

YDS-X9MF-OV5640-1B V1.2

5MP OmniVision OV5640-1B MIPI and DVP Parallel Interface M12 Fixed Focus Camera Module



Front View



Back View

Specifications

| | |
|--------------------------|--|
| Camera Module No. | YDS-X9MF-OV5640-1B V1.2 |
| Resolution | 5MP |
| Image Sensor | OV5640-1B |
| Sensor Type | 1/4" |
| Pixel Size | 1.4 um x 1.4 um |
| EFL | 0.90 mm |
| F.NO | 2.00 |
| Pixel | 2592 x 1944 |
| View Angle | 220.0°(DFOV) 187.0°(HFOV) 144.0°(VFOV) |
| Lens Dimensions | 13.00 x 13.00 x 13.56 mm |
| Module Size | 55.00 x 22.00 mm |
| Module Type | Fixed Focus |
| Interface | MIPI and DVP Parallel |
| Auto Focus VCM Driver IC | Embedded |
| Lens Model | YDS-LENS-TRC-F5022A6-02 |
| Lens Type | 650nm IR Cut |
| Operating Temperature | -30°C to +70°C |
| Mating Connector | FX12B-40P-0.4SV |



YDS-X9MF-OV5640-1B V1.2

**5MP OmniVision OV5640-1B MIPI and DVP Parallel Interface M12
Fixed Focus Camera Module**



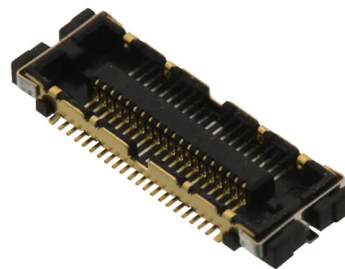
Top View



Side View



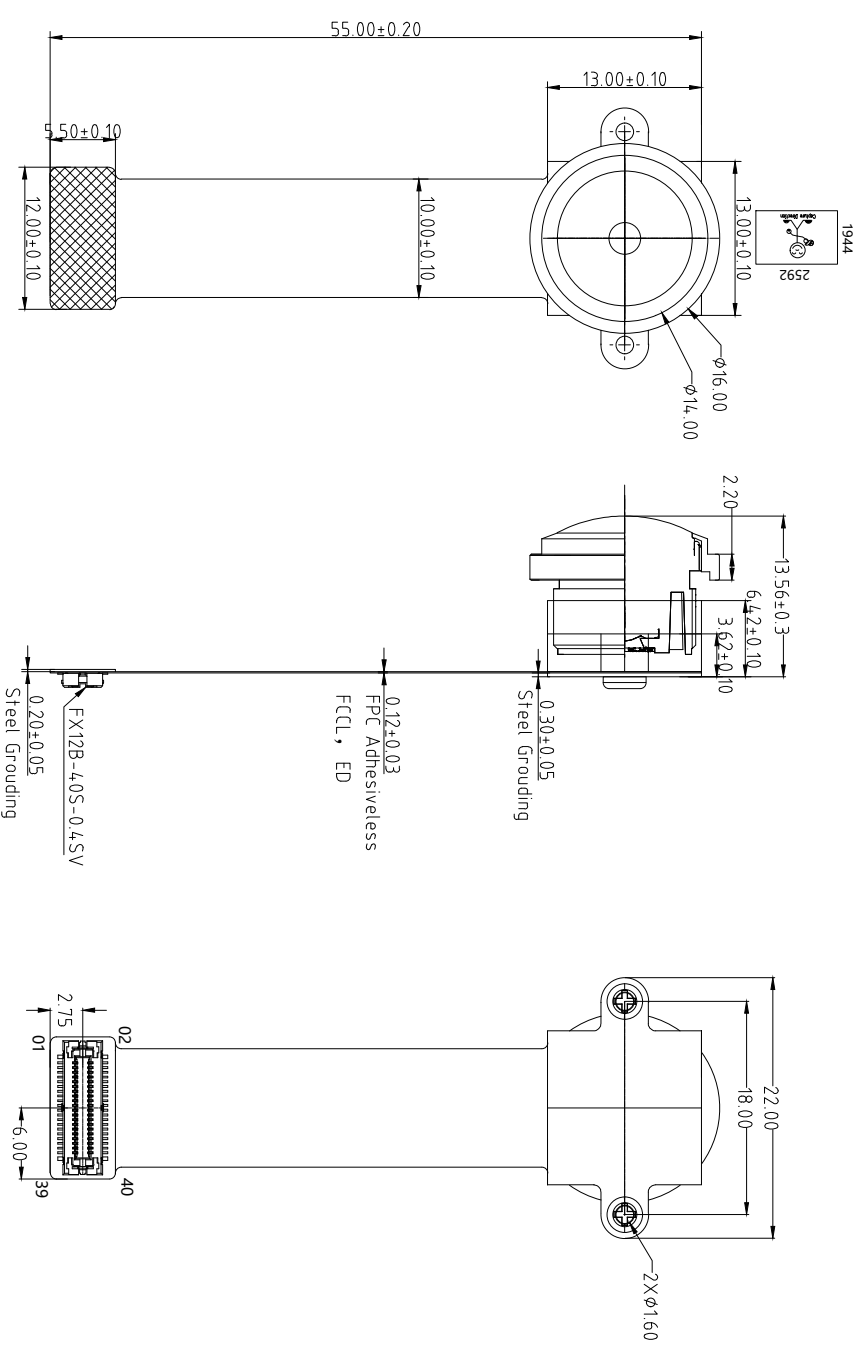
Bottom View



Mating Connector

| D | | E | |
|---------|-------------|---------------|-----------|
| Version | Information | First Version | Date |
| V1.2 | | | 7-12-2022 |

