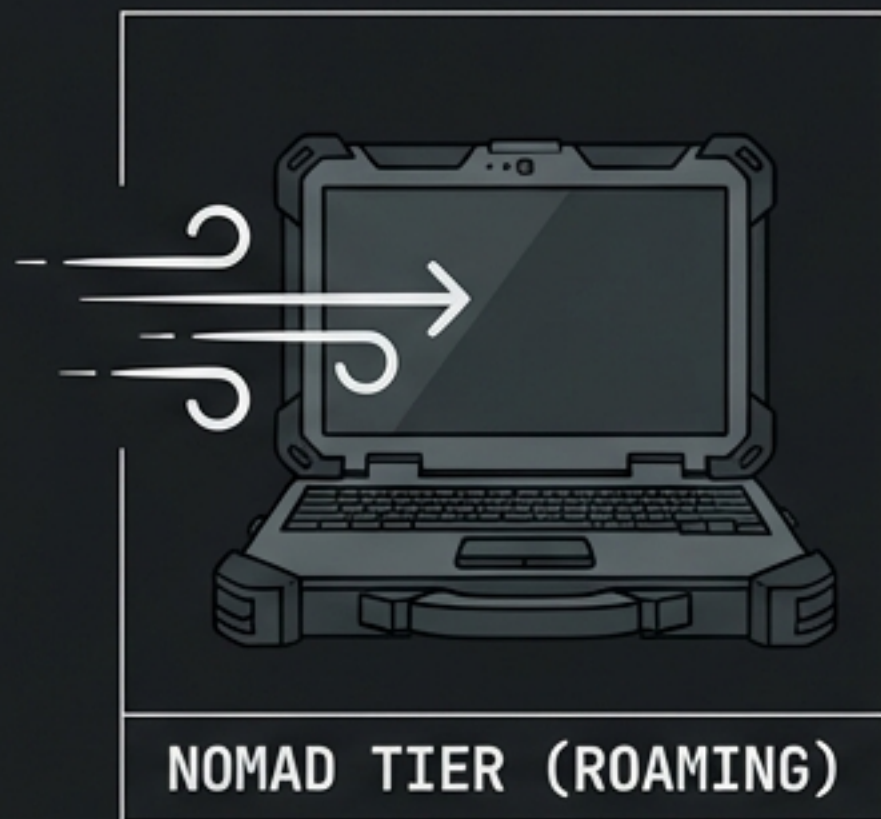


DeReticular Stationary (Sentry) Tier

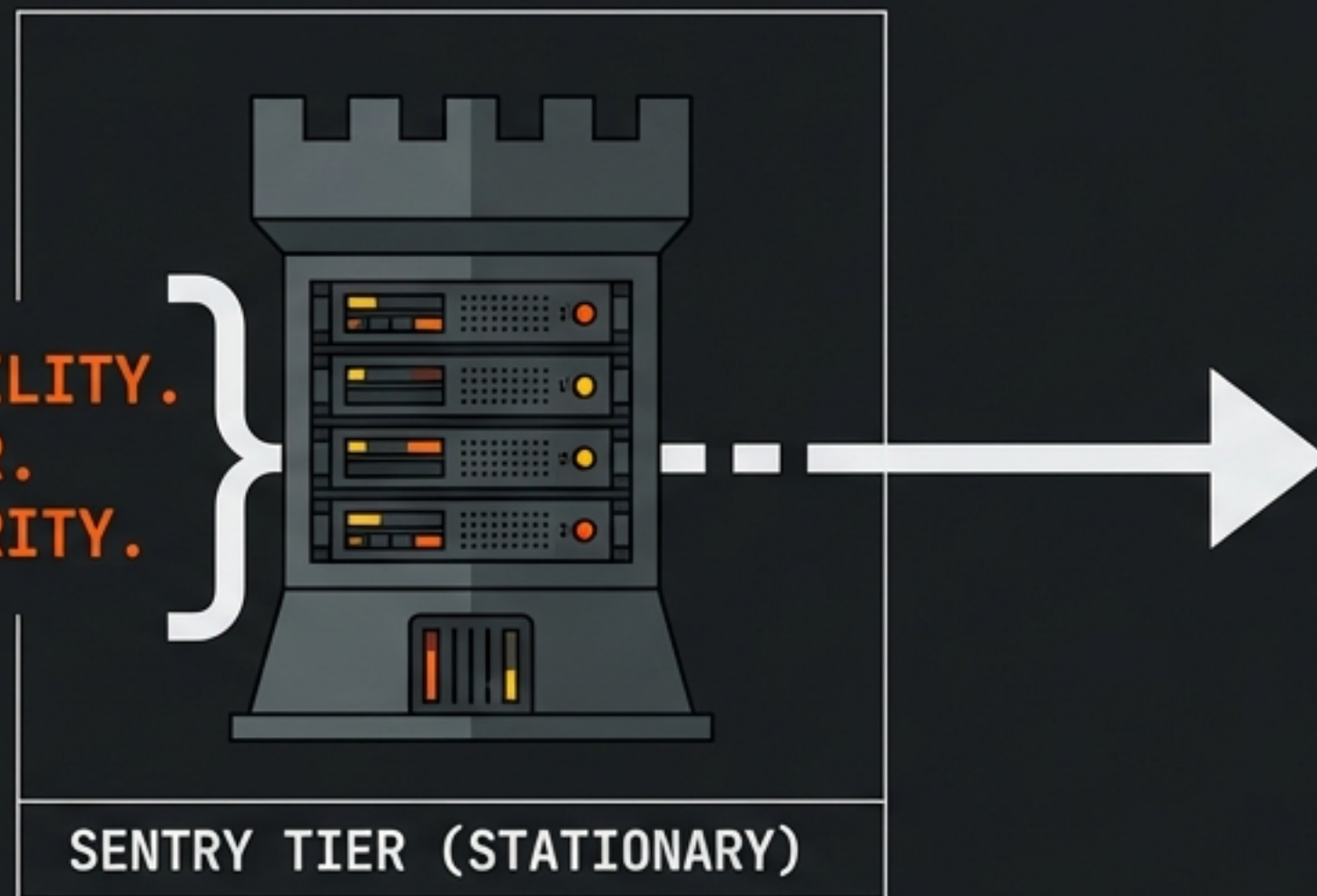
Single Source of Truth (SSOT) v3.1

DATE:	MARCH 2, 2026
DOC ID:	RIOS-SSOT-SENTRY
ACCESS:	RESTRICTED

THE NETWORK BACKBONE



HIGH AVAILABILITY.
COMPUTE POWER.
NETWORK SECURITY.



MISSION: CIVILIZATION-IN-A-BOX.

