

VEGA-7030

1U High Density Media Server for Accelerated Video Processing



Features

- Short Depth 1RU x 19" Server Platform
- Intel 12th/13th/14th generation Core™ i9/i7/i5/i3 Processor with Intel UHD Graphic Functionality and Intel Quick Sync Video Support
- Four PCI Express Card Slots for I/O and Accelerators
- Four Gigabit Ethernet Network Ports
- Front Panel LCD Display, Keypad, and Confidence Monitor
- Flexible storage options
- Redundant Power Supplies

Introduction

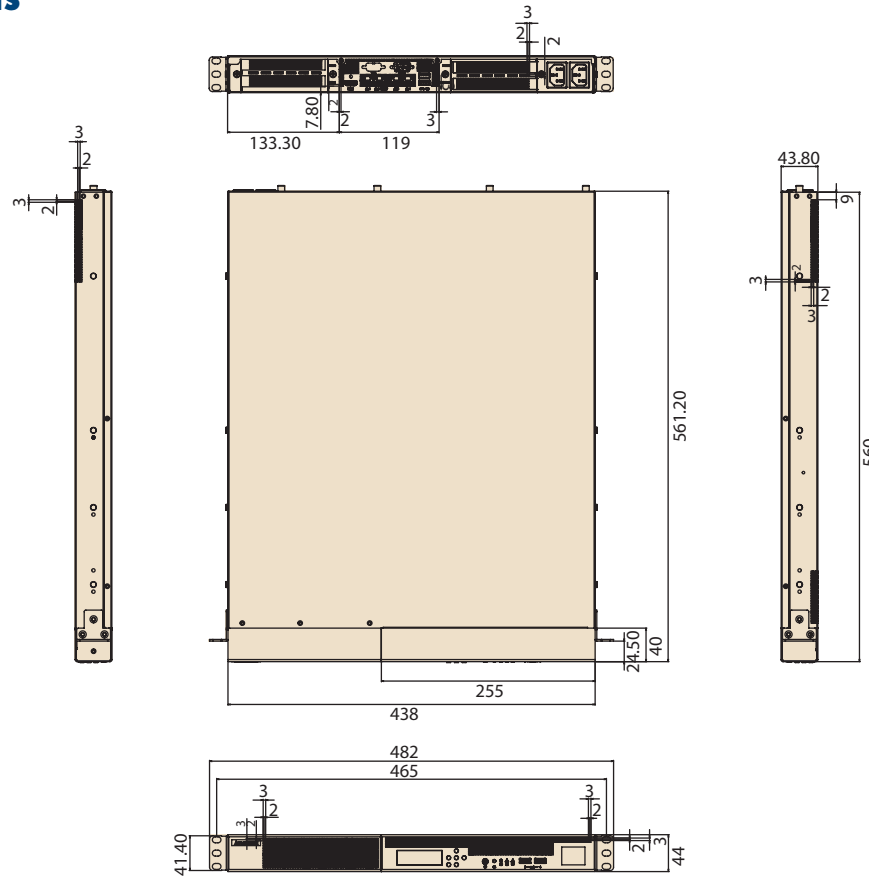
The VEGA-7030 is a highly configurable, 1U, short-depth video applications server based on the Intel 12th/13th/14th generation Core family of desktop processors. Supporting up to 24 CPU cores with on-board Intel UHD Graphics and Quick Sync Video functionality, the VEGA-7030 offers plenty of processing power for many software video workflows while its class-leading four PCI Express slots provide high flexibility to fit a wide range of video accelerators or video I/O cards such as the Advantech VEGA 4K and 8K encoding cards. VEGA-7030 is ready for integration into streaming networks with three 2.5Gigabit and one Gigabit Ethernet connections and can support latest generation protocols like SRT. It has the look and feel of an appliance with user-programmable front panel LCD and keypad and a small OLED confidence monitor for video display, but inside this is a reliable server architecture with dual redundant 550W power, dual NVMe storages, and options for BMC-based remote management and secure TPM feature. The short depth, high temperature operation makes VEGA-7030 especially suitable for video edge or field installations as well as equipment cabinets. VEGA-7030 can be supplied as an application ready platform with a range of accelerator options from 4K or 8K 4:2:2 HEVC capture and encode cards to high performance FPGA and multi-channel transcoders with Linux and Windows software packages that streamline product development and shortens time-to-market for the latest generation of OEM video requirements.

