

VEN-134-90U3M/C-D

VENUS Series 1.3MP CMOS USB3.0 Board Level Camera



The Split board level camera is a major member of DAHENG IMAGING's VENUS family industry camera. VEN-134-90U3M/C-D is a monochrome/color USB3 Vision camera with two Onsemi PYTHON 1300 CMOS sensors.

VEN-134-90U3M/C-D is more flexible for installment and suitable for more applications. There are three connection ports in the main board and the sensor board can be connected to one or two of the three ports with FPC cables. The length of FPC cable can be extended up to 460mm. They can be put in both sides or the same side to meet users' application requirements for different structure products.

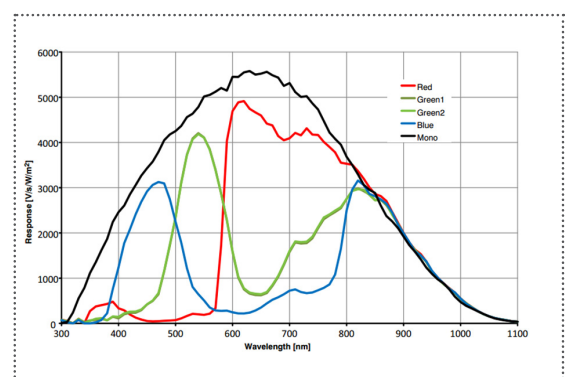
Applications

Suitable for machine vision applications such as handheld 3D scanner, desktop 3D scanner and so on.

Features

- USB3.0(Micro-B) interface with 10-bit or 8-bit Mono/Bayer output
- ROI, Gain and exposure
- Adjustable URB
- Software reset function
- Support hardware trigger and software trigger
- PC with Intel Core 2 Duo, 2.4GHz above and 2GB above memory is recommended

Spectral Response



Model Configuration

Model	FPC length	FPC installation	Lens mount	Part number
VEN-134-90U3M/C-D	J01 (460mm) /J02 (210mm) /J03 (150mm)	S00 (same side) /S01 (both sides)	M00 (C-Mount)/M01 (CS-Mount) /M05 (S-Mount)/M06 (No-Mount)	Model - FPC length - FPC installation - Lens mount

For instance, VEN-134-90U3M-D-J01J01S01M00 indicates that VEN-134-90U3M-D with 460mm FPC in the both sides and C-Mount.

Specifications

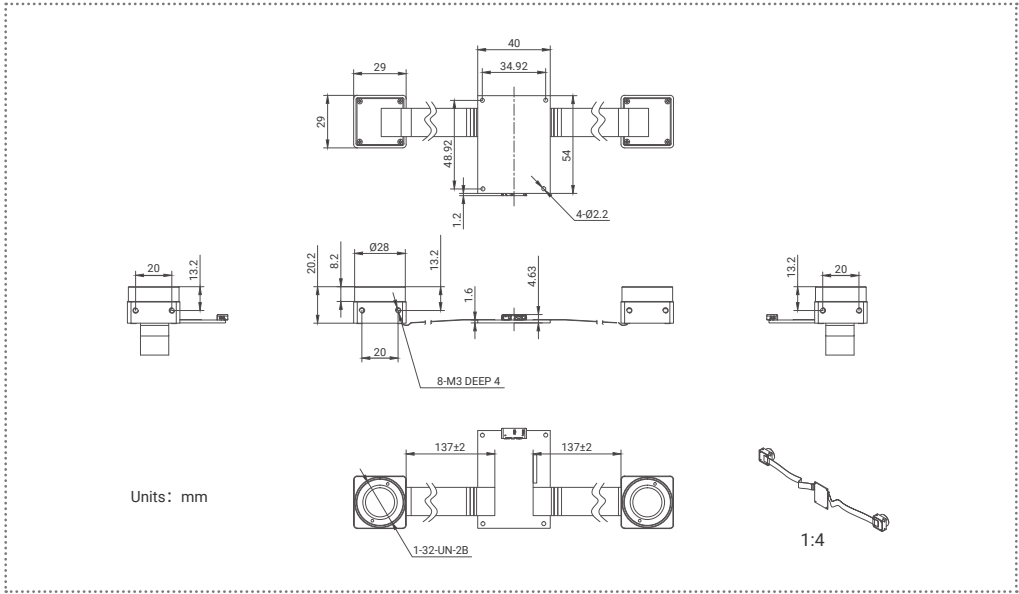
Model	VEN-134-90U3C-D	VEN-134-90U3M-D
Resolution	1280(H) × 1024(V) × 2	
Sensor	Onsemi PYTHON 1300 Global shutter CMOS	
Sensor Format	1/2"	
Pixel Size	4.8μm × 4.8μm	
Frame Rate	90 fps	
ADC	10 bit	
Pixel Bit Depth	8 bit, 10 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer RG8 / Bayer RG10	Mono8 / Mono10
SNR	41 dB	
Exposure Time	Standard: 5μs~1s, Actual Steps: 1 row period	
Gain	0dB ~ 16dB; Default: 0dB, Steps: 0.1dB	
Binning	-	
Decimation	-	
Synchronization	Hardware trigger, software trigger	
Acquisition Mode	Continuous, Software trigger, Hardware trigger	
Reverse X/Y	-	
I/O Interface	2 GPIOs	
Data Interface	USB3.0 (Micro-B)	
Power Supply	Powered by USB3.0 bus	
Typical Power	3.08 W @ 5 VDC	
Operating Temp.	0° C ~ +45° C	
Storage Temp.	-20° C ~ +70° C	
Operating Humidity	10% ~ 80%	
Lens Mount	C / S / CS / No-mount	
Dimensions	C-mount: 29(W) × 29(H) × 20.2(L) mm S-mount: 29(W) × 29(H) × 16.1(L) mm CS-mount: 29(W) × 29(H) × 15.2(L) mm No-mount: 25.4(W) × 25.4(H) × 2.28(L) mm acquisition board: 40mm × 54mm; imaging board : 25.4mm × 25.4mm	
Weight	39 g (C); 50 g (S); 49 g (CS); 25 g (No-mount)	
Software	3rd-party software such as HALCON, MERLIC and LabVIEW	
OS	32bit / 64bit Windows, Linux, Android, ARMv7, ARMv8	
Conformity	CE, RoHS, USB3.0 Vision®, GenICam®	

