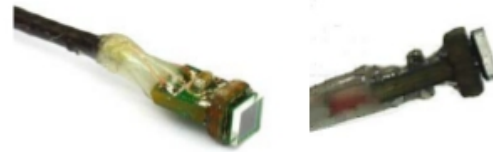


This is a family of products based on the most advance CMOS mixed signal technology. It integrates image array, signal processing, timing and control circuitry, all on a single chip. It is ideal for applications requiring a small footprint, low power and low cost.

**Features:**

- Small size : 2.65mm diameter
- Resolution: 400x400 pixels
- Operation voltage 3.3V
- Low power consumption (48mW typ.)
- Cable size: 1.95mm OD
- Cable length: 1M



**Application Example**

- Inspection device
- Endoscope

**Pin Description**

1. VDD 3VDC
2. GND Ground
3. CLK Clock input from backend
4. VTO Analog video out
5. SDA I2C data
6. SCL I2C clock

**Application Note**

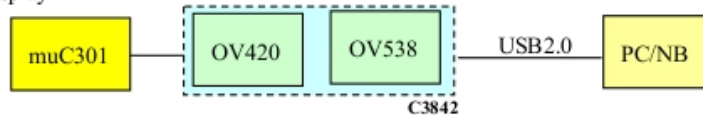
This module needs the backend chip OV420 to work with. For details of backend solution, please refer to the related doc, C3842 (USB application) and C6203, C9203 (handheld application)

**Specification**

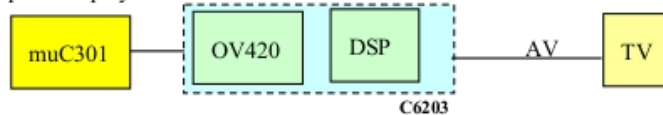
Imager	CMOS imager sensor OV6930
Optical Format	1/10.6"
Clock rate	4MHz
Max exposure	876 x T <sub>line</sub>
Video Output	Analog
Scan mode	Progressive
Data format	Raw RGB
Picture Element	400x400 pixel
Pixel size	3.0x3.0um
Effective image area	1224x1212um
S/N Ratio	38dB
Dynamic range	68dB
Operation Voltage	3.3VDC
Operation Current	15.4mA max
Connector	6pin cable
Connection	VDD, GND, CLK, VTO, SDA, SCL
Dimension	Sensor board: 2.65mm diameter Main board: 2.65x3mm

**Application Block Diagram**

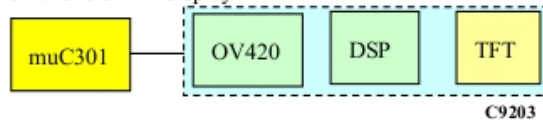
1. PC Display



2. Desktop TV display



3. Portable/handheld TFT display

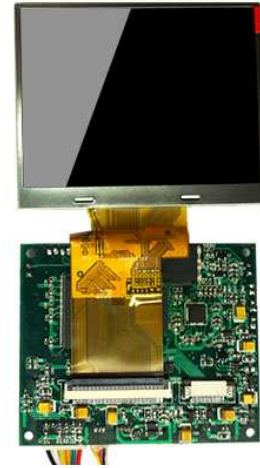


### Introduction

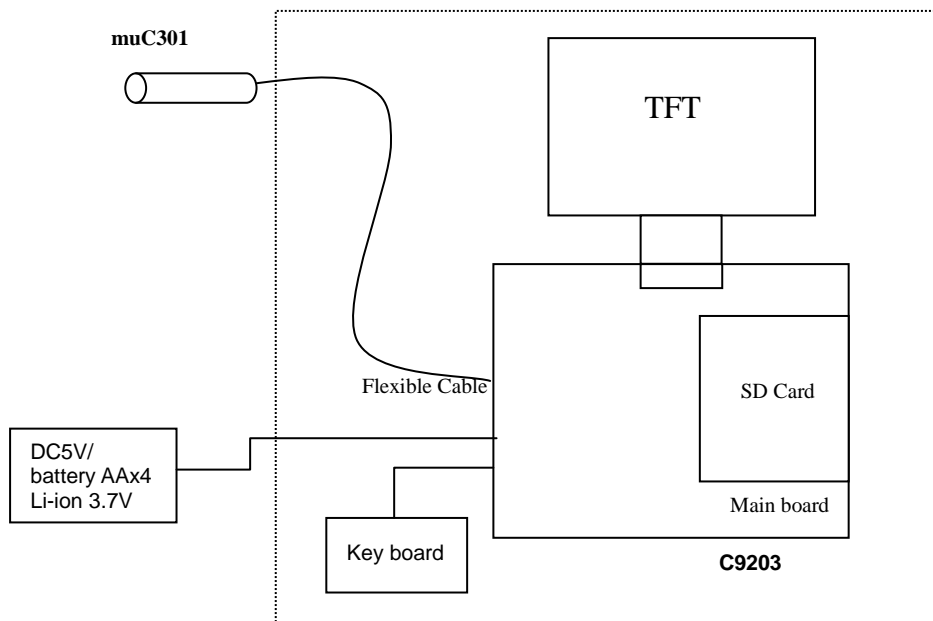
This module has been designed to interface the micro camera muC301. Real time video is displayed on the TFT panel. It performs still image capture and video recording, store files to SD card. It is good for portable and handheld application.

### Key Features

- ✓ Interface to muC301
- ✓ Real time Video output
- ✓ Support TFT panel size 3.5"
- ✓ RTC, OSD
- ✓ Manual capture JPG/AVI
- ✓ Image resolution 384\*384
- ✓ Frame rate: 30fps
- ✓ Store to SD card, up to 16G
- ✓ Mass storage



### System Block Diagram



### Keyboard Design

8- Key design: power/mode/menu/UP/DN/LF/RT/OK

1. Power: power on/off the module
2. Mode: toggle playback or preview
3. Menu: for setup or quit the setup
4. LF/RT/UP/DN for item select
5. OK to confirm

