

AXIS SWGI™

SECURE WORKLOAD GATE INTERFACE

"Safety in autonomous systems cannot be probabilistic. It must be an architectural constant. AXIS SWGI™ replaces retrospective logging with sub-millisecond, deterministic enforcement."

ARCHITECTURAL THESIS

Modern compute requires a shift from "**Detection**" to "**Deterministic Prevention.**" AXIS SWGI™ serves as the final gateway before compute execution, ensuring no state change occurs without cryptographically verified authority.

**Execution = Intent +
Authority**

$g_{\pi} \in \{0,1\}$

ATOMIC ENFORCEMENT

Enforcement occurs at the **execution boundary**. By binding mission intent to hardware-backed policy, we eliminate the "Audit Gap."

- **Sub-Millisecond Logic:** < 0.25ms latency.
- **Binary Gating:** Decisions are absolute (Allow/Deny).
- **Stateless Integrity:** Metadata-only verification prevents data leakage.

VERIFICATION FLOW

1. Intent Submission → 2. Policy Attestation → 3. Trust Receipt Generation → 4. SWGI Gate Verification → 5. Deterministic Execution.

TRUST RECEIPT SYSTEM

Every decision produces an immutable, signed Receipt. This move shifts the burden of proof from *human interpretation* to *mathematical verification*.

ID: TR-8829 | AUTH: VERIFIED
GATE: 1 [ALLOW] | SIG: RSA_4096
LATENCY: 0.242ms

HARDWARE ALIGNMENT

Optimized for **Intel® TEE/SGX** environments. SWGI binds execution to a verified compute state, providing a tamper-proof barrier for Defense, Robotics, and Clinical infrastructure.