



Workstation

Key Features

10th Generation Intel® Core™ i9/Core™ i7/Core™ i5/Core™ i3/Pentium®/Celeron® Processor, 11th Generation Intel® Core™ i5/i7/i9 Processors, Intel® Xeon® W-1200 Processors, Intel® Xeon® W-1300 Processors  
Single Socket LGA-1200 (Socket H5) supported, CPU TDP supports Up to 125W TDP

Intel® W580

Single LAN with Intel® Ethernet i225LM  
Single LAN with Intel® PHY I219LM LAN controller for AMT/vPro  
Single LAN with RTL8211  
Dedicated LAN for IPMI

2 PCI-E 4.0 x16 slots (16/NA or 8/8)2 PCI-E 3.0 x1  
1 - 5V PCI 32bit

**M.2 Interface:** 1 PCI-E 4.0 x4 and 2 PCI-E 3.0 x4, RAID 0 & 1  
**M.2 Form Factor:** 2280/22110  
**M.2 Key:** M-Key  
RAID 5 only applied for INTEL Storage Device, M.2-M3 is limited with 10th Gen CPU and W-1200 CPU

128GB Unbuffered ECC/non-ECC UDIMM, DDR4-3200MHz, in 4 DIMM slots

Intel® W580 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10

1 DP 1.4a port, 1 HDMI 2.0b port, 1 DVI - D port, 1 VGA port

Product SKUs	
<b>MBD-X12SCA-5F</b>	<ul style="list-style-type: none"><li>■ X12SCA-5F</li></ul>
Physical Stats	
<b>Form Factor</b>	<ul style="list-style-type: none"><li>■ ATX</li></ul>
<b>Dimension</b>	<ul style="list-style-type: none"><li>■ 12" x 9.6" (30.48cm x 24.38cm)</li></ul>
Processor	
<b>CPU</b>	<ul style="list-style-type: none"><li>■ 11th Generation Intel® Core™ i5/i7/i9 Processors, Intel® Xeon® W-1200 Processors, Intel® Xeon® W-1300 Processors, 10th Generation Intel® Core™ i9/Core™ i7/Core™ i5/Core™ i3 Processor</li><li>■ Single Socket LGA-1200 (Socket H5) supported, CPU TDP supports Up to 125W TDP</li></ul>
<b>Core</b>	<ul style="list-style-type: none"><li>■ Up to 10 cores</li></ul>
System Memory	
<b>Memory Capacity</b>	<ul style="list-style-type: none"><li>■ 4 DIMM slots</li><li>■ 128GB ECC/non-ECC UDIMM, DDR4-3200MHz</li></ul>
<b>Memory Type</b>	<ul style="list-style-type: none"><li>■ 128GB 3200MHz</li></ul>
<b>DIMM Sizes</b>	<ul style="list-style-type: none"><li>■ 2GB, 4GB, 8GB, 16GB, 32GB</li></ul>
<b>Memory Voltage</b>	<ul style="list-style-type: none"><li>■ 1.2V</li></ul>
On-Board Devices	
<b>Chipset</b>	<ul style="list-style-type: none"><li>■ Intel® W580</li></ul>
<b>SATA</b>	<ul style="list-style-type: none"><li>■ Intel® W580 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10</li></ul>
<b>IPMI</b>	<ul style="list-style-type: none"><li>■ ASPEED AST2500 BMC</li></ul>
<b>Audio</b>	<ul style="list-style-type: none"><li>■ ALC 888S HD Audio</li></ul>
<b>Network Controllers</b>	<ul style="list-style-type: none"><li>■ Single LAN with Intel® PHY I219LM LAN controller, for AMT/vPro</li><li>■ Single LAN with Intel® Ethernet i225LM</li><li>■ Single LAN with Realtek RTL8211F PHY (dedicated IPMI), Dedicated LAN for IPMI</li></ul>
Input / Output	
<b>LAN</b>	<ul style="list-style-type: none"><li>■ 1 RJ45 Dedicated IPMI LAN port</li><li>■ 1 RJ45 Gigabit Ethernet LAN ports</li><li>■ 1 RJ45 2.5 Gigabit Ethernet LAN port</li></ul>
<b>USB</b>	<ul style="list-style-type: none"><li>■ 4 USB 3.2 Gen2 port(s) (4 rear type A)</li><li>■ 2 USB 3.2 Gen1 port(s) (2 via header)</li><li>■ 2 USB 2.0 port(s) (2 via header)</li><li>■ 2 USB 3.2 Gen2x2 port(s) (1 rear type C; 1 via header)</li></ul>
<b>Video Output</b>	<ul style="list-style-type: none"><li>■ 1 VGA port(s), 1 DVI - D port(s), 1 DP 1.4a port(s), 1 HDMI 2.0b port(s)</li></ul>
<b>Serial Port</b>	<ul style="list-style-type: none"><li>■ 1 COM Port(s) (1 header)</li></ul>
<b>TPM</b>	<ul style="list-style-type: none"><li>■ 1 TPMHeader</li></ul>

