



Midas Touch

magic embedded

We are dedicated to developing sensing technology, and providing customers with an innovative and diverse range products.

With the state-of-the-art algorithm technology, there are many brand products with our advanced image technology in the market.

MUV-0202 2M USB
Camera Module Datasheet

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產品特色 (Features)

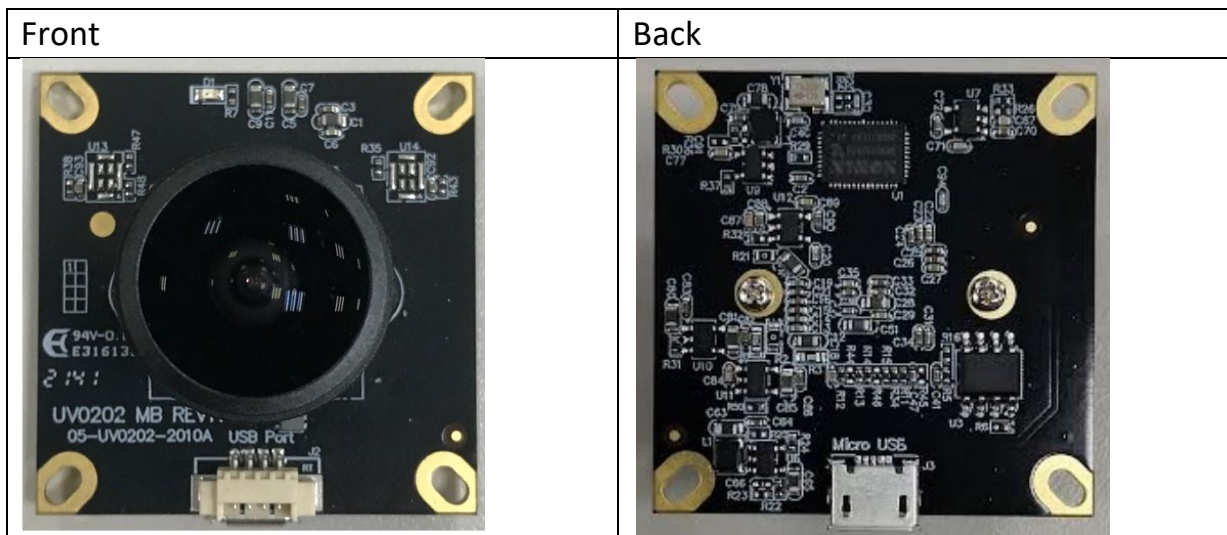
Sony STARVIS CMOS Image Sensor UP to 2Mega-pixel resolution

UVC (USB Video Class) control Single PCB

產品應用 (Applications)

- Barcode Reading Devices
- Surveillance cameras / Web camera
- Body camera AI cameras /Smart glasses
- AR/VR systems Education and web conference cameras

產品外觀 (Appearance)





產品規格 (Specifications)

