

LOOM Service Fabric Architecture

Thread-local heterogeneous service architecture exposing digital I/O, radio, sensor, SerDes and optical capability endpoints while preserving homogeneous Thread software contract.

IP-2563 · Source / reference evidence · RTL / reference evaluation

Function and architecture

- Thread-local heterogeneous service architecture exposing digital I/O, radio, sensor, SerDes and optical capability endpoints while preserving homogeneous Thread software contract.

Integration summary

LOOM Service Fabric Architecture provides the documented i/o / service arch responsibility: Thread-local heterogeneous service architecture exposing digital I/O, radio, sensor, SerDes and optical capability endpoints while preserving homogeneous Thread software contract. Evaluate the exact LOOM-IP-034 implementation and confirm its integration contract before using it inside the target design.

Technical record

Canonical identity	IP-2563
Native implementation identity	LOOM-IP-034
Documented responsibility	Thread-local heterogeneous service architecture exposing digital I/O, radio, sensor, SerDes and optical capability endpoints while preserving homogeneous Thread software contract.
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

v2 corrections + service RTL

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 / IMPLEMENTATION-BACKED ARCHITECTURE

Source basis: Bible v7.42 VERIFIED V29, IP-2563; 89.3 New canonical LOOM records - 44 net-new identities (table 774, row 35).

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.

Contact: patrick@garmolabs.com | Product path: /ip/loom-service-fabric-architecture-ip-2563