

The MSI logo is positioned in the top right corner of the page. The background of the entire page is a futuristic, blue-toned digital landscape with a grid pattern on the floor and ceiling, and a glowing globe in the center. Various images are floating in the air, including a golf ball on a green, a laptop, a house, a globe, and abstract data visualizations.

**msi**<sup>®</sup>

# Media Streaming Server

## M1000 Series

M1000 series is innovated as a media streaming server which support 2 node computing system and integrate 4 GPU devices to be a highly flexible GPUs configuration to empower streaming processing. Each node built in Intel<sup>®</sup> Xeon<sup>®</sup> E3-1500 v5 series CPU and C236 PCH to raise performance which is help media streaming providers for enterprise, education and entertainment areas.

### MSI M1000 Series



## Introduction

M1000 series empower media providers to support real-time and multi-stream HD and UHD content directly as well as live broadcasting and video conferencing. Each node equips up to four 2.5" HDDs for maximum capacity or additional content repository. State-of-the-art encoding, decoding and transcoding capability supported by Intel® Xeon® E3-1500 v5 series CPU and C236 PCH with flexible GPU module add-on option. Each CPU delivers up to 18 AVC or 8 HEVC streams at 1080p FPS or 2 HEVC streams at 4K 30 FPS.

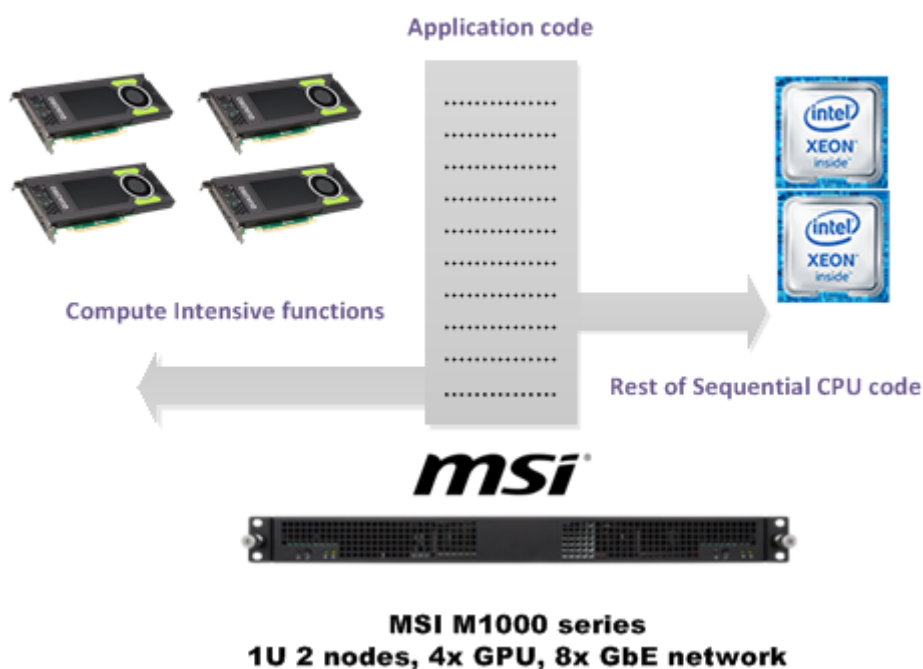
### Key Features

- ✓ **2 node High density system** – 2 node design can provide 2 set of media system in one 1U server which could greatly save room space to construct a higher production in limited resource.
- ✓ **Great computing and Graphic processing** – M1000 series built in Intel® Xeon® Processor E3-1500 v5 series which has high processor frequency and cache (E3-1585 v5 ,8M Cache, 3.50 GHz). Especially integrated Intel® Iris™ Pro Graphics P580 (Max Dynamic Frequency 1.15 GHz, 64 GB) to support high quality video experience. The integrated Iris™ Pro Graphics P580 has advanced technology like Intel® Flexible Display Interface (Intel® FDI), Intel® Clear Video Technology, Intel® Quick Sync Video, etc. Each node can support 3 displays and 72 execution unit.
- ✓ **Low latency transmission** – Considering the heavy loading of live streaming network, M1000 has 8x 1GbE LAN ports to satisfy simultaneous high speed transmissions to meet real-time live service.


- ✓ **4 GPU accelerators** – Each node has Optional x16/x8+x8 PCIe slot for GPU acceleration modules to accommodate a variety of demand and application like nVidia, Intel and AMD solutions. By adding GPU accelerators to provide harness parallel processing and deliver performance augmentation in file streaming, video compression and any applications that require multiple iterations. GPU accelerators optimize CPU’s serial processing speed by taking over iterative and compute-intensive tasks. The GPU acceleration works as shown in figure 1.