| PIN | SIGNAL |
|-----|-----------|
| 1 | AGND |
| 2 | NC |
| 3 | STROBE |
| 4 | NC |
| 5 | SIOD |
| 6 | NC |
| 7 | SIOC |
| 8 | AVDD2.8V |
| 9 | RESET |
| 10 | GPIO1 |
| 11 | PCLK |
| 12 | GPIO0 |
| 13 | VSYNC |
| 14 | FREX |
| 15 | HREF |
| 16 | D9/MDP1 |
| 17 | PWDN |
| 18 | D8/MDN1 |
| 19 | D9/MDP1 |
| 20 | DGND |
| 21 | D8/MDN1 |
| 22 | D7/MCP |
| 23 | D7/MCP |
| 24 | D6/MCN |
| 25 | D6/MCN |
| 26 | DGND |
| 27 | D5/MDP0 |
| 28 | D5/MDP0 |
| 29 | D4/MDN0 |
| 30 | D4/MDN0 |
| 31 | D3 |
| 32 | DGND |
| 33 | D2 |
| 34 | XCLK |
| 35 | D1 |
| 36 | DVDD1.5V |
| 37 | D0 |
| 38 | DOVDD1.8V |
| 39 | DGND |
| 40 | DGND |

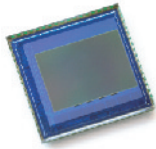


TOP VIEW SIDE VIEW BOTTOM VIEW

Parameter:

- Sensor specification:**
 - Image Sensor: OV5640-1B
 - Pixel: 1.4umx1.4um
 - Lens Type: 1/4
 - Important Voltage Description: DVDD1.5V (external power supply);
- Lens specification:**
 - FOV: 220°(D);187°(H);144°(V)
 - F/NO.: 2.0
 - TV distortion: <-16%
 - Focal length: 0.9mm
 - Composition: 1G4P+IR FILTER
 - IR Cut Coating: 650nm±10nm@50%

| | | | | |
|-------------|-----------|------------------|---------------------|-----------------|
| Designed By | Kevin | Model Name: | X9MF-0V5640-1B V1.2 | |
| Checked By | Aouly_Yan | Projection Type: | Unit: mm | Material: ----- |
| | | Third Angle | Scale: 1:1 | Sheet: 1 of 1 |
| | | | | Version: 1/0 |



OV5640 5-megapixel product brief



1/4-inch, 5-Megapixel SOC Image Sensor Optimized for High-Volume Mobile Markets



available in
a lead-free
package

The OV5640 delivers a complete 5-megapixel camera solution on a single chip, aimed at offering cost efficiencies that serve the high-volume autofocus (AF) camera phone market. The system-on-a-chip (SOC) sensor features OmniVision's 1.4 micron OmniBSI™ backside illumination architecture to deliver excellent pixel performance and best-in-class low-light sensitivity, while enabling ultra compact camera module designs of 8.5 mm x 8.5 mm with <6 mm z-height. The OV5640 provides the full functionality of a complete camera, including anti-shake technology, AF control, and MIPI while being easier to tune than two-chip solutions, making it an ideal choice in terms of cost, time-to-market and ease of platform integration.

The OV5640 enables 720p HD video at 60 frames per second (fps) and 1080p HD video at 30 fps with complete user control over formatting and output data transfer. The 720p/60 HD video is captured in full field of view (FOV) with 2 x 2 binning, which doubles the sensitivity and improves the signal-to-noise ratio (SNR). Additionally, a unique post-binning re-sampling filter function removes zigzag artifacts around slant edges and minimizes spatial artifacts to deliver even sharper, crisper

color images. To further improve camera performance and user experience, the OV5640 features an internal anti-shake engine for image stabilization, and it supports Scalado™ tagging for faster image preview and zoom.

The OV5640 offers a digital video port (DVP) parallel interface and a high-speed dual lane MIPI interface, supporting multiple output formats. An integrated JPEG compression engine simplifies data transfer for bandwidth-limited interfaces. The sensor's automatic image control functions include automatic exposure control (AEC), automatic white balance (AWB), automatic band filter (ABF), 50/60 Hz automatic luminance detection, and automatic black level calibration (ABLC). The OV5640 delivers programmable controls for frame rate, AEC/AGC 16-zone size/position/weight control, mirror and flip, cropping, windowing, and panning. It also offers color saturation, hue, gamma, sharpness (edge enhancement), lens correction, defective pixel canceling, and noise canceling to improve image quality.

Find out more at www.ovt.com.

