

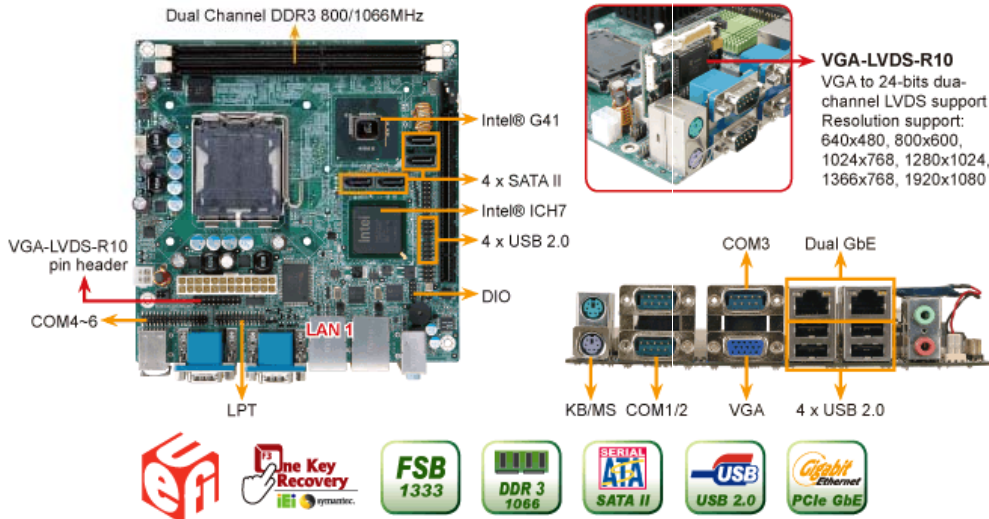
KINO-G410

Mini-ITX SBC supports socket LGA775 Intel® Core™2 Quad CPU with 1333MHz FSB

Date: November 01, 2010



KINO-G410 Mini-ITX SBC supports socket LGA775 Intel® Core™2 Quad CPU with 1333MHz FSB, DDR3, VGA, dual PCIe GbE, six COM, four SATA II, Audio and RoHS



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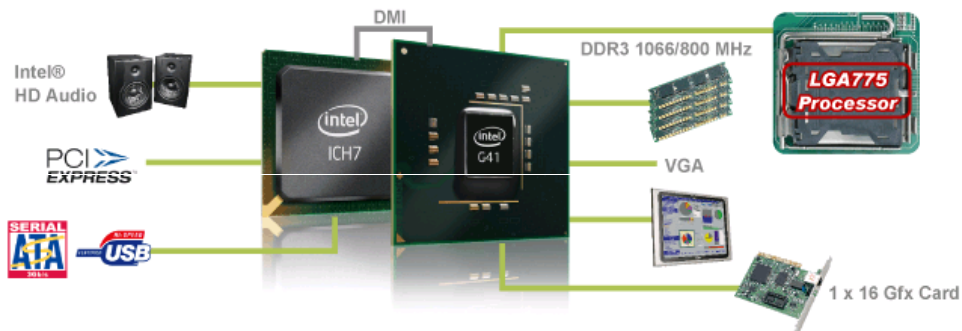
Features

- LGA775 Intel® Core™ 2 Extreme/Quad/Duo and Celeron® processor with up to 1333MHz FSB
- Intel® GMA X4500 delivers an excellent blend of graphics performance
- Dual-channel DDR3 800/1066MHz supports up to 8GB
- LVDS supported by VGA-LVDS-R10 convertor board
- Complete I/O interface for 6 COM, 8 USB, LPT and 4 SATA II
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Intel® G41Chipset

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The Best Choice of Performance Chipset for LGA775 Platform

