Data Sheet
FUJITSU ATX Mainboard D3348-B
Extended Lifecycle Series

Powered by the Intel® C612 series chipset, quad channel DDR4 2133/2400 SDRAM memory (ECC support) and Intel® Xeon® / Intel® Core™ i7 processors (LGA2011-R3)
Designed & approved for 24/7 continuous operation

Chipset:
Intel® C612 Chipset

Processors:
Intel® Xeon® Processor E5-26xx [V3] series
Intel® Xeon® Processor E5-16xx [V3] series
Intel® Core™ i7 Processor 59xx series
Intel® Xeon® Processor E5-26xx [V4] series
Intel® Xeon® Processor E5-16xx [V4] series
Intel® Core™ i7 Processor 69xx series
Compatible with Intel® processors LGA2011-R3 (up to 160W TDP)

Memory:
DDR4 2133 SDRAM (quad channel)
DDR4 2400 SDRAM (quad channel)
RDIMM / LRDIMM / RDIMM 3DS with ECC Support (XEON only)
UDIMM (Core™ i7 only)
(memory type/speed and ECC depends on processor)
Up to 512GB (XEON) / 128GB (Core™ i7) memory

Product Features:
2 x PCIe x16 - generation 3 onboard
5.1 multichannel audio onboard
USB 2.0 and USB 3.0 onboard
Dual Intel GbE LAN supporting iAMT / vPro & Teaming
10 x Serial ATA III incl. RAID onboard
Trusted Platform Modul (Infineon) V1.2 / V2.0 onboard
BIOS-POST/-Boot & OS - HW Watchdog onboard
Support for M.2 SSD modules via D3352 carrier board

Compatibility with:
Windows 7
Windows 8
Windows 10
Intel CHIPSET
Serial ATA
PCI EXPRESS
Silent Fan
System Guard
Silent Drives
Multi Boot
HDD Password
Recovery BIOS
Desk Update
24x7 Operation
Watch Dog
Erasedisk
USB 3.0
Halogen Free
Features and benefits

**Power Supply Requirements**

<table>
<thead>
<tr>
<th>Source</th>
<th>Voltage</th>
<th>Min. PS Load (Rail#1)</th>
<th>Max Voltage Tolerance</th>
<th>Mainboard Capacitive Load</th>
<th>Mainboard Max. Current (continuous)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Power Supply</td>
<td>+12 V&lt;sub&gt;pu&lt;/sub&gt;</td>
<td>0.5A&lt;sup&gt;a&lt;/sup&gt;</td>
<td>± %</td>
<td>1.000μF</td>
<td>~16A&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>+12 V&lt;sub&gt;pu&lt;/sub&gt;</td>
<td>0.2A</td>
<td>± %</td>
<td>1.000μF</td>
<td>~19A&lt;sup]&gt;b&lt;/sup&gt;</td>
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<td>-12 V&lt;sub&gt;pu&lt;/sub&gt;</td>
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<td>-12 V&lt;sub&gt;pu&lt;/sub&gt;</td>
<td>0.2A</td>
<td>± %</td>
<td>2.200μF</td>
<td>~25A&lt;sup&gt;b&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>+5V</td>
<td>0.2A</td>
<td>± %</td>
<td>1.200μF</td>
<td>~21A&lt;sup&gt;b&lt;/sup&gt;</td>
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<tr>
<td></td>
<td>+3.3V</td>
<td>0.5A</td>
<td>± %</td>
<td>2.200μF</td>
<td>~2A</td>
</tr>
<tr>
<td>Aux</td>
<td>+5Vaux</td>
<td>0A</td>
<td>± %</td>
<td>2.200μF</td>
<td>~2A</td>
</tr>
</tbody>
</table>

A) Combined load for Rail1 & Rail3.  Note: Processor peak current = 32A (<250ms)!
B) Depends on system configuration (Main focus: 12V/3.3V: PCIe Slots; 5V: Memory/USB)

## Common Features

- **Board Size / Chipset**: ATX / Intel C612
- **Audio**: Realtek ALC671, 5.1 Multichannel, High Definition Audio
- **LAN**: Intel i217LM / Intel i210AT Ethernet Controller with 10/100/1000 MBit/s, AMT, Wake-on-LAN (WLn) by interesting Packets, Link Status Change and Magic Packet™, PXE Support, BIOS MAC Address Display, Teaming Support
- **Drives**: 10 x SATA III 600 Interfaces (up to 6GBit/s, NCQ); AHCI; RAID 0, 1, 5, 10.  Note: Two integrated controllers. #1 (SATA) = Port 0-5, #2 (sSATA) = Port 6-9
- **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: Easy driver update with Drivers&Utilities DVD
  - Multi Boot: Comfortable boot from any boot device
  - HDD Password: Access protection for disk drives
  - 24/7 Operation: Mainboard is designed for continuous operation
  - Boot Watchdog: Full supervision of BIOS POST and Boot sequence

## BIOS

- **AMI Aptio 5. x (UEFI) BIOS**
- **Dimm Sockets DDR4 (2400) / DDR4 (2133)**
- **PO Express x16: 4 lanes-gen3 / 8 lanes-gen2**
- **PO Express x8: 4 lanes-gen3 / 8 lanes-gen2**
- **SATA (600) / SATA (300) / ATA (100) / Floppy**
- **USB 2.0 channels / USB 3.0 channels / socket for USB2.0 stick**
- **Serial (16550 compatible) / SMBus (Temperature)**
- **FAN PSU / CPU / AUX1 / AUX2 / AUX3**
- **Intrusion (Case Open) / LCD Status Display Support**
- **External Connectors**
- **Input Signals / Connectors**
  - **Audio Mic. In** / **Line in / Line out**
  - **LAN**: RJ-45 / PS/2 Mouse / PS/2 Keyboard
  - **FireWire™ / Serial (RS232) / Parallel (EPP/ECP)**
  - **USB 2.0 / USB 3.0**

## Security Features

- **Recovery BIOS, System and BIOS Password, Boot Sequence Control, Serial/USB - Port Access Protection, Boot Sector Virus Warning, Write Protection for Flash BIOS, EraseDisk (optional BIOS Feature), Infineon Trusted Platform Module (TPM) V1.2 / SLB9660 / V2.0 / SLB9665**

## Features

- **Features Mainboard Versions**
  - D3348-B1x
  - D3348-B2x
  - D4R4-2133 RDIMM (max. 128GB) / LRDIMM (max. 256)
  - D4R4-2400 RDIMM (max. 512GB)
  - Xeon® 55xx series (Haswell) / 69xx series (Broadwell)

1) Note: D3348-B1: Core™ i7-5820K not supported. D3348-B2: Core™ i7-680x is NOT supported.
2) Not supported by standard Power Supplies.
3) FAN PSU and FAN AUXX must not be used simultaneously
4) Optional BIOS Feature (License required)
5) PCIe x16 card can be inserted (open connector)
External Connectors

LAN2   LAN1 (iAMT)
PS/2    USB 2.0     USB 2.0   USB 3.0   Audio

Connector / Socket Diagram

Further industrial products offered by Fujitsu

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- Wireless Modules

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■ Network

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