

# STX-1001

Mini-STX Motherboard



## KEY FEATURES

- Intel® Elkhart Lake SoC Processor
- 1 x 260-pin SO-DIMM DDR4 3200 MHz, up to 32GB
- 1 x USB 3.2 Gen2, 4 x USB 3.2 Gen1, 6 x USB 2.0, 1 x M.2 Key E, 1 x M.2 Key B, 1 x M.2 Key M, 2 x COM, 1 x SATA3
- 1 x Realtek 2.5 Gigabit LAN, 1 x Realtek 1 Gigabit LAN
- Supports triple display, 2 x DP1.2, 1 x LVDS or eDP
- TPM Header
- 12~28V DC-In

## SPECIFICATIONS

### Form Factor

Dimensions	Mini-STX (5.5-in x 5.8-in x 1-in, 14.0 cm x 14.7 cm x 2.5 cm)
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### Processor System

CPU	Intel® Elkhart Lake SoC Processor -STX-1001D (J6426, QC, Max Speed Up to 3.0GHz, 10 W) -STX-1001J (J6412, QC, Max Speed Up to 2.6GHz, 10 W) -STX-1001N (N6415, QC, Max Speed Up to 3.0GHz, 6.5 W) -STX-1001L (N6210, DC, Max Speed Up to 2.6GHz, 6.5 W)
Chipset	SoC
BIOS	AMI SPI 128 Mbit

### Memory

Technology	Single Channel DDR4 3200 MHz
Capacity	32 GB
Socket	1 x 260-pin SO-DIMM

### Graphics

Controller	Intel® Gen11 Graphics
DisplayPort	DisplayPort 1.2 and DP1.2++ Max resolution up to 4096x2160@60Hz
LVDS	Dual channel 24 bit up to 1920 x 1080@60Hz (Connector shared with eDP)
eDP	Max resolution up to 1920 x 1080@60Hz (Connector shared with LVDS)
MultiDisplay	Triple Display

### Expansion Slot

M.2	1 x M.2 (Key E, 2230) with PCIe Gen3 x1 and USB 2.0 for Wireless 1 x M.2 (Key B, 3042/3052) with PCIe Gen3 x1, USB 3.2 Gen2, and USB 2.0 and SIM for 4G/5G
SIM Socket	1 x Socket connected to M.2 Key_B

### Audio

Interface	Realtek ALC897, High Definition Audio. Line-out, Mic-in
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### Ethernet

Controller/ Speed	LAN1: Realtek RTL8111H-CG with 10/100/1000 Mbps LAN2: Realtek RTL8125BG with 10/100/1000/2500 Mbps
Connector	2 x RJ-45

### Rear I/O

DisplayPort	DISPLAY1: DP1.2++, DISPLAY2: DP1.2
Ethernet	1 x 1 Gigabit LAN 1 x 2.5 Gigabit LAN
USB	2 x USB 3.2 (Gen1) 2 x USB 2.0

### Front I/O

USB	2 x USB 3.2 (Gen1)
Audio	2 (Mic-in, Line-out)

### Internal Connector

USB	1 x USB 3.2 Gen2 (1 x Type-A vertical con) 4 x USB 2.0 (2 x 2.54 pitch header)
COM	COM1, COM3 (RS-232/422/485)
GPIO	4 x GPI, 4 x GPO
TPM	TPM Header
LVDS	1 (Connector with LVDS/eDP signal, switch by BIOS)
SATA PWR Output	1
Speaker Header	1
CAN Bus	2 x CAN Bus (1 x 2.00 pitch header) (Supported by STX-1001D, STX-1001N)

### Storage

M.2	1 x M.2 (Key M, 2242/2280) with PCIe Gen3 x1 for SSD
SATA	1 x SATA3 (6Gb/s)

### Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ...255sec

### Power Requirements

Input PWR	12~28V DC-In
Power On	AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready

### Environment

Operating Temp	0°C ~ 60°C
Storage Temp	-40° C ~ 85° C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%

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