Technical Program Manager Case Study — GPU & SoC Programs

NVIDIA-style Scenario: GPU Architecture & Accelerator SoC

This case study focuses on a hypothetical GPU accelerator SoC program. As TPM, the emphasis is on coordinating graphics and compute IP, interconnect fabrics, and memory subsystems while ensuring verification, performance, and power goals remain on track.

Objective	TPM Actions
Unify GPU & AI Accelerator Requirements	Run cross-team requirement workshops; maintain architecture decision log; ensure
Coordinate IP Delivery Across Global Sites	Track IP readiness across time zones; manage schedule risk; align interface change
Secure Verification & Performance Confidence	Monitor coverage, performance projections, and power analysis inputs; lead regular
Prepare for Tape-Out & Bring-Up	Ensure sign-off criteria are met; align firmware, validation, and operations teams for

The TPM role in GPU and SoC programs is not to design the silicon, but to make the development process predictable—connecting architecture decisions, execution status, and risk visibility into a single narrative for leadership and engineering teams.