

APOGEAN WORKSTATION IS4T-W1-A



CPU	Intel® Socket 1200 for 10th Gen Intel® Xeon® Core™, Pentium® Gold and Celeron® Processors * Supports Intel® 14 nm CPU Supports Intel® Turbo Boost Technology 2.0 and Intel® Turbo Boost Max Technology 3.0** **Intel® Turbo Boost Max Technology 3.0 support depends on the CPU types.
Chipset	Intel® W480
Memory	4 x DIMM, Max. 128GB, DDR4 4800(O.C.)/4600(O.C.)/4500(O.C.)/4400(O.C.)/4266(O.C.)/4133(O.C.)/4000(O.C.)/3866(O.C.)/3733(O.C.)/3600(O.C.)/3466(O.C.)/3400(O.C.)/3333(O.C.)/3300(O.C.)/3200(O.C.)/3000(O.C.)/2933(O.C.)/2800(O.C.)/2666/2400/2133 MHz Non-ECC, Un-buffered Memory * Dual Channel Memory Architecture Supports Intel® Extreme Memory Profile (XMP) OptiMem II * 10th Gen Intel® Core™/i9/i7 CPUs support 2933/2800/2666/2400/2133 natively ECC Memory (ECC mode) support varies by CPU.
Thunderbolt	2 x Intel® Thunderbolt™ 3 ports(TypeC™) support DisplayPort and Thunderbolt™ video outputs Supports DisplayPort 1.4/ with max. resolution 7680/ x 3840/@ 60 Hz* * VGA resolution support depends on VGA cards' resolution. Data transfer rate up to 40 Gbps Daisy-chain up to 12 Thunderbolt devices Up to 5V/3A, 15W charging support
Graphic	Integrated Graphics Processor 1 x DisplayPort 1.4 ** 1 x HDMI 1.4b *Graphics specifications may vary between CPU types. **Support DisplayPort 1.4 with max. resolution of 4096 x 2304 @60Hz. Please refer to www.intel.com for any update.
Multi-GPU Support	Supports AMD 3-Way CrossFireX™ Technology
Expansion Slots	Intel® 10th Gen Processors 2 x PCIe 3.0 x16 (x16 or dual x8) *1 Intel® W480 Chipset 1 x PCIe 3.0 x16 (x4 mode) *2 2 x PCIe 3.0 x1
Storage	*Total supports 2 x M.2 slots Internal 3.5" x 1 and 2.5" x 4" Intel® W480 Chipset : 1 x M.2 Socket 3, with M key, type 2242/2260/2280/22110 storage devices support (SATA & PCIe 3.0 x 4 mode)*3 1 x M.2 Socket 3, with M key, type 2242/2260/2280/22110 storage devices support (SATA & PCIe 3.0 x 4 mode)*4 Support Raid 0, 1, 5, 10 Intel® Rapid Storage Technology supports Intel® Optane™ Memory Ready
LAN	Intel® I225-LM 2.5Gb Ethernet Realtek® RTL8117
Audio	Realtek® ALC S1220A 8-Channel High Definition Audio CODEC - Supports : Jack-detection, Multi-streaming, Front Panel Jack-retasking, Front Panel MIC Jack-retasking, up to 24-Bit/192kHz playback - High quality 120 dB SNR stereo playback output and SNR recording input Audio Feature : - Optical S/PDIF out port(s) at back panel - Audio Shielding - Dedicated audio PCB layers - Premium Japanese audio capacitors - Audio Cover - Unique de-pop circuit * Due to limitations in HDA bandwidth, 32-Bit/192kHz is not supported for 8-Channel audio.

USB Ports	Intel® Thunderbolt™ 3 Controller : 2 x USB 3.2 Gen 2 port(s) (USB Type-C™) Rear USB Port (Total 6) 4 x USB 3.2 Gen 2 port(s)(4 x Type-A) 2 x USB 3.2 Gen 1 port(s)(2 x Type-A) Front USB Port (Total 7) 1 x USB 3.2 Gen 1 port(s)(1 x USB Type-C™) 2 x USB 3.2 Gen 1 port(s)(2 x Type-A) 4 x USB 2.0 port(s)
Operating System Support	Windows® 10 64-bit
Software Features	Armoury Crate AI Suite 3 Performance And Power Saving Utility - TPU - EPU - Digi+ VRM - EZ update - Fan Xpert 4 - Turbo app IT Management software supported AI Charger WinRAR UEFI BIOS
Other Features	Thermal Solution - Aluminum heatsink design - Procool II - SafeSlot
Out-of-band Management	- BIOS Update Indicator LED - LAN Initialization Indicator LED
Back I/O Ports	2 x Thunderbolt 3 ports TypeC™ 2 x DisplayPort IN ports for Thunderbolt™ 3 1 x HDMI 1 x LAN (RJ45) port(s) 1 x LAN (2.5G) port(s) 4 x USB 3.2 Gen 2 Type-A 2 x USB 3.2 Gen 1 Type-A 1 x Optical S/PDIF out 5 x Audio jack(s)
Internal I/O Ports	1 x CPU Fan connector(s) 1 x CPU OPT Fan connector(s) 3 x Chassis Fan connector(s) 1 x AIO_PUMP connector 1 x USB 3.2 Gen 1 (up to 5Gbps) connector(s) support(s) additional 1 USB 3.2 Gen 1 port(s) (20-pin, Type-C) 1 x USB 3.2 Gen 1 (up to 5Gbps) connector(s) support(s) additional 2 USB 3.2 Gen 1 port(s) 2 x USB 2.0 connector(s) support(s) additional 4 USB 2.0 port(s) 2 x M.2 Socket 3 with M key, type 2242/2260/2280/22110 storage devices support (SATA & PCIe 3.0 x 4 mode) 6 x SATA 6Gb/s connector(s) 1 x 24-pin EATX Power connector(s) 1 x 8-pin EATX 12V Power connectors 1 x Front panel audio connector(s) (AAFP) 1 x System panel(s) (Chassis intrusion header is inbuilt) x With flexkey function 1 x Thermal sensor connector(s) 1 x Clear CMOS jumper(s) 1 x COM port header
BIOS	128 Mb Flash ROM, UEFI AMI BIOS
Manageability	Tower Board Dimension 12 inch x 9.2 inch (30.5cm x 23.4cm)
Power Supply	550W, 650W, 750W, 850W, 1000W
Operating System	Windows® 10 64-bit