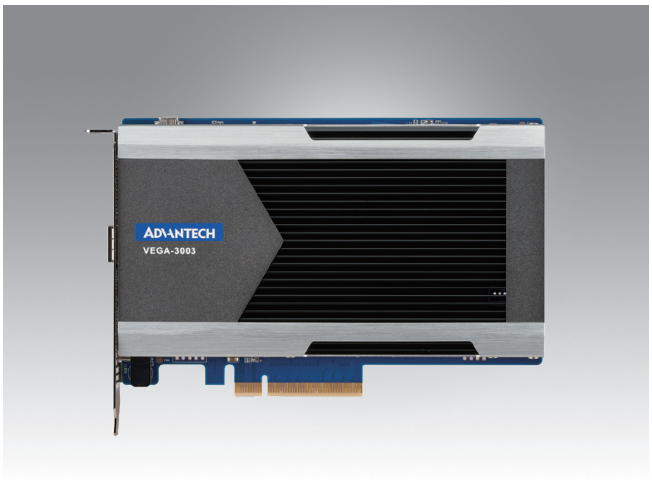
VEGA-3003

UHD SDVoE Video Capture Card



Features

- UHD SDVoE zero latency video capture & Loop-out by HDMI 2.0
- HDMI 2.0 Video capture & Loop-out
- FPGA based color space covert and de-interlace support
- Customized resolution video capture and processing support
- Linux and Windows SDK including simple-to-use API and example code
- FHHL PCI Express Gen3 x8, compatible with standard PCIe slots

Introduction

The VEGA-3003 is a PCI Express interface card supporting low latency transmission of uncompressed or lightly compressed video over IP networks according to industry agreed standards. As a low power, half-length board, it is ideal for adding IP media connectivity to IT-server-based media applications, and can also optimize expansion slot usage by offering a traditional HDMI interface on the same board.

The VEGA-3003 fully supports the roadmap set out by SDVoE alliance, and can be firmware-upgraded to support additions video pre-processing feature. This includes realtime color space conversion, de-interlace and optional HDCP for ODM project.

As a software-configurable board, the VEGA-3003 can support multiple application and deployment scenarios through firmware selections. This, together with the additional support for direct HDMI capture, allows a user to move their video application confidently into an IP future with minimum risk.

Specifications

Capturing Feature	Video	Pixel Format	NV12 / YV12 / I420 / P010 / NV16 / YV16 / YUY2/P210
		Resolution	(UHD) 3840 x 2160 (FHD)1920x1080 (HD)1280x720 (SD)720x480
		Frame Rate	60p/59.94p/50p/30p/29.97p/25p/24p / 59.94i/50i
	Audio	Sample Frequency	48KHz / 96KHz
		Sampling Depth	16 bit / 24 bit
		Channel Layouts	8-ch / 16-ch
Software	Operating system		Windows 10(64bit), Windows 11(64bit), Linux Kernel (64-bit)
	Development Kits		V4L2, Microsoft DirectShow
Physical Characteristic	Networking Interface		1 x 10G SFP+
	Digital Video IO		1 x HDMI 2.0
	Video Input Interfaces		1 x SDVoE Input 1 x HDMI 2.0 Input
	Video Output Interface		PCI express Gen3 x8
	Video Pass-Through		SDVoE to HDMI 2.0 HDMI 2.0 to HDMI 2.0
	Power Consumption		< 15W
	Dimensions		FHHL PCI Express Card
Environmental	Operating Temperature		-10 to 70 degrees Celsius
	Non-operating Temperature		-40 to 85 degrees Celsius
	Operating Humidity		50 to 95% (non-condensing)
	Non-operating Humidity		50 to 95% (non-condensing)

Ordering Information

Part Number	Description