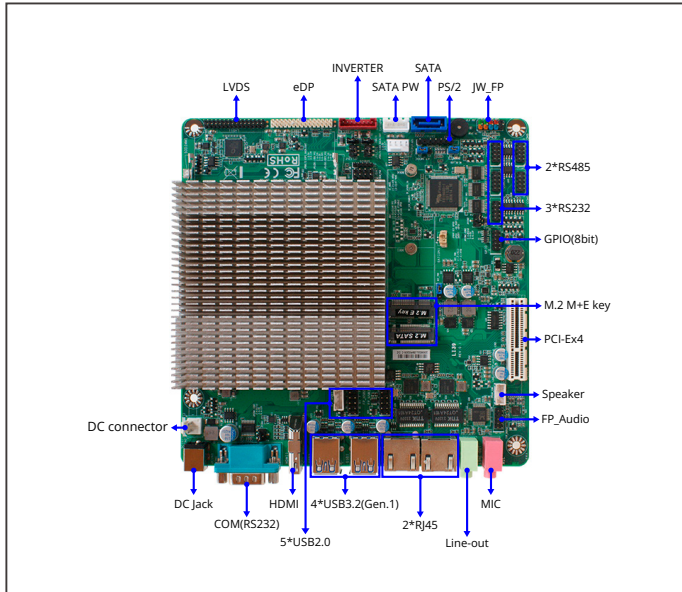


Thin Mini-ITX with Intel® Celeron® Processor J6412 (formerly Elkhart Lake)



## Specifications

SYSTEM	
FORM FACTOR	Thin Mini-ITX
CPU	Onboard Intel® Celeron® Processor J6412 (formerly Elkhart Lake) *For additional compatible CPUs, please contact regional sales
CPU TDP	10W
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	1 x DDR4 3200MHz, Single Channel SODIMM, up to 32GB
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0 (optional)
RTC BATTERY	Lithium Battery
DIMENSION (L X W)	170mm x 170mm (6.7" x 6.7")
OS SUPPORT	Windows® 10 (64bit), Windows® 11 (64bit) Linux
POWER	
POWER REQUIREMENT	DC 12V
POWER SUPPLY TYPE	AT/ATX
CONNECTOR	PH3.96 2-pin Connector + DC Jack
DISPLAY	
CONTROLLER	Intel® UHD Graphics
LVDS/eDP/MIPI-DSI	1 x eDP, up to 2560 x 1600 @60Hz 1 x 24 Bit Dual Channel LVDS, up to 1920 x 1080 @60Hz
DISPLAY INTERFACE	1 x HDMI 2.0b, up to 4K x 2K @60Hz
MULTIPLE DISPLAY	Support 3 Displays
AUDIO	
CODEC	Realtek ALC897 with 3W Amp.
AUDIO INTERFACE	1 x Line-out 1 x MIC
Speaker	1 x Speaker Connector
EXTERNAL I/O	
ETHERNET	2 x Intel® i225V, 10/100/2500Base
USB	4 x USB3.2 Gen 1
SERIAL PORT	1 x RS232 (with 5V/12V selectable)
VIDEO	1 x HDMI 2.0b
INTERNAL I/O	
USB	4 x USB2.0 (PH2.54) 1 x USB2.0 (PH2.0)
SERIAL PORT	3 x RS232 (COM2 with 5V/12V selectable, PH2.0) 2 x RS485 (PH2.0)
VIDEO	1 x 24 Bit Dual Channel LVDS, up to 1920 x 1080 @60Hz 1 x eDP, up to 2560 x 1600 @60Hz
AUDIO	1 x Audio Header (PH2.0) 1 x Speaker Connector (3W amplifier, PH2.0)
GPIO	8-Bit (PH2.0)
SMBUS	Yes (PH2.0)
I2C	—
FAN	1 x CPU Fan (4-pin CPU Fan PWM)
SIM	—
FRONT PANEL	PWR LED HDD LED Power Button Reset Button
OTHERS	1 x PS/2
STORAGE	
SATA	1 x SATA3 1 x SATA Power Connector
MINI PCI-E/MSATA	—
M.2	1 x M-Key 2242/2280 (SATA)
eMMC	—
EXPANSION	
M.2	1 x E-key 2230 (USB2.0/PCIe 3.0x1)
OTHERS	1 x PCI-E3.0 x4
ENVIRONMENT & CERTIFICATION	
OPERATING TEMPERATURE	0°C ~ 60°C (32°F ~ 140°F)
STORAGE TEMPERATURE	-20°C ~ 70°C (-4°F ~ 158°F)
OPERATING HUMIDITY	10% ~ 90% relative humidity, non-condensing
CERTIFICATION	CE/FCC Class A

## Features

- 1 x DDR4 SODIMM Slot, up to 32GB
- 1 x HDMI 2.0b, 1 x LVDS, 1 x eDP
- 2 x 2.5GbE
- 4 x USB 3.2 Gen1, 5 x USB2.0
- 2 x RS485, 4 x RS232
- 1 x M.2 2242/2280 M-key, 1 x M.2 2230 E-key
- 1 x PCI-E3.0 x4

