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INDUSTRIAL/MACHINE VISION APPLICATIONS

P/N CFGM–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

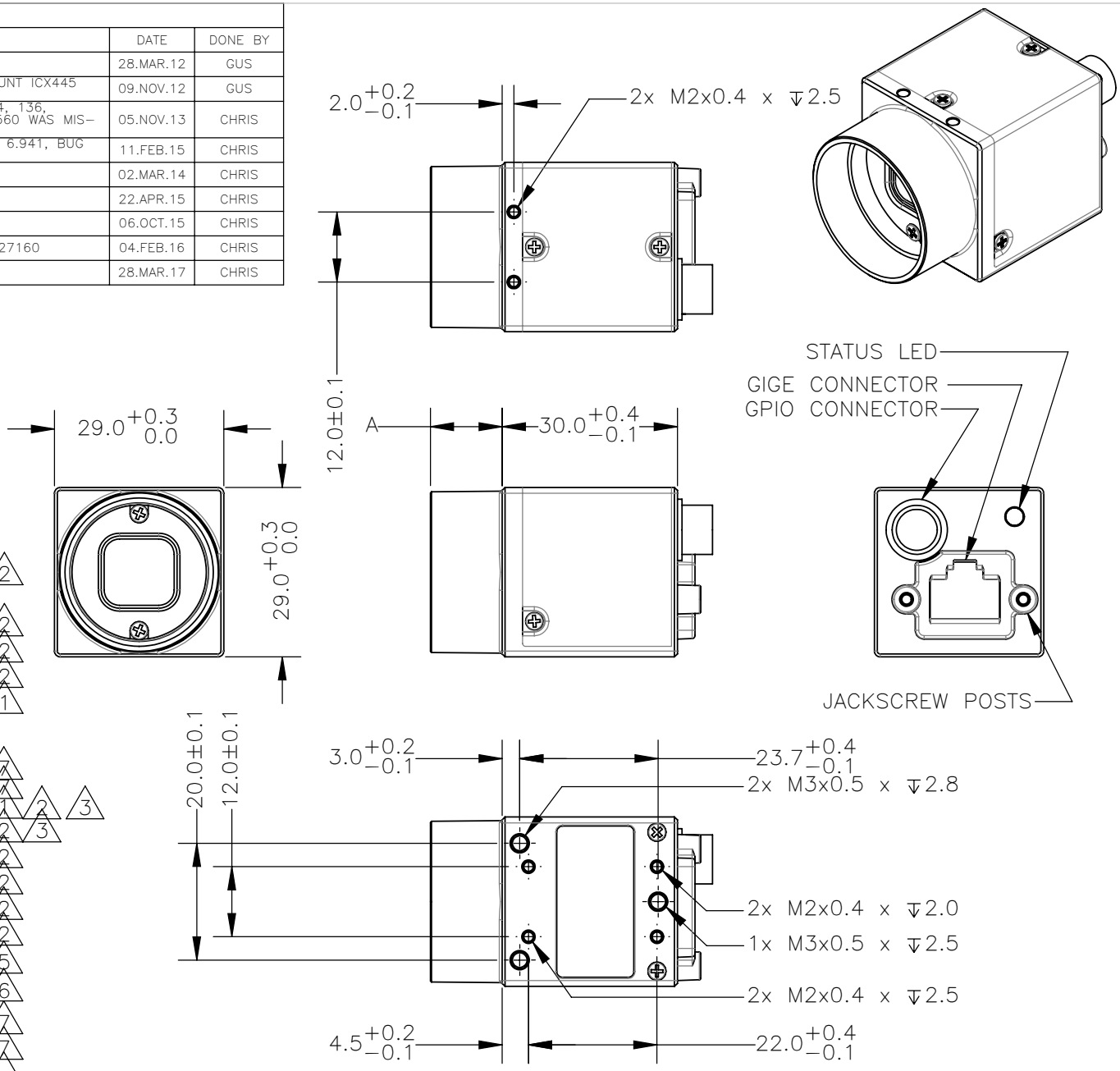
SPECS	CFGM-130M	CFGM-130C
Resolution	1280 x 1024	
Frame Rate*	85 FPS	
Megapixels	1.3 MP	
Chroma	Mono	Color
Sensor	On Semi P1300, CMOS, 1/2"	
Readout Method	Global shutter	
Pixel Size	4.8 µm	
Lens Mount	C-mount	
ADC	10-bit	
Minimum Frame Rate**	1 FPS	
Gain Range**	0 to 18 dB	
Exposure Range**	11 µs to 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	2
ICX267	12.30	–	
ICX274	12.30	7.27	2
ICX692	–	7.27	2
ICX693	–	7.27	2
ICX445	12.30	7.27	1
ICX655	12.30	–	
ICX414	–	7.27	7
ICX618	12.30	–	7
EV76C560	–	6.94	1 2 3
EV76C570	–	6.94	2 3
IMX104	–	6.72	2
IMX136	–	6.72	2
AR0134	–	6.45	2
MT9P	–	6.45	2
RJ32	12.30	–	5
RJ33	–	7.083	6
IMX264	11.83	–	7
IMX265	11.83	–	7
P1300	12.06	–	7



