

Data Sheet

FUJITSU Mainboard D3076-S ATX

Industrial Series

Powered by the Intel® Q67 Express Chipset supporting DDR3 1333 SDRAM Memory and 2nd generation Intel® Core™ i3 / i5 / i7 Processors (Socket LGA1155)
Designed & approved for enhanced operating temperature range from 0°C to 60°C
Designed & approved for 24/7 continuous operation

Chipset:

Intel® Q67 Express Chipset

Processors:

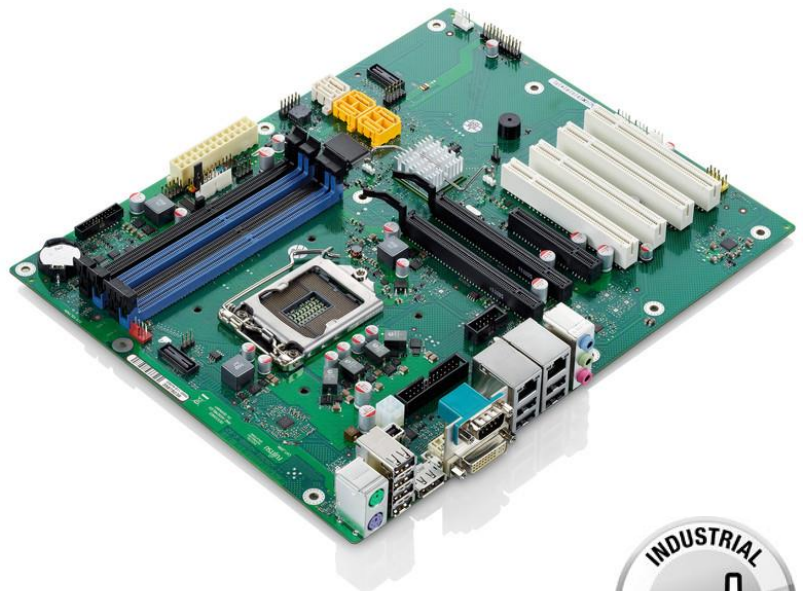
Intel® Core™ i7 – 2xxx processor series
Intel® Core™ i5 – 2xxx processor series
Intel® Core™ i3 – 2xxx processor series
No support for Core™ 3xxx (IvyBridge) series!

Memory:

DDR3 1333/1066 SDRAM

Product Features:

Intel® VPro 2011 = Intel® iAMT 7 (CPU support required)
Intel® HD Graphics (integrated in processor)
8 Bit GPIO onboard
PCI Express Gen2
Multichannel Audio onboard
2 x Intel GbE LAN onboard
Infineon TPM V1.2 onboard
Mainboard ready for EuP
BIOS-POST/-Boot & OS – HW Watchdog onboard



Features and benefits

Board Size ATX: 9.6" x 12" (243.8 x 304.8 mm)

Chipset Intel® Q67 Express Chipset

Memory

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

Processor

Intel® Core™ i7 – 2xxx processor series
 Intel® Core™ i5 – 2xxx processor series
 Intel® Core™ i3 – 2xxx processor series
 Compatible with Intel® FMB11B (65W) and FMB11A (95W), LGA1155.
 No support for Core™ 3xxx (IvyBridge) series!
 (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 %	10.000µF	14A/18A ¹⁾
Main Power	- 12V	0A	± 10 %	500µF	0.1A
Supply	+ 5V	0.2A	± 5 %	10.000µF	5A
	+ 3.3V	0A	± 5 %	6.000µF	2A
Aux. Power Supply	+ 5Vaux	0A	+5 % / -3%	7.000µF	2.5A

1) 18A = Surge Current for 20 sec!

BIOS

AMI UEFI BIOS
 modified and adapted by Fujitsu Technology Solutions; Recovery BIOS, BIOS and CPU Microcode Update, Quick Boot, Logo Boot, Quiet Boot, Plug & Play, DRAM and PCI Auto Configuration, S.M.A.R.T. Support

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), Infineon Trusted Platform Module (TPM) V1.2.

