

## MM91 Series

*Micro-ATX Embedded Motherboard, 6th/7th Generation Intel® Core™ i7/ i5 /i3, Pentium® LGA1151 Socket Processor, Max. 65W TDP*

1. Intel® LGA1151 Socket Core i3, i5, i7 & Pentium Processors (Max. 65W)
2. Intel H110 Express Chipset
3. Support Dual Channel DDR4 2133MHz, 2 \* UDIMM slot, up to 32GB memory
4. 2 \* Intel Gigabit LAN (I219-V + I211-AT)
5. 3 \* SATA III (6Gb/s), 1 \* M.2 (M-key 2242/2260/2280/22110)
6. 4 \* USB 3.0, 5 \* USB 2.0
7. 10 \* COM ports (COM1 supports RS232/422/485)
8. Support TPM function (option)
9. Micro ATX form factor (244mm x 244mm)



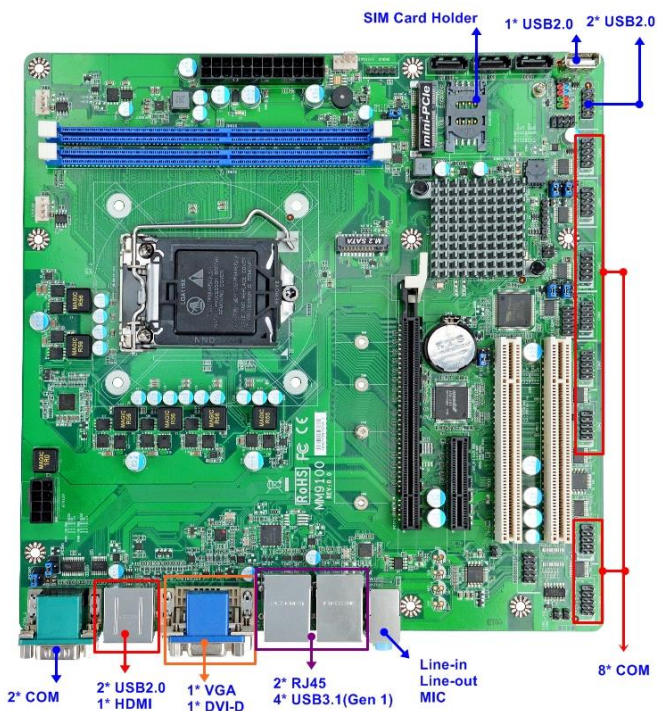
### Overview

The JETWAY MM91 is Micro-ATX form factor board adopts the Intel® 6<sup>th</sup> and 7<sup>th</sup> generation Core i7/i5/i3, Pentium and Celeron Processor. The board supports two UDIMM DDR4 2133Mhz memory, up to 32GB. Featuring the integrated Intel® Gigabit Ethernet controller, the MM91 offers two 10/100/1000Base-TX Ethernet devices for network transmission. Three SATAIII (6Gb/s) interface and one M.2 M-key offer storage devices. One Mini PCIe interface, four USB3.1 Gen.1 ports, five USB2.0/1.0 ports and ten COM ports provide versatile expansion. The PCIe16 slot can support Jetway riser card for different expansion. The MM91 offers one HDMI1.4 port, one DVI-D port and one VGA port which can support dual independent displays. Because of the above features, MM91 is suitable for ATM, Industrial PCs, Factory Automation applications.