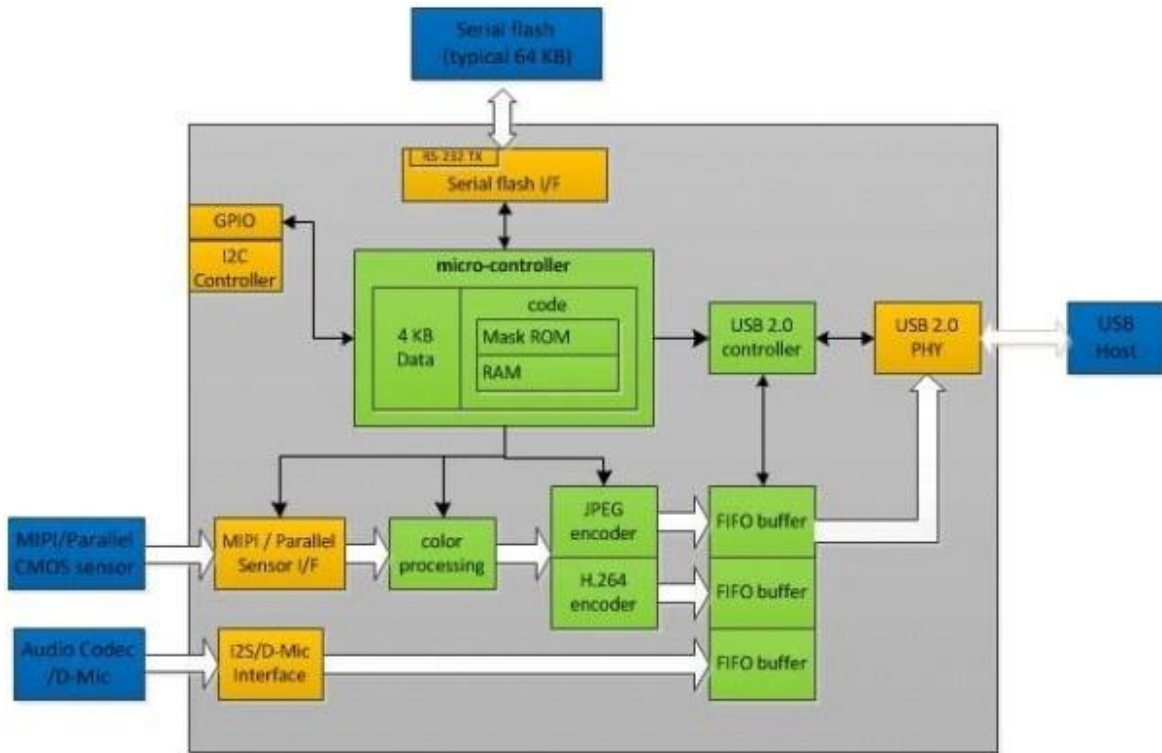
Image Sensor	Sony IMX291 STARVIS
Expose mode	Rolling shutter
Max Resolution	1920 x 1080
Optical Format	1/2.8"
Data Format	MJPEG / YUY2 / H.264
Frame Rate	H.264 30fps@1920 x 1080 MJPEG 30fps@1920 x 1080 YUY2 30fps@640 x 360
Dynamic Range	72dB
Minimum Illumination	0.1 Lux
USB Connector	Micro USB / Wafer 4pin pitch=1.25mm
Field of View (FOV)	D=190°
Lens Mount	M12
Focusing Range	0.3M to infinity
Auto Controlled	Saturation, Contrast, Acutance, White Balance, Exposure.
Audio MIC	N/A
System Compatibility	Windows, Linux, and Mac with UVC
Power Supply	USB powered 5V
Temperature Range (Operating)	0°C~+60°C
Temperature Range (Stable image)	0°C~+40°C
Dimension	38mm x 38mm x 29mm
Cable Length	N/A

韌體版本 (Firmware Version) 硬體

識別碼 : PID_0291 / REV_0202



系統方塊圖 (System Block Diagram)



