



EMX-H110KP

Intel® 6/7th Generation Core™ Processor Mini ITX Motherboard with Intel® H110 Chipset

- > Intel® 7th Generation Core™ Processor (Max. TDP at 95W)
- > Intel® H110 Chipset
- > 2 x 260-pin DDR4 2133MHz SO-DIMM supports up to 32GB
- > 1 x Intel® I219LM Gigabit Ethernet PHY
- > 1 x Intel® I211AT PCIe Gigabit Ethernet
- > Realtek ALC888S & ALC897 (co-lay) Audio Codec
- > VGA, HDMI, DP++, Dual channel 18/24-bits LVDS (Chrontel CH7511B eDP to LVDS)
- > 3 x SATA III, 1 x SATA III or 1 x mSATA III switch by BIOS
- > 1 x PCIe x16
- > 1 x Full Size Mini-PCIe with mSATA Support (SATA III)
- > 1 x Half Size Mini PCIe
- > 4 x USB 3.0, 2 x USB 2.0 at I/O
- > 1 x PS/2 Keyboard or Mouse with Dual deck USB 2.0
- > 5 x RS232, 1 x RS232/422/485
- > Line-in, Mic-in, Line-out
- > 8-bits GPIO
- > Infineon SLB9665 support TPM 2.0 (Optional)
- > AT/ATX Power

+ Spec

System Information

Processor	Intel® LGA1151 Socket Supports 6/7th Generation Core™ i7/ i5/ i3 & Pentium®/Celeron® Processors (Max. TDP at 95W)
Platform Controller Hub	Intel® H110 Chipset
System Memory	2 x 260-pin DDR4 2133MHz SO-DIMM supports up to 32GB
I/O Chipset	Nuvoton® NCT6106D
BIOS Information	AMI uEFI BIOS, 128Mbit SPI Flash ROM
Watchdog Timer	H/W Reset, 5~255 seconds/5~255 minutes
H/W Status Monitor	CPU temperature monitoring Voltages monitoring CPU fan speed control
TPM	Infineon SLB9665 support TPM 2.0 (Optional)
Board	Mini ITX

Expansion

Expansion	1 x PCIe x 16 1 x Full Size Mini PCIe Supports mSATA (by auto switch IC) 1 x Half Size Mini PCIe
------------------	--

I/O

USB Port	4 x USB 2.0 4 x USB 3.0
COM Port	5 x RS232 1 x RS232/422/485
SATA	3 x SATA III, 1 x SATA III or 1 x mSATA III switch by BIOS selection
DIO	1 x 8-bit GPIO
MIO	1 x PS/2 Keyboard or 1 x PS/2 Mouse
Other	Infineon SLB9665 support TPM 2.0 (Optional)

Display

Graphic Chipset	Intel® 7th Generation CPU integrated VGA + HDMI + DP
Spec. & Resolution	VGA: 2048 x 1536 @ 50Hz HDMI: 4096 x 2160 @ 24Hz DP: 4096 x 2304 @ 60Hz
Multiple Display	Dual Display
LVDS	Dual channel 18/24-bits LVDS (Chrontel CH7511B eDP to LVDS)

Audio

Audio Codec	Realtek ALC888S & ALC897 (co-lay) Audio Decoding Controller
Audio Interface	Mic-in, Line-out, Line-in
Audio Amplifier	2 x 6W Amplifier

Ethernet

LAN Chipset	1 x Intel® I219LM Gigabit Ethernet PHY 1 x Intel® I211AT PCIe Gigabit Ethernet
LAN Port	2 x RJ-45

Mechanical & Environmental

Operating Temperature	0~60°C (32~140°F)
Storage Temperature	-40~ 75°C (-40~167°F)
Operating Humidity	40°C @ 95% relative humidity, non-condensing
Weight	0.40 kg
Power Requirement	+12V/+5V/5VSB/+3.3V/-12V
ACPI	Single power ATX Support S0, S3, S4, S5
Power Mode	AT/ATX
Dimension (L x W)	6.69" x 6.69" (170mm x 170mm)

Ordering Information



Ordering Information

EMX-H110KP-B1R
Intel® 6/7th Generation Core™ i7/ i5/ i3 Processor Mini ITX Motherboard with Intel® H110 Chipset