applications

- cellular phones
- toys
- PC multimedia
- digital still cameras

ordering information

- **OV05640-A71A-1B** (color, lead-free)
71-pin CSP

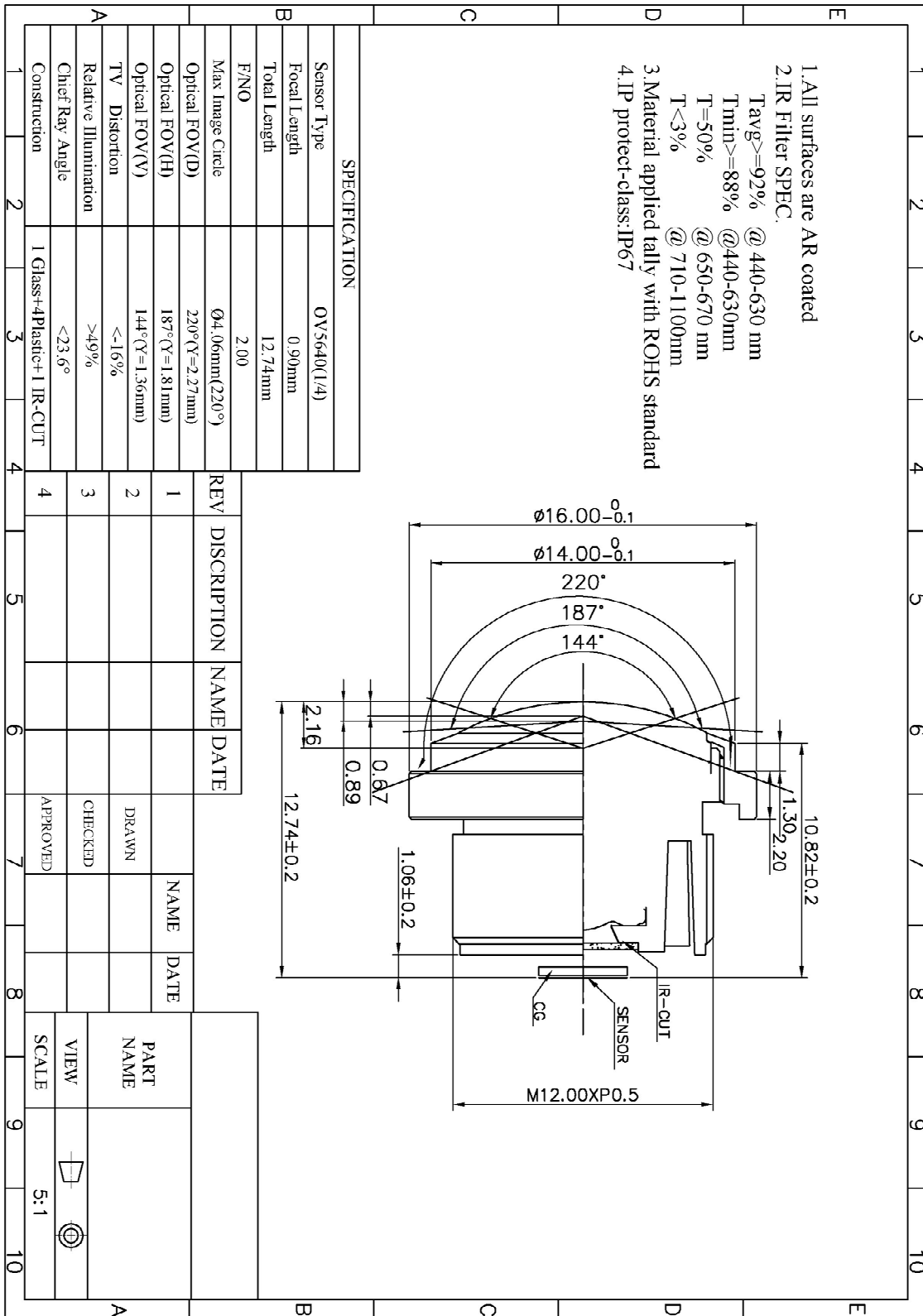
features

- 1.4 μm x 1.4 μm pixel with OmniBSI technology for high performance (high sensitivity, low crosstalk, low noise, improved quantum efficiency)
- optical size of 1/4"
- automatic image control functions: automatic exposure control (AEC), automatic white balance (AWB), automatic band filter (ABF), automatic 50/60 Hz luminance detection, and automatic black level calibration (ABLC)
- programmable controls for frame rate, AEC/AGC 16-zone size/position/weight control, mirror and flip, cropping, windowing, and panning
- image quality controls: color saturation, hue, gamma, sharpness (edge enhancement), lens correction, defective pixel canceling, and noise canceling
- support for output formats: RAW RGB, RGB565/555/444, CCIR656, YUV422/420, YCbCr422, and compression
- support for video or snapshot operations
- support for internal and external frame synchronization for frame exposure mode
- support for LED and flash strobe mode
- support for horizontal and vertical sub-sampling, binning
- support for minimizing artifacts on binned image
- support for data compression output
- support for anti-shake
- standard serial SCCB interface
- digital video port (DVP) parallel output interface and dual lane MIPI output interface
- embedded 1.5V regulator for core power
- programmable I/O drive capability, I/O tri-state configurability
- support for black sun cancellation
- support for images sizes: 5 megapixel, and any arbitrary size scaling down from 5 megapixel
- support for auto focus control (AFC) with embedded AF VCM driver
- embedded microcontroller
- suitable for module size of 8.5 x 8.5 x <6mm with both CSP and RW packaging

key specifications (typical)

