AMD Radeon™ E6760 Graphics Board



Standard PCI Express® Add-In Board for Embedded Market Drives up to Six Displays

PCI EXPRESS ADD-IN BOARD
> Single slot
> Fansink or heatpipe
> Multiple display output models

AMD RADEON™ E6760 EMBEDDED GPU
> Discrete GPU with 1 GB GDDR5

EXCEPTIONAL GRAPHICS & VIDEO
> Microsoft® DirectX® 11 capable
> 3DMark® VantageP score of P5870[1]
> 3rd generation video decoder

AMD APP TECHNOLOGY[2]
> 576 GFLOPs SPFP (peak)
> OpenCL™ 1.1[3]

AMD EYEFINITY TECHNOLOGY[4]
> Up to six display outputs

HD3D TECHNOLOGY[5]
> Blu-ray 3D, stereo 3D graphics

EXTENDED AVAILABILITY
> 5 year supply[6]
> Dedicated support

Embedded Applications Benefit from Feature Rich PCI Express® Board

The exceptional feature set of the AMD Radeon™ E6760 embedded discrete graphics processor (GPU) is now available on an industry standard PCI Express® PC add-in board. Featuring advanced 3D graphics, video and compute capabilities, this board is available in a variety of different models with different thermal solutions (passive, active) and display output options (DVI, DisplayPort). Supporting up to six displays with AMD Eyefinity multi-display technology[4], the AMD Radeon™ E6760 graphics board is ideal for digital signage, video wall, arcade and casino gaming systems.

Exceptional Graphics and Compute Capabilities

The AMD Radeon™ E6760 graphics board enables an exceptional entertainment experience with immersive desktop-level 3D graphics and outstanding multimedia features. The advanced 3D graphics engine supports Microsoft® DirectX® 11 technology for superior graphics rendering. The third generation unified video decoder enables picture-in-picture dual HD decode of H.264, VC-1, MPEG4 and MPEG2 compressed video streams. Delivering 576 GFLOPs of peak single precision floating point performance, the AMD Radeon™ E6760 graphics board is ideal for general purpose, graphics processing unit (GPGPU) applications.

Ultimate Display Flexibility with Support for up to Six Displays

To suit different display applications, the AMD Radeon™ E6760 graphics board is offered in different models with different display output interfaces. Boards with (a) dual DVI + mini DisplayPort 1.2, or (b) six mini DisplayPort, or (c) six DVI (with six mini DisplayPort to DVI dongles) display connectors are available. With AMD Eyefinity multi-display technology, the six displays can be driven independently or all together as a single large surface. With the multi-stream transport (MST) capabilities of DisplayPort 1.2, up to three displays can be driven from a single DisplayPort connector.

Designed to Perform, Engineered to Lead, Built to Win

AMD understands the unique requirements of the embedded market. Building on a proven track record of customer-centric innovation, AMD offers the AMD Radeon™ E6760 graphics board with a five year planned product life cycle. With specialized technical support and fast time-to-market, the AMD Radeon™ E6760 graphics board provides system designers with an exciting and innovative solution for their embedded graphics or GPGPU applications.

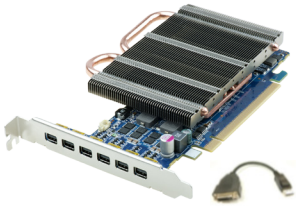
AMD RADEON™ E6760 GRAPHICS ADD-IN BOARD MODELS



Dual DVI + mini DisplayPort



6x mini DisplayPort



6x DVI (w 6x mDP to DVI dongle)

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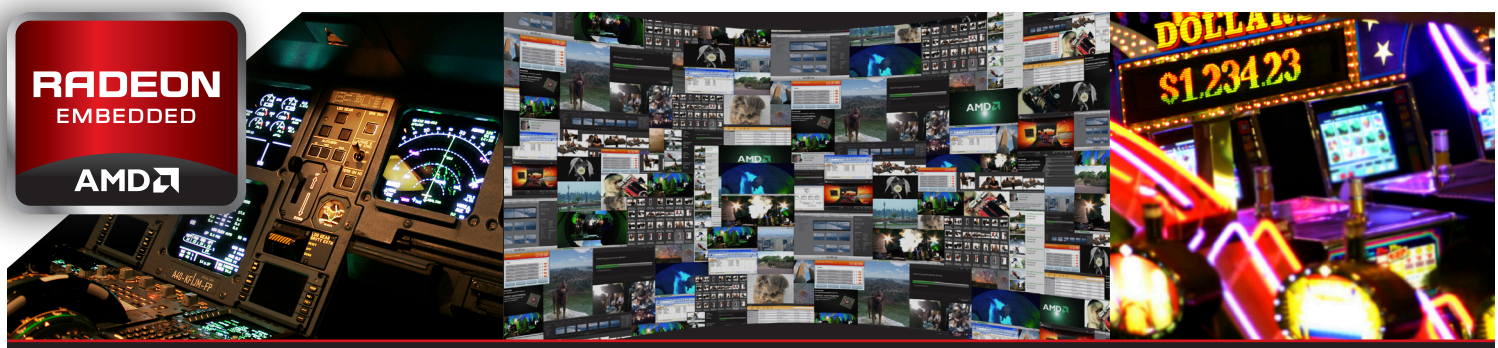

