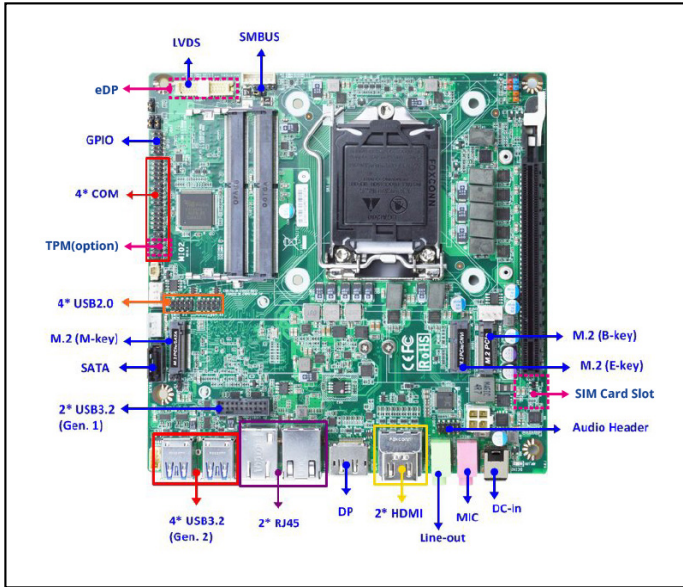


Mini-ITX Board with Intel® LGA1200 Socket, 10/11th Gen Processors & Wide Range DC-in 12V to 28V



## Features

- Powered by Intel® LGA1200 10/11th Gen Socket Processor (Comet Lake-S, TDP 65W) and Intel Q470E Chipset
- Triple display support with 2 x 4K HDMI, 1 x 4K DP, 1 x LVDS, and 1 x 4K eDP
- Dual LAN ports with 1 x Intel GbE and 1 x Intel i225LM 2.5GbE for reliable networking
- Reliable storage with 1 x SATA III (6Gb/s) and 1 x M.2 M-Key supporting RAID 0/1
- Additional expansion options with 1 x PCIe x16 slot, 1 x M.2 E-Key, 1 x M.2 B-Key, and 1 SIM card slot
- Comprehensive I/O featuring 4 x COM, 4 x USB3.2 Gen.2, 2 x USB3.2, and 4 x USB2.0
- Supports a wide range DC-in from 12V to 28V for flexible power options
- Supports Intel® PTT (fTPM) with optional onboard TPM 2.0 (dTPM)

## Packing List

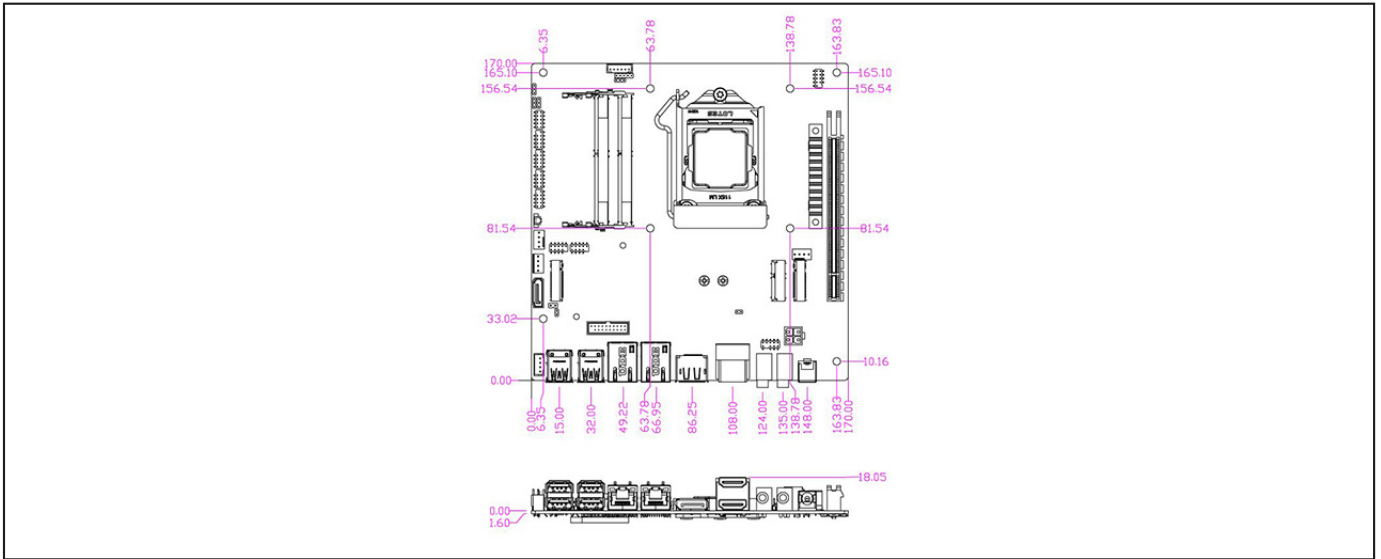
PART NUMBER	DESCRIPTION	QTY
MI02-10 Series	MI02-10 / MI02-12 M/B	1
F04-MB-083-1F	MI02 I/O Shield	1
G01-COM-H2M22-1F	COM Cable	2
G01-PW4PS-2S-323F	SATA Power Cable	1
G01-SATA3-BL-1F	SATA Cable	1

