

DESIGNCORE®

D3CM-IMX390 CAMERA MODULE



Enclosed Camera Module enables evaluation of imaging platforms designed with production in mind.

Enclosed Camera Module for Embedded Vision System Evaluation and Demonstration

This Camera Module is ideal for vision system evaluation and demo platforms. It is designed for use with D3 Engineering's DesignCore® RVP (Rugged Vision Platform) Development Kits. The D3CM features the Sony IMX390 sensor and optics in an unsealed (non-rugged) enclosure. It has industrial environmental ratings.

This D3CM Camera Module features a SerDes camera interface (FPD-Link III). The camera features a high performance CMOS active pixel type solid state image sensor. It also features motion artifact free HDR combination and LED flicker mitigation.

After evaluation, D3 Engineering can customize Camera Modules to your OEM/ODM requirements. We develop custom ISP and software drivers, add local power or autofocus, design to your environmental specifications or standards, and more. We support your product with advanced manufacturing in the USA or offshore, in volumes from 10 to 10 million.

FEATURES

Sony IMX390 Image Sensor

FPD-Link III Serializer

Resolution: 1080p HD (1920X1080)

Frame Rate: 60fps

MIPI-CS12 Over FPD-Link III (Serial) Video Output

Back-Channel Configuration Connectivity

Square Pixel and RGGGB Filter Array

Motion Artifact Free HDR

On-Board Image Compression

Built in LED Flicker Mitigation

APPLICATIONS

Automotive Advanced Driver Assist (ADAS) Systems

- o Front or Rear Camera

- o 3D Surround View

- o Driver Monitoring

- o Camera Monitoring Systems (CMS)

Autonomous Trucking / Transportation Systems

Autonomous Guided Vehicles (AGV)

Collaborative Robotics

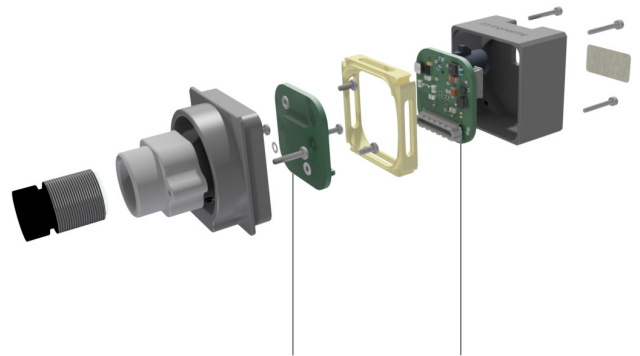
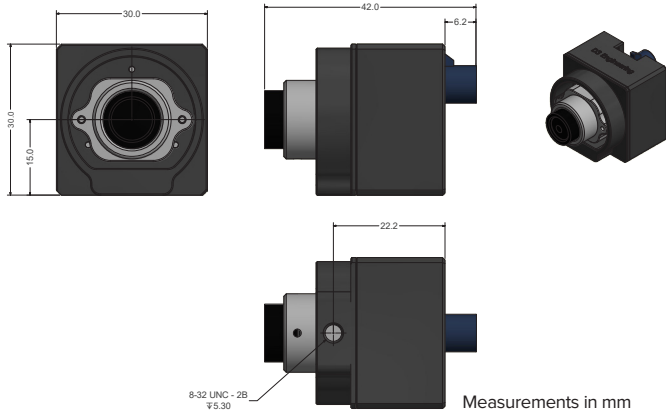
360-Degree Vision Systems

SPECIFICATIONS

Sensor	Sony IMX390
Megapixels	2.07 Full-HD or 2.30 WUXGA
Video Resolution	1080p Full-HD or WUXGA
Frame Rate	60fps in Full-HD or 50fps in WUXGA
Sensor Size	6.67mm (type 1/2.7)
Lens Options	Interchangeable M12 lens Sunex DSL239A-650-F2.4, 192° FOV Sunex DSL945D-650-F2.5, 56° FOV
Image Format Packing	10/12-bit Raw Bayer, Linear, multiple HDR modes
High Dynamic Range (HDR)	Sub-pixel method, Internal Combining
Voltage Input	9-16V, 12V nominal
Video Output	MIPI-CS12 over FPD-Link III (serial)
Dimensions	L:42 W:30 H:30 (mm)
Mounting Options	8/32 mounting hole
Temperature Range	-40C to 105C
Enclosure Type	DCM enclosure
Communication	I2C Address Image Sensor 0x21 I2C Address Serializer 0x30

