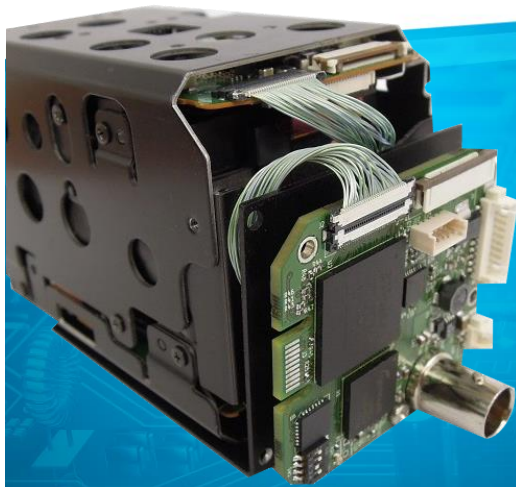




3G/HD-SDI INTERFACE BOARD

FOR SONY FCB-EV, EH & SE600



More than a video transmission module, the 3G/HD-SDI interface board is the heart of your industrial vision system.

Thanks to the 3G/HD-SDI module, you will be able to transfer HD video in real time to deliver staggering picture quality.

FEATURES

- Support Sony FCB-EV, EH & SE600
- SMPTE 424M & 292M -3G/HD-SDI video output
- Y, Pb, Pr 75 ohms, 1 V analog video output*
- VBS analogue SD video output*
- Ultra-low jitter
- Video mode selection by DIP switches
- TTL or RS232 VISCA dialog level
- Embedded color bar**
- 6 to 12VDC protected and EMC filtered power supply
- BNC 75 ohm connector- SMB or MCX option

*Refer to camera technical manual for video standard supported

**A command needs to be sent to camera

○ Perfect HD-SDI image quality

3G/HD-SDI technology is the first established standard that provides sufficient bandwidth to allow uncompressed transmission of high-definition video signals from camera to screen.

○ OEM embedded image processing functions

The 3G/HD-SDI module is based on a powerful Xilinx FPGA. On request, image processing functions such as colorimetry tests, measurements, reticles, contrast enhancement, ROI extraction, OSD and even more functions can be applied to the image flow in real time.

○ Cost effective and easy installation

Upgrading existing SD video systems to HD is a cost-effective way to bring high resolution video without any significant modification of existing coaxial cables.

Only front-end and back-end products need to be replaced.

Hence, the number of cameras needed to capture vivid details such as facial features or license plate is largely reduced. This approach increases time efficiency while also cutting costs.

TARGET APPLICATIONS



Onboard Connectors

| J4 | Analogue HD/SD output + COM | |
|----|-----------------------------|--|
| 1 | Y | |
| 2 | GND | |
| 3 | Pb | |
| 4 | GND | |
| 5 | Pr | |
| 6 | GND | |
| 7 | TX RS232 | |
| 8 | RX RS232 | |
| 9 | GND | |
| 10 | VBS | |

| DIP switches | | | | video format configuration | |
|--------------|-----|-----|-----|----------------------------|----------|
| 1 | 2 | 3 | 4 | FCB-EH | FCB-EV |
| OFF | OFF | OFF | OFF | External | External |
| ON | ON | ON | ON | - | 1080p60 |
| OFF | ON | ON | ON | - | 1080p30 |
| OFF | OFF | ON | ON | - | 720p560 |
| OFF | OFF | ON | ON | 1080p59.94 | - |
| ON | ON | OFF | ON | 1080p50 | - |
| ON | OFF | OFF | OFF | 1080p29.97 | 1080p30 |
| OFF | ON | OFF | OFF | 1080p25 | 1080p25 |
| ON | ON | OFF | OFF | 1080i59.94 | 1080i60 |
| OFF | OFF | ON | OFF | 1080i50 | 1080i50 |
| ON | OFF | ON | OFF | 720p59/94 | 720p60 |
| OFF | ON | ON | OFF | 720p50 | 720p50 |
| ON | ON | ON | OFF | - | 720p30 |
| OFF | OFF | OFF | ON | - | 720p25 |






| J5 | Power supply |
|----|--------------|
| 1 | 6 to 12V DC |
| 2 | GND |

| LED blink | Status |
|-----------|---------------------------------------|
| 1 | Initialization OK |
| 2 | FPGA loading OK |
| 3 | VISCA Dialog W/camera OK |
| 4 | Camera identification OK |
| 5 | Audio ADC configuration OK |
| 6 | FPGA video processing OK |
| 7 | Video format modification by switches |

| TTL / RS232 Dialog level | |
|--------------------------|-------------|
| R29 + R31 Soldered | RS232 level |
| R30 + R32 Soldered | TTL level |

| Functions | Specifications |
|-------------------------------------|--|
| Digital video output | 3G-SDI SMPTE 424 M, HD-SDI 292 M |
| Analogue video output* | Y, Pb, Pr 75 ohms, 1V - VBS |
| Video output standard configuration | DIP switches* |
| Camera control | VISCA – Default : RS232 Level – TTL level (Option) |
| Power supply | 6 to 12 VDC, 5 W (including camera) |
| Operating temperature range | 0°C to 60°C |
| Storage temperature range | -20°C to 60°C |
| Regulation | EMC FCC part 15, PCB : UL 94 V0 |
| Dimensions (mm) | 48 (H) x 45 (W) x 13 (D) |

Aegis SDI-EV for Sony FCB-EV, EH & SE600

| Content | | |
|---|---|-------------------|
| 3G/HD-SDI interface board - SDI-EV | ✓ | ✓ |
| 30 way USL20-30SS-012-C Cable assembly | ✓ | ✓ |
| 24 way FCC cable | ✓ | |
| 2 way cable - power supply (J5) | ✓ | ✓ |
| 10 way cable - COM (J4) | ✓ | |
| Right angle black anodized aluminum bracket | ✓ | |
| Screws + spacers | ✓ | |
| Connector Options |    | without connector |