ZedBoard Advanced Image Processing Kit

SKU:
471-034

Product Description

The ZedBoard Advanced Image Processing Kit was built to use the video processing capabilities of the Zynq-7000 AP SoC's tightly coupled ARM processing system and 7-series programmable logic. Included in the bundle is a ZedBoard, an FMC Pcam Adapter, and up to four Pcams to create the ultimate video streaming setup. This bundle has everything you'll need for setup, including the ribbon cables for connection to the Pcams and Pcam Adapter.
Users can take advantage of our project demonstrations to get started:

- ZedBoard FMC Pcam Adapter: One to Four Camera Demo
- ZedBoard FMC Pcam Adapter: Two Camera Demo

ZedBoard Features:
- Xilinx Zynq-7000 AP SoC XC7Z020-CLG484
- Dual-core ARM Cortex™-A9
- 512 MB DDR3
- 256 MB Quad-SPI Flash
- On-board USB-JTAG Programming
- 10/100/1000 Ethernet
- USB OTG 2.0 and USB-UART
- Analog Devices ADAU1761 SigmaDSP® Stereo, Low Power, 96 kHz, 24-Bit Audio Codec
- Analog Devices ADV7511 High Performance 225 MHz HDMI Transmitter (1080p HDMI, 8-bit VGA, 128x32 OLED)
- PS & PL I/O expansion (FMC, Pmod, XADC)

FMC Pcam Adapter Features:
- Two/Four Pcam system-side connectors
- Level translators from MIPI D-PHY to LVDS and LVCMOS
- Male FMC LPC connector for digital signals
- Compatible with a wide range of VADJ voltages (1.8V – 3.3V)
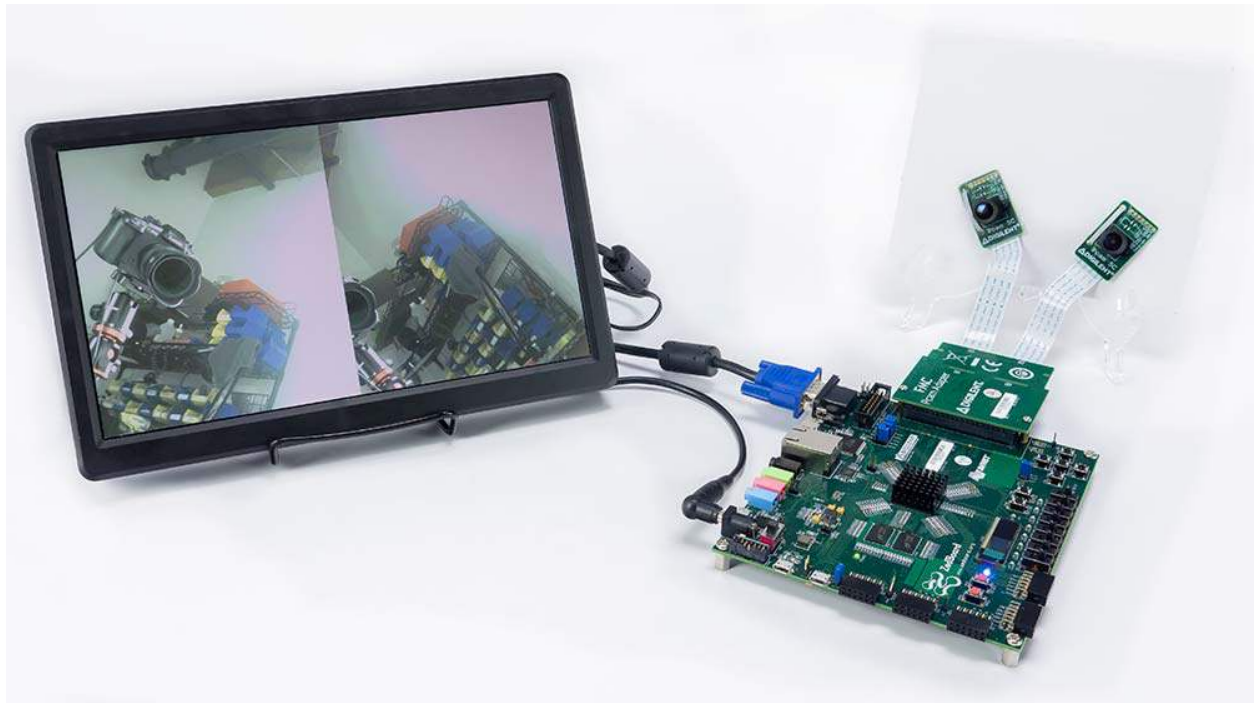
Pcam 5C Features:
- 5MP color system-on-chip image sensor
- 15-pin FFC connector for image data
- Dual lane MIPI CSI-2 image sensor interface
- Supports QSXGA@15Hz, 1080p@30Hz, 720p@60Hz, VGA@90Hz and QVGA@120Hz
- Output formats include RAW10, RGB565, CCIR656, YUV422/420, YCbCr422, and JPEG compression*
- Standard M12 lens mount for lens interchangeability
- Ships with 10 cm cable and factory installed fixed-focus lens
- Small PCB size for flexible designs (4.0 cm x 2.5 cm)
- 1×7 straight 100-mil header for access to auxiliary camera signals
- Works with Pcam compatible Digilent development boards

*JPEG compressed output is a feature of the OV5640, but is currently untested on this module

What's Included:	- ZedBoard Zynq-7000 ARM/FPGA SoC Development Board - Choose between bundling with two or four Pcam 5C fixed focus color camera modules, which also come with: 10 cm ribbon cable - Factory installed fixed focus-lens - One Pcam Adapter 12 V AC/DC power supply (US & EU adapters - **UK plug adapter not included**) 4 GB SD Card - USB A to micro-B cable - USB Adapter: Male Micro-B to Female Standard-A - Custom Digilent cardboard packaging with protective foam