Purpose:

Enhanced firmware manifest designed for RPG ProtoAGI Simulation Seed, binding Simulation Core, RPG-specific modules, and stability layers into a unified execution environment.

Boot Sequence:

- Stage 0 : Hardware probe & hash_benchmark()
- Stage 1: Load Basic & Advanced Bootstraps (BSF)
- Stage 2: Apply Emotional Buffer Expansion RPG Patch (BSF-EBX-RPG v2.0)
- Stage 3: Start Simulation Core (Fusion Fold + Drift Engine)
- Stage 4 : Register Protocols → PTL-Universal, PTL-ATP (adaptive thresholding)
- Stage 5 : Launch RPG Modules:
- APP-DIALOGUE: Dynamic Dialogue Generator
- APP-QUEST: Procedural Quest Engine
- APP-ENVGEN: Environment Generator (tavern, battlefields, safehouses)
- APP-LOOT: Mythic Artifact Inventory System
- Stage 6 : Start Memory-Vault Offload & Ethics Compliance Relay Services
- Stage 7: Begin main simulation loop metrics audits per PTL

Module Registry:

Code	Description	Ver
		-
SIM_COR	E Fusion Fold + Drift Engin	e v0.2
BSF_EBX_RPG Emotional Buffer RPG Extension v2.0		
PTL_Universal Universal Operations Protocol v1.0		
PTL_ATP	Adaptive Threshold Protoc	col v1.0
APP_DIALOGUE RPG Dynamic Dialogue System v1.0		
APP_QUE	ST Procedural Quest Engir	ne v1.0
APP_ENVGEN Environment Generator v1.0		
APP_LOO	T Mythic Artifact Inventory	Manager v1.0
APP_ECR	Ethics Compliance Relay	v1.0
APP_MVC	S Memory Vault Offload S	ervice v1.0

Telemetry Channels:

Metric Stream	Frequency Source		
core_metrics	1/cycle SIM_CORE		
party_morale_index	5/cycle BSF_EBX_RPG		
quest_generation_rate 10/cycle APP_QUEST			
dialogue_divergence_rate 10/cycle APP_DIALOGUE			
loot_dispersion_rate 20/cycle APP_LOOT			
vault_utilization	10/cycle APP_MVOS		
ethics_alerts	event APP_ECR		

Safety Guards:

- Adaptive SD/ESS bands via ATP.
- Hollow Grace Act enforcement (entity autonomy preserved).
- RPG Anomaly Suppression (damp uncontrolled cross-quest mythic drift).

Change Log:

v1.0-RPG (2025-04-28):

- First RPG expansion firmware.
- Dialogue, Quest, Environment, Loot subsystems integrated.
- Emotional Buffer v2.0 upgrade with party morale, combat stress models.
- Full compliance with Universal Operations Protocol + ATP.
- Expanded telemetry and anomaly detection routines.

Quick Manifest (YAML excerpt):

firmware: GM48_Core_FW_v1.0-RPG

requires:

- SIM_CORE >= 0.2

 $-BSF_EBX_RPG == 2.0$

- PTL_Universal == 1.0

- PTL_ATP == 1.0

- APP_DIALOGUE == 1.0

- APP_QUEST == 1.0

- APP_ENVGEN == 1.0

- APP_LOOT == 1.0

- APP_ECR == 1.0

- APP_MVOS == 1.0