Features

- 6th Generation Intel® Xeon® / Core™ i7/i5/i3 & Pentium®/Celeron® Mini-ITX Motherboard w/ Intel® C236 PCH

- 2x DDR4 SO-DIMM, Max. 32GB

- Intel® Processor integrated graphics device, supports DVI-D, HDMI and DisplayPort

- Dual Intel® Gigabit LAN

- 2x USB 2.0, 6x USB 3.0, 4x COM, 4x SATAIII

- 2x Mini PCIe slots, 1x mSATA, 1x PCI-E(16x)

- Watchdog timer, Digital I/O, iAMT (11.0), TPM (1.2), iSMART

System

CPU Type

LGA1151 for 6th Generation Intel® Xeon®/ Core™ i7/i5/i3 / Pentium® QC/ DC processors, up to 4GHz

System Memory

2x DDR4 SO-DIMM, Max. 32GB (Supports ECC by CPU SKUs)

System Chipset

Intel® C236 / Q170 (MI991AF) / H110 PCH (MI991EF)

BIOS

AMI

Watchdog Timer

256 levels

SSD

1x mSATA

H/W Monitor

Yes

Expansion Slot

1x PCI-E(x16), 2x Mini PCIe

Graphics

VGA Controller

6th Generation Intel® Xeon®/ Core™ i7/i5/i3/ Pentium® processor integrated

VGA Memory

Max. Shared memory – 1024MB

Display Interface

Supports DVI-D, HDMI and DisplayPort

LAN

Controller

MI991AF: Intel® I219LM Gigabit LAN PHY

MI991EF: Intel® I219V Gigabit LAN PHY

Intel® I211AT PCI-E Gigabit LAN (as 2nd LAN)

Connector

RJ-45 on board

Multi I/O

I/O Chipset

Fintek F81846D-I

3x RS232, 1x RS232/422/485 (Jumper-less selection), 4x SATAIII (MI991AF) or 3x SATAIII (MI991EF)

USB

3.0: 6 ports on board (MI991AF), 4 ports on board (MI991EF)

2.0: 2 ports on board (MI991EF), 2 ports via pin-header

Audio

Intel® C236/Q170/H110 PCH built-in HD audio + Realtek ALC662 codec

Others

Digital I/O(4-in/4-out), EuP/ErP, RAID, TPM(1.2), iAMT(11.0), iSMART

Mechanical and Environmental

Dimensions

170mm x 170mm [6.7” x 6.7”]

Max. Power Requirement

TBD

Operating Temperature

0°C~60°C (32°F~140°F)

Storage Temperature

-20°C~80°C (-4°F~176°F)

Relative Humidity

90% (non-condensing @60°C)

Ordering Information

MI991AF-C236

LGA1151 C236 Mini-ITX motherboard w/ DVI-D, HDMI, DisplayPort, dual Gigabit LAN, RAID, iAMT (11.0), TPM (1.2), iSMART 3.0

MI991AF

LGA1151 Q170 Mini-ITX motherboard w/ DVI-D, HDMI, DisplayPort, dual Gigabit LAN, RAID, iAMT (11.0), TPM (1.2), iSMART 3.0

MI991EF

LGA1151 H110 Mini-ITX motherboard w/ DVI-D, HDMI, DisplayPort, dual Gigabit LAN, EuP/ErP, iSMART 3.0

Dimensions and Drawing

Reported errors: 1. Specifications are subject to change without prior notice. 2. ODM/OEM is available. 3. For user’s manual & datasheet download, visit www.ibase.com.tw.
MI991

Mini-ITX Motherboard
6th Generation Intel® Xeon® /Core™ i7/i5/i3 & Pentium®/Celeron® Mini-ITX Motherboard w/ Intel® C236 PCH

Desktop Processor Reference Table

<table>
<thead>
<tr>
<th>Processor Number</th>
<th>Base Freq (GHz)</th>
<th>Intel® turbo Boost Technology - max single core turbo freq (GHz)</th>
<th>Last Level Cache</th>
<th>Cores/Threads</th>
<th>Memory Speed Support (DDR4)</th>
<th>ECC Memory Support</th>
<th>TDP</th>
<th>Intel Integrated Graphics</th>
<th>Intel® vPro</th>
<th>Intel® AMT</th>
<th>Intel® TXT</th>
<th>Intel® VT-x</th>
<th>Intel® VT-d</th>
</tr>
</thead>
</table>
| Intel® Xeon® Processor E3 Family (Workstation) - 14nm Skylake Platform
| E3-1275 v5      | 3.6            | 4.0                                                          | 8M               | 4/8           | 2133                       | √                 | 80W | GT2-P530                | √           | AMT 11.0  | √         | √         | √         |
| E3-1225 v5      | 3.3            | 3.7                                                          | 6M               | 4/4           | 2133                       | √                 | 80W | GT2-P530                | √           | AMT 11.0  | √         | √         | √         |
| E3-1268L v5     | 2.4            | 3.4                                                          | 8M               | 4/8           | 2133                       | √                 | 35W/25W | GT2-P530                | √           | AMT 11.0  | √         | √         | √         |
| Intel® Core™ Processors - 14nm Skylake Platform
| i7-6700         | 3.4            | 4.0                                                          | 8M               | 4/8           | 2133                       | b5W               | 35W | GT2-P530                | √           | AMT 11.0  | √         | √         | √         |
| i7-6700TE       | 2.4            | 3.4                                                          | 6M               | 4/4           | 2133                       | b5W               | 35W | GT2-P530                | √           | AMT 11.0  | √         | √         | √         |
| i5-6500         | 2.3            | 3.6                                                          | 6M               | 4/4           | 2133                       | b5W               | 35W | GT2-P530                | √           | AMT 11.0  | √         | √         | √         |
| i3-6100         | 2.7            | 3.3                                                          | 4M               | 2/4           | 2133                       | b5W               | 35W | GT2-P530                | √           | AMT 11.0  | √         | √         | √         |
| i3-6100TE       | 2.7            | 3.3                                                          | 4M               | 2/4           | 2133                       | b5W               | 35W | GT2-P530                | √           | AMT 11.0  | √         | √         | √         |
| Intel® Pentium® Processors - 14nm Skylake Platform
| G4400           | 3.3            | 3M                                                           | 2/2              | 2133           | √                           | b5W               | 35W | GT1-510                 | √           | √         | √         | √         | √         |
| G4400TE         | 2.9            | 3M                                                           | 2/2              | 2133           | √                           | b5W               | 35W | GT1-510                 | √           | √         | √         | √         | √         |
| Intel® Celeron® Processors - 14nm Skylake Platform
| G3900           | 2.8            | 2M                                                           | 2/2              | 2133           | √                           | b5W               | 35W | GT1-510                 | √           | √         | √         | √         | √         |
| G3900TE         | 2.8            | 2M                                                           | 2/2              | 2133           | √                           | b5W               | 35W | GT1-510                 | √           | √         | √         | √         | √         |

Remarks: 1. Specifications are subject to change without prior notice. 2. ODM/OEM is available. 3. For user’s manual & datasheet download, visit www.ibase.com.tw.

iSMART Technology

- LCD Panel Brightness Control
- EuP/Erp Power Saving
- Auto Power On/Off Scheduler
- Low Temperature Guardian (Optional)
- Power Resume

iSMART Version 3.0

Intelligent System Recovery

Smart Control

Green Leaf

EuP/Erp

Power Resume