

Universal Shaping Engine (USE): Bengali, Gujarati & Tamil

The same Indic_Syllabic_Category/Indic_Positional_Category-driven classify/scan/reorder pipeline as Devanagari, extended to three more Brahmic scripts.

Bengali

Pre-base vowel sign reordering and conjunct formation

কি ("ki") reorders its pre-base matra before the base; ক্খি ("kṣi") fuses the KA+VIRAMA+SSA conjunct via the font's own Cj Ct feature before reordering the following matra:

কি ক্খি

Bengali's own USE categories: Consonant Placeholder (GB) and Syllable Modifier (FMABv)

ক (BENGALI ANJI, U+0980) is a Consonant Placeholder - grouped with an ordinary base consonant as a syllable start; a base consonant followed by the Sandhi Mark (U+09FE, a Syllable Modifier) stays in logical order, resolved to above-base position by its own GPOS mark anchoring - two categories no Devanagari codepoint ever reaches:

Consonant Placeholder (Anji) alone	Base + Sandhi Mark
ক	ক্‌

Gujarati

Pre-base vowel sign reordering, conjunct and reph formation

કિ ("ki") reorders its pre-base matra; ક્ખિ ("kṣi") fuses the conjunct; ક્ખિરિ ("rkṣi") forms a reph via rphf and fuses it with the repositioned matra into one combined presentation glyph via pres - the same mechanism as Devanagari's own reph+matra fusion, verified against this real font too:

કિ ક્ખિ ક્ખિરિ

Tamil

Pre-base vowel sign reordering and a Grantha- loanword conjunct

கெ ("ke") reorders its pre-base matra; க்ஷெ ("kṣe") fuses KA+VIRAMA+SSA (SSA is a Grantha-origin letter Tamil borrows for Sanskrit loanwords) into one conjunct glyph via the font's own Cj Ct/half features, exactly like a native Indic conjunct:

கெ க்ஷெ