

# EC7-1820 Mini-ITX Motherboard with Intel® Apollo Lake

## Brief Introduction

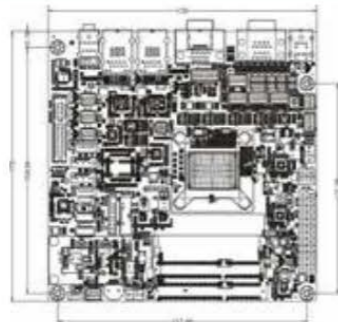
EC7-1820 is a standard Mini-ITX motherboard with Intel® Apollo Lake SoC, support Intel® J3455 and N3350 processor and up to 8GB RAM. EC7-1820 also features with rich I/O and expansion including 2 x LAN, 10 x USB, 6 x COM, VGA, HDMI, LVDS, PS/2, Audio, GPIO, TPM, PCIE.



## Features

- Intel® Apollo Lake J3455/N3350 SoC
- 2 x 204PIN DDR3L SO-DIMMs support up to 8GB
- VGA + HDMI + LVDS, support dual-independent display
- 2 x LAN/10 x USB, 6 x COM
- 1 x PCIe16/1 x Mini PCIE/1x mSATA
- ATX and DC 12V power supply

## Product size chart



## Specifications

Items	Specification
Chipset	Intel® Apollo Lake
CPU	Intel® J3455/N3350
Memory	2 x 204PIN DDR3L SO-DIMMs Non-ECC, up to 8GB
Storage	2 x SATA 3.0 or 1 x SATA 3.0, 1 x mSATA
LAN	2 x 10/100/1000Mbps RJ45 LAN1: Intel® I211 controller, support wake-on-line LAN2: Intel® I211 controller
Rear I/O	1 x VGA, 1 x HDMI, support dual-independent display
	4 x USB 3.0
	2 x Serial ports, support RS232/R422/485 auto-flow control in RS485
	2 x 10/100/1000Mbps RJ45
	Audio, support Mic-in, Line-out 2 x PS/2
Internal I/O	1 x VGA, 1 x LVDS support dual-channel 24bit
	6 x USB 2.0
	4 x Serial ports, support RS232
	2 x SATA 3.0 or 1 x SATA 3.0, 1 x mSATA
	1 x 8ch GPIO 1 x TPM
Expansion	1 x PCIe1 (x4 connector), support PCIE 2.0/1.1 1 x Mini PCIE with SIM card holder SPI, I2C, SMBUS, LPC
Watchdog Timer	1 ~ 255sec/min timer system reset or interrupt
Power Supply	J3455: ATX power supply N3350: DC 12V
Operating System	Win10, Linux
Environment	Operating temperature: -10 ~ 65 Storage temperature: -40 ~ 80 Humidity: 20% ~ 95% Non-condensing
Dimensions(L x W)	170mm x 170mm

## Ordering Information

P/N	Model	Description
0030-021271	EC7-1820-J3455	Mini-ITX MB/Intel® Apollo Lake J3455 1.5GHz/ 2 x 204PIN DDR3L SO-DIMMs/SATA/mSATA/ 2VGA/HDMI/LVDS/2LAN/8USB/6COM/2 x PS2/Audio/TPM/8ch GPIO/1 x PCIe1/1 x Mini PCIE/ SIM/ATX power supply
0030-021281	EC7-1820-N3350	Mini-ITX MB/Intel® Apollo Lake N3350 1.1GHz/2 x 204PIN DDR3L SO-DIMMs/SATA/mSATA/ 2VGA/HDMI/LVDS/2LAN/8USB/6COM/2 x PS2/Audio/TPM/8ch GPIO/1 x PCIe1/1 x Mini PCIE/ SIM/DC 12V