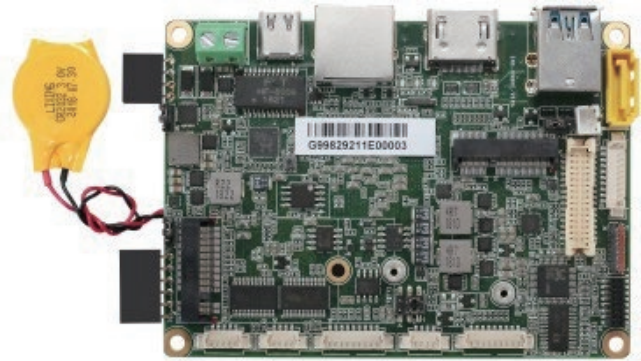




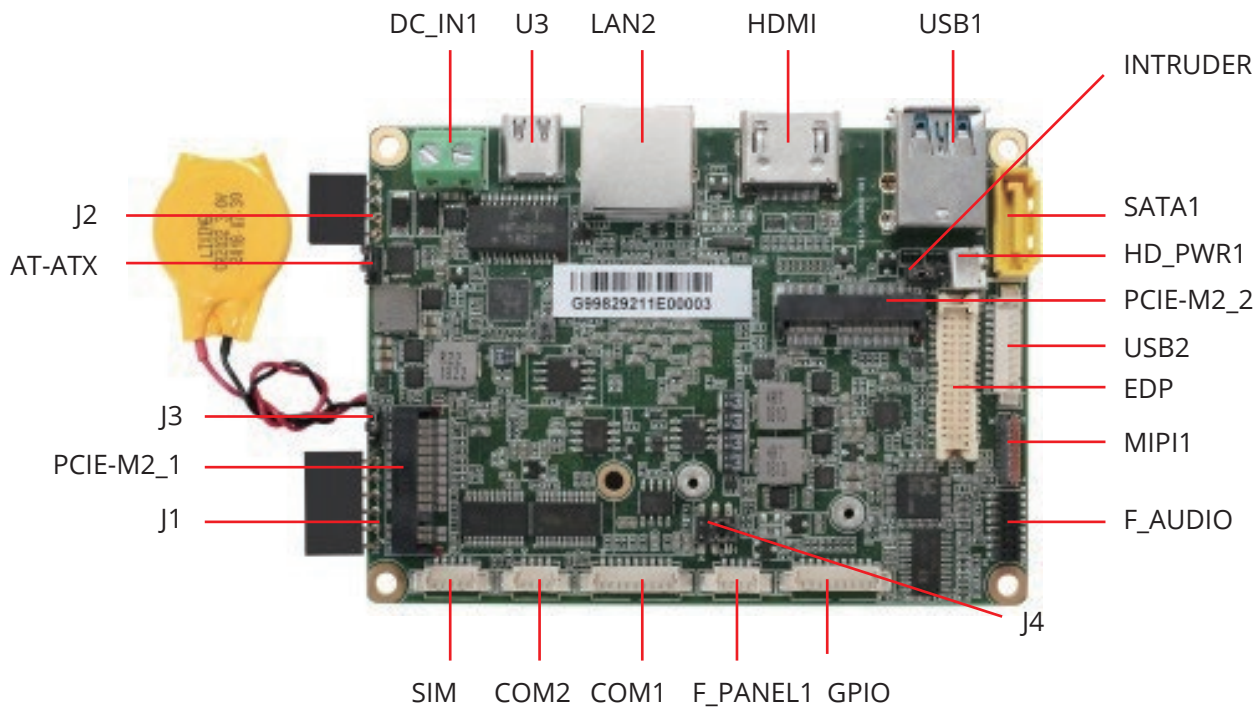
## 2.5" Embedded Motherboard Based on Intel Gemini Lake Celeron N4020/N4100 CPU