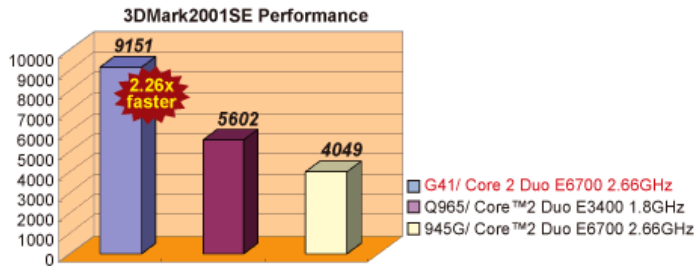


LGA775 Processor Supported by Intel® G41


Brand Name	CPU Code	CPU No.	Process	Clock speed	FSB MHz	L2 cache	TDP
Core 2 Quad	Yorkfield	Q9400	45nm	2.66G	1333	6M	95W
Core 2 Duo	Wolf dale	E8400	45nm	3.0G	1066	6M	65W
		E7400	45nm	2.8G		3M	65W
Pentium D Dual Core	Wolfdale	E6500	45nm	2.93G	1066	2M	65W
		E5300	45nm	2.6G	800	2M	65W
Core 2 Duo	Conroe	E6400	65nm	2.13G	1066	2M	65W
		E4300	65nm	1.8G	800	2M	65W
Pentium D Dual Core	Conroe	E2160	65nm	1.8G	800	1M	65W
		E3400	45nm	2.4G	800	512K	65W
Celeron Dual Core	Conroe	E1500	65nm	2.2G	800	512K	65W
		Celeron	Conroe L	440	65nm	2.0G	800

Performance Comparison

Intel® G41 chipset features not only complete CPU support list but also an excellent graphic performance compared with Q965/945G chipset



Intel® Desktop Chipset Specification Comparison Table

Northbridge	 Intel® G41	Intel® G45	Intel® Q45	Intel® Q35	Intel® Q965	Intel® 945G
CPU FSB	1333MHz 45nm/65nm	1333MHz 45nm/65nm	1333MHz 45nm/65nm	1333MHz 45nm/65nm	1066MHz 65nm	1066MHz 65nm
Graphic	GMAX4500 Direct*X10	GMAX4500HD Direct*X10	GMAX4500 Direct*X10	GMA3100 Direct*X 9.0c	GMA3000 Direct*X 9.0c	GMA 950 Direct*X 9.0c
Full H/W decode acceleration MPEG2/4, VC1 & AVC	N/A	Yes	N/A	N/A	N/A	N/A
Memory	DDR3-1066 8GB	DDR3-1066 16GB	DDR3-1066 16GB	DDR2-800 8GB	DDR2-800 8GB	DDR2-667 4GB
PCIe x16	Gen1	Gen2	Gen2	Gen1	Gen1	Gen1
Southbridge	ICH7/ICH7R	ICH10	ICH10DO	ICH9DO	ICH8DO	ICH7/ICH7R
PCI	6	4	4	4	6	6
PCIe x1 Lanes	6 (ICH7R) 4 (ICH7)	6	6	6	6	6 (ICH7R) 4 (ICH7)
USB 2.0	8	12	12	12	10	8
SATA II	4	6	6	6	6	4
Intel AMT	N/A	N/A	Yes	Yes	Yes	N/A

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Specifications

- ❖ CPU
LGA775 45nm Intel® Core™2 Quad, Core™2 Duo, Pentium® D, Celeron® at FSB 800/1066/1333MHz processors
- ❖ System Chipset
Intel® G41 + ICH7
- ❖ Memory
- ❖ I/O Interface
 - 5 x RS-232
 - 1 x LPT
 - 2 x PS/2 KB/MS
 - 1 x RS-232/422/485 with Auto Flow control
- ❖ Watchdog Timer
Software programmable support 1~255 sec. system reset
- ❖ Digital I/O
- 8 x USB 2.0
- 4 x SATA II

