

Data Sheet

FUJITSU Mainboard D3417-B µATX

Extended Lifecycle Series



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:

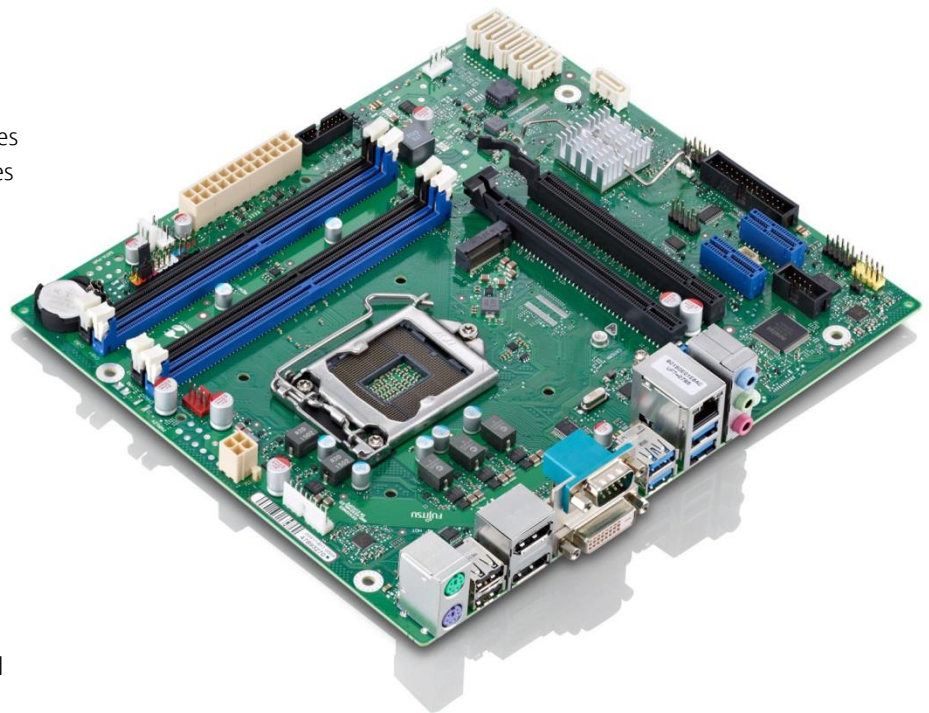
Intel® Xeon® E3-1200 V5 processor series
Intel® Core™ i7 / i5 / i3 – (6th gen.) processor series
Intel® Pentium® / Future Celeron® processor series
Socket LGA1151 – up to 80W TDP

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

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
Intel® Pentium® / Future Celeron® processor series
Socket LGA1151, max. 80W TDP

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 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 ¹⁾ |
| | - 12V | 0A | ± 10 % | 470µF | 0.3A |
| | + 5V | 0.2A | ± 5 % | 3.000µF | 6.0A |
| Aux. Power | + 3.3V | 0A | ± 5 % | 3.000µF | 0.5A |
| | + 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)

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 certified | CSA 60950-1-07 SE / UL 60950-1 SE (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 | tbd |
| Linux-64 | X | tbd |

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

Drives

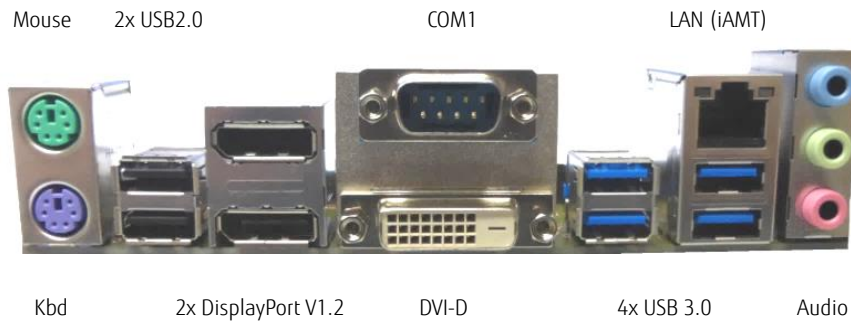
6 x Serial ATA III 600 Interface (up to 6GBit/s, NCQ, AHCI, RAID 0/1/5/10)
1 x M.2 Socket (2260/2280) for PCIe (4 lanes) based M.2 modules, AHCI Boot support

