MEMORY & COHERENCY

SONJE-P64 Four-Bank Controller RTL

Four-bank P64 controller implementation routing full-line operations among independent production-facing banks rather than the earlier reduced-width controller proof.

IP-3949 · Executed digital evidence · RTL / reference evaluation

Function and architecture

• Four-bank P64 controller implementation routing full-line operations among independent production-facing banks rather than the earlier reduced-width controller proof.

Integration summary

SONJE-P64 Four-Bank Controller RTL provides the documented multi-bank memory controller rtl responsibility: Four-bank P64 controller implementation routing full-line operations among independent production-facing banks rather than the earlier reduced-width controller proof. Evaluate the exact SONJE-P64-IP-015 implementation and confirm its integration contract before using it inside the target design.

Technical record

Canonical identity	IP-3949
Native implementation identity	SONJE-P64-IP-015
Documented responsibility	Four-bank P64 controller implementation routing full-line operations among independent production-facing banks rather than the earlier reduced-width controller proof.
Recorded evidence class	Executed digital 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

rtl/p64/top/sonje_p64_controller.sv + tb/p64/tb_sonje_p64_controller.sv

Evidence shown is the Bible 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 / DIRECTED RTL + SYNTHESIS OBSERVED PASS; PRODUCTION QUEUING/MACRO/PROTOCOL CLOSURE OPEN

Source basis: Bible v7.42 VERIFIED V29, IP-3949; 104.6 New canonical SONJE-P64 records - 17 net-new implementation identities (table 801, row 16).

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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