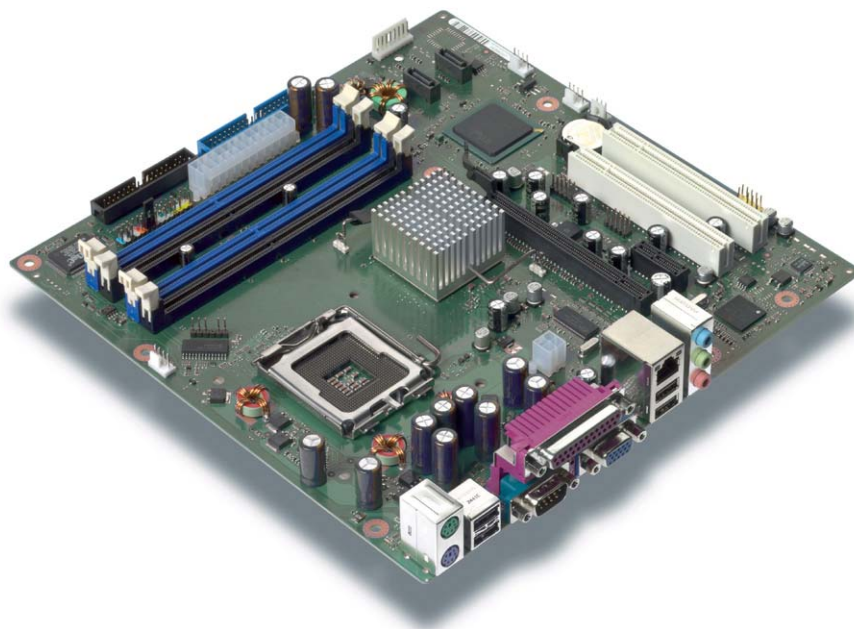


Premium Mainboard D2151-A1

Issue November 2006

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Intel® 945G Express Chipset for DDR2 667 SDRAM Memory and Intel® Pentium® D Processors (1066 MHz FSB)



Chipset:

Intel® 945G / ICH7

Processors:

Intel® Pentium® D Processors, LGA775 with 800 MHz FSB

Intel® Pentium® 4 Processors, LGA775 with 1066/800/533 MHz FSB

Intel® Celeron® D Processors, LGA775 with 533 MHz FSB

Memory:

DDR2 667 SDRAM

DDR2 533 SDRAM

DDR2 400 SDRAM

Product Features:

Graphics on board

Audio on board

USB 2.0 on board

Gbit LAN on board

Serial ATA II on board

Support for Hyper-Threading Technology

Compatible with Intel® 05A processors



Board Size	µATX: 9.6" x 9.6" (243.8 x 243.8 mm)
Chipset	Intel® 945G

Memory
 4 DIMM Sockets (1.8V), 256 MB - 4 GB, Single or Dual channel, DDR2 667/533/400 SDRAM, unbuffered, no ECC
 (For details on recommended RAM, please refer to our website)

Processors
 Intel® Pentium® D Processors, LGA775, 1066/ 800/ 533 MHz FSB,
 Intel® Pentium® 4 Processors, LGA775, 1066/ 800/ 533 MHz FSB,
 Intel® Celeron® D Processors, LGA775, 533 MHz FSB
 Support for Hyper-Threading Technology
 Compatible with Intel® 05A processors
 (For details on processors supported, 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 Requirements
 for onboard components (worst case)

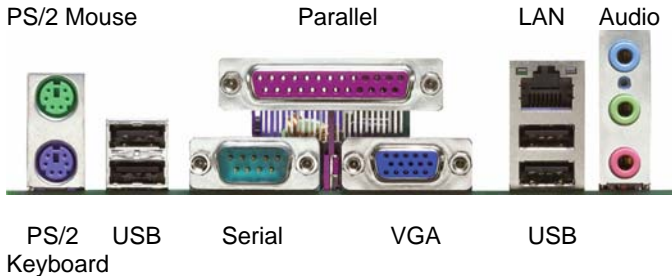
Source	Voltage	Maximal variation	Mainboard current (Maximal)
Main Power Supply	+ 12 V	5 %	10.0 A
	- 12 V	10 %	0.05 A
	+ 5 V	5 %	6 A
	+ 3.3 V	5 %	4 A
Aux. Power Supply	+ 5 V	5 %	2 A

BIOS
 Phoenix cME FirstBIOS Desktop Pro Version V5.00
 modified and adapted by Fujitsu Siemens Computers; 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 (Save-to-RAM), ACPI S4
 (Save-to-Disk), Wake on time from S5

