Powered by the Intel® C236 Express Chipset supporting DDR4 2133 SDRAM Memory and 6th generation Intel® Core™ i3 / i5 / i7 and Xeon® E3-1200 V5 Processors (Socket LGA1151)
Designed for 24/7 continuous operation

Chipset:  
Intel® C236 Express Chipset

Processors:  
Intel® Xeon® E3-1200 V5 processor series  
Intel® Core™ i7 / i5 / i3 – (6th gen.) processor series  
Future Intel® Pentium® / Celeron® processor series  
Socket LGA1151 – up to 80W TDP

Memory:  
DDR4 2133 SDRAM (UDIMM)  
ECC / Non-ECC

Product Features:  
Intel® iAMT 11.0 / vPro 2015  
Onboard Support for M.2 SSD (PCIe)  
Intel® HD Graphics  
PCI Express Gen3  
Multichannel Audio & Intel GbE LAN onboard  
USB 2.0/3.0 and USB 3.0 Socket (Stick) onboard  
Trusted Platform Module V2.0 (Infineon) onboard  
HW Watchdog onboard
## Features and benefits

### Features

**Board Size**  reduced µATX: 9.6" x 8.4" (243.8 x 213.4 mm)

**Chipset**  Intel® C236 Express Chipset

**Memory**
- 4 DIMM Sockets DDR4, max. 64GB, Dual Channel, 2133MHz (CL15), UDIMM, 1.2V/2.5V, 288-pin, ECC (Xeon only) / non-ECC.
- Effective memory speed depends on installed processor.

**Processor**
- Intel® Xeon® E3-1200 V5 processor series
- Intel® Core™ i7 / i5 / i3 – (6th generation) processor series
- Future Intel® Pentium® / Celeron® processor series

**Special Features**
- Trusted Platform Module
- BIOS, EraseDisk
- Advanced Power Management, ACPI S3/S4, Wake on time from S5 & Play, Automatic DRAM and PCI (DMI), BIOS and CPU modified and adapted by Fujitsu Technology Solutions; Recovery BIOS, SM BIOS
- w/o PCIe cards, w/o for onboard components (worst case)

**Power Specification**
- ATX- 24 Pin or ATX- 20 Pin + 4 Pin (12V) Power Connector required
- Support for Soft-Off Power Supplies
- 12V and 3.3V Supply Voltage on PCIe Slots
- 3.3V Auxiliary Supply Voltage on PCIe Slots (Wake-Up Function)
- On board CPU Voltage Regulator, 5V / 2A Auxiliary Power required for USB Wake-Up from Save-to-RAM, Save-to-Disk

**Power Supply Requirements**
- for onboard components (worst case incl. processor & memory; w/o USB cards; w/o PCIe cards, w/o M.2 / SATA drives)

<table>
<thead>
<tr>
<th>Source</th>
<th>Voltage</th>
<th>Min. PS Load</th>
<th>Max. Voltage Tolerance</th>
<th>Mainboard Capactive Load</th>
<th>Max. Mainboard Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Power Supply</td>
<td>+12V</td>
<td>0.05A</td>
<td>± 5 %</td>
<td>5.000µF</td>
<td>10A/15A (1)</td>
</tr>
<tr>
<td></td>
<td>-12V</td>
<td>0A</td>
<td>± 10 %</td>
<td>470µF</td>
<td>0.3A</td>
</tr>
<tr>
<td></td>
<td>+5V</td>
<td>0.2A</td>
<td>± 5 %</td>
<td>3.000µF</td>
<td>0.6A</td>
</tr>
<tr>
<td></td>
<td>+3.3V</td>
<td>0A</td>
<td>± 5 %</td>
<td>3.000µF</td>
<td>0.5A</td>
</tr>
<tr>
<td>Aux. Power</td>
<td>+5Vaux</td>
<td>0A</td>
<td>± 5% /-3%</td>
<td>3.000µF</td>
<td>2.5A</td>
</tr>
</tbody>
</table>

1) Max. Cont. Current = 10A; max. Surge Current = 12A (<100sec) / 15A (<10ms)

