

**ATX Motherboard with Intel LGA775 Core 2 Quad, Celeron  
with a 1333/1066/800Mhz FSB, PCIe x16, PCIe x4, PCIe  
GbE, SATAII and Audio, ROHS**

# **IMBA-XQ354-R11**

## **Quick Installation Guide**

### **Version 1.0**

Mar. 2, 2011

### **Package Contents**

IMBA-XQ354-R11 package includes the following items:

- 1 x IMBA-XQ354 Single Board Computer
- 1 x Mini jumper pack
- 6 x SATA cables
- 2 x Dual RS-232 Cable
- 1 x RS-232 Cable
- 1 x Utility CD
- 1 x QIG (Quick Installation Guide)
- 1 x IO Shielding



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## Specifications

- CPU:  
LGA775 Intel® Core™ 2 Duo(45nm and 65nm), Intel® Core™ 2 Quad(45nm and 65nm), Intel® Celeron(65nm)
- System Chipset: Intel® Q35 + ICH9DO
- BIOS: AMI BIOS
- System memory:  
4 x 240 pin Dual channel DDR2 SDRAM DIMM 667/800MHz up to 8GB
- Ethernet:  
One Intel® 82566DM (PHY) and Intel® ICH9DO (MAC)  
One PCIe x1 Intel® 82573L (MAC+PHY)
- I/O Interface:  
12 x USB 2.0 (4x External, 8x on board)  
6 x SATAII  
6 x RS-232  
1 x keyboard/mouse PS/2 connector
- Super I/O: ITE IT8718F
- Digital I/O: 8-bit digital I/O,4-bit input/ 4-bit output
- IrDA:1x IrDA by pin header
- Audio: Realtek ALC888 HD audio codec
- Display:  
VGA integrated in Q35  
Analog VGA display through external DB-15 connector
- Watchdog timer: Software programmable supports 1~255 sec. system reset
- Power Supply: ATX POWER support
- Power consumption :  
3.3V @2.96A,5V@6.92A,5Vsb@1.61A,12V@2.77A, (2.66GHz E6850 Intel® Core™ 2 Duo CPU with 1333MHz FSB and 8GB 800 MHz DDR2 DIMM, running -- 3D Mark 2001 )
- Temperature: 0 ~ 60°C( 32 ~ 140°F)
- Humidity: Operation: 5% ~ 95%
- Dimension: 338mm x 126mm
- Weight: GW: 1.1 Kg

## Ordering Information

### IMBA-XQ354-R10:

ATX Motherboard with Intel LGA775,Core 2 Quad, Celeron with a 1333/1066/800Mhz FSB,PCIe x16,PCIex4,PCIe GbE,SATAII and Audio;ROHS

CB-USB02-RS: Dual USB cable

CB-USB14-RS: Four USB cable

CF-775A-RS/CF-520-RS: CPU cooler

TPM-WI01-R10: 20-pin WINBOND TPM Module, S/W Management

TPM-IN01-R10: 20-pin INFINEON TPM Module, S/W Management

SDVO-100VGA-R10: PCIe x16 VGA Output SDVO card supports dual display (IEI CPU board only)

SDVO-100DVI-R10: PCIe x16 DVI Output SDVO card supports dual display (IEI CPU board only)

## Jumpers setting & Connector

<b>J_CMOS1 : Clear CMOS Setup (1*3 pin header, pitch 2.54mm)</b>	
J_COMS1	DESCRIPTION
1-2	Normal (default)
2-3	Clear CMOS Setup

<b>J_COM_F3~J_COM_F6 : Set the function of pin9 as signal or voltage</b>	
J_COM_F3~F6	DESCRIPTION
1-2	Pin9 of COM3~COM6 as voltage
2-3	Pin9 of COM3~COM6 as signal (RING)

<b>J_COM_V3~J_COM_V6 : Set the voltage level of pin9 at COM3 ~ COM6</b>	
J_COM_V2~V4	DESCRIPTION
1-2	+5V
2-3	+12V

<b>JP1: SPDIF_OUT Connector Selection</b>	
J_COM_F3~F6	DESCRIPTION
1-2	RCA Connector (default)
2-3	Optical Connector

<b>CPU12V1 : CPU Power Connector</b>			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	GND
3	+12V	4	+12V

<b>CPU_FAN1: CPU Fan Connector</b>	
PIN	DESCRIPTION
1	Ground
2	+12V
3	Rotation Signal
4	Control

<b>SYS_FAN1~2: CPU Fan Connector</b>	
PIN	DESCRIPTION
1	Ground
2	+12V
3	Rotation Signal

<b>CD_IN1</b> : Internal CD IN connector	
PIN	DESCRIPTION
1	CD-L
2	CD-GND
3	CD-GND
4	CD-R

<b>FPAUDIO1</b> : Front audio connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	MIC_L	2	GND
3	MIC_R	4	Audio Detect
5	LINE2-R	6	GND
7	Jack Detection	8	N/C
9	LINE2-L	10	GND

<b>SPDIF1</b> : Internal SPDIF connector	
PIN	DESCRIPTION
1	5V
2	N/C
3	SPDIFOUT
4	GND
5	SPDIFIN

<b>COM2~6</b> : Internal Serial Port Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1.	DCD	2.	RXD
3.	TXD	4.	DTR
5.	GND	6.	DSR
7.	RTS	8.	CTS
9.	RI	10.	N/C

