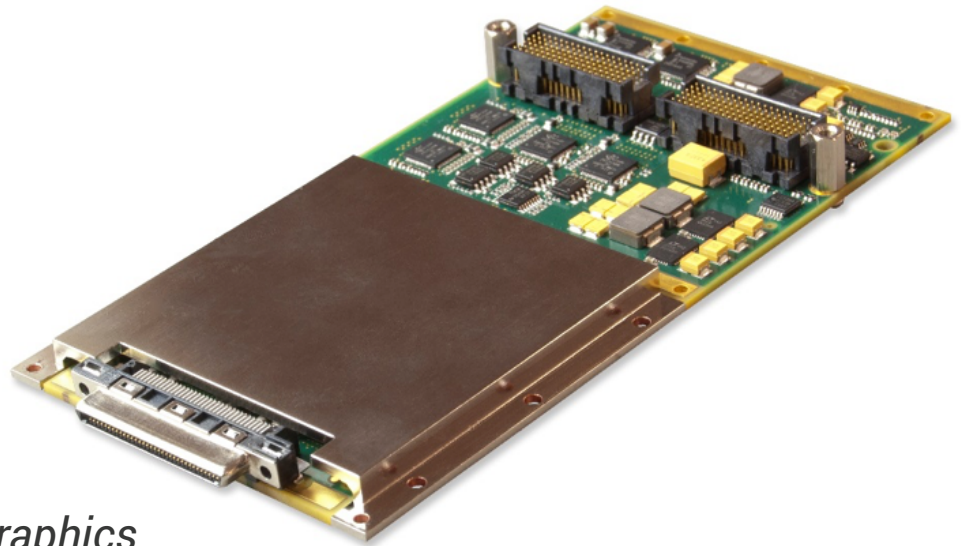




XMCGA8

XMC High Performance Graphics Board Based on AMD / CoreAVI Radeon™ E8860 Embedded GPU

XMCGA8 is the eighth generation of graphics mezzanine card designed to support the needs of the rugged marketplace, bringing modern graphics performance to demanding 2D and 3D applications.

The XMC form factor allows for high speed PCI Express® connections to single board computers in the system. The XMCGA8 supports the 8-lane PCI Express implementation, providing the maximum available communication bandwidth to a single board computer such as Abaco Systems' SBC314, PPC10A and XVR16.

The GPU is capable of PCI Express Gen 2 speeds, and will automatically adapt to the speed of the host board. The PCI Express link will also automatically adapt to the active number of lanes available, and will work with single board computers in 8- and 4-lane configurations.

VxWorks®, VxWorks 653, Windows®, and Linux® drivers are available for the XMCGA8.

XMCGA8 is designed to support a number of connector options, which are defined at build time:

- XMC I/O – the XMC I/O connector (P16) allows optimal routing of signals on host boards which support this connector. Signal pairs are preserved for the high speed digital connections (DVI) ensuring the best possible signal integrity.
- Front I/O – for air-cooled (L1-L3) boards, signals can be brought out through the front panel, easing the task of cabling in deployed systems or in lab development boards. The VHDCI connector supports both channels with both DVI and VGA. An adapter cable is available from Abaco to split the signals out onto two DVI-I connectors.

FEATURES:

- AMD / CoreAVI Radeon™ E8860 Embedded GPU
- 2 GB GDDR5 SDRAM
- x8 PCI Express (Gen 2 capable)
- Four independent output channels (two dual heads)
- DVI 1.0 digital video output
- Single link to 1920x1200 @ 60 Hz
- 2x analog VGA output
- VESA resolutions to 1920x1200 @ 60 Hz
- XMC (VITA 42) form factor; VITA 61 also available
- Front and rear I/O options
- Air- and conduction-cooled variants

