

# MCM-9000 CERTIFIED SERVERS GUIDE

(Recommended Short List)

The MCM-9000 makes use of standard Intel CPU based servers. The monitoring capacity depends on the selected CPU model and memory setup.

Hardware capacity is calculated in units of SD channels. Each certified server receives “x” amount of SD units, for example: Intel Dual Xeon Gold 6140 has 310 SD Units.

$$\text{Required Capacity} = (\# \text{ SD channels}) \times 1 + (\# \text{ HD channels}) \times 5 + (\# \text{ mosaic outputs}) \times 20$$

- Monitoring of each SD channel requires 1 SD unit
- Monitoring of each HD channel requires 5 SD units
- Monitoring of each Contribution HD channel requires 10 SD units
- Monitoring of each HEVC channel requires double the points above
- Monitoring of each UHD H.265 channel requires 60 SD units
- Monitoring of each Uncompressed 1.5G or 3.0G channel requires 5 or 10 SD units respectively
- Creation of each **\*\*Different\*\*** H.264 or Uncompressed mosaic requires 20 SD units for HD and 40 SD units for UHD



Intel Dual Processors	
Intel CPU	SD Units
<b>Silver Dual Xeon</b>	
Silver 4114	160
<b>61XX Gold CPU's</b>	
Gold 6126	230
Gold 6132	270
Gold 6140	310
Gold 6150	360
Gold 6154	400
<b>62XX Gold CPU's</b>	
Gold 6226	230
Gold 6240	335
Gold 6248	360
Gold 6254	400



### Memory Setup:

*Xeon Gold 61XX platform:*

Memory Types & Speed: DDR4 2666MHz  
**12 identical memory modules** (6 per CPU), each on a different memory bus connected directly to the CPU.

### Memory Setup:

*Xeon Gold 62XX platform:*

Memory Types & Speed: DDR4 2933MHz  
**12 identical memory modules** (6 per CPU), each on a different memory bus connected directly to the CPU.

### **Mellanox Network cards – For High Bandwidth connectivity**

- MCX516A-CDAT ←Connect-x 5 - Dual port 100G QSFP28 (supports 10/25/40/50/100G) (PCIE 4.0)
- MCX516A-CCAT ←Connect-x 5 - Dual port 100G QSFP28 (supports 10/25/40/50/100G)
- MCX515A-CCAT ←Connect-x 5 - Single port 100G QSFP28 (supports 10/25/40/50/100G)
- MCX512A-ACAT ←Connect-x 5 - Dual port 25G SFP28 (supports 10/25G)



Capacity calculations are based on dual processor platforms with an optimal memory installation. The number of modules is critical (regardless of memory size.) It is highly important that the setup be as stated above and that memory modules be identical. Other memory setups may result in capacity/performance reduction.

Other Intel CPU modules could be supported, however, please consult with TAG's Support Department ([support@tagvs.com](mailto:support@tagvs.com)) for approval of the CPUs and Network Cards, prior to any hardware purchase.