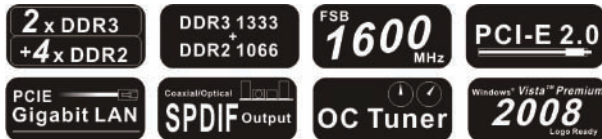
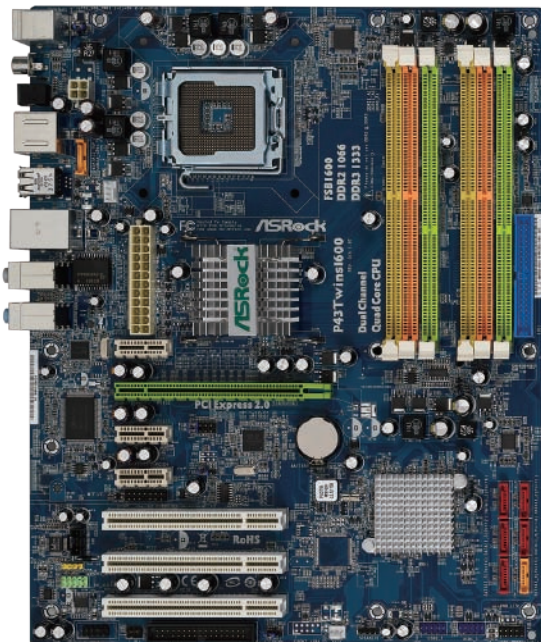


P43Twins1600

Intel® P43 + ICH10 Chipsets

ASRock®
www.asrock.com



Product Brief <<<

- LGA 775 for Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron®, supporting **Penryn Quad Core Yorkfield and Dual Core Wolfdale** processors
- Supports **FSB1600/1333/1066/800** MHz CPUs
- Supports Dual Channel **DDR3 1333/1066** (2 x DIMM slots) with max. capacity up to 4GB and Dual Channel **DDR2 1066/800/667** (4 x DIMM slots) with max. capacity up to 8GB
- 1 x **PCI Express 2.0** x16 slot (green @ x16 mode)
- **6 x SATAII** 3.0 Gb/s connectors, support NCQ, AHCI and Hot Plug functions
- 1 x **eSATAII** 3.0 Gb/s connector
- **PCI-E Gigabit LAN** 10/100/1000 Mb/s
- 1 x **WiFi/E** header
- 7.1 CH Windows® Vista™ Premium Level HD Audio (ALC888 Audio Codec)
- Supports **I. O. T.** (Intelligent Overclocking Technology) , **ASRock OC Tuner**
- **Windows® Vista™ Premium 2008 Logo Ready**

Detail Specification <<<

Platform	- ATX Form Factor: 12.0-in x 9.6-in, 30.5 cm x 24.4 cm
CPU	- LGA 775 for Intel® Core™ 2 Extreme / Core™ 2 Quad / Core™ 2 Duo / Pentium® Dual Core / Celeron®, supporting Penryn Quad Core Yorkfield and Dual Core Wolfdale processors - Supports FSB1600/1333/1066/800 MHz - Supports Hyper-Threading Technology - Supports Untied Overclocking Technology - Supports EM64T CPU
Chipset	- Northbridge: Intel® P43 - Southbridge: Intel® ICH10
Memory	- Dual Channel DDR3/DDR2 memory technology - 2 x DDR3 DIMM slots - Supports DDR3 1333/1066 non-ECC, un-buffered memory - Max. capacity: 4GB - 4 x DDR2 DIMM slots - Supports DDR2 1066/800/667 non-ECC, un-buffered memory - Max. capacity: 8GB
Expansion Slot	- 1 x PCI Express 2.0 x16 slot (green @ x16 mode) - 3 x PCI Express x1 slots - 3 x PCI slots
Audio	- 7.1 CH Windows® Vista™ Premium Level HD Audio (ALC888 Audio Codec)
LAN	- PCI-E x1 Gigabit LAN 10/100/1000 Mb/s - Realtek RTL8111B/RTL8111C - Supports Wake-On-LAN
Rear Panel I/O	ASRock SPDIF I/O - 1 x PS/2 Mouse Port - 1 x PS/2 Keyboard Port - 1 x Coaxial SPDIF Out Port - 1 x Optical SPDIF Out Port - 6 x Ready-to-Use USB 2.0 Ports - 1 x eSATAII Port - 1 x RJ-45 LAN Port - HD Audio Jack: Side Speaker / Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone
Connector	- 6 x SATAII 3.0 Gb/s connectors, support NCQ, AHCI and Hot Plug functions - 1 x eSATAII 3.0 Gb/s connector (shared with 1 SATAII port) - 1 x ATA133 IDE connector (supports 2 x IDE devices) - 1 x Floppy connector - 1 x DeskExpress Hot Plug Detection header - 1 x COM port header - 1 x HDMI_SPDIF header - CPU/Chassis FAN connector - 24 pin ATX power connector - 4 pin 12V power connector - CD in header - Front panel audio connector - 2 x USB 2.0 headers (support 4 USB 2.0 ports) - 1 x WiFi/E header
BIOS Feature	- 4Mb AMI BIOS - AMI Legal BIOS - Supports "Plug and Play" - ACPI 1.1 Compliance Wake Up Events - Supports jumperfree - SMBIOS 2.3.1 Support - CPU, DRAM, NB, SB, VTT Voltage Multi-adjustment - Supports I. O. T. (Intelligent Overclocking Technology)
Support CD	- Drivers, Utilities, AntiVirus Software (Trial Version)
Unique Feature	- ASRock OC Tuner - Hybrid Booster: - CPU Frequency Stepless Control - ASRock U-COP - Boot Failure Guard (B.F.G.)
Hardware Monitor	- CPU Temperature Sensing - Chassis Temperature Sensing - CPU Fan Tachometer - Chassis Fan Tachometer - CPU Quiet Fan - Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	- Microsoft® Windows® 2000 / XP / XP 64-bit / Vista™ / Vista™ 64-bit compliant
Certifications	- FCC, CE, WHQL
Accessories	- Quick Installation Guide, Support CD, I/O Shield - Floppy/ATA 133 Cables - 2 x SATA Data Cables (Optional) - 1 x SATA 1 to 1 Power Cable (Optional) - 1 x HDMI_SPDIF Cable (Optional)

