



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:

- Tip size 3.8 OD x 8mm
- Resolution: HD1280x720 pixels
- Operation voltage 2.8V
- MIPI interface
- Low power consumption
- Cable size: 1.8mm OD
- Cable length: 1M (upto 4M)



Specification

Application Example

- Inspection device
- Endoscope

Pin Description (tentative)

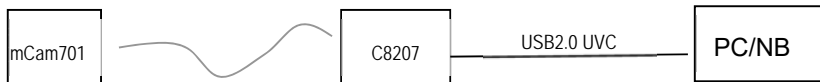
1. VDD 2.8VDC
2. GND Ground
3. CLK Clock input from backend
4. EVD 1.5VDC
D
5. SDA I2C data
6. SCL I2C clock
7. MCP MIPI clock Positive o/p
8. MCN MIPI clock Negative o/p
9. MDP MIPI Data Positive o/p
10. MDN MIPI Data Negative o/p

Imager	CMOS imager sensor OV9734
Optical Format	1/9", CRA 32.1°
Clock rate	6~27MHz
Max exposure	824 x T _{line}
Sensitivity	585mV/Lux-sec
Video Output	1-lane MIPI
Scan mode	Progressive, max 30fps
Data format	10bit Raw RGB
Sensitivity	1300mV/Lux-sec
Picture Element	1298x808pixel
Pixel size	1.75x1.75um
Effective image area	2300x1440um
S/N Ratio	36dB
Dynamic range	70dB@8x 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)

Application Note

Customer can develop his own solution to interface mCam701 but we provide USB modules C8207 for PC application, C82880 for handheld as well as recording module C8203 for HDMI display

System Block Diagram



Backend Module Selection

Features	Model No	Interface	Display
PC application	C8207	USB2.0	PC/NB
HD display	C8203	HDMI	HD Monitor
Handheld	C82880	DVP	3.5" panel