



Server for Edge/Telco

High Efficiency Edge/Telco Server

Powerful and Affordable

The Ampere Hawk board is an eMAG™ 8180-based 1U half width single socket server board targeted for high-density telco, edge, and datacenter deployments. The board is designed to fit into the OCP openEDGE and Open19 chassis.

The flexible and efficient server platform enables diverse applications requiring low latency and high data-processing capabilities for edge computing.

With a powerful and efficient 32 core eMAG 8180 processor, up to 8 DIMM slots and 4 native SATA ports that can be used to connect SATA-compliant mass storage devices with a maximum transfer rate of 6 Gb/s, this extremely flexible platform offers tremendous total cost of ownership (TCO) value with the best performance per dollar and best performance per watt to customers using high volume servers, and for customers using servers for edge, storage, and web server applications.

Two direct-connect M.2 NVMe ports on the board provide ultra-fast reads/writes while loading the OS from an NVMe drive, and reduces costs by eliminating PCIe adapters.

For network connectivity, the Hawk board provides an integrated 1 GbE port and an OCP Mezzanine card connector supporting 10/40/100 GbE NIC.

Ordering Information

The Hawk board may be ordered either from Ampere Computing or any authorized Ampere Computing distributor using the following part number:

- Hawk board: EV-8180-MHB-1

Note: The Hawk board collateral can be obtained from the Ampere Computing Customer Connect web portal at <https://connect.amperecomputing.com/products/pd/hawk>



Specifications

Form Factor	Designed to fit into the OCP openEDGE and Open19 Chassis
Number of Processors	1 x Ampere eMAG 8180 CPU, 32 x ARMv8 64-bit CPU cores at 3.30 GHz with Turbo
Memory	Up to 256 GB in 8x slots using 32 GB DIMMs; 2666 MHz DDR4 RDIMM (1DPC)
Expansion Slots	1 x PCIe x16 (PCIe 0)
Rear Panel I/O Ports	<ul style="list-style-type: none">• 1 x Power Control Button• 1 x RJ45 (BMC)• 1 x RJ45 for 1GbE NIC• 1 x VGA (DB15)• 1 x Serial Port (DB9)• 2 x USB 2.0
Internal I/O Connectors	<ul style="list-style-type: none">• 4 x SATA 6.0 Gb/s Connectors• 2 x NVMe M.2 (PCIe 4, 5)• 1 x OCP Mezzanine Card 2.0 (Conn. A and Conn B) supporting 10/40/100 GbE NIC• 3 x 6-Pin Hot Plug Fan Connector supporting single/dual rotor fans• 1 x 24-pin Multi-Input ATX Power Connector• 1 x 8-pin 12V Power Connector
Network Interfaces	<ul style="list-style-type: none">• 1 x RJ45 for BMC• 1 x RJ45 for 1 GbE
System Management	IPMI2.0, iKVM
Installed Operating System	CentOS 7.x
UEFI	AMI Aptio® V
BMC	AMI MegaRAC®
Others	GCC and LLVM tool chain bundled with latest eMAG software release
Dimensions	22.10 mm (H) x 165.1 mm (W) x 351.79 mm (D) / 0.87" (H) x 6.5" (W) x 13.85" (D)
Limited Warranty	1 year or 3 year base warranty