

IoT SuperServer E100-12T-H



Integrated Board



[\(/en/products/motherboard/X12STN-H-](/en/products/motherboard/X12STN-H-)

[WOHS\)](#)

Super X12STN-H-WOHS (</en/products/motherboard/X12STN-H->
[WOHS\)](#)

Views: | **Angled View** (/a_images/products/views/E100-12T_angle.jpg) | **Front View** (/a_images/products/views/E100-12T_front.jpg) | **Rear View** (/a_images/products/views/E100-12T_rear.jpg) |

[Drivers & Utilities](#) **[BIOS](#)** **[IPMI](#)** **[Tested Memory](#)**

[Tested M.2 List \(/en/support/resources/m2ssd?SystemID=87733&ProductName=SSE100-12T-H\)](/en/support/resources/m2ssd?SystemID=87733&ProductName=SSE100-12T-H)

[Manuals](#)

[OS Certification Matrix \(/support/resources/OS/OS_Certification_Intel.cfm?MProduct_Name=SYS%2DE100%2D9W%2DH\)](/support/resources/OS/OS_Certification_Intel.cfm?MProduct_Name=SYS%2DE100%2D9W%2DH)

[Quick-References Guide](#)

[AWS IoT Guide \(/manuals/other/AWS_IoT_SYS-E100-12T-H.pdf\)](/manuals/other/AWS_IoT_SYS-E100-12T-H.pdf)

[AWS Greengrass Guide \(/manuals/other/AWS_Greengrass_SYS-E100-12T-H.pdf\)](/manuals/other/AWS_Greengrass_SYS-E100-12T-H.pdf)

Key Applications

- Industrial Automation, Retail
- Smart Medical Expert Systems
- Kiosk, Interactive info system
- IoT Gateway for Smart Factory
- Smart Building
- Security and Surveillance
- Digital Signage

Key Features

1. 11th Generation Intel® Core™ i7-1185GRE Processor; Single Socket FCBGA-1449
2. System-on-Chip
3. M.2: B-Key, M-Key, E-Key
M.2 2242/3042/2280 B-Key (USB3.0/2.0, SATA Gen3/PCI-E Gen3 x1) with nano SIM holder M.2 2230 E-Key (CNVi/PCI-E 3.0 x1/USB2) M.2 2242/2280 M-Key (PCI-E 4.0 x4), NVMe support (add MCP-270-10105-0B Fin Bottom Cover)
4. Up to 64GB Unbuffered Non-ECC SO-DIMM DDR4 3200MHz; 2 DIMM slots
5. Dual 2.5GbE LAN w/ Intel I225-IT
6. 4 COM (RS-232/422/485), 3 USB 3.2, 1 USB-C 3.2, 4 USB 2.0, 1 DIO via DB9
7. 1 HDMI 2.0b (4K60Hz), 1 HDMI 1.4b
8. -30°C to 50°C Operating Temperature
9. Lockable 12V DC 84W power adapter
10. Hailo-8™ powerful and efficient Edge AI solution integration ready

Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

Specifications

Product SKUs

SYS-E100-12T-H
SuperServer E100-12T-H (**Black**)

Motherboard

Super X12STN-H-WOHS
[\(/en/products/motherboard/X12STN-H-WOHS\)](/en/products/motherboard/X12STN-H-WOHS)

Processor/Cache

CPU
11th Generation Intel® Core™ i7-1185GRE Processor
Single Socket FCBGA-1449
System-on-Chip
CPU TDP support up to 12/15/28W
Note
BIOS version 1.1 or above is required

System Memory

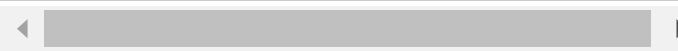
Memory Capacity
Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-3200MHz, in 2 DIMM slots
Memory Type
DDR4 up to 3200MHz
DIMM Sizes
32GB, 16GB, 8GB, 4GB
Memory Voltage
1.2V

On-Board Devices

Chipset
System on Chip
Network Controllers
Dual 2.5GbE LAN with Intel® I225-IT
Audio
ALC 888S HD Audio
Video
Intel® Xe Graphics

Input / Output

USB
3 USB 3.2 ports, 1 USB-C 3.2 port, 4 USB 2.0 ports
Video Output
1 HDMI 2.0b (4K60Hz), 1 HDMI 1.4b
COM Port
4 COM ports: 2 RS232, 2 RS232/422/485, RS-485 supports auto flow control
Audio
1 HD Audio header
(Mic-in/Line-Out) [optional]
Others
8-bit configurable GPIO via DB9



Chassis

Form Factor
3.5" SBC
Model
CSE-E101-03

Dimensions

Width
7.68" (195mm) / 11.81" (300mm) - pkg.
Height
1.73" (44mm) / 5.12" (130mm) - pkg.
Depth
5.94" (150mm) / 11" (279mm) - pkg.
Weight
Gross Weight: 4.5 lbs (2.04 kg)
Net Weight: 2.65 lbs (1.2 kg)
Available Colors
Black

Front Panel

Buttons
Power On/Off button
LEDs
Power LED and Hard drive activity LED

Expansion Slots

M.2
Key: B-Key, M-Key, E-Key
M.2 2242/3042/2280
B-Key (1 USB 3.0/2.0, 1 SATA Gen3) with nano SIM holder
E-Key (CNVi/PCI-E 3.0 x1/USB2) M.2 2242/2280
M-Key (PCI-E 4.0 x4), NVMe support

System Cooling

Fans
Fan-less design

Power Supply

Lockable 12V DC 84W power adapter

System BIOS

BIOS Type
AMI UEFI

Management

Software
SuperDoctor® 5 (/products/nfo/SMS_SD5.cfm)
Watch Dog
vPro
AMT

Power Configurations

- +12V ~ +24V DC Wide power range input
- ACPI Power Management
- Control of power-on for recovery from AC power loss
- Force Power On by Jumper
- CPU thermal trip support for processor protection

Operating Environment / Compliance

RoHS

RoHS Compliant

Environmental Spec.

- Operating Temperature:
-30°C ~ 50°C (-22°F ~ 122°F) with 0.7 m/s air flow. The use of industrial grade wide-temperature peripherals is required to meet 50°C operating temperature.
- Non-operating Temperature:
-40°C to 70°C (-40°F to 158°F)
- Operating Relative Humidity:
8% to 90% (non-condensing)
- Non-operating Relative Humidity:
5% to 95% (non-condensing)
- Operational Vibration, IEC 60068-2-64, 5 Grms, random, 5~500 Hz, 1hr/axis

Parts List

[Global SKU \(/en/products/SMC_global_skus\)](/en/products/SMC_global_skus)