allāh		In LoC: rule no. 23
7 b)	[l; b; bism]illāh	[20&6C/ 20&62/ 20&62&69&73&6D/] + 69&6C&6C&101&68	lillāh/ billāh/ bismillāh	20&62&6C&6C&101&68/ 20&6C&6C&6C&101&68/ 20&62&69&73&	Combinations of preposition + Allāh remain the same	lillāh billāh bismillāh	Rule no. 7b) has priority over 7a)	In LoC: rule no. 23

				6D&69&6C&6C&101&68			