BPcore Silicon

VERIFICATION BRIEF / REV 1.0 / 20 November 2026

NeuraEdge keyword-spotting verification

A pre-silicon functional check of one fixed model on the NeuraEdge reference system.

Matching inferences	Selected inputs	Environment
72/72	17	RTL simulation

Test setup

The replay used precomputed audio features, one fixed model and one reference RTL configuration. Runs covered ready and stalled simulated memory conditions at two memory placements. All valid inferences matched the integer reference.

One replay, byte for byte

First valid inference in a two-input replay. Audio-derived features were supplied to the RTL simulation. The simulated SRAM used the lower test placement with no injected stalls.

Quantized output bytes in model output order (hex)

Integer reference	`7D 80 80 80 80 81 80 80 80 80 80 81`
Observed in RTL	`7D 80 80 80 80 81 80 80 80 80 80 81`

All 12 output bytes match.

What the result covers

The result is specific to the tested workload and configuration. Silicon operation, power, target clock rates, live audio capture and buyer integration were outside the test scope. The replay does not measure keyword-recognition accuracy on a held-out dataset.

Request a technical evaluation

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