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Specifications

GPU

- AMD / CoreAVI Radeon E8860 processor

Graphics memory

- 2 GB GDDR5 SDRAM

Host interface

- 8-lane PCI Express Gen 2.0 capable

RGB (VGA) output

- 2 channels, VESA: resolutions up to 1920x1200 @ 60 Hz

Digital output

- 4 channels, single link DVI 1.0: resolutions up to 1920x1200 @ 60 Hz

Output Build Options

- XMC I/O output to P16
- Front I/O

Form factor

- XMC (VITA 42): air- or conduction-cooled; VITA 61 also available

Drivers

- AMD, Windows, and Linux
- CoreAVI for RTOS, OpenGL (VxWorks, VxWorks 653, other operating systems on demand)
- Standard video BIOS
- Power-on and Continuous Built-In Test

Environmental

- Levels 1-5, air- and conduction-cooled

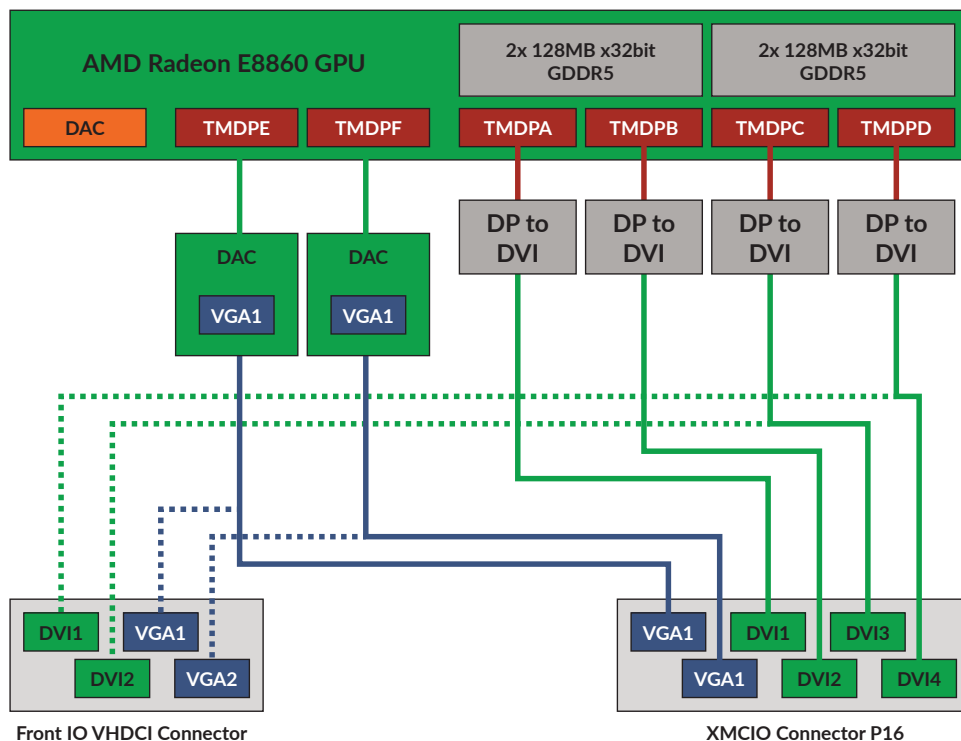
Power Requirements

- +5V / 3V3

Weight

- 325g (with heat sink)

Block diagram



Ordering information

XMCGA8	x	x	x	x	x	x	x	
A	1 2 3 4 5							Level 1: 0°C to +55°C air-cooled Level 2: -20°C to +65°C air-cooled Level 3: -40°C to +75°C air-cooled Level 4: -40°C to +75°C conduction-cooled Level 5: -40°C to +85°C conduction-cooled
B		1 2						AMD E8860 Core AVI E8860
C			1 2					Front Rear
D				0				Reserved
E					0			Reserved
F						1		Standard video BIOS
G							1 2	VITA 42 (standard XMC connectors) VITA 61 (Gen3 PCIe XMC connectors)

WE INNOVATE. WE DELIVER. YOU SUCCEED.

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Europe, Africa, & Middle East: +44 (0) 1327-359444

Locate an Abaco Systems Sales Representative visit: abaco.com/products/sales

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