



WIO Key Features

1. 8th/9th Generation Intel® Core™ i3/Pentium®/Celeron® Processor, Intel® Xeon® E-2100 Processor, Intel® Xeon® E-2200 Processor., Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP
2. Intel® C246
3. Up to 128GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots
4. 1 PCI-E 3.0 x16,
1 PCI-E 3.0 x4 (in x8 slot)
M.2 Interface: 1 SATA/PCI-E 3.0 x4 and 1 PCI-E 3.0 x4
M.2 Form Factor: 2260/2280/22110
M.2 Key: M-Key
Double Height Connector
5. Intel® C246 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10
6. Dual LAN with Intel® Ethernet Controller I210-AT
7. 1 VGA port
8. 4 USB 3.1 Gen2 (2 header, 2 rear), 1 USB 3.1 Gen1 Type A, 6 USB 2.0

Links & Resources

- [Tested Memory List](#)
- [Tested HDD / SSD List](#)
- [Tested M.2 List](#)
- [Tested AOC List](#)
- [Motherboard Manual](#)
- [Quick Reference Guide](#)
- [Update Your BIOS](#)
- [BMC/IPMI Firmware](#)
- [Download the Latest Drivers and Utilities](#)
- [Download Driver CD](#)
- [OS Compatibility](#)
- [Optimization](#)

Specifications

Product SKUs

- MBD-X11SCW-F
- X11SCW-F

Physical Stats

- **Form Factor** Proprietary WIO

- **Dimensions** 8" x 13" (20.32cm x 33.02cm)

Processor/Cache

- **CPU** 8th/9th Generation Intel® Core™ i3/Pentium®/Celeron® Processor, Intel® Xeon® E-2100 Processor, Intel® Xeon® E-2200 Processor.
- Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP

- **Cores / Cache** 8 cores, 16 threads

- **Note** BIOS version 1.0b or above is required to support Intel® Xeon® E-2200 and 9th Generation Intel® Core™ i3/Pentium®/Celeron® Processors

System Memory

- **Memory Capacity** Up to 128GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots

- **Memory Type** 2666/2400/2133MHz ECC DDR4 SDRAM 72-bit

- **DIMM Sizes** 4GB, 8GB, 16GB, 32GB

- **Memory Voltage** 1.2V

- **Error Detection** Corrects single-bit errors

On-Board Devices

- **Chipset** Intel® C246

- **SATA** Intel® C246 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10

- **IPMI** ASPEED AST2500

- **Network Controllers** Dual LAN with Intel® Ethernet Controller I210-AT

- **Graphics** Aspeed AST2500 BMC

Input / Output

- **SATA** 6 SATA3 (6Gbps) ports

- **LAN** 2 RJ45 Gigabit Ethernet LAN ports

- **USB** 6 USB 2.0 ports (2 rear + 4 via headers)
- 1 USB 3.1 Gen1 ports, 1 Type A)
- 4 USB 3.1 Gen2 ports (2 rears, 2 via headers)

- **Video Output** 1 VGA port

- **Serial Port / Header** 2 COM Ports (1 rear, 1 header)

- **TPM** 1 TPM Header

Expansion Slots

- **PCI-E** 1 PCI-E 3.0 x16,
- 1 PCI-E 3.0 x4 (in x8 slot)

- **M.2** M.2 Interface: 1 SATA/PCI-E 3.0 x4 and 1 PCI-E 3.0 x4
- Form Factor: 2260/2280/22110
- Key: M-Key
- Double Height Connector

System BIOS

- **BIOS Type** UEFI 256Mb

- **BIOS Features** ACPI 6.0
- SMBIOS 2.7
- Plug and Play (PnP)
- RTC (Real Time Clock) Wakeup
- UEFI 2.7
- USB Keyboard support
- PCI 3.0

Management

- **Software** Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog

- **System Management Software** IPMI (Intelligent Platform Management Interface) v1.5 / 2.0 with KVM support

- **Power Configurations** ACPI Power Management

PC Health Monitoring

- **Voltage** +12V, +3.3V, +5V, +5V standby, 6 -fan status, Chassis intrusion header, Chipset Voltage, Memory Voltages, Monitors CPU voltages, Supports system management utility, System level control, VBAT

- **FAN** 6x 4-pin fan headers (up to 6 fans), 6 fans with tachometer status monitoring, Fan speed control, Overheat LED indication, Thermal control tachometer fan connectors

- **Temperature** Monitoring for CPU and chassis environment, CPU thermal trip support, Thermal Monitor 2 (TM2) support, PECL

- **LED** UID/Remote UID, CPU / System Overheat LED

- **Other Features** ACPI power management, Chassis intrusion detection, Chassis intrusion header, Control of power-on for recovery from AC power loss, CPU thermal trip support for processor protection, M.2 NGFF connector, Node Manager Support, UID, WOL

Operating Environment

- **Operating Temperature Range** 0°C ~ 50°C (32°F ~ 122°F)

- **Non-Operating Temperature Range** -40°C - 70°C (-40°F - 158°F)

- **Operating Relative Humidity Range** 8% - 90% (non-condensing)

- **Non-Operating Relative Humidity Range** 5% - 95% (non-condensing)

Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SCW-F	1	X11SCW-F Motherboard
I/O Cables	CBL-0044L	2	57.5CM SATA FLAT S-S PBF

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11SCW-F	1	X11SCW-F Motherboard
QRG	MNL-2070-QRG	1	Motherboard Quick Reference Guide
I/O Cables	CBL-0044L	6	57.5CM SATA FLAT S-S PBF

Optional Parts List			
Name	Part Number	Qty	Description
TPM security module	AOM-TPM-9670H	1	SPI capable TPM 2.0 with Infineon 9670 controller with horizontal form factor
TPM security module	AOM-TPM-9670V	1	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor
TPM security module	AOM-TPM-9671H	1	SPI capable TPM 1.2 with Infineon 9670 controller with horizontal form factor
TPM security module	AOM-TPM-9671V	1	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor

Chassis (Optimized for X11SCW-F)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
	● SC815TQC-R504WB2 1U Heatsink:SNK-P0046P				

● = Most optimized Chassis for SuperServer Configuration

Blue color = Compatible

Green color = Global SKU & Compatible

Red dot & green color = Optimized + Global SKU

Server (Optimized for X11SCW-F)

Server Name
SYS-5019C-WR