



ECM-ADLS

Intel 12th Gen Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor, supports LGA 1700 CPU Up to 35W Max 3.5" Micro Module

- > Top Layer Soldered Socket
- > Intel® 12th/13th Gen Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor, supports LGA 1700 CPU Up to 35W Max; 13th does not support i7, i9 CPU.
- > Intel® Q670E/H610E chipsets
- > Single DDR5 4800MHz SO-DIMM socket, support up to 32GB
- > Triple Display: 1 x DP++, 1 x HDMI, 1 x 2CH LVDS or 1x eDP (Default LVDS)
- > Expansion Slot M.2 Key-E, M.2 Key-M
- > Dual 2.5G Gigabit Ethernet
- > 2 x RS-232/422/485
- > DC-Input, +12VDC

+ Spec

-System Information-

Processor	Intel® 12th/13th Gen Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor, supports LGA 1700 CPU Up to 35W Max *13th does not support i7 & i9 CPU
Platform Controller Hub	Intel® Q670E Chipset Intel® H610E Chipset
System Memory	Single 262-pin DDR5 4800MHz SO-DIMM socket, support up to 32GB (Non ECC for Chipset Q670E & H610E)
I/O Chipset	EC ITE IT5782VG
BIOS Information	AMI BIOS, 256Mbit SPI Flash ROM
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec and 1sec. or 1min./step
H/W Status Monitor	CPU & system temperature monitoring Voltages monitoring
TPM	fTPM

Expansion

Expansion	1 x M.2 (2230) E-Key, support Wi-Fi module, support 2x PCIe x1 Gen 3, USB 2.0 1 x M.2 (2280) M-Key, support PCIe x4 Gen 3 NVMe or SATA device
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Storage

Storage	1 x M.2 (2280) M-Key, support PCIe x4 Gen 3 NVMe or SATA device
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I/O

USB Port	4 x USB 3.2 Gen 2 (note: H610E USB 3.2 Support 2x Gen 2 & 2x Gen 1) 4 x USB 2.0
COM Port	2 x RS-232/422/485
DIO	1 x 2 x 6 pin, pitch 1.27mm connector for GPIO: 8bits
Other	2 x LAN ports

Display

Graphic Chipset	Intel® 12/13th Generation CPU integrated
Spec. & Resolution	1 x DP 1.4b : 4096 x 2304@60 Hz, support DP++ 1 x HDMI 2.0 : 4096 x 2304@60 Hz 1 x LVDS: 1920 x 1080 Dual channel 18/24-bits LVDS (Chrontel CH7513A-BF eDP to LVDS) or 1 x eDP 1920 x 1080@60Hz (2 Lanes), default LVDS Note: JLVDS1 Support 1 x LVDS or 1 x eDP, share the same connector.
Multiple Display	Triple Display
LVDS	1 x LVDS: 1920 x 1080 Dual channel 18/24-bits LVDS (Chrontel CH7513A-BF eDP to LVDS)

Audio

Audio Codec	Realtek ALC888S
Audio Interface	Mic-In, Line-In, Line-Out

Certifications

Certification Information	CE FCC Class B
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Ethernet

LAN Chipset	Intel® i226-LM 2.5 Gigabit Controller
Ethernet Interface	2 x 2.5 Gigabit Ethernet
LAN Port	2 x RJ-45

Mechanical & Environmental

Operating Temperature	0~60°C (32~140°F) with 0.5m/s air flow
Storage Temperature	-40°C ~ 75°C (-40°F ~ 167°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Weight	0.44lbs (0.2kg)
Vibration Test	1.5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30min/Axis, 3 Axis
Shock Test	10G, IEC 60068-2-27, Half Sine, 11ms, Z Axis
Drop Test	ISTA 2A, IEC-60068-2-32 Test : Ed, 1 Corner, 3 Edges, 6 Faces
Power Requirement	DC in +12V Note: Only use DC IN 12V for ECM-ADLS, please do not use Switching Power Supply.



ACPI	Single power ATX Support S0,S3, S4, S5 ACPI 5.0 Compliant
Power Mode	AT/ATX (Default Setting: AT)
Dimension (L x W)	5.7" x 4" (146mm x 101mm)
Software Support	
OS Information	Win 11, Win 10 Linux
Ordering Information	
Ordering Information	ECM-ADLS-Q67-A1R 3.5" Q670E micro module w/CPU socket/A1 ECM-ADLS-H61-A1R 3.5" H610E micro module w/CPU socket/A1 ACC-CPU-G6900TER, Intel Celeron G6900TE 2.4GHz Processor ACC-CPU-G7400TER, Intel Pentium G7400TE 3.0GHz Processor ACC-CPU-12100TER, Intel Core i3-12100TE 4.0GHz Processor ACC-CPU-12500TER, Intel Core i5-12500TE 4.5GHz Processor ACC-CPU-12700TER, Intel Core i7-12700TE 4.6GHz Processor ACC-CPU-12900TER, Intel Core i9-12900TE 4.8GHz Processor ACC-CPU-13100TER, Intel Core i3-13100TE 2.40GHz Processor