

# Data Sheet

## Fujitsu Mainboard D3162-B $\mu$ ATX

### Extended Lifecycle Series



Powered by the Intel® Q77 Express Chipset supporting DDR3 1600 SDRAM Memory and 3<sup>rd</sup> generation Intel® Core™ i3 / i5 / i7 Processors (Socket LGA1155)

Designed for 24/7 continuous operation

**Chipset:**

Intel® Q77 Express Chipset

**Processors:**

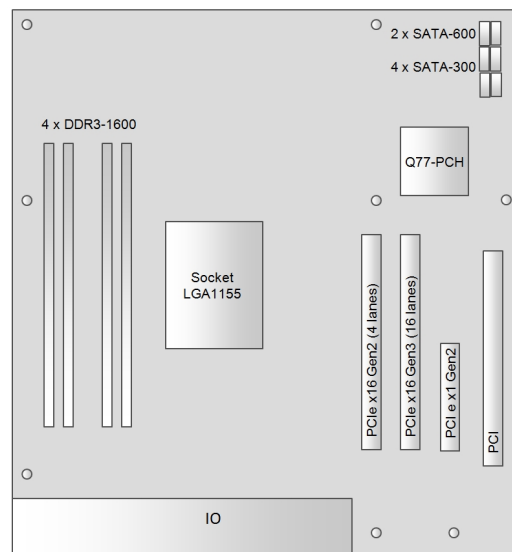
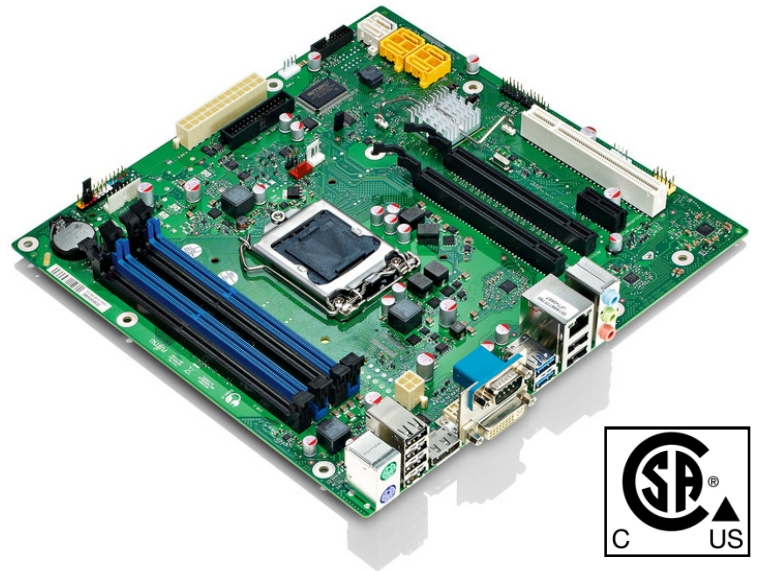
- Intel® Core™ i7 – 2xxx / i7-37xx processor series
- Intel® Core™ i5 – 2xxx / i5-3xxx processor series
- Intel® Core™ i3 – 2xxx / i3-32xx processor series
- Intel® Pentium® – G21xx / G6xx / G8xx proc. series
- Intel® Celeron® – G4xx / G5xx processor series

**Memory:**

DDR3 1066/1333/1600 SDRAM

**Product Features:**

- Intel® iAMT 8 / vPro
- Intel® HD Graphics (depends on processor)
- PCI Express Gen3
- Multichannel Audio & Intel GbE LAN onboard
- USB 2.0 and USB 3.0 onboard
- Trusted Platform Modul V1.2 (Infineon) onboard
- HW Watchdog onboard



# Features and benefits

Board Size  $\mu$ ATX: 9.6" x 9.6" (243.8 x 243.8 mm)

Chipset Intel® Q77 Express Chipset

Memory  
4 DIMM Sockets (1.5V), 1GB - 32GB, Single Channel / Dual Channel DDR3-1066 (CL7) / DDR3-1333 (CL9) / DDR3-1600 (CL11) SDRAM, unbuffered, no ECC

