

MIPI Monitoring Board : SVM-06

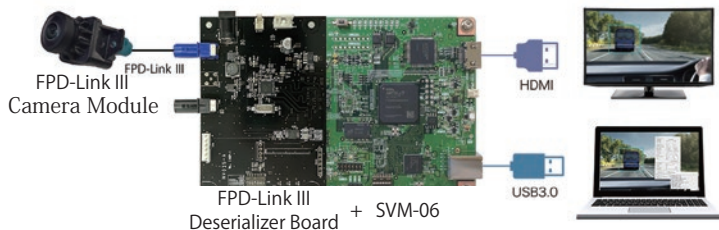
MIPI Camera-Compatible USB 3.0 / HDMI Output Capture Board

- ◆ Proven connectivity with various SerDes interfaces
- ◆ Compatible with a wide range of automotive cameras
- ◆ Supports HDMI output up to 4K@30fps
- ◆ USB output supports up to 5MP-class cameras
- ◆ Easy PC display and recording with bundled application



CASE1 Automotive Camera Video Display PoC

- Instant display with auto I²C setup
- PC / monitor / HDMI recorder output
- PC-recognized camera, easy OpenCV integration

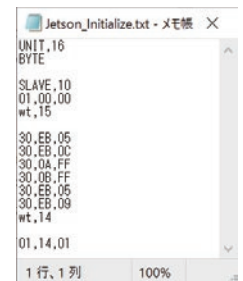


CASE2 New Camera Module Debugging

- No driver needed – flexible I²C setup
- 300+ device setting library (onsemi, OMNIVISION, SONY, etc.)

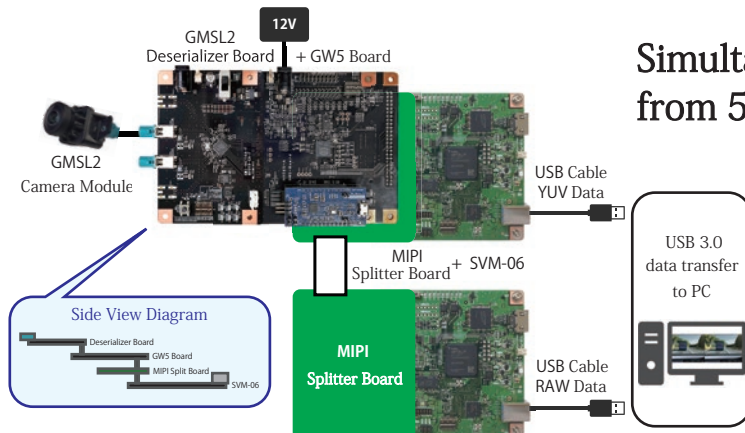


I²C Control Application "SVMCtl"



I²C Script Example

CASE3 Virtual Channel Output Capture with indie GW5 ISP



Simultaneous dual virtual channel capture from 5.4MP IMX490 + indie GW5 ISP.

- ISP distortion correction & demosaic (RAW12 → YUV)
- Dual capture: YUV (VC0) + RAW (VC1) via two SVM-06
- Supports RGB-IR simultaneous capture

Specification Details

- MIPI CSI-2 1.5Gbps/lane 4Lane
- USB3.0 (Windows, Linux, UVC Driver)
- USB bus power (excl. camera)
- HDMI (720P/60Hz, 1080P/60Hz, 4K/30Hz)
- Max. resolution 8190 × 4095 px
- Input: YUV422 8-bit, RGB24, RAW8/10/12/16/20
- Equipped with 256MB DDR3 SDRAM for stable capture
- I²C frequency: 100, 200, 400 kHz
- Works with GMSL, FPD-Link, GVIF
- Windows software included – uncompressed recording

