8 MP USB 3.0 Camera Module (PP8MP-OV-1)

Supported Features

- UVC and UAC Compliant Plug and Play device (UAC is in progress. Targeted Date : November'14)
- USB3.0 interface
- It is backward compatible with USB 2.0 if USB3.0 is not available
- Output Format: YUV2
- Frame Rate Supported

 \circ VGA 640x480 – 30fps (USB 2.0 / USB 3.0)

HD 1280x720 (720p) – 60fps (USB 3.0) -(In progress. Targeted Date: November'14)

 Full HD 1920x1080 (1080p) - 30fps (USB 3.0)

- Full Resolution 3264x2448 (8MP) -11fps (USB 3.0)
- Still Image Capture supported at full resolution
- Support for LED Flash/Torch during low light conditions (In progress. Targeted Date : November'14)
- Built in MEMS microphone
- User Configurable general purpose pins available
- USB Bus powered device
- Operating Temperature Range: -20° C to +70° C
- Stable Image: 0° C to +50° C
- Power Consumption: 5V@260mA typical (excluding LED Flash current)

- Operating Voltage: 5V±250mV
- Board Size: 60mm x 20mm
- RoHS Compliant

Note: Evaluation Copy of Video HDR executable on PC is provided for enhanced video experience.(Under development)

- Features of 8MP Camera Sensor Module
 - Output Formats: YUV
 - 1/3.2 inch 4P + IR Lens
 - View Angle: 66.1°±2°
 - Signal to noise ratio: 35.7 dB
 - Dynamic Range: 70.45dB@8X gain
 - Object Distance: 100 mm to infinity
 - o Module Size:24mmx8.5mmx5.9mm

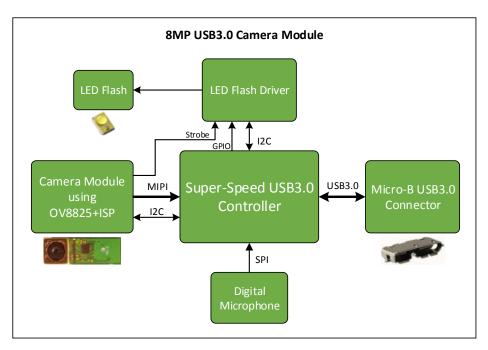
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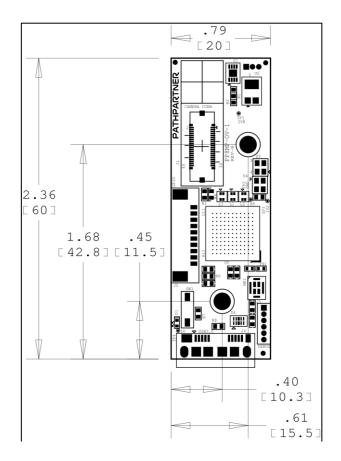
Description

8 MP Autofocus HD USB 3.0 Camera Module is based on OV8825 CMOS image sensor and image sensor processor from Omnivision and is fully compliant with USB Video Class (UVC) 1.0 standard and USB Audio Class (UAC) 1.0 standard. It provides full functionality of complete camera including AF Control and automatic image control functions and outputs the data in high speed dual lane MIPI interface.

Block Diagram

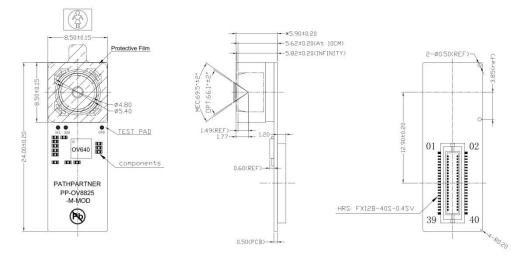


Mechanical Drawing



PP8MP-OV-1 RevB

Sensor Module Drawing



Acronyms

| Abbreviation/Term | Expansion/Definition |
|-------------------|----------------------|
| USB | Universal Serial Bus |
| UVC | USB Video Class |
| UAC | USB Audio Class |
| AF | Autofocus |
| HD | High Definition |

About PathPartner Technology

PathPartner Technology based out of California, USA and Bangalore, India is a leading provider of products and services for multimedia centric embedded devices. PathPartner has extensive experience in audio & video codecs, video analytics & vision, imaging, multimedia middleware and application development.

PathPartner has an expert management team with rich experience in Technology, Engineering & Business practices. The company has Sales & marketing presence in USA, Europe, Korea Taiwan and India. PathPartner specializes in addressing challenges faced by leading Silicon vendors, OS providers and OEMs in their product development.

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