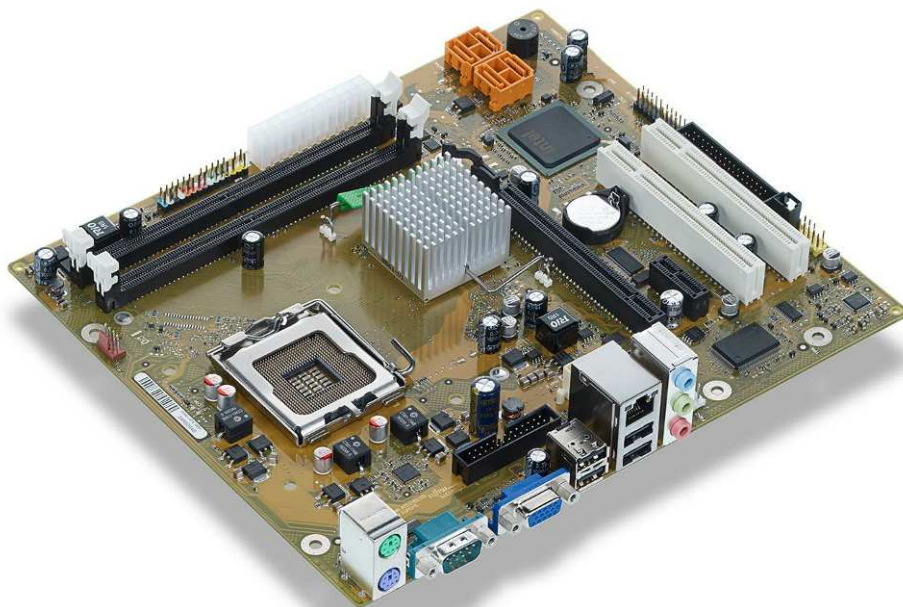


## Value Mainboard D2841-A µATX

Issue March 2009

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Intel® G41 Express Chipset for DDR2 800 SDRAM Memory and  
Intel® Core™2 Duo Processors and Core™2 Quad Processors (up to 1333 MHz FSB)



### Chipset:

Intel® G41 / ICH7

### Memory:

DDR2 667 SDRAM  
DDR2 800 SDRAM

### Processors:

Intel® Core™ 2 Quad Q9xxx / Q8xxx Processors,  
LGA775 with 1333/1066 MHz FSB

Intel® Core™ 2 DUO E8xxx / E6xxx Processors,  
LGA775 with 1333/1066/800 MHz FSB

Intel® Core™ 2 DUO E7xxx / E4xxx Processors,  
LGA775 with 1333/1066/800 MHz FSB

Intel® Pentium® Dual Core E5xxx / E2xxx  
Processors, LGA775 with 800 MHz FSB

Intel® Celeron® Dual Core E1xxx Processors,  
LGA775 with 800 MHz FSB

Intel® Celeron® 4xx Processors,  
LGA775 with 800 MHz FSB

### Product Features:

GbE LAN onboard  
Graphics onboard  
5.1 multichannel audio onboard  
Serial ATA II onboard  
USB 2.0 onboard



<b>Board Size</b>	µATX (reduced): 244 x 213 mm
<b>Chipset</b>	Intel® G41 / ICH7

**Memory**  
2 DIMM Sockets (1.8V), 512MB - 8GB, Single Channel or Dual Channel DDR2 800/667 SDRAM, unbuffered, no ECC

**Processors**  
Intel® Core™ 2 Quad Q9xxx / Q8xxx, 1333/1066 MHz FSB,  
Intel® Core™ 2 Duo E8xxx / E6xxx, 1333/1066 MHz FSB,  
Intel® Core™ 2 Duo E7xxx / E4xxx, 1066/800 MHz FSB,  
Intel® Pentium® Dual Core E2xxx / E5xxx, 800 MHz FSB,  
Intel® Celeron® Dual Core E1xxx, 800 MHz FSB  
Intel® Celeron® 4xx, 800 MHz FSB  
Compatible with Intel® 06 and 05A processors, max. 95W (LGA775)  
(For details on supported processors 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)  
3.3V auxiliary supply voltage on PCI Slots (wake-up support)

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

Source	Voltage	PS Load (min. ) <sup>1</sup>	Voltage Tolerance (max)	Mainboard Current (max.)
Main Power Supply	+ 12 V	0.3 A	± 5 %	12 A
	- 12 V	0 A	± 10 %	0.05 A
	+ 5 V	0.6A	± 5 %	6 A
	+ 3.3 V	0A	± 5 %	0.5 A
Aux. Power Supply	+ 5 V	0 A	+5 % / -3%	2 A

1) PS must support these load conditions if low power processors (e.g. Celeron 4xx) are used.

