

# Data Sheet

## FUJITSU Mainboard D3417-B µATX

### Extended Lifecycle Series



Powered by the Intel® C236 Express Chipset supporting DDR4 2133 SDRAM Memory and 6<sup>th</sup> generation Intel® Core™ i3 / i5 / i7 and Xeon® E3-1200 V5 Processors (Socket LGA1151)  
Designed for 24/7 continuous operation @ 50°C

#### Chipset:

Intel® C236 Express Chipset

#### Processors:

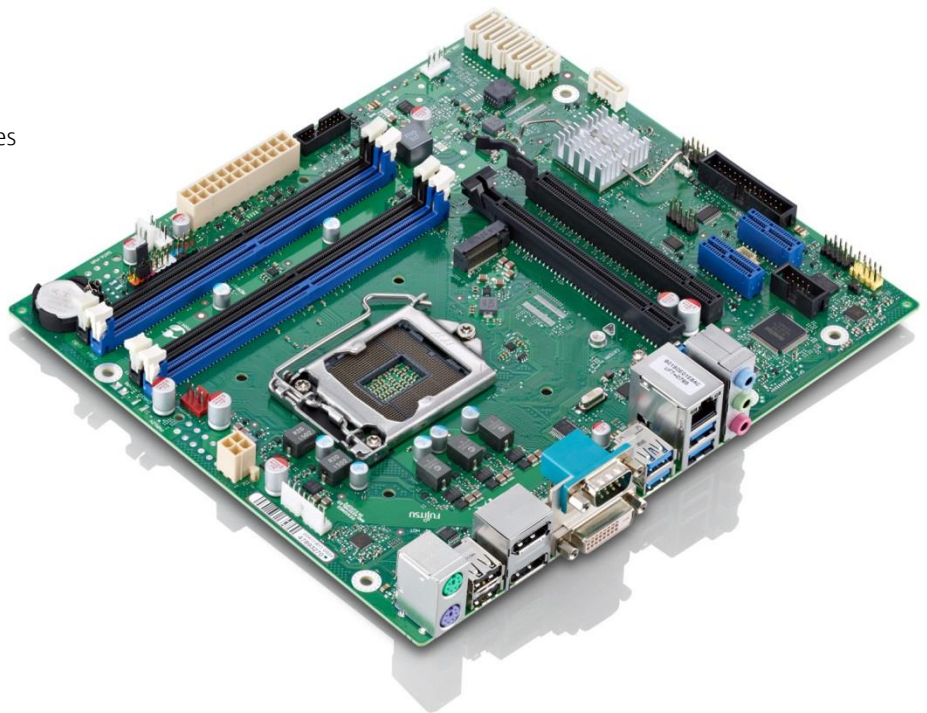
Intel® Xeon® E3-1200 V5 processor series  
Intel® Core™ i7 / i5 / i3 – (6<sup>th</sup> gen.) processor series  
Intel® Pentium® / Celeron® processor series  
Socket LGA1151 – up to 80W TDP

#### Memory:

DDR4 2133 SDRAM (UDIMM)  
ECC / Non-ECC

#### Product Features:

Intel® iAMT 11.0  
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



(planned)



# Features and benefits

|                            |  |
|----------------------------|--|
| <b>Board Size</b>          | reduced µATX: 9.6" x 8.4" (243.8 x 213.4 mm)   |
| <b>Chipset</b>             | Intel® C236 Express Chipset  |
| <b>Memory</b>              | 4 DIMM Sockets DDR4, max. 64GB, Dual Channel, 2133MHz (CL15), UDIMM, 1.2V/2.5V, 288-pin, ECC (appropriate processor required) / non-ECC. Effective memory speed depends on installed processor   |
| <b>Processor</b>           | Intel® Xeon® E3-1200 V5 processor series<br>Intel® Core™ i7 / i5 / i3 – (6th generation) processor series<br>Intel® Pentium® / Celeron® processor series<br>Socket LGA1151, max. 80W TDP   |
| <b>Power Specification</b> | ATX- 24 Pin or ATX- 20 Pin + 4 Pin (12V) Power Connector required<br>Support for Soft-Off Power Supplies<br>12V and 3.3V Supply Voltage on PCIe Slots<br>3.3V Auxiliary Supply Voltage on PCIe Slots (Wake-Up Function)<br>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 devices; w/o PCIe cards, w/o M.2 / SATA drives)

