

## MF10 Series

**11<sup>th</sup> Gen. Intel® Tiger Lake-UP3 SoC Processors, support up to 4\* independent 4K HDR Displays, M.2 PCIe 4.0 x4 supports NVMe, 1\* COM, 3\* USB3.2 (Gen2), 2\* USB Type-C, 1\* 2.5GbE, 1\* GbE**

1. Intel® Tiger Lake-UP3 SoC Processor (TDP 12~28W)
2. 2\* DDR4-3200MHz SO-DIMM up to 64GB
3. 1\* Intel i219-LM 1.0GbE, 1\* Intel i225V 2.5GbE
4. 2\* HDMI, 2\* DP1.4 (from Type-C), 1\* eDP
5. 1\* RS232, 3\* USB3.2 (Gen.2), 3\* USB2.0, 2\* USB 3.2 (Gen. 2) Type-C support DP1.4 display output
6. 1\* M.2 M-key 2242/2280, PCIe 4.0 x4/SATA interface support NVMe, 1\* SATAIII (6Gb/s)
7. 1\* M.2 E-key 2230, USB2.0/PCIe x1 interface support CNVi, 1\* M.2 B-Key 3042/3052, USB3.1/USB2.0/PCIe x1 interface
8. MF10-22 / MF10-92: Onboard TPM 2.0 (option)



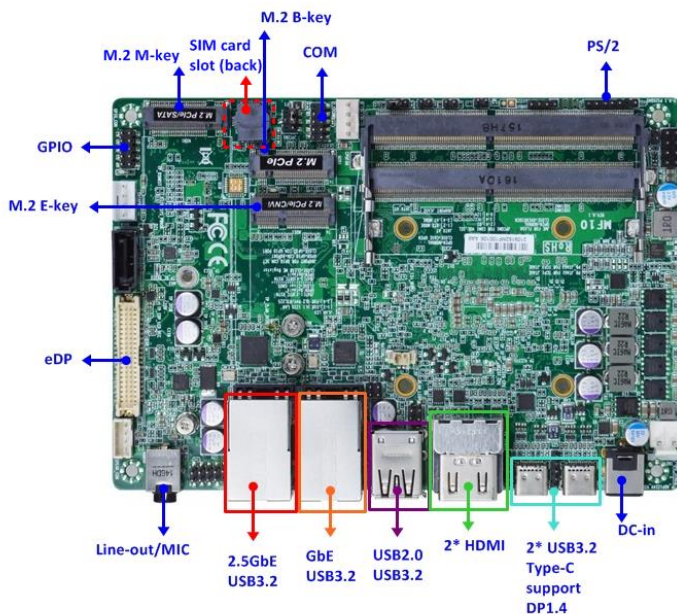
### Overview

The JETWAY MF10 Series is a 3.5" form factor motherboard based on the Intel® 11<sup>th</sup> Gen. Intel Tiger Lake-UP3 SoC Processors. The board supports two SO-DIMM DDR4 memory up to 64GB. Having dual integrated Intel® i219-LM GbE & i225V 2.5GbE controllers, the MF10 Series offers one gigabit and one 2.5 gigabit ethernet. The MF10 is support the latest PCI Express 4.0 interface on the M.2 PCIe 4.0 x4 slot for NVME solid state drive. The MF10 is also support up to four independent 4K HDR displays. In addition, the MF10 has internal eDP port for customers integrating LCD panels. The JETWAY MF10 Series is suitable for Digital Signage, Industrial PCs, Edge Computing, Factory Automation, AI and IOT Solution applications. The MF10 includes a flat aluminum heatsink for thermal dissipation allowing for easy integration into fanless systems.

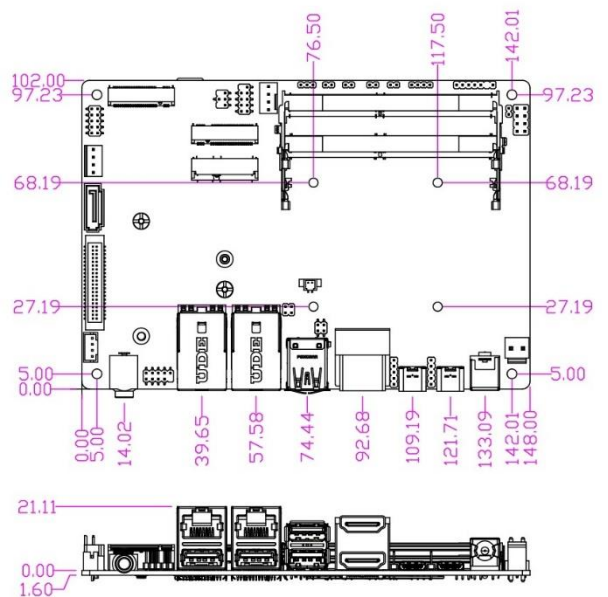
### Application

Digital Signage / Industrial PCs / Edge Computing / Factory Automation / AI Inference / Retail Solution