<b>USB45,67,89,1011</b> : Internal USB Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	VCC	2	GND
3	DATA-	4	DATA+
5	DATA+	6	DATA-
7	GND	8	VCC

<b>TPM1</b> : Trusted Platform Module connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	TPMPCLK	2	GND
3	LFRAME#	4	KEY
5	PCIRST#	6	VCC
7	LAD3	8	LAD2
9	VCC3	10	LAD1
11	LAD0	12	GND
13	SMBCLK	14	SMBDATA
15	3VDUAL	16	SERIRQ
17	GND	18	CLKRUN#
19	LPCPD#	20	LDRQ#

<b>JSPI1</b> : SPI FLASH Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	VCC	2	GND
3	CS#	4	CLOCK
5	SO	6	SI
7	NC	8	NC

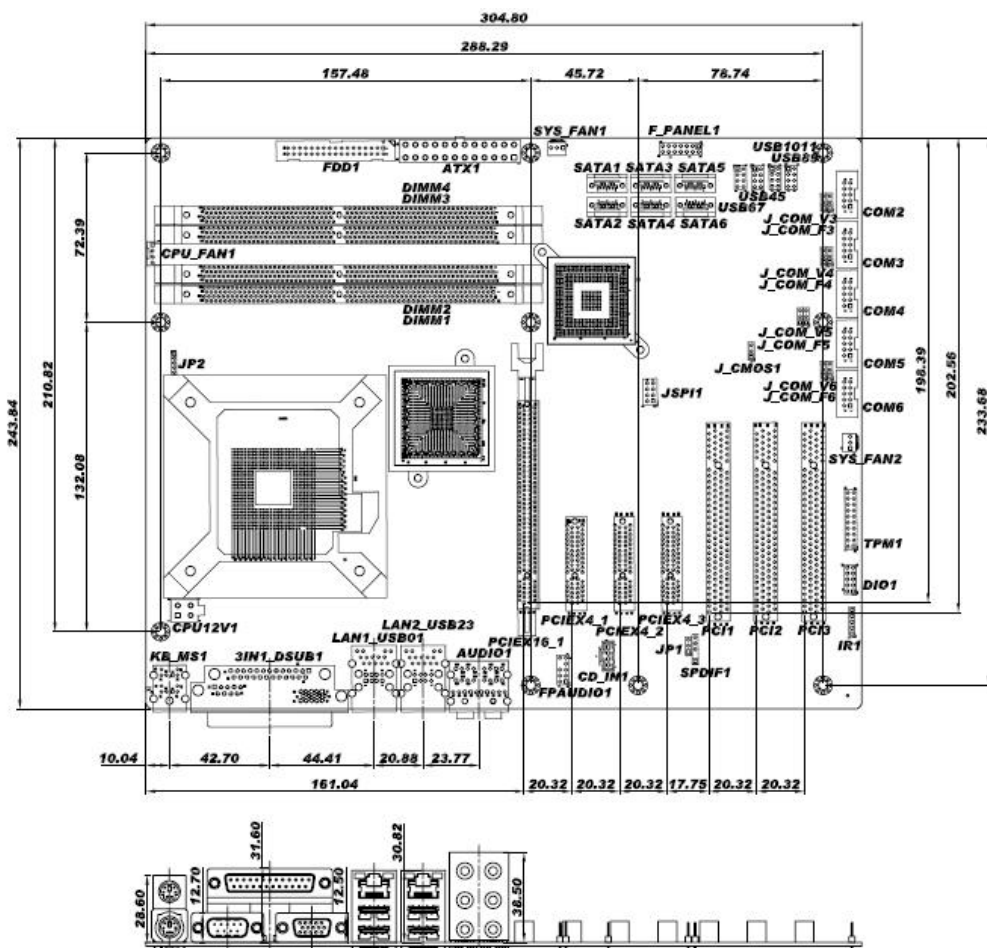
<b>IR1</b> : IrDA connector	
PIN	DESCRIPTION
1	VCC
2	NC
3	IR-RX
4	GND
5	IR-TX

<b>DIO1</b> : 8-bit Digital I/O Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	Ground	2	VCC
3	Output 3	4	Output 2
5	Output 1	6	Output 0
7	Input 3	8	Input 2
9	Input 1	10	Input 0

<b>FDD1: FDC Connector</b>			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	DENSEL-
3	GND	4	N/C
5	N/C	6	N/C
7	GND	8	INDEX#
9	GND	10	MOTOR ENABLE A#
11	GND	12	DRIVE SELECT B#
13	GND	14	DRIVE SELECT A#
15	GND	16	MOTOR ENABLE B#
17	GND	18	DIRECTION#
19	GND	20	STEP#
21	GND	22	WRITE DATA#
23	GND	24	WRITE GATE#
25	GND	26	TRACK 0#
27	GND	28	WRITE PROTECT#
29	GND	30	READ DATA#
31	GND	32	SIDE 1 SELECT#
33	GND	34	DISK CHANGE#

<b>F_PANEL1: External Switches and Indicators panel</b>			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	PWR_LED+	2	SPKR+
3	N/C	4	N/C
5	PWR_LED-	6	N/C
7	PWRBTN+	8	SPKR-
9	PWRBTN-	10	N/C
11	HDD_LED+	12	RESET+
13	HDD_LED-	14	RESET-
<p>1-3-5 : Power LED  2-4-6-8 : Speaker  7-9 : PWRBTN  11-13 : HDDLED  12-14 : RESET</p>			

# Board Layout



(Unit : mm)