

Embedded Motherboard Based on Intel Celeron J4125 Quad Core CPU

Description:

EMB-IJ4125-1242 is based on Intel Celeron J4125 processor, and supports Intel Gemini Lake-R series CPU. It can be widely used in soft routing, network security, industrial control, cloud terminal and other fields.

Main Features:

- · Integrated Intel Celeron J4125 2.0GHz quad-core processor, support Intel Gemini Lake-R series CPU
- · 1 x SODIMM slot, support single-channel 2400MHz DDR4 up to 8GB
- · Support VGA and HDMI dual display
- · Support 4 x Intel I225-V or I226-V 2.5G network
- · Support 1 x Mini PCIe (WIFI/4G) and 1 x mSATA
- · Support 4 x USB 3.0 and 3 x USB 2.0
- · Support 2 x internal RS232 (2 x RS485 optional)
- \cdot With fanless design, it can work in a closed chassis to build a dust-proof and moisture-proof computer
- · Support -20 °C ~60 °C operating temperature
- · Support AT and ATX mode switching, 12V~19V DC power supply



Specification:

System	
CPU	Integrated Intel Celeron J4125 2.0GHz Quad Core CPU, TDP 10W
CFU	Support Intel Gemini Lake-R series CPU
Memory	1 x SODIMM slot, support single-channel 2400MHz DDR4 up to 8GB
Storage	1 x 7-pin SATA3.0 hard disk interface, 6Gbps
	1 x Full-height mSATA3.0 slot
BIOS	64Mb Flash ROM
Watch Dog	Support hardware reset function (256 levels, 0~255 seconds)
OS	Windows 10/Linux
Display	1 x Intel UHD Graphics 600 cores
	1 x HDMI, 1 x DP (optional), support HDMI & DP synchronous and asynchronous display
Network	4 x Intel I225-V/I226-V 2.5G network, support Wake on LAN/PXE
I/O Interfaces	
Expansion	1 x Mini-PCIe slot (support both full-height and half-height), support 4G module (If WIFI is
	needed, only 3 wired network cards are supported)
Back I/O	4 x Intel I225-V/I226-V 2.5G network interface
	2 x USB 2.0
	1 x HDMI 1.4 (HDMI and DP dual-layer display interface is optional, of which the DP interface
	supports 4K display)
	1 x 12V~19V DC IN
Front I/O	4 x USB 3.0
	1 x Line OUT and MIC combo (optional)
	2 x DB9 RS232 (RS232 for default, COM1 and COM2 support RS485 through hardware
	adjustment)
	1 x Hard disk LED
	1 x Power button with LED light
Internal I/O	1 x USB 2.0 1*4pin (support 2 x USB 2.0 when supporting 2 x network and not supporting 4G)
	2 x COM 2*5pin (the same signal with front I/O, optional)
	1 x Hard disk power input
	1 x Power supply 1*4pin
	1 x Front power button and LED interface 2*5pin
Fan	Back-mounted CPU passive cooling design, 1*4pin CPU fan interface is reserved
GPIO	4 x GPIO
Power Supply	DC 12V~19V power input
Mechanical & Env	·
Dimension	120mm x 121mm

Dimension 120mm x 121mm Operating Temp. $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$ Storage Temp. $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$

Operating Humidity 5%~95% relative humidity, non-condensing



ABOUT POLYHEX

As a board level and system level designer and manufacturer, Polyhex, with 9-year experience, 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, Allwinner and so on, we have earned trust from clients worldwide in over 30 countries. Polyhex is also certified with ISO9001 and ISO13485 for the self-owned manufacture facility.

