

# AMIX-CML0

Intel® Q470E/H420E based Mini-ITX Motherboard supports  
Intel® 10th Gen Core™ i9/i7/i5/i3 /Pentium/Celeron® Processors with  
HDMI/DP/DVI-D/VGA/LVDS(eDP), 4 SATAIII, 4 COM, 12USB, Dual Intel® GbE LAN.

## Key Features

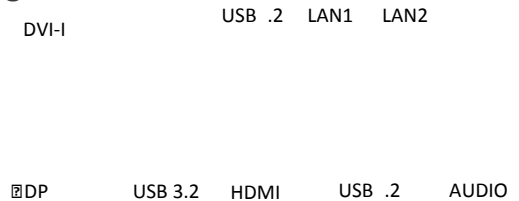
- Intel® 10th Generation Core™ i9/i7/i5/i3 /Pentium/Celeron® series processor (LGA1200 socket) with Q470E/H420E chipset
- Two 260-pin SO-DIMM up to 32GB DDR4 2933MHz SDRAM
- Multi-Display: HDMI/DP/DVI-D/VGA/LVDS (co-lay with eDP)
- Two Intel® Gigabit Ethernet ports
- 1 xPCIe (x16), 1 x Mini-PCIe, 2 x M-key 2280
- 4 x SATA III, 4 x COM, 10x USB 3.2 Gen. and 2 x USB 2.0
- Supports 4K/2K resolution display
- ATX Power support

## Product Specification

System Processor/Chipset	
Processor	Intel® 10th Generation Core™ i9/i7/i5/i3/Pentium/Celeron (Comet Lake-S) processor (LGA1200 socket); (max TDP 65W)
Chipset	Intel® Q470E or H420E
BIOS	AMI SPI Flash ROM
Memory	
Technology	DDR4 SDRAM 2933MHz
Max. capacity	Up to 32GB
Socket	2 x 260-pin SO-DIMM
Display	
Graphics	Intel® UHD Graphics
Display interface	HDMI/DP/DVI-D/LVDS (eDP co-lay)
Multi-display	DP + HDMI + DVI-/ +LVDS DP + HDMI + DVI-/ +VGA DP + DP +DVI-D + LVDS DP + DP + VGA + LVDS
Resolution	DP: 4096 x 2304 @ 60Hz (max.) HDMI: 4096 x 2160 @ 60Hz (max.) LVDS: 1920 x 1200 @ 60Hz (max.) DVI-/: 1920 x 1200@60Hz VGA: 1920 x 1200@60H
Ethernet	
Interface	10/100/1000 Mbps
Controller	Intel® I219LM + i211 GbE
Connector	2 x RJ45
Audio	
Interface	Line-out, Mic-in, Line-in
CODEC	Realtek ALC662 HD
Expansion Slot	
PCIe	1 x PCIe (x16)
Mini-PCIe	1 x Full-Size DMI/PCIe w/ SIM
M.2	1 x M.2 M-key 2280 NVMe SSD
SATA	
Max. data transfer rate	6.0 Gb/s
Port	4 x SATA III
I/O	
Audio	Line-out, Mic-in, Line-in (box-header)
USB	10 x USB 3.2 Gen. 1(Rear I/O) (Q470E) 6 x USB 3.2 Gen. 1(Rear I/O) (H420E) 2 x USB 2.0 (box-header)
COM	3 x RS-232 (box-header) 1 x RS-232/422/485 (box-header)
HDMI/VGA/DVI/DP	HDMI; DP; DVI-D; VGA; LVDS (eDP co-lay)
DIO	4-in/4-out
Power Requirement	
Power connector	ATX (24+4P)
Power type	ATX

Power mode	ATX
Watchdog Timer	
Interval	Programmable 1 ~ 255 sec/min
Output	System reset
Environment	
Operating temperature	0°C ~ 60°C (32°F ~ 140°F) standard -20°C ~ 70°C (-4°F ~ 158°F) optional -40°C ~ 70°C (-40°F ~ 158°F) optional
Storage temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative humidity	0% ~ 95% (non-condensing)
Form Factor	
Dimensions (L x W)	Mini-ITX 170mm x 170mm (6.69" x 6.69")

## Rear I/O



## Dimensions

## Ordering Information

Part Number	Description
AMIX-CML0-Q470	Mini-ITX, Intel 10th Gen Q470E, HDMI/DP/DVI-D/ LVDS, 4SATA/ 4COM/12USB/2LAN, ATX20P
AMIX-CML0-H420	Mini-ITX, Intel 10th Gen Q470E, HDMI/DP/DVI-D/ LVDS, 4SATA/ 4COM/8USB/2LAN, ATX20P

## Optional Accessories

Part Number	Description
TBD	I/O Shied
TBD	Cooler w/ FAN for LGA1200
VK00000700A9	SATA cable
VK00002600A9	SATA power cable