| Source            | Voltage | Min. PS Load | Max. Voltage Tolerance | Mainboard Capacitive Load | Max. Mainboard Current |
|-------------------|---------|--------------|------------------------|---------------------------|------------------------|
| Main Power Supply | + 12V   | 0.05A        | ± 5 %                  | 5.000µF                   | 10A/15A <sup>1)</sup>  |
|                   | - 12V   | 0A           | ± 10 %                 | 470µF                     | 0.3A                   |
|                   | + 5V    | 0.2A         | ± 5 %                  | 3.000µF                   | 6.0A                   |
|                   | + 3.3V  | 0A           | ± 5 %                  | 3.000µF                   | 0.5A                   |
| Aux. Power        | + 5Vaux | 0A           | +5 % / -3%             | 3.000µF                   | 2.5A                   |

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

## BIOS

AMI Aptio 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 / NVME)

## 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 (Infineon SLB 9665; 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 Driver&Utilities DVD                                       |
| Multi Boot               | Comfortable boot from any boot device  |
| HDD Password             | Access protection for disk drives  |
| CSA / UL / FCC certified | cSAsus 60950-1/ FCC-B (planned)  |

## Supported / Released Operating Systems

| OS                | "Runnable" | "Tested/Released by Fujitsu" |
|-------------------|------------|------------------------------|
| MS Windows XP     | --         | --                           |
| MS Windows 7-32   | X          | X                            |
| MS Windows 7-64   | X          | X                            |
| MS Windows 8.1-64 | X          | X                            |
| MS Windows 10-64  | X          | X                            |
| Linux-32          | X          |                              |
| Linux-64          | X          |                              |

## Designed for 24 / 7 use

Longlife 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 Support, Wake-on-LAN (WoL) by interesting Packets, Link Status Change and Magic Packet™, PXE Support, BIOS MAC Address Display

## Drives

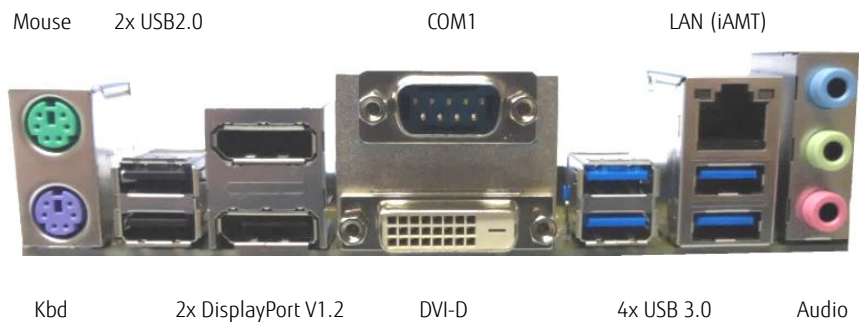
6 x Serial ATA III 600 Interface (up to 6Gbit/s, NCQ, AHCI, RAID 0/1/5/10)  
1 x M.2 Socket (2260/2280) for PCIe (4 lanes) based M.2 modules, AHCI / NVME Boot support

