

Category		Members	Unicode	TIS-620
V_1	Preposed vowel	เ แ โ ใ ไ	0E40, 0E41, 0E42, 0E43, 0E44	E0, E1, E2, E3, E4
C_1	Initial consonant	ก ข ฃ ค ฅ ฆ ง จ ฉ ช ฌ ฌ ญ ฎ ฏ ฐ ฑ ฒ ณ ด ต ถ ท ธ น บ ป ผ ฝ พ ฟ ภ ม ย ร ล ฬ ฤ ว ศ ษ ส ห พื อ ฮ	0E01 - 0E2E (inclusive)	A1 - CE (inclusive)
C_2	Clustered consonant	ร ล ว น ม	0E19, 0E21, 0E23, 0E25, 0E27	B9, C1, C3, C5, C7
V_2	Super- or subscript vowel	ิ ี ื ึ ุ ู ั ็	0E31, 0E34, 0E35, 0E36, 0E37, 0E38, 0E39, 0E47	D1, D4, D5, D6, D7, D8, D9, E7
T	Superscript tone mark	่ ๊ ๋ ๋	0E48, 0E49, 0E4A, 0E4B	E8, E9, EA, EB
V_3	Postposed vowel or glide	า อ ย ว	0E22, 0E27, 0E2D, 0E32	C2, C7, CD, D2
C_3	Final consonant	ง น ม ด บ ป ก ย ว	0E01, 0E07, 0E14, 0E19, 0E1A, 0E21, 0E22, 0E27	A1, A7, B4, B9, BA, C1, C2, C7

States and transitions of the finite state machine

State #	Action	Transition
0	Accept V1/C1	V1 → 1 C1 → 2
1	Accept C1	C1 → 2
2	Accept C2/V2/T/V3/C3/V1/C1	C2 → 3 V2 → 4 T → 5 V3 → 6 C3 → 9 V1 → 7 C1 → 8
3	Accept V2/T/V3/C3	V2 → 4 T → 5 V3 → 6 C3 → 9
4	Accept T/V3/C3/V1/C1	T → 5 V3 → 6 C3 → 9 V1 → 7 C1 → 8
5	Accept V3/C3/V1/C1	V3 → 6 C3 → 9 V1 → 7 C1 → 8
6	Accept C3/V1/C1	C3 → 9 V1 → 7 C1 → 8
7	Break before previous character	→ 1
8	Break before previous character	→ 2
9	Break now	→ 0

Start state: 0
Accept (final) states: 7, 8, 9

If there is no valid transition out of a state based on the current character, then the input would be rejected. Note, however, that *the test data for this project has been selected so that a correct FSM will not reject any lines*, and will correctly identify all Thai syllables.