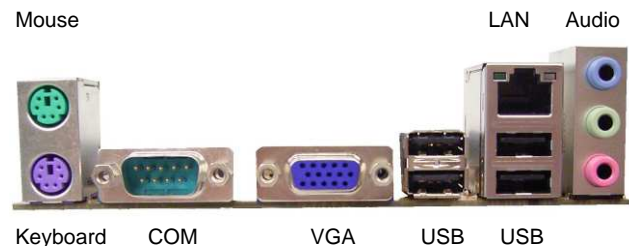
**BIOS**  
Phoenix Secure Core BIOS Version 6.00  
modified and adapted by Fujitsu Siemens Computers; Recovery BIOS, SM-BIOS (DMI), BIOS and CPU Microcode Update via disk (stable user settings), Quick Boot, Logo Boot, Quiet Boot, Plug & Play, Automatic DRAM and PCI Configuration, BIOS Support for S.M.A.R.T., Advanced Power Management, ACPI S3/S4, Wake on time from S5

**Security Features**  
Recovery BIOS, System and BIOS Password, Write Protection for Floppy Disk Drive, Boot Sequence Control, Serial/Parallel/USB- Port Access Protection, Boot Sector Virus Warning, Write Protection for Flash BIOS.

**Special Features**

Silent Fan LT	Independent temperature related processor fan and system fan control
System Guard	View Silent Fan LT 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**



**Graphics**  
Intel® GMA X4500 integrated graphics controller, shared memory (up to 256MB), DirectX 10 compliant, upgradeable with PCI Express x16 graphics card or ADD2+ cards

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

**LAN**  
Broadcom BCM5784M Ethernet Controller with 10/100/1000 Mbit/s, Wake-on-LAN (WoL) by interesting Packets, Link Status Change and Magic Packet™, bootix® PXE Support

**Drives**  
- 4 Serial ATA II 300 Interfaces (up to 3Gbit/s, NCQ)  
- Floppy

**Version** D2841-A

**Features**

Chipset	iG41, ICH7
Board Size	reduced µATX
VGA	✓
Stereo Audio / 5.1 Multichannel Audio	- / ✓
Buzzer / int. Speaker Support	✓ / -
LAN Gbit / 100 Mbit / 10 Mbit	✓ / ✓ / ✓
LAN ASF / DASH / WoL / Boot / iAMT	- / - / ✓ / ✓ / -
SATA / ATA / RAID / eSATA Support	✓ / - / - / -
FireWire™ / USB 2.0	- / ✓
FAN monitored PSU <sup>1)</sup> / CPU / AUX1	- / - / -
FAN controlled PSU <sup>1)</sup> / CPU / AUX1	- / ✓ / ✓
TEMP monitored CPU / ONB1 / ONB2 / OFFB	✓ / ✓ / ✓ / -

**Special Features**

Silent Fan / Silent Fan LT / System Guard / Silent Drives	- / ✓ / ✓ / ✓
Recovery BIOS / Desk Update / Multi Boot	✓ / ✓ / ✓
HDD Password / HDD Encryption	✓ / -
Logo Boot Option / Intel On Screen Branding	✓ / ✓
High Efficient Core regulator design (85% @ 65W)	-

**Internal Connectors**

DIMM Sockets (DDR2 800)	2
PCI Express x16 Slot	1
PCI Express x1 Slot	1
PCI Slots (32Bit, 33 MHz, Rev. 2.3)	2
SATA (300) / ATA (100) / Floppy	4 / 0 / 1
S/PDIF (digital Audio) OUT / IN	1 / -
Audio Input (analogue CD type)	-
Frontpanel High Definition Audio (9-Pin)	1
FireWire™ (9-Pin, Intel standard Header)	-
USB (2.0, ~480 MB/s, 2 Channels per Connector)	2
Serial (FIFO, 16550 compatible)	-
FAN PSU <sup>1)</sup> / CPU / AUX1	- / 1 / 1
SMBus (Case Temperature)	-
Intrusion (Case Open)	-
Parallel (EPP/ECP) Pin Connector <sup>2)</sup>	1
Status LCD Display Connector	-
Power 24 Pin (BTX) / 4 Pin (12V Processor Supply)	1 / 1

**External Connectors**

VGA Sub D / DVI <sup>3)</sup>	1 / -
Audio Mic. In / Line in / Line out (configurable)	1 / 1 / 1
Audio Surround / RearSurround / CenterLFE	- / - / -
S/PDIF (digital Audio)	-
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) <sup>2)</sup>	-

1) Not supported by standard Power Supplies  
2) External parallel port possible via optional connector cable  
3) DVI connector possible via DVI extension card D2823