

# **DFM**

# Dual-head video processing board

#### **Embedded processing**

The DFM is a small form factor video processing module to build embedded vision solutions utilizing two cameras. This makes it an ideal solution for stereoscopic imaging or sensor fusion.

### **Maximized flexibility**

The DFM module utilizes a powerful video processor with 3D and 4K x 2K support. A broad range of system interfaces is available to offer maximum flexibility to the user for system integration.

Moreover a board-to-board interface allows system integration on a motherboard.

#### Software programmable

An onboard ARM-based processor is open to the user to integrating DSP functionality for image fusion, stereoscopic measurement, OSD generation, file management systems and many more.

### **Features**

- Supports 2 camera inputs for sensor fusion
- 4K (UHD) ready
- Support for 3D stereoscopic imaging
- Onboard ARM-Core with Linux OS
- Board-to-Board connector for easy system integration
- HDMI; USB2.0 and Ethernet
- MIPI and USB3.0 optional



### **Specifications**

	Entner Electronics UC-Series
Supported cameras	Sony FCB-EV Series
	Other cameras can be supported on request
Digital interfaces	<ul> <li>Ethernet – 1Gb</li> <li>HDMI 2.0</li> <li>USB2.0 Host/Device</li> <li>MIPI (Option)</li> <li>USB3.0 (Option)</li> </ul>
Camera control	<ul> <li>VISCA commands via virtual COM port</li> <li>UVC commands will be translated into VISCA commands</li> <li>Serial COM port (H/W)</li> </ul>
System interfaces	<ul> <li>RS-232 debug connector</li> <li>IR/Trigger</li> <li>12x GPIO</li> <li>SD Card</li> <li>2x CAN</li> <li>LVDS for TFT display</li> </ul>
Memory	<ul><li>64MB NOR-Flash</li><li>1GB DDR3L</li></ul>
Power	12V DC, 5W – Depending on camera configuration
Dimensions & Weight	80x50x15 mm, appr. 20g
Operating temperature	0°C to 40°C ambient
Image processing features	Linux based ARM-Core for onboard processing, open to the developer

DATASHEET\_DFM\_01, November 18