Features

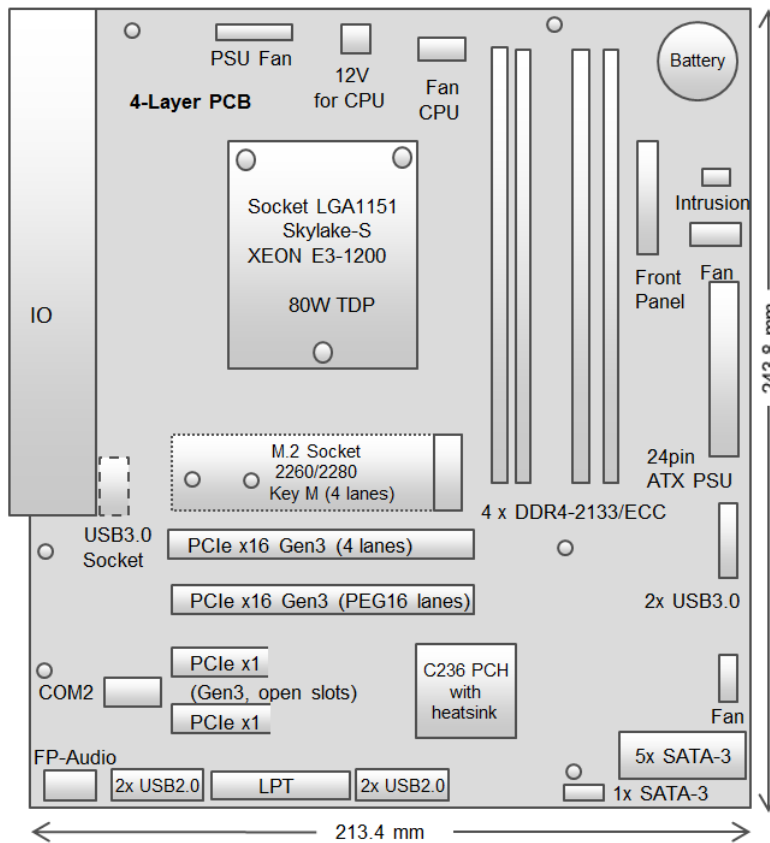
| Features | D3417-B |
|--|-----------------------|
| Chipset | iC236 |
| Board Size | reduced µATX |
| VGA ¹⁾ / DVI-I / DVI-D / DP V1.2 / 2 nd DP V1.2 / LVDS | - / - / ✓ / ✓ / ✓ / - |
| Stereo Audio / 5.1 Multichannel Audio | - / ✓ |
| Buzzer / int. Speaker Support | - / ✓ |
| LAN Gbit / 100 Mbit / 10 Mbit / WoL / LAN Boot | ✓ / ✓ / ✓ / ✓ / ✓ |
| iAMT 11.0 vPro / iAMT Standard / DASH V1.0 | ✓ / - / ✓ |
| SATA / ATA / RAID / eSATA-support / M.2 (PCIe x4) | ✓ / - / ✓ / ✓ / ✓ |
| FireWire™ / USB 2.0 / USB 3.0 | - / ✓ / ✓ |
| FAN monitored & controlled PSU ²⁾ / CPU / AUX1 / AUX2 | ✓ / ✓ / ✓ / ✓ |
| TEMP monitored CPU / onboard sensors / external sensor | ✓ / ✓ / - |
| Special Features | |
| Silent Fan / Silent Fan LT / System Guard / Silent Drives | ✓ / - / ✓ / ✓ |
| Recovery BIOS / Desk Update / Multi Boot | ✓ / ✓ / ✓ |
| HDD Password / HDD Encryption / EraseDisk ³⁾ / 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 ⁵⁾ | ✓ / - |
| Internal Connectors | |
| 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 ²⁾ / CPU / AUX1 / AUX2 | 1 / 1 / 1 / 1 |
| SMBus (Case Temperature) | - |
| Intrusion (Case Open) | 1 |
| Parallel Port Pin Connector ⁴⁾ | 1 |
| ATX Power Supply (24 pin + 4 pin) / 12V-only Power Supply | ✓ / - |
| External Connectors | |
| VGA Sub D ¹⁾ / 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) ⁴⁾ | - |

- 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 → LPC-DMA-Mode no longer supported
- Combined Backplate: Can not 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

Contact:

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 Fax: +31 (0)23 556 0950
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 Address: Diamantlaan 25
 2132 WV Hoofddorp
 Netherlands

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- Software
- Network

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