VEGA-7110

1U High-Density Live Video Streaming Server

Features

- Short Depth 1RU x 19" Server Platform

- Intel 11th Generation Intel® Core™ U-series Processor with Embedded Intel® Xe Graphics Functionality

- Three PCI Express Card Slots for I/O and Accelerators

- Two Gigabit Ethernet Network Ports

- Front Panel LCD Display, Keypad, and Confidence Monitor

- Flexible storage options
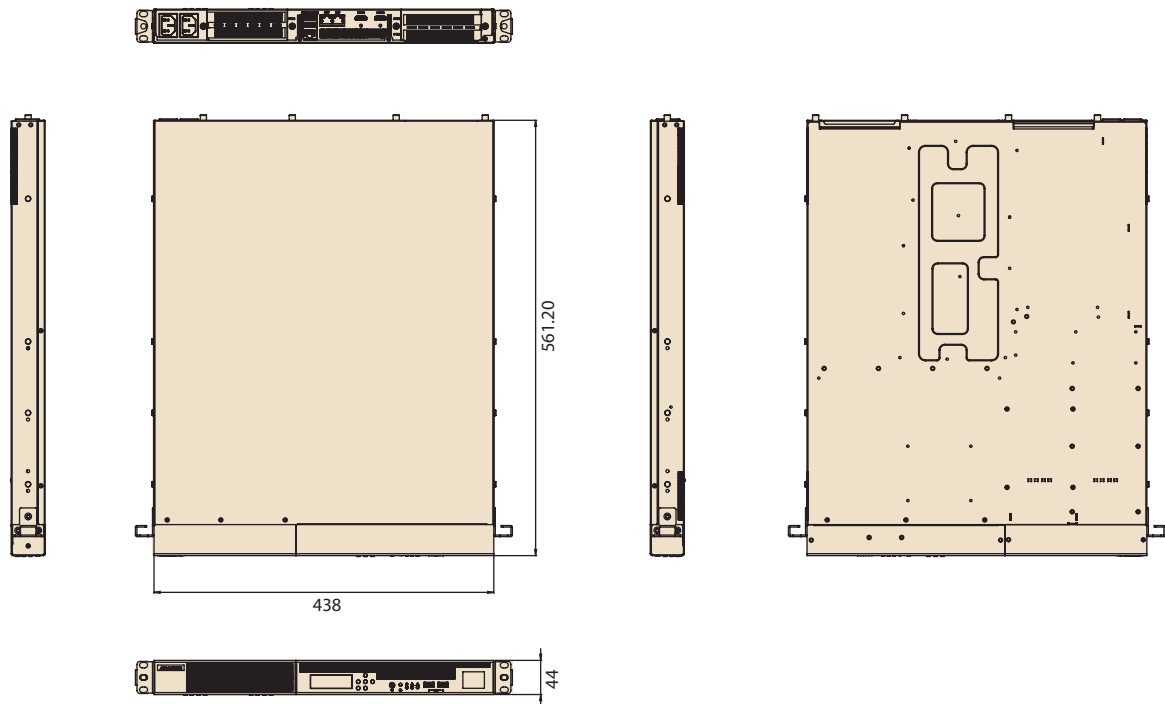
- Redundant Power Supplies

Introduction

The VEGA-7110 is a highly configurable, 1U, short-depth video application server based on the Intel 11th Core™ CPU family (also known as Tiger Lake-UP3). Supporting up to 4 CPU cores with on-board Intel Xe Graphics and significantly uprated Quick Sync Video (QSV) functionality, the VEGA-7110 offers plenty of processing power for many software video workflows while its three full-height PCI Express slots provide high flexibility to fit a wide range of video accelerators, network interfaces, or video I/O cards such as the Advantech VEGA SDI and ST-2110 cards. QSV enhancements include improved resolutions, support for AV1 and VP9 codecs, and 4:2:2 and 4:4:4 chroma subsampling directly on the processor. The value proposition is further enhanced by strong AI performance under the Intel OpenVINO architecture with the Xe graphics execution units helping to comfortably outpace many Intel Xeon-SP alternatives at a much lower cost and power. VEGA-7110 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 processing architecture with dual redundant 300W power, dual NVME SSDs, and secure TPM module. The short depth, high temperature operation together with strong fixed function video encoding and decoding makes VEGA-7110 especially suitable for video edge or field installations as well as equipment cabinets. VEGA-7110 can be supplied as an application ready platform with a range of accelerator or networking options 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 Server With Appliance Look and Feel
Processor System	CPU Type	Intel® 11th Generation Core™ i7-1185G7E (TDP up to 28W)
Graphics	Embedded Controller	Intel Xe Graphics with up to 96 Execution Units and Video Encode/Decode
Memory	Memory channels	2 channels DDR4 Non-ECC 3200/2933/2666/2400 MHz SO-DIMM (288-pin)*
	Max. Capacity	64GB
Storage	M.2 NVME	2 x M.2 2280
	2.5 SATA	2 x 2.5" (optional)
Physical Characteristics	Form Factor	1U rackmount
	Height x Width x Depth	44.4 x 438 x 560 mm
Power Supply	System PSU	Redundant AC/300W, hot swappable
PCIe Expansion Slots	PCIe slot qty for Add on card	2 x PCIe Gen 3 x8 FH/FL (x16 + x8 physical) or 1 x PCIe Gen 3 x16 FH/FL (optional)
		1 x PCIe Gen 3 x4 FH/HL (x8 physical)
Networking	Interface	10/100/1000 Mbps
	Controller	GbE LAN1: Intel® I219; GbE LAN 2: Intel I210-AT
	Connector	RJ-45 x 2
Front I/O Interface	USB	2 x USB2.0 ports
	LCM	1 (Optional)
	OLED	1 (Optional)
	LED	3 x LEDs (Power, HW Fault, Alarm)
Rear I/O Interface	1GbE RJ-45	2 x 1GbE ports
	HDMI Port	2 x HDMI 2.0 (Resolution up to 4096 x 2160 @ 60 Hz)
	Serial port	1 x RJ45 Serial Console
	USB	2 x USB 3.1 ports
Security	TPM	TPM2.0
	Humidity operational (non-condensing)	10 ~ 85% @ 40 °C non-condensing
	Storage	-20 to 70 °C
Environment	Humidity Storage	5% to 95% RH
	RoHS6 Compliant	RoHS 5/6
	Operation Temperature	0 to 45 °C

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All product specifications are subject to change without notice.　　　　　　　　　　　Last updated: 14-Mar-2023

Dimensions

561.20

438

44

Ordering Information

PN	Description
VEGA-7110-0A00E	VEGA-7110 Tiger Lake U 2-PSU STD Video Streamer
VEGA-7110-0B00E	VEGA-7110 Tiger Lake U 2-PSU STD Video Streamer w/o LCM & OLED