

# Hawk Board Overview

Sanjeev Shalia Dir. Applications Engineering

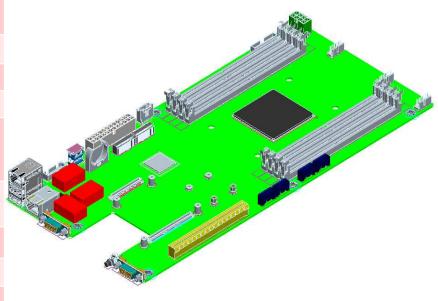
February 12, 2020

#### Hawk is...

- The codename for an Ampere™ eMAG™-based motherboard design targeted for high density telco, edge, and datacenter deployments.
- Designed to fit in a half-width chassis based on openEDGE and Open19 Specifications.
- Currently available and shipping.

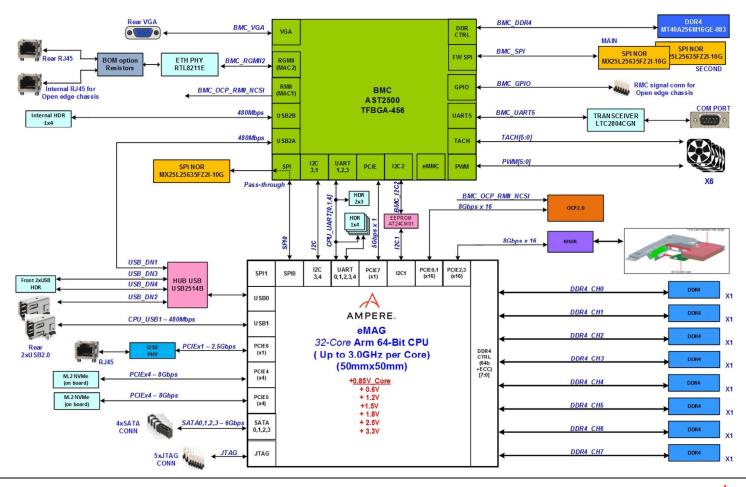
#### **Hawk Features**

	Hawk
CPU	<ul> <li>1x Ampere eMAG 8180 CPU (TDP ~110-125W),</li> <li>32x ARMv8 64-bit CPU cores at 3.30 GHz with Turbo</li> <li>1x Ampere eMAG 8140 CPU (TDP ~75W),</li> <li>16 x ARMv8 64-bit CPU cores at 3.30 GHz with Turbo</li> </ul>
Form Factor	Half Width (1U)
Chassis	openEDGE, Open19
Memory	• 8 x DDR4 2667 RDIMM (1DPC)
Network	<ul> <li>OCP Mezzanine v2 (Conn. A and Conn. B) supporting 10/40/100 GbE NIC</li> <li>1 x 1 GbE (RJ45) Onboard</li> </ul>
Storage	<ul><li>2 x NVMe M.2 (PCle x4)</li><li>4 x SATA (Gen3)</li></ul>
PCIe Expansion	• One PCle slot (x16)
Other I/Os	• VGA, USB 2.0
Power	Power Shelf, ATX
Mgmt.	• 1 G RJ45, slimline (openEDGE)

