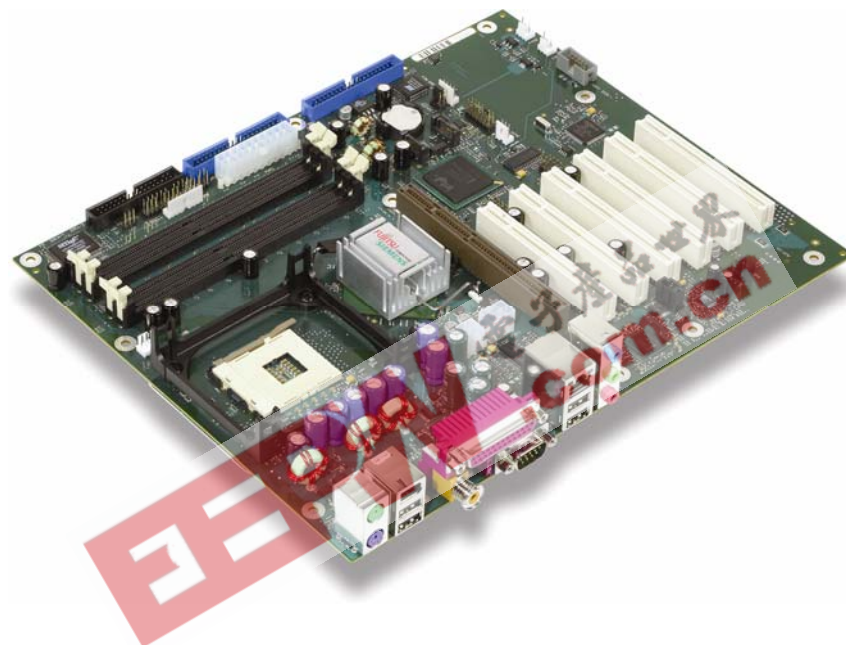


## Mainboard D1688 / D1683

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



premium



Intel<sup>®</sup> PRO  
Network Connections

Product picture (ATX-version) similar to product

### Chipset:

Intel<sup>®</sup> 875P

Performance Accelerator Technology  
(PAT)

### Processors:

Intel<sup>®</sup> Pentium<sup>®</sup> 4 Processors,  
mPGA 478 with  
800/533 MHz FSB

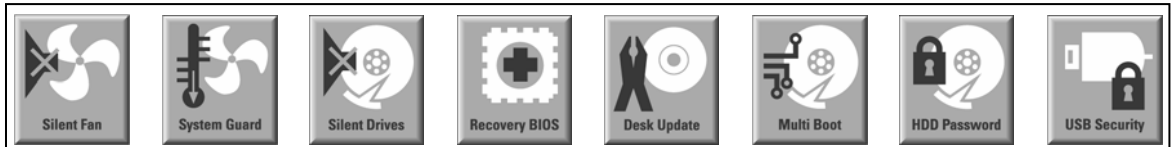
Support for Hyper-Threading  
Technology  
PSC FMB 1.5

### Memory:

DDR400 SDRAM (PC3200)  
DDR333 SDRAM (PC2700)

### Product Features:

FireWire<sup>™</sup> 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

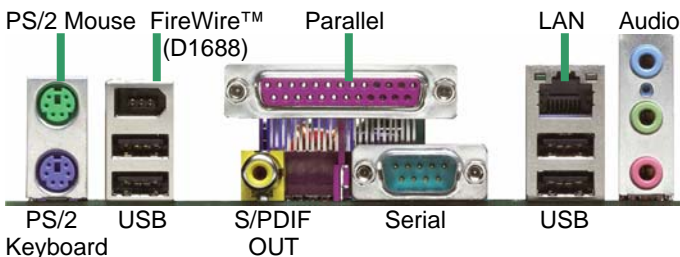
**Security Features**

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
<b>Features</b>		
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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