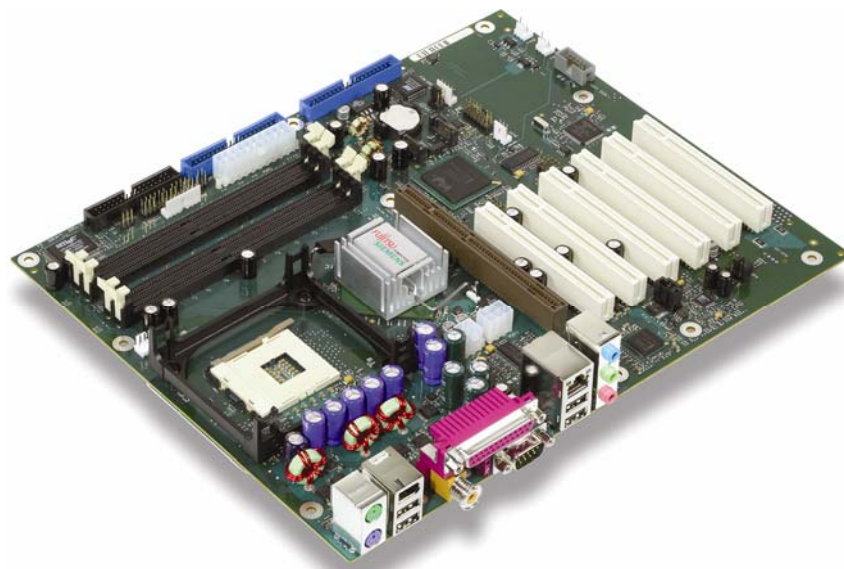


Mainboard D1688 / D1683

Intel 875P Chipset for
DDR400 SDRAM (PC3200) Memory and
Intel Pentium 4 Processors (800 MHz FSB)



premium



Intel[®] PRO
Network Connections

Data Sheet

Product picture (ATX-version) similar to product

Chipset:

Intel[®] 875P

Performance Accelerator Technology
(PAT)

Processors:

Intel[®] Pentium[®] 4 Processors,
mPGA 478 with
800/533 MHz FSB

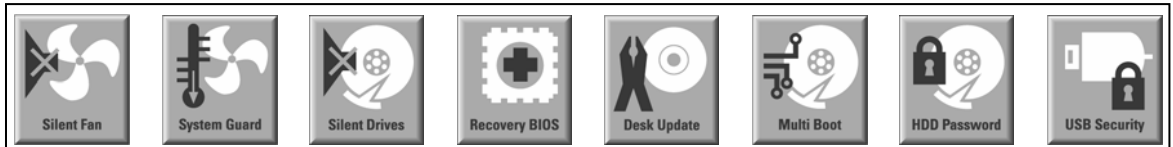
Support for Hyper-Threading
Technology
PSC FMB 1.5

Memory:

DDR400 SDRAM (PC3200)
DDR333 SDRAM (PC2700)

Product Features:

FireWire[™] on board (D1688)
USB 2.0 on board
Gbit LAN on board



Board Size ATX (D1688): 12" x 9.6" (304.8 x 243.8 mm)

µATX (D1683): 9.6" x 9.6" (243.8 x 243.8 mm)

Chipset Intel® 875P, Performance Accelerator Technology

Memory

4 DIMM Sockets (2.5 V), 128 MB - 4 GB, 184 Pin
Single or Dual Channel, DDR400/333 SDRAM (PC3200/2700),
unbuffered, with or without ECC
(For details on recommended RAM, please refer to our website)

Processors:

Intel® Pentium® 4 Processors, mPGA 478, 800/533 MHz FSB
Support for Hyper-Threading Technology, PSC FMB 1.5
(For details on processors supported, please refer to our website)

Power Specification

ATX 12 V Power Supply required
Support for Soft-Off Power Supplies
5 V and 3.3 V Supply Voltage on PCI Slots
3.3 V Auxiliary Supply Voltage on PCI Slots (Wake-Up Function)
On board CPU Voltage Regulator, 5 V / 2 A 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 %	12 A
	- 12 V	± 10 %	0.05 A
	+ 5 V	± 5 %	9 A
	+ 3.3 V	± 5 %	5.9 A
Aux. Power Supply	+ 5 V	± 5 %	2 A

BIOS

Phoenix NuBIOS V4.06 modified and adapted by
Fujitsu Siemens Computers
SM-BIOS (DMI), BIOS Update via disk, Quick Boot, Logo Boot
Quiet Boot (Silent Screen), Plug & Play, Automatic DRAM and PCI
Configuration, Advanced Power Management
ACPI S4 (Save-to-Disk), ACPI S3 (Save-to-RAM)
Wake on time from S3, Intel on Screen Branding