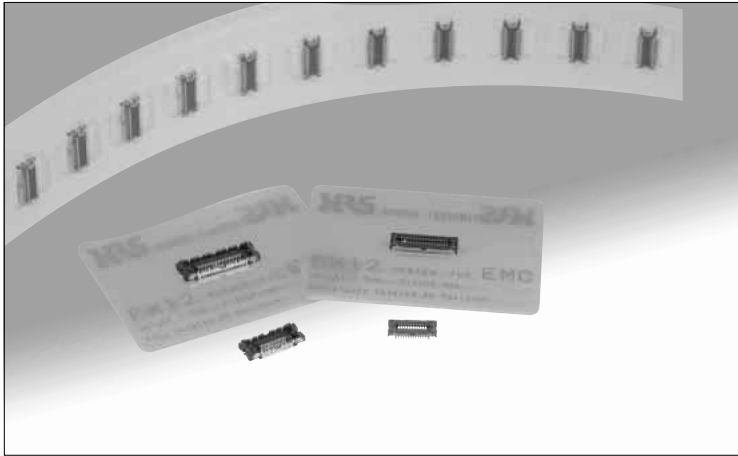
- **active array size:** 2592 x 1944
- **power supply:**
 - core: 1.425 ~ 1.675V (with embedded 1.5V regulator)
 - analog: 2.6 ~ 3.0V (2.8V typical)
 - I/O: 1.8V / 2.8V
- **power requirements:**
 - active: 140 mA
 - standby: 20 μA
- **temperature range:**
 - operating: -30°C to 70°C junction temperature (see [table 8-2](#))
 - stable image: 0°C to 50°C junction temperature (see [table 8-2](#))
- **output formats:** 8-/10-bit RGB RAW output
- **lens size:** 1/4"
- **lens chief ray angle:** 24° (see [figure 10-2](#))
- **input clock frequency:** 6~27 MHz
- **max S/N ratio:** 36 dB
- **dynamic range:** 68 dB @ 8x gain
- **maximum image transfer rate:**
 - QSXGA (2592x1944): 15 fps
 - 1080p: 30 fps
 - 1280x960: 45 fps
 - 720p: 60 fps
 - VGA (640x480): 90 fps
- **sensitivity:** 600 mV/Lux-sec
- **shutter:** rolling shutter / frame exposure
- **maximum exposure interval:** 1964 x t_{ROW}
- **pixel size:** 1.4 μm x 1.4 μm
- **dark current:** 8 mV/s @ 60°C junction temperature
- **image area:** 3673.6 μm x 2738.4 μm
- **package dimensions:** 5985 μm x 5835 μm

YDS-LENS-TRC-F5022A6-02

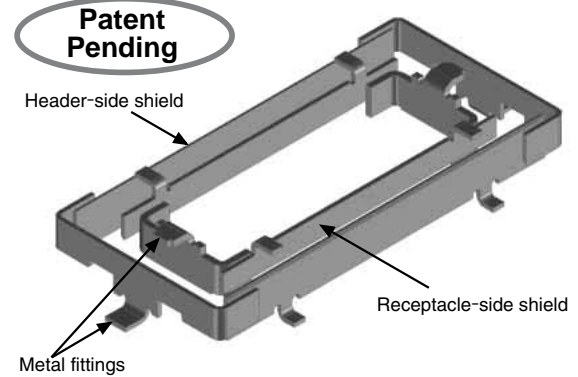


0.4 mm Pitch, 1.5 mm Board-to-Board Connectors with Dual Shields

FX12 Series



Dual Shields (when mated)



■ Features

1. Dual shields

Built-in shield plates and metal fittings in the plugs and receptacles prevent electromagnetic emission and external interference on the entire 360° periphery of mated connectors.

2. Low-Profile

Board-to-Board distance of 1.5 mm and reduced PCB mounting pattern allows use in applications where space is limited.

3. Self alignment

Built-in self-alignment feature in the plug and receptacle allows mating / un-mating in limited spaces.

4. Consistent mated retention force

Indents in the shield plates and contact configuration assure consistency of the mated retention forces irrespective of the contact numbers. Positive “click” sensation confirms fully mated condition.

5. Solder wicking prevention

Nickel plating barrier on the contacts prevents solder compound intrusion (wicking) into the contact engagement areas.

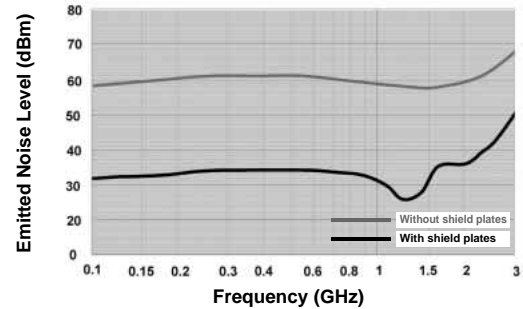
6. Board placement with automatic equipment

Packaged on tape-and-reel, the connectors have flat areas (0.8mm) to allow use of vacuum nozzles.

7. RoHS Compliant

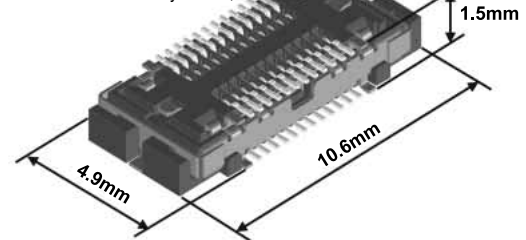
All components and materials comply with the requirements of the EU Directive 2002/95/EC.

High Shielding Effectiveness

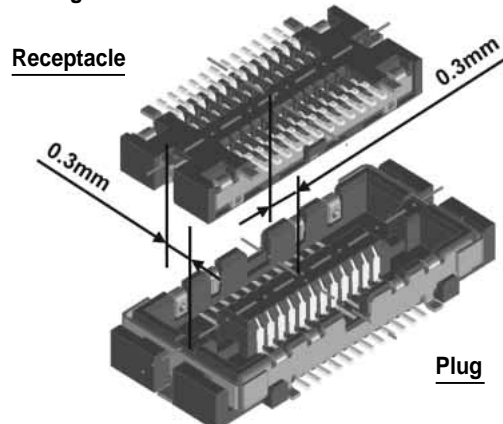


Low-Profile, Space-Saving with Reduced Connector Footprint

(Shown 24-Position – fully mated)



