UEI	CAGE	SAM.GOV	ENTITY	HEADQUARTERS	OWNERSHIP
J8PVQBNB34A5	25C44	Active	Delaware C-corporation	Paradise Valley, AZ	U.S. majority owned

Assured Signal · engineer eval

Engineer pilot handout · 20 October 2026

Job: CPU **denoise / stabilize** sensor time series **before** your detect, track, or fusion blocks.

Compare to: Moving average, Savitzky-Golay, Wiener, wavelet shrinkage, local-projection (LP) family on chaotic/sensor traces.

Pilot KPIs: SNR improvement on **your recorded tapes**; false-alarm or track-stability proxies you already use; **no degradation** on clean (high-SNR) segments.

30-day pilot: Side-by-side preprocess on digitized channels; document mixed-noise and edge cases in the eval report.

Pass: Agreed SNR/stability KPIs on customer tapes; clean-input pass-through verified.

Lab evidence (scope): Broad chaotic denoise grid: wins vs published LP-class baselines on **~98%** of tested conditions (**927/945** BSE-any, job **45157**); **do not** sell **Dynamic-only ~47.8%** per-cell best (G4) as the grid story. **Two mixed-noise rows (do not merge):** full dysts mixed-noise grid with **CMP router**; **~99.7%** routed wins vs LP on **938** licensed cells (jobs **45284-45286**, **45261**); **EW staging** **24/24** (job **45157**). **JVE Rössler @ 0 dB; dual row (G25 guard):** **default SKU** `bse_dynamic` **12.119 dB** (45207); **below** LP+wavelet **14.11 dB**; **licensed opt-in** **`deriv_w11+b0.70|parity_stack`** **14.560 dB** (45598, fixed-policy replication); **+0.450 dB** vs **14.11 dB** when citing job **45598** with default disclosure. **Public replay eval path:** **9/9** modalities indexed (45230 pack; uav_acoustic durable cite **45434**); engineering substitute only, not field PASS.

Do not compare to: Forecast benchmarks (N-BEATS, etc.); end-to-end radar detection mAP.

Dispatch lanes (motion 06 @2026-11-02): Default pilot call is **`denoise(bse_dynamic)`** (L1). For dysts/mixed/JVE-class benchmarks, documented receipt paths are **`denoise_parity_stack`**, **`denoise_mixed_noise`**, **`denoise_routed`**, and licensed G1 integration arms; see hybrid addendum dispatch table · [`assured-signal-hybrid-disclosure-addendum-2026-11.md`](../assured-signal-hybrid-disclosure-addendum-2026-11.md).

Integration: One float64 vector per channel per call; reference CPU **~80 ms** p50 end-to-end for **`bse_dynamic`** @ **4096** samples (Aegis **45611** full latency table; 1024 / 4096 / 16384 blocks; internal design anchor **165 ms**, HY-C11 sidecar pass). **Do not** cite **parity_stack** multi-second latency as product dwell time (G23 ultra-latency bound). Registrar footnotes: [`g12_latency_engineer_eval_footnote_2026-10-29.yaml`](../../../resonix_lab_moridain/projects/signal-processing/as-parity-gap-2026/docs/g12_latency_engineer_eval_footnote_2026-10-29.yaml) · publish receipt [`g12_engineer_eval_latency_footnote_published_2026-11-02.yaml`](../../../resonix_lab_moridain/projects/signal-processing/as-parity-gap-2026/docs/g12_engineer_eval_latency_footnote_published_2026-11-02.yaml) (BK **#7** @2026-11-02).

INQUIRIES
Partnering, teaming and technical questions

Mike Hurm, COO
mikeh@resonixusa.com

Paul West, CTO
paulw@resonixusa.com