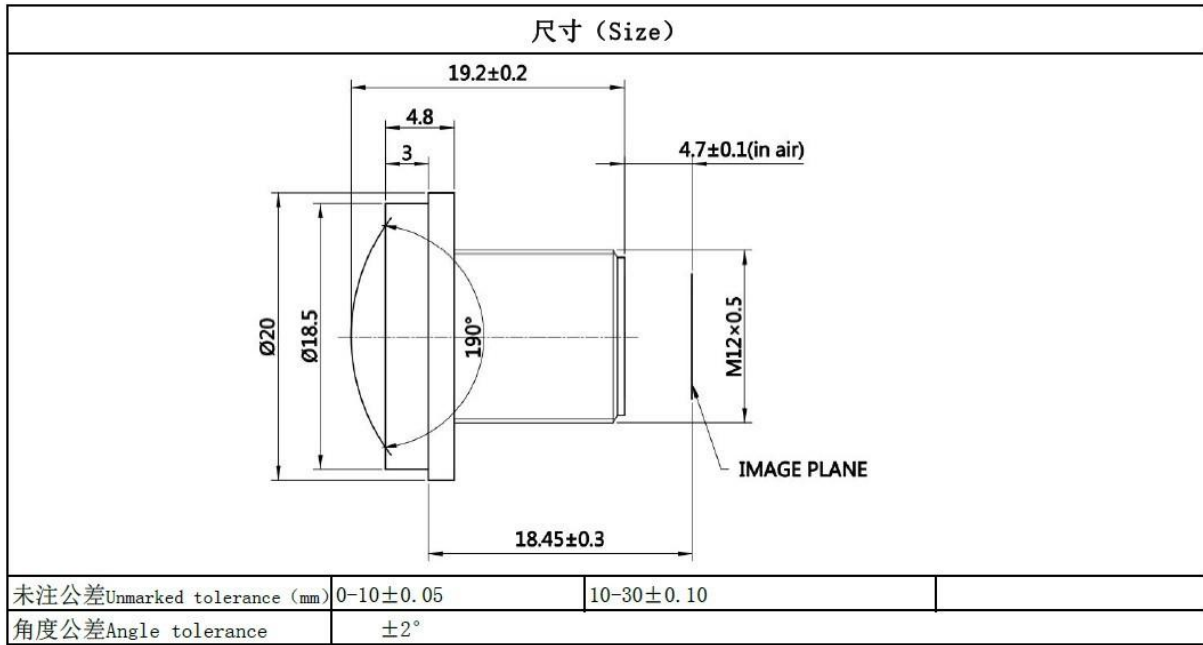


鏡頭光學參數 (Lens Optical Specifications)

	分辨率 (Resolution)	5 Megapixel		
	像面尺寸 (Image format)	1/2.7"		
	焦距 (Focal length)	2.1mm		
	通光孔径 (Aperture)	F2.0		
	接口 (Mount)	M12		
	視場角 (Field Angle) D×H×V(°)	1/2.7		
		D	190	
		H	153	
		V	102	
	F-Theta畸變	-15.05%		
	主光線入射角 (CRA)	≤15.1°		
	最近物距 (M. O. D.)	0.3m		
	重量 (Weight)	6.8±2g		
	外形尺寸 (Dimension)	Φ20×19.2mm		
	法蘭後焦距 (Flange BFL)	/		
	光學總長 (TTL)	23.9mm		
	機械後焦距 (MBF)	4.7mm(in air)		
日夜共焦 (IR Correction)	NO			
操作方法 (Operation)	光圈 (Iris)	固定光圈 (Fixed)		
	聚焦 (Focus)	/		
	變焦 (Zoom)	/		
工作溫度 (Operating temperature)	-20℃~+60℃			

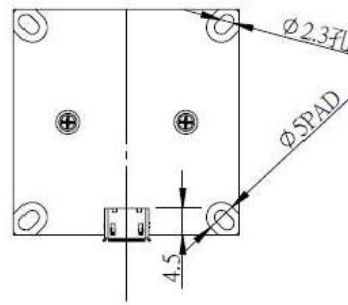
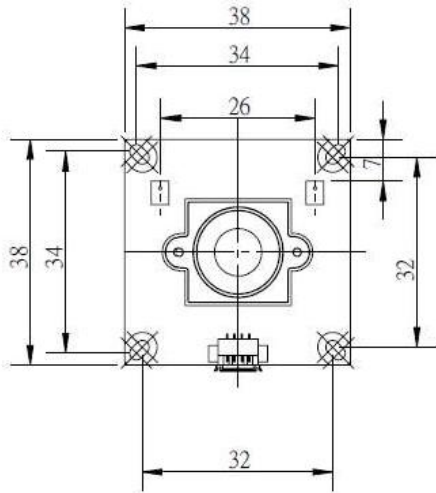


鏡頭尺寸/視點圖 (Lens Dimension / Viewpoint Figure)

