


<b>NEW PRODUCT</b>	 A National Instruments Company	<b>Release Year</b> 2018	<b>Released Quarter</b> Q1
<b>Digilent Part Number</b> 471-021		<b>Category</b> FPGA	

## OVERVIEW

**Product Name:** Embedded Vision Bundle

**Product Subtitle:** N/A

**Product Description:** The Digilent ZYBO Z7 is the newest addition to the popular ZYBO line of ARM/FPGA SoC Platform. The ZYBO Z7 surrounds the Zynq with a rich set of multimedia and connectivity peripherals to create a formidable single-board computer, even before considering the flexibility and power added by the FPGA. Hardware designer and software developer can seamlessly integrate your FPGA and CPU functionality. The ZYBO Z7's video-capable feature set includes a MIPI CSI-2 compatible Pcam connector, HDMI input, HDMI output, and high DDR3L bandwidth. Attaching additional hardware is made easy by the ZYBO Z7's Pmod connectors, allowing access to Digilent's catalog of over 70 Pmod peripheral boards, including motor controllers, sensors, displays, and more.

The bundle comes with a SDSoC voucher. The SDSoC™ development environment provides a familiar embedded C/C++ application development experience including an easy to use Eclipse IDE and a comprehensive design environment for heterogeneous Zynq® All Programmable SoC.

The Pcam 5C is an imaging module meant for use with FPGA development boards. The module is designed around the Omnivision OV5640 5 megapixel (MP) color image sensor. This sensor includes various internal processing functions that can improve image quality, including automatic white balance, automatic black level calibration, and controls for adjusting saturation, hue, gamma and sharpness. Data is transferred over a dual-lane MIPI CSI-2 interface, which provides enough data bandwidth to support common video streaming formats such as 1080p (at 30 frames per second) and 720p (at 60 frames per second). The module is connected to the FPGA development board via a 15-pin flat-flexible cable (FFC). The Pcam 5C comes with a set of open source Vivado IP cores on FPGA and Zynq host boards, a 10 cm flat-flexible cable and a factory-installed fixed focus lens with M12 lens mount, so it is ready to use out of the box.

**Key Search Terms:** Omnivision, OV5640, MIPI, CSI-2, FFC, Image sensor, Vivado IP cores, Xilinx, Zynq, FPGA

**Video Link:** N/A

**Datasheet:**

**Demo / Project Links:** <https://reference.digilentinc.com/learn/programmable-logic/tutorials/zybo-z7-pcam-5c-demo/start>

### Features

The Kit includes

- [Zybo Z7-20 Zynq-7000 ARM/FPGA SoC Development Board with SDSoC Voucher](#)
- [Pcam 5C 5 MP Fixed Focus Color Camera Module](#)

### Product Image



### Image Links:


- <https://flic.kr/p/22rQG2k> (Front)

### 3 Target Applications

- Mobile Phones
- Entertainment
- Digital Still and Video Camera

### Related Products

- Zybo Z7-20 with SDSoC (471-015)
- PCAM (410-358)

<b>NEW PRODUCT</b>	 A National Instruments Company	<b>Release Year</b> 2018	<b>Released Quarter</b> Q1
<b>Digilent Part Number</b> 471-021		<b>Category</b> FPGA	

**PRICE INFO**

<i>MSRP</i>	\$343.99
<i>Academic Price</i>	NA
<i>Distributor Discount</i>	20%
<i>Distributor Price</i>	\$275.19

**PRODUCT DATA**

<b>Dimension*</b>	9x7x2 inches	<b>Weight*</b>	5 lbs
<b>Product Type</b>	<input checked="" type="checkbox"/> Digilent <input type="checkbox"/> Resell		
<b>Packaging</b>	Box		
<b>Export</b>	EAR99	<b>HTS Code</b>	8473.30.11.80
<b>Kit Contents</b>	<input type="checkbox"/> USB Cable <input type="checkbox"/> Voucher <input type="checkbox"/> Power Supply Other: 10cm cable & lens		
<b>Certifications</b>	<input checked="" type="checkbox"/> CE <input checked="" type="checkbox"/> RoHs <input checked="" type="checkbox"/> Reach <input type="checkbox"/> Other:		

**\*Dimension & Weight include packaging**