	Tower	Small Form Factor	Micro
SATA 2.0	1	1	0
SATA 3.0	3	2	1(HDD)
M.2 Socket 3 (for SATA / NVMe SSD)	1	1	1
M.2 Socket 1 (for WiFi/BT card)	1	1	1
3.5" Drives:			
3.5 inch 500 GB 7200 RPM Hard Disk Drive	Υ	Υ	N/A
3.5 inch 1 TB SATA 7200 RPM Hard Disk Drive	Υ	Υ	N/A
3.5 inch 2 TB SATA 7200 RPM Hard Disk Drive	Υ	Υ	N/A
2.5" Drives:			
2.5 inch 500 GB SATA 5400 RPM Hard Disk Drive	Υ	Υ	Υ
2.5 inch 500 GB SATA 7200 RPM Hard Disk Drive	Υ	Υ	Υ
2.5 inch 500GB 7200 RPM FIPS Self Encrypting Opal 2.0 Hard Disk Drive	Υ	Υ	Υ
2.5 inch 1 TB SATA 7200 RPM Hard Disk Drive	Υ	Υ	Υ
2.5 inch 2 TB 5400 RPM SATA Hard Disk Drive	Υ	Υ	Υ
2.5 inch 256 GB SATA Class 20 Solid State Drive <sup>1</sup>	Υ	Υ	Υ
2.5 inch 512 GB SATA Class 20 Solid State Drive <sup>1</sup>	Υ	Υ	Υ
2.5 inch 1 TB SATA Class 20 Solid State Drive <sup>1</sup>	Υ	Υ	Υ
M.2 SSD:			
M.21TB PCIe Class 40 Solid State Drive	Υ	Υ	Υ
M.2 256 GB PCIe NVMe Class 40 Solid State Drive	Υ	Υ	Υ
M.2 512 GB PCle NVMe Class 40 Self Encrypting Opal 2.0 Solid State Drive	Υ	Υ	Υ
M.2 512 GB PCIe NVMe Class 40 Solid State Drive	Υ	Υ	Υ
M.2 128 GB PCIe NVMe Class 35 Solid State Drive	Υ	Υ	Υ
M.2 256 GB PCIe NVMe Class 35 Solid State Drive	Υ	Υ	Υ
M.2 512 GB PCle NVMe Class 35 Solid State Drive	Υ	Υ	Υ

<sup>&</sup>lt;sup>1</sup>2.5 Inch Solid State Drives are only available as a secondary storage option and can only be paired with a M.2 Solid State Drive as the Primary Storage Device.

## **System board connectors**

(i) NOTE: See Detailed Engineering Specifications for maximum card dimensions.

Table 9. System board connectors

	Tower	Small Form Factor	Micro
PCle x16 Slot(s) <sup>1</sup>	1	1	0
PCle x16 (wired x4) Slot(s) <sup>2</sup>	1	1 x4 open ended	0
PCle x1 Slot(s) <sup>2</sup>	2	0	0
Serial ATA (SATA) <sup>3</sup>	4	3	1
M.2 Socket 3 <sup>4</sup> (for SSD)	1 - 2280/2230	1 - 2280/2230	1 - 2280/2230
M.2 Socket 1 <sup>5</sup> (for WiFi/BT card)	1 - 2230	1 - 2230	1 – 2230

## **External ports and connectors**

NOTE: Tower supports Full Height (FH) cards and Small Form Factor supports Low Profile (LP) cards. See chassis diagrams section for port/connector locations.

Table 10. External ports and connectors

	Tower	Small Form Factor	Micro
USB 2.0 (SmartPower On)	2 Rear	2 Rear	0
USB 3.1 Gen 1 (Front/Rear/Internal)	1/4/0	1/4/0	0/3/0
USB 3.1 Gen 1 (SmartPower On)	0	0	1 Rear
USB 3.1 Gen 1 PowerShare	0	0	1 Front
USB 2.0 port	1 Front	1 Front	0
USB 2.0 PowerShare (2A max)	1 Front	1 Front	0
USB 3.1 Gen 2 Type C with PowerShare	1 Front	1 Front	1 Front
Serial port	Optional	Optional	2 Options: #1 - Serial port in option port, #2 Serial & PS/2 via fan out cable
Network Connector (10/100/1000 RJ-45)	1 Rear	1 Rear	1 Rear
PS/2	Optional	Optional	Optional
Video:			
DisplayPort 1.2	2 Rear (3rd optional video out: HDMI 2.0, DP, VGA, USB Type C (with DP Alt Mode))	2 Rear (3rd optional video out: HDMI 2.0, DP, VGA, USB Type C (with DP Alt Mode))	2 Rear (3rd optional video out: HDMI 2.0, DP, VGA, USB Type C (with DP Alt Mode))
Support for Dual 50 W Graphics	Yes	N/A	N/A
Support for Dual 25 W Graphics	N/A	Yes	N/A
Audio:			
Rear panel Mic-in/Line-in, Line-out	1 x Line-out	1 x Line-out	N/A
Universal Audio Jack	1 x UAJ	1 x UAJ	1 x UAJ and 1 x Line-out

## **Graphics and Video Controller**

NOTE: Tower supports Full Height (FH) cards and Small Form Factor supports low profile (LP) cards.

**Table 11. Graphics and Video Controller** 

	Tower	Small Form Factor	Micro
Intel UHD 630 Graphics [with 9th Generation Core i3/i5/i7 CPU-GPU combo]	Integrated on CPU	Integrated on CPU	Integrated on CPU
Intel UHD 610 Graphics [with 9th Generation Pentium CPU-GPU combo]	Integrated on CPU	Integrated on CPU	Integrated on CPU

## **Enhanced Graphic/Video Options**

<sup>&</sup>lt;sup>1</sup> PCle x16 Slots (Support Standard Rev 3.0)

<sup>&</sup>lt;sup>2</sup> PCle x16 (wired x 4), PCle x1 Slots, M.2 Slot (Support Standard Rev 3.0)

<sup>&</sup>lt;sup>3</sup> Serial ATA (Tower/Small Form Factor support one Gen2 port for ODD and the rest of the ports support Gen3)

<sup>&</sup>lt;sup>4</sup> M.2 Socket3: Support SATA & PCle interface

<sup>&</sup>lt;sup>5</sup> M.2 Socket1: Support Intel CNVi or USB2.0/PCle