HQ-BOX2 | Edge Server



Flexible & Powerful IoT-Edge / Networking server

- Based on Intel® Xeon D1700 LCC, 4-10 Cores
- 3x DDR4-ECC channels, up to 384GB memory capacity
- 2x 2.5GbE(i225) + 1x GbE (i210)
- 8x SFP+ with up to 100Gb Ethernet throughput
- Rugged Fanless design for harsh environments.
- AST2600-based BMC with Display Port (DP) video
- On-board storage: M.2 NVMe + M.2 SATA + eMMC (soldered)
 - M.2 slots have specially designed heatsink mounting points specially designed for transportation environments (shock and vibration protected).
- Extension: 24 lanes of PCIe for Add-on cards and SSD distributed as:
 - o 16-Lane PCIe Gen 4, can be bifurcated into 4x, 8x and 16x lanes
 - 8-Lane PCle Gen 3, can be bifurcated into 4x, 8x lanes
- Storage options (in addition to the on-board storage)
 - o 4x M.2 NVMe (G4) or
 - 4 x U.3 (2.5", 17mm, PCIe G4) + PCIe SSD AOC (8-lane, G3)
- Mixed PCle Add-on cards and storage:
 - Storage :4 x U.3 (2.5", 17mm, PCle G4) .
 - Add-on: 8-Lane PCIe G3, Full height half length card.



The HQ-Box2 was designed for the (hard) Edge and networking applications. The HQ-Box2 utilizes Intel®'s densest compute and connectivity SOC, and has integrated accelerators such as Intel® QuickAssist Technology (QAT) and Inline IPSec. Combined with a flexible 8-port Ethernet controller, the HQ-Box is the best fit for 5G / Edge network applications. Security features such as Intel® Boot Guard, Intel® SGX & Intel® TME-MT ensure better protection in hostile environments.

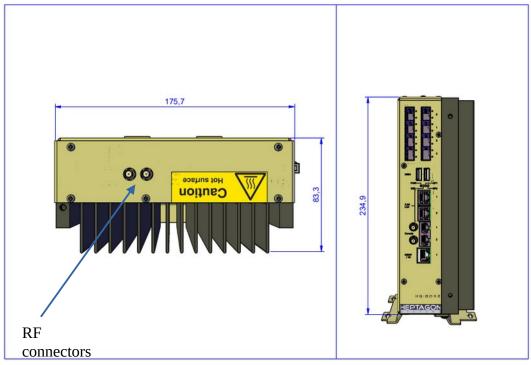
The built-in Board Management Controller is based on Aspeed most advanced AST2600 BMC enabling secure and safe remote administration and recovery.

HQ-BOX2 | Edge Server

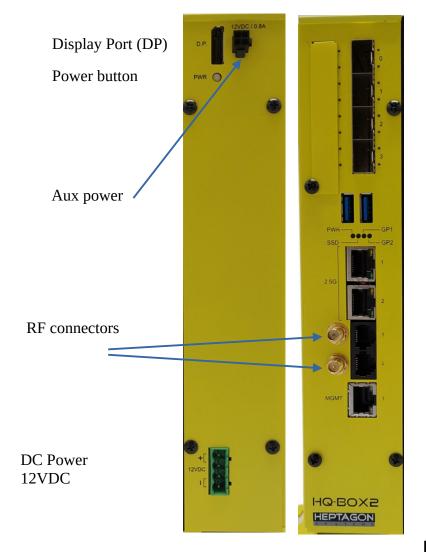


Processor	Intel® Xeon D1700 LCC, 4-10 Cores		
Memory	3x DDR4-ECC channels, 384GB memory capacity		
Storage	Motherboard :	NVMe SSD: M.2 KEY M, PCIE3.0 x4, 2280/2260	
		SATA3 SSD: M.2 KEY B, 2280	
		EMMC: Up to 256GB boot media, soldered	
	Extension:	4x M.2 NVMe SSD: M.2 KEY M, PCIE3.0 x4, 2280	
		4x U.3 (2.5", 17mm, PCle G4)	
Networking	4x or 8x ports SFP+ 2x I225 (2.5GbE) 1x I210 (1GbE)	10/25/50/100 Gigabit configurations	
	WWAN / WLAN: 5G,LTE,3G / 802.11ax Wireless with M.2E slot		
Display	Display port (DP), w	Display port (DP), with BMC	
Interfaces	USB: 2x USB3.0		
	Serial ports: 2x RS232		
Expansion	1x PCle 4.0 x16, 1x PCle 3.0 x8		
Slots	M.2 M-KEY: 1x sockets, NVME, PCIEx4		
	M.2 B-KEY: 1x socket, SATA, USB3.0/2.0 + SIM		
	M.2 E-KEY: 1x sock	M.2 E-KEY: 1x socket, PCIEx1, USB2.0	
Management	BMC AST2600, OpenBMC, IPMI 2.0, DCMI, iKVM, Virtual Media		
Security	TPM 2.0, SLB9665		
		SECURE BOOT, SECURE FLASH	
Power	12VDC. Reverse polarity, Over/under Voltage protection		
Software support	Windows: Win 10 IoT, WS19H1,WS19H2,WS20H1, Win11		
	Linux: All major distributions		
	Virtualization: KVM, ACRN, Vmware ESXi, Microsoft Hyper-V		
	RTOS: Wind River V		
Led	Power, SSD, 2x GPIO		
Mechanical	DIMENSIONS: Slim: 84x176x235n Extended:160x176;		
Environment	OPERATING TEMPE	RATURE Standard 0°C to 50°C Extended* -20°C to 60°C Industrial* -40°C to 72°C * On selected configurations	
	STORAGE TEMPERA	TURE -40°C to 85°C	
	HUMIDITY	95%@40°C (non-condensing)	
Certification	EMC: CE, FCC ,AS/NZS, SAFETY: IEC 60950-1, AS/NZS		
Contact	Email sales@heptagonsystems.com		
	Web	www.heptagonsystems.com	

HQ-BOX2 | Edge Server



Dimensions and Panels



SOC Ethernet controller

4 + 4 SFP ports

2x USB3

LED's

2x 2.5G ETH, Intel i225

RS-232, 2 ports

1G ETH mux with Management port