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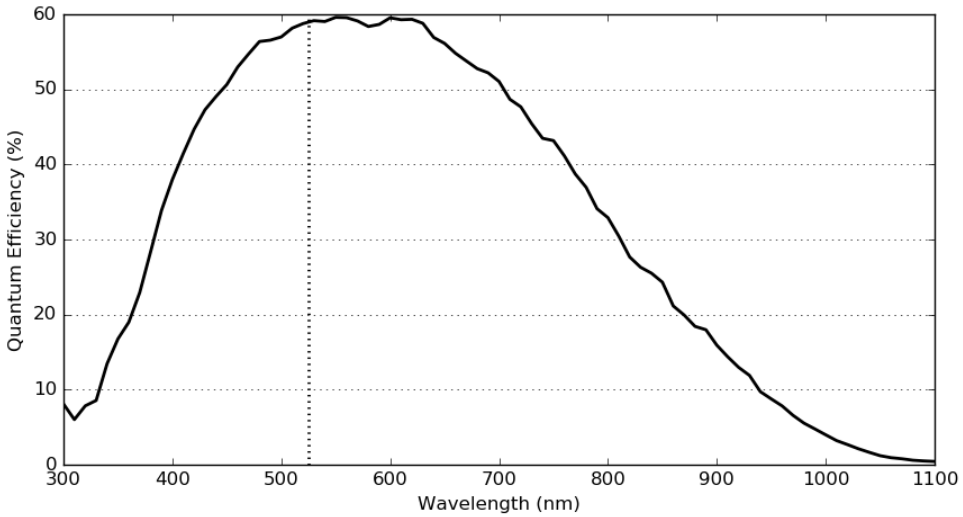
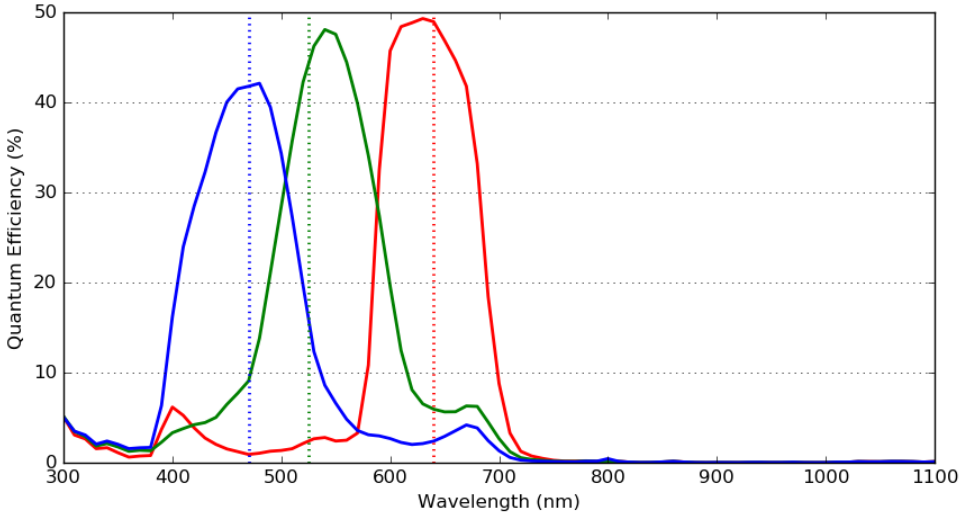
3RD ANGLE PROJ

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 1:1
SIZE A
DWG NO CFGM-130M/C
TITLE
SHEET 1 OF 3
REV 8

CFGM-130M



CFGM-130C