THE POSSIBILITIES ARE INFINITE FUJITSU

DATA SHEET

MAINBOARD D2912-A
µBTX
Classic Desktop Series

Issue January 2010

Pages 2

Intel® Q57 Chipset supporting Intel® Active Management Technology 6.0 for DDR3 1333 SDRAM Memory and Intel® Core™ i7 / i5 / i3 and Pentium® G Processors (Socket LGA 1156)

Chipset:
Intel® Q57

Processors:
Intel® Core™ i7 – 800 processor series
4 Cores / 8 Threads, 8MB SLC, Turbo Boost Technology

Intel® Core™ i5 – 700 processor series
4 Cores / 4 Threads, 8MB SLC, Turbo Boost Technology

Intel® Core™ i5 – 600 processor series
2 Cores / 4 Threads, 4MB SLC, Turbo Boost Technology
Integrated Intel® HD Graphics

Intel® Core™ i3 – 500 processor series
2 Cores / 4 Threads, 4MB SLC
Integrated Intel® HD Graphics

Intel® Pentium® G processor series
2 Cores / 2 Threads, 3MB SLC
Integrated Intel® HD Graphics

Memory:
DDR3 1333 SDRAM
DDR3 1066 SDRAM

Product Features:
Intel AMT 6.0 technology
Intel vPro™ ready
Intel® HD Graphics (optional, depends on processor)
PCI Express Gen2
Multichannel Audio onboard
USB 2.0 onboard
Intel GbE LAN onboard supporting DASH
Serial ATA II RAID onboard
Trusted Platform Modul V1.2 onboard
Mainboard prepared for EuP

SILENT FAN | SYSTEM GUARD | SILENT DRIVES | MULTI BOOT | HDD PASSWORD | RECOVERY BIOS | DESK UPDATE | WATCH DOG

Board Size	µBTX: 10,5“ x 9.95“ (266.7 x 264.2 mm)
Chipset	Intel® Q57

Memory
4 DIMM Sockets (1.5V), 1GB - 16GB, Single Channel or Dual Channel DDR3-1066 (CL7) / DDR3-1333 (CL9) SDRAM, unbuffered, no ECC

Processors
Intel® Core™ i7 – 800 processor series, 4 Cores / 8 Threads
Intel® Core™ i5 – 700 processor series, 4 Cores / 4 Threads
Intel® Core™ i5 – 600 processor series, 2 Cores / 4 Threads, graphics
Intel® Core™ i3 – 500 processor series, 2 Cores / 4 Threads, graphics
Intel® Pentium® G processor series, 2 Cores / 2 Threads, graphics

Compatible with Intel® FMB 09A/09B, max. 95W (LGA1156)
(For details on supported processors please refer to our website)

Power Specification
BTX12V (24 Pin) or ATX12V (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 / 2A Auxiliary Power required for USB Wake-Up from Save-to-RAM, Save-to-Disk

Power Supply (PS) Requirements
for onboard components (worst case)

Source	Voltage	min PSU Load [1]	max.Voltage Tolerance	max. Mainboard Current
Main Power Supply	+ 12 V	0.1A	± 5 %	12A
	- 12 V	0A	± 10 %	0.05A
	+ 5 V	0.6A	± 5 %	6A
	+ 3.3 V	0A	± 5 %	0.5A
Aux. Power Supply	+ 5 V	0A	+5 % / -3%	2A

1) PS must support these load conditions in order to support low power processors states

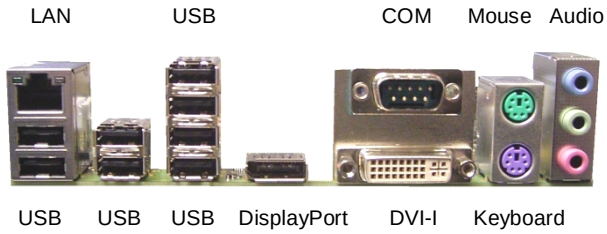
BIOS
Phoenix Secure Core BIOS Version 6.00
modified and adapted by Fujitsu Technology Solutions; Recovery BIOS, SM-BIOS (DMI), BIOS and CPU Microcode Update via disk (stable user settings), Quick Boot, Logo Boot, Quiet Boot, Plug & Play, Automatic DRAM and PCI Configuration, BIOS Support for S.M.A.R.T., 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.
Trusted Platform Module TPM V1.2 (Atmel)

