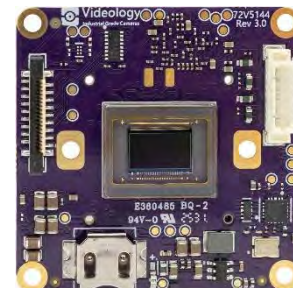


Product Features

- Sony STARVIS 2™
- ONVIF Profile S compliant for standardized IP integration
- NDAA compliant (Section 889)
- GPIO connector



Description

The 801-IP-678 is a 38 × 38 mm board level 8 MP (4K) IP camera based on an embedded RISC-V processor running embedded Linux, with API support for application development.

The camera supports digital pan tilt zoom, DHCP or static IP configuration, and integrates Ethernet magnetics, microSD card support, and GPIO for compact embedded system integration.

Technical Specifications

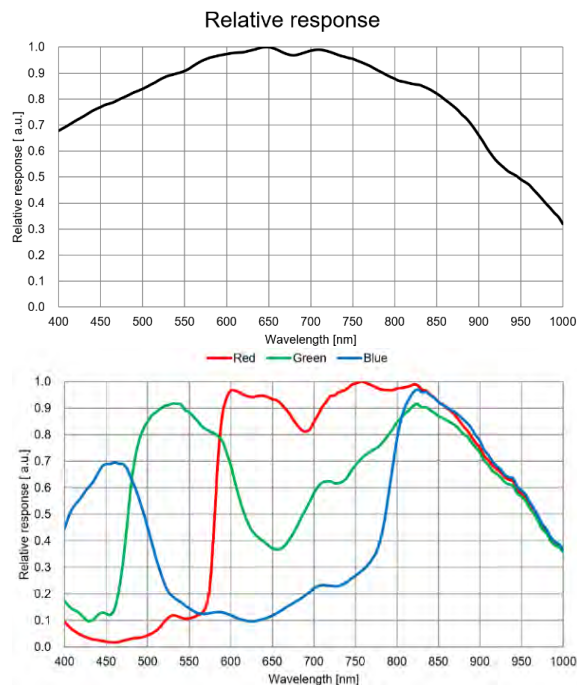
Sensor Data

Image Sensor	Sony IMX678, Starvis 2™
Sensor Size	1/1.8"
Resolution	3840 x 2160
Optical Size	1/1.8"
Pixel Size	2.0 μm x 2.0 μm
Shutter Type	Rolling
Scanning System	Progressive
Sensitivity	0.05 lux (0.04 lx ~ 0.07 lx)

Standards & Compliance

REACH	Compliant
RoHS	Compliant
NDAA	Section 889 Compliant
ONVIF	Profile S Compliant

Spectral Response



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Technical Specifications (cont'd)

Camera Data & Functionality

Video Resolution(s)	3840 x 2160, 1920 x 1080
Video Codec	H.264, MJPEG
Streaming	3 streams
Frame Rate @ 2160p	12.5, 15, 25 & 30 fps
Frame Rate @ 1080p	25, 30, 50 & 60 fps
Processor	Quad-core CPU 64-bit RISC-V
Latency	Typ. < 300 ms
Shutter	Auto/Manual
Virtual Pan/Tilt/Zoom	Yes
Real Time Clock (RTC)	Yes
RTC Battery Backup	Yes
Micro SD-Card Compatibility	Hardware optional, see Accessories
GPIO	Yes

Environmental

Operating Temp.	-30° C ~ 80° C (-22° F ~ 176° F)
Storage Temp.	-40° C ~ 85° C (-40° F ~ 185° F)
Operating Humidity	25% ~ 90% RH (non-condensing)
Storage Humidity	< 75% RH

Mechanical (Camera Board Only)

Dimensions WxHxD	38 mm x 38 mm x 10 mm
Weight	9.5 g

Cables (Included)

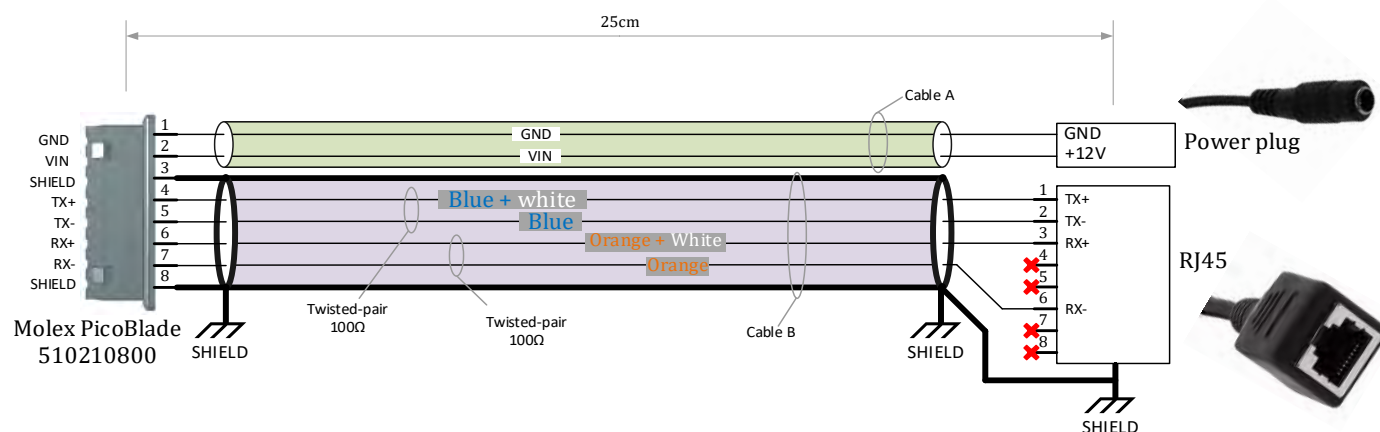
Function	Connector cable for power & Ethernet
Mfg.	Videology
Part Number	60C5030

Electrical

Input Voltage	5-15 VDC
Power @ 12 VDC	2.7 W (typ) 4.2 W (max)

Accessories (Optional)

Part Number	Description
72V5145	SD-Card Interface Board
72V5153	SD-Card Interface Board Cable



The Molex PicoBlade connector on the camera board interfaces to power and Ethernet through the supplied connector cable (60C5030). This figure illustrates the pin-to-signal mapping between the camera board connector and the power & Ethernet interfaces.