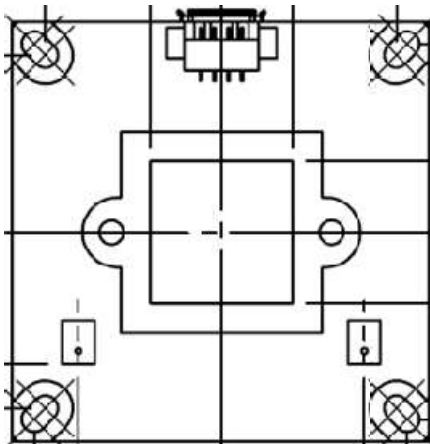




模組尺寸 (Dimension)

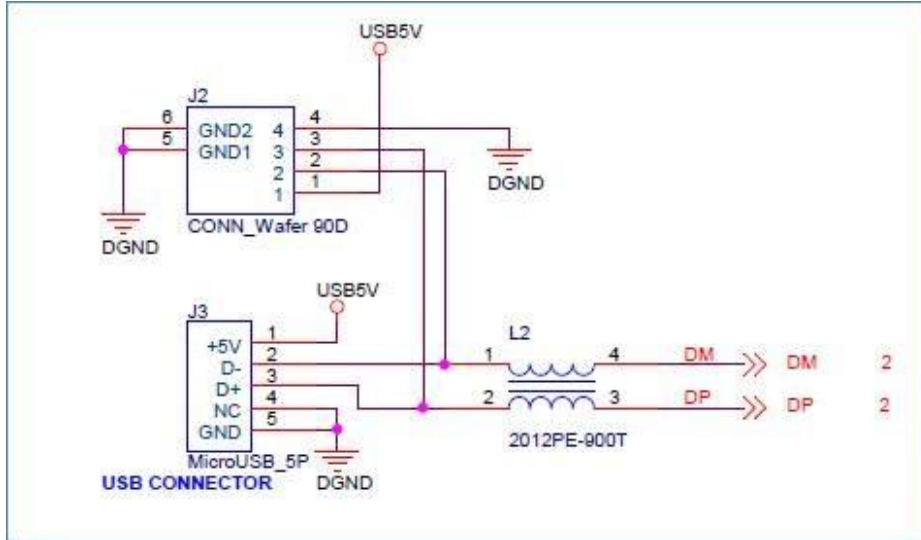


影像擷取方向 (Image Capture Direction)





USB 腳位定義 (USB PIN Define)





環溫測試 (Temperature Test)

MUV 0202 UVC camera temperature test report

Test Date : 2022/1/17 ~ 2022/1/20

Test condition : PCBA

Powerd : USB 5V/2A

SOC Tj : 100°C

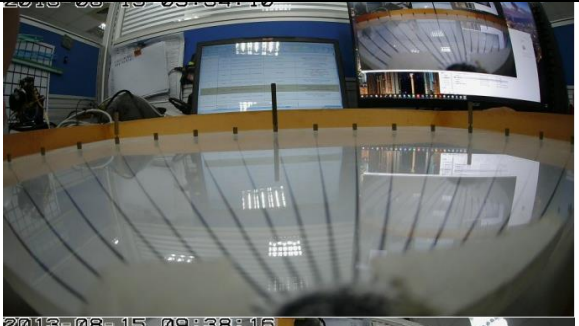

SOC Ta : 0 ~ 70°C

Product temperature: 0 ~ 40°C

Item	Temp.	Duration	SOC temp.	Operating Volt.	Operating Cur.
1	70°C	24hr	101°C	5V	0.2A
2	60°C	24hr	92°C	5V	0.2A
3	50°C	24hr	84°C	5V	0.2A
4	40°C	24hr	77°C	5V	0.2A
5	0°C	24hr	36°C	5V	0.2A
6	-10°C	24hr	23°C	5V	0.2A
7	-20°C	24hr	14°C	5V	0.2A
8	-30°C	24hr	5°C	5V	0.2A
9					
10					