## Features

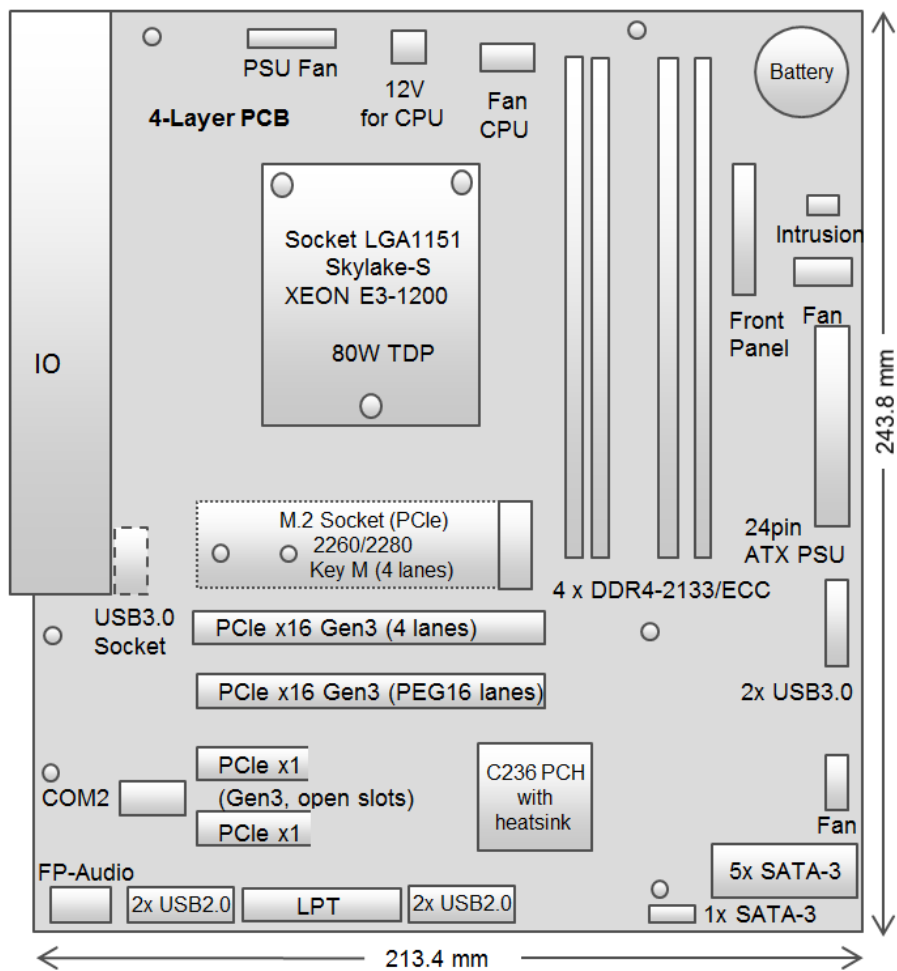
| Features   | D3417-B               |
|--|-----------------------|
| Chipset  | iC236                 |
| Board Size   | reduced µATX          |
| VGA <sup>1)</sup> / DVI-I / DVI-D / DP V1.2 / 2 <sup>nd</sup> DP V1.2 / LVDS | - / - / ✓ / ✓ / ✓ / - |
| Stereo Audio / 5.1 Multichannel Audio  | - / ✓                 |
| Buzzer / int. Speaker Support  | - / ✓                 |
| LAN Gbit / 100 Mbit / 10 Mbit / WoL / LAN Boot                               | ✓ / ✓ / ✓ / ✓ / ✓     |
| iAMT 11.0 / Intel Standard Manageability / DASH V1.1                         | ✓ / ✓ / ✓             |
| SATA / ATA / RAID / eSATA-support / M.2 (PCIe x4)                            | ✓ / - / ✓ / ✓ / ✓     |
| FireWire™ / USB 2.0 / USB 3.0  | - / ✓ / ✓             |
| FAN monitored & controlled PSU <sup>2)</sup> / CPU / AUX1 / AUX2             | ✓ / ✓ / ✓ / ✓         |
| TEMP monitored CPU / onboard sensors / external sensor                       | ✓ / ✓ / -             |
| <b>Special Features</b>  |                       |
| Silent Fan / Silent Fan LT / System Guard / Silent Drives                    | ✓ / - / ✓ / ✓         |
| Recovery BIOS / Desk Update / Multi Boot                                     | ✓ / ✓ / ✓             |
| HDD Password / HDD Encryption / EraseDisk <sup>3)</sup> / TPM                | ✓ / - / ✓ / ✓         |
| BIOS POST Watchdog / BIOS Boot Watchdog / OS HW Watchdog                     | - / - / ✓             |
| Logo Boot Option / Intel On Screen Branding                                  | ✓ / ✓                 |
| High Efficiency Core Voltage Regulator Design                                | ✓                     |
| Operating Mode 24-7 / 8-5 (hrs per day - days per week)                      | ✓ / -                 |
| Mainboard operating temperature range (chassis inside)                       | 10°C – 50°C           |
| ILM - Backplate / ILM + Heatsink combined <sup>5)</sup>                      | ✓ / -                 |
| <b>Internal Connectors</b>   |                       |
| DIMM Sockets (DDR4-2133)   | 4                     |
| PCI Express x16 Slot (Gen3)  | 1                     |
| PCI Express x16 Slot (4 Lanes, Gen3) / x1 Slot (Gen3)                        | 1 / 2                 |
| PCI Slots (32Bit, 33 MHz, Rev. 2.3)  | -                     |
| SATA-600 / SATA-300 / ATA / Floppy / M.2 SSD                                 | 6 / - / - / - / 1     |
| S/PDIF (digital Audio) OUT / IN  | - / -                 |
| Frontpanel Audio (9-Pin, HD Audio)   | 1                     |
| USB 2.0 channels / USB 3.0 channels / USB Stick (3.0)                        | 4 / 2 / 1             |
| Serial (COM2, RS232)   | 1                     |
| FAN PSU <sup>2)</sup> / CPU / AUX1 / AUX2                                    | 1 / 1 / 1 / 1         |
| Intrusion (Case Open) / SMBus (Case Temperature)                             | 1 / -                 |
| Parallel Port Pin Connector <sup>4)</sup>                                    | 1                     |
| ATX Power Supply (24 pin + 4 pin) / 12V-only Power Supply                    | ✓ / -                 |
| <b>External Connectors</b>   |                       |
| VGA Sub D <sup>1)</sup> / DVI-I / DVI-D / DisplayPort V1.2                   | - / - / 1 / 2         |
| Audio Mic. In / Line in / Line out (or driver configuration)                 | 1 / 1 / 1             |
| LAN (RJ-45)  | 1                     |
| PS/2 Mouse / Keyboard  | 1 / 1                 |
| USB 2.0 / USB 3.0  | 2 / 4                 |
| Serial (COM1, RS232)   | 1                     |
| Parallel (EPP/ECP) <sup>4)</sup>   | -                     |