AMD RADEON™ E6760 GRAPHICS BOARD

AMD Radeon™ E6760 Graphics Board Overview

Board dimensions (single slot, L x H mm, nominal)	Dual DVI + mini DisplayPort	Heatpipe 177 x 111 mm	Fansink 177 x 111 mm
	6x mini DisplayPort	Heatpipe 166 x 109 mm	Fansink 166 x 89 mm
	6x DVI	Heatpipe 173 x 111 mm	Fansink 173 x 111 mm
Thermal Design Power[7] (TDP)		Dual DVI + mini DisplayPort: 37W 6x mini DisplayPort: 38W 6x DVI: 42W	
E6760 Graphics Processing Unit			
Process Technology		40 nm	
Graphics Engine / Memory Clock		600 MHz Engine/800 MHz Memory	
Memory		128-bit, 1 GB GDDR5, 51.2 GB/s	
Host Interface		PCI Express® Version 2.1 (x1, x2, x4, x8, x16)	
Graphics		480 shaders 3DMark® VantageP score of P5870 DirectX® 11, Shader Model 5.0, OpenGL 4.1	
Video		3rd Generation Video Decoder H.264, VC-1, MPEG-2, MPEG-4 part 2 decode Blu-ray 3D & stereo 3D graphics with AMD HD3D technology	
Compute		576 GFLOPs/s single precision floating point (peak) AMD APP technology, OpenCL™ 1.1, DirectCompute 11	
Display		Up to 6 displays with AMD Eyefinity multi-display technology	
Audio		Integrated HD audio controller (Azalia) & Codec	
Display Interfaces[8] (max resolution)			
Analog VGA		1x Triple 10-bit RGB DAC, 400 MHz, (2048 x 1536)	
Single / Dual-Link DVI Resolution (w HDCP)		2x single-link DVI, (1600 x 1200) / 1x dual-link DVI, (2560 x 1600), 162 MPixels/s per link	
DisplayPort		2x DisplayPort 1.1a, (2560 x 1600), 4x DisplayPort 1.2, (3840 x 2400)	
Board Model Display Options			
Dual DVI + DisplayPort		1x single-link DVI-D + 1x dual-link DVI-I + 1x mini DisplayPort 1.2a	
6x DisplayPort		2x mini DisplayPort 1.1 + 4x mini DisplayPort 1.2a	
6x DVI		6x single-link DVI-D (with 6x mini DisplayPort –› DVI dongles)	
Software Support			
Windows® XP / Windows® XP Embedded[9]		yes	
Windows Vista® / Windows® 7		yes	
Linux® (x86)		yes	

1. System configuration: 1280x1024, E6760: 600e/800m, 1 GB GDDR5, AMD: AMD Athlon™ II X4 620 @ 2.6GHz, MSI Gigabyte GA-MA770T-UD3P, Corsair XMS3 4GB (2x2GB) 1333MHz 9-9-9-24 (TW3X4G1333C9A G), Windows® 7 64-bit Ultimate.
2. AMD APP technology is a set of technologies designed to improve video quality and enhance application performance. Full enablement of some features requires support for OpenCL™ or DirectCompute (including AMD's Universal Video Decoder (UVD)). Not all products have all features and full enablement of some capabilities and may require complementary products.
3. OpenCL™ certification expected.
4. AMD Eyefinity technology can support multiple displays with some limitations. AMD Embedded Catalyst™ Software driver version 8.81 or higher is required to support AMD Eyefinity multi-display technology. Microsoft® Windows® 7, Windows Vista®, or Linux® is required in order to support more than 2 displays. SLS ("Single Large Surface") functionality requires all display outputs to be driven through a DisplayPort interface with each display set to an identical display resolution.
5. AMD HD3D is a technology designed to enable stereoscopic 3D support in games, movies and/or photos. Additional hardware (e.g., 3D-enabled panels, 3D-enabled glasses/emitter, Blu-ray 3D drive) and/or software (e.g., Blu-ray 3D discs, 3D middleware, games) are required for the enablement of stereoscopic 3D.
6. Part availability is planned for 5 years from date of announcement and subject to change without notice.
7. 3DMark® Vantage FT6, nominal silicon, 25 degC, 6x1920x1080 displays, except for AMD Radeon E6760 2xDVI+mDP graphics board, 3x1920x1080 displays.
8. Not all display interfaces available at same time. Maximum resolution dependent on link bit-rate and available memory bandwidth. Two internal PLLs + an integrated DisplayPort reference clock can support (1) two legacy display outputs + four DisplayPort outputs, (2) one legacy display output + five DisplayPort outputs or (3) six DisplayPort outputs. Legacy display = VGA, DVI, HDMI or LVDS. AMD Eyefinity multi-display technology has certain restrictions on supported display interfaces.
9. Some features not supported (e.g., AMD Eyefinity, DirectX® 11, etc.).

Contact your local AMD distributor for ordering information.

OPN: 100-438060	E6760 1 GB RoHs AES PCIe™ Board 6x mDP w Fan
OPN: 100-438061	E6760 1 GB RoHs AES PCIe™ Board 6x mDP w Heatpipe
OPN: 100-438038	E6760 1 GB RoHs AES PCIe™ Board 6x DP w Fan & mDP–›DP dongles
OPN: 100-438039	E6760 1 GB RoHs AES PCIe™ Board 6x DP w Heatpipe & mDP–›DP dongles
OPN: 100-438020	E6760 1 GB RoHs AES PCIe™ Board 6x DVI w Fan & mDP–›DVI dongles
OPN: 100-438023	E6760 1 GB RoHs AES PCIe™ Board 6x DVI w Heatpipe & mDP–›DVI dongles
OPN: 100-438019	E6760 1 GB RoHs AES PCIe™ Board DVI + Dual-Link DVI-I + mDP 1.2 w Fan
OPN: 100-438042	E6760 1 GB RoHs AES PCIe™ Board DVI + Dual-Link DVI-I + mDP 1.2 w Heatpipe