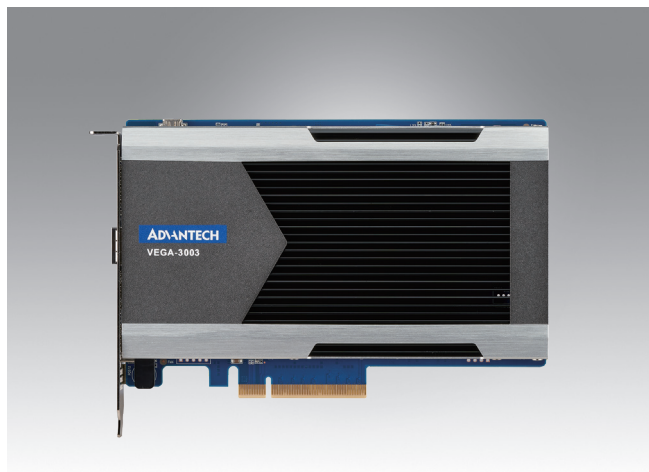


VEGA-3003

SDVoE & HDMI UHD Video Acquisition PCIe 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 convert 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	V210, YUY2, Y216, RGB8
		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
VEGA-3003-S0H0	FPGA-based 4K UHD SDVoE & HDMI video acquisition PCIe Card