Security Features
 Recovery BIOS, System and BIOS Password, Boot and/or Write
 Protection for Floppy Disk Drive, Boot Sequence Control for each
 Floppy and IDE Drive, Serial and Parallel Port Access Protection,
 Boot Sector Virus Warning, Write Protection for Flash BIOS

Special Features
 Silent Fan Independent temperature related processor and fan supervision and control
 System Guard View and adjust Silent Fan
 Silent Drives Noise reduction for optical and hard disk drives
 Safe Standby Prevents data loss in S3 (save-to-RAM)
 Recovery BIOS Restores a corrupted BIOS
 Desk Update Simple driver update with DU CD
 Multi Boot Comfortable boot from any boot device
 HDD Password Access protection for ATA5/ATAPI5 disk drives

External Connectors



Graphics
 Intel® GMA950 Graphics Controller, 333 MHz core frequency, 256-bit 2-D and 32-bit 3-D engine, Motion video acceleration, up to 2048 x 1536 at 75 Hz refresh, integrated 24-bit 400 MHz RAMDAC, Dynamic Video Memory Technology, upgradeable with PCI Express x16 Graphics Card or ADD2 Cards to add support for digital displays or TV Out, DDC 2B Support for Monitor Detection

Audio
 Realtek ALC260 (HD Audio), HW 3D Stereo Enhancement, SW Wavetable Synthesis Support

LAN
 Broadcom BCM5751 controller with 10/100/1000 Mbit/s via PCI Express, Wake-on-LAN (WoL) by interesting Packets, Link Status Change and Magic Packet™, bootix® PXE Support

IDE
 1 ATA 100 Interface, up to 2 Drives,
 2 Serial ATA II 300 Interfaces (up to 3Gbit), up to 2 Drives

Versions	D2151-A
Features	
Chipset	Intel® 945G
Board Size	µATX
VGA	✓
Audio / 6-channel / S/PDIF	✓ / - / -
Buzzer / int. Speaker Support	- / ✓
LAN Gbit / 100 Mbit / 10 Mbit	✓ / ✓ / ✓
LAN ASF / AoL / WoL / Boot	✓ / - / ✓ / ✓
SATA / ATA / RAID	✓ / ✓ / -
FireWire™ / USB 2.0	- / ✓
FAN monitored PSU**/CPU/AUX1/AUX2	✓ / ✓ / ✓ / -
FAN controlled PSU**/CPU/AUX1/AUX2	✓ / ✓ / ✓ / -
TEMP monitored CPU/ONB1/ONB2/HDD	✓ / ✓ / ✓ / ✓

Special Features

Silent Fan / Silent Fan LT	✓ / -
System Guard / Silent Drives	✓ / ✓
Recovery BIOS/Desk Update/Multi Boot/Safe Standby	✓ / ✓ / ✓ / ✓
HDD Password	✓
Logo Boot / Intel On Screen Branding	✓ / ✓

Internal Connectors

DIMM Sockets (DDR2 667 SDRAM)	4
PCI Express x16	1
PCI Slots (32bit, 33 MHz, 5 V and 3.3 V) PCI Rev. 2.3	2
PCI Express x1	1
SATA (300) / ATA (100) / Floppy	2 / 1 / 1
S/PDIF * (digital Audio) OUT / IN	- / -
CD / AUX Audio Input	- / -
Frontpanel Audio (9-Pin, Azalia Pinning)	1
FireWire™ * (9-Pin, Intel standard header)	-
USB * (2.0, ~480 MB/s)	4
Serial * (FIFO, 16550 compatible)	-
FAN PSU**/CPU/AUX1/AUX2	1 / 1 / 1 / -
SMBus * (Case Temperature)	-
Intrusion * (Case Open)	1
Power BTX(ATX supported) / ATX12V / AGP Pro	1 / 1 / -

External Connectors

VGA	1
Audio Mic. In / Line in / Line out	1 / 1 / 1
S/PDIF (5.1 digital Audio, cinch) OUT / IN	- / -
LAN (RJ-45)	1
PS/2 Mouse / Keyboard	1 / 1
FireWire™ (6-Pin, IEEE 1394)	-
USB (2.0, ~480MB/s)	4
Serial (RS232, FIFO, 16550 compatible)	1
Parallel (EPP/ECP)	1

* for use with internal devices or optional Front- or Rearpanel

** not supported by standard Power Supplies