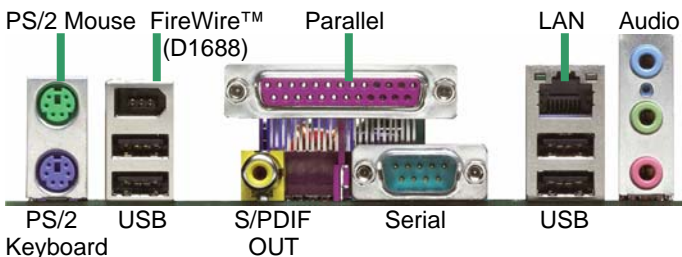
Security Features

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
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
USB Security Access protection with Fujitsu Siemens Computers Memory Bird

External Connectors



Audio

Analog Devices AD1980, AC '97 Audio, S/PDIF 5.1, HW 3D
Stereo Enhancement, SW Soundblaster Emulation
(Win98/WinME/ Win2000) Support, SW Wavetable Synthesis
Support

LAN

Intel® LAN Ethernet Controller 82547 EI with 10/100/1000 MBit/s,
Alert Standard Format (ASF), Wake-on-LAN (WoL) by interesting
Packets, Link Status Change and Magic Packet™, bootix® PXE
support, bootix BootP support flashable (License included), BIOS
MAC Address Display

FireWire™ (D1688)

Agere FW 322, 1394 Controller, two 1394 interfaces

IDE

2 ATA 100 Interfaces, up to 4 Drives,
2 Serial ATA 150 Interfaces, up to 2 Drives

Versions	D1688-A	D1683-A
Features		
Chipset	Intel® 875 P	Intel® 875 P
Board Size	ATX	µATX
VGA	-	-
Audio / 6-channel / S/PDIF 5.1	✓ / - / ✓	✓ / - / ✓
Buzzer / int. Speaker Support	- / ✓	- / ✓
LAN GBit / 100Mbit / 10 MBit	✓ / ✓ / ✓	✓ / ✓ / ✓
LAN ASF/ AoL / WoL / Boot	✓ / - / ✓ / ✓	✓ / - / ✓ / ✓
SATA / ATA / RAID	✓ / ✓ / -	✓ / ✓ / -
FireWire™	✓	-
USB 2.0	✓	✓
Logo Boot / Intel on Screen Branding	✓ / ✓	✓ / ✓
silent² - Silent Fan / System Guard / Silent Drives	✓ / ✓ / ✓	✓ / ✓ / ✓
simple² - Recovery BIOS / Desk Update / Multi Boot	✓ / ✓ / ✓	✓ / ✓ / ✓
secure² - HDD Password / USB Security	✓ / ✓	✓ / ✓

Internal Connectors

DIMM Sockets (DDR400 SDRAM, PC3200)	4	4
AGP Pro 50 Slot (2/4/8x, 32Bit, 66 MHz, 1.5 V)	1	-
AGP Slot (2/4/8x, 32Bit, 66 MHz, 1.5 V)	-	1
PCI Slots (32Bit, 33 MHz, 5 V and 3.3 V)	6	3
CNR Slot (Type A, AC'97 only)	-	-
S-ATA (150 Mbyte/s)	2	2
ATA (Ultra DMA/100)	2	2
Floppy (up to 2.88 MB)	1	1
S/PDIF 5.1 (digital Audio) OUT / IN	- / -	- / -
CD / AUX Audio Input	1 / -	1 / -
Frontpanel Audio (9 pin for headphone, microphone)	1	1
FireWire™ (9-Pin, Intel standard header)	1	-
USB* (2.0, ~480 MB/s)	4	4
Serial* (RS 232, FIFO, 16550 compatible)	-	-
FAN PSU**/CPU/AUX1/AUX2	1 / 1 / 1 / 1	1 / 1 / 1 / 1
SMBus* (Case Temperature)	-	1
Intrusion* (Case Open)	1	1
Power ATX/ATX 12V/AGP Pro	1 / 1 / 1	1 / 1 / -

External Connectors

VGA	-	-
Audio Mic. In / Line in / Line out	1 / 1 / 1	1 / 1 / 1
S/PDIF 5.1 (digital Audio) OUT / IN	1 / -	1 / -
LAN (RJ-45)	1	1
PS/2 Mouse / Keyboard	1 / 1	1 / 1
FireWire™ (6-Pin, IEEE1394)	1	-
USB (2.0, ~480MB/s)	4	4
Serial (RS 232, FIFO, 16550 compatible)	1	1
Parallel (EPP/ECP)	1	1

* for use with internal devices or optional Front- or Rearpanel
** not supported by standard Power Supplies

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