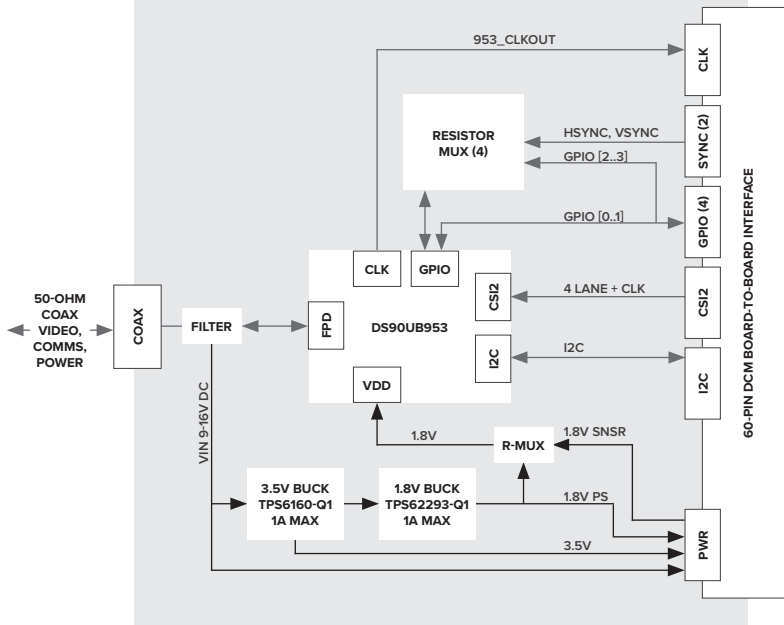
DesignCore® Platform Supported:

DesignCore® platforms with Intel®, NVIDIA®, and Texas Instruments® processors and SoCs. Visit d3engineering.com/store for a complete list of supported platforms for this camera module. Customized processor solutions available.

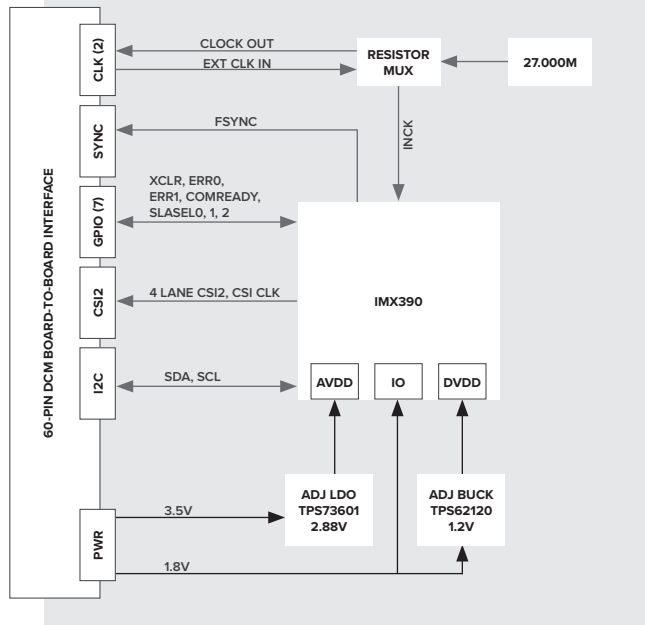


IMX390 Image Sensor Board DS90UB953 FPD-Link III Interface Board

DS90UB953 FPD-LINK III INTERFACE BOARD



IMX390 IMAGE SENSOR BOARD



CABLE ORDERING INFORMATION

D3CM products are not supplied with cables. D3 tests all D3CM products with Pasternack PE38754Z series cables. Contact D3 for more information on cables and accessories.

ACCELERATE TIME TO MARKET

D3 Engineering speeds embedded system development with our proven DesignCore® Camera Modules and full-cycle embedded product development services. Our expertise in imaging system design will help you get to market faster, while reducing the risks and costs of new product development.

CALL: **1-585-429-1550**
 EMAIL: **sales@D3Engineering.com**
 VISIT: **D3Engineering.com/Products/Camera-Modules**
 BUY: **Store.D3Engineering.com/Product/DesignCore-D3CM-IMX390-Camera-Module**