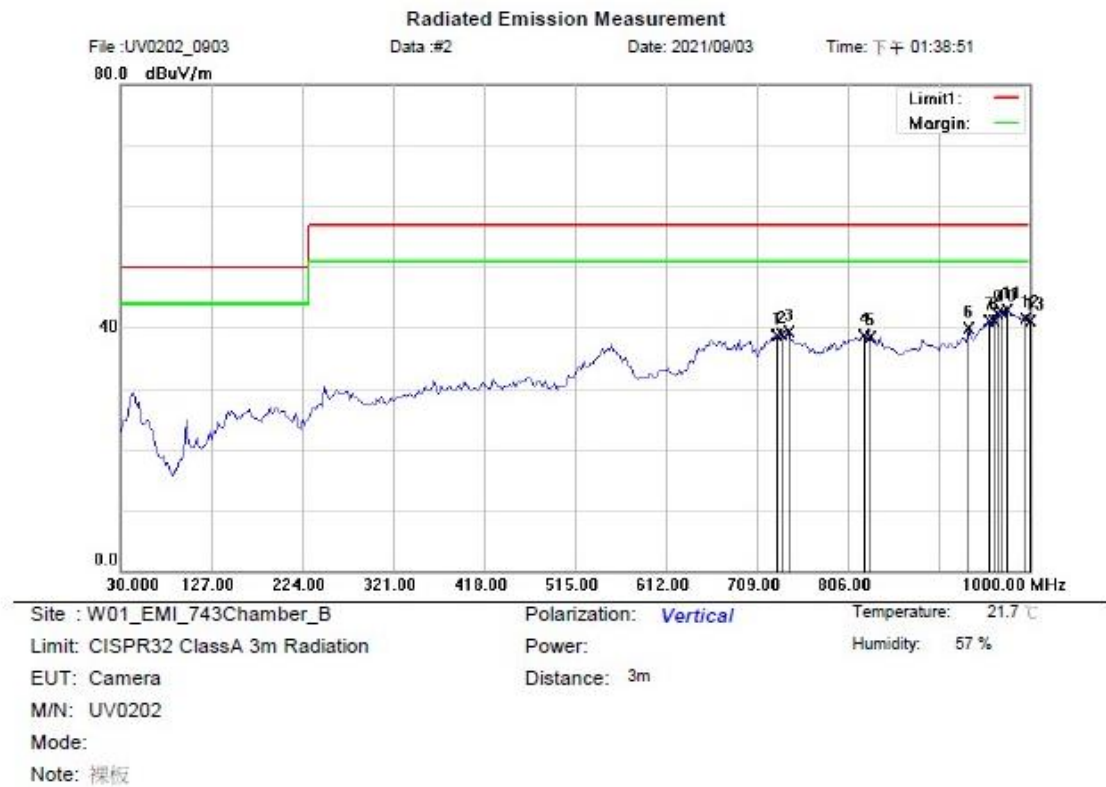
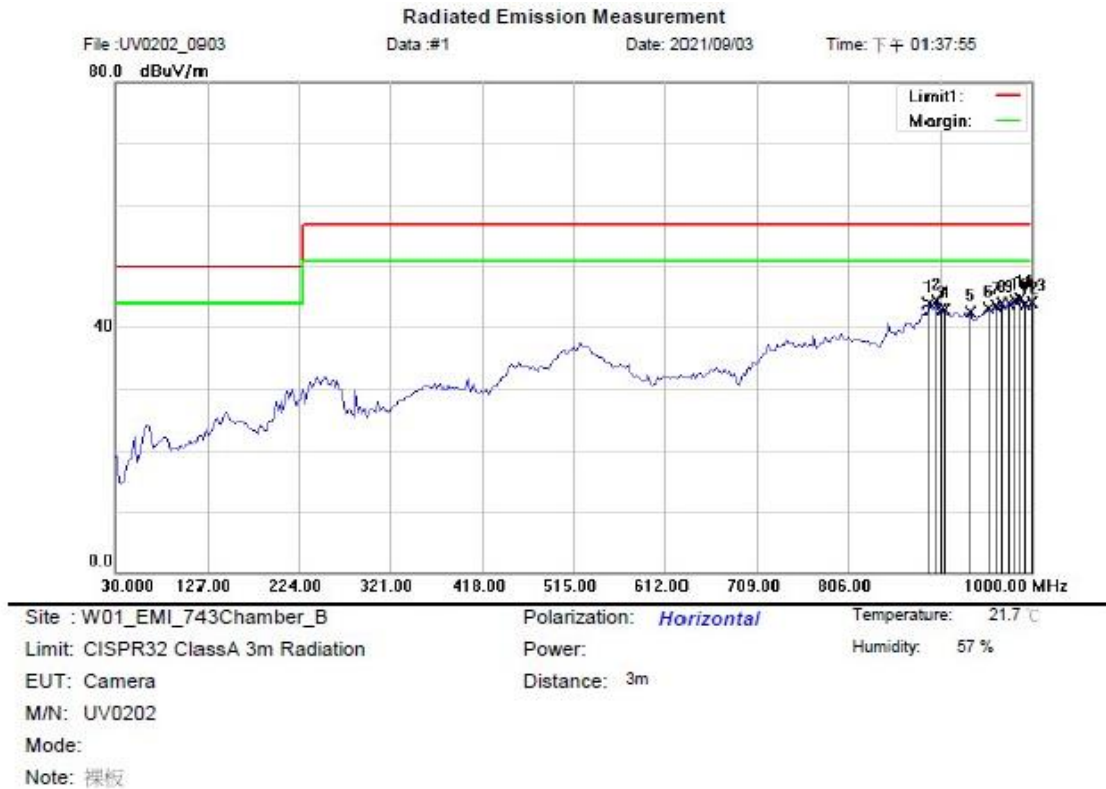
角度測試 (FOV)