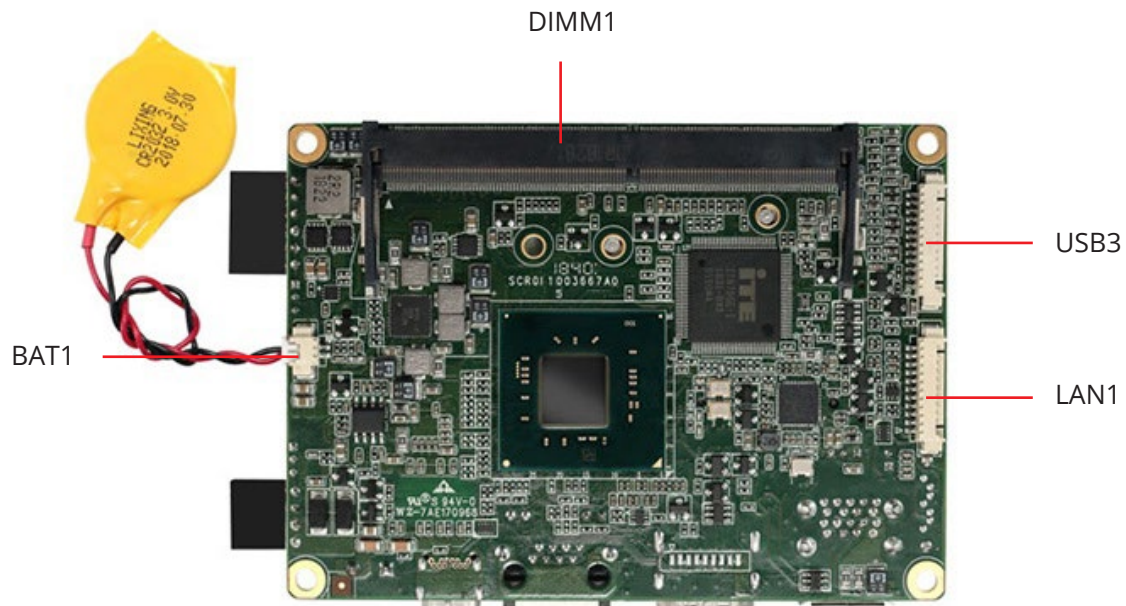
### Main Features:

- Intel Gemini Lake Atom CPU serials
- Intel HD Graphics Integrated Graphic
- 1 x HDMI/eDP/MIPI DSI display
- 2 x RTL8111F GbE LAN
- 1 x RS232/485 option, 1 x RS232
- DDR4L SODIMM Socket
- 2 x USB 3.0 Port & 5 x USB Pin-header
- DC 12~24V Voltage input



### Interfaces:





### Specification:

System	
CPU	Intel Gemini Lake Celeron N4020/N4100, fanless design
CPU Socket	On-board
BIOS	SPI 128M, CMOS battery CR2302
Graphic Controller	Intel Gemini Lake Graphics
Memory	DDR4L 2400MHz, 1.2V low voltage JEDEC, up to 16GB RAM
Memory Socket	SODIMM
Storage	SATA Socket
Display	
HDMI	Support 1 x Standard HDMI Socket
eDP	24Bit eDP Dual channel display, Max 4K@60Hz
MIPI CSIx4	
Audio	
Controller	Realtek HD ALC662 audio codec + 15W amplifier
Ethernet	
Controller	LAN1: RTL8111F GbE LAN(Pin-Header) LAN2: RTL8111F GIGA LAN (RJ45 With LED, POE + PD) Power supply module (>30W, 48V input@550mA)
Super I/O	
Controller	IT8786E SIO
H/W Monitor	
Watch Dog Timer	Programmable 1~255 sec, support System Reset

## I/O Interfaces

USB	2 x USB 3.0 Port, 1 x USB 3.0 Pin-Header, 4 x USB 2.0/1.1, Pin-Header
Serial Port	1 x RS232/RS485 option, 1 x RS232
Type-c	With power and USB 3.0 (Single 1-way USB 3.0)
GPIO	7Bit GPIO(7GPIO + 5V + GND SINGLE), 3.3V@24mA
M2 Socket	M2 E-KEY 2230 support USB 2.0/PCIe 1X device
Controller	M2 B-KEY 2242+2260 support USB 2.0/SATA device

## Power Supply

Power Type	DC-IN 12~24V
Power Consumption	Typical PW: 10W

## Mechanical & Environment

Operating Temp.	-20°C~70°C
Storage Temp.	-40°C~80°C
Operating Humidity	0%~90% relative humidity, non-condensing
Storage Humidity	0%~90% relative humidity, non-condensing
Dimensions	100 x 72mm

## Certification

Certificate	3C, FCC, CE, RoHS compliant
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## Order Information:

### ENC-G998HE-CL

INTEL® Core N4100 1.10GHz 6W CPU, 1 x HDMI/eDP/MIPI DSI Display, 2 x RTL8111F GbE LAN, 1 x RS232/485 Option, 1 x RS232, SODIMM DDR4L memory, 2 x USB3.0 Port & 5 x USB Pin-header, 1 x M2-KEY B & SATA, 1 x M2-KEY E, DC 12~24V Voltage input.

### ENC-G998HE-PT

INTEL®Pentium J5005 1.15GHz 10W CPU, 1 x HDMI/eDP/MIPI DSI Display, 2 x RTL8111F GbE LAN, 1 x RS232/485 Option, 1 x RS232, SODIMM DDR4L memory, 2 x USB3.0 Port & 5 x USB Pin-header, 1 x M2-KEY B & SATA, 1 x M2-KEY E, DC 12~24V Voltage input.

## ABOUT POLYHEX

As a board level and system level designer and manufacturer, Polyhex, always delivers best-in-class embedded computing solutions based on both ARM and X86 architecture, including hardware customization and software debugging etc. Partnered with silicon vendors like Intel, NXP, ST, Rockchip and so on, we have earned trust from clients worldwide in over 60 countries. Polyhex is also certified with ISO9001 and ISO13485 for the self-owned manufacture facility.

