Apogean

Apogean Single Socket Intel 12th Gen & 13th Gen Core Processors Workstation

IS4T-C9-A

Intel® W680 (LGA 1700) Tower Workstation, PCIe® 5.0, DDR5, dual Intel® 2.5 Gb Ethernet, three PCIe 4.0 M.2 slots, USB 3.2 Gen 2x2 front panel connector, SlimSAS, SATA 6 Gbps, HDMI®, DisplayPort and VGA.

Intel® LGA 1700 socket:
Ready for 13th Gen Intel® Core™ processors & 12th Gen Intel® Core™, Pentium® Gold and Celeron® Processors

Enhanced power solution:
DrMOS, ProCool connector, alloy chokes and durable capacitors for stable power delivery

Next-gen connectivity:
Dual PCIe 5.0 SafeSlots, dual PCIe 3.0 slots, 3 x M.2 PCIe 4.0, SlimSAS, dual Intel® 2.5Gb Ethernet, front panel USB 3.2 Gen2x2 Type-C®, Thunderbolt™ 4 header support, TPM header, LPT header

Comprehensive cooling:
Large VRM heatsink, M.2 heatsinks, hybrid fan headers and Fan Xpert 4

Advanced security management:
USB port management, software blacklisting and Regedit on/off controls.

Apogean

Choose from our wide range of server offerings get in touch with our server experts
sales@apical.in | www.apical.in | www.apogean.in

Specifications

CPU
Intel® Socket LGA1700 for 13th Gen Intel® Core™ Processors & 12th Gen Intel® Core™
Chipset
Intel® W680 Chipset

Memory
4 x DIMM, Max. 128GB, DDR5 ECC and Non-ECC Un-buffered Memory
Dual Channel Memory Architecture
Supports Intel® Extreme Memory Profile (XMP)

Graphics
1 x DisplayPort**
1 x HDMI® port***
1 x VGA port
* Graphics specifications may vary between CPU types. Please refer to www.intel.com for any updates.
**Supports max. 8K@60Hz as specified in DisplayPort 1.4.
***Supports 4K@60Hz as specified in HDMI 2.1.

Expansion Slots
Intel® 13th & 12th Gen Processors*
- 2 x PCIe 5.0 x16 slots (support x16 or x8 / x8 mode)
Intel® W680 Chipset
- 2 x PCIe 3.0 x16 slots (supports x4 mode)
- 1 x PCIe 3.0 x1 slot

Storage
Total supports 3 x M.2 slots and 8 x SATA 6Gb/s ports*
Intel® 13th & 12th Gen Processors
- M.2_1 slot (Key M), type 2242/2260/2280 (supports PCIe 4.0 x4 mode)
Intel® W680 Chipset**
- M.2_2 slot (Key M), type 2242/2260/2280 (supports PCIe 4.0 x4 mode)
- M.2_3 slot (Key M), type 2242/2260/2280/22110 (supports PCIe 4.0 x4 mode)
- 4 x SATA 6Gb/s ports
- 1 x SlimSAS Slot Support SlimSAS NVMe device (supports PCIe 4.0 x4 mode and up to 4 SATA devices)***
* Intel® Rapid Storage Technology supports PCIe RAID 0/1/5/10, SATA RAID 0/1/5/10.
** Intel® Rapid Storage Technology supports Intel® Optane Memory H Series on PCH attached M.2 slots.
*** SlimSAS slot can support up to 4 SATA devices via a transfer cable. the cable is perchased seperately.

Ethernet
2 x Intel® 2.5Gb Ethernet
Wireless & Bluetooth
M.2 slot only (Key E, CNVi & PCIe)*
*Wi-Fi module is sold separately.

USB
Rear USB (Total 8 ports)
- 2 x USB 3.2 Gen 2 ports (1 x Type-A, 1 x Type-C®)
- 4 x USB 3.2 Gen 1 ports (4 x Type-A)
- 2 x USB 2.0 ports (2 x Type-A)
Front USB (Total 7 ports)
- 1 x USB 3.2 Gen 2x2 connector (supports USB Type-C®)
- 1 x USB 3.2 Gen 1 header supports additional 2 USB 3.2 Gen 1 ports
- 2 x USB 2.0 headers support additional 4 USB 2.0 ports

Audio
Realtek 7.1 Surround Sound High Definition Audio CODEC
- Supports: Jack-detection, Multi-streaming, Front Panel Jack-retasking
- Supports up to 24-Bit/192 kHz playback"
Audio Features
- Audio Shielding
- Premium audio capacitors
- Dedicated audio PCB layers
- Unique de-pop circuit

Back Panel I/O Ports
-2 x USB 3.2 Gen 2 ports (1 x Type-A, 1 x Type-C®)
-4 x USB 3.2 Gen 1 ports (4 x Type-A)
-2 x USB 2.0 ports (2 x Type-A)
-1 x DisplayPort
-1 x HDMI® port
-1 x VGA port
-2 x Intel® 2.5Gb Ethernet ports
-5 x Audio jacks
-1 x BIOS FlashbackTM button

Internal I/O Connectors
Fan and Cooling related
1 x 4-pin CPU Fan header
1 x 4-pin CPU OPT Fan header
1 x 4-pin W_PUMP+ header
3 x 4-pin Chassis Fan headers

Power related
1 x 24-pin Main Power connector
1 x 8-pin +12V Power connector
1 x 4-pin +12V Power connector
1 x 6-pin PCIe Power connector

Storage related
3 x M.2 slots (Key M)
4 x SATA 6Gb/s ports
1 x SlimSAS port

USB
1 x USB 3.2 Gen 2x2 connector (supports USB Type-C®)
1 x USB 3.2 Gen 1 header supports 2 additional USB 3.2 Gen 1 ports
2 x USB 2.0 headers support 4 additional USB 2.0 ports

Miscellaneous
1 x LPT header
1 x T-sensor
1 x Clear CMOS header
1 x COM Port header
1 x BMC Header
1 x Front Panel Audio header (AAFP)
1 x Start button
1 x Flexkey button
1 x SPI TPM header (14-1pin)
1 x 20-3 pin System Panel header with Chassis intrude function
1 x M.2 slot (Key E)
1 x LPT_P80 Switch
1 x Thunderbolt™ header

Special Features
5X PROTECTION III
- DIGI+ VRM (- Digital power design with DrMOS)
- ESD Guards
- LANGuard
- Overvoltage Protection
- SafeSlot
- Stainless-Steel Back I/O

Q-Design
- Q-Code
- M.2 Q-Latch
- Q-Connector
- Q-DIMM
- Q-LED (CPU [red], DRAM [yellow], VGA [white], Boot

Device [yellow green]
- Q-Slot
Thermal Solution
- M.2 heatsink
- VRM heatsink design
EZ DIY
- CPU Socket lever protector
- SafeDIMM
- SafeSlot
- BIOS FlashBack™ button
- BIOS FlashBack™ LED

Software Features
Exclusive Software
Armoury Crate
- Fan Xpert 4
- Power Saving
CPU-Z
WinRAR
IT Management software supported
Control Center Express

UEFI BIOS
EZ DIY
CrashFree BIOS 3
EZ Flash 3
FlexKey
BIOS
256 Mb Flash ROM, UEFI AMI BIOS
Manageability
WOL by PME, PXE

Operating System
Windows® 11, Windows® 10 64-bit
Form Factor
Tower
Power Supply
500W, 550W, 600W, 650W, 750W, 850W, 950W, 1000W, 1200W