Manta
G-283

Description

Preliminary

The Manta G-283B/C includes an 2/3'' Sony ICX674 sensor with EXview HAD II technology. The ICX674 is distinguished by reduced smear, a higher quantum efficiency, and an increased NIR sensitivity. At HD resolution (1920 x 1080), it runs 35 fps.

- Sony ICX674 EXview HAD II, 2.8 Megapixels
- Sync modes
  - Trigger ready, trigger input, exposing, readout, imaging, strobe, GPO
- Trigger
  - External trigger event: rising/falling/any edge, level high/low
  - External trigger delay: 0 to 60 s in 1 µs increments
- Modular options
  - Various IR cut/pass filters
  - CS-Mount
  - Board level version
  - Angled head
  - White medical housing
  - PoE (Power over Ethernet)

Specifications

Manta	G-283
Interface	IEEE 802.3 1000baseT
Resolution	1936 x 1458
Sensor	Sony ICX674
Sensor type	CCD Progressive
Sensor size	Type 2/3
Cell size	4.54 µm
Lens mount	C/CS-Mount
Max frame rate at full resolution	30 fps
A/D	14 bit
On-board FIFO	128 MB
	Output
Bit depth	8/14 (mono) - 8/12 (color) bit
Mono modes	Mono8, Mono16, Mono12 packed
Color modes YUV	YUV411, YUV422, YUV444
Color modes RGB	RGB24, BGR24
Raw modes	Bayer8, Bayer16, Bayer12 packed
	General purpose inputs/outputs (GPIOs)
Opto-coupled I/Os	2 inputs, 2 outputs
RS-232	1
	Operating conditions/Dimensions
Operating temperature	+5 °C ... +45 °C
Power requirements (DC)	8 V - 30 V
Power consumption (12 V)	tbd
Mass	tbd
Body Dimensions (L x W x H in mm)	86.4 x 44 x 29 mm incl. connectors
Regulations	CE, FCC Class B, RoHS

Smart features

- Switchable single tap/dual tap mode
- ROI (Region of Interest Readout)
- Gain, exposure
- 3 Look-up tables (LUTs)
- Gamma (0.25 - 4.0)
- DSP subregion (selectable ROI for auto features)
- Binning
- Decimation (sub-sampling)
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- IEEE 1588 (PTP, Precision Time Protocol)
- Event channel
- Chunk data
- Storable user sets

Applications

The Manta G-283 with its ICX674 sensor has an excellent image quality even under challenging light conditions.

Typical applications:

- Metrology and inspection systems
- Scientific measurement
- Microscopy
- Forensic solutions
- ITS traffic solutions
- Applications requiring a highly sensitive camera (low light conditions)
- Applications requiring good sensitivity in the NIR spectrum