

PCIE-7217

High Density Cloud Gaming Blade

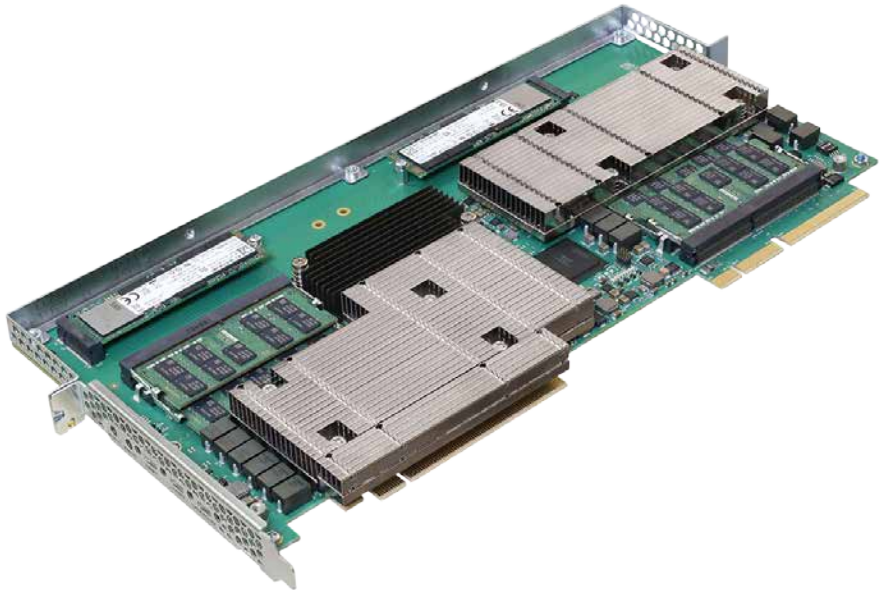
Preliminary Data Sheet

High-Density off-the-shelf dual-microserver PCIE card optimized for cloud gaming applications

- **Two independent processor complexes based on the Intel® Core™ i7-8705G with integrated Radeon™ RX Vega M GL GPU**
 - 4-core Core i7 processor
 - Integrated Intel® HD Graphics 630
 - Integrated Radeon™ RX Vega M GL GPU
- Up to 32GB DRAM per processor
- One M.2 SSD per processor
- Optional up to 512GB soldered-down SSD per processor
- MaxCore™ PCIe Full-Length (312mm) x Extended Full-Height (159.6mm) form factor
- 3rd party ecosystem of gaming platform software

The PCIE-7217 has been designed specifically to work in Artesyn's 4U MaxCore™ platform, taking advantage of special features like a second connector for cable-free auxiliary power and integrated 1G Ethernet for a management network.

