

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

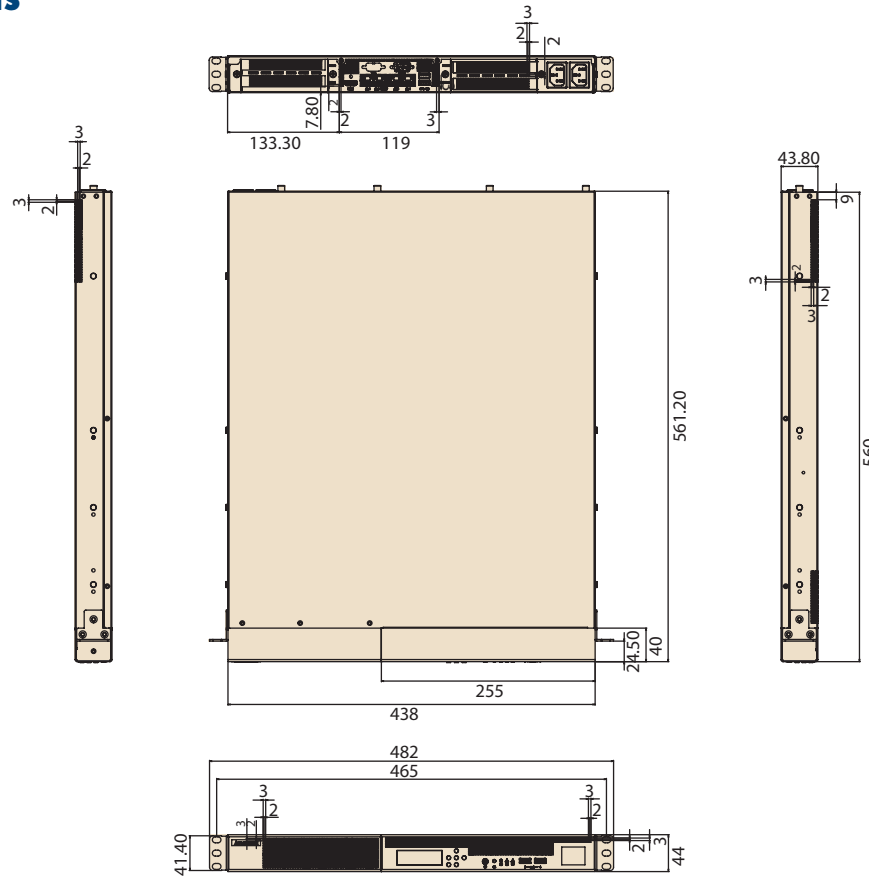
The VEGA-7030 is a highly configurable, 1U, short-depth video applications server based on the Intel 12th/13th/14th generation Core family of desktop processors. Supporting up to 24 CPU cores with on-board Intel UHD Graphics and Quick Sync Video functionality, the VEGA-7030 offers plenty of processing 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 UHD encoding/acquisition 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 UHD 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

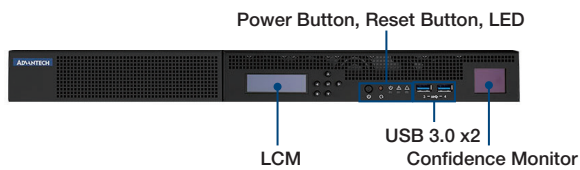
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|--------------------------|-------------------------------|--|
| System type | | 1U Media Server With Video Appliance |
| Processor System | CPU Type | Intel® 12 th /13 th /14 th Generation Core™ i3/i5/i7/i9 (TDP up to 65W) |
| | Socket Reference | 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 | 96GB (2 x 48GB) |
| 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

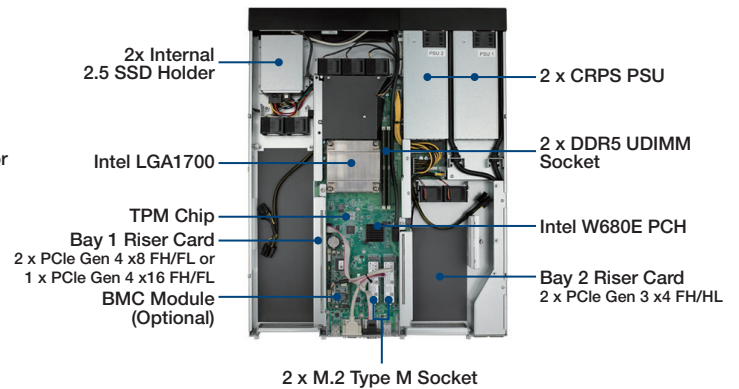
Unit: mm [inch]



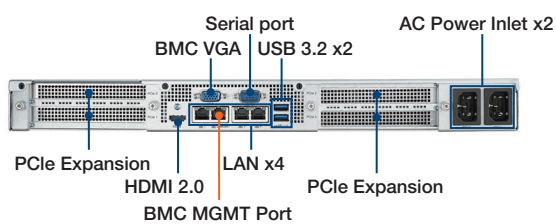
Front View



Inner View



Rear View



Ordering Information

| Part Number | CPU | CPU Cooler | BMC | LCM | Confidence Monitor | PSU | PCIe Expansion |
|-----------------|-----|------------|-----|-----|--------------------|---------|------------------------------------|
| VEGA-7030-0A00E | NA | Yes | Yes | Yes | Yes | 1x 550W | 2x PCIe Gen 4x8 2x PCIe Gen 3x4 |
| VEGA-7030-0A01E | NA | Yes | Yes | No | No | | |
| VEGA-7030-0B00E | NA | Yes | No | Yes | Yes | | |
| VEGA-7030-0B01E | NA | Yes | No | No | No | | |
| VEGA-7030-2A01 | NA | Yes | Yes | No | No | NA | |
| VEGA-7030-2B01 | NA | Yes | No | No | No | NA | |

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-D5V48GN56-HA | 48GB DDR5-5600 3GX8 1.1V |
| | 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 |
| | AQD-D5V16GN56-HB1 | 16GB DDR5-5600 2GX8 1.1V |
| | AQD-D5V32GE56-HB1 | 32GB ECC-DDR5-5600 2GX8 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-BDLKDUO2 | Blackmagic Design DeckLink Duo 2 |

* Please ensure you confirm specifications prior to making a purchase. This document serves as a reference and informational resource only. Please be aware that all product specifications are subject to change without prior notice.