



INDUSTRIAL/MACHINE VISION APPLICATIONS

P/N CXGM-130M/C

SMALL PACKAGE, POWERFUL RESULTS

The Blackfly S is a compact, high performance machine vision camera that allows designers to easily produce the exact images they need. With both automatic and precise manual control over image capture and on-camera pre-processing, the Blackfly S accelerates application development.

FEATURES

THE LATEST CMOS SENSORS

Switch between high sensitivity and low noise, and high saturation capacity and dynamic range with selectable conversion gain.

IMPROVE CYCLE TIMES

Automate more with advanced camera controls, event notifications, chunk data, counters and timers.

ACCELERATE YOUR TIME TO MARKET

FLIR's GenICam3 API with GUI library, and detailed event logging is supported by comprehensive documentation.

APPLICATIONS

AUTOMATED OPTICAL INSPECTION

MICROSCOPY

ROBOT GUIDANCE

LASER BEAM PROFILING

AUTONOMOUS VEHICLE GUIDANCE

SPECS

| | CXGM-130M | CXGM-130C |
|-------------------------|--|--|
| Resolution | 1280 x 1024 | |
| Frame Rate* | 85 FPS | |
| Megapixels | 1.3 MP | |
| Chroma | Mono | Color |
| Sensor | On Semi P1300, CMOS, 1/2" | |
| Readout Method | Global shutter | |
| Pixel Size | 4.8 μ m | |
| Lens Mount | C-mount | |
| ADC | 10-bit | |
| Minimum Frame Rate** | 1 FPS | |
| Gain Range** | 0 to 18 dB | |
| Exposure Range** | 11 μ s to 30 s | |
| Acquisition Modes | Continuous, Single Frame, Multi Frame | |
| Partial Image Modes | Pixel binning, decimation, ROI | |
| Image Processing | Gamma, lookup table, and sharpness | Color correction matrix, gamma, lookup table, hue, saturation, and sharpness |
| Sequencer | Up to 8 sets using 6 features, including image size | |
| Image Buffer | 240 MB | |
| User Sets | 2 user configuration sets for custom camera settings | |
| Flash Memory | 6 MB non-volatile memory | |
| Opto-isolated I/O | 1 input, 1 output | |
| Non-isolated I/O | 1 bi-directional, 1 input | |
| Auxiliary Output | 3.3 V, 120 mA maximum | |
| Interface | GigE PoE | |
| Power Requirements | Power over Ethernet (PoE), or 12 V nominal (8 - 24 V) via GPIO | |
| Power Consumption | 3 W maximum | |
| Dimensions/Mass | 29 mm x 29 mm x 30 mm / 36 g | |
| Machine Vision Standard | Gige Vision v1.2 | |
| Compliance | CE, FCC, KCC, RoHS, REACH. The ECCN for this product is: EAR099. | |
| Temperature | Operating: 0°C to 50°C Storage: -30°C to 60°C | |
| Humidity | Operating: 20% to 80% (no condensation) Storage: 30% to 95% (no condensation) | |
| Warranty | 3 years | |