## Specifications

SYSTEM	
MB FORM FACTOR	Mini-ITX
CPU	Intel® LGA1200 10/11th Gen Socket Processor (Formerly Comet Lake-S, TDP 65W)
CHIPSET	Intel® Q470E
MEMORY	2 x DDR4 2933/2666/2400MHz, Dual Channel SO-DIMM, up to 64GB
BIOS	AMI 256Mb Flash ROM
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0
DIMENSION (W X D)	170.0 (W) x 170.0 (D) mm (6.7" x 6.7")
OS SUPPORT	Windows® 11 (64bit) Windows® 10 (64bit) Linux
POWER	
POWER REQUIREMENT	DC-in 12~28V
POWER ON MODE	AT / ATX
CONNECTOR	DC Jack
DISPLAY	
GPU	Intel® HD Graphics
LVDS	1 x LVDS (Max. Resolution: 1920 x 1200 @60Hz)
eDP	1 x eDP (Max Resolution: 4096 x 2304@60Hz)
DP	1 x DP (Max Resolution: 4096 x 2304@60Hz)
HDMI	2 x HDMI 1.4 (Max Resolution: 4096 x 2160@30Hz)
MULTIPLE DISPLAY	Support 3 Displays
AUDIO	
CODEC	Realtek Audio Codec
Line-out	1 x Audio Jack for Line-Out
MIC-in	1 x Audio Jack for MIC-In
LAN	
ETHERNET	1 x RJ45 for Intel® I219-LM GbE 1 x RJ45 for Intel® I226-LM 2.5GbE
USB PORT	
USB	4 x USB 3.2 Gen 2x1 (10Gbps, Formerly USB 3.1 Gen 2) Internal Header for 2 x USB 3.2 Internal Header for 4 x USB 2.0
SERIAL PORT	
COM	Internal Header for 2 x RS-232/422/485 Internal Header for 2 x RS-232
INTERNAL I/O	
GPIO	8-Bit
SMBUS	Yes
ADDITIONAL	1 x Chassis Intrusion 1 x Audio Header 1 x eDP 1 x LVDS 1 x AT Mode Selection
STORAGE	
SATA	1 x SATA III
RAID	RAID 0/1
EXPANSION	
M.2	1 x M-key 2280 (SATA/PCIe4) support NVMe 1 x E-Key 2230 (USB 2.0/PCIe x1) Support CNVi 1 x B-key 3042/3052 (USB3.0/PCIe x1) support W/SIM card slot
PCIe	1 x PCIe x16
SIM	1 x Nano SIM Card Slot
ENVIRONMENT & CERTIFICATION	
SHOCK	15G, 11ms duration
VIBRATION	1 Grms/ 5- 500Hz/ Operation
OPERATING TEMPERATURE	0°C ~ 60°C (32°F ~ 140°F)
STORAGE TEMPERATURE	-20°C ~ 85°C (-4°F ~ 185°F)
OPERATING HUMIDITY	10 ~ 90% Relative Humidity, Non-condensing
CERTIFICATION	CE/FCC Class A LVD
ESG DECLARATION	EU RoHS China RoHS REACH

## Dimension

Unit: mm



## Ordering Information

PART NUMBER	MI02-10-A01	MI02-12-A1
CPU	Intel® Socket LGA1200 CPU	Intel® Socket LGA1200 CPU
SECURITY	Intel® PTT (fTPM)	Intel® PTT (fTPM) & TPM 2.0 (dTPM)
POWER REQUIREMENT	DC-in 12-28V	DC-in 12-28V
GPU	Intel® HD Graphics	Intel® HD Graphics
LVDS	1 x LVDS	1 x LVDS
DP	1 x DP	1 x DP
HDMI	1 x HDMI	1 x HDMI
MULTIPLE DISPLAY	Support 3 Displays	Support 3 Displays
ETHERNET	1 x 2.5GbE	1 x 2.5GbE
ETHERNET	1 x GbE	1 x GbE
USB	4 x USB 3.2 Gen 2	4 x USB 3.2 Gen 2
USB	2 x USB 3.2	2 x USB 3.2
USB	4 x USB 2.0	4 x USB 2.0
COM	2 x RS-232	2 x RS-232
COM	2 x RS-232/422/485	2 x RS-232/422/485
SATA	1 x SATA III	1 x SATA III
M.2	1 x M-Key 2280	1 x M-Key 2280
M.2	1 x E-Key 2230	1 x E-Key 2230
M.2	1 x B-Key 3042/3052	1 x B-Key 3042/3052
PCI-E	1 x PCI-E x16	1 x PCI-E x16
SIM	1 x SIM Card Slot	1 x SIM Card Slot
OPERATING TEMPERATURE	0°C - 60°C (32°F - 140°F)	0°C - 60°C (32°F - 140°F)