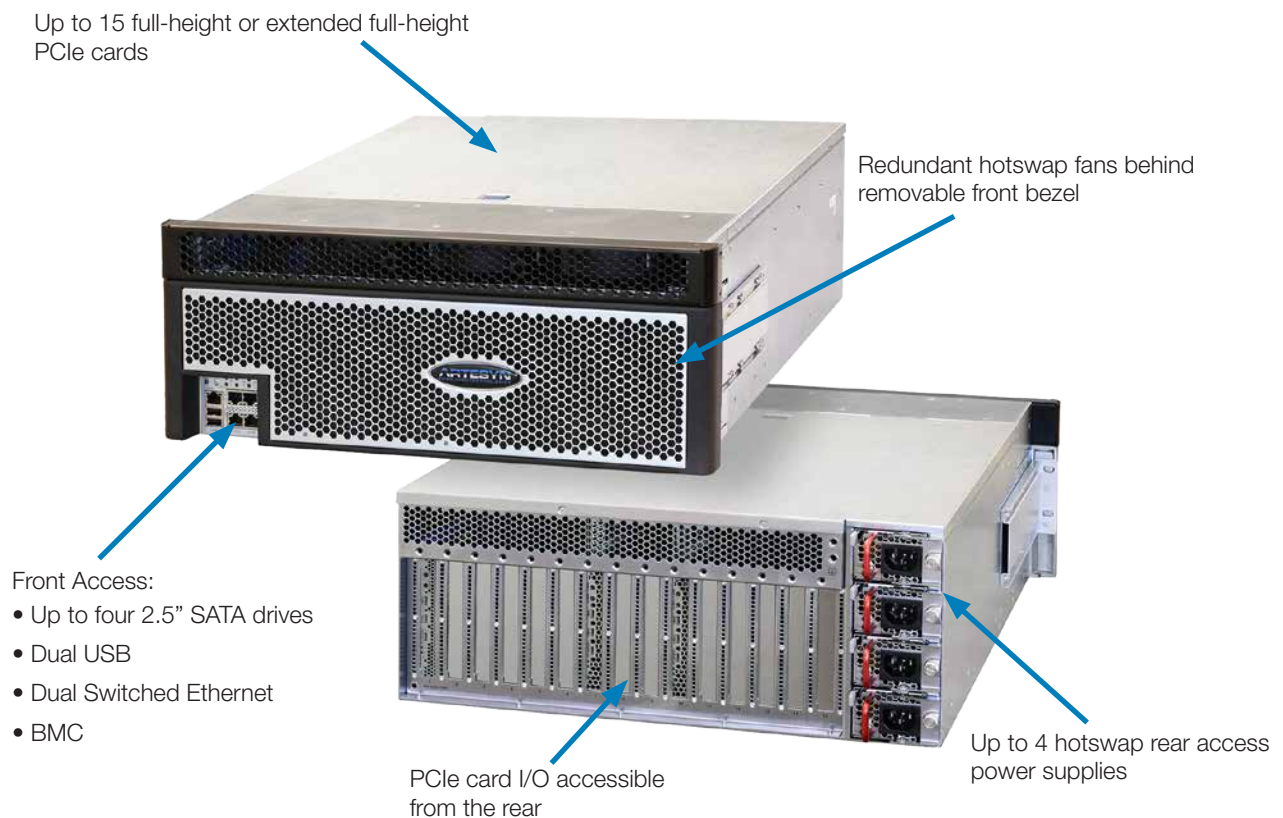
Built into the Intel® Core™ i7-8705G are two GPUs; the Intel® HD Graphics 630 and the AMD Radeon™ RX Vega M GL. This CPU with dual-GPU architecture allows the PCIE-7217 card to simultaneously service multiple gamers at different resolutions. Each processor complex has a dedicated M.2 for local storage of large game libraries. Each processor also optionally has up to 512GB soldered-down SSD for OS or other uses.



MaxCore™ Host Platform

The PCIE-7217 is designed specifically to operate in Artesyn's MC4100 4U MaxCore™ platform providing maximum gaming density

- Up to 15 PCIE-7217 cards for a total of 30 Intel Core i7-8705G processor complexes or a combination of 15 Artesyn or standard 3rd party PCIe cards
- PCIe fabric that can operate as a single domain or be split into multiple PCIe domains
- A second edge connector in each slot that accommodates features unique to many of Artesyn's PCIe cards
 - Cable-less auxiliary power
 - Embedded Gigabit Ethernet network to each slot
 - Additional I/O such as SATA or USB that can be routed from the Slot 1 or Slot 15 PCIe cards to the front panel of MaxCore™ platform
- Up to four 1100W AC power supplies
- Redundant hotswap fans
- 4U x 508mm for mounting in a standard 19" rack



Application: Cloud Gaming

The PCIE-7217 is designed to be integrated in an Artesyn MaxCore™ chassis and deployed in carrier or hospitality network data centers. Optimal performance is achieved when deployed in a low-latency network such as fiber-to-the-home or 5G wireless networks.

- Each processor complex on the PCIE-7217 enables:
 - High-performance 4-core Core i7 CPU with the capability of running multiple copies of the latest AAA games
 - High-performance integrated Radeon RX Vega GPU for single-chip graphics rendering and video compression
 - Integrated Intel® HD Graphics for additional rendering and video compression of classic and retro games

Carrier or Hospitality Network Datacenter



Multiple concurrent users

- Different resolutions
- Different games
- Monthly or per-use subscription

Low Latency End-to-End Network

- Gamer actions displayed in 10s of milliseconds

Compressed Video (3-16 Mbps)