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

Designed for Industrial Applications

Longlife components	Designed for 24/7 use in industrial applications
Tin-plated PCB	Improved durability of PCB surface
Revision control	Strict control and pre-announcement
Extended lifecycle	Mainboard available for more than three years
Enhanced operating temperature range (0°C-60°C) ⁴⁾	

Graphics

Intel® HD Graphics DX10.1 (integrated in processor)

Audio

Conexant CX20642, 5.1-channel, High Definition Audio Codec

LAN

Intel 82579LM / Intel 82574L Ethernet Controller with 10/100/1000 MBit/s, iAMT, Wake-on-LAN (WoL) by interesting Packets, Link Status Change and Magic Packet™, PXE Support, BIOS MAC Address Display, Teaming Support

Drives

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

Features

Features	D3076-S
Chipset	iQ67
Board Size	ATX
VGA	optional ³⁾
Stereo Audio / 5.1 Multichannel Audio	- / ✓
Buzzer / int. Speaker Support	✓ / ✓
LAN Gbit / 100 Mbit / 10 Mbit	✓ / ✓ / ✓
LAN ASF / DASH / WoL / Boot / VPro 2011 (iAMT 7)	- / ✓ / ✓ / ✓ / ✓ / ✓
SATA / ATA / RAID / eSATA-support	✓ / - / ✓ / ✓ / ✓
FireWire™ / USB 2.0	- / ✓
FAN monitored PSU ¹⁾ / CPU / AUX1 / AUX2 / AUX3 ¹⁾	✓ / ✓ / ✓ / ✓ / ✓
FAN controlled PSU ¹⁾ / CPU / AUX1 / AUX2 / AUX3 ¹⁾	✓ / ✓ / ✓ / ✓ / ✓
TEMP monitored CPU / ONB1-5 / OFFB	✓ / ✓ / ✓ -
Special Features	
Silent Fan / Silent Fan LT / System Guard / Silent Drives	✓ / - / ✓ / ✓ / ✓
Recovery BIOS / Desk Update / Multi Boot	✓ / ✓ / ✓ / ✓
HDD Password / HDD Encryption / EraseDisk	✓ / - / ✓
Logo Boot Option / Intel On Screen Branding	✓ / ✓
High Efficiency Core Voltage Regulator Design	✓
BIOS POST- / BIOS Boot- / OS- HW Watchdog	✓ / ✓ / ✓ / ✓
Operating Mode 24-7 / 8-5 (hrs per day - days per week)	✓ / -
Mainboard operating temperature range (chassis inside)	0°C – 60°C

Internal Connectors

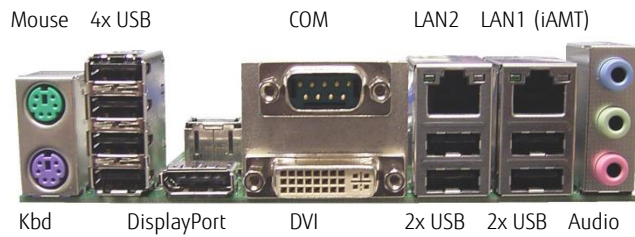
DIMM Sockets (DDR3 1333)	4
PCI Express x16 Slot (Gen2)	1
PCI Express x16 Slot (4 Lanes, Gen2) / x8 Slot (1 Lane, Gen2)	1 / 1
PCI Slots (32Bit, 33 MHz, Rev. 2.3)	4
SATA-600 / SATA-300 / ATA / Floppy	2 / 4 / 0 / 0
S/PDIF (digital Audio) OUT / IN	- / -
Frontpanel Audio (9-Pin, HD Audio)	1
USB (2.0, 2 channels per connector) / USB Flashdrive / USB Stick	2 / 1 / 1
Serial (FIFO, 16550 compatible)	1
FAN PSU ¹⁾ / CPU / AUX1 / AUX2 / AUX3 ¹⁾	1 / 1 / 1 / 1 / 1
SMBus (Case Temperature)	-
Intrusion (Case Open) / GPIOI(8Bit)	1 / 1
Parallel (EPP/ECP) Pin Connector ²⁾	1
Power 24 pin (BTX) / 4 pin (12V processor supply)	1 / 1

External Connectors

VGA Sub D ³⁾ / DVI-I / DisplayPort	- / 1 / 1
Audio Mic. In / Line in / Line out (or driver configuration)	1 / 1 / 1
S/PDIF (digital Audio) OUT / IN	- / -
LAN (RJ-45)	2
PS/2 Mouse / Keyboard	1 / 1
FireWire™ (6-Pin, IEEE 1394)	-
USB (2.0, ~480MBit/s)	8
Serial (RS232, FIFO, 16550 compatible)	1
Parallel (EPP/ECP) ²⁾	-

- 1) Not supported by standard Power Supplies; FAN PSU and FAN AUX3 cannot be used simultaneously (Selectable in BIOS Setup)
- 2) External parallel port possible via optional connector cable
- 3) Via optional DVI-I / VGA interface connector
- 4) Forced cooling required, see technical documentation for detailed requirements

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
Website: emea.fujitsu.com/components
Address: Diamantlaan 25
2132 WV Hoofddorp
Netherlands

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Fujitsu products, solutions & services

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- Network

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

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Fujitsu green policy innovation

www.fujitsu.com/global/about/environment/
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www.fujitsu.com/fts/mainboards/

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2015-07-21