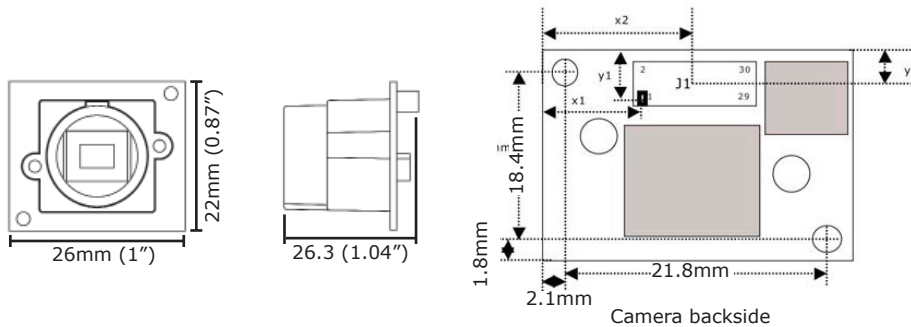


Product Features

- Progressive scan, 1.3 megapixel sensor with RGB color filter
- 15 fps at full 1280 x 1024 resolution uncompressed
- Mirror mode option
- Delivers 8-bit, or 10-bit digital YUV & RGB video output
- Software controllable features & functions via I²C
- Ultra small board 22mm x 26mm



J1 Connector*

| | |
|-----------------------------------|-----------------------------|
| 01 GROUND | 16 NC |
| 02 GROUND | 17 YUV7 CCIR656 |
| 03 YUV0 CCIR656 | 18 NC |
| 04 LSB0 (additional bit 10 bits)* | 19 Data Clock |
| 05 YUV1 CCIR656 | 20 IR-filter control switch |
| 06 LSB1 (additional bit 10 bits)* | 21 iris out |
| 07 YUV2 CCIR656 | 22 GROUND |
| 08 NC | 23 HREF |
| 09 YUV3 CCIR656 | 24 VREF |
| 10 NC | 25 DO NOT CONNECT! |
| 11 YUV4 CCIR656 | 26 DO NOT CONNECT! |
| 12 NC | 27 I ² C data |
| 13 YUV5 CCIR656 | 28 I ² C clock |
| 14 NC | 29 NC |
| 15 YUV6 CCIR656 | 30 =5v power supply in |

* Please review application note for details.

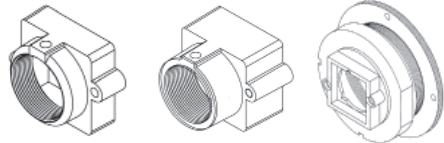
Technical Specifications

| Electrical | 24C1.3XDIG |
|------------------------|----------------------------------------------------------------------------|
| Image Sensor | 1/3" CMOS |
| Active Pixels (H x V) | 1280 x 1024 (max) |
| Frame Rate | 15 fps at 1280 x 1024 uncompressed |
| Sensitivity | < 1.0 Lux (50 IRE) F1.2 3200K, lens transmission 80%, scene reflection 75% |
| | 0.4 Lux (30IRE), 5fps |
| Signal to Noise Ratio | >45dB |
| Gamma | 0.45 default (1.0 via software) |
| Gain Control | AGC default (selectable via software) |
| Synchronization | Internal (crystal controlled) |
| Control Communication | Camera control via I ² C bus |
| Backlight Compensation | Selectable via software |
| Contour Enhancement | Default on |
| White Balance | Auto/manual (selectable) |
| Scan Mode | Progressive scan |
| Mirror Mode | Selectable via software |
| Horizontal Flip | Selectable via software |
| Contrast | Selectable via software |
| Brightness | Selectable via software |
| Dynamic Range | 68 db |
| Iris Control | Electronic (iris signal for lens drive available) |
| Shutter Mode | Electronic rolling shutter |
| Shutter Speed | 1/frame rate to <1/100,000 Fixed shutter speeds selectable via software |
| Video Output | BT656, 8-bit, or 10-bit digital YUV or RGB |
| Power Supply | 5vdc ± 5% (not polarity protected) |
| Power Consumption | <275mwatt |

Environmental

| | |
|-----------------------|--------------------------------|
| Operating Temperature | -15°C ~ 55°C (5° F ~ 131° F) |
| Operating Humidity | 20% up to 93% RH |
| Storage Temperature | -25°C ~ 70°C (-13° F ~ 158° F) |
| Storage Humidity | Up to 98% RH |
| Lifetime | MTBF > 150,000 hours |
| Packaging | ESD safe package |

Mechanical

| | |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Dimensions W x H x D | 26mm x 22mm x 16mm (without Lens mount) |
| Lens mounts | Replace "X" in model number with desired lens mount option: |
| Example: Change 24C1.3XUSB to 24C1.35USB to select an M-12 Board Mount. | 2 = Metal M-12 Pinhole 5 = Metal M-12 Board 8 = Metal CS Board |
| |  |
| Connectors | Molex 52991-0308-Mate On board 53916-0304 |

Complementary Models

| | |
|------------|-------------------------------------------|
| 24C1.3XUSB | CMOS 1.3 megapixel USB color board camera |
|------------|-------------------------------------------|