XMC-G745





Features \

- NVIDIA GeForce GT 745M GPU (Kepler refresh)
- 384 CUDA cores for maximum processing power
- 2GB dual channel GDDR5 soldered memory
- XMC site PCle x8 Gen3 on P15
- Four DVI-D and one VGA with 3 independent displays (VGA supported on conduction cooled version only)





Specifications

Processor & System

GPU NVIDIA GeForce GT 745M

NVIDIA CUDA Technology (compute capability 3.0), 384 cores

NVIDIA H.264 video encoding

NVIDIA PureVideo hardware decoding

High-Bandwith Digital Content Protection (HDCP) support

Supports OpenGL 4.4, OpenCL 1.2, DirectX 11.1

Memory Dual channel GDDR5 SDRAM with ECC, 2GB

128-bit memory interface

Display Digital display resolution up to 1920 x 1200

Analog display resolution up to 2048 x 1536

Three independent displays supported

VITA Specifications VITA 42.0 XMC: Switched Mezzanine Card Base Specification

VITA 42.3 XMC: XMC PCI Express Protocol Layer

VITA 46.9 VPX: PMC/XMC Rear I/O Fabric Signal Mapping on

3U and 6U VPX Modules

Connectivity

XMC Site PCle x8 Gen3 on P15

XMC I/O Four single-link DVI-D and one VGA on P16

(conduction cooled version only)

Front Panel Four single-link DVI to front panel extra space via VHDCI

connector (air cooled version only)

Operating System

OS Microsoft Windows 7

Microsoft Windows 8.1

Red Hat Enterprise Linux

(Please contact ADLINK for other OS support)

XMC-G745-R2 (conduction cooled)

Mechanical & Environmental

Form Factor	Standard XMC Form Factor
	143.75 x 74mm (conduction cooled version)
	149 x 74mm (air cooled version)
Operating Temperature	-40°C to +85°C (conduction cooled version, with GPU throttling)
	0°C to +55°C (air cooled version)
Rel. Humidity	95% non-condensing
Shock	Sawtooth 40G, 11ms, each axis, operating (conduction cooled version)
	20g peak, 11ms (air cooled version)
Vibration	15Hz-2KHz, 12Grms, random, each axis, operating (conduction cooled version)
	Random: 0.002g2/Hz from 10 to 2000Hz; Sine: 2G, 5 to 500Hz (air cooled version)
Power	Power input 5V. 3.3V

Safety & EMI

Certifications CE/ FCC Class A

Ordering Information

Model Number	Description/Configuration
XMC GPU Module	
XMC-G745-R2	XMC NVIDIA GT 745M GPU Module, conduction cooled
XMC-G745-A1	XMC NVIDIA GT 745M GPU Module, air cooled

Block Diagram

