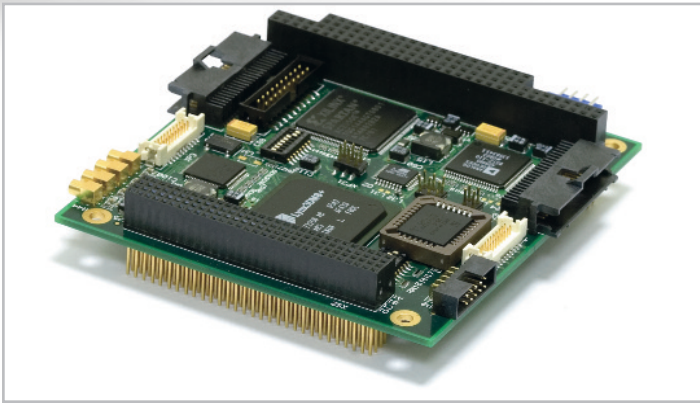


# VIM301

## Video Graphics Controller Card



### Features

- Lynx3DM8+(SM722G8) video processor
- Graphics memory: 8 MB, 64 bit, 100 MHz
- PCI/104 (PCI)
- PC/104 (ISA), not used, installed for compatibility
- One RGB connector for CRT monitors
- Two LVDS interfaces
- Two Flat Panel (FP) interfaces
- One SGD 4 bit LCD (EL Planar) interface
- Four video input channels

### Overview

VIM301 is a PC/104 Plus graphics controller module based on the low power mobile display controller SM722G8 (Lynx3DM8+) from Silicon Motion with 8 MB of integrated video memory.

Depending on version, VIM301 allows connection of the following displays: analog CRT monitor with RGB interface, up to two LCD panels with Flat Panel (FP) interface (resolutions 640×480, 800×600, 1024×768, 1280×1024, 9/12/18/24 bit color), up to two LCD panels with single channel LVDS interface, electroluminescent (EL) monochrome display from Planar with SGD 4 bit LCD interface (resolution 320×240), up to four analog video cameras.

For communication with other modules in stack VIM301 uses PCI bus (PC/104 Plus connector). The module is designed for embedded applications requiring low power consumption and capable to operate within temperature range from -40°C to +85°C.

### Technical Specifications

#### System

- GPU: Lynx3DM8+(SM722G8) video processor: 32 bit graphics core; 128 bit Drawing Engine (100 MHz); PCI 2.1 compatible controller, 33 MHz, Master/Slave modes; RAMDAC 200 MHz
- MTBF: 100 000 hours

#### BIOS

- Video BIOS: 64 KB chip with BIOS; ACPI 1.0 compatible

#### Graphics

- Graphics memory: 8 MB, 64 bit, 100 MHz, on chip
- Video input: up to four analog video cameras; PAL/SECAM or NTSC standards; resolutions 720×576/720×504; 25/30 frames per second

#### Software Support

- MS DOS 6.22, FDOS 6.22
- Windows 98, NT, XP, CE 4.2
- Linux 2.6
- QNX 6.3

#### Interfaces

- PCI/104 (PCI)
- PC/104 (ISA), not used, installed for compatibility
- One VGA connector for CRT monitors
- Two LVDS interfaces
- Two Flat Panel (FP) interfaces

- One SGD 4 bit LCD (EL Planar) interface
- Four video input channels
- LCD panels with resolutions 640×480, 800×600, 1024×768, 1280×1024 and 9, 12, 18, 24 bit color
- TFT/DSTN LCD support
- Planar monochrome EL displays support, resolution 320×240

#### Mechanical

- Dimensions: 96×95.4×23.7 mm (3.78"×3.75"×0.93")
- Weight: 0.120 kg

#### Power

- +5 V ±5% DC via PC/104 and PCI/104 connectors
- Optional power connector
- 0.6 ... 1.0 A max consumption current, depending on the version

