



Cerebras CS-3 Inference Cluster (32-node)

32x WSE-3 Wafer Scale Engine 3 cluster 2024

OVERVIEW

— Peak Dense	— Aggregate Memory	672000.0 TB/s Aggregate Bandwidth	945.0 kW Aggregate Power
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CONFIGURATION

Accelerator	WSE-3
Count	32
Memory per GPU	—
Bandwidth per GPU	—

POWER & EFFICIENCY

Aggregate Power	945.0 kW
TDP per GPU	—
Efficiency	—
Aggregate Bandwidth	672000.0 TB/s

SYSTEM DETAILS

Vendor: Cerebras	Family: CS-3	Architecture: Wafer Scale Engine 3
Form Factor: cluster	Release Year: 2024	Process Node: TSMC 5nm

INTERCONNECT

On-wafer fabric per engine, 214 Pb/s; cluster networking via dedicated NET cabinets

NOTES

A thirty-two-node Cerebras inference cluster, provisioned as twenty cabinets: sixteen WSE cabinets holding two CS-3 systems each, plus four NET cabinets. Provisioned heat load is approximately 945 kW, about 875 kW on water and 70 kW on air, Cerebras's own provisioned total including networking. The cluster holds 1.408 TB of on-chip SRAM and no DRAM. Each engine is rated at 125 petaFLOPS, footnoted by Cerebras as sparse; the sparsity is unstructured, so no dense figure is derived.