Expansion Slots	
<b>PCI-E</b>	<ul style="list-style-type: none"><li>■ 2 PCI-E 4.0 x16 slots (16/NA or 8/8),</li><li>■ 2 PCI-E 3.0 x1</li><li>■ 1 - 5V PCI 32bit</li></ul>
<b>M.2</b>	<ul style="list-style-type: none"><li>■ M.2 Interface: 1 PCI-E 4.0 x4, RAID 0 &amp; 1; 2 PCI-E 3.0 x4</li><li>■ Form Factor: 2280/22110</li><li>■ Key: M-Key</li></ul>
System BIOS	
<b>BIOS Type</b>	<ul style="list-style-type: none"><li>■ 256MB SPI Flash with AMI BIOS</li></ul>
<b>BIOS Features</b>	<ul style="list-style-type: none"><li>■ ACPI 6.0</li><li>■ Plug and Play (PnP)</li><li>■ BIOS rescue hot keys</li><li>■ Riser card auto-detection support</li><li>■ SMBIOS 3.0 or later</li></ul>
Management	
<b>Software</b>	<ul style="list-style-type: none"><li>■ SuperDoctor® 5, <u>SUM</u>, <u>SSM</u>, AMT, vPro, Watchdog, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support (** OOB Bios refresh is not supported on X12SCA-5F )</li></ul>
<b>System Management Software</b>	<ul style="list-style-type: none"><li>■ SuperDoctor 5</li></ul>
<b>Power Configurations</b>	<ul style="list-style-type: none"><li>■ Power-on mode for AC power recovery, ACPI Power Management, Power button override mechanism, Wake-on-LAN</li></ul>
PC Health Monitoring	
<b>Voltage</b>	<ul style="list-style-type: none"><li>■ VBAT, System temperature, PCH temperature, CPU temperature, 3.3V standby, 1.05 (PCH), +5V standby, +5V, +3.3V, +12V, CPU thermal trip support, +1.8V PCH</li></ul>
<b>LED</b>	<ul style="list-style-type: none"><li>■ Power LED</li><li>■ BMC/IPMI Heartbeat LED</li><li>■ Catastrophic Error LED</li></ul>
<b>FAN</b>	<ul style="list-style-type: none"><li>■ 5x 4-pin fan headers (up to 5 fans)</li><li>■ Fan speed control</li><li>■ Overheat LED indication</li></ul>
<b>Other Features</b>	<ul style="list-style-type: none"><li>■ CPU thermal trip support for processor protection, Control of power-on for recovery from AC power loss, Chassis intrusion detection, ATX Power connector, ACPI power management, 8-pin 12v DC power connector</li></ul>
Operating Environment	
<b>Operating Temperature Range</b>	<ul style="list-style-type: none"><li>■ 0°C - 50°C (32°F - 122°F)</li></ul>
<b>Non-Operating Temperature Range</b>	<ul style="list-style-type: none"><li>■ -20°C - 60°C (-4°F - 140°F)</li></ul>