



This is a family of products based on OCHTA10, which is a 1/31" color 160 Kpixel analog camera for the rapidly growing disposable medical endoscope market. The small size enables devices that can reach deep into the body for neuro, ophthalmic ENT, cardiac, spinal, urology. Gynecology and arthroscopy procedures. It features PureCel®Plus-S pixel technology, enabling high functionality in the smallest possible die size. With 400x400 resolution at 30 frames per second, it provides the best image quality for improved patient outcomes.

**Features:**

- Small size
- Built in 1 LED
- Resolution: 400x400 pixels
- Operation voltage 3.3V
- Low power consumption
- Cable size: 0.5mm OD
- Cable length: 1M, up to 3M



**Application Example**

- Inspection device
- Endoscope

**Connector**

24pin B-B connector to fit backend modules.  
Device ID has been built for back end module identification.



**Order information**

muC110L1 – module with 1LED  
Default length of cable is 1Meter, other options needs to be specified at ordering.

**USB UVC Backend module**

C8209DL is USB UVC modules, which is designed for interfacing muC110L1. It has built in LED control circuit such that user can control LED brightness to get the optimum lighting for camera illumination, even though it has auto gain and exposure control.

**Features**

- ✓ UVC compatible, no driver is needed for win7, win10
- ✓ Good for some kernel of Linux OS
- ✓ Output 400x400 pixels at 30fps
- ✓ On board LED to indicate operation status
- ✓ USB Type-C connector



**Specification**

Imager	CMOS imager sensor OCHTA10
Optical Format	1/31"
Clock rate	4MHz
Video Output	Analog
Scan mode	Progressive
Data format	Raw RGB
Picture Element	400x400 pixel
Pixel size	1.008 μm
Effective image area	411x411um
S/N Ratio	TBD
Dynamic range	TBD
Operation Voltage	3.3VDC
Power consumption	25mW
Connection	VDD, DGND, CLK, VOUT, VLED, AGND
Tip Dimension	OD 1.2mm
Optical Spec	
FOV	120° Diagonal
F/No	2.8
Working Distance	5mm ~ infinity
LED Spec	
Brightness	300mCd
CIE	0.314/0.282 ~0.334/0.311