Specifications

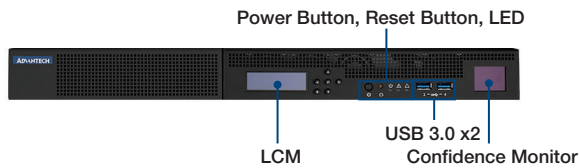
System type		1U Media Server With Video Appliance
Processor System	CPU Type	Intel® 12 th /13 th /14 th Generation Core™ i3/i5/i7/i9 (TDP up to 65W)
	Socket Reference	LGA 1700
	Intel PCH chipset	W680E
Graphics	Controller	Chipset integrated Intel UHD Graphics
Memory	Memory channels	2 channels DDR5 ECC/Non-ECC Up to 5600 MHz DIMM
	Max. Capacity	64GB (2 x 32GB)
Storage	M.2 NVMe	2 x M.2 2280
	2.5 SATA	2 x 2.5" SSD (optional)
Power Supply	System PSU	Redundant AC/550W (optional)
		Redundant AC/800W (optional)
PCIe Expansion Slots	PCIe slot qty for Add on card	2 x PCIe Gen 4 x8 FH/FL (x8 + x8 physical) or 1 x PCIe Gen 4 x16 FH/FL (optional)
		2 x PCIe Gen 3 x4 FH/HL (x8 + x8 physical)
Networking	Interface	10/100/1000/2500 Mbps
	Controller	2.5 GbE LAN 1,3,4: Intel I226LM ; 1 GbE LAN2: Intel® I210
	Connector	RJ-45 x 4
Front I/O Interface	USB	2 x USB 3.2 Gen 1
	LCM	1
	OLED	1
	LED Indicator	1 x Power LED, 1 x Hardware Fault LED, 1 x Alarm LED
Rear I/O Interface	GbE RJ-45	3 x 2.5GbE, 1 x GbE
	HDMI Port	1 x HDMI 2.0 (Resolution up to 4096 x 2160 @ 60 Hz)
	Serial port	1 x DB9
	USB	2 x USB 3.2 Gen 2
Security	TPM	TPM2.0
System Management	BMC	Aspeed AST2600 BMC (optional)
Physical Characteristics	Rackmount/Tabletop/Others	1U Rackmount
	Height x Width x Depth	44 x 438 x 560 mm
Certification	Safety /EMC	UL-62368/ cUL-62368/ CB-62368/ CE/ FCC/ VCCI/RCM
	Environmental Regulation	REACH, EU RoHS, China RoHS, WEEE
Environment	Relative Humidity	Operating, 95% RH @ 40°C, non-condensing Non-operating, 95% RH @ 60°C, non-condensing
	Storage Temperature	-20 to 70 °C
	RoHS6 Compliant	RoHS 5/6
	Operation Temperature	0 to 45 °C

Dimensions

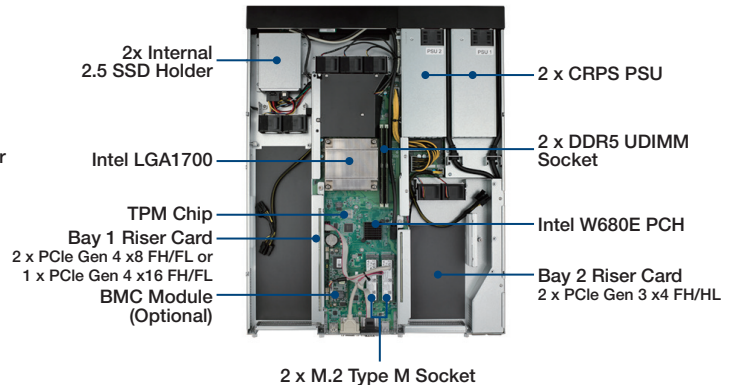
Unit: mm [inch]



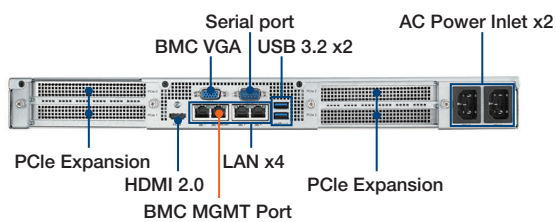
Front View



Inner View



Rear View



Ordering Information

Advantech P/N	CPU	CPU Cooler	BMC	LCM	Confidence Monitor	PSU	Advantech Logo on Front Panel	PCIe Expansion
VEGA-7030-0A00E	N/A	Yes	Yes	Yes	Yes	1x 550W	N/A	2x PCIe Gen 4x8 2x PCIe Gen 3x4
VEGA-7030-0A01E			Yes	N/A	N/A			
VEGA-7030-0B00E			N/A	Yes	Yes			

