

VEGA-7010

1U High Density Video Server for Multi-channel 4K/8K HEVC Encoding and Decoding



Features

- 1U scalable & versatile accelerated video server w/ support for:
 - Multi-channel UHD, HD & SD low-latency HEVC, AVC & MPEG-2 encode, decode & transcode
 - Broadcast-quality video @ 60 fps including 10-bit profiles & 4:2:2 chroma sub-sampling
 - Industry-standard Media-over-IP protocols including SMPTE 2110, SMPTE 2022 & Sony IP Live with optional TICO or LLVC lightweight compression
 - SDI-3G/12G, HDMI 2.0 & DP 1.2 video inputs
 - Multiple redundant 10GbE & 1GbE ports
- Robust & low-power Intel(R) Xeon(R) Processor based host system:
 - Redundant system image, and PSU
 - 4 USB3 ports & console port

Introduction

The VEGA-7010 is a highly configurable, 1U, short depth video server based on the Intel® Xeon® Processor E3-1200 v6 Product Family that integrates on-chip graphics engine to improve performance of UHD HEVC developments. Its four PCI Express slots provide high flexibility to fit a wide range of video accelerators such as FPGA or GPU cards supporting up to 300W PCIe power in total. When integrating Advantech's VEGA 3300 accelerators, the VEGA-7010 can perform multi-channel 4Kp60 HEVC 10-bit encoding, decoding or transcoding, including SDI and IP media capture. It supports dual redundant power supply units for high availability in a variety of edge media processing scenarios. The application-ready VEGA-7010 streamlines product development and shortens time-to-market providing equipment manufacturers with a comprehensive software package that supports Linux and Windows operating systems.

Specifications

System type		1U Server
Processor System	Intel CPU name	Intel Kabylake Xeon E3-1245v6 LGA1151(up to 73W)
	Cache	8 MB
	Intel chipset name	C236
Graphics	Controller	Intel GPU P630
Memory	Memory channels	2 channels DDR4-2400 UDIMM (w/ ECC)
Storage	mSATA/m.2 slot	2 x M.2 2280
	2.5 SATA	2 x 2.5" (optional)
Physical Characteristics	Rackmount/Tabletop/Others	1U rackmount
	Height x Width x Depth	44.4 x 438 x 550 mm
Power Supply	System PSU	Redundant AC/550W
PCIe Expansion Slots	PCIe slot qty for Add on card	2 x PCIe Gen 3 x8 FH/FL (x16 + x8 physical) 2 x PCIe Gen 3 x4 FH/HL (x8 + x8 physical)
	Front I/O Interface	USB 2 x USB3.0 ports
Rear I/O Interface	1GbE RJ-45	2 x 1GbE ports
	Display	1 x VGA
	Serial port	1 x RJ45 in rear side
	USB	2 x USB 3.0 ports
Security	TPM	TPM2.0 (Optional)
Environment	Humidity operational (non-condensing)	10 ~ 85% @ 40 °C non-condensing
	Storage	-20 to 70 °C
	Humidity Storage	5% to 95% RH
	RoHS6 Compliant	RoHS 5/6
	Operation Temperature	0 to 50 °C

Ordering Information

Part Number	Description
VEGA-7010-0A00E	VEGA-7010 Kabylake-S 2-PSU Standard Server
VEGA-7010-0A01E	VEGA-7010 Kabylake-S 1-PSU Standard Server