I/O Interface

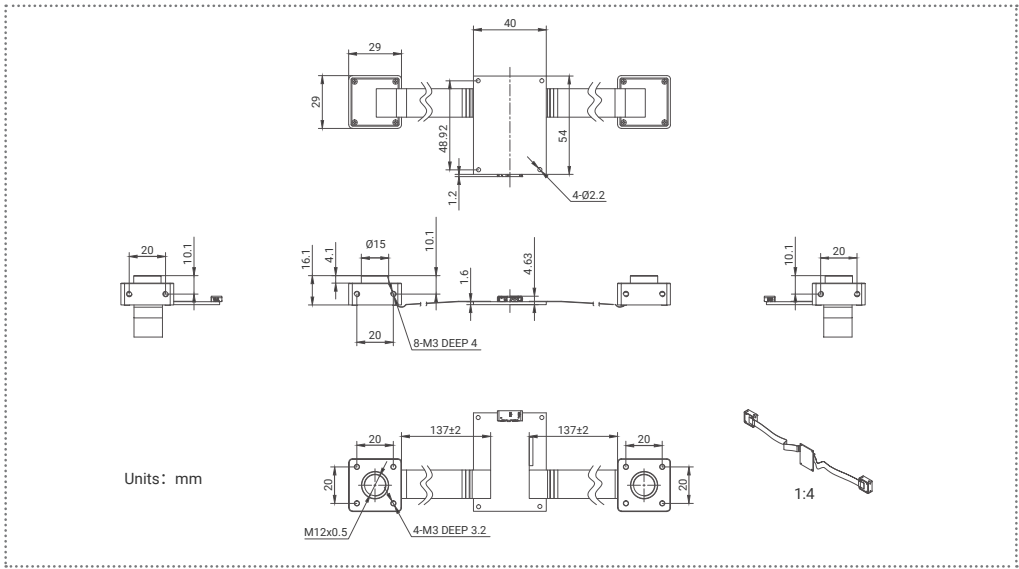


Pin	Definition	Description
1	GND	GPIO GND
2	Line2	GPIO input/output
3	Line3	GPIO input/output
4	NC	NC