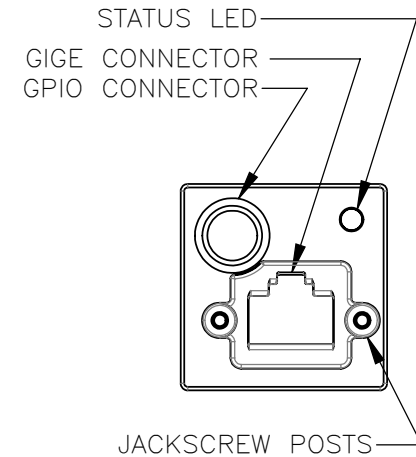
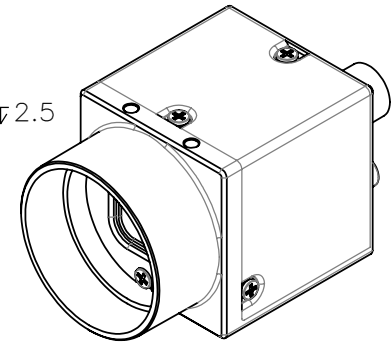
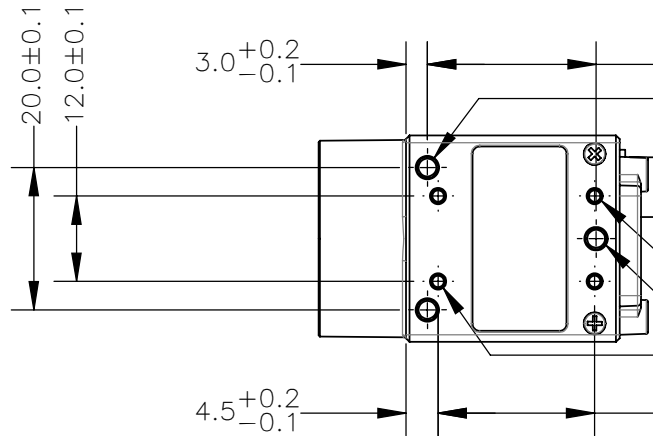
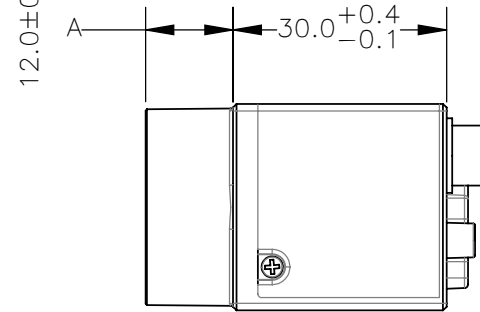
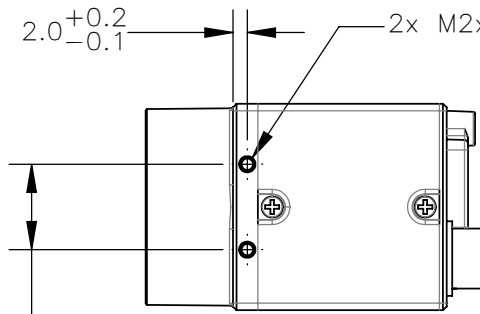
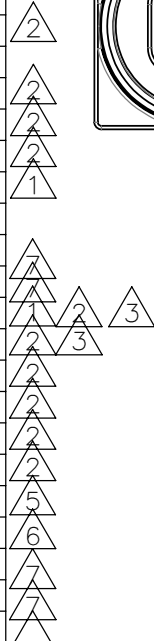
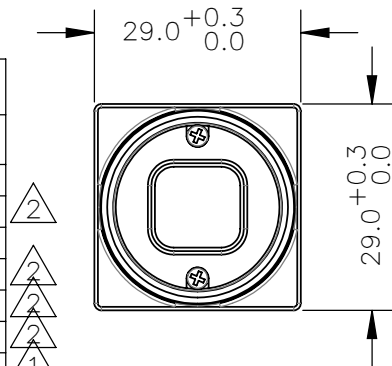
*Frame rates are measured with Device Link Throughput Limit of 380 MBps and Acquisition Frame Rate disabled. Values are rounded down to whole numbers.

