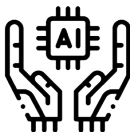


# TARCHIA

## COMPACT AI PLATFORM FOR CRITICAL INDEPENDENT SYSTEMS



Artificial Intelligence technology has moved from science fiction to business fact.

As AI & Deep Learning capabilities rapidly evolve, it's vital to scale from experimentation to implementation, optimized for the application specific market targeted by today's leading edge OEM's.

Deep learning relies on GPU acceleration, both for training and inference. **Tarchia** was designed to meet the rigorous demands of industrial applications in Virtual Reality, Machine Vision, Deep Learning and Control to create Smart Machines.

With tightly integrated Intel® Architecture for the control plane and NVIDIA® Pascal™ data plane architecture delivering 2560 CUDA® cores, **Tarchia** delivers innovative GPU-Accelerated platforms, so AI data scientists, AR/VR multi-media developers, & Smart Machine builders can focus on building solutions and gathering insights from processes.



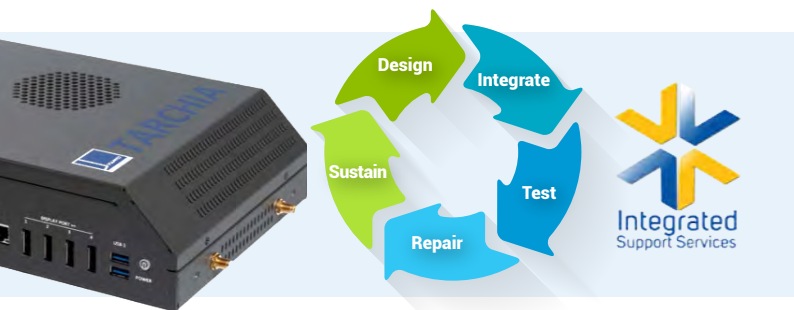
### FEATURES:

- ✓ HPC form factor (7.3" x 2.7" x 10") "bookshelf" mountable
- ✓ Kaby Lake Quad core Intel® processor @ 3.0 / 3.7GHz
- ✓ Intel® HD Graphics 630 with DP++ 4096x2304@60Hz Support (2 Ports when MXM not populated)
- ✓ NVIDIA® GeForce® GTX1080 MXM graphics with 2560 CUDA® cores, 4 DP++ ports
- ✓ M.2 (2280) and 2.5" SATA III (6Gb/s) device storage bay (SSD/HDD) support
- ✓ 24VDC Phoenix®-Style 4-pin power input @ 300W
- ✓ State-of-the-Art heat pipe cooling for processor & MXM graphics slot
- ✓ M.2 slot for optional 802.11a/b/g/n/ac + Bluetooth 4.1
- ✓ 2 x external SMA antenna connectors
- ✓ Six (6) RJ-45 GbE LAN ports
- ✓ Two (2) USB 3.0 Type-A ports
- ✓ I/O Ingress/Egress from only one side of the chassis, "top", when vertically mounted



## SPECIFICATIONS:

<b>CPU</b>	Intel® Core™ i7-7820EQ (KBL-H) Quad-core processor @ 3.0/3.7 GHz	<b>DISPLAY SUPPORT</b>	Quad (4x) Dual Mode DisplayPort (DP++) 4 x GTX 1080 when installed and dual ports switched automatically from GPU to CPU when GTX1080 not populated
<b>CHIPSET</b>	Intel® QM175		
<b>MEMORY</b>	16 GB dual-channel DDR4 SO-DIMM preinstalled	<b>POWER</b>	1 x Power button, 1 x Green LED for power-on indication, collocated with switch. Power Input 24V (+/- 10%) via Phoenix®-Style 4-pin pluggable terminal block 300 W @ 80% Max CPU/GPU Performance
<b>GPU/GRAPHICS</b>	NVIDIA® GeForce® GTX 1080 Microsoft DirectX® 12 compatible MXM3.0 Type B NVIDIA PhysX® GeForce CUDA™ technology GPU over-clocking Support for up to up to 4 active displays Support NVIDIA® Surround View Fixed version of HW, VBIOS and GPU Driver support	<b>ENVIRONMENTAL</b>	-20°C to +55°C with >0.5m/s airflow (IEC60068-2) 40° C @ 95%, Non-Condensing, operating; 60° C @ 95%, Non-Condensing, non-operating Shock with SSD: 30g, IEC 60068-2-27, half sine, 11 ms duration Vibration with SSD: 5 grms , IEC 60068-2-64, random, 10~500 Hz , 1hr/axis
<b>WIRELESS SUPPORT</b>	2 x External antenna connector M.2 slot to support the following option: 802.11a/b/g/n/ac + Bluetooth 4.1	<b>MECHANICAL</b>	Flat black colour. Private branding or White labeling optional Weight: 2.3 kg Dimensions: 185 mm (W) x 255 mm (D) x 68 mm (H) 7.3" x 10" x 2.7" Desktop or Bookshelf/Wall-mounting, other mounting (VESA, DIN Rail) by request
<b>STORAGE</b>	M.2 (2280), SATA3.0, 6.0GB/s SATA 3.0, 6.0GB/s 2.5" SSD bay	<b>CERTIFICATIONS</b>	UL, FCC Class A
<b>OPERATING SYSTEM</b>	Windows 10 Pro, Windows 10 Enterprise LTSC, Windows Server 2016 or Linux		
<b>ETHERNET</b>	6 x RJ-45 GbE LAN port		
<b>USB</b>	2 x USB 3.0 Type-A port		



### TEST STANDARDS:

MIL-STD-810	ASTM B117
MIL-S-901	ASTM G53
MIL-STD-167	ASTM D4169
RTCA DO-160	UN TDG

