

# 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

- CPU 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: 100000 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

- Windows® 2000, XP, XPE
- Linux® 2.6
- Fastwel DOS™ (MS™ DOS compatible)

### Interfaces

- 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
- 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 for VIM301-01 and VIM301-04; 0°C to +70°C for all other versions
- 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

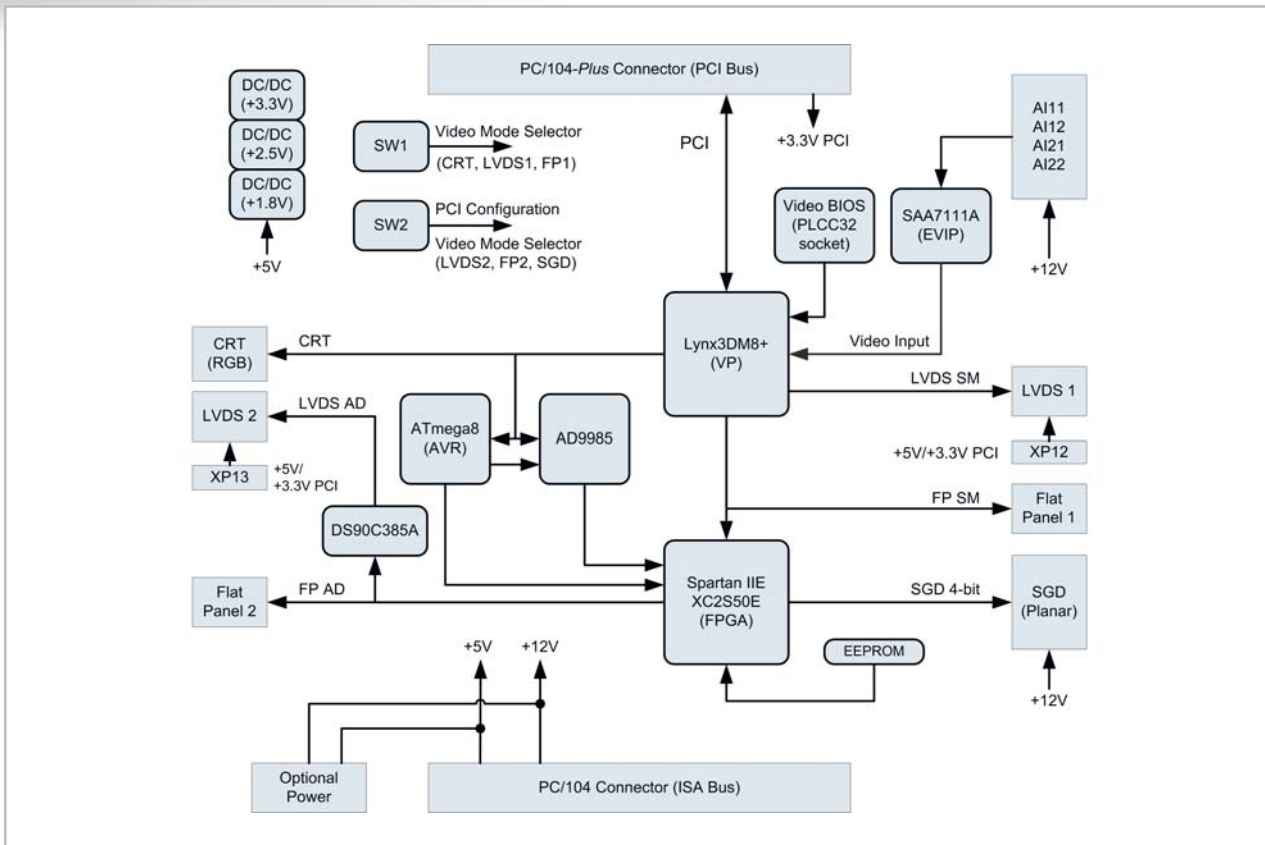
### VIM301 Versions

Device Type	VIM301 Lynx3DM8+, 8 MB RAM, PC/104-Plus connectors				
Version	CRT	FP	LVDS	4-bit SGD for Planar panel	Video Input Channels
VIM301-01	1	1	1	—	—
VIM301-02	—	2	2	—	—
VIM301-03	1	1	1	—	4
VIM301-04	1	1	1	1	—
VIM301-05	1	2	2	1	4

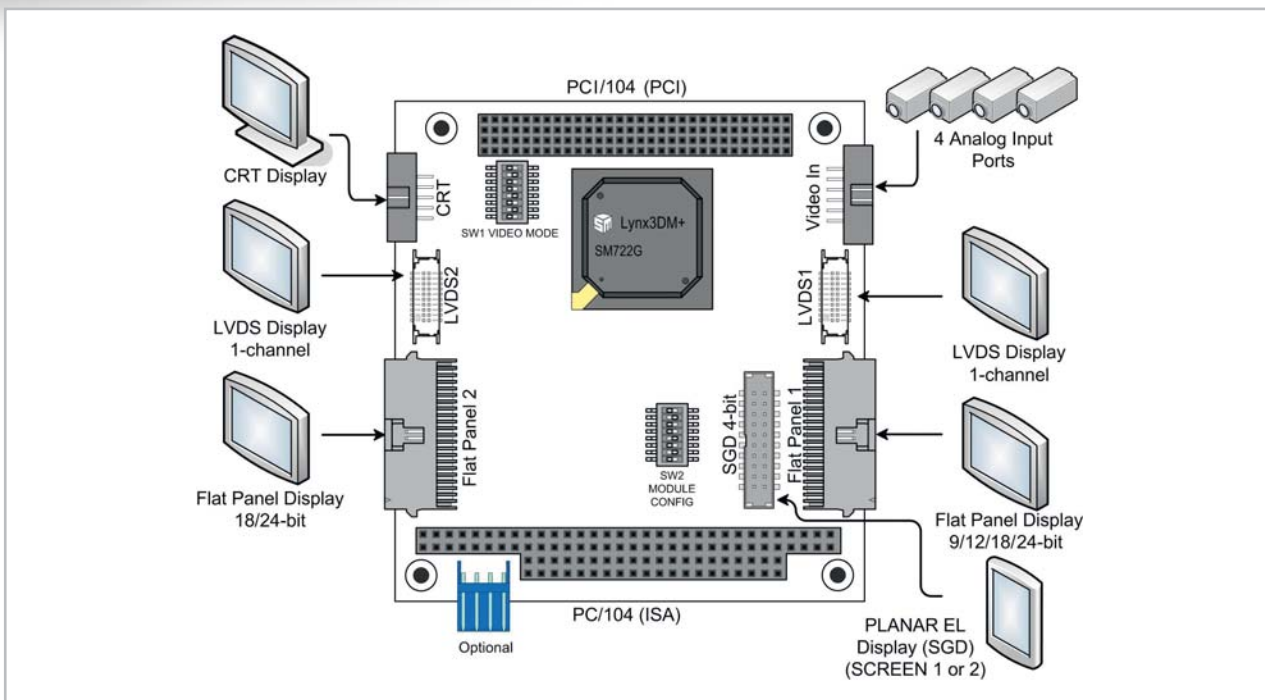
# VIM301

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## VIM301: Block Diagram



## VIM301: External Connections



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Product specifications are subject to change without notice

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