# VIM552
## 3U CompactPCI Graphics Processing Module

## Features

- ■ Compliance with PICMG 2.30 and PICMG S.0 standards
- ■ LynxExp SM750 graphics processor
- ■ 64 MB DDR SDRAM
- ■ VGA (up to 1920×1440) and DVI-I (up to 1920×1200) front panel interfaces
- ■ 1×USB 2.0 on front panel
- ■ 1×SATA channel with possibility to mount a 2.5" HDD
- ■ Passive cooling
- ■ Operating temperature: –40°C to +85°C
- ■ Windows XP (Embedded), Windows 7, Linux 2.6

## Overview

VIM552 is a graphics processing module designed for CompactPCI® PlusIO compliant platforms (e.g. based on Fastwel CPC506 processor module) or in systems compliant with the CompactPCI® Serial specification (e.g. based on Fastwel CPC510 module). The board has two independent outputs with DVI-I and VGA interfaces; they can be used together with integrated graphics subsystem of the processor module.

VIM552 is based on Silicon Motion SM750 graphics controller which has low power consumption thus allowing passive cooling management and using the module as a 2.5" SATA disk carrier.

There is a USB connector rooted to the front panel, which enables the external devices connection.

## Technical Specifications

### SM750 Graphics Controller
- 1×PCI-Express 1.1 (up to 2.5 GB/s)
- DDR RAM interface, 64 bits, up to 64 MB
- 2 independent RGB outputs
- 24-bit digital output (duplicates one of the RGBs), used for DVI-I

### System memory
- DDR333 SDRAM 64 MB, soldered

### Video outputs (front panel)
- VGA (resolution up to 1920×1440 @ 60 Hz)
- DVI-I (resolution up to 1920×1200 @ 60 Hz) single-channel mode

### Rooted to RearIO via CPCI Plus Type B connector (optional)
- DVI output copy (digital output only) Simultaneous image display to the front panel and to RearIO in the "mirror" mode is possible
- VGA output copy
- 2 DDC channels individually switchable from the front panel to RearIO

### FLASH BIOS
- 512 Kbit SPI-Flash for Video BIOS

### SATA interface
- 1 × onboard corner SATA connector with power
- The revision type and the interface speed are defined by the CPU board
- The power consumption is limited by 1 A @ +5 V

### USB port
- 1×USB port, rooted to the front panel;
- 1×USB port can be rooted to DVI connector (upon request)

### Operating temperature range
- Industrial –40°C to +85°C

### Supported OS
- Windows XP (Embedded)
- Windows 7
- Linux 2.6
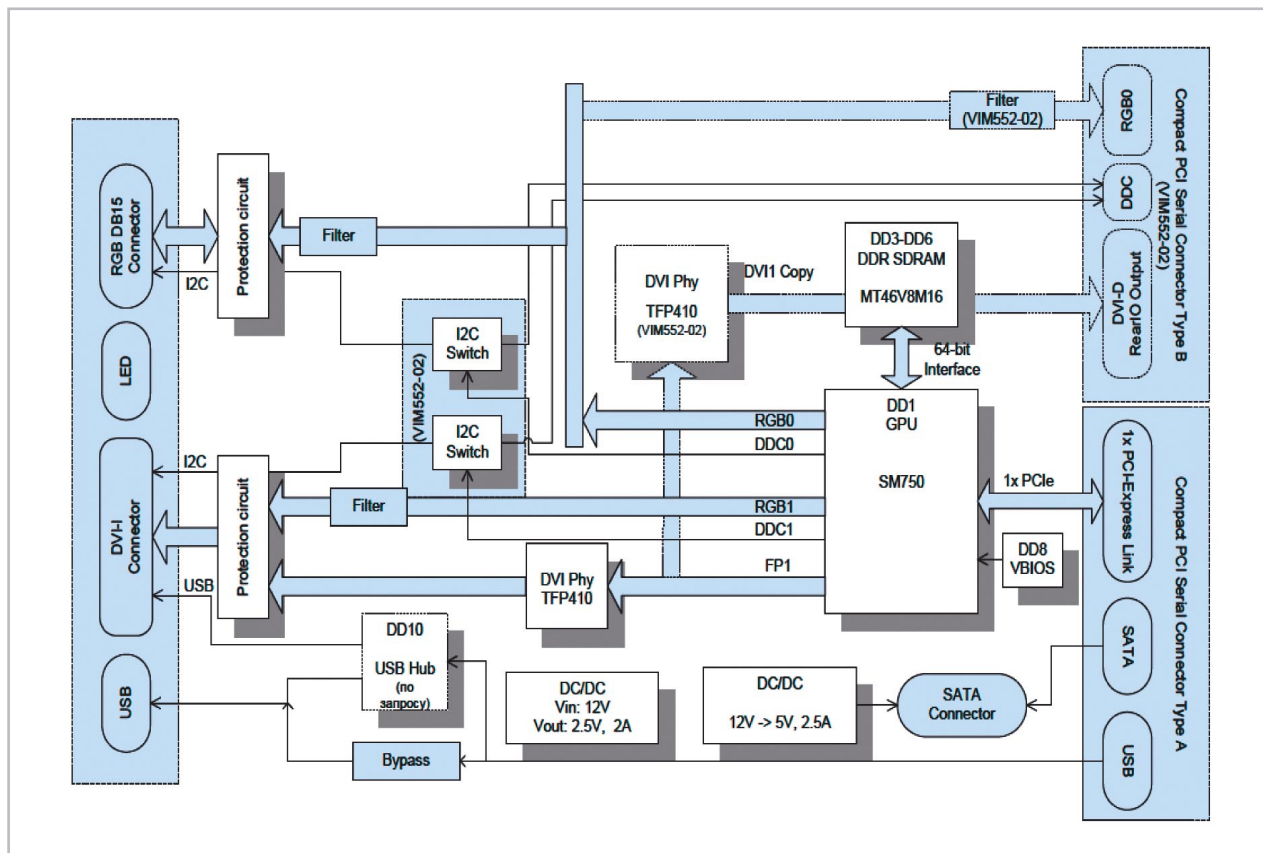
**MTBF:** 340 000 hours

### Power requirements
- Power supply voltage +12 V
- Module consumption power is 0.4 A (without peripheral devices)

**Weight:** no more than 0.16 kg

**Dimensions:** 212.8×130.5×20.3 mm

Fastwel

## Board layout



## Ordering Information

### VIM552 Configuration

#### Versions

| | |
|---|---|
| VIM552-01-I | VIM552 64Mb RAM, DVI-I, VGA, USB, SATA, industrial temperature range (–40°C to +85°C) |
| VIM552-02-I | VIM552 64Mb RAM, DVI-I, VGA, USB, SATA; DVI-D, VGA on RearIO, industrial temperature range (–40°C to +85°C) |

#### Available options

| | |
|---|---|
| \Coated | damp-proof coating |

#### Delivery checklist:

1. VIM552 module
2. Antistatic bag
3. Package
4. Installation kit: 4 × M3×5 DIN7985 screws

**Ver.1.7.2013**

Product specifications are subject to change without notice

## Corporate Offices