

KLT-OIS-FF-IMX179-C V1.0

**Sony IMX179 Optische Bildstabilisierung MGS MIPI Schnittstelle Fixer Fokus
8MP Kameramodul
Micro Gimbal Stabilizer, Optische Bildstabilisierung (OIS) Plattform**



Kameramodul Nr.	KLT-OIS-FF-IMX179-C V1.0
Bildsensor	IMX179
Stabilisator	Micro Gimbal Stabilizer (MGS)
EFL	3.05 mm
F.NO	2.2
Pixel	3280 x 2464
Blickwinkel	87.6°
Linsentyp	1/3.2 Zoll
Objektivabmessungen	19.00 x 19.00 x 9.9 mm
Modulgröße	39.00 x 19.00 mm
Modultyp	Fixer Fokus
Schnittstelle	MIPI
IMT-Objektivmodell	IMT-1A65H005-N

Gegenstecker Teile-Nr. BAF04-30083-0500

Gegenstecker auf der Hauptplatine. Separat erhältlich.

OIS Camera Modules

(OIS = Optical Image Stabilization Platform)

World's Smallest Gimbal Stabilizer



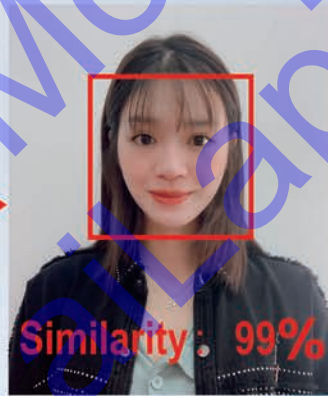
Core Technologies:

- MGS (micro gimbal stabilizer)
(The lens and image sensor tilt together)
- $\pm 5^\circ$ max. compensation angle
(More than enough for walking and jogging)
- Innovative anti-shaking solutions with 10+ patents
- Integrated design, including a gyroscope and an MGS driver IC

EIS:



MGS:



Face recognition success rate



MGS can significantly reduce blur especially in low-light conditions, and thus support dynamic face recognition and other emerging technologies

Main Advantages:

- Support horizontal FOV over 100deg
- Support all-glass lens
- 2m+ drop test
- Easy to use
- One-stop anti-shaking solution provider
- Light weight down to 5g
- Small size down to 19×19mm
- Competitive price

Ordering Models



KLT-OIS-USB1A-IMX258 V1.0



KLT-OIS-AF-IMX258-C V1.0

MGA190 series:

Size: 19×19×9.9mm

Auto Focus MGS

Largest FOV: 100deg

Max. compensation angle: ±5deg

Weight: 5g

Support a wide variety of lenses and image sensors

Supported sensors:

OmniVision OV5640, Sony IMX179 & IMX258

MGF250 series:

Size: 25x25x15mm

Fixed Focus MGS

Largest FOV: 140deg

Max. compensation angle: ±5deg

Weight: 28g

Support a wide variety of lenses and image sensors

Supported sensors:

Onsemi AR1335, OmniVision OV2718 & OV4689



KLT-OIS-FF-OV4689 V7.0A

Module	Resolution	Sensor	Focus	DFOV
KLT-OIS-AF-IMX258-C V1.0	13 MP OIS	IMX258-C	Auto	87.6
KLT-OIS-USB1A-IMX258 V1.0	13 MP OIS	IMX258	Auto	87.6
KLT-OIS-FF-OV4689 V7.0A	4 MP OIS	OV4689	Fixed	122

Product Applications:



AI face recognition



Body worn camera



Robot



AR/VR smart glasses



Sport DV

[Product Brief]

Ver.1.0

IMX179

Diagonal 5.7mm (Type 1/3.2) CMOS Image Sensor with Square Pixel for Color Cameras

Description

The IMX179 is a diagonal 5.7 mm (Type 1/3.2) CMOS active pixel type image sensor with a square pixel array and 8.08M effective pixels. This chip operates with three power supplies, analogue 2.7 V, digital 1.2 V, and IF 1.8 V, and has low power consumption. High sensitivity, low dark current, and no smear are achieved through the adoption of R,G, and B primary color pigment mosaic filters. This chip features an electronic shutter with variable charge-storage time.

In addition, this product is designed for use in cellular phone and tablet PC. When using this for another application, Sony does not guarantee the quality and reliability of product.

Therefore, don't use this for applications other than cellular phone and tablet PC. Consult your Sony sales representative if you have any questions.

Functions and Features

- ◆ CMOS active pixel type dots
- ◆ 2-wire serial communication circuit on chip
- ◆ CSI2 serial data output
- ◆ Timing generator, H and V driver circuits on chip
- ◆ CDS/PGA on chip
- ◆ 10-bit A/D converter on chip
- ◆ Automatic optical black (OB) clamp circuit on chip
- ◆ PLL on chip (rectangular wave/sine wave)
- ◆ High sensitivity, low dark current, no smear
- ◆ Excellent anti-blooming characteristics
- ◆ Variable-speed shutter function (1H units)
- ◆ R, G, B primary color pigment mosaic filters on chip
- ◆ Max. 30 frame/s in all-pixel scan mode
- ◆ Pixel rate: >260 MHz (>30 frame/s at All-pixel mode)

◆ CMOS image sensor	
◆ Image size	: Diagonal 5.7 mm (Type 1/3.2)
◆ Total number of pixels	: 3288 (H) × 2512 (V) approx. 8.26M pixels
◆ Number of effective pixels	: 3280 (H) × 2464 (V) approx. 8.08M pixels
◆ Chip size	: 6.18 mm (H) × 5.85 mm (V)
◆ Unit cell size	: 1.4μm (H) × 1.4μm (V)
◆ Substrate material	: Silicon

Top view

VANA
VDD1
GND

Flash Strobe(GPI01)
Shutter Strobe(GPI02)
(GPI03)
(GPI04)

Lane 1
Lane 2
CLK
Lane 3
Lane 4

Logic Block
(Image Pipe-Line, CCP2 and CSI2 Link)

Pixel Array

Column Block

OTP

Vertical Decoder

Ref Vol. Gen. Circuit
Bias Circuit
Power Supply Circuit

VRL1
VRL2
VBO
VPO
VPI1, VPI2

Logic Block
(Control and Pixel Access)

Power On Reset

INCK
SDA
SCL
REGEN
XCLR

* Exmor R is a trademark of Sony Corporation. The Exmor R is a Sony's CMOS image sensor with significantly enhanced imaging characteristics including sensitivity and low noise by changing fundamental structure of Exmor™ pixel adopted column parallel A/D converter to back-illuminated type.

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Application circuits shown, if any, are typical examples illustrating the operation of the devices. Sony cannot assume responsibility for any problems arising out of the use of these circuits.