

# GSH-AS — Silicon Harness Active Substrate

GTI/GTG; data, management and lifeboat fabrics; analog service; power/clock/reset; security/RAS; GDI

IP-111 · Controlled physical release · Exact-release RTL / physical views by agreement

## Function and architecture

- GTI/GTG
- data, management and lifeboat fabrics
- analog service
- power/clock/reset
- security/RAS

## Integration summary

GSH-AS — Silicon Harness Active Substrate integration role: Managed active silicon substrate. Documented composition: GTI/GTG; data, management and lifeboat fabrics; analog service; power/clock/reset; security/RAS; GDI.

## Technical record

|                            |                                                                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Canonical identity         | IP-111                                                                                                                                |
| Responsibility             | Managed active silicon substrate                                                                                                      |
| Documented building blocks | GTI/GTG; data, management and lifeboat fabrics; analog service; power/clock/reset; security/RAS; GDI                                  |
| Delivery boundary          | Controlled Guardian/Substrate release views; broader architecture remains separately scoped.                                          |
| Evidence scope             | Exact pre-silicon Guardian/Substrate release acceptance; not returned-silicon characterization or blanket architecture qualification. |

## Delivery and release binding

- Interface version and parameter set
- Clock/reset domains and integration constraints
- Companion memory, PHY and software requirements
- Verification collateral and acceptance criteria

Confirm for the selected release: Node/library binding, Clock/reset limits, Physical and protocol dependencies, Artifact hashes, Acceptance criteria.

## **Evidence and qualification**

Bible v7.42 retains the GSH-AS exact pre-silicon acceptance-complete release: source-manifest match; 33/33 gates; 53/53 DV tests; 40 formal proofs; CDC/RDC; Guardian/Substrate physical signoff and final GDS/netlist hashes bound to passing runs. This is not returned-silicon characterization.

No node-port, silicon-performance, standards certification or analog qualification is inherited from a related product.

Canonical status: EXACT PRE-SILICON RELEASE ACCEPTANCE COMPLETE; BIBLE SECTION 132

Source basis: Bible v7.42 VERIFIED V29, IP-111 and section 132 release-specific GSH-AS promotion.

## **Evaluation and licensing**

Evaluation: Evaluate an individual IP configuration. Production: Named-design production license. Custom work: Node binding or derivative integration. Rights, pricing, support and acceptance criteria are agreed for the exact scope.

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