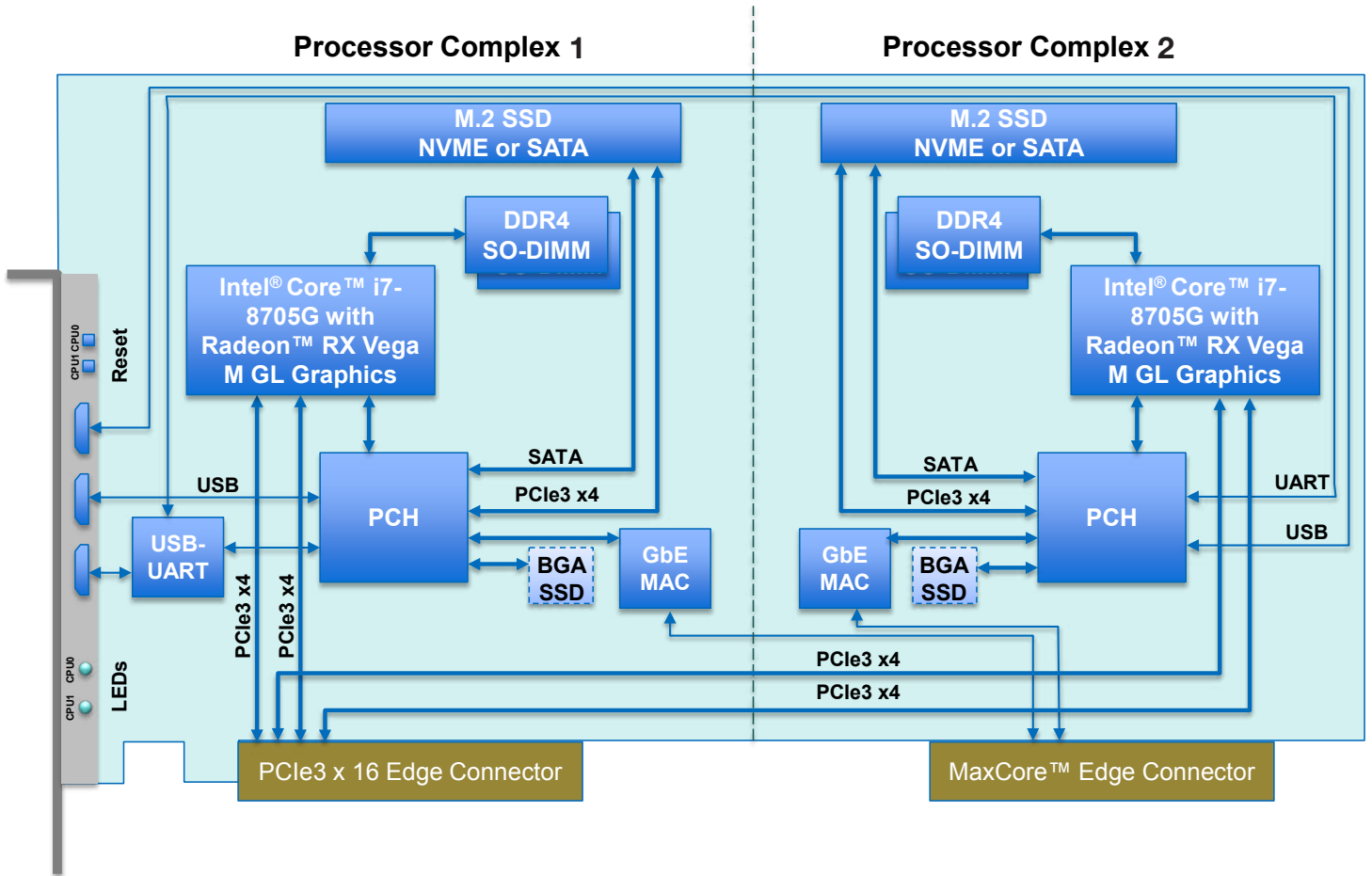
Gamer Actions Management Info



Thin Client at End User

- Manage customer
- Decompress video
- Send gamer actions

PCIE-7217 Hardware Block Diagram



Processor

- Two independent processor complexes
- Intel® Core™ i7-8705 (formerly “Kaby Lake G”) at 3.1 GHz
 - 4-Core Core i7 processor
 - Integrated Intel® HD Graphics 630 GPU
 - Integrated Radeon™ RX Vega M GL GPU with 20 processing units
- Skylake-H PCH I/O hub
- Embedded headless EDID dongle for streaming applications

Memory

- Dual DDR4 SO-DIMM sockets per processor with up to 32GB DRAM installed per processor
- Dedicated M.2 SSD per processor
 - Supports NVME or SATA SSDs
 - Accepts 110mm or 80mm M.2 modules
- Optional up to 512GB soldered-down BGA SSD

PCIe

- Dual PCIe3 x 4 from each processor complex to PCIe3 x 16 card edge connector

Front Panel

- USB connections to each of the 2 processor complexes
- USB/UART connector with USB-UART bridge to support console access to both processor complexes
- Indicator LEDs for each processor
- Reset for each processor

Other I/O

- Connections from each PCH to the unique MaxCore™ edge connector
 - 2 x SATA
 - 1x PCIe x1
 - 2 x USB
 - 1 x UART (supports SOL via BMC)
- 1 x GbE from each processor complex to the unique MaxCore edge connector

Form Factor

- MaxCore™ PCIe Full-Length (312mm) x Extended Full-Height (159.6mm)

Power

- Estimated 150W typical

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