**Bios**
- AMI Apio 5.x (UEFI) BIOS
- modified and adapted by Fujitsu Technology Solutions; Recovery BIOS, SM-BIOS (DMI), BIOS and CPU Microcode Update, Quick Boot, Logo Boot, Quiet Boot, Plug & Play, Automatic DRAM and PCIe Configuration, BIOS Support for S.M.A.R.T., Advanced Power Management, ACPI S3/S4, Wake on time from S5.
- Boot support for M.2 SSD (PCIe-based based modules, AHCI)

**Security Features**
- Recovery BIOS, System and BIOS Password, Boot Sequence Control, Serial-/ Parallel-/ USB- Port Access, Boot Sector Virus Warning, Write Protection for Flash BIOS, EraseDisk (optional BIOS Feature)
- Trusted Platform Module (Infiniwave SLB9655; TPM V2.0; TCG compliant).

**Special Features**
- Silent Fan
  - Independent temperature related processor fan and system fan supervision and control
- System Guard
  - View and adjust Silent Fan features
- Silent Drives
  - Noise reduction for optical and hard disk drives
- Recovery BIOS
  - Restores a corrupted BIOS
- Desk Update
  - Simple driver update with DriverUtilities DVD
- Multi Boot
  - Comfortable boot from any boot device
- HDD Password
  - Access protection for disk drives
- CSA / UL certified
  - CSA 60950-1-07 SE / UL 60950-1 SE (planned)

**Supported / Released Operating Systems**

<table>
<thead>
<tr>
<th>OS</th>
<th>&quot;Runnable&quot;</th>
<th>&quot;Tested/Released by Fujitsu&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Windows XP</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>MS Windows 7-32</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>MS Windows 7-64</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>MS Windows 8-1.64</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>MS Windows 10-64</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Linux-32</td>
<td>X</td>
<td>tbd</td>
</tr>
<tr>
<td>Linux-64</td>
<td>X</td>
<td>tbd</td>
</tr>
</tbody>
</table>

**Designed for 24 / 7 use**
- Long-life components for 24 / 7 continuous operation @ 50°C Revision control & Extended Lifecycle (up to 3 years)

**Graphics**
- Intel® HD Graphics (depends on installed processor), DX12

**Audio**
- Realtek ALC671, 5.1-channel, High Definition Audio Codec

**LAN**
- Intel® i219LM with 10/100/1000 MBit/s, iAMT 11 / vPro Support, Wake-on-LAN (WoL) by interestig Packets, Link Status Change and Magic Packet®, PXE Support, BIOS MAC Address Display

**Drives**
- 6 x Serial ATA III 600 Interface (up to 6GBit/s, NCO, AHCI, RAID 0/1/5/10)
- 1 x M.2 Socket (2260/2280) for PCIe (4 lanes) based M.2 modules, AHCI Boot support

**Features**

<table>
<thead>
<tr>
<th>D3436-B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chipset</td>
<td>i3 / 7</td>
</tr>
<tr>
<td>VGA</td>
<td>1 x DVI-D / DVI-D / DP V1.2 / 2 x DP V1.2 / LVDS</td>
</tr>
<tr>
<td>Audio</td>
<td></td>
</tr>
<tr>
<td>LAN</td>
<td></td>
</tr>
<tr>
<td>Drivers</td>
<td></td>
</tr>
</tbody>
</table>

**Board Size**
- reduced µATX

**Power**
- 5V/2.5V, 288-pin, ECC (Xeon only) / non-ECC

**Serial ATA III**
- reduced µATX

**Internal Connectors**
- ATX Power Supply (24 pin + 4 pin) / 12V-only Power Supply

**External Connectors**
- Serial (COM1, RS232, FIFO, 16550 compatible)
- Front Panel Control (PS/2 Mouse / Keyboard)
- USB 2.0 / USB 3.0

1. VGA possible via optional converter board D3436 or DP/VGA-converter (dongle)
2. Not supported by standard Power Supplies
3. Optional BIOS Feature, License required
4. External parallel port possible via optional connector cable

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External Connectors

- **Mouse**: 2x USB 2.0
- **COM1**: 2x DisplayPort V1.2
- **LAN (iAMT)**: DVI-D, 4x USB 3.0
- **Kbd**: Audio

Connector / Socket Diagram

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Contact:

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Fax: +31 (0)23 556 0950
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2132 WV Hoofddorp
Netherlands

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- Network

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