Self Alignment of 0.3 mm



FX12 Series 0.4 mm Pitch, 1.5 mm Board-to-Board Connectors with Dual Shields

Specifications

| | | | |
|--------|--|--|--|
| Rating | Current rating 0.3A Voltage rating 30V AC | Operating temperature range -55°C to +85°C (Note 1) | Storage temperature range -10°C to +60°C (Note 2) Storage humidity range Relative humidity 95% max. (No condensation) |
|--------|--|--|--|

| Item | Specification | Conditions |
|------------------------------------|---|--|
| 1. Insulation resistance | 50 MΩ min. | 100V DC |
| 2. Withstanding voltage | No flashover or insulation breakdown. | 100V AC/one minute |
| 3. Contact resistance | 100 mΩ max. | 100 mA |
| 4. Vibration | No electrical discontinuity of 1μs or more. No damage, cracks or parts dislocation. | Frequency: 10 to 55 Hz, single amplitude of 0.75mm, 3 axis, 10 cycles |
| 5. Shock | No electrical discontinuity of 1μs or more. No damage, cracks or parts dislocation. | Acceleration of 490 m/s ² , 11 ms duration, sine half-wave waveform, 3 cycles / each of 3 axis |
| 6. Humidity | Contact resistance: 120 mΩ max. Insulation resistance: 25 MΩ min. No damage, cracks or parts dislocation. | 96 hours at 40°C, 90% to 95% R.H. |
| 7. Temperature cycle | Contact resistance: 120 mΩ max. Insulation resistance: 50 MΩ min. No damage, cracks or parts dislocation. | Temperature: -55°C → +15°C to 35°C → +85°C → +15°C to +35°C Time: 30 → 2 to 3 → 30 → 2 to 3 (Minutes) 5 cycles |
| 8. Durability (mating / un-mating) | Contact resistance: 120 mΩ max. No damage, cracks or parts dislocation. | 30 cycles |
| 9. Resistance to soldering heat | No deformation of components affecting performance. | Reflow: At the recommended temperature profile Manual soldering: 360°C for 5 seconds |

Note 1: Includes temperature rise caused by current flow.

Note 2: The term “storage” refers to products stored for long period of time prior to mounting and use. Operating temperature range and humidity range covers non-conducting condition of installed connectors in storage, shipment or during transportation.

Note 3: Information contained in this catalog represents general requirements for this Series. Contact us for the drawings and specifications for a specific part number shown.

Materials

| Part | Material | Finish | Remarks |
|----------------|-----------------|--------------|-----------------------|
| Insulator | Polyamide | Color: Black | UL94V-0 |
| Contacts | Phosphor bronze | Plug | Selective gold plated |
| | | Receptacle | |
| Ground plates | | Gold plated | — |
| Metal fittings | | Tin plated | — |

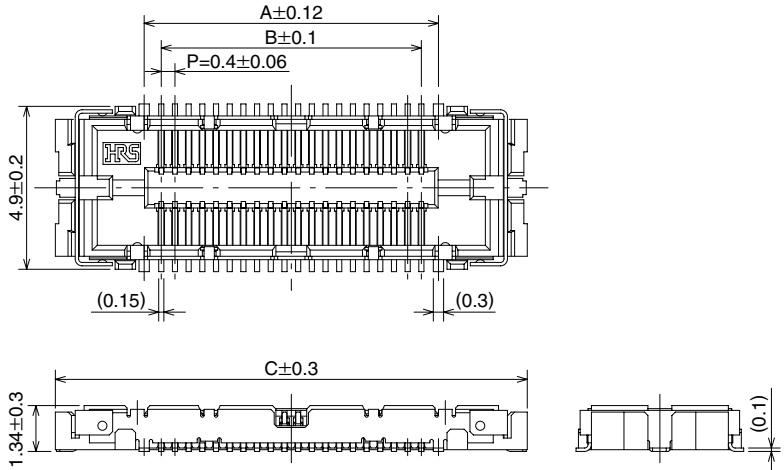
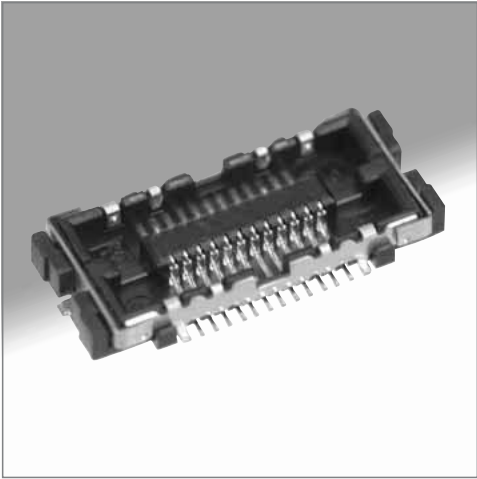
Ordering information