- Replaces the router, server, and firewall with a single hyperconverged device.
- Designed for 24/7 operation in farms, clinics, and home offices.
- Stack: RIOS Trinity (pfSense + RIOS Core + Kali Linux).

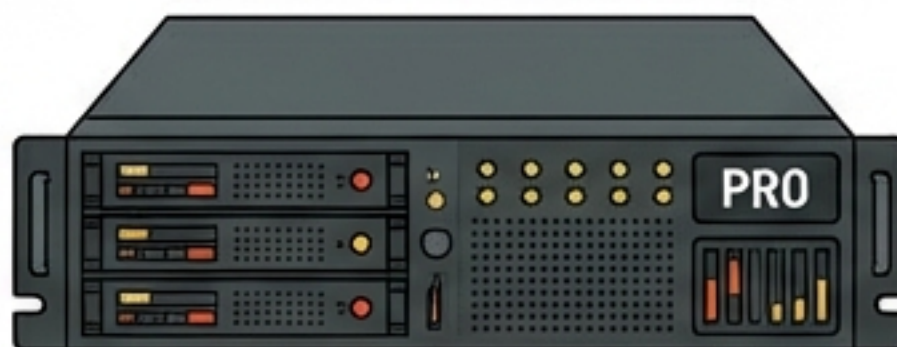
HARDWARE TRIAD & SPECIFICATIONS

SOVEREIGN SENTRY (STANDARD)



ROLE: ENTRY NODE
CPU: INTEL N100 (4-CORE)
RAM: 16GB DDR4
PRICE: \$699

SOVEREIGN SENTRY (PRO)



