

This is a family of products based on the most advance CMOS mixed signal technology. It integrates image array, signal processing, timing and control circuitry, all on a single chip. It is ideal for applications requiring a small footprint, low power and low cost.

Features:

- > Small size 2.8x2.8mm
- Resolution: 640x480 pixels
- Operation voltage 2.8V
- Mipi interface
- Low power consumption
- Cable size: 1.8mm OD
- Cable length: 1M (upto 4M)

Application Example

- Inspection device
- Endoscope

Pin Description(tentative)

- 1. VDD 2.8VDC
- 2. GND Ground
- 3. CLK Clock input from backend
- EVDD 1.5VDC
 SDA I2C data
- 6. SCL I2C clock
- 7 MCP MIPI clock Positive o/p
 8 MCN MIPI clock Negative o/p
 9 MDP MIPI Data Positive o/p
- 10 MDN MIPI Data Negative o/p

Application Note

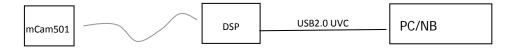
- 1. Correct lens needs to be attached for image viewing. Check other models with lens mounted.
- 2. Customer can develop his own solution to interface mCam501 but we provide USB modules C7026 for PC application



Specification

Imager	CMOS imager sensor VGA	
Optical Format	1/13", CRA 26.1°	
Clock rate	24MHz	
Max exposure	536 x T _{line}	
Video Output	MIPI	
Scan mode	Progressive, max 30fps	
Data format	YUV422, 10bit Raw RGB	
Sensitivity	1200mV/Lux-sec	
Picture Element	656x496pixel	
Pixel size	1.75x1.75um	
Effective image area	1148x868um	
S/N Ratio	35.9dB	
Dynamic range	66.7dB@16x gain	
Operation Voltage	2.8VDC & 1.5VDC	
Operation Current	95mA max	
Cable	2p + 1C coaxial + 5C wire,	
	OD1.8+/-1mm	
Connection	10pin 1.25mm connector	
	(options: open)	
Dimension	Sensor board: 2.8x2.8mm	
	Main board: 3.4x5.8mm	

System Block Diagram



Backend Module Selection

Features	Model No	Interface	Display
PC application	C7026	USB2.0	PC/NB
Analog output	C8201-VGA	CVBS	TV