



# TGA-300X

Mission and Payload Systems 3U-VPX

3U VPX Graphics Processor  
with AMD E4690 GPU

## Feature Set

### General

- 3U VPX per VITA 46
- 0.8" air cooled, 0.85" and 1" conduction cooled Pitch available
- VITA 65 OpenVPX Compliant
- AMD E4690 GPGPU
- 2D and 3D Graphics
- 1920 X 1200 Resolution
- STANAG 3350B
- 512 MB Frame Buffer
- 128 bit Memory Interface
- OpenGL Support
- OpenCL Support

### Outputs

- 2x DVI and VGA Outputs
- OpenLDI Output
- Sync on Green

### Inputs

- 2x TV, HD, RGB, DVI Inputs
- External Sync Input
- Sync on Green

### Power

- < 25 Watts (Typical)
- < 15 Watts (Low Power)

### Environmental

- Conduction Cooled
- Operating Temperature: -40° to +85°C
- Storage Temperature: -55° to +105°C
- Humidity: 0 to 95% RH Non-Condensing
- Conformal Coat: Yes
- Shock: 40g Peak Sawtooth @ 11 mSec
- Vibration (Random): 1g2/Hz, 15Hz to 2KHz
- Vibration (Sine): 10g Peak, 15Hz to 2KHz



**TGA-300X** is designed for a wide variety of high performance graphics, video and GPGPU mission critical applications requiring flexibility in video input and output formats. Based on the AMD E4690, the TGA-300X™ has the latest graphics features and includes hardware acceleration of H.264, VC-1 High Definition video, as well as MPEG-2. Most of the processing is done in the GPU, off-loading the target system's CPU to maximize system performance.

The TGA-300X has two digital DVI and OpenLDI, as well as analog VGA or STANAG outputs available on the rear connector. The card is also configurable to enable NTSC or PAL outputs.

The TGA-300X has two video inputs which can support various formats including RGB, STANAG, NTSC, PAL and HDTV. The inputs can be processed and passed through to the outputs under program control. Graphics overlays can be generated to allow symbology to be superimposed on input video.

Drivers for Linux® and Windows® are available with the baseline configuration. Drivers for other Real Time Operating Systems such as VxWorks®, Integrity® and LynxOS® are also available, please consult factory for details.

Standard temperature range for the conduction cooled version is -40°C to +85°C.



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### Compliance Specifications:

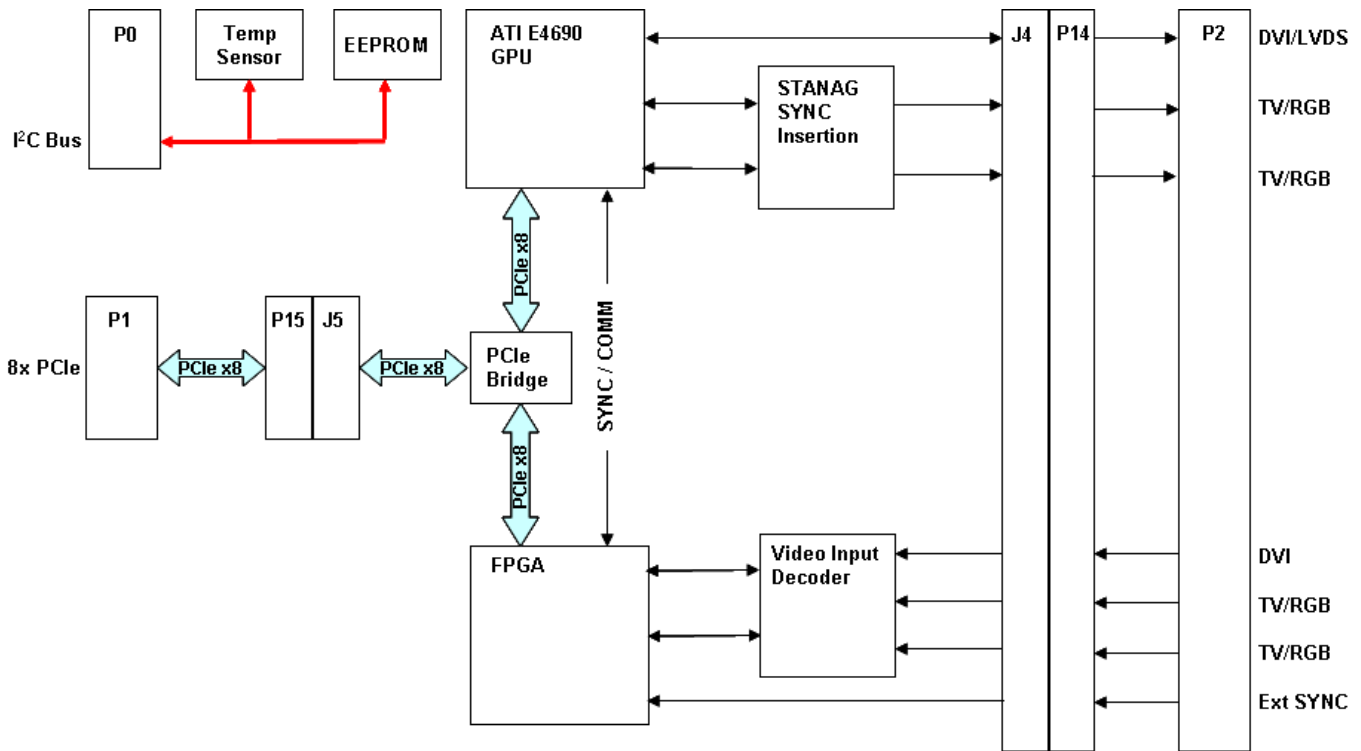
The TGA-300X Graphics Processor Module is designed to meet CE Emissions specification EN 55022, CE Immunity specification EN 50082-2 and FCC 47 CFR, Part 15, Class A when tested in a shielded enclosure.

### Standard Configuration Ordering Information:

Air Cooled	Level 1	0.8" Pitch		TGA-300X1-000
Conduction Cooled	Level 5	1.0" Pitch	VPX-REDI	TGA-300X5-501

Consult factory to order other configurations

## TGA-300X Block Diagram



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