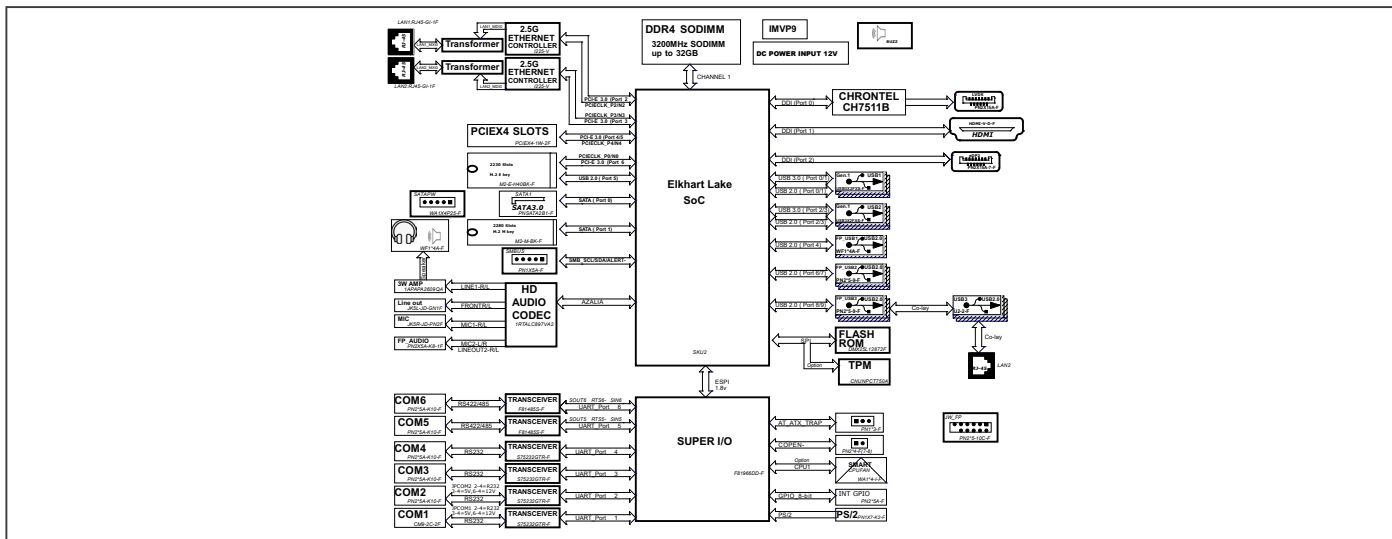
## Applications

- Industrial Automation
- POS
- KIOSK

## Packing List

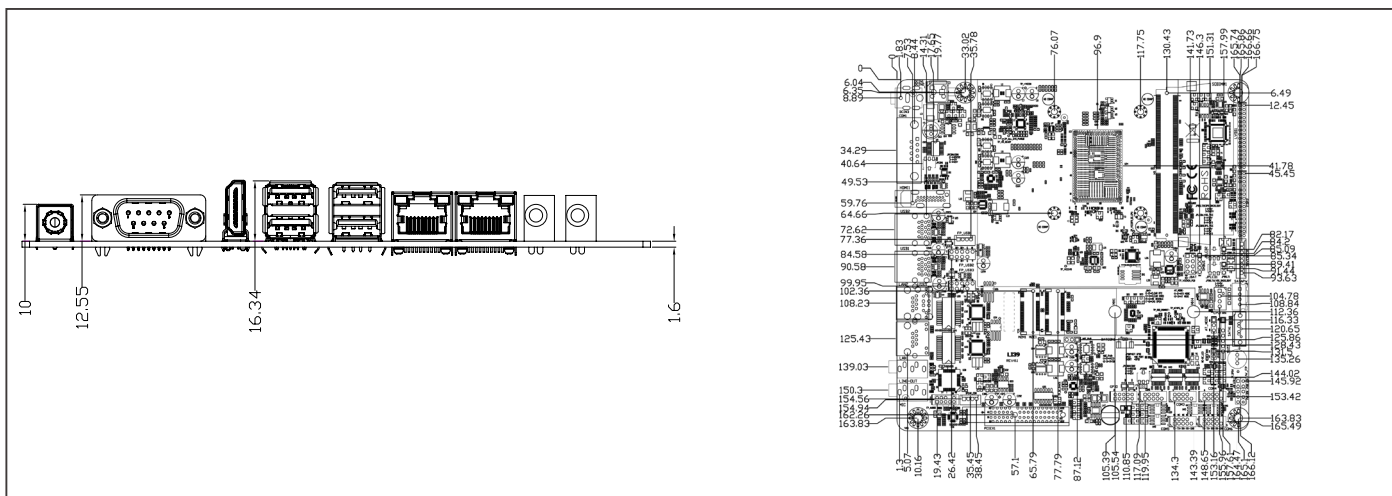
Part Number	Description	QTY per Board
	LI39 MB	1
G01-COM-H2M22-1F	COM Cable	1
G01-SATAL-RD30-F	SATA Cable, 30cm	1
F04-MB-075-1F	I/O Shield	1

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

PART NUMBER	LI39-64120	LI39-64122
CPU	Intel® Celeron® Processor J6412	Intel® Celeron® Processor J6412
DISPLAY	1 x HDMI 1 x LVDS 1 x EDP	1 x HDMI 1 x LVDS 1 x EDP
LAN	2 x 2.5GbE	2 x 2.5GbE
USB	4 x USB 3.2 Gen 1 5 x USB 2.0	4 x USB 3.2 Gen 1 5 x USB 2.0
RS232	4	4
RS485	2	2
STORAGE	1 x SATA	1 x SATA
EXPANSION SLOT	1 x M.2 M Key 2242/2280 1 x M.2 E Key 2230	1 x M.2 M Key 2242/2280 1 x M.2 E Key 2230
TPM	—	2.0
POWER	12V	12V
OPERATING TEMP	0°C – 60°C	0°C – 60°C
OTHERS	GPIO	GPIO
eMMC	—	—
MIPI	—	—