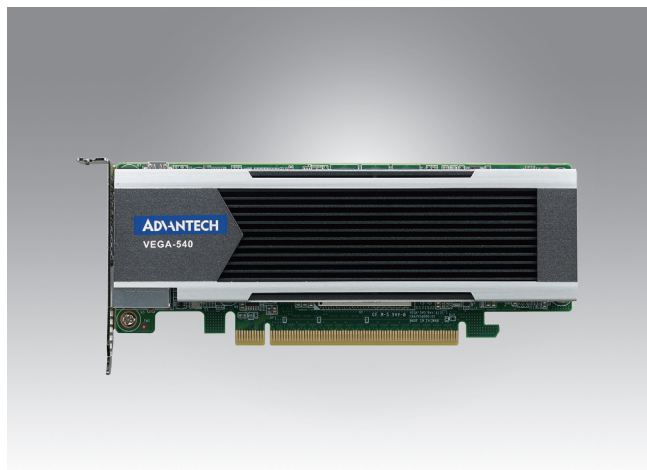


# VEGA-540

## Reconfigurable Video Content Intelligence Accelerator



### Features

- Xilinx Zynq UltraScale+ ZU7EV MPSoC
- 4GB+4GB DDR4 w/ ECC
- PCIe Gen 3 x16 host interface
- Low profile form factor
- Under 40W power consumption

### Introduction

VEGA-540 is a FPGA(MPSoC)-based low profile PCI Express card. VEGA-540, as a high-performance, high-bandwidth, low-latency, and low-power consumption AI accelerator, provides an ideal platform with video codec and programmable logic integrated for machine learning inference, video transcoding, image recognition, and voice recognition, etc. VEGA-540 is fully Xilinx Vitis supported, allowing developers to build their 3rd party IP using RTL/OpenCL and can be delivered already pre-integrated in a range of server platforms. Please contact your Advantech representative for more details.

### Specification

	Device	Description
FPGA	Zynq UltraScale+ XCZU7EV MPSoC	1
Physical Characteristic	Interfaces	PCI express Gen3 x16
	Low Profile	64.4 x 167.65 mm
	Power Consumption	40W
Memory	DDR4	4GB DDR4-2400 64-bit + ECC to processing system(PS) 4GB DDR4-2666 64-bit + ECC to programmable logic(PL)
	Storage	eMMC
QSPI		32MB x 1
Ethernet Port (RJ45)		1
I/O	USB 3.0	1
	USB Console (UART to USB)	1
	JTAG	1
	DisplayPort(mini)	1
Integrated IP	Video Codec Unit (VCU)	4:2:2 10-bit 4Kp60
Environmental	Operating Temperature	0 to 50 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)

### Applications

- Video Analytics
- Video Transcoding
- Surveillance Video Analytics

### Ordering Information

Part Number	Description
VEGA-540-I4A0	VEGA-540 with signal Xilinx MPSoC