



Balanced power and performance for form factor sensitive embedded applications

AMD ASIC Family	AMD Radeon™ E8870
Process Technology	28nm
GPU Clock (Max)	1,000 MHz
Bus Interface	x16 PCle 3.0
Compute Units	12 (768 Shader Processors)
Peak SP FLOPs	1.5 TFLOPs
DirectX® Compatibility	12
Shader Model	5.0
OpenGL™	4.5
OpenCL™	2.0
Unified Video Decoder (UVD)	UVD 4.2
Memory	4 GB
Memory Type	128-bit, GDDR5
Mem Clock (max)	1.5 GHz
Memory Bandwidth (max)	96 Gbps
Thermal Design Power	75W
Planned Availability	2021

Balanced Power and Performance Embedded E385MF MXM GPU

Delivering a balance between high performance graphics, or compute, and power consumption 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™ E8870 GPU delivers high graphics, compute, and multiple display support for applications such as main-stream casino and arcade gaming machines, medical imaging applications, and military/aerospace installations.

Compute Performance: With 12 high performance compute units delivering up to 1.5 TFLOPs peak single-precision floating-point performance and 4 GB of memory on a high speed 128-bit GDDR5 interface, the AMD Embedded Radeon™ E8870 GPU is great for compute intensive applications such as mid-range ultrasound and UAV applications.

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 fourth generation unified video decoder (UVD) supports dual-stream high-definition (HD) decode support of 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, HDMI and DVI capabilities of the AMD Radeon™ E8870 GPU. Delivering an excellent solution for multi-headed gaming, digital signage, and medical imaging applications.







3x2 Landscape

Compact and Efficient: The small MXM form factor and low power of the E385MF, with a thermal design power of less than 75W, makes it an ideal fit for compact or small form factor embedded applications that require high 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 very high performance EA8950MF 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 5 years, the integrated AMD Embedded Radeon™ E8870 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 E385MF MXM module available through HTA is planned to be available and supported through 2021 or longer under contract.



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