

Data Sheet

FUJITSU Mainboard D3417-A µATX

Classic Desktop 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:

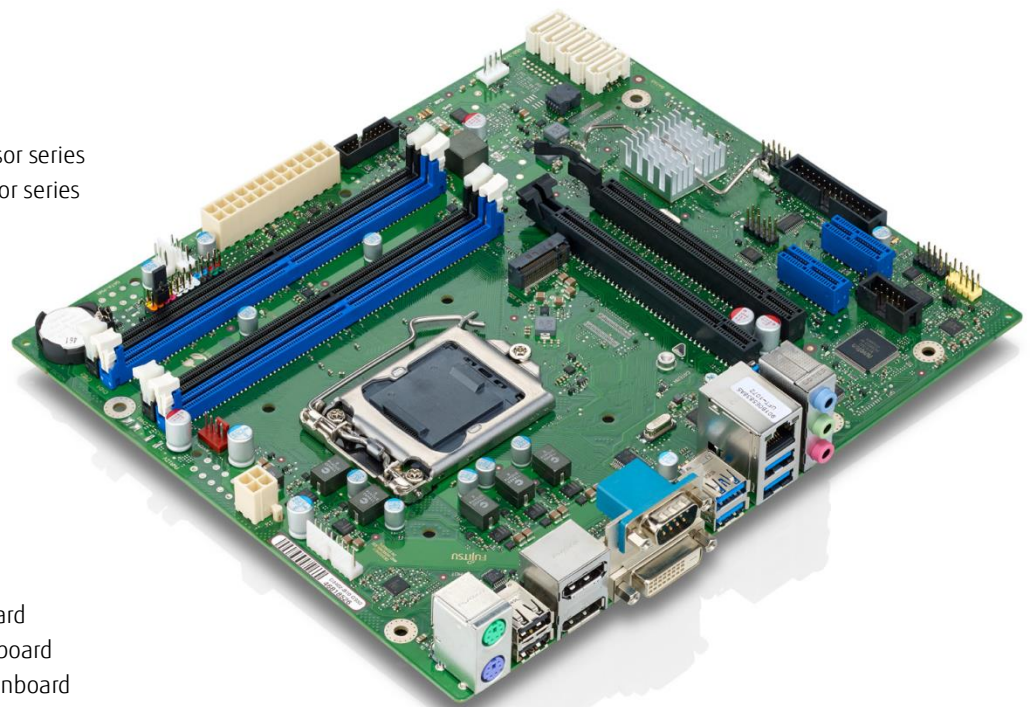
Intel® Xeon® E3-1200 V5 processor series
Intel® Core™ i7 / i5 / i3 – (6th gen.) processor series
Intel® Pentium® / Future Celeron® processor series
Socket LGA1151 – up to 80W TDP

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
Specific 12V-only Powersupply required



(Picture similar to product; ATX PSU not possible; w/o heatsink)



(planned)



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

Fujitsu 12V only concept adopted Power Supply required
Support for Soft-Off Power Supplies
3.3V Auxiliary Supply Voltage on PCIe Slots (Wake-Up Function)
On board CPU Core Voltage Regulator

Power Supply Requirements

for onboard components (worst case)

| Source | Voltage | Min. PS Load | Max.Voltage Tolerance | Cont./ Peak Mainboard Current |
|-------------------|-------------------------|--------------|-----------------------|-------------------------------|
| Main Power Supply | + 12 V _{Rail1} | 0.1 A | ± 5 % | 15 A / 18 A |
| Main Power Supply | + 12 V _{Rail2} | 0.1 A | ± 5 % | 15 A / 18 A |
| Aux. Power Supply | + 11 V _{Aux} | 0 A | 10.2 V-11.8 V | 1 A |

18A = Surge Current for 20 sec!

