

CMOS CAMERA MODULES



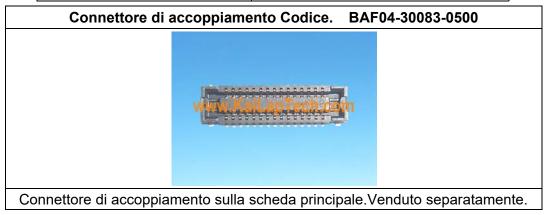
your BEST camera module partner

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

SONY IMX179 MIPI Interface Fixed Focus 8MP Camera Module Micro Gimbal Stabilizer, Optical Image Stabilization (OIS) Platform



| Modulo telecamera n. | KLT-OIS-FF-IMX179-C V1.0 |
|---------------------------|----------------------------------|
| Sensore d'immagine | IMX179 |
| Stabilizzatore | Stabilizzatore micro gimbal(MGS) |
| EFL | 3.05 mm |
| F.NO | 2.2 |
| Pixel | 3280 x 2464 |
| Vista ad angolo | 87.6° |
| Tipo di lente | 1/3.2 pollice |
| Dimensioni dell'obiettivo | 19.00 x 19.00 x 9.9 mm |
| Dimensione del modulo | 39.00 x 19.00 mm |
| Tipo di modulo | Messa a fuoco fissa |
| Interfaccia | MIPI |
| Modello obiettivo IMT | IMT-1A65H005-N |



SONY

[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)

SONY IMX179

Device Structure

◆ CMOS image sensor

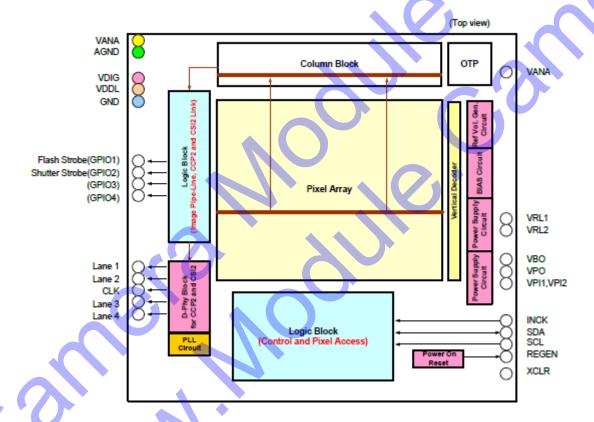
♦ Image size : Diagonal 5.7 mm (Type 1/3.2)

◆ 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

Block Diagram





* 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 ExmorTM 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.