Overview
VIM554 Audio/Video Input Module is implemented in CPCI-S.0 3U standard with support of rear I/O modules.

The module is designed for reception of standard definition analog video signals (SDTV) and voice audio signals, their conversion to digital form and their entry into PC system memory.

Features
- Form-factor: PICMG CPCI-S.0 R1.0 CompactPCI® Serial Specification 3U;
- System bus: PCI Express x4;
- LED-indication of module’s operation modes;
- Power supply: Supplying voltage: +12.0 V, consumed current: no more than 0.8 A;
- Vibration resistance: 5g;
- Single/multiple shock resistance: 100g/50g;
- Dimensions: No more than 130.5 mm x 213.0 mm x 20.32 mm (WxDxH);
- Weight: VIM554-01-R1: 320 g, VIM554-02-R1: 380 g;
- Operating temperature range: Industrial version: from –40°C to +85°C;
- MTBF: 100 000 hours;
- OS: Windows 7 (Embedded) 32/64 bit; Linux 3.2.0.

Technical Specifications

Form-factor
PICMG CPCI-S.0 R1.0 CompactPCI® Serial Specification 3U.

System bus
PCI Express x4.

LED-indication
- LED-indication of module’s operation modes.

Software monitor
- Overheating protection (module disconnection).

Video path
- For VIM554-01 version: 4x channels;
- For VIM554-02 version: 8x channels;
- Video signal standard: PAL (B, D, G, H, I, M, N), SECAM, NTSC;
- Video signal type: composite (CVBS);
- Connector type and characteristic impedance: MCX (slot), 75 Ohm;
- Video input type: AC-coupled;
- Video input accepted level: 0.5 V to 2.0 V (peak-to-peak amplitude);
- Anti-aliasing filters: yes;
- Input speed per each channel: 25/30 frames per second depending on the video signal standard;
- Output frame format: up to D1;
- Video decoder: TW6869.

Audio path
- For VIM554-01 version: 4x channels (mono);
- For VIM554-02 version: 8x channels (mono);
- Type of audio sources: active microphones, amplifiers, sound cards;
- Power supply of active microphones: +12.0 V/45.0 mA;
- Bandwidth: 12 KHz (using the level –3 dB);
- Input stage type: differential;
- Input resistance – No less than 47 KΩ (f=1 KHz);
- Input signal level: up to 2.0 V (root-mean-square value);
- Sampling rate: 8/16/32/44.1/48 KHz;
- Retrieval capacity: 8/16 bit;
- Input stage overload protection: yes;
- Audio decoder: TW6869.

Power supply
- Supplying voltage: +12.0 V;
- Consumed current: no more than 0.8 A.

Resistance to mechanical impact
- Vibration, acceleration amplitude – no more than 5g;
- Single shocks, peak acceleration – no more than 100 g;
- Multiple shocks, peak acceleration – no more than 50 g.

MTBF
- No less than: 100 000 hours.

Weight
- VIM554-01-R1: 320 g;
- VIM554-02-R1: 380 g.

Dimensions
- No more than 130.5 mm x 213.0 mm x 20.32 mm (WxDxH).

Operating temperature range
- Industrial version: from –40°C to +85°C.

Humidity
- Up to 80%, non-condensing.

Resistance to cyclic damp heat in case of lacquer coating
- At the ambient temperature of (+55±2)°C and relative humidity of (93±3)%.

OS compatibility
- Windows 7 (Embedded), 32/64 bit;
- Linux 3.2.0.
VIM554
Audio / Video Input Module

Board Layout

http://www.fastwel.com
VIM554 Configuration

VIM554-01/VIM554-02

Versions:
- VIM554-01-R1: 4x audio (mono) and 4x video channels, Weight: no more than 320 g.
- VIM554-02-R1: 8x audio (mono) and 8x video channels, Weight: no more than 380 g.

Options
- Conformal coating.

Delivery checklist
1. VIM554 Audio / Video Input Module;
2. Package.