STC-MCA5MUSB

- Brand New USB 3.0 Interface
- 5MP QSXGA Resolution
- 1/2.5" CMOS Sensor
- 14 ~ 123 fps

SENTECH
Sensor Technologies America, Inc.

Phone: (972) 481-9223

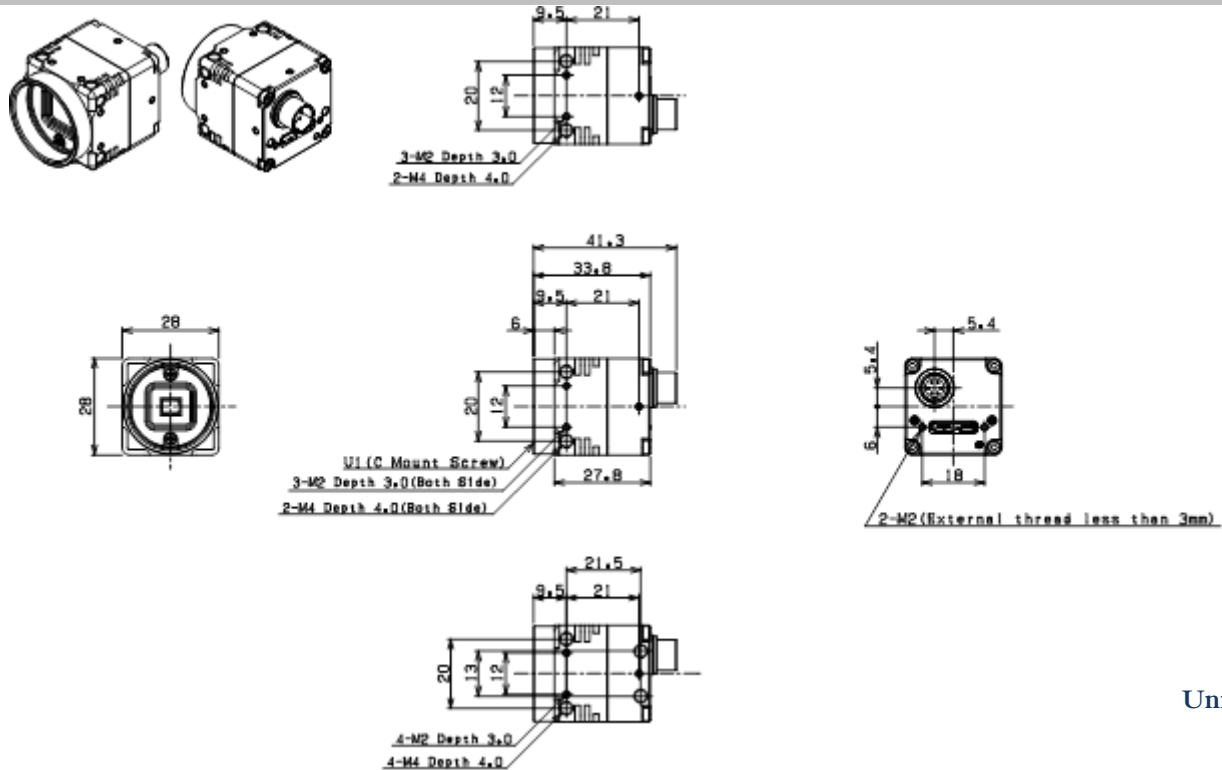FAX: (972) 481-9209

Toll Free: (877) SENTECH

www.SentechAmerica.com

Specifications– MCA5MUSB

| Model Number		STC-MBA5MUSB3	STC-MCA5MUSB3
Image Sensor		1/2.5"5M pixel Monochrome CMOS (Aptina:MT9P031I12STM)	1/2.5"5M pixel Color CMOS (Aptina:MT9P031I12STC)
Active Picture Elements		2592(H) x 1944(V)	
Cell Size		2.2 (H) x 2.2 (V) μm	
Scanning System		Progressive	
Shutter Type		Rolling Shutter	
Scanning Mode		Full Scanning, Variable AOI (Horizontal / Vertical)	
Maximum Frame Rate (in Full Scanning Mode)		QSXGA: 2592 x 1944 : 14fps (Settable from 6.88 to 14fps) *Frame rate will drop if connected with the USB2.0 port. （Raw 8bit output: 7fps、Raw 10/12bit output 3.5fps）	
Sync. System		Internal	
Video Output Format		RAW8bit/10bit/12bit	BGR8bit, RAW8bit/10bit/12bit, Mono8bit/10bit/12bit
S/N Ratio (8bit)		≤ 4 Digit (Gain 0 dB)	≤ 4 Digit (Gain 0 dB)
Minimum Scene Illumination		0.3 Lux at F1.2	9 Lux at F1.2
ALC		Auto Shutter / Auto Gain	
Electronic Shutter		Free-run Mode: Exposure Time -- 32 μsec to 38sec (in full scanning mode) Edge Preset Trigger Mode: Exposure Time -- 32 μsec to 38sec (in full scanning mode) Pulse-width Trigger Mode: Exposure Time -- 32 μsec to unlimited (in full scanning mode)	
Gain	Analog	0 to 26.97 dB	
	Digital	0 to 12.04 dB	
Digital Clamp		0 to 255 (LSB of 12bit output)	
Gamma		0.1 to 4.0 (settable with 0.1 step)	
AOI		AOI (Horizontal: 32 to 2592 pixels / Vertical: 32 to 1944 lines) Adjustable Steps: 4 pixels in horizontal direction and 4 lines in vertical direction	
Binning Function		Horizontal 1/2, 1/4 Vertical 1/2, 1/4 *Only pixels in the horizontal direction can be added to increase the brightness.	
Skipping Function		Horizontal 1/2, 1/3, 1/4, 1/5, 1/6, 1/7 Vertical 1/2, 1/3, 1/4, 1/5, 1/6, 1/7, 1/8	
Mirror Image		Horizontal / Vertical / Horizontal and Vertical	
Pixel Defect Correction		Up to 64 pixels (This function is turned off at shipping.)	
White Balance		N/A	Auto / Manual/ One-shot
Operational Mode		Free-run / Edge-preset Trigger/ Pulse-width Trigger / Start and Stop Trigger	
Frame Memory		One Frame	
Interface		USB3.0 Super speed (USB3.0 Micro B)	
Input/Output		Two Inputs and Two Outputs	
Power	Input Voltage	+5V(typ.) (Conform to USB Standard)	
	Consumption	Less than 2W	

