MEMORY & COHERENCY

SONJE-P64 64-Byte Production Datapath Architecture

Concrete 64-byte / 512-bit VMOL datapath with 576-bit eight-lane SECDED proof-storage path and metadata-coupled control; moves the prior production target into implemented P64 technology.

IP-3935 · Source / reference evidence · RTL / reference evaluation

Function and architecture

• Concrete 64-byte / 512-bit VMOL datapath with 576-bit eight-lane SECDED proof-storage path and metadata-coupled control

• moves the prior production target into implemented P64 technology

Integration summary

SONJE-P64 64-Byte Production Datapath Architecture provides the documented memory datapath / implementation architecture responsibility: Concrete 64-byte / 512-bit VMOL datapath with 576-bit eight-lane SECDED proof-storage path and metadata-coupled control; moves the prior production target into implemented P64 technology. Evaluate the exact SONJE-P64-IP-001 implementation and confirm its integration contract before using it inside the target design.

Technical record

Canonical identity	IP-3935
Native implementation identity	SONJE-P64-IP-001
Documented responsibility	Concrete 64-byte / 512-bit VMOL datapath with 576-bit eight-lane SECDED proof-storage path and metadata-coupled control; moves the prior production target into implemented P64 technology.
Recorded evidence class	Source / reference evidence
Interface and physical parameters	Bound to the selected source/configuration; not inferred from name or family.

Delivery and release binding

• Exact implementation and configuration manifest

• Documented interfaces and clock/reset contract

- Available reference or verification collateral
- Recorded physical views where authorized and applicable
- Integration acceptance criteria and unresolved gate list

Confirm for the selected release: Source/configuration identity, Interface and dependencies, Verification evidence, Process/library where applicable, Authorized package and acceptance criteria.

Evidence and qualification

Evidence retained in our records + P64 source tree

Evidence shown is our record for this canonical implementation, not a fresh tool rerun. External foundry acceptance, silicon measurements, standards certification and unlisted interface/physical parameters are not inferred. Exact delivery and rights are agreed before licensing.

Canonical status: P1 / IMPLEMENTATION-BACKED; PREPHYSICAL RTL/FORMAL/SYNTHESIS CHAIN

Evaluation and licensing

Evaluation: Review the exact recorded implementation and agreed test scope. Production: Named-design rights for the agreed qualified release. Custom work: Target integration, verification or physical qualification. Rights, pricing, support and acceptance criteria are agreed for the exact scope.

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