### I/O Diagram



### Mechanical Drawings (Unit = mm)



## Specifications

<b>Model</b>	<b>Form Factor</b>
<ul style="list-style-type: none"><li>MF10-20 (i5-1145G7E Default)</li><li>MF10-22 (i5-1145G7E, TPM2.0)</li><li>MF10-90 (i5-1135G7)</li><li>MF10-92 (i5-1135G7, TPM2.0)</li></ul>	3.5" (5.8-in * 4.0-in, 148 * 102mm)
<b>Processor System</b>	<b>Expansion Slot</b>
<ul style="list-style-type: none"><li>Intel® Tiger Lake i5-1145G7E SoC Processor (TDP 12~28W) (Default)</li><li>Intel® Tiger Lake i5-1135G7 SoC Processor (TDP 12~28W)</li><li>AMI Flash ROM BIOS</li></ul>	<ul style="list-style-type: none"><li>M.2 E-key (2230) USB2.0/PClex1 interface support CNVi</li><li>M.2 B-Key (3042/3052) USB3.1/USB2.0/PCIe x1 interface</li></ul>
<b>Memory</b>	<b>Graphics</b>
2* DDR4-3200 Dual Channel SO-DIMM up to 64GB total	<ul style="list-style-type: none"><li>Intel® HD Graphics, shared memory</li><li>1* eDP (Max Resolution: 4096x2304@60Hz)</li><li>2* HDMI 2.0b (Max Resolution: 4096x2160@60Hz)</li><li>2* DP1.4 (Max Resolution: 4096x2304@60Hz) from Type-C</li><li>Support Four independent 4K HDR Displays</li></ul>
<b>Ethernet</b>	<b>Audio</b>
<ul style="list-style-type: none"><li>1* Intel i219-LM 1.0GbE</li><li>1* Intel i225V 2.5GbE</li></ul>	<ul style="list-style-type: none"><li>HD audio: Realtek ALC888S-VD2</li><li>3W AMP speaker</li></ul>
<b>Storage</b>	<b>Rear I/O</b>
<ul style="list-style-type: none"><li>1* SATAIII (6Gb/s)</li><li>M.2 M-key 2242/2280, PCIe 4.0 x4/SATA interface, support NVMe</li></ul>	<ul style="list-style-type: none"><li>3* USB3.2 (Gen.2)</li><li>1* USB2.0</li><li>2* USB3.2 (Gen.2) Type-C support DP1.4 display output</li><li>2* HDMI</li><li>2* RJ45</li><li>1* SIM card slot (bottom side)</li><li>Line-out/MIC Combo</li><li>DC-in (12-24V)</li></ul>
<b>Internal Connector</b>	<b>Watchdog Timer</b>
<ul style="list-style-type: none"><li>2* USB 2.0</li><li>1* PS/2</li><li>1* eDP</li><li>1* COM (RS232)</li><li>1* SATAIII</li><li>1* GPIO (8 bit)</li><li>1* Chassis intrusion</li><li>1* Speaker header (4pin)</li><li>1* SMBUS</li><li>1* AT/ATX mode jumper</li><li>Optional onboard TPM2.0 (MF10-22 &amp; MF10-92)</li></ul>	<ul style="list-style-type: none"><li>From Super I/O to drag RESETCON#</li><li>256 segments (10sec ~ 255min)</li></ul>
<b>Power</b>	<b>Compliance</b>
DC-in 12-24V - AT: Directly PWR on as Power input ready - ATX: Press Button to PWR on after Power input ready <b>- 90W adaptor is Recommended</b>	CE, FCC, LVD, RoHS, REACH
<b>Temperature</b>	<b>Warranty</b>
<ul style="list-style-type: none"><li>Operating: 0°C ~ 60°C</li><li>Storage: -20°C ~ 85°C</li><li>Humidity: 10% ~ 90% RH @40°C (non-condensing)</li></ul>	2 Years Limited Warranty

\* Specifications subject to change without notice, not responsible for typographical errors. Does not include memory, storage or OS.

## Standard Accessories

Part Number	Description
	MF10 M/B
G01-COM-H2M20-1F	1* COM cable
G01-SATA3-BL-1F	1* SATA cable
G01-PW4PS2S-322-1F	1* SATA Power cable
HCS3XXMHT03S-1F	1* Flat type Heatsink