THE POSSIBILITIES ARE INFINITE

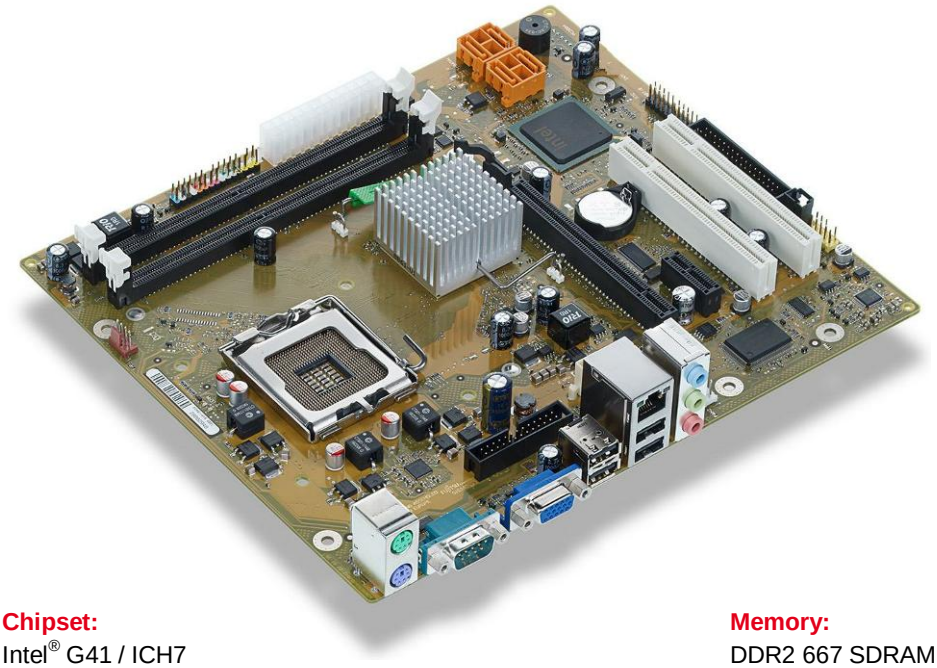
DATA SHEET

MAINBOARD D2841-A
µATX
Classic Desktop Series

Issue July 2009

Pages 2

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

SILENT FAN LT | SYSTEM GUARD | SILENT DRIVES | MULTI BOOT | HDD PASSWORD | RECOVERY BIOS | DESK UPDATE

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

Memory
2 DIMM Sockets (1.8V), 512MB - 8GB, Single Channel or Dual Channel DDR2-800 (CL6) / DDR2-667 (CL5) 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. .) [1]	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.

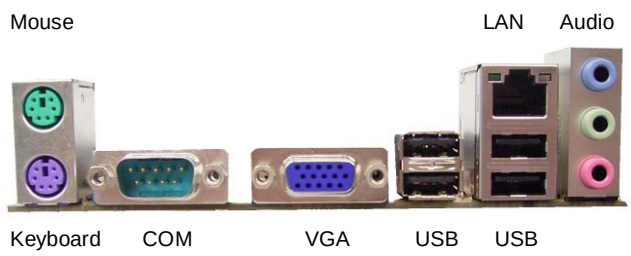
BIOS
Phoenix Secure Core BIOS Version 6.00
modified and adapted by Fujitsu Technology Solutions; Recovery BIOS, SM-BIOS (DMI), BIOS and CPU Microcode Update via disk (stable user settings), Quick Boot, Logo Boot, Quiet Boot, Plug & Play, Automatic DRAM and PCI Configuration, BIOS Support for S.M.A.R.T., 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™, PXE Support

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

	D2841-A
Features	
Chipset	iG41, ICH7
Board Size	reduced µATX
VGA	**ü**
Stereo Audio / 5.1 Multichannel Audio	- / **ü**
Buzzer / int. Speaker Support	**ü** / -
LAN Gbit / 100 Mbit / 10 Mbit	**ü** / **ü** / **ü**
LAN ASF / DASH / WoL / Boot / iAMT	- / - / **ü** / **ü**/ -
SATA / ATA / RAID / eSATA Support	**ü** / - / - / -
FireWire™ / USB 2.0	- / **ü**
FAN monitored PSU [1] / CPU / AUX1	- / - / -
FAN controlled PSU [1] / CPU / AUX1	- / **ü** / **ü**
TEMP monitored CPU / ONB1 / ONB2 / OFFB	**ü** / **ü** / **ü** / -
Special Features	
Silent Fan / Silent Fan LT / System Guard / Silent Drives	- / **ü** / **ü** / **ü**
Recovery BIOS / Desk Update / Multi Boot	**ü** / **ü** / **ü**
HDD Password / HDD Encryption	**ü** / -
Logo Boot Option / Intel On Screen Branding	**ü** / **ü**
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 [1] / CPU / AUX1	- / 1 / 1
SMBus (Case Temperature)	-
Intrusion (Case Open)	-
Parallel (EPP/ECP) Pin Connector [2]	1
Status LCD Display Connector	-
Power 24 Pin (BTX) / 4 Pin (12V Processor Supply)	1 / 1
External Connectors	
VGA Sub D / DVI [3]	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) [2]	-

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

Information about environmental care, policies, programs and our Environmental Guideline FSC03230:
ts.fujitsu.com/aboutus
Take back and Recycling information: ts.fujitsu.com/recycling

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