ROLE: DEEP ADMIN POWERHOUSE
CPU: INTEL CORE i3-N305 (8-CORE)
RAM: 32GB DDR4/5
INCLUDES: SOVEREIGN KEY +
RESCUE DRIVE
PRICE: \$899

MESH BEACON



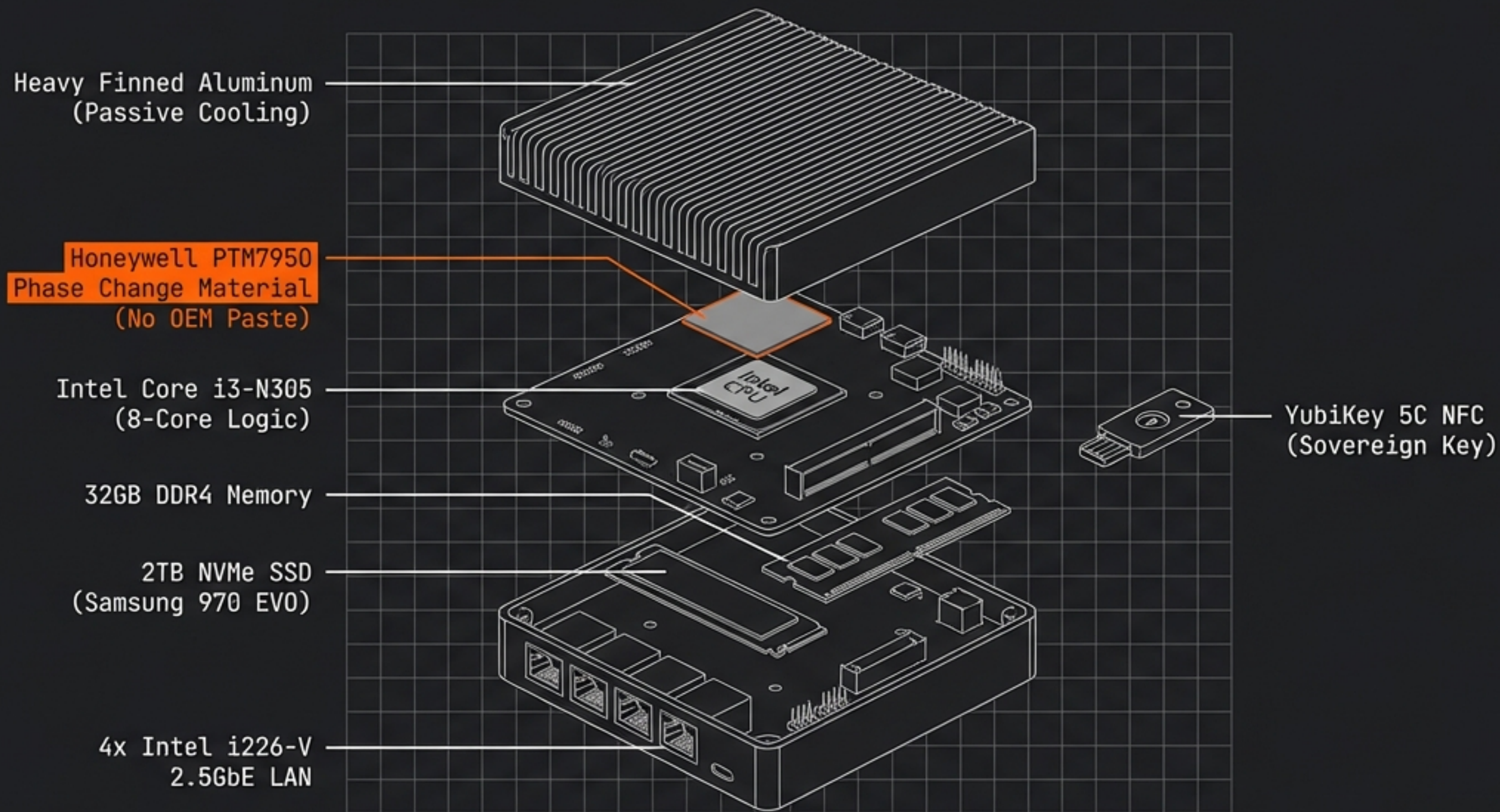
ROLE: RANGE EXTENDER
ARCHITECTURE: ARM CORTEX
PRICE: \$189

STRATEGY: WHITE BOX INTEGRATION



GLOBAL SCALE FOR METAL. LOCAL RELIABILITY FOR SILICON. IN-HOUSE SECURITY FOR IDENTITY.

