

# Data Sheet

## Fujitsu Mainboard D2990-A $\mu$ ATX

### Classic Desktop Series

Powered by the Intel® H61 Express Chipset supporting DDR3 1333 SDRAM Memory and 2<sup>nd</sup> generation Intel® Core™ i3 / i5 / i7 Processors (Socket LGA1155)

**Chipset:**

Intel® H61 Express Chipset

**Processors:**

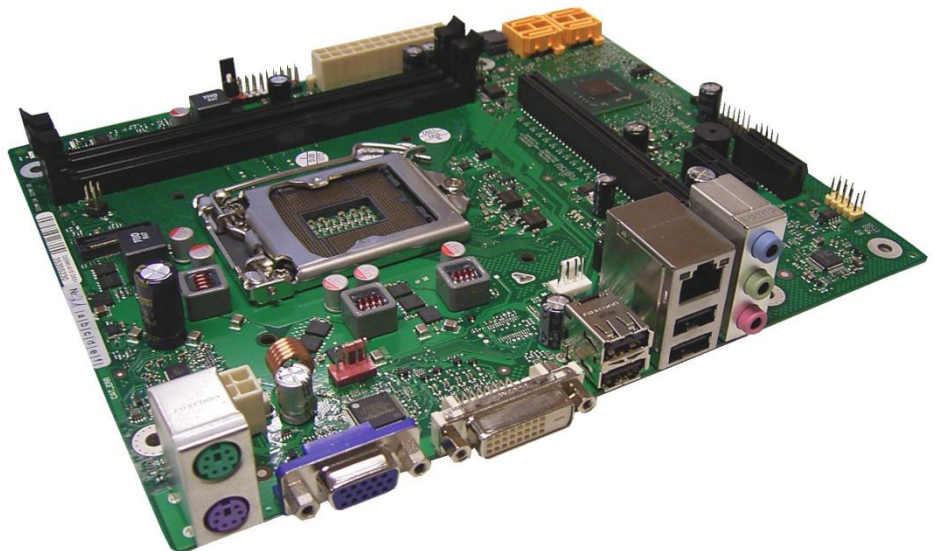
Intel® Core™ i7 – 2xxx processor series  
Intel® Core™ i5 – 2xxx processor series  
Intel® Core™ i3 – 2xxx processor series  
Intel® Pentium™ G6xx/G8xx  
Intel® Celeron®

**Memory:**

DDR3 1333/1066 SDRAM

**Product Features:**

Intel® HD Graphics (depends on processor)  
PCI Express Gen2  
5.1 Multichannel Audio onboard  
USB 2.0 onboard  
GbE LAN onboard  
Mainboard ready for EuP



# Features and benefits

**Board Size** ultra small µATX: 218 x 183 mm

**Chipset** Intel® H61 Express Chipset

**Memory**  
2 DIMM Sockets (1.5V), 1GB - 16GB, 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.  
Prepared for future LGA1155 processors.  
(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 <sup>1)</sup>
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

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

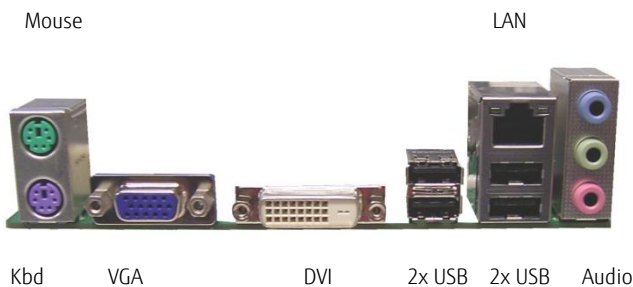
**BIOS**  
AMI UEFI BIOS  
modified and adapted by Fujitsu Technology Solutions; Recovery BIOS, SM-BIOS (DMI), BIOS and CPU Microcode Update, Quick Boot, Logo Boot, Quiet Boot, Plug & Play, Automatic DRAM and PCI Configuration, BIOS Support for S.M.A.R.T., Advanced Power Management, ACPI S3/S4, Wake on time from S5

**Security Features**  
Recovery BIOS, System and BIOS Password, Boot Sequence Control, USB- Port Access Protection, Boot Sector Virus Warning, Write Protection for Flash BIOS.

**Special Features**

Silent Fan LT	Independent temperature related processor fan and system fan control
System Guard	View Silent Fan LT 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

**External Connectors**



**Graphics**  
Intel® HD graphics 2000 (integrated in the processor), DirectX 10.1 compliant, Dynamic Video Memory (DVM), upgradeable with PCI Express x16 graphics card

**Audio**  
Realtek ALC 663, 5.1-channel, High Definition Audio Codec

**LAN**  
Realtek RTL8111E Ethernet Controller with 10/100/1000 MBit/s, Wake-on-LAN (WoL) by interesting Packets, Link Status Change and Magic Packet™, PXE support

**Drives**  
4 Serial ATA II 300 Interfaces (up to 3GBit/s, NCQ)

Features	D2990-A
Chipset	iH61
Board Size	Ultra small µATX
DVI/VGA	optional
Stereo Audio / 5.1 Multichannel Audio	✓/✓
Buzzer / int. Speaker Support	✓/ -
LAN Gbit / 100 Mbit / 10 Mbit	✓/✓/✓
LAN ASF / DASH / WoL / Boot / iAMT	-/ -/ ✓/ ✓/ -
SATA / ATA / RAID / eSATA-support	✓/ -/ -/ -
FireWire™ / USB 2.0	-/ ✓
FAN monitored PSU <sup>1)</sup> / CPU / AUX1 / AUX2	-/ -/ -/ -
FAN controlled PSU <sup>1)</sup> / CPU / AUX1 / AUX2	-/ ✓/ ✓/ -
TEMP monitored CPU / ONB / OFFB	✓/ ✓/ -
<b>Special Features</b>	
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	-
Operating Mode 24-7 / 8-5 (hrs per day - days per week)	-/ ✓
<b>Internal Connectors</b>	
DIMM Sockets (DDR3 1333)	2
PCI Express x16 Slot (Gen2)	1
PCI Express x16 Slot (4 Lanes, Gen2) / x1 Slot (Gen2)	0 / 2
PCI Slots (32Bit, 33 MHz, Rev. 2.3)	0
SATA-600 / SATA-300 / ATA / Floppy	0 / 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, ~480 MBit/s, 2 channels per connector)	2 (4 channels)
Serial (FIFO, 16550 compatible)	-
FAN PSU <sup>1)</sup> / CPU / AUX1 / AUX2	-/ -/ -/ -
SMBus (Case Temperature)	-
Intrusion (Case Open)	-
Parallel (EPP/ECP) Pin Connector	-
Power 24 pin (BTX) / 4 pin (12V processor supply)	1 / 1
<b>External Connectors</b>	
VGA Sub D / DVI-D / 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
FireWire™ (6-Pin, IEEE 1394)	-
USB (2.0, ~480MBit/s)	4
Serial (RS232, FIFO, 16550 compatible)	-
Parallel (EPP/ECP)	-

1) Not supported by standard Power Supplies

# 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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