

ATI Radeon™ E4690 PCI-Express Board



Superior Graphics Performance for the Embedded Market



→ PCI-Express x16 Form Factor

- Dual dual-link DVI-I outputs

→ Superior Graphics for Embedded Systems

- 320 shader processors
- 3DMark06 HDR/SM3.0 2,669*
- 128-bit, 512MB GDDR3

→ Avivo HD Video and Display

- Next generation video decode
- H.264, VC-1, MPEG-2
- Picture-in-Picture

→ Extended Availability

- 5 year supply**
- Dedicated support

Advanced Graphics in an Industry Standard PCI-E x16 Form Factor

The ATI Radeon™ E4690 PCI-Express add-in board delivers exceptional graphics and video performance for embedded applications requiring an industry standard PCI-Express x16 form factor. With dual dual-link DVI-I outputs, it is ideal for demanding applications such as casino gaming, arcade and digital signage. The on-board ATI Radeon E4690 GPU with ATI Avivo™ HD display technology enables the ATI Radeon E4690 PCI-E board to deliver superior video playback fidelity, low CPU utilization and brilliant picture clarity. Boasting ATI CrossFireX™ Multi-GPU technology, up to four E4690 boards can be connected to accelerate 3D graphics capabilities for the ultimate embedded graphics experience.

Exceptional Power Efficiency

Designed to meet the thermal requirements of embedded systems, the ATI Radeon E4690 PCI-E board incorporates ATI's PowerPlay™ intelligent power management technology to enable exceptional performance per Watt. System designers can tune system clocks to meet exacting performance and power consumption targets.

Dual Independent Dual-Link DVI-I Display Outputs

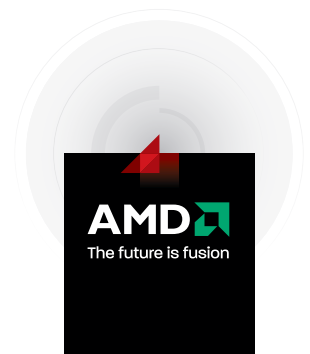
The ATI Avivo™ HD Video and Display Subsystem provides for an immersive, cinematic graphics experience, setting a new standard in visual computing for the embedded market. The second generation unified HD video decoder enables an amazing HD user experience, supporting dual stream video decode and picture-in-picture. Each of the DVI-I output connectors support DVI output up to 2048 x 1536 and VGA output up to 2048 x 1536.

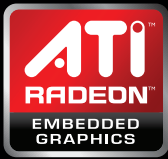
Designed to Perform, Engineered to Lead, Built to Win

AMD understands the unique requirements of the embedded market. Building on a proven track record of customer-centric innovation, AMD offers the ATI Radeon E4690 PCI-Express board with a 5 year product life cycle. With specialized technical support and fast time-to-market, the ATI Radeon E4690 PCI-E board provides system designers with an exciting and innovative graphics solution for their embedded applications.

* System Configuration: 1280x1024, CPU - AMD Athlon II X4 620 (@ 2.6 GHz), MB - Gigabyte GA-MA770T-UD3P, Memory - Corsair XMS3 4GB (2x2GB) 1333MHz, Windows 7 64-bit

** Part availability is planned for 5 years from date of announcement subject to change without notice





ATI Radeon™ E4690 PCI-Express Board

E4690 PCI-Express Board Product Overview	
Board Dimensions	17.5 cm x 11 cm
E4690 Graphics Processing Unit	
Process Technology	55 nm
Graphics Engine / Memory Clock scalable to	600 MHz engine / 700 MHz memory
Memory	128-bit, 512 MB, GDDR3
PCI-Express	V 2.0, (x1, x2, x4, x8, x16)
Display Interfaces*	
Integrated DVI	2 x Single-Link, 2 x Dual-Link
Integrated CRT	2 x 10-bit RGB DAC (RGB + RGB)
Display Specifications	
Maximum DAC Speed	400 MHz
Maximum Single / Dual-Link DVI Resolution	UXGA (1600 x 1200) @ 60 Hz / QXGA (2048 x 1536) @ 60 Hz
Maximum Pixel Clock per DVI Link	162 MPixels / sec
Maximum DisplayPort Resolution	WQXGA (2560 x 1600) @ 60 Hz
Maximum HDMI Resolutions	1920 x 1080p @ 60 Hz, 148.5MHz
Supported YPbPr Outputs	480i, 480p, 576i, 576p, 720p, 1080i, 1080p
Multi-Display Configurations	
Dual Independent Display Support	Yes
	CRT / Single / Dual-Link DVI / HDMI / DisplayPort + CRT / Single / Dual-Link DVI / HDMI / DisplayPort
Features	
ATI CrossFireX™ Multi-GPU Technology	✓
Integrated Spread Spectrum for LVDS	✓
Integrated Spread Spectrum for GPU and Memory Clock	✓
Thermal Sensor	✓
Universal Video Decoder (UVD2)	H.264, VC-1, MPEG-2
Software Support	
Windows XP / Windows XP Embedded	✓
Windows Vista	✓
Windows 7	✓
Linux (x86)	✓
Windows DirectX®	DirectX 10.1
Windows OpenGL®	OpenGL 3.3

*Display interfaces limited by DVI-H connector pin-out. Dual display outputs have independent timing. Display resolution up to 3840 x 2400 per display output, provided available memory or interface bandwidth is not oversubscribed.

Contact your local AMD distributor for ordering information:
OPN: 100-437975

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