FX12 B - 24 P - 0.4 SV

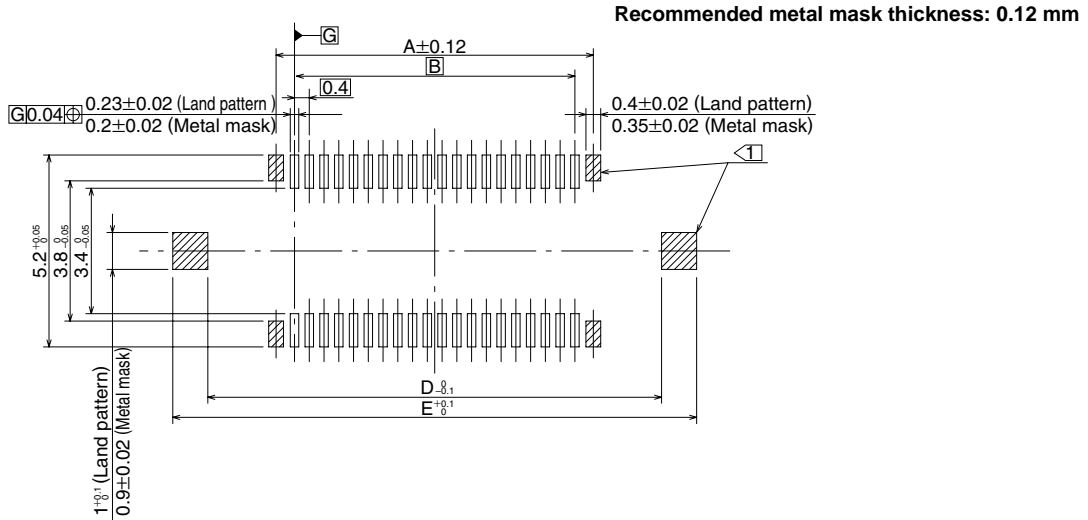
① ② ③ ④ ⑤ ⑥

| | |
|--|--|
| ① Series name: FX12 | ④ Connector type P: Plug S: Receptacle |
| ② Configuration B: Without guide post | |
| ③ Number of positions: 24, 40, 60 | ⑤ Contact pitch: 0.4 mm |
| | ⑥ Termination configuration SV: SMT |

Plugs



Recommended PCB Mounting Pattern and Metal Mask Dimensions



Notes:

- ① Positions marked indicate a ground circuit connections.
- 2 The co-planarity of SMT terminations is 0.1 maximum.
- 3 No polarity orientation for board mounting.
- 4 Dimensions in parentheses () are reference dimensions.
- 5 All dimensions in mm.

| Part number | CL No. | Number of positions | A | B | C | D | E | RoHS |
|------------------------|-------------------|---------------------|------------|------------|-------------|-------------|-------------|------------|
| FX12B-24P-0.4SV | 573-1005-0 | 24 | 5.4 | 4.4 | 10.6 | 9.1 | 11.0 | YES |
| FX12B-40P-0.4SV | 573-1001-0 | 40 | 8.6 | 7.6 | 13.8 | 12.3 | 14.2 | |
| FX12B-60P-0.4SV | 573-1007-6 | 60 | 12.6 | 11.6 | 17.79 | 16.3 | 18.2 | |

Packaging : 3,000 pieces per reel



YDS CAMERA MODULE

your best camera partner

Camera Module Pinout Definition Reference Chart

| OmniVision | Sony | Samsung | On-Semi | Aptina | Himax | GalaxyCore | PixArt | SmartSens | Sensors |
|-------------------------------|---------|-------------|---------|--------|-------|------------|--------|-----------|---|
| Pin Signal | | Description | | | | | | | |
| DGND | GND | | | | | | | | ground for digital circuit |
| AGND | | | | | | | | | ground for analog circuit |
| PCLK | DCK | | | | | | | | DVP PCLK output |
| XCLR | PWDN | XSHUTDOWN | STANDBY | | | | | | power down active high with internal pull-down resistor |
| MCLK | XVCLK | XCLK | INCK | | | | | | system input clock |
| RESET | RST | | | | | | | | reset active low with internal pull-up resistor |
| NC | NULL | | | | | | | | no connect |
| SDA | SIO_D | SIOD | | | | | | | SCCB data |
| SCL | SIO_C | SIOC | | | | | | | SCCB input clock |
| VSYNC | XVS | FSYNC | | | | | | | DVP VSYNC output |
| HREF | XHS | | | | | | | | DVP HREF output |
| DOVDD | | | | | | | | | power for I/O circuit |
| AFVDD | | | | | | | | | power for VCM circuit |
| AVDD | | | | | | | | | power for analog circuit |
| DVDD | | | | | | | | | power for digital circuit |
| STROBE | FSTROBE | | | | | | | | strobe output |
| FSIN | | | | | | | | | synchronize the VSYNC signal from the other sensor |
| SID | | | | | | | | | SCCB last bit ID input |
| ILPWM | | | | | | | | | mechanical shutter output indicator |
| FREX | | | | | | | | | frame exposure / mechanical shutter |
| GPIO | | | | | | | | | general purpose inputs |
| SLASEL | | | | | | | | | I2C slave address select |
| AFEN | | | | | | | | | CEN chip enable active high on VCM driver IC |
| MIPI Interface | | | | | | | | | |
| MDN0 | DN0 | MD0N | DATA_N | DMO1N | | | | | MIPI 1st data lane negative output |
| MDP0 | DP0 | MD0P | DATA_P | DMO1P | | | | | MIPI 1st data lane positive output |
| MDN1 | DN1 | MD1N | DATA2_N | DMO2N | | | | | MIPI 2nd data lane negative output |
| MDP1 | DP1 | MD1P | DATA2_P | DMO2P | | | | | MIPI 2nd data lane positive output |
| MDN2 | DN2 | MD2N | DATA3_N | DMO3N | | | | | MIPI 3rd data lane negative output |
| MDP2 | DP2 | MD2P | DATA3_P | DMO3P | | | | | MIPI 3rd data lane positive output |
| MDN3 | DN3 | MD3N | DATA4_N | DMO4N | | | | | MIPI 4th data lane negative output |
| MDP3 | DP3 | MD3P | DATA4_P | DMO4P | | | | | MIPI 4th data lane positive output |
| MCN | CLKN | CLK_N | DCKN | | | | | | MIPI clock negative output |
| MCP | CLKP | MCP | CLK_P | DCKN | | | | | MIPI clock positive output |
| DVP Parallel Interface | | | | | | | | | |
| D0 | DO0 | Y0 | | | | | | | DVP data output port 0 |
| D1 | DO1 | Y1 | | | | | | | DVP data output port 1 |
| D2 | DO2 | Y2 | | | | | | | DVP data output port 2 |
| D3 | DO3 | Y3 | | | | | | | DVP data output port 3 |
| D4 | DO4 | Y4 | | | | | | | DVP data output port 4 |
| D5 | DO5 | Y5 | | | | | | | DVP data output port 5 |
| D6 | DO6 | Y6 | | | | | | | DVP data output port 6 |
| D7 | DO7 | Y7 | | | | | | | DVP data output port 7 |
| D8 | DO8 | Y8 | | | | | | | DVP data output port 8 |
| D9 | DO9 | Y9 | | | | | | | DVP data output port 9 |
| D10 | DO10 | Y10 | | | | | | | DVP data output port 10 |
| D11 | DO11 | Y11 | | | | | | | DVP data output port 11 |

