

## VRmDC-12 COB (color)

Intelligent board level camera with lens mount

### Highlights

- Camera with 300MHz ARM9-processor
- 600MHz Texas Instruments DSP - 4800 MIPs
- 128 MB RAM
- 512 MB flash-memory
- Standard Debian Linux
- Fully programmable
- Preconfigured toolchain
- Same API on intelligent camera and host
- GCC cross compiler

### Sensor Characteristics

- 754 x 482 pixel array size
- Global shutter, CMOS
- Active pixel size 6µm x 6µm
- 1/3" optical format
- User programmable windowing and panning
- Resolution 8bit or 10bit
- Pixelclock 5-26.6 MHz
- Bayer RGB pattern
- Switchable High Dynamic Mode (Multiple Exposure with image superposition)
- Switchable Auto Exposure and Auto Gain Mode
- Adjustable anti-blooming circuit
- Readout: 8bit or 10bit
- Responsivity 4.8 V/lux-sec
- Dynamic Range: linear 55db, highdyn: 80-100db
- Minimal exposure time (at full resolution) 30µs (at 26.6 MHz pixelclock), overclocked: 20µs (at 40MHz pixelclock)
- Freely definable region of interest (ROI)

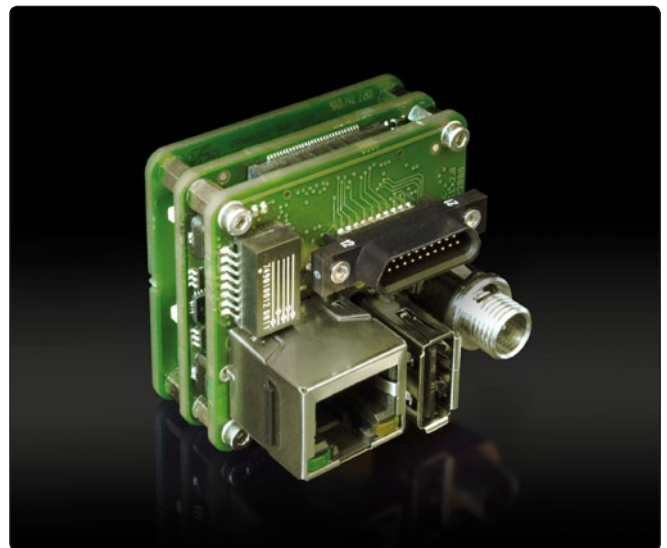
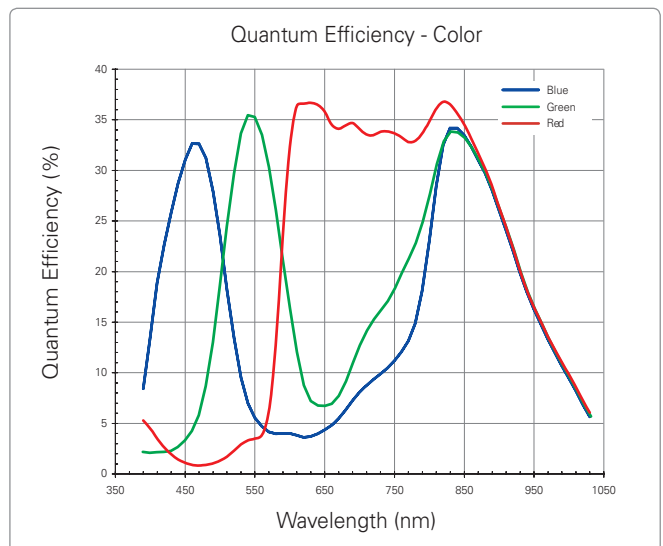
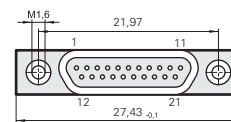


Image similar to original



### MPE Garry M-0025-50-21



Pin	Signal
1	Ground
2	Strobe - (potential-free)
3	Strobe + (potential-free)
4	Strobe (TTL 5V)
5	Ground
6	Trigger - (potential-free)
7	Trigger + (potential-free)
8	Trigger (TTL 5V)
9	Ground
10	+5V
11	+5V
12	General Purpose Output 41
13	General Purpose Output 37
14	General Purpose Output 39
15	General Purpose Input 40
16	General Purpose Input 53
17	Serial RS232 Transmit
18	Serial RS232 Receive
19	S-Video C (DAC_C)
20	S-Video Y (DAC_B)
21	DAC_A

## Physical characteristics

- Standard lens: 12.0mm F2.0
- Alternative lenses are available on request
- Board dimensions 42 x 38 mm
- Total height of package ca. 50 mm
- Mounting holes 36 x 32 mm
- Stack of 3 boards
- Inter-board distance 5 mm
- 10/100 Mbit Ethernet on RJ45
- USB 2.0 host port
- MPE-Garry Micro-T Connector for Trigger/Strobe/RS232/S-Video/GPIOs signals
- 5V power supply, 3W at normal operation, max. 3.5W
- Operating temperature 0°C to 40°C
- Storage temperature -30°C to 80°C
- IR-cut-filter

## Data Transfer Characteristics

- Supports streaming over Ethernet using TCP/IP

## Options

### Illumination

- Illumination with 12 ultrabright LED
- White, red and infrared LED
- Connected to strobe output with adjustable strobe width and delay
- Illumination synchronized with sensor exposure
- USB-powered

### Window Glass

- Window glass alternatively to IR-cut-filter

