

IoT SuperServer E100-12T-C



Integrated Board



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

[WOHS\)](#)

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

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

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

[Tested M.2 List \(/en/support/resources/m2ssd?SystemID=87731&ProductName=SSE100-12T-C\)](/en/support/resources/m2ssd?SystemID=87731&ProductName=SSE100-12T-C)

[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](#)

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. Intel® Celeron® 6305E 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
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. 0°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-C

SuperServer E100-12T-C (**Black**)

Motherboard

Super X12STN-C-WOHS

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

Processor/Cache

CPU

Intel® Celeron® 6305E Processor

Single Socket FCBGA-1449

System-on-Chip

CPU TDP support up to 15W

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® UHD 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:

0°C ~ 50°C (32°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)