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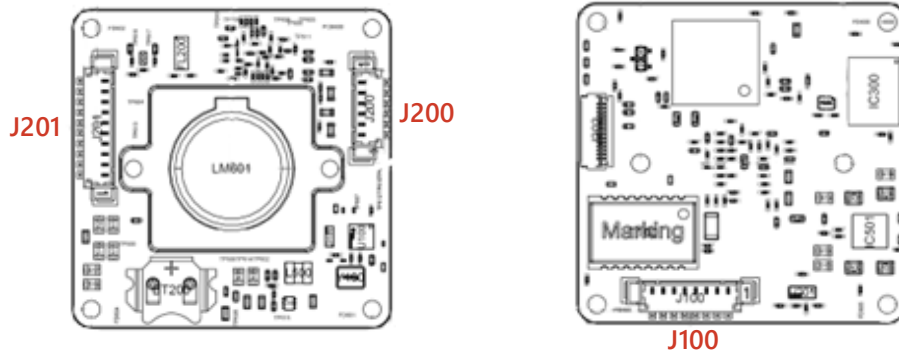
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Connectors



Connector(s)

Function	SD-Card Header
Label	J201
Type/Mfg.	Würth WR-FPC
P/N	687318124422
Mate P/N	0.5mm Pitch 18 Way FPC
Pin 1	Copper to board inside

Function	GPIO Connector, Future Use
Label	J200
Type/Mfg.	Molex PicoBlade
P/N	53398-0671
Mate P/N	510210600
Pin 1	Marked with dot on PCB

Function	Ethernet + Power
Label	J100
Type/Mfg.	Molex Picoblade
P/N	53398-0871
Mate P/N	51021-0800
Pin 1	Marked with dot on PCB

Pin	Function
01	GND
02	VIN 12V
03	SHIELD
04	TX+
05	TX-
06	RX+
Pin	Function
07	RX-
08	SHIELD

Pin	Function
01	GND
02	3V3
03	3V3
04	GND
05	SDCARD-DATA2
06	GND
Pin	Function
07	SDCARD-DATA3
08	GND
09	SDCARD-CMD
10	GND
11	SDCARD-CLOCK
12	GND
13	SDCARD-DATA0
14	GND
15	SDCARD-DATA1
16	GND
17	SDCARD-DETECT
18	GND

Pin	Function
01	GPIO 0
02	GPIO 1
03	GND
04	GPIO 3
05	GPIO 4
06	GND

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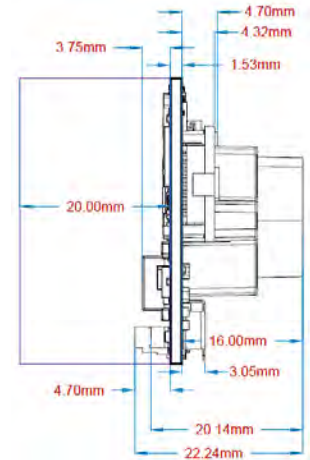
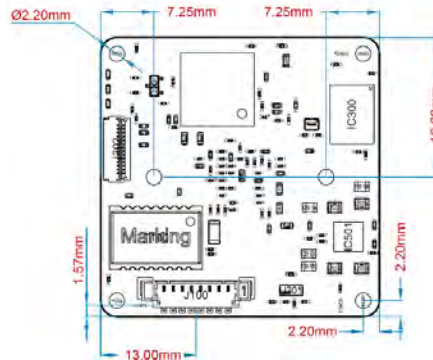
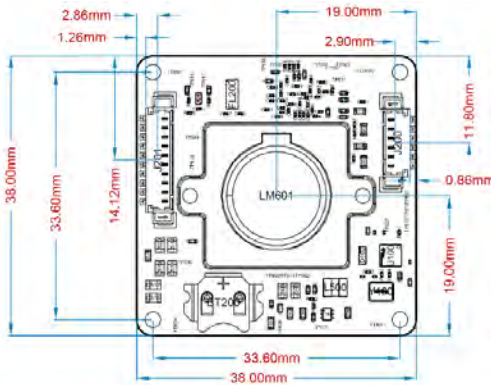
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Dimensions



Part Numbering

Base Part Number	801-IP-678- xyzp	
x (Lens Mount)	0	No lens Mount
	1	Low M12 Lens Mount, 10 mm
	1H	Low M12 Mount, 10 mm with Heatsink
	2	M12 Lens Mount, 16 mm
	2H	M12 Lens Mount, 16 mm with Heatsink
y (Spectrum)	C	Color
	M	Mono
z (Filter)	0	No IR Filter
p (Power)	DC	Direct Current

Example:

801-IP-678-**2HC0DC** – 8MP Camera, IP, Sony Starvis 2™ IMX678, M12 Lens Mount 16mm with Heatsink, Color, No IR Filter, Direct Current, Connector Cable for Power & Ethernet

Note:

- Heat sink recommended

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