- Two 240-pin 800/1066MHz dual-channel DDR3 SDRAM DIMM supported (System max. 8GB)
- ❖ BIOS
 - UEFI BIOS
- ❖ Ethernet
 - Dual Realtek RTL8111E PCIe GbE controller, LAN 1 with ASF2.0 support
- ❖ Graphic Engine
 - Intel® GMA X4500
- ❖ Display Interface
 - VGA Integrated in the Intel® G41 24-bit LVDS by VGA-LVDS-R10
- ❖ Super I/O
 - Fintek F81865
- ❖ Audio
 - Realtek ALC888 HD Audio Codec
- ❖ Expansion
 - 1 x PCIe x16 slot
- ❖ TPM (optional)
 - On board Infineon SLB9635TT1.2
- 8-bit digital I/O, 4-bit input / 4-bit output
- ❖ FAN Connector
 - 1 x 4-pin CPU fan connector
 - 1 x 3-pin system fan connector
- ❖ Power Supply
 - ATX power supply
- ❖ Power Consumption
 - 5V@6.41A, Vcore_12V@2.52A, 3.3V@0.27A (2.8GHz Intel® Core™2 Duo E7400 with 1GBx2 DDR3 1066MHz)
- ❖ Operating Temperature
 - 10°C ~ 60°C
- ❖ Operating Humidity
 - 5% ~95%, non-condensing
- ❖ Dimensions
 - 170mm x 170mm
- ❖ Weight
 - GW:1100g / NW: 700g

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Packing List

- 1 x KINO-G410 single board computer
- 1 x I/O shielding (P/N: 45014-0014C0-00-RS)
- 1 x Utility CD
- 2 x SATA cable (P/N: 32000-062800-RS)
- 1 x Mini jumper pack
- 1 x QIG

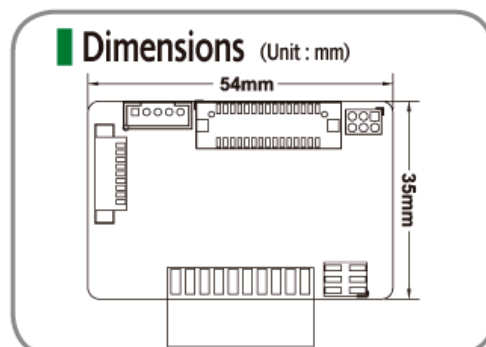
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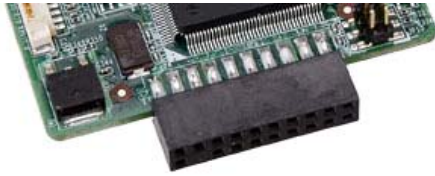
Ordering Information

Part No.	Description
KINO-G410-R10	Mini-ITX SBC supports socket LGA775 Intel® Core™ 2 Quad CPU with 1333MHz FSB, DDR3, VGA, Dual PCIe GbE, 6 COM, 4 SATA II and Audio, RoHS
KINO-G410T-R10	Mini-ITX SBC supports socket LGA775 Intel® Core™ 2 Quad CPU with 1333MHz FSB, DDR3, VGA, Dual PCIe GbE, 6 COM, 4 SATA II and Audio, TPM, RoHS
CB-USB02-RS	Dual ports USB cable with Bracket
32102-000100-200-RS	SATA power cable
CF-775A-RS	CPU cooler for 130W
CF-520-RS-R11	CPU cooler for 115W
CF-775B-RS	1U CPU cooler for 90W
32200-015100-RS	LPT cable
32205-000300-100-RS	RS-232/422/485 cable
19800-000112-RS	Dual RS-232 with bracket cable
VGA-LVDS-R10	VGA to 24-bit dual channel LVDS convertor module

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[VGA-LVDS-R10](#) VGA to 24-bits dual-channel LVDS converter board





- Compatible with IEI mini ITX SBC KINO-G410 only
- LVDS supported by scaling chip Novatek 68667UFG
- Support resolution support: 640x480, 800x600, 1024x768, 1280x1024, 1366x768, 1920x1080

Ordering Information

Part No.	Description
VGA-LVDS-R10	VGA to 24-bit dual-channel LVDS converter module
32600-004900-RS	30-pin LVDS connecting cable for evaluation only

Packing List

1 x VGA to LVDS converter module	1 x QIG
1 x Mini jumper Pack	

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Taiwan

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