

Mini-ITX Embedded Motherboard Powered by Intel® Q370 Chipset Supporting Intel® 8th & 9th Generation Core™ Processors



- Supports Intel® 8th & 9th Gen Coffee Lake Core i3/i5/i7 and Pentium processors
- Dual-channel DDR4 SO-DIMM memory, max to 32GB
- 4 x SATA3.0 standard storage interfaces
- Processor integrated graphics with Triple Display support of 4096 x 2048P resolution
- 3 x 1000M Gigabit ethernet
- Integrated TPM data protection module
- High Expandability and Rich I/O Connectivity with M.2, PCIe and COM ports
- Power-on automatic boot function
- Wide Temperature Optional



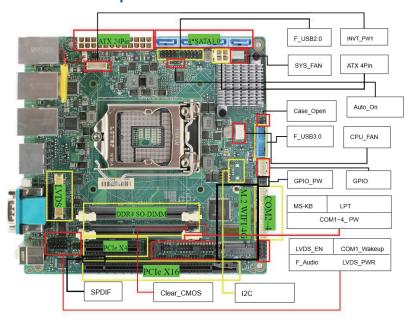
Description:

The EMB-IQ370D-MI34 is a native x86 motherboard based on the standard Mini-ITX architecture. The Mini-ITX is only 170x170mm. The board uses Intel® Q370 chipset to support Intel's 8th Generation Coffee Lake, 9th Gen Coffee Lake Refresh platform, the Core i3/i5/i7, and the Pentium processor.

The motherboard supports dual-channel DDR4 SO-DIMM memory, maximum expandable support 32G, support 4 SATA3.0 standard storage interfaces, processor integrated graphics, support for three independent digital display interfaces, support 4096 x 2048P resolution HD playback. Built-in LVDS display output, support dual eight 24B display output. Integrated PCIe x16 expansion interface for external graphics. The motherboard integrates three Intel 1000M independent network cards to support Intel VPro functions, enabling remote management and maintenance of the computer.

It has one M.2 2230 interface onboard for WiFi and Bluetooth; onboard M.2 2280/2242 interface for PCIe SSD and onboard M.2 2242 (M.2 KEY-B) interface, supports 4G. It can support 4 COM ports, 12 USB ports pins (4x USB3.1, 2x USB3.0, 6x USB2.0). Integrated TPM data protection module, support power-on automatic boot function. Can be widely used in high-definition video playback, digital signage, video conferencing, audio-visual systems, interactive touch self-service, network management, one machine and other industries, is a powerful, powerful expansion of the industry motherboard.

Board Components:





Rear I/O Interfaces:



Specification:

СРИ	Support Intel® 8th and 9th Generation desktop platforms Core i3/i5/i7/Pentium processor TDP≤65W
	Intel® Celeron® Processors
	G4900/G4900T/G4920/G4930/G4930T/G4950
	Intel® Pentium® Gold Processors
	G5400/G5400T/G5420/G5420T/G5500/G5500T/G5600/G5600T/G5620 Intel® 8th Gen Processors
Compatible	Core™ i3-8100/i3-8100T/i3-8300T/i3-8300T/i5-8400T/i5-8400T/i5-8500T/i5-8500T/i5-8600T/i7-8700/i7-
Processors	8700T
	Intel® 9th Gen Processors
	Core™ i3-9100/i3-9100E/i3-9100TE/i3-9100T/i3-9100F/i3-9300/i3-9300T/i3-9320/i5-9400/i5-9400T/i5-
	9400F/i5-9500/i5-9500E/i5-9500F/i5-9500T/i5-9600T/i5-9500TE/i5-9600/i7-9700/i7-9700E/i7-9700F/i7-
	9700T/i7-9700TE
Chipset	Intel® Q370 chipset
RAM	2x DDR4 SO-DIMM slot with dual channel support DDR4-2666/2400/2133
	maximum capacity support 32GB Non-ECC
Graphics card	CPU integrated display core (Intel® HD Graphics) Based on CPU
Network controller	3 x 1000M network card, including 1x I219+ 2x I210 Intel® Gigabit LAN
ТРМ	Onboard TPM2.0 security chip
Display	Dual DP++, DVI-D support 4096 x 2048P@60Hz
Display	Support dual 8 24B LVDS output, maximum resolution 1920*1080
M.2	1 x M.2 KEY-A supports WIFI, BT
	1 x M.2 KEY-B supports 4G Either Key A or Key B can be used at a time. Cannot be used simultaneously
	1 x M.2 2280/42 Supports PCle SSD
сом	4 COM Ports
	COM3, COM4 support BIOS to choose RS232/RS485/RS422 function
	COM1/COM2 only supports RS232
SATA	4 ports, 4x SATA3.0
USB	Rear: 4 * USB3.1, interface, 2 * USB2.0.
	Built-in: 1 set of USB3.0 pins (supports 2*USB3.0 interface), built-in 2 sets of USB2.0 pins
	(supports 4*USB2.0 interface)
I/O	• 2 * USB2.0 + RJ45 (supports Intel® VPro function)
	• 2 * USB3.1 + RJ45 • 2 * USB3.1 + RJ45
	• 2 * DP++1.2
	• DVI-D+COM
	Audio_OUT+MIC
	• 2 sets of front USB 2.0 pins
	• 1 set of front USB3.0 pins
	• 3 standard 9pin COM pins (optional)
	• 1 KB_MS pin • 1 LPT pin
	• 4 COM power supply selection jumpers
internal neaders	• 1 front audio pin
	• 1 front panel control pin
	• 1 Case OPEN jumper
	•1 LVDS pin
	• 1 GPIO socket
Expansion slot	• 1 PCle X4 slot (non-standard location, custom adapter card as needed)
	• 1 PCle X16 slot
Power supply	Standard ATX power supply
Dimension	170 * 170mm
Cooling	Reserve CPU heat sink, main chip heat sink
Temperature	-20°C ~ 60°C(-40°C ~ 85°C Optional)



ABOUT POLYHEX

As a board level and system level designer and manufacturer, Polyhex, with 9 years' 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 venders like Intel, NXP, ST, Rockchip, Allwinners 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.