Processor  
Intel® Core™ i7 – 2xxx (32nm) and -37xx (22nm) processor series  
Intel® Core™ i5 – 2xxx (32nm) and -3xxx (22nm) processor series  
Intel® Core™ i3 – 2xxx (32nm) and -32xx (22nm) processor series  
Intel® Pentium® G8xx / G6xx / G21xx and Celeron® G5xx / G4xx processor series  
Socket LGA1155, max. 95W TDP  
(For details on supported processors please refer to our website)

Power Specification  
ATX- 24 Pin or ATX- 20 Pin Power Supply required  
Support for Soft-Off Power Supplies  
5V and 3.3V Supply Voltage on PCI Slots (PCI Rev. 2.3)  
3.3V Auxiliary Supply Voltage on PCI Slots (Wake-Up Function)  
On board CPU Voltage Regulator, 5V / 2.5A Auxiliary Power required for USB Wake-Up from Save-to-RAM, Save-to-Disk

Power Supply Requirements  
for onboard components (worst case)

Source	Voltage	Min. PS Load	Max. Voltage Tolerance	Mainboard Capacitive Load	Max. Mainboard Current
	+ 12V	0.1A	± 5 %	10.000 $\mu$ F	14A/18A <sup>1)</sup>
Main Power	- 12V	0A	± 10 %	500 $\mu$ F	0.1A
Supply	+ 5V	0.2A	± 5 %	10.000 $\mu$ F	5A
	+ 3.3V	0A	± 5 %	6.000 $\mu$ F	2A
Aux. Power Supply	+ 5Vaux	0A	+ 5 % / -3%	7.000 $\mu$ F	2.5A

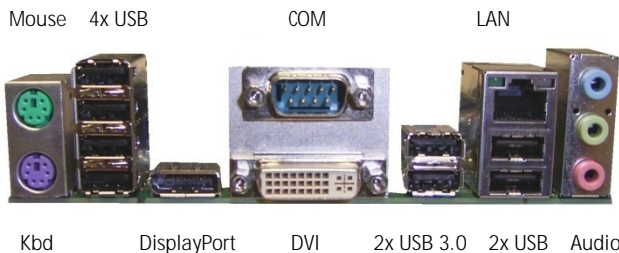
<sup>1)</sup> 18A = Surge Current for 20 sec!

BIOS  
AMI Aptio 4.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 PCI Configuration, BIOS Support for S.M.A.R.T., Advanced Power Management, ACPI S3/S4, Wake on time from S5

Security Features  
Recovery BIOS, System and BIOS Password, Boot Sequence Control, Serial/Parallel/USB- Port Access Protection, Boot Sector Virus Warning, Write Protection for Flash BIOS, EraseDisk (BIOS Feature), Trusted Platform Module.

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  
UL/CSA certified CSA 60950-1-07 SE / UL 60950-1 SE

External Connectors



Designed for 24 / 7 use  
Longlife components for 24 / 7 continuous operation  
Revision control & Extended Lifetime (up to 3 years)

Graphics  
Intel® HD Graphics DX10.1 or DX11 (depends on installed processor)

Audio  
Conexant CX20642, 5.1-channel, High Definition Audio Codec

LAN  
Intel 82579LM Ethernet Controller with 10/100/1000 MBit/s, iAMT 8, Wake-on-LAN (WoL) by interesting Packets, Link Status Change and Magic Packet™, PXE Support, BIOS MAC Address Display, vPro Support

Drives  
2 Serial ATA III 600 Interface (up to 6GBit/s),  
4 Serial ATA II 300 Interfaces (up to 3GBit/s), NCQ, AHCI, RAID 0/1/5/10