Peripheral

Category	Advantech P/N	Description
CPU	96MPI-14900-24E	Intel® Core i9-14900 2G 36M 24C
	96MPI-14700-20E	Intel® Core i7-14700 2.1G 33M 20C
	96MPI-14500-14E	Intel® Core i5-14500 2.6G 24M 14C
	96MPI-14100-4E	Intel® Core i3-14100 3.5G 12M 4C
	96MPI-13900E-24E	Intel® Core i9-13900E 1.8G 32M 24C
	96MPI-13900-24E	Intel® Core i9-13900 2.0G 36M 24C
	96MPI-13700E-16E	Intel® Core i7-13700E 1.9G 24M 16C
	96MPI-13700-16E	Intel® Core i7-13700 2.1G 24M 16C
	96MPI-13500E-14E	Intel® Core i5-13500E 2.4G 11.5M 14C
	96MPI-13500-14E	Intel® Core i5-13500 2.5G 24M 14C
	96MPI-13100E-4E	Intel® Core i3-13100E 3.3G 5M 4C
	96MPI-13100-4E	Intel® Core i3-13100 3.4G 12M 4C
	96MPI7A-2.1-25M17	Intel® Core i7-12700 2.1G 25M 12C
96MPI5A-3.0-18M17	Intel® Core i5-12500 3G 18M 6C	
Memory	AQD-D5V32GN56-HB	32GB DDR5-5600 2GX8 1.1V
	AQD-D5V16GN56-HB	16GB DDR5-5600 2GX8 1.1V
	AQD-D5V8GN56-HC	8GB DDR5-5600 1GX16 1.1V
M.2 NVME	96FD80-P1TB-TS1	SSSTC M.2 2280 1TB NVME G4x4 DRAMLESS SSD
	96FD80-P512-TS1	SSSTC M.2 2280 512GB NVME G4x4 DRAMLESS SSD
	96FD80-P256-TS1	SSSTC M.2 2280 256GB NVME G4x4 DRAMLESS SSD
2.5" HDD/SSD	96FD25-ST960-M54P	Micron 5400PRO 2.5" 960GB SATA3 3D TLC
PSU	VEGA-7030-PS0AE	VEGA-7030 550W CRPS PSU
	VEGA-7030-PS2AE	VEGA-7030 800W CRPS PSU
Slide Rail for Rack Mount	VEGA-7030-SL2AE	VEGA-7030 Toolless Slide Rail
Power Cord	1702002605	Power Cord EU 3P 10A 250V 183cm (EU)
	1702002600	Power Cord UL 3P 10A 125V 183cm (US)
	1700000237	Power Cord PSE 3P 12A 125V 183cm (Japan)
PCIe Card	VEGA-3310-A0	VEGA-3310-A0 (non-FPGA SKU)
	VEGA-3321-IOF0	VEGA-3321 VoIP_25G for SMPTE2110
	VEGA-3312-S0G0	VEGA-3312_SDI
	PCIE-2521NP-MEA1E	Dual Port SFP28 25GbE Ethernet PCIE Adapter with NVIDIA ConnectX-6
	PCIE-1220PS-00A1E	Dual Port SFP+ 10GbE Ethernet PCIE Adapter with Intel X710
	PCIE-1131PS-00A1E	Quad Port Fiber Gigabit Ethernet PCIE Server Adapter with Intel® I350
	PCIE-1130PS-00A1E	Quad Port RJ45 Gigabit Ethernet PCIE Adapter with Intel I350
	SKY-QUAD-4000A-20	NVIDIA Quadro RTX 4000 Ada 20GB PCI-Ex16 DP*4
	SKY-QUAD-2000EA-16	Quadro RTX 2000E Ada PCIe 16GB SSLP w/ATX BKT
	SKY-QUAD-2000A-16	Quadro RTX 2000 Ada PCIe 16GB DSLP w/ATX BKT
	XVEGA-PRO8K12GG2	Blackmagic DeckLink 8K Pro G2
	XVEGA-BDLKSDI4K	Blackmagic DeckLink SDI 4K
	XVEGA-BDLKDUO2LP	Blackmagic Design DeckLink Duo 2