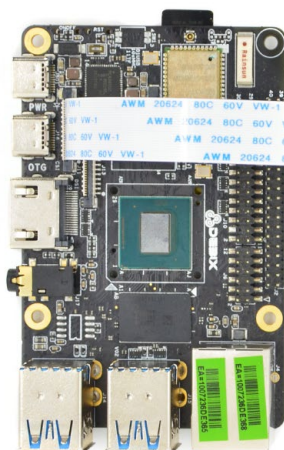# Camera 500A

DEBIX Camera 500A Module

Overview:

DEBIX Camera 500A Module utilizes the OV5640 sensor with 5 megapixels still resolution. Installed with an infrared filter, it takes photos and videos close to what you see with your eyes. It allows auto focus and three video modes, with higher frame rates at lower resolutions. Compared with the Camera 200A, it supports taking full HD videos at 30fps.

Main Features:

· 5 megapixels still resolution, three video modes: 2592 x 1944/15fps, 1920 x 1080/30fps, 1280 x 960/45fps
· 72 degrees diagonal FOV, 58 degrees horizontal FOV, 45 degrees vertical FOV
· Auto focus for default, could be changed to fixed focus

Compatibility:

· Compatible with DEBIX Model A and DEBIX Model B
· Support for use with DEBIX SOM A I/O Board through an add-on board

Certificates:

Specification:

Camera 500A	
Still Resolution	5 megapixels
Video Modes	2592 x 1944/15fps 1920 x 1080/30fps 1280 x 960/45fps
Sensor	OV5640
Sensor Resolution	2592 x 1944 pixels
Sensor Image Area	3.67mm x 2.74mm
Pixel Size	1.4um x 1.4um
Optical Size	1/4"
Depth of Field	Approx 10cm to ∞
Diagonal FOV	72 degrees
Horizontal FOV	58 degrees
Vertical FOV	45 degrees
Focus	Auto
Focal Length	3.25mm
Focal Ratio (F-Stop)	2.8
Maximum Exposure Time (seconds)	390
Lens Mount	N/A
Size	25mm x 24mm x 7.5mm
Flexible Flat Cable	15cm

Camera Lens	
Output Formats	Raw/YCbCr4:2:2/RGB565
Lens Construction	3P + 1IR
TV Distortion	<1%
Thread	M6.0 x 0.35P
IR Filter	650±10nm
S/N Ratio	36dB
Dynamic Range	68dB
Power Supply	Core: 1.5VDC Analog: 2.8VDC I/O: 3.3VDC
Power Consumption	Operating：160mW
Temperature Range	Operating Temp.: -30°C~ 70°C Storage Temp.: -40°C~ 85°C

PIN Definition and Mechanical Dimension:

24 PIN DESCRIPTION

No	Name
1	VDD_5V
2	VDD_3V3
3	VDD_1V8
4	CSI-PWD
5	CSI-NRST
6	CSI-I2C-SDA
7	CSI-I2C-SCL
8	CSI-SYNC
9	CSI-MCLK
10	GND
11	CSI-DN0
12	CSI-DP0
13	GND
14	CSI-DN1
15	CSI-DP1
16	GND
17	CSI-CKN
18	CSI-CKP
19	GND
20	CSI-DN2 (NC)
21	CSI-DP2 (NC)
22	GND
23	CSI-DN3 (NC)
24	CSI-DP3 (NC)

TOP VIEW

DEBIX

DEBIX

Camera 500A

25.00 ± 0.2

23.86 ± 0.2

8.5

8.5

2

2

2

2

BOTTOM VIEW

Steel Exposed

12.5

21.2

24

1

4*Ø2.2
4*Ø4.5

24PIN Connector
FP5212D1W-R24-01
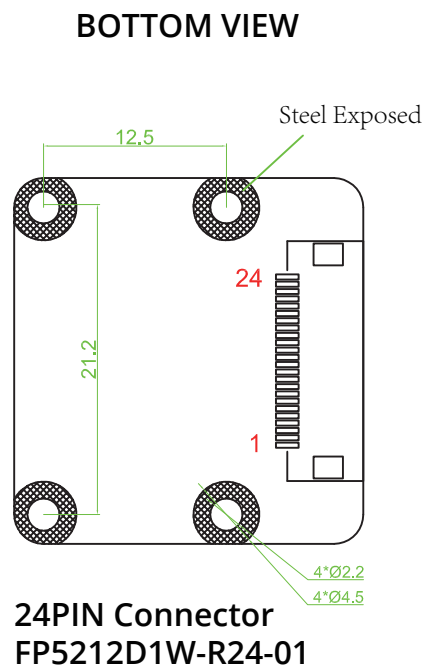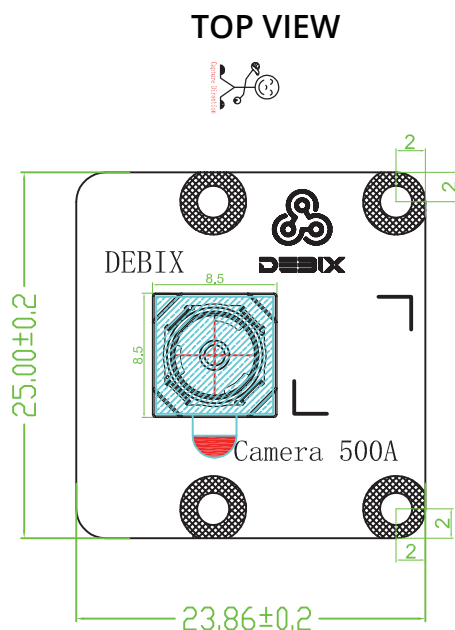
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