#### Environmental Conditions

- Operating temperature range: -40°C to +85°C;
- Storage temperature range: -55°C to +90°C
- Relative humidity: 5% to 90% at +25°C, noncondensing
- Vibration: 10 g; single shock stability: 150 g; multiple shock stability: 50 g

#### Warranty

- 3 years for parts and labor

### Ordering information

#### VIM301 Versions

##### Device Type

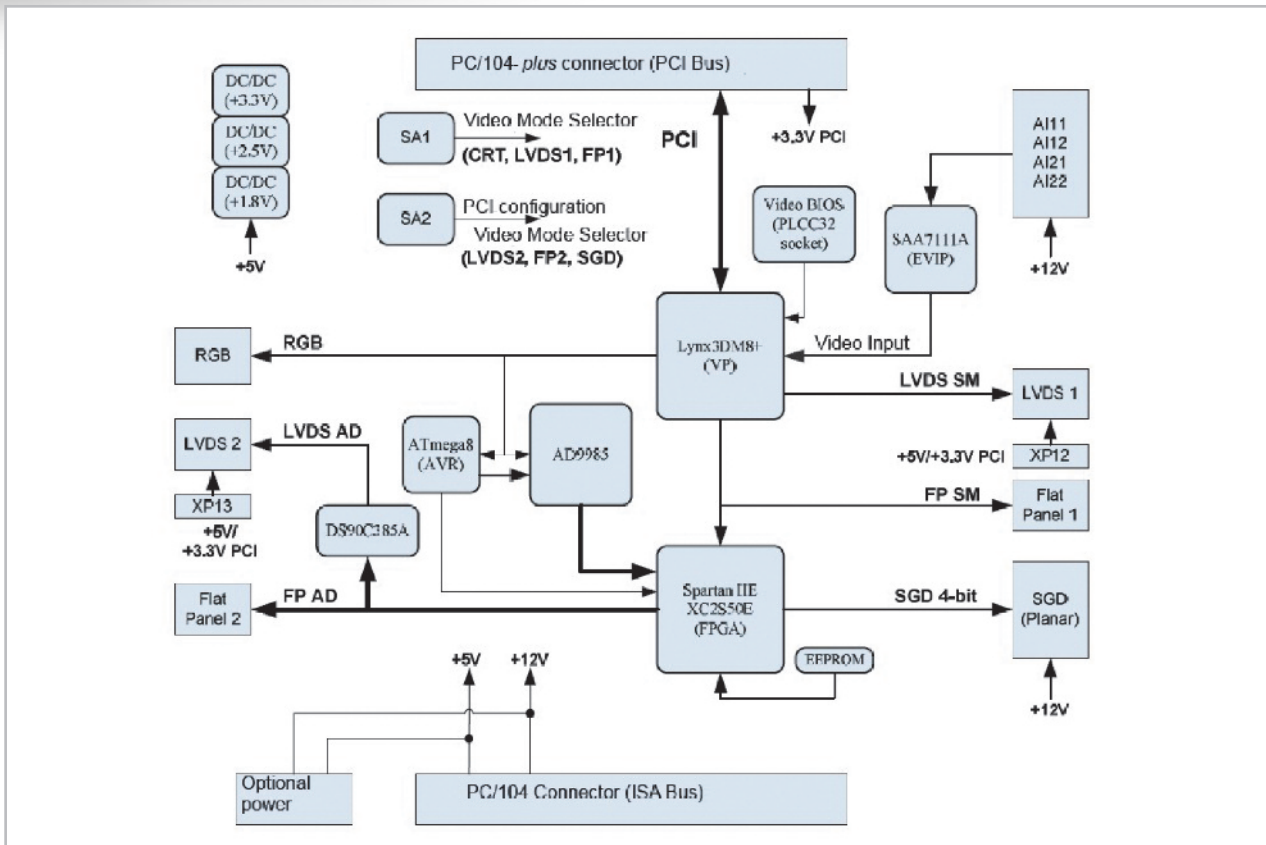
VIM301 Lynx3DM8+, 8 MB RAM, PC/104 Plus connectors

