Entner Electronics

LUCY-MFT20/40 Family

2.0MP / 4.0MP High Speed Camera Family with CameraLink or USB 3.0 Interface and Micro Four Thirds Lens Mount

Features

o LUCY-MFT20: >1080p resolution (2032 x 1088)
o LUCY-MFT40: 4.0 MP resolution (2032 x 2048)
o Color (LUCY-MFTxxCxx) and monochrome (LUCY-MFTxxMxx) versions available
o High speed readout (1080p: 120fps over CameraLink, 240fps over USB3.0)
o Digital binning possible (after blemish correction for best image quality)
o Designed for Micro Four Thirds lenses (with active mount for electric focusing, etc.)
o Large choice of high quality lenses from consumer market (e.g. Olympus and Panasonic, some with electric zoom)
o Global shutter
o 5.5µm pixels
o Smaller read-out areas possible for higher frame-rate
o LUCY-xxxCL: CameraLink (with PoCL) interface, with trigger support
o LUCY-xxxU3: USB 3.0 interface (uncompressed or MJPEG compressed)
o 3G-SDI and LVDS output option available on request
o Integrated FPGA allows various post-processing options (e.g. AE, WB, gamma-correction, sharpness enhancement, etc.)
o Separate RS-232 and power connectors available on request
o Custom modifications possible

High Resolution and Frame Rate (Examples)

Resolution (Examples)	Max. fps (8bpp CL)	Max. fps (10/12bpp CL)	Max. fps (USB Raw 8b)	Max. fps (USB MJPEG)
2032 x 2032 (CS40 only)	60	40	40	120
1920 x 1080	120	80	80	240
1280 x 720	270	180	180	480
640 x 480	750	530	530	750
640 x 300	1200	850	850	1200
960 x 540 2x binned	330	295	295	330
960 x 360 2x binned	500	440	440	500
640 x 180 2x binned	1000	1000	1000	1000
640 x 360 3x binned	300	330	330	300

Resolution can be selected by RS-232 commands; lower resolutions will have a smaller field of view ("region of interest readout")

Specifications

Sensor	2032 x 1088 / 2032 x 2048 , 2/3" / 1", 5.5µm pixel pitch
Lens Mount	Micro Four Thirds Mount
Output	CameraLink or USB3.0 (3G-SDI and LVDS as option)
Power Supply	5V to 12V / 3.5W (PoCL or USB 3.0)
Sensitivity	5.6V/lux.s
Dynamic range	60 dB
Temperature range	0°C to 50°C (wider range available as option)
Size (with housing)	46mm x 46mm x 46mm

Preliminary information – specification and availability subject to change without notice