Model Number	STC-MBA5MUSB3	STC-MCA5MUSB3
Dimensions	28 (W) x 28 (H) x 33.8 (D) mm *excluding the connector	
Lens Mount	CS Mount	
Optical Filter	IR Cut Filter	No IR Cut Filter
Optical Center Accuracy	Positional accuracy in H and V directions: +/- 0.5 mm Rotational accuracy of H and V: +/- 0.35 deg.	
Weight	Approximately 38 g	
Interface Connectors	USB Connector: USB3.0 MicroB type I/O Connector: HR10A-7R-6PB (Hirose) or equivalent	

Mechanical Drawing

Unit: mm

Spectral Sensitivity Characteristics
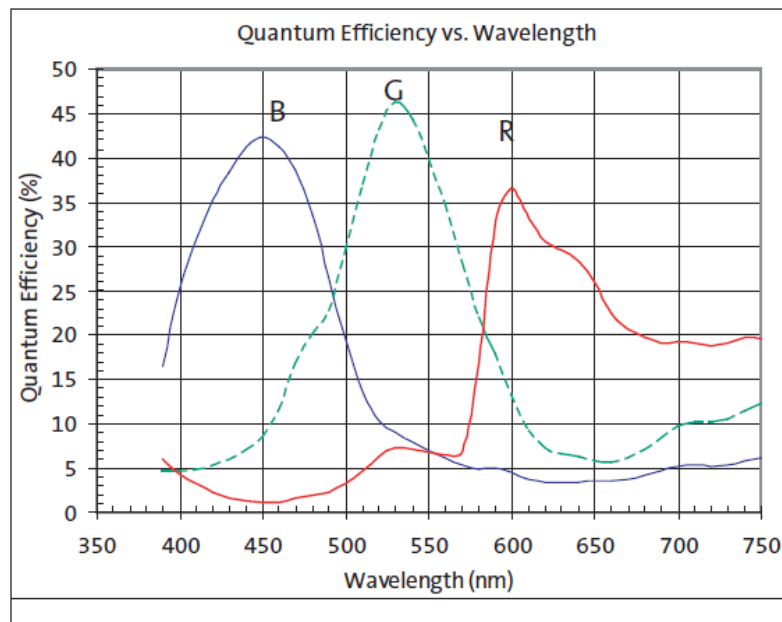
Quantum Efficiency vs. Wavelength

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Key Features

- **Color or Monochrome Models**
- **Full Triggering Functions**
- **Sentech Viewing Software and SDK**
- **All Standard Industry Drivers**
- **Low Cost**
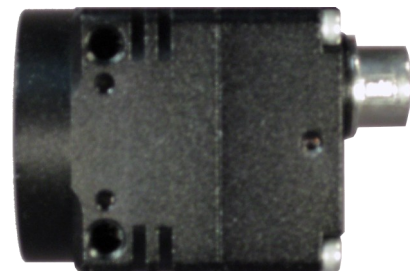- **High Quality and Performance**

28 mm

28 mm
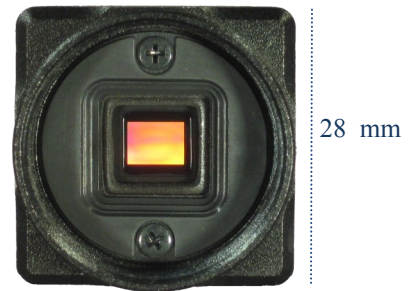
This year Sentech is introducing the brand new USB 3.0 interface technology to our clients in the form of the USB 3.0 CMOS series. The CMOS USB 3.0 series is available in 5 to 0.3 MP scalable resolution with 14 to 123 fps and both color and monochrome models. These low cost, high performance cameras will be compatible with all standard industry drivers, and the Sentech Viewing Software and SDK. The CMOS USB 3.0 series is available now at an astonishingly low price!

If you are interested in the STC-MCA5MUSB or any of the many Sentech cameras look no further! Contact your Sales Representative immediately.

33.8 mm

(Business Card)

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