

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

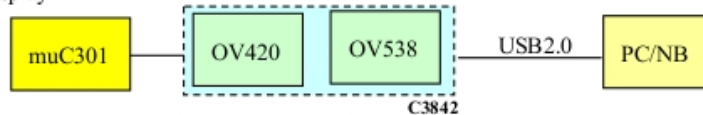
This module needs the backend chip OV420 to work with. For details of backend solution, please refer to the related doc, C3842 (USB application) and C6203, C9203 (handheld application)

Specification

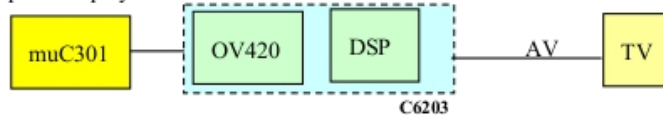
| | |
|----------------------|---|
| Imager | CMOS imager sensor OV6930 |
| Optical Format | 1/10.6" |
| Clock rate | 4MHz |
| Max exposure | 876 x T _{line} |
| Video Output | Analog |
| Scan mode | Progressive |
| Data format | Raw RGB |
| Picture Element | 400x400 pixel |
| Pixel size | 3.0x3.0um |
| 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

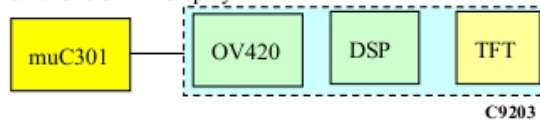
1. PC Display



2. Desktop TV display



3. Portable/handheld TFT display



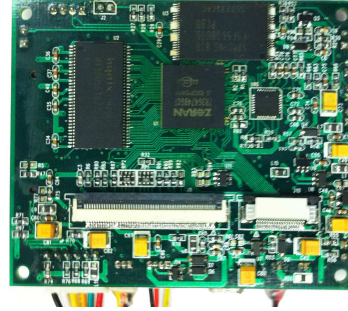
C6203 Display and Recording module for muC301

Introduction

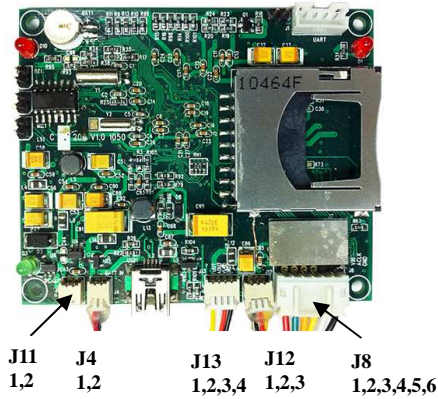
This module has been designed to interface the micro camera muC301. It can be connected to TV monitor and display real time video streaming. It performs still image capture and video recording, store files to SD card. It is good for desktop application.

Key Features

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



Connector and Pin Description



| | Pin1 | Pin2 | Pin3 | Pin4 | Pin5 | Pin6 |
|-----|-----------|-------------|------|----------|------|------|
| J11 | BATT OUT | GND | | | | |
| J4 | BATT IN | GND | | | | |
| J13 | VIDEO OUT | | | GND | | |
| J12 | GND | Key/ PWR On | KEY | | | |
| J8 | VCC | SDA | SCL | VIDEO IN | CLK | GND |

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