Figure 1. GPU Acceleration works

### GPU Acceleration Works



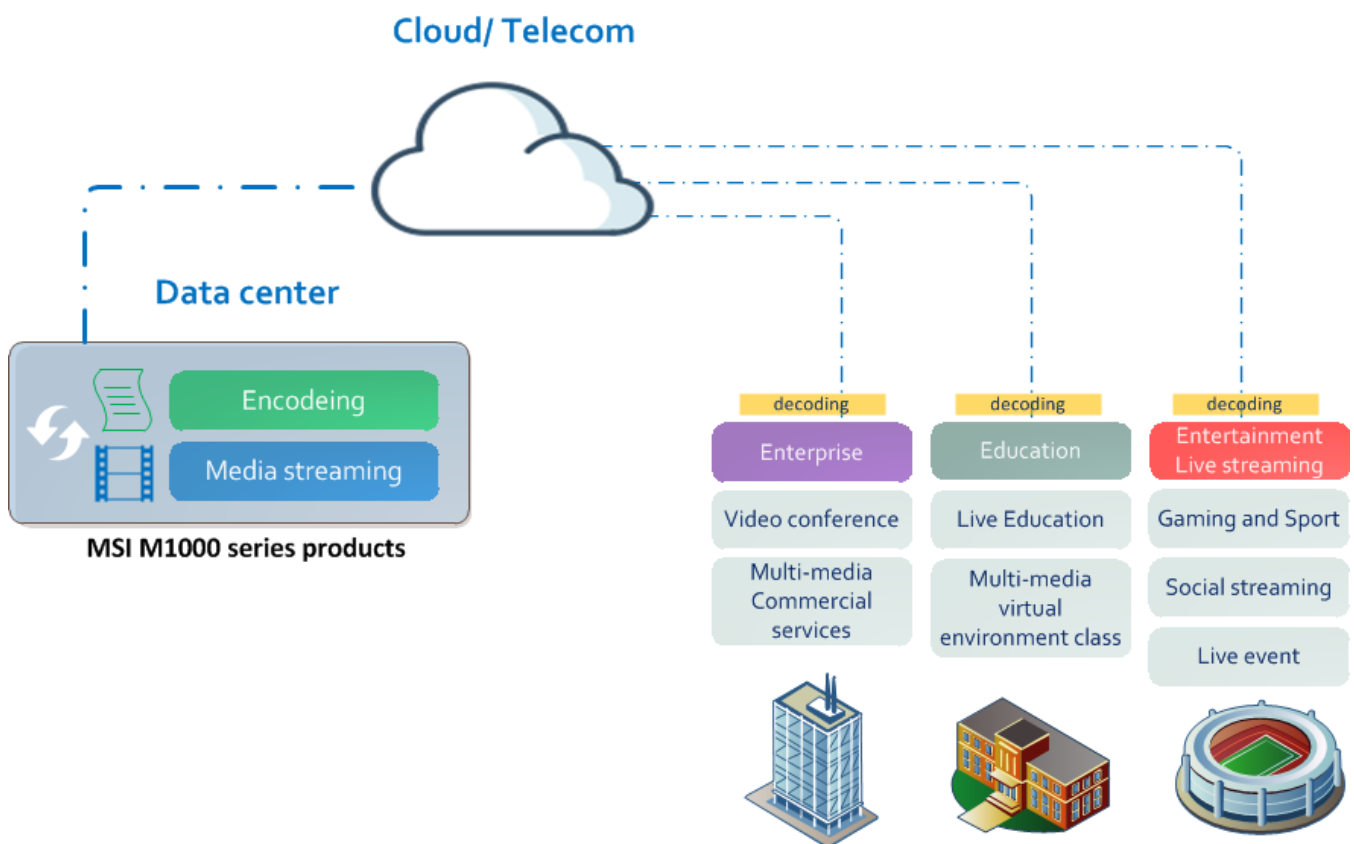
M1000 series platform unit each consists of two nodes. Below specification is shown with two nodes.

Model	<b>M1000</b> 
Form factor	1U
Dimensions	W(430mm) x H(43.6 mm )x D(700mm)
Color	Black
CPU	Intel® Xeon® E3-1500 v5 series
PCH	Intel® C236
Memory	8 x DDR4 ECC SODIMM, 1866/2133MHz
Storage	4 x 2.5" HDDs 2 x M.2 (internal OS)
I/O	LAN Modules: 8 x GbE LAN (2 x Mgmt share NIC)  Front IO: 4 x Buttons (Power/ Reset ) 4 x Status LEDs (Power/ Reset ) (2 x for each node)  Rear IO: 8 x GbE LAN (2 x Mgmt share NIC) 4 x USB 3.0 2 x HDMI 4 x Audio ( Line-in/Line-out)
Graphic	2 x Intel® Xeon® E3-1500 v5 series integrated 4 x GPU modules optional
Expansion	2 x PCIe 3.0 x16 (x16 or x8) 2 x PCIe 3.0 x8 ( x8 )
Security	TPM Header
Power supply	2 x Single Flex ATX Power, 500W PSU

## M1000 series typical application

Global media applications are expanding such as Facebook and Netflix. This growing trend is driving the need for more media processing in the network and cloud. Efficient video transcoding and streaming help to optimize network bandwidth usage while improving worldwide communication. Improved communication across various fields further boost collaboration between teams, effective communication channel, maintaining a central information archive, reducing transmission cost and time, and real-time access to information. There lie enormous opportunities for media streaming server including entertainment business, education work and cloud info business, etc. Many benefits such as video communication, live webcasts, on-demand meeting recording, executive presentations, training, and product information continue to allow overall industry to flourish.

Figure 2. M1000 series typical application



For more information, please visit our website.  
<http://server.msi.com>

