



Exceptional performance for power and form factor sensitive embedded applications

| AMD ASIC Family | AMD Radeon™ E8950 |
|-----------------------------|------------------------------|
| Process Technology | 28nm |
| GPU Clock (Max) | 727 MHz |
| Bus Interface | x16 PCle 3.0 |
| Compute Units | 32 (2,048 Shader Processors) |
| Peak SP FLOPs | 3.0 TFLOPs |
| DirectX® Compatibility | 12 |
| Shader Model | 5.0 |
| OpenGL™ | 4.5 |
| OpenCL™ | 2.0 |
| Unified Video Decoder (UVD) | UVD 5 |
| Memory | 8 GB |
| Memory Type | 256-bit, GDDR5 |
| Mem Clock (max) | 1.25 GHz |
| Memory Bandwidth (max) | 160 Gbps |
| Thermal Design Power | 95W |
| Planned Availability | 2018 |
| | |

High Performance Embedded EA8950MF MXM GPU

Delivering high performance graphics or compute for embedded applications. Built in the MXM (Mobile PCI Express Module) Type B form factor with an MXM 3.0 interface, it delivers a small form factor modular GPU solution for a variety of embedded applications.

The integrated AMD Embedded Radeon™ E8950 GPU delivers exceptional graphics, compute, and multiple displays for applications such as highend casino and arcade gaming machines, medical imaging applications, and military/aerospace installations.

Compute Performance: With 32 compute units delivering up to 3.0 TFLOPs peak single-precision floating-point performance and 8 GB of memory on a high speed 256-bit GDDR5 interface, the AMD Embedded Radeon™ E8950 GPU is great for compute intensive applications such as ultrasound and endoscopy, radar, or machine vision systems.

3D Compatibility: The Graphics Core Next advanced 3D graphics engine supports Microsoft® DirectX® 12 and Shader Model 5.0 for superior graphics rendering for gaming applications.

HD Video: AMD's fifth generation unified video decoder (UVD) supports dual-stream high-definition (HD) decode, along with decode support of 4K H.264 and VC-1, and entropy decode of MPEG-2 HD and MPEG-4 Part 2 (DivX® and Xvid) content.



Display Support: Support for up to **six** independent **4K** displays can be delivered through the MXM 3.0 interface and the DisplayPort 1.2 capabilities of the AMD Radeon™ E8950 GPU. Delivering an excellent solution for multi-headed gaming, digital signage, and medical imaging applications.





3x2 Landscape

2x3 Portrait

Compact and Efficient: The small MXM form factor and low power of the EA8950MF when compared to standard PCI Express based GPUs makes it an ideal fit for compact or small form factor embedded applications that require exceptional graphics performance. The modular design enables it to lay parallel to the motherboard and provides a rigid connection suitable for rugged designs.



Modularity and Scalability: The modularity and scalability afforded through the MXM interface enables a single design to support a variety of GPUs in both MXM Type B and Type A form factors. Interface compatibility with the high performance E385MF and low power and cost effective EM91F enables a range of performance, power, and price solutions to easily be offered through a single design.

Long Life: With a planned product life cycle of up to 3 years, the integrated AMD Embedded Radeon™ E8950 processor delivers a stable lifecycle for industrial and embedded products. Avoiding product obsolescence due to a shortage of critical parts enables this GPU solution to fit the demands of long life, durable and high stability applications and also helps to reduce OEMs development costs by avoiding frequent product revisions. The EA8950MF MXM module available through HTA is planned to be available and supported through 2018 or longer under contract.



© 2017 Harmony Technical Associates. All rights reserved. The HTA logo is a trademark of Harmony Technical Associates, Inc. AMD and Radeon are trademarks of Advanced Micro Devices, Inc. PCIe and PCI Express are registered trademarks of PCI-SIG. Microsoft and DirectX are registered trademarks of Microsoft Corporation in the U.S. and/or other jurisdictions. 3DMark is a registered trademark of Futuremark Corporation. OpenCL is a trademark of Apple Inc. used by permission by Khronos. All other company and/or product names are for informational purposes only and may be trademarks and/or registered trademarks of their respective owners.