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Cameras Applications



Camera Reliability Test

| Reliability Inspection Item | | Testing Method | Acceptance Criteria | |
|-----------------------------|-----------------------------|---|-------------------------|-------------------------|
| Category | Item | | | |
| Environmental | Storage Temperature | High 60°C 96 Hours | Temperature Chamber | No Abnormal Situation |
| | | Low -20°C 96 Hours | Temperature Chamber | No Abnormal Situation |
| | Operation Temperature | High 60°C 24 Hours | Temperature Chamber | No Abnormal Situation |
| | | Low -20°C 24 Hours | Temperature Chamber | No Abnormal Situation |
| | Humidity | 60°C 80% 24 Hours | Temperature Chamber | No Abnormal Situation |
| | Thermal Shock | High 60°C 0.5 Hours Low -20°C 0.5 Hours Cycling in 24 Hours | Temperature Chamber | No Abnormal Situation |
| Physical | Drop Test (Free Falling) | Without Package 60cm | 10 Times on Wood Floor | Electrically Functional |
| | | With Package 60cm | 10 Times on Wood Floor | Electrically Functional |
| | Vibration Test | 50Hz X-Axis 2mm 30min | Vibration Table | Electrically Functional |
| | | 50Hz Y-Axis 2mm 30min | Vibration Table | Electrically Functional |
| | | 50Hz Z-Axis 2mm 30min | Vibration Table | Electrically Functional |
| | Cable Tensile Strength Test | Loading Weight 4 kg 60 Seconds Cycling in 24 Hours | Tensile Testing Machine | Electrically Functional |
| Electrical | ESD Test | Contact Discharge 2 KV | ESD Testing Machine | Electrically Functional |
| | | Air Discharge 4 KV | ESD Testing Machine | Electrically Functional |
| | Aging Test | On/Off 30 Seconds Cycling in 24 Hours | Power Switch | Electrically Functional |
| | USB Connector | On/Off 250 Times | Plug and Unplug | Electrically Functional |



Camera Inspection Standard

| Inspection Item | | Inspection Method | Standard of Inspection | | |
|------------------|----------|-------------------|-----------------------------|--|---------------------------------|
| Category | Item | | | | |
| Appearance | FPC/ PCB | Color | The Naked Eye | Major Difference is Not Allowed. | |
| | | Be Torn/Chopped | The Naked Eye | Copper Crack Exposure is Not Allowed. | |
| | | Marking | The Naked Eye | Clear, Recognizable (Within 30cm Distance) | |
| | Holder | Scratches | The Naked Eye | The Inside Crack Exposure is Not Allowed | |
| | | Gap | The Naked Eye | Meet the Height Standard | |
| | | Screw | The Naked Eye | Make Sure Screws Are Presented (If Any) | |
| | | Damage | The Naked Eye | The Inside Crack Exposure is Not Allowed | |
| | Lens | Scratch | The Naked Eye | No Effect On Resolution Standard | |
| | | Contamination | The Naked Eye | No Effect On Resolution Standard | |
| | | Oil Film | The Naked Eye | No Effect On Resolution Standard | |
| | | Cover Tape | The Naked Eye | No Issue On Appearance. | |
| | Function | Image | No Communication | Test Board | Not Allowed |
| | | | Bright Pixel | Black Board | Not Allowed In the Image Center |
| Dark Pixel | | | White board | Not Allowed In the Image Center | |
| Blurry | | | The Naked Eye | Not Allowed | |
| No Image | | | The Naked Eye | Not Allowed | |
| Vertical Line | | | The Naked Eye | Not Allowed | |
| Horizontal Line | | | The Naked Eye | Not Allowed | |
| Light Leakage | | | The Naked Eye | Not Allowed | |
| Blinking Image | | | The Naked Eye | Not Allowed | |
| Bruise | | | Inspection Jig | Not Allowed | |
| Resolution | | | Chart | Follows Outgoing Inspection Chart Standard | |
| Color | | | The Naked Eye | No Issue | |
| Noise | | | The Naked Eye | Not Allowed | |
| Corner Dark | | | The Naked Eye | Less Than 100px By 100px | |
| Color Resolution | | | The Naked Eye | No Issue | |
| Dimension | Height | The Naked Eye | Follows Approval Data Sheet | | |
| | Width | The Naked Eye | Follows Approval Data Sheet | | |
| | Length | The Naked Eye | Follows Approval Data Sheet | | |
| | Overall | The Naked Eye | Follows Approval Data Sheet | | |