Version	CRT	FP	LVDS	4 bit SGD for Planar panel	Video Input Channels
VIM301 02	—	2	2	—	—
VIM301 03	1	1	1	—	4
VIM301 04	1	1	1	1	—
VIM301 05	1	2	2	1	4

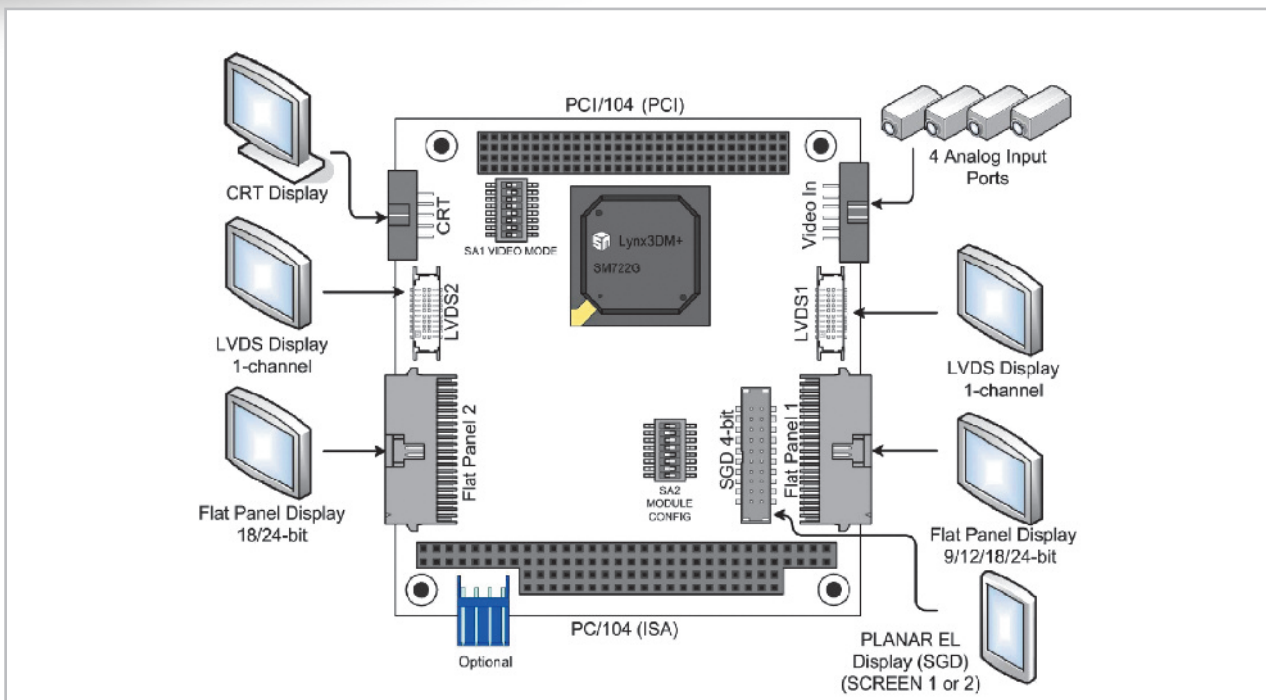
# VIM301

Video Graphics Controller Card

## VIM301: Block Diagram



## VIM301: External Connections



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Product specifications are subject to change without notice

## Corporate Offices

### FASTWEL GROUP Co. Ltd

108 Profsoyuznaya str.  
Moscow, Russia 117437  
Tel: +7 (495) 232-1681  
Fax: +7 (495) 232-1654  
E-mail: info@fastwel.com  
Web: www.fastwel.com

### FASTWEL Corporation US

Fastwel Corporation US  
6108 Avenida Encinas,  
Suite B, Carlsbad,  
CA 92011.  
Phone: 858-488-3663  
E-mail: info@fastwel.com