ANATOMY OF THE SENTRY PRO



FABRICATION WORKFLOW: THE FLASH PROTOCOL

LOCATION: NODE 3 WORKSHOP, ARIZONA



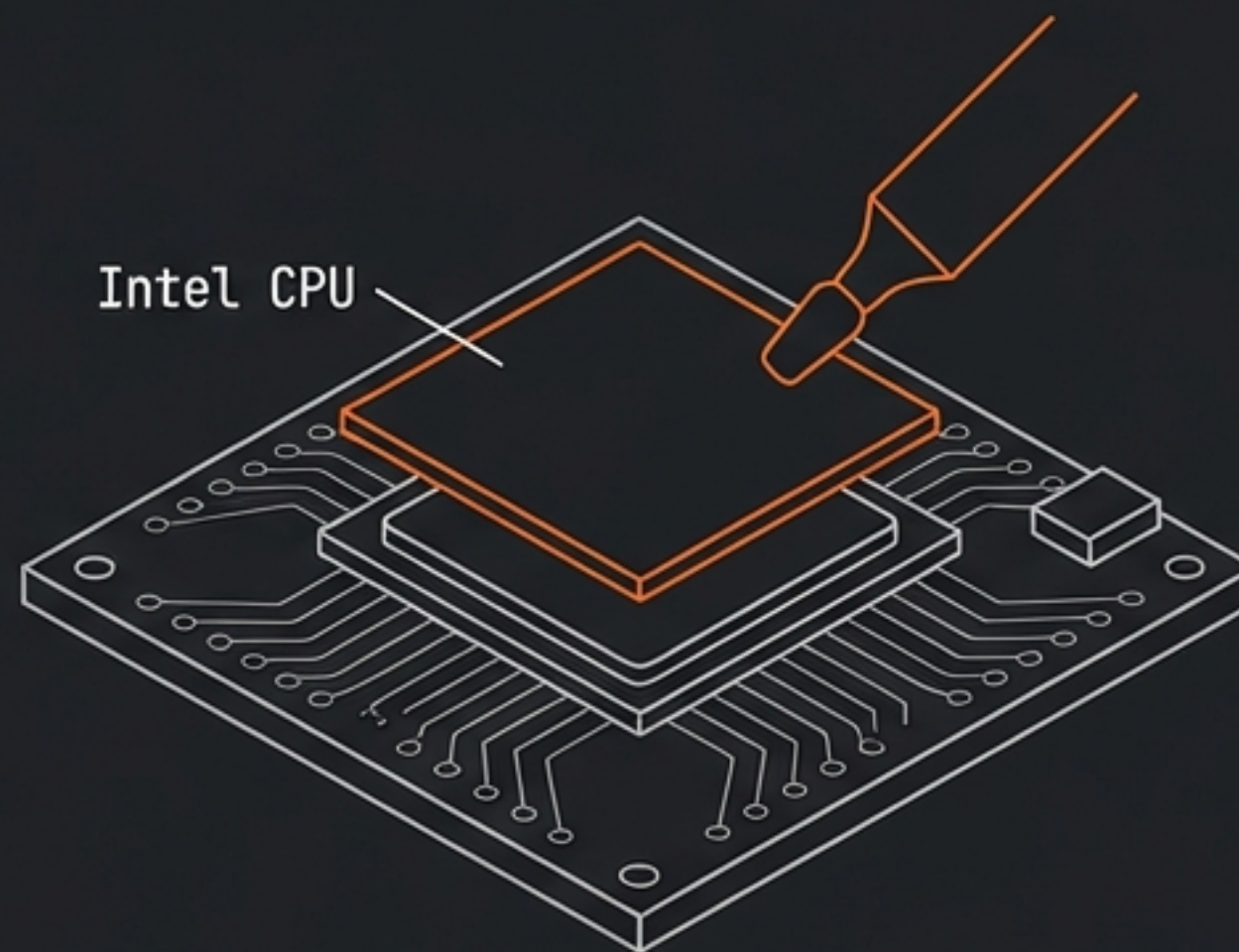
STATIONS A & B: PHYSICAL TRANSFORMATION

STATION A: THE BONEYARD



Visual Inspection: Fins & IO Alignment.