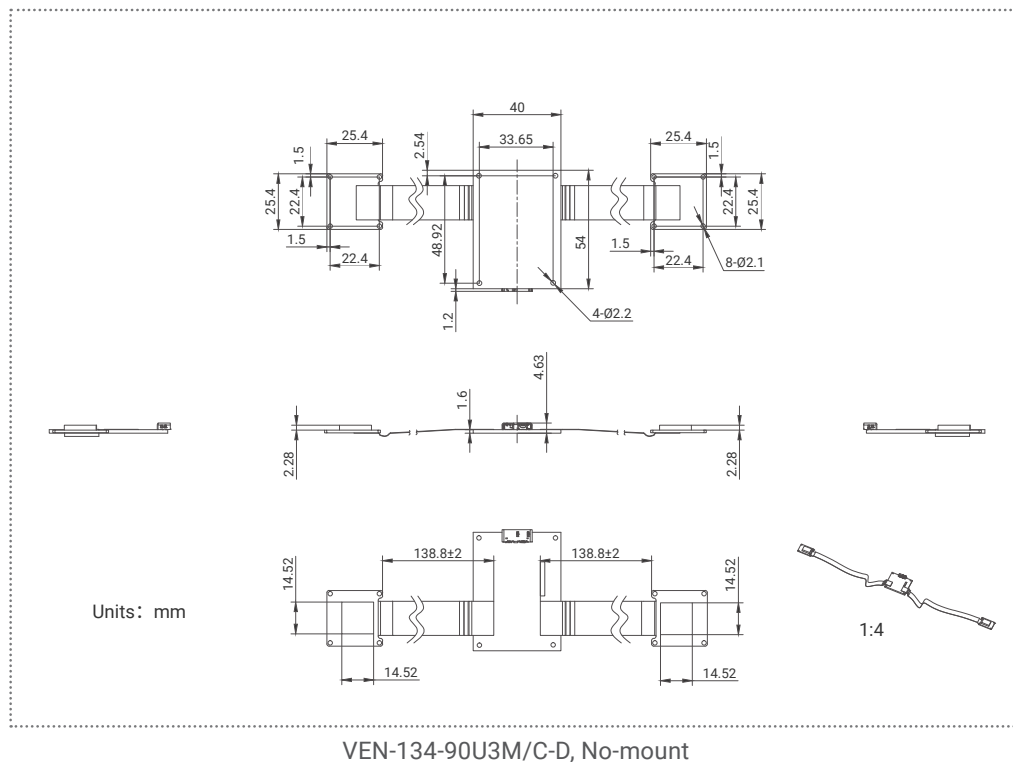
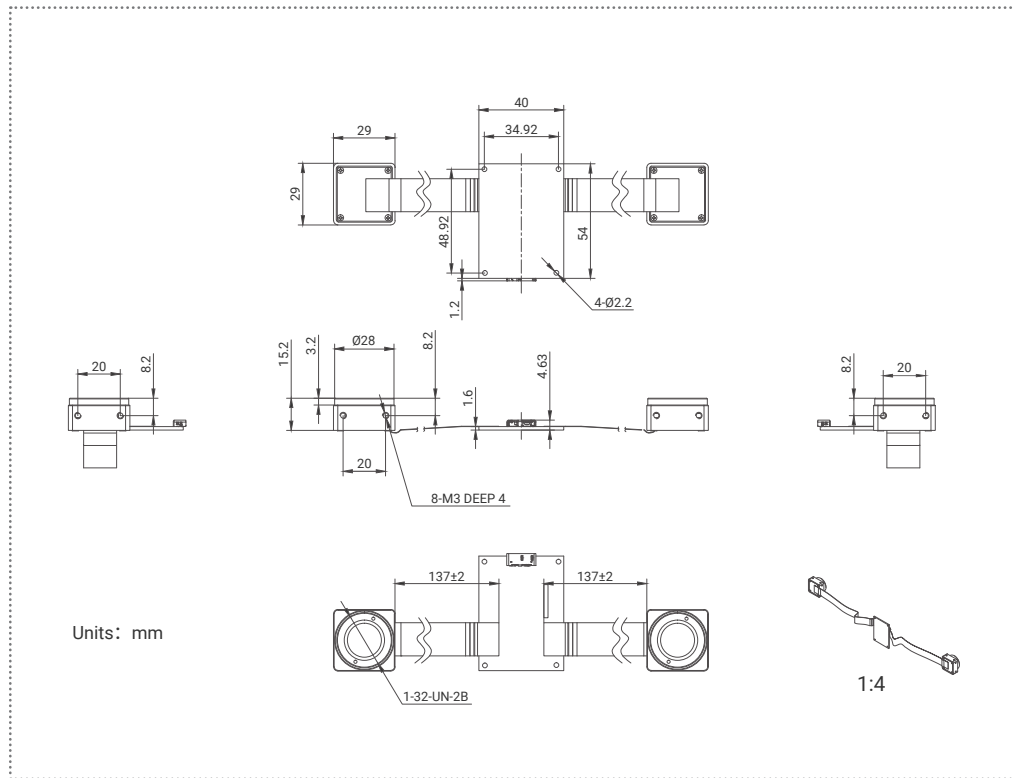
Technical Drawing



VEN-134-90U3M/C-D, C-mount



VEN-134-90U3M/C-D, S-mount



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