

CMOS Image Sensor

ν Maicovicon®

1/3 inch 1.3M Pixel
MN34210PL

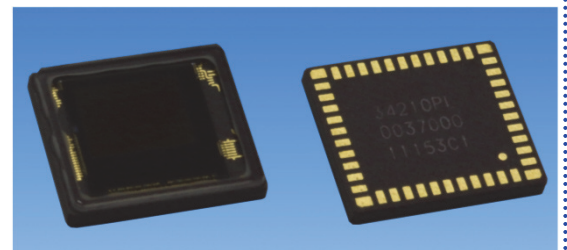
At dark night, not everything is visible to the human eye but Panasonic's ν Maicovicon® image sensor is able to deliver vivid color movie, and catch small letters clearly.

Key Features

- Offering high sensitivity from Panasonic's proprietary pixel technology
- Capturing sharp and vivid color images at 0.05 lux
- High speed*1
- New Wide Dynamic Range function supports high speed and high sensitivity movie under different light conditions
- Industry's leading low noise sensor
- Industry's leading low power consumption sensor
- Industry's leading small QFN package*2

*1 : Full Scan Mode : 120fps

*2 : Package size : 46pin : 8.30mm x 9.40mm x 1.53mm

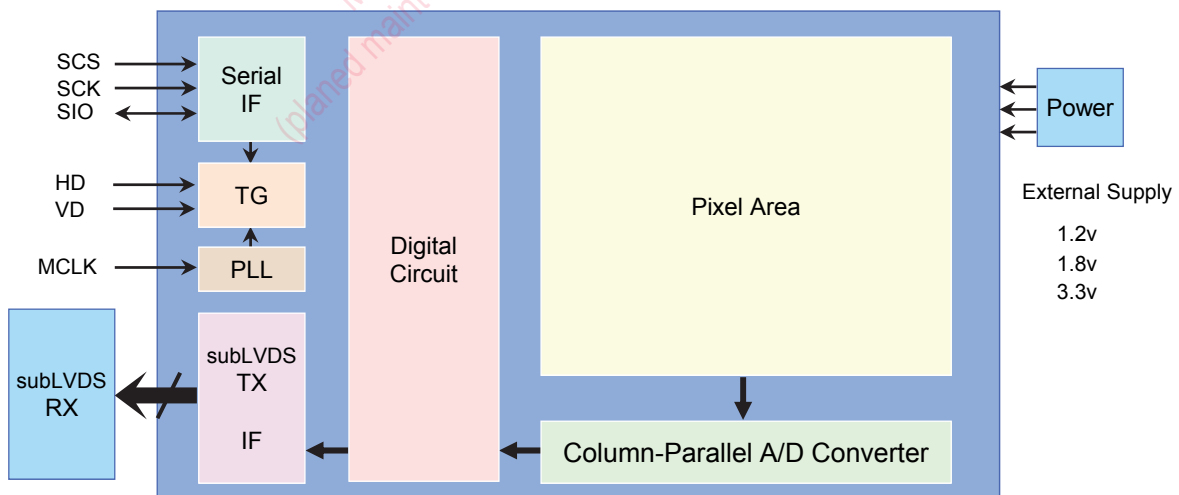


* ν Maicovicon is a registered trademark or trademark of Panasonic Corporation.

■ Specifications

Parameter	MN34210PL (1.33M Pixel)
Scan mode	Progressive scan
Optical size	1/3 type (inch)
Number of active pixels	1296 (H) x 1032 (V) = 1,337,472 (pixel)
Total number of pixels	1304 (H) x 1074 (V) = 1,400,496 (pixel)
Pixel size	3.8 (H) um x 3.8 (V) um
Actual imaging area dimensions (active pixel area)	4,925 (H) um x 3,922 (V) um
Color filter arrangement	R,G,B Bayer Pattern
Package, Pin number	QFN 46pin Ceramic Package (8.30mm x 9.40mm x 1.53mm)
Power supply voltage	3.3V / 1.8V / 1.2V
Master clock	13.5MHz / 27 MHz / 54MHz / 37.125MHz / 74.25MHz
Bit number of internal ADC	12bit
Output signal type	subLVDS DDR method Output data rate : 445.5 Mbps, 486 Mbps, 594 Mbps
Register I/F	3 Line Serial I/F, I ² C I/F
Output frame rate per second	subLVDS 1ch 4port / 2ch 2port 16bit format : 60 fps (Full scan mode) 10bit format :120 fps (Full scan mode) 12bit format : 60 fps (720p)
Electronic shutter	60fps : 1 / 59.89 s ~ 1 / 67500 s (1/67500 s step)
Variable gain	Analog gain 0dB ~ 30dB 0.36dB/step Digital gain 0dB ~ 30dB 0.36dB/step
Functions	Full scan mode (1.33Mpixels)
	Flip mode
	Variable frame rate, Long time Exposure
	Vertical any cropping (720p)

■ Block Diagram



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