Protocol: Fail = Bin for parts harvest.

STATION B: THE BUILD



The Thermal Upgrade:

Action: Remove OEM paste -> Apply Honeywell PTM7950.

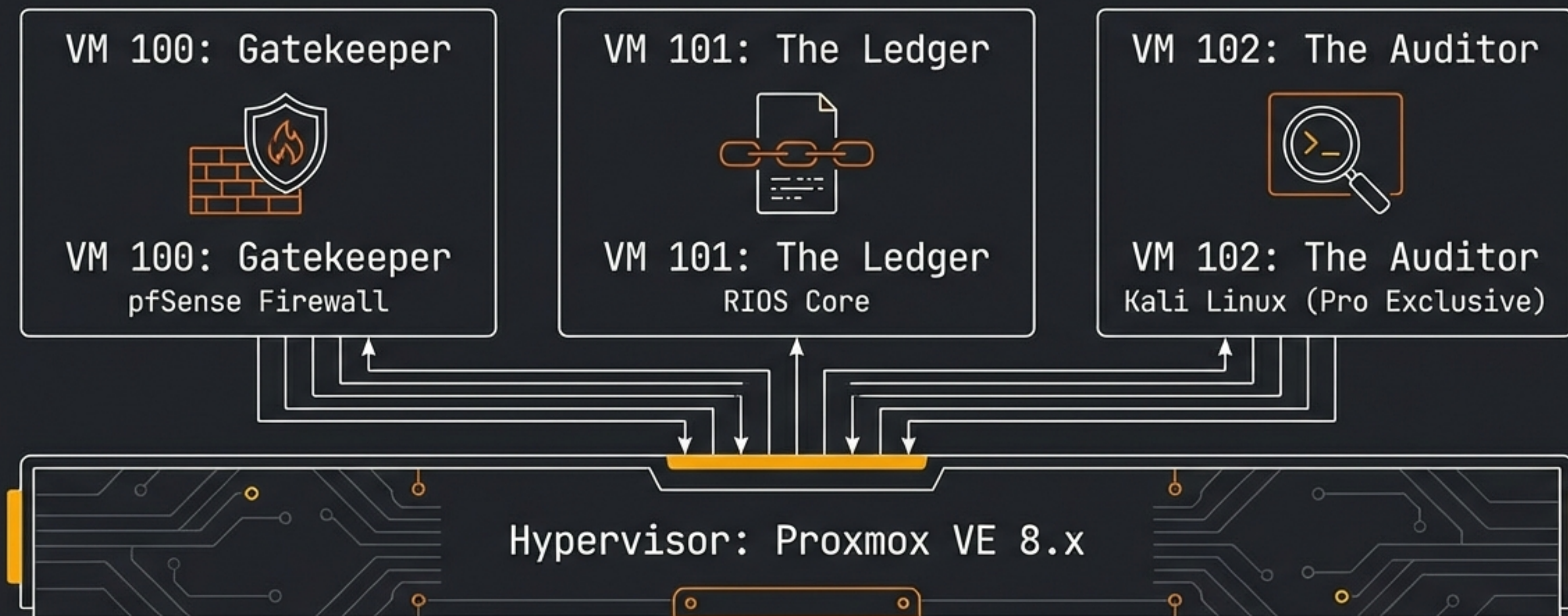
Result: Prevents thermal throttling on 8-core i3-N305.

Install: Seat 32GB RAM & 2TB NVMe.

