XMCP - One Pager

Adaptive Memory-Centric Execution Platform

XMCP is an adaptive computing platform: it observes each workload and reshapes routing, memory, precision and sparsity at runtime - then proves what it did with evidence.

The eight engines

- XFlow Scheduler - adaptive routing from measured congestion and traffic prediction.
- Predictive Memory - learns stride/reuse to prefetch data before it is needed.
- Sparse Compute - detects zero lanes and skips the work entirely.
- Adaptive Precision - selects 8/16/32-bit precision per operation.
- Runtime Optimization - closed-loop tuning of routing, precision, cache and sparse thresholds.
- Decision Intelligence - explains every decision with reason and confidence.
- Digital Twin - projects behavior on your target architecture and power envelope.
- Hybrid Execution - Fast Simulation for iteration, RTL Validation for functional sign-off.

Customer evaluation workflow

Upload workload -> XMCP analyzes -> adaptive execution -> runtime optimization -> evidence generated -> recommendations and comparison. Supported inputs: JSON, CSV, YAML, trace files, performance logs, tensor workloads and RTL traces.

Request an enterprise evaluation at xsyda.com/contact.