



## Pcam 5C: 5 MP Fixed Focus Color Camera Module

SKU: 410-358

### Product Description

**Note: For important information regarding software support, please see the Software Support section of the Pcam 5C reference manual prior to purchasing.**

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) that is pin compatible with the connector found on the popular Raspberry Pi development board. The Pcam 5C comes with 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.

## 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)
- 1x7 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:

- Pcam 5C
- Custom Digilent packaging

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*\*Not all resolutions and output formats tested.*

Electrical	
Image Bus	MIPI CSI-2
Control Bus	SCCB (I2C)
Physical	
Width	25 mm
Length	40 mm
J1 Pinout	
Pin 1	GND
Pin 2	MIPI_LANE0_N
Pin 3	MIPI_LANE0_P
Pin 4	GND
Pin 5	MIPI_LANE1_N
Pin 6	MIPI_LANE1_P
Pin 7	GND
Pin 8	MIPI_CLK_N
Pin 9	MIPI_CLK_P
Pin 10	GND
Pin 11	PWUP
Pin 12	N/C
Pin 13	SCCB_SCL
Pin 14	SCCB_SDA
Pin 15	VCC3V3



<http://store.digilentinc.com/pcam-5c-5-mp-fixed-focus-color-camera-module/> 1-8-18