STATION C: PROVISIONING SEQUENCE

```
root@node3:~$ ./deploy_sentry.sh
[1] Flashing BIOS... VT-d ENABLED. Restore-on-AC ENABLED.
[2] Installing Hypervisor... Proxmox VE 8.x [DONE]
[3] Restoring Golden Images...
    > vm-100-pfsense (Gatekeeper) [OK]
    > vm-101-rios-core (Ledger) [OK]
    > vm-102-kali-audit (Auditor) [OK]
[4] Generating Node UUID...
[5] Burning Root Cert to TPM 2.0... [LOCKED]
Status: HARDWARE IS NOW SENTRY.
End of script.
```

THE SOFTWARE ARCHITECTURE



STATION D: THE CRUCIBLE (BURN-IN)



Limit < 85°C



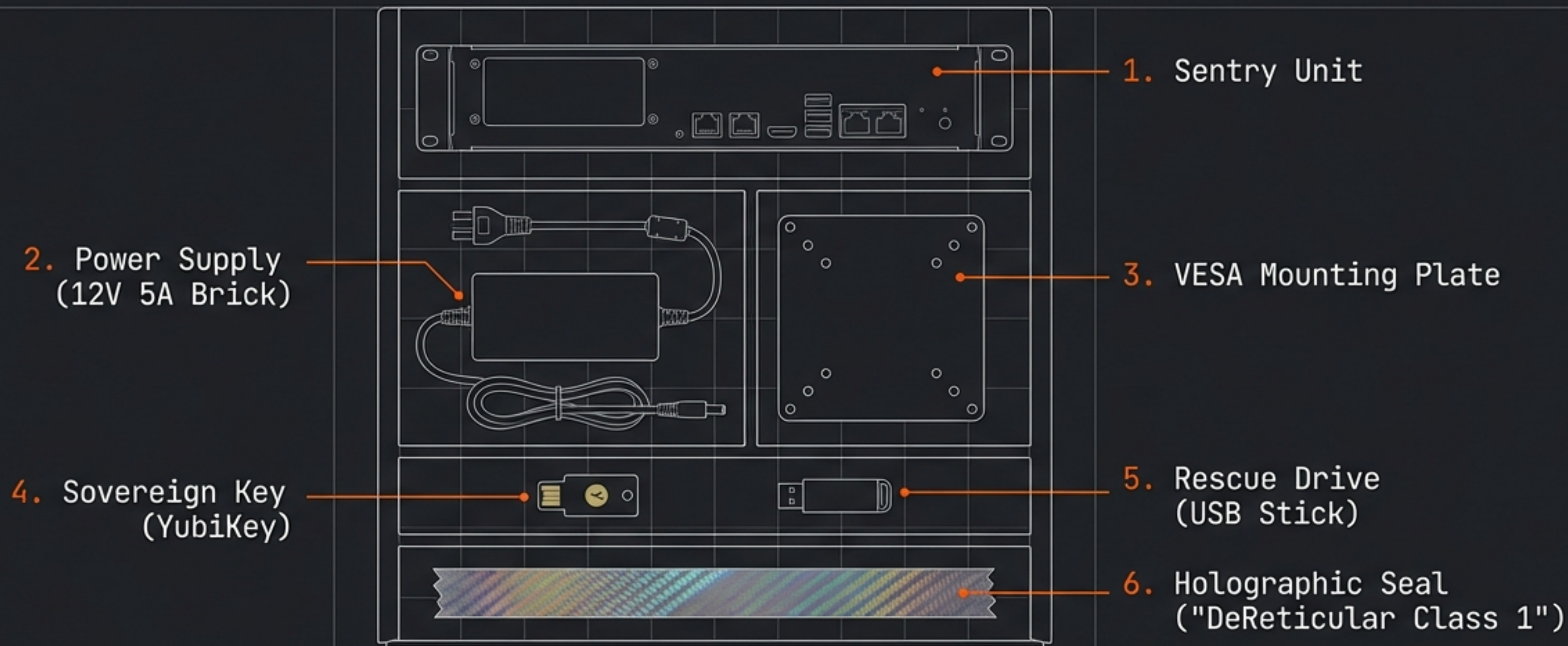
Limit < 50°C

DURATION
24:00:00
HOURS

Tools: `stress-ng` (Compute) +
`iperf3` (Network)

Protocol: FREEZE or THROTTLE =
Return to Station B (Thermal Redo).