H-FOV	
V-FOV	
角度(H-FOV)	152°
角度(V-FOV)	85°

實測角度保留 ±5% 累計公差。



EMI 預掃 (EMI Pre-Scan)





File: UVDZB2_0803
BfI.0 dBuV/m

Radiated Emission Measurement
Data #:3 Date: 2021/09/03

Time: 11-11-21 14:21:11

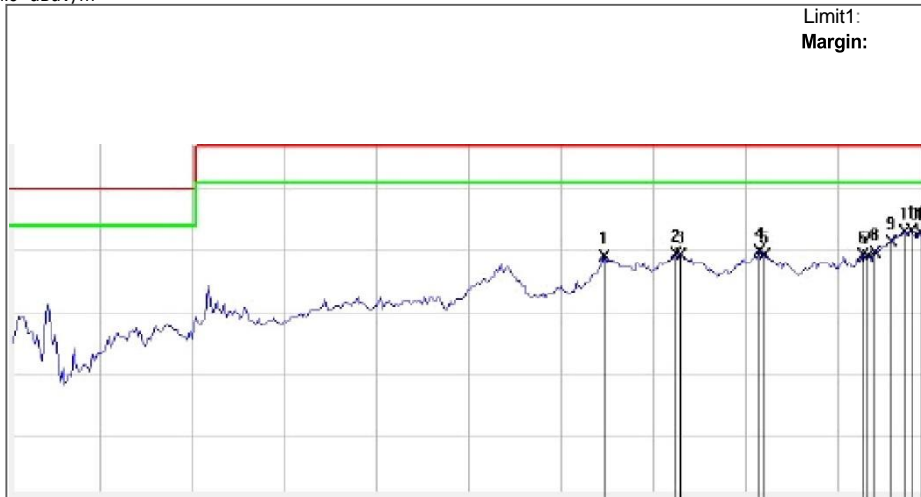


Site : WO1_EMI_743ChamberB Polarization: *Horizontal* Temperature: 21
 Limit: CISPR32 ClassA 3m Radiation p t DC SV Humid 57k
 EUT: Camera Distance: ++
 M/N: U/0202
 Mode:
 Note: . . *

File: UVD2D2_0003
BfI.0 dBuV/m

Radiated Emission Measurement
Data #:4 Date: 2021/08/3

Time: 11-11-21 14:31:11



Site : WO1_EMI_743ChamberB Limit: Polarization: *Vertical* Temperature: 1
 CISPR32 ClassA 3m Radiation EUT: p t DC SV Humid E7%
 Camera Distance:
 M/N: U/0202
 Mode:
 Note: . . *