

KLT-Q2MPF-HM2143 V1.0

Himax HM2143 MIPI et Parallèle DVP Interface Mise au point fixe
2MP M12 Module de caméra



Module de caméra No.	KLT-Q2MPF-HM2143 V1.0
Capteur d'image	HM2143
EFL	2.5 mm
F.NO	2.1
Pixel	1920 X 1080
Angle de vue	120°
Type d'objectif	1/4 pouce
Dimensions de l'objectif	13.70 x 13.70 x 18.53 mm
Taille du module	40.00 x 22.00 mm
Type de module	Mise au point fixe
Interface	MIPI et Parallèle DVP

Référence du connecteur d'accouplement. DF30FC-30DS-0.4V



Connecteur d'accouplement sur la carte principale. Vendu séparément.

HM2143 Ultra Low Power UltraSense NIR™ RGBIR FHD CIS

89.5mW @30FPS(MIPI) ■ 1/4" 1920 x 1080 (FHD) ■ RGBIR ■ Color and NIR enhanced CIS ■ MIPI CSI-2/Parallel

HM2143 is a 1/4" 1080p UltraSense NIR™ CMOS Image Sensor which is utilized high NIR performance pixel technology and the RGBIR technology of Himax Imaging. Both sensitivity enhancement in 850nm and 940nm infrared light and lowest power consumption are essential. The 4×4 pixel array patterns are supported for the application of home surveillance, IOT, face recognition product that can process the image in day and night time without mechanical IR-cut filter. The HM2143 can shrink the product ID size and reduce the RMA issue to save the cost of product maintenance.

Image Sensor Features

Back Side Illuminated (BSI) pixel delivers outstanding sensitivity, response uniformity and noise performance.

Designed for low power consumption at 30 frames per second (FPS)

Operates up to 30FPS at full resolution over MIPI interface and Parallel interface.

Global analog gain up to 15.5x

Supports RAW10 format

Precision black level calibration independent of operation temperature, gain and voltage

On-chip temperature sensor

Support SSCG on MIPI DPHY

Available in CSP package

Support 3D SYNC for image synchronization

Integrated LDO, POR and PLL

High sensitivity at 825nm and 940nm wavelength

Image Sensor Specifications

Part Number	HM2143-AWA
Color Filter Array	RGB-IR 4×4
Array Diagonal	4.42mm

Resolution	FHD (1920 x 1080)
Output Format	RAW10
Optical Format	1/4"
Pixel Size	2 μ m x 2 μ m (UltraSense™ Back Side Illuminated)
Frame Rate_{max}	30FPS
Sensitivity (FD @ 530nm)	TBD mV / Lux – sec
Video Data Interface	1-lane MIPI CSI-2 10-bit Parallel
SNR_{max}	TBD dB
CRA_{max}	18°
AVDD / DVDD / IOVDD	3.3V / 1.2V (1.8V LDO enabled) / 1.8V
Power Consumption	Active: TBD mW (MIPI, 30fps) XSHUTDOWN: TBD μ W
Temperature	Operating: -30° to 85°C, Storage: -40° to 125°C
Package	CSP