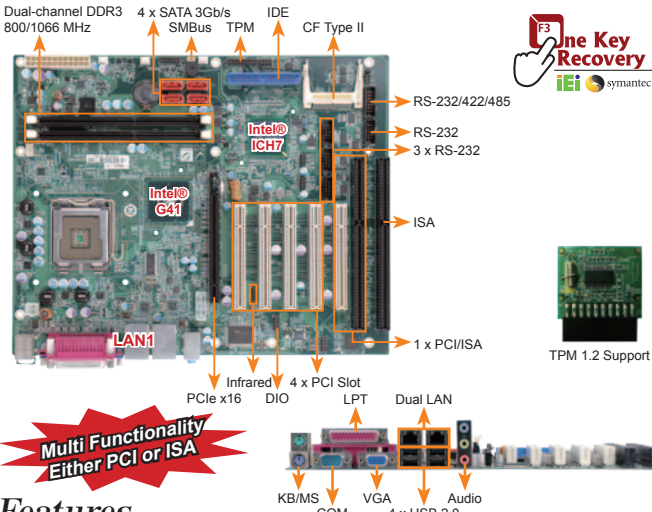


# IMBA-G412ISA-R20

ATX motherboard supports LGA775 Intel® Core™2 Duo/Quad processor with 1333 MHz FSB, DDR3, Dual PCIe GbE, ISA, COM, SATA 3Gb/s, USB 2.0 and RoHS



## Features

- Support 45nm LGA775 Intel® Core™2 processor family with higher system performance
- Intel® GMA X4500 delivers an excellent blend of graphics performance
- Integrated VGA and PCIe x16 SDVO card interface for dual display
- Support dual-channel DDR3 800/1066 MHz up to 8 GB
- TPM V1.2 hardware security function supported by TPM module
- Expansion capability supports either five PCI slots plus one ISA slot or four PCI slots plus two ISA slots
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Specifications

- ◆ CPU: LGA775 45nm Intel® Core™2 Quad, Core™2 Duo, Pentium® D, Celeron® processors at FSB 800/1066/1333 MHz
- ◆ System Chipset: Intel® G41+ICH7
- ◆ Memory: Two 240-pin 4 GB (max.) 800/1066 MHz dual-channel DDR3 SDRAM DIMM supported (system max. 8 GB)
- ◆ BIOS: AMI BIOS
- ◆ Graphics Engine: Intel® GMA X4500
- ◆ Display Interface: VGA supports analog CRT up to 2048x1536@75 MHz
- ◆ Ethernet: LAN1: Realtek RTL8111E PCIe GbE controller with ASF 2.0 support; LAN2: Realtek RTL8111E PCIe GbE controller
- ◆ Audio: Realtek ALC888 HD Audio codec (line-in, line-out, mic)
- ◆ Infrared Interface: 1 x Infrared (1x5 pin)
- ◆ TPM: 1 x TPM connector (2x10 pin)
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ External I/O Interface: 1 x LPT, 1 x RS-232, 4 x USB 2.0
- ◆ Internal I/O Interface: 1 x CF Type II, 1 x IDE, 1 x KB/MS (1x6 pin), 4 x SATA 3Gb/s, 1 x RS-232/422/485 (2x5 pin, P=2.54), 4 x RS-232 (2x5 pin, P=2.54), 4 x USB 2.0 (2x4 pin, P=2.54)
- ◆ Expansion: 1 x ISA slot, 1 x PCI/ISA slot, 4 x PCI slot, 1 x PCIe x16 slot
- ◆ Digital I/O: 8-bit digital I/O, 4-bit input/4-bit output
- ◆ Power Supply: ATX power supply
- ◆ Power Consumption: 12V@2.01A, -12V@0.05A, 3.3V@0.15A, 5V@5.06A (Intel® Core™ Duo CPU E7400@2.8GHz with 1 GB DDR3 memory)
- ◆ Operating Temperature: -10°C ~ 60°C
- ◆ Storage Temperature: -20°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 305mm x 244mm
- ◆ Weight: GW: 1200g/NW: 650g

## Packing List

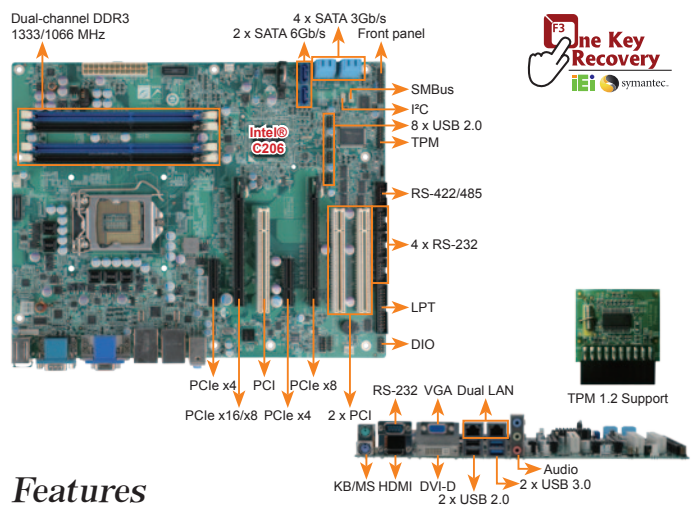
1 x IMBA-G412ISA single board computer	1 x One Key Recovery CD
1 x Dual-port RS-232 cable with bracket	1 x Mini jumper pack
1 x I/O shielding	1 x Utility CD
4 x SATA cable	1 x QIG