**Values are the same in binning and no binning modes.

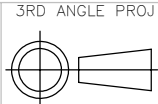


| REVISIONS | | | |
|-----------|--|-----------|---------|
| REV. | DESCRIPTION | DATE | DONE BY |
| 0 | INITIAL RELEASE | 28.MAR.12 | GUS |
| 1 | ADDED CS-MOUNT E2V7C560 SENSOR, AND CS-MOUNT ICX445 SENSOR | 09.NOV.12 | GUS |
| 2 | ADDED CS-MOUNT ICX274, 424, 692, 693, IMX 104, 136, EV76C570, AR0134, APTINA MT9P SENSORS. EV76C560 WAS MIS-SPELLED AS E2V7C560. | 05.NOV.13 | CHRIS |
| 3 | EV76C560 & 570 BARREL LENGTH WAS 7.276 NOW 6.941, BUG 35817 | 11.FEB.15 | CHRIS |
| 4 | ADDED TOLERANCE, BUG 31274 | 02.MAR.14 | CHRIS |
| 5 | ADDED SHARP RJ32, RT# 252497 | 22.APR.15 | CHRIS |
| 6 | ADDED SHARP RJ33, BUG 27160 | 06.OCT.15 | CHRIS |
| 7 | ADDED IMX264 & IMX265, ICX414 & ICX618, BUG 27160 | 04.FEB.16 | CHRIS |
| 8 | ADDED P1300, BUG 47232 | 28.MAR.17 | CHRIS |

| BARREL LENGTH - "A" (+0.10/-0.15) | | |
|--------------------------------------|---------|----------|
| SENSOR | C-MOUNT | CS-MOUNT |
| ICX204 | 12.30 | - |
| ICX424 | 12.30 | 7.27 |
| ICX267 | 12.30 | - |
| ICX274 | 12.30 | 7.27 |
| ICX692 | - | 7.27 |
| ICX693 | - | 7.27 |
| ICX445 | 12.30 | 7.27 |
| ICX655 | 12.30 | - |
| ICX414 | - | 7.27 |
| ICX618 | 12.30 | - |
| EV76C560 | - | 6.94 |
| EV76C570 | - | 6.94 |
| IMX104 | - | 6.72 |
| IMX136 | - | 6.72 |
| AR0134 | - | 6.45 |
| MT9P | - | 6.45 |
| RJ32 | 12.30 | - |
| RJ33 | - | 7.083 |
| IMX264 | 11.83 | - |
| IMX265 | 11.83 | - |
| P1300 | 12.06 | - |



HOURS
www.hours-web.com



| TOLERANCES |
|--------------|
| X.X ±0.3 |
| X.XX ±0.10 |
| X.XXX ±0.020 |
| ANGLES ±0.5° |

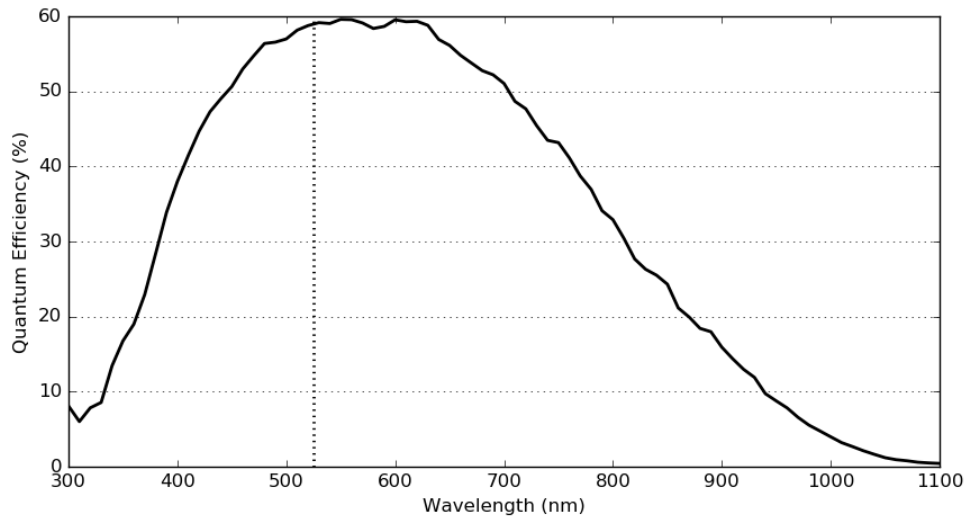
UNLESS OTHERWISE STATED:
ALL DIMENSIONS IN MM
MACHINE FINISH 1.6µM

SCALE: DWG NO
1:1
SIZE: TITLE
A

CXGM-130M/C

SHEET 1 OF 3
REV 8

CXGM-130M



CXGM-130C