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 DU DVD
Multi Boot	Comfortable boot from any boot device
HDD Password	Access protection for disk drives

External Connectors



Note: In case a processor w/o graphics support is installed, the onboard graphics connectors (DVI-I and DisplayPort) can be closed by a plastic cover included in the shipment.

Graphics
Optional: Intel® HD Graphics integrated in processor

Audio
Realtek ALC 663, 5.1-channel, High Definition audio

LAN
Intel 82578 LM Ethernet Controller with 10/100/1000 MBit/s, Wake-on-LAN (WoL) by interesting Packets, Link Status Change and Magic Packet™, bootix® PXE Support, BIOS MAC Address Display, iAMT 6.0; DASH 1.1

Drives
- 6 Serial ATA II 300 Interfaces (up to 3GBit/s, NCQ); RAID 0, 1, 10, 5

	D2912-A
Features	
Chipset	iQ57
Board Size	µBTX
VGA	optional
Stereo Audio / 5.1 Multichannel Audio	- / **ü**
Buzzer / int. Speaker Support	- / **ü**
LAN Gbit / 100 Mbit / 10 Mbit	**ü** / **ü** / **ü**
LAN ASF / DASH 1.1 / WoL / Boot / iAMT	- / **ü** / **ü** / **ü**/ **ü**
SATA / ATA / RAID / eSATA-support	**ü** / - / **ü** / **ü**
FireWire™ / USB 2.0	- / **ü**
FAN monitored PSU [1] / CPU / AUX1 / AUX2	**ü** / **ü** / **ü** / -
FAN controlled PSU [1] / CPU / AUX1 / AUX2	**ü** / **ü** / **ü** / -
TEMP monitored CPU / ONB1 / ONB2 / OFFB	**ü** / **ü** / **ü** / -
Special Features	
Silent Fan / Silent Fan LT / System Guard / Silent Drives	**ü** / - / **ü** / **ü**
Recovery BIOS / Desk Update / Multi Boot	**ü** / **ü** / **ü**
HDD Password / HDD Encryption	**ü** / -
Logo Boot Option / Intel On Screen Branding	**ü** / **ü**
High Efficient Core regulator design	**ü**
Operating Mode 24-7 / 8-5 (hrs per day - days per week)	**ü** / -
Internal Connectors	
DIMM Sockets (DDR3 1333)	4
PCI Express x16 Slot (Gen. 2)	1
PCI Express x16 Slot (4 Lanes)	1
PCI Slots (32Bit, 33 MHz, Rev. 2.3)	2
SATA (300) / ATA (100) / Floppy	6 / 0 / 0
S/PDIF (digital Audio) OUT / IN	- / -
Audio Input	-
Frontpanel Audio (9-Pin) AC'97 / Azalia	- / 1
FireWire™ (9-Pin, Intel standard header)	-
USB (2.0, ~480 MB/s, 2 channels per connector)	3
Serial (FIFO, 16550 compatible)	-
FAN PSU [1] / CPU / AUX1 / AUX2	1 / 1 / 1 / -
SMBus (Case Temperature)	-
Intrusion (Case Open)	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 [3]	- / 1 / 1
Audio Mic. In / Line in / Line out (or driver configuration)	1 / 1 / 1
Audio Surround / RearSurround / CenterLFE	- / - / -
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, ~480MB/s)	8
Serial (RS232, FIFO, 16550 compatible)	1
Parallel (EPP/ECP) [2]	-

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

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Take back and Recycling information: ts.fujitsu.com/recycling

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