## Ordering Information

Part No.	Description
IMBA-G412ISA-R20	ATX motherboard supports LGA775 Intel® Core™2 Duo/Core™2 Quad CPU with FSB 1333 MHz, DDR3, dual PCIe GbE, ISA, PCI, PCIe x16, COM, LPT, SATA 3Gb/s, IDE, USB 2.0, audio and RoHS
19800-003100-300-RS	Dual-port USB cable with bracket
32102-000100-200-RS	SATA power cable
32225-002000-200-RS	IDE cable
CF-520-RS-R11	CPU cooler for 115W
CF-775A-RS	CPU cooler for 130W
CF-775B-RS-R11	1U CPU cooler for 90W
SDVO-100DVI-R10	PCIe x16 DVI output SDVO card supports dual display (IEI CPU board only)
SDVO-100VGA-R10	PCIe x16 VGA output SDVO card supports dual display (IEI CPU board only)
TPM-IN01-R11	20-pin Infineon TPM module, software management tool, firmware v3.17

# IMBA-C2060-R20

ATX motherboard supports 32nm LGA1155 Intel® Xeon® E3/Core™ i3/ Celeron® CPU per Intel® C206, DDR3, VGA/DVI/HDMI, dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, audio and RoHS



## Features

- LGA1155 Intel® Xeon® E3 and Intel® Core™ i3 processor supported
- Dual-channel 1333 MHz DDR3 supports up to 32 GB memory
- Intel® PCIe GbE with Intel® AMT 7.0 support
- Providing high-speed graphics interface by two PCIe x8/PCIe x4 add-on cards
- USB 3.0 and SATA 6Gb/s supported
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Specifications

- ◆ CPU: LGA1155 socket supports Intel® Xeon® E3 quad-/dual-core, Core™ i3 dual-core, Celeron® dual-core
- ◆ System Chipset: Intel® C206
- ◆ Memory: Four 240-pin 1333/1066 MHz dual-channel DDR3 SDRAM ECC and non-ECC unbuffered DIMM supported (system max. 32 GB)
- ◆ BIOS: UEFI BIOS
- ◆ Ethernet: LAN1: Intel® 82574L PCIe controller; LAN2: Intel® 82579 PHY with Intel® AMT 7.0 supported
- ◆ Graphics Engine: Support for DX10.1 and OpenGL3.0, Full MPEG2, VC1, AVC Decode
- ◆ Display Output: Dual display supported; 1 x VGA, 1 x HDMI, 1 x DVI-D
- ◆ Expansion: 2 x PCIe x16 (share 1 PCIe x 16 signal), 2 x PCIe x4 slots, 3 x PCI slots
- ◆ Audio: Realtek ALC892 HD Audio codec (line-in, line-out, mic) (2x5 pin)
- ◆ TPM: 1 x TPM connector (2x10 pin)
- ◆ System Chipset: Intel® C206
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ I²C: 1 x I²C (1x4 pin)
- ◆ Internal I/O Interface: 1 x KB/MS (1x6 pin), 1 x LPT (2x13 pin, P=2.54), 1 x RS-422/485 (1x4 pin, P=2.00), 2 x SATA 6Gb/s with RAID 0/1/5/10 support, 4 x RS-232 (2x5 pin, P=2.54), 4 x SATA 3Gb/s with RAID 0/1/5/10 Support, 8 x USB 2.0 (2x4 pin, P=2.54)
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ Watchdog Timer: Software programmable supports 1~255 sec. system reset
- ◆ Fan Connector: 1 x CPU smart fan (1x4 pin), 2 x System fan (1x3 pin)
- ◆ Power Supply: ATX power supply
- ◆ Power Consumption: 3.3V@1.61, 5V@2.79A 12V@0.50A, Vcore@5.59A, 5VSB@0.16A (Intel® Xeon® E3-1275 3.40GHz CPU with four 1333 MHz 2 GB DDR3 memory)
- ◆ Operating Temperature: -10°C ~ 60°C
- ◆ Storage Temperature: -20°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 244mm x 305mm
- ◆ Weight: GW:1200g, NW: 700g

Slot	PCIe x16	PCIe x8	PCIe x4	PCI
Configuration 1	1	N/A	2	3
Configuration 2	N/A	2	2	3
Configuration 3	N/A	1	2	3

## Packing List

IMBA-C2060-R20 single board computer	
1 x I/O shielding	1 x Mini jumper pack
4 x SATA cable	1 x Utility CD
1 x One Key Recovery CD	1 x QIG

## Ordering Information

Part No.	Description
IMBA-C2060-R20	ATX motherboard supports 32nm LGA1155 Intel® Xeon® E3/ Core™ i3/Celeron® CPU per Intel® C206, DDR3, VGA/DVI/ HDMI, dual Intel® PCIe GbE, USB 3.0, SATA 6Gb/s, Audio and RoHS
19800-000049-RS	LPT cable
19800-000051-RS	RS-232 cable, 230mm
19800-003100-300-RS	Dual-port USB cable with bracket
32102-000100-200-RS	SATA power cable
32205-003800-300-RS	RS-422/485 cable, 200mm
CF-1156A-RS-R11	High performance LGA1155/LGA1156 cooling kit, 1U chassis compatible, 73W
CF-1156E-R11	High performance LGA1155/LGA1156 cooling kit, 95W
TPM-IN01-R11	20-pin Infineon TPM module, software management tool, firmware v3.17