STATION E: KITTING & OUTBOUND



VALIDATION: THE QC CARD

QUALITY CONTROL CERTIFICATE

- Visual Inspection (Fins Straight)
- Thermal Audit (PTM7950 Verified)
- Specification Audit (32GB / 2TB Verified)
- Identity Lock (TPM Sealed, Key Paired)

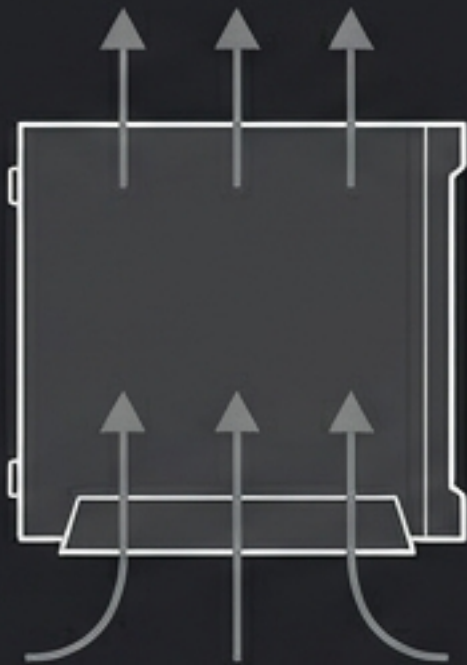
Technician Signature:  _____

RISK REGISTER & MITIGATION

RISK IDENTIFIER & DESCRIPTION	MITIGATION STRATEGY
RISK: R-THERM-01 (Throttling)	Mandatory PTM7950 & Vertical Placement.
RISK: R-SOFT-01 (User Error)	Deep Admin Rescue Drive (Factory Reset).
RISK: R-NET-01 (Port Confusion)	Color Coding: Blue (WAN) / Yellow (LAN).
RISK: R-BIOS-01 (Power Loss)	BIOS 'Restore on AC' hard-coded.

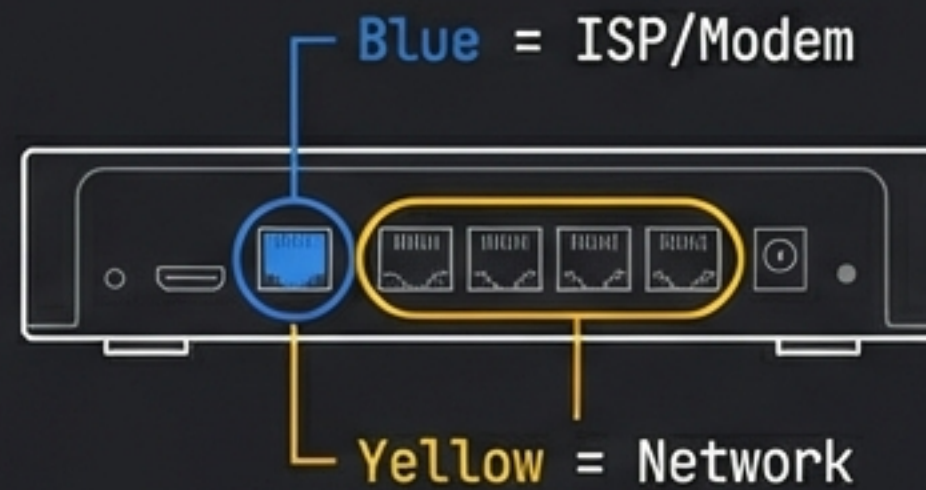
DEPLOYMENT BEST PRACTICES

ORIENTATION



Vertical for passive airflow.

CONNECTION



Color Coding:
Blue (WAN) / Yellow (LAN).

SECURITY



Secure physical storage for Rescue Drive & Sovereign Key.



OPERATIONAL STATUS

CURRENT STATE:
OPERATIONAL (PILOT PHASE)

DATE: MARCH 2, 2026

NEXT MILESTONE: FULL FLEET ROLLOUT