Features	D3162-B
Chipset	iQ77
Board Size	$\mu$ ATX
VGA	optional
Stereo Audio / 5.1 Multichannel Audio	- / $\ddot{u}$
Buzzer / int. Speaker Support	- / $\ddot{u}$
LAN Gbit / 100 Mbit / 10 Mbit	$\ddot{u}$ / $\ddot{u}$ / $\ddot{u}$
LAN ASF / DASH V1.1 / WoL / Boot / iAMT 8	- / $\ddot{u}$ / $\ddot{u}$ / $\ddot{u}$ / $\ddot{u}$
SATA / ATA / RAID / eSATA-support	$\ddot{u}$ / - / $\ddot{u}$ / $\ddot{u}$
FireWire™ / USB 2.0 / USB 3.0	- / $\ddot{u}$ / $\ddot{u}$
FAN monitored PSU <sup>1)</sup> / CPU / AUX1 / AUX2	$\ddot{u}$ / $\ddot{u}$ / $\ddot{u}$ / $\ddot{u}$
FAN controlled PSU <sup>1)</sup> / CPU / AUX1 / AUX2	$\ddot{u}$ / $\ddot{u}$ / $\ddot{u}$ / $\ddot{u}$
TEMP monitored CPU / ONB / OFFB	$\ddot{u}$ / $\ddot{u}$ / -
Special Features	
Silent Fan / Silent Fan LT / System Guard / Silent Drives	$\ddot{u}$ / - / $\ddot{u}$ / $\ddot{u}$
Recovery BIOS / Desk Update / Multi Boot	$\ddot{u}$ / $\ddot{u}$ / $\ddot{u}$
HDD Password / HDD Encryption / EraseDisk / TPM	$\ddot{u}$ / - / $\ddot{u}$ / $\ddot{u}$
Logo Boot Option / Intel On Screen Branding	$\ddot{u}$ / $\ddot{u}$
High Efficiency Core Voltage Regulator Design	$\ddot{u}$
Operating Mode 24-7 / 8-5 (hrs per day - days per week)	$\ddot{u}$ / -
Mainboard operating temperature range (chassis inside)	10°C – 50°C
Internal Connectors	
DIMM Sockets (DDR3-1600)	4
PCI Express x16 Slot (Gen3)	1
PCI Express x16 Slot (4 Lanes, Gen2) / x1 Slot (Gen2)	1 / 1
PCI Slots (32Bit, 33 MHz, Rev. 2.3)	1
SATA-600 / SATA-300 / ATA / Floppy	2 / 4 / 0 / 0
S/PDIF (digital Audio) OUT / IN	- / -
Frontpanel Audio (9-Pin, HD Audio)	1
FireWire™ (9-Pin, Intel standard header)	-
USB 2.0 channels / USB 3.0 channels	4 / 2
Serial (FIFO, 16550 compatible)	-
FAN PSU <sup>1)</sup> / CPU / AUX1 / AUX2	1 / 1 / 1 / 1
SMBus (Case Temperature)	-
Intrusion (Case Open)	1
Parallel (EPP/ECP) Pin Connector <sup>2)</sup>	1
Power 24 pin (BTX) / 4 pin (12V processor supply)	1 / 1
External Connectors	
VGA Sub D <sup>3)</sup> / DVI-I / DisplayPort	- / 1 / 1
Audio Mic. In / Line in / Line out (or driver configuration)	1 / 1 / 1
S/PDIF (digital Audio, cinch) OUT / IN	- / -
S/PDIF (digital Audio, optical) OUT	-
LAN (RJ-45)	1
PS/2 Mouse / Keyboard	1 / 1
LAN (RJ-45)	1
PS/2 Mouse / Keyboard	1 / 1
FireWire™ (6-Pin, IEEE 1394)	-
USB 2.0 / USB 3.0	6 / 2
Serial (RS232, FIFO, 16550 compatible)	1
Parallel (EPP/ECP) <sup>2)</sup>	-

1) Not supported by standard Power Supplies  
2) External parallel port possible via optional connector cable  
3) Via optional DVI-I / VGA interface connector

# More information

## Fujitsu platform solutions

In addition to Fujitsu Mainboards Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure-as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

### Computing products

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

- PRIMERGY: Industrial standard server
- SPARC Enterprise: UNIX server
- PRIMEQUEST: Mission-critical IA server
- ETERNUS: Storage system

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

- Interstage: Application infrastructure software
- Systemwalker: System management software

## More information

Learn more about Fujitsu Mainboards, please contact your Fujitsu sales representative, Fujitsu business partner, or visit our website.

<http://ts.fujitsu.com/>

## Fujitsu green policy innovation

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:

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

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