The specification is subject to change without notice. The brand and product names are trademarks of their respective companies. Any configuration other than original product specification is not guaranteed.

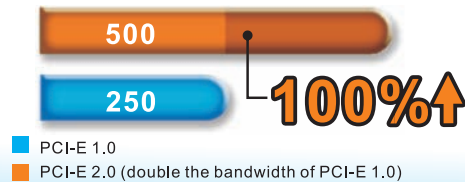
PCI-E 2.0 Revolution

Only PCI-E 2.0 MB can fully deliver PCI-E 2.0 VGA card Performance!

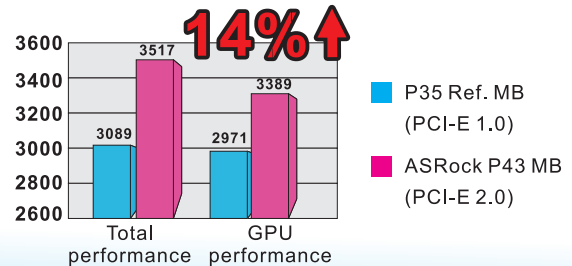
PCI-E 1.0 vs. PCI-E 2.0



Bandwidth (MB/s)



3DMark Vantage (Extreme)



	P35 (PCI-E 1.0)	P43 (PCI-E 2.0)	Performance Improved
Total performance Score (Extreme)	X3089	X3517	14%
GPU performance Score (Extreme)	2971	3389	14%

Test Configurations :
 CPU: Intel QX9650 3.0GHz FSB1333 CPU
 VGA: SPARKLE GF9800GX2/1024MB PCI-E Gen2 VGA card
 Memory: 2 x 1GB DDR3 1333; Resolution: 1920x1200

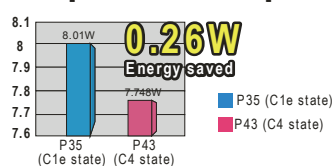
Full Time Energy Saving

Energy Saving Comparison (P43 vs. P35)

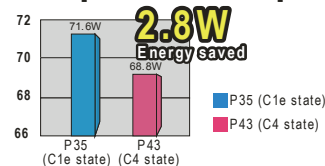
During Operation Mode:

When CPU is at idle mode, P43 MB can enter deeper sleep mode (C4 state) than P35 (can only enter C1e state) and save more energy

CPU power consumption



System power consumption

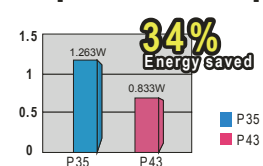


	P35 (C1e state)	P43 (C4 state)	Energy saved
CPU power consumption	8.01W	7.748W	0.26W
System power consumption	71.6W	68.8W	2.8W

During Off Mode:

Even when system is off, ASRock P43 MB can save more energy than P35 Ref. MB because of the lower power consumption of +5VSB

+5VSB power consumption



	P35	P43	Energy saved
+5VSB power consumption	1.263W	0.833W	34%

P43 Series Motherboard

P43R1600Twins-WiFi

P43R1600Twins-110dB

P43R1600Twins

P43D1600Twins-1394

P43D1600Twins

P43Twins 1600