YDSCAM Package Solutions

YDS Camera Module



Complete with Lens Protection Film



Tray with Grid and Space

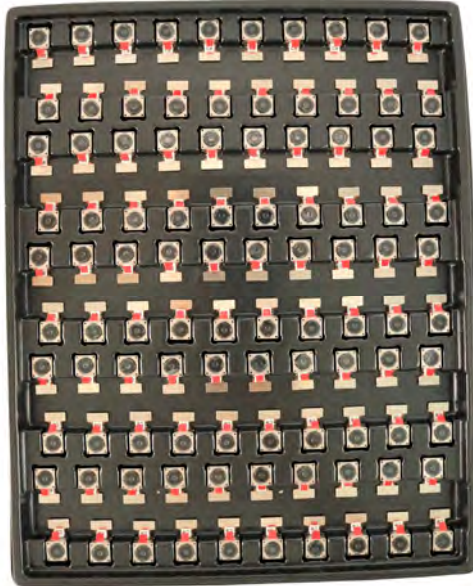


Place Cameras on the Tray

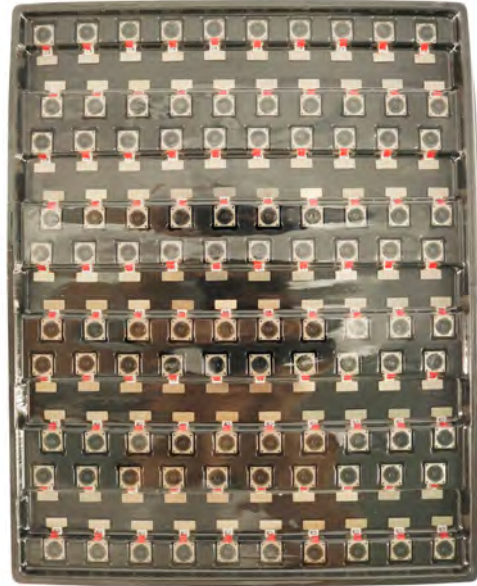


YDSCAM Package Solutions

Full Tray of Cameras



Cover Tray with Lid



Place Tray into Anti-Static Bag



Vacuum the Anti-Static Bag



YDSCAM Package Solutions

Sealed Vacuum Anti-Static Bag with Labels

1. Model and Description 2. Quantity 3. Manufacturing Date Code 4. Caution



YDSCAM Package Solutions

Place Foam Sheets Between Tray Bags



Foam Sheets are Larger Than Trays



Place Foam Sheets and Trays into Box



Foam Sheets are Tightly Fitting in Box



Seal the Carbon Box



Label the Carbon Shipping Box





YDSCAM Package Solutions

USB Camera Module

Complete with Lens Protection Film



Place Camera Sample into Anti-Static Bag

Place USB Cameras into Tray



Seal the Tray with Anti-Static Bag

Label the Carbon Shipping Box



YDSCAM Package Solutions

Place Camera Sample into Anti-Static Bag



Place Connectors into Anti-Static Bag



Label the Sample Bags



Place Connectors into Reel



Place Samples into the Carbon Box



Place Connectors into the Carbon Box





YDS CAMERA MODULE

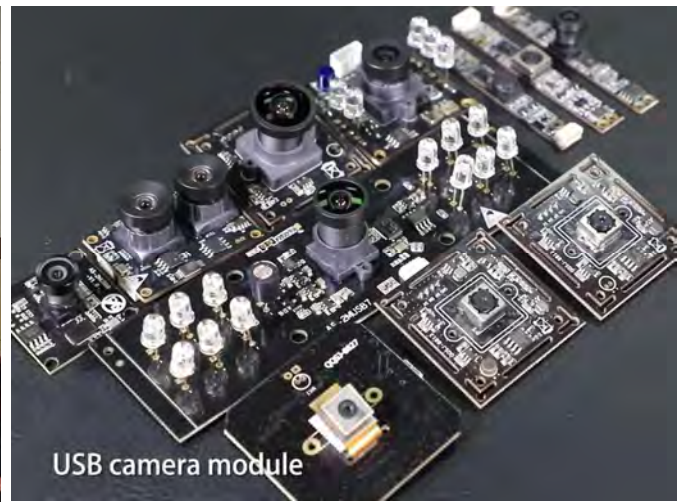
your best camera partner

Company YDSCAM

YingDeShun Co. Ltd. (YDS) was established in 2017, a next-generation technology driven manufacturer specialized in research, design, and produce of audio and video products. YDS is occupying 20,000 square feet automated plants with 100 employees of annual throughput 30,000,000 units cameras.

YDS provides OEM, ODM design, contract manufacturing, and builds the camera products. You may provide the requirements to us, even with a hand draft, our sales and engineering work together to meet your needs. We consider ourselves your last-term partner in developing practical and innovative solutions.

Our team covers everything from initial concept development to mass produced product. YDS specializes in customized camera design, raw material, electronic engineering, firmware/software development, product testing, and packing design. Our experienced strategic supply systems offer a robust and dependable manufacturing capacity for orders of various sizes.



Limited Warranty

YDS provides the following limited warranty if you purchased the Product(s) directly from YDS company or from YDS's website www.YDSCAM.com. Product(s) purchased from other sellers or sources are not covered by this Limited Warranty. YDS guarantees that the Product(s) will be free from defects in materials and workmanship under normal use for a period of one (1) year from the date you receive the product ("Warranty Period").

For all Product(s) that contain or develop material defects in materials or workmanship during the Warranty Period, YDS will, at its sole option, either: (i) repair the Product(s); (ii) replace the Product(s) with a new or refurbished Product(s) (replacement Product(s) being of identical model or functional equivalent); or (iii) provide you a refund of the price you paid for the Product(s).

This Limited Warranty of YDS is solely limited to repair and/or replacement on the terms set forth above. YDS is not reliable or responsible for any subsequent events.



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your best camera partner

YDS Strength

Powerful Factory



Professional Service



Promised Delivery



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