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 |

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

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

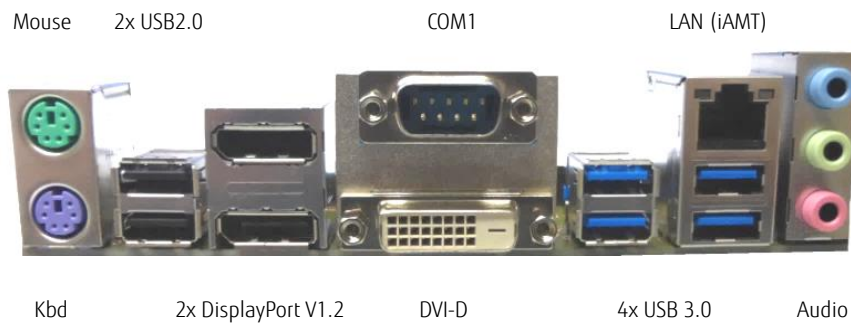
Drives

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

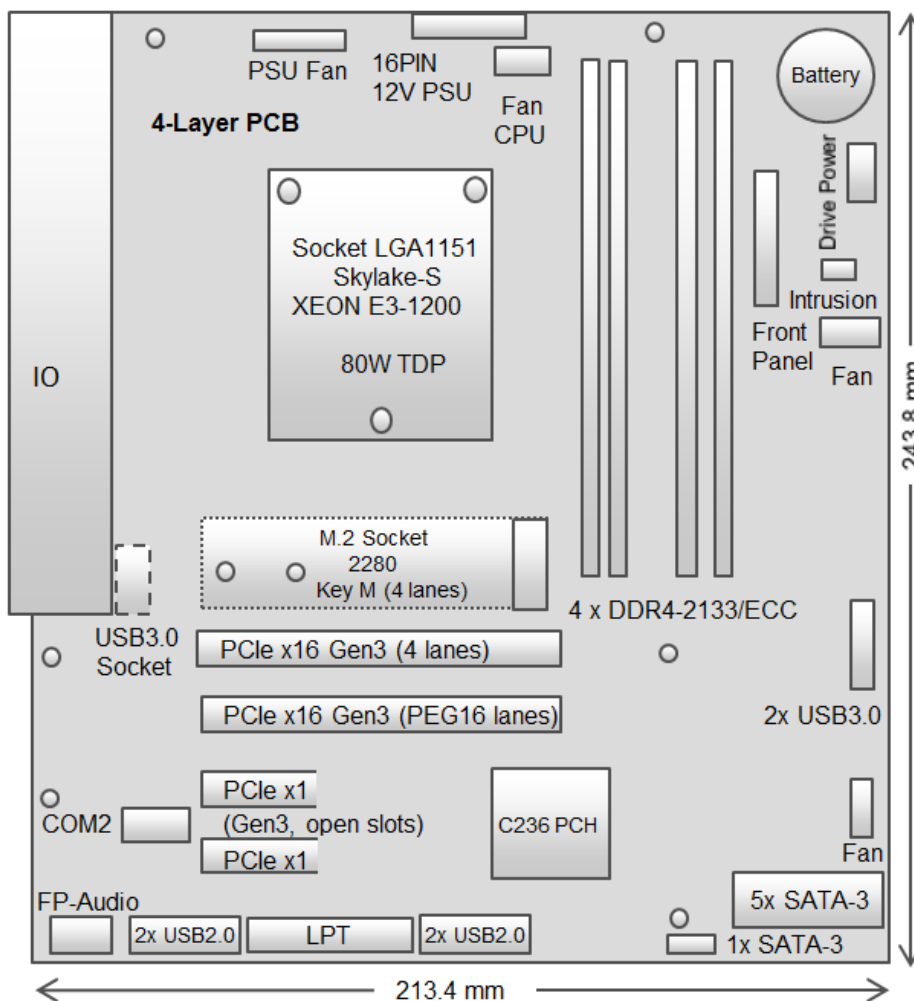
| Features | D3417-A |
|--|---------------------------|
| Chipset | iC236 |
| Board Size | reduced µATX |
| VGA ¹⁾ / DVI-I / DVI-D / DP V1.2 / 2 nd DP V1.2 / LVDS | - / - / ✓ / ✓ / ✓ / ✓ / - |
| Stereo Audio / 5.1 Multichannel Audio | - / ✓ |
| Buzzer / int. Speaker Support | - / ✓ |
| LAN Gbit / 100 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 - 45°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 / - |
| SMBus (Case Temperature) | - |
| Intrusion (Case Open) | 1 |
| Parallel Port Pin Connector ⁴⁾ | 1 |
| ATX Power Supply (24 pin + 4 pin) / 12V-only Power Supply ⁵⁾ | - / ✓ |
| 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
Plus additional onboard drive power connector
- 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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Products

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- Server: PRIMERGY, PRIMEQUEST, Fujitsu SPARC M10, BS2000/OSD Mainframe
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- Peripherals: Fujitsu Displays, Accessories
- Software
- Network

Product Support Services with different service levels agreements are recommended to safeguard each product and ensure smooth IT operation.

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Industry Solutions are tailored to meet the needs of specific verticals.

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www.fujitsu.com/global/services/
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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/
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More information

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