- VGA possible via optional converter board D3453 or DP-VGA-converter (dongle)
- Not supported by standard Power Supplies
- Optional BIOS Feature, License required
- External parallel port possible via optional connector cable  
Note: Intel limitation → ECP-DMA-Mode no longer supported  
Combined backplate: Can't be used for pushpin heatsink

External Connectors



Connector / Socket Diagram



Further industrial products offered by Fujitsu

- Connectors
- KVM Switches
- Relays
- Touch Panels
- Thermal Printers
- Wireless Modules



24 Volt Kiosk Printers



Multi-Input Touch Panels

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Fax: +31 (0)23 556 0950  
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# More information

## Fujitsu products, solutions & services

### Products

[www.fujitsu.com/global/products/](http://www.fujitsu.com/global/products/)

In addition to the Fujitsu [Product name], Fujitsu offers a full portfolio of other computing products.

### Computing products

- Storage systems: ETERNUS
- Server: PRIMERGY, PRIMEQUEST, Fujitsu SPARC M10, BS2000/OSD Mainframe
- Client Computing Devices: LIFEBOOK, STYLISTIC, ESPRIMO, FUTRO, CELSIUS
- Peripherals: Fujitsu Displays, Accessories
- Software
- Network

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**Application Services** support the development, integration, testing, deployment and on-going management of both custom developed and packaged applications. The services focus on delivering business and productivity improvements for organizations.

**Business Services** respond to the challenge of planning, delivering and operating IT in a complex and changing IT environment.

**Managed Infrastructure Services** enable customers to deliver the optimal IT environment to meet their needs – achieving high levels of IT service quality and performance for data center and end user environments.

## Fujitsu green policy innovation

[www.fujitsu.com/global/about/environment/](http://www.fujitsu.com/global/about/environment/)  
Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at:



## More information

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