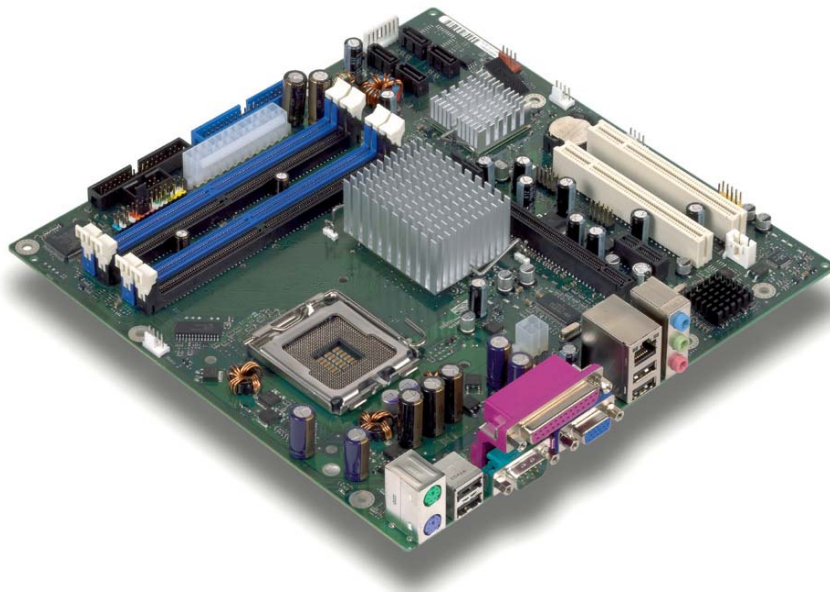


Premium Mainboard D2151-S1 Industrial Version

Issue November 2006

Pages 2

Intel® 945G Express Chipset for DDR2 667 SDRAM Memory and
Intel® Pentium® 4 Processors (1066 MHz FSB)
Enhanced operating temperature range from 0°C to 60°C



Chipset:

Intel® 945G

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

Support for Hyper-Threading Technology

Compatible with Intel® 05A processors

Memory:

DDR2 667 SDRAM

DDR2 533 SDRAM

DDR2 400 SDRAM

Product Features:

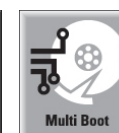
Graphics on board

HD Audio on board

USB 2.0 on board

Gbit LAN on board

Serial ATA II RAID on board



| | |
|-------------------|--------------------------------------|
| 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, 800 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
 5V and 3.3V Supply Voltage on PCI Slots (PCI Rev. 2.3)
 3.3 V Auxiliary Supply Voltage on PCI Slots (Wake-Up Function)
 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 % | 17.0 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 |

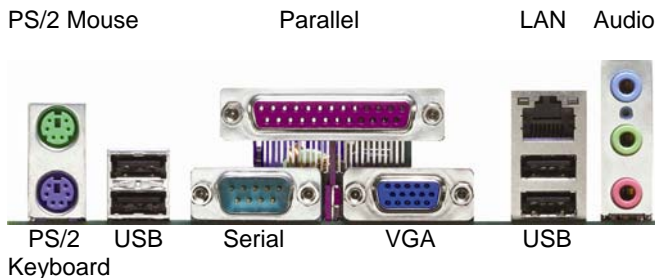
BIOS
 Phoenix cME FirstBIOS Desktop Pro Version V5.00
 modified and adapted by Fujitsu Siemens Computers

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

Designed for industrial applications
 Longlife capacitors Designed for 24/7 use in industrial applications
 Tin-plated PCB Improved durability of PCB surface
 Revision control Less hardware changes and better information management

Extended lifetime Mainboard available for more than three years
 Additional Documentation & Support
 RoHS-compliant
 Enhanced operating temperature range (0°C-60°C) ¹⁾

External Connectors



1) forced cooling required

All rights, including rights created by patent grant or registration of a utility model or design as well as rights of technical modifications are reserved. Delivery subject to availability. Designations may be trademarks, the use of which by third parties for their own purposes may violate the rights of the trademark owners.

Graphics
 Intel® GMA950 Graphics Controller, up to 2048 x 1536 at 75 Hz refresh, Dynamic Video Memory Technology, upgradeable with PCI Express x16 Graphics Card or ADD2 / ADD2+

Audio
 Realtek ALC260 (HD Audio), 2 channel

LAN
 Broadcom BCM5751 controller with 10/100/1000 Mbit/s via PCI Express, Alert Standard Format (ASF), 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,
 4 Serial ATA II 300 Interfaces (up to 3Gbit, NCQ), up to 4 Drives, RAID 0, 1, 0+1, 5

| Versions | D2151-S |
|---|-------------------|
| 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/AUX3 | ✓ / ✓ / ✓ / ✓ / ✓ |
| FAN controlled PSU**/CPU/AUX1/AUX2/AUX3 | ✓ / ✓ / ✓ / ✓ / ✓ |
| 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 | 4 / 1 / 1 |
| S/PDIF * (5.1 digital Audio) OUT / IN | - / - |
| Audio Input | 1 |
| Frontpanel Audio (9 Pin, Azalia Pinning) | 1 |
| FireWire™ * (9-Pin, Intel standard header) | - |
| USB * (2.0, ~480 MB/s) | 4 |
| Serial * (FIFO, 16550 compatible) | 1 |
| FAN PSU**/CPU/AUX1/AUX2/AUX3 | 1 / 1 / 1 / 1 / 1 |
| SMBus * (Case Temperature) | - |
| Intrusion (Case Open) | - |
| 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

Diamond Point International (Europe) Ltd

Suite 13, Ashford House, Beaufort Court
 Sir Thomas Longley Road, Rochester, Kent, ME2 4FA, UK
 Phone 01634 300900 - Fax 01634 722398 - Email sales@dpie.com – Web www.dpie.com



www.dpie.com