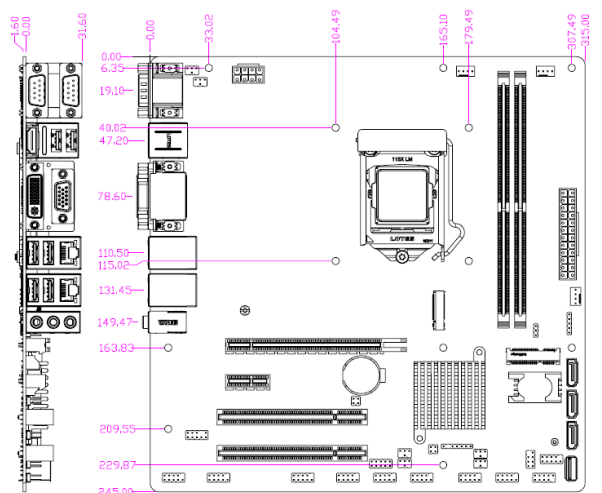
### Application

ATM / Industrial PCs / Factory Automation

### I/O Diagram



### Mechanical Drawings (Unit = mm)



## Specifications

<b>Model</b> MM91-00 : no TPM MM91-02 : TPM 2.0 onboard	<b>Form Factor</b> Micro ATX (244 * 244mm)
<b>Processor System</b> <ul style="list-style-type: none"> <li>Intel® LGA1151 SkyLake/KabyLake Processor (Max. 65W TDP)</li> <li>H110 chipset</li> <li>AMI Flash ROM BIOS</li> </ul>	<b>Expansion Slot</b> <ul style="list-style-type: none"> <li>1* Mini PCIe (full size)</li> <li>1* PCIe16 slot</li> <li>1* PCIe4 slot</li> <li>2* PCI</li> <li>1* SIM card slot</li> </ul>
<b>Memory</b> 2* UDIMM DDR4 2133MHz Dual CH non-ECC up to 32GB	<b>Graphics</b> <ul style="list-style-type: none"> <li>Intel® HD Graphics, shared memory</li> <li>1* VGA (Max Resolution: 1920x1200@60Hz)</li> <li>1* DVI-D (Max Resolution: 1920x1200@60Hz)</li> <li>1* HDMI 1.4 (Max Resolution: 4096x2160@30Hz)</li> <li>Support Dual Displays</li> </ul>
<b>Ethernet</b> 2* Intel GbE (1* i219V, 1* i211AT)	<b>Audio</b> 6 channel HD audio: Realtek ALC662
<b>SATA</b> 3* SATAIII	<b>Watchdog Timer</b> <ul style="list-style-type: none"> <li>From Super I/O to drag RESETCON#</li> <li>256 segments (10sec ~ 255min)</li> </ul>
<b>Rear I/O</b> <ul style="list-style-type: none"> <li>1* VGA</li> <li>1* HDMI</li> <li>1* DVI-D</li> <li>2* Ethernet RJ45</li> <li>4* USB 3.1 (Gen. 1) &amp; 2* USB2.0</li> <li>Line-In, Line-Out, MIC</li> <li>2* COM (COM 1 support RS232/422/485)</li> </ul>	<b>Internal Connector</b> <ul style="list-style-type: none"> <li>2* USB 2.0, 1* USB2.0 (Vertical type)</li> <li>1* PS/2</li> <li>8* COM</li> <li>3* SATAIII</li> <li>1* SIM card slot</li> <li>1* Mini PCIe (full size)</li> <li>1* M.2 M-key 2242/2260/2280/22110 (SATA I/F)</li> <li>1* GPIO (8 bit)</li> <li>1* Chassis intrusion</li> <li>1* Audio Header</li> <li>1* SMBUS</li> <li>1* AT mode</li> <li>Support onboard TPM (option)</li> </ul>
<b>Power</b> ATX PWR (8+24 pin), AT/ATX Supported - AT: Directly PWR on as Power input ready - ATX: Press Button to PWR on after Power input ready	<b>Compliance</b> CE, FCC, LVD, RoHS, REACH
<b>Temperature</b> <ul style="list-style-type: none"> <li>Operating: 0°C ~ 60°C</li> <li>Storage: -20°C ~ 85°C</li> </ul>	<b>Warranty</b> 2 Years Limited Warranty

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

## Accessories

Parts Number	Description	Parts Number	Description
-----	MM91 M/B	G01-COM9X3-30A-1F	COM cable
F04-MB-007-1F	MM91 I/O shield	G01-SATA3-BL-1F	SATAIII cable
G01-COM9-30A-1F	COM cable		