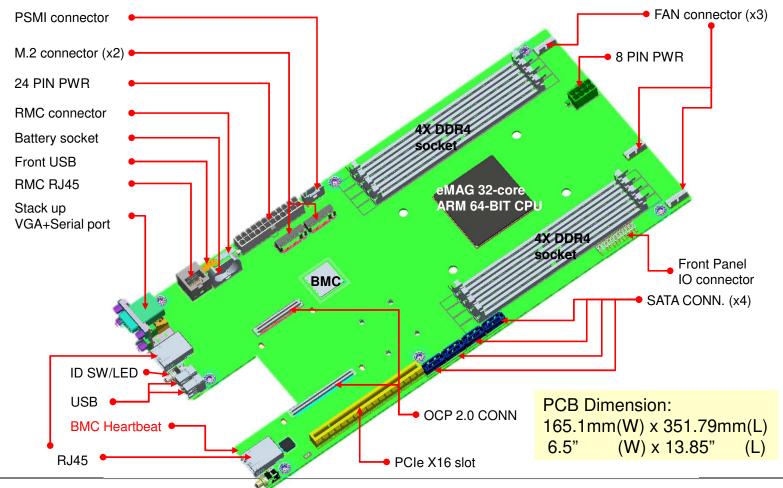




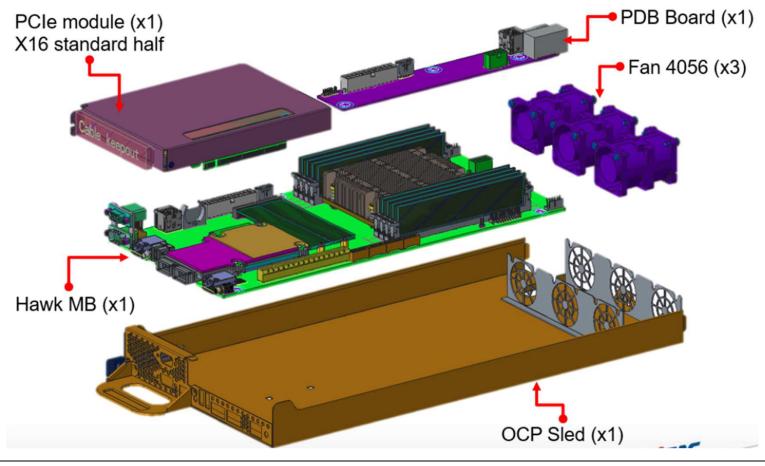
## Hawk Motherboard Block Diagram



#### Hawk Motherboard Placement

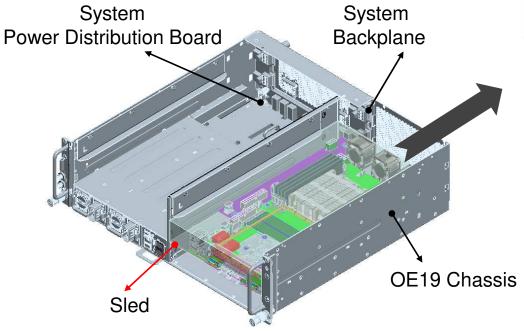


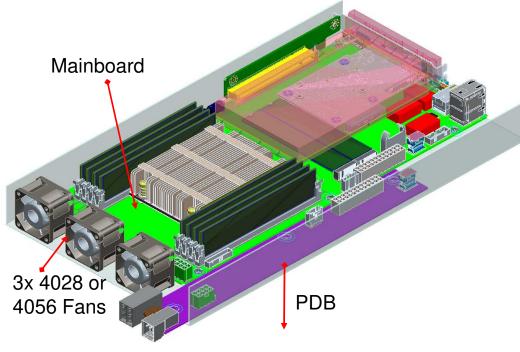
## Hawk Motherboard in openEDGE Sled



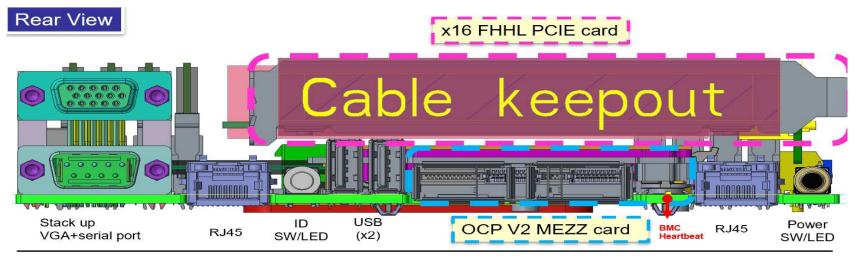


## Hawk Sled in openEDGE Chassis

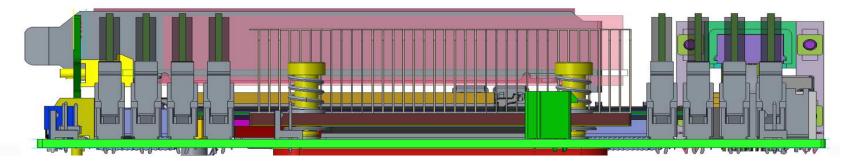




#### Rear and Front Views of the Hawk Board



#### Front View



## Hawk Motherboard Connection with Wiwynn Interposer





## Hawk Motherboard in Wiwynn openEDGE Chassis – Front View







# Thank You

Ampere Computing