PICMG1.0 CPU Card supports Intel® 45nm LGA 775 Core™2 Quad process at FSB800/1066/1333, VGA, Dual PCIe GbE, 6 SATAII, IDE, FDD, LPT, USB2.0

WSB-Q354
Quick Installation Guide
Version 4.0

Nov. 25, 2010

Package Contents

WSB-Q354 package includes the following items:

- 1 x WSB-Q354 single board computer
- 1 x ATA 66/100 flat cable
- 1 x Dual RS-232 cable
- 1 x KB/MS Y cable
- 1 x USB cable
- 3 x SATA power cable
- 6 x SATA cable
- 1 x mini jumper pack
- 1 x Utility CD
- 1 x QIG (Quick Installation Guide)

Specifications

- CPU: LGA775 45nm Intel® Core™2 Quad (Yorkfield),Core™2 Duo (Wolfdale), Core™2 Duo, Celeron at FSB800/1066/1333MHz processors
- System Chipset: Intel® Q35+ICH9R
- BIOS: AMI BIOS Label
- System memory: 4 x 240pin dual channel DDRII at 800/667MHz up to 8GB
- Ethernet: Dual Realtek RTL8111E GbE controller with ASF2.0
- I/O Interface:

  2 x RS-232
  7 x USB2.0 (1 on bracket,6 on board by pin header)
  6 x SATA II support RAID 0,1,10, 5
  1 x IDE
  1 x FDD
  1 x LPT
  1 x IrDA
  1 x Keyboard and mouse (PS/2)
  1 x 5-pin on-board header for KB

  Super I/O: ITE IT8718F

  Digital I/O: 8-bit Digital I/O, 4-bit input / 4-bit output
- Display: VGA integrated in Intel® Q35
- Audio: 10-pin on-board header support 7.1 channel HD Audio by IEI AC-KIT883HD
- TPM: 1x 20-pin on-board header for TPM
- Watchdog timer: Software programmable 1-255 sec. by super I/O
- Power supply: ATX power supply
- Power Consumption:

  5V @5.97A, 5Vsb @0.07A, 12V @0.29A , Vcore @2.97A (Intel® Core™ 2 Duo E8500 3.16 GHz,DDR2 800MHz 2GB x 4 running 3D Mark 2001SE)
- Temperature: 0 ~ 60°C(32 ~ 140°F)

Ordering Information

WSB-Q354-R40

PICMG1.0 CPU Card support Intel® LGA 775 Core™2 Duo CPU in 45nm process at FSB800/1066/1333MHz, Intel® Q35&ICH9R,VGA, Dual GbE, 6 SATA II with RAID,IDE,FDD,LPT,USB2.0

AC-KIT883HD-R10

7.1Channel HD Audio kit with Realtek ALC883 support dual audio streams

CF-775A-RS

High performance CPU cooler (115mmx115mmx67mm , 130W)

CF-520-RS-R11

High performance CPU cooler (115mmx115mmx67mm , 115W)

TPM-IN01-R11

Infineon 20-pin Trusted Platform Module with SW Management Tool

TPM-WI01-R10

Winbond 20-pin Trusted Platform Module with SW Management Tool

32200-000052-RS

IDE flat cable

Jumpers setting and Connectors

J_CMOS1 : Clear CMOS Setup	
JSPI_SEL1	**DESCRIPTION**
1-2	Normal(Default)
2-3	Clear CMOS Data

JLAN_PWR1 : WOL enable jumper(Optional)	
	DESCRIPTION
1-3	**LAN 2 WOL Enable(Default)**
2-4	**LAN 1 WOL Enable(Default)**
3-5	**LAN 2 WOL Disable**
4-6	**LAN 1 WOL Disable**

KB1 : 5-pin Keyboard Connector	
PIN	**DESCRIPTION**
1	KEYBOARD CLOCK
2	KEYBOARD DATA
3	N/C

4	GROUND
5	VCC

COM1, COM2 : External Serial Port Connector			
PIN	**DESCRIPTION**	**PIN**	**DESCRIPTION**
1	DCD#	2	DSR#
3	RXD	4	RTS#
5	TXD	6	CTS#
7	DTR#	8	RI#
9	GND	10	NC

USB01, USB23, USB45: Internal USB Connector			
PIN	**DESCRIPTION**	**PIN**	**DESCRIPTION**
1	VCC	2	GND
3	DATA-	4	DATA+
5	DATA+	6	DATA-
7	GND	8	VCC

ATXCTL1 : Backplane Power Connector	
PIN	**DESCRIPTION**
1	Ground
2	PS_ON
3	5V Dual

IR1: IrDA connector	
PIN	**DESCRIPTION**
1	VCC
2	NC
3	IR-RX
4	GND
5	IR-TX

J_AUDIO1 : Audio Source Connector			
PIN	**DESCRIPTION**	**PIN**	**DESCRIPTION**
1	ACZ_SYNC	2	ACZ_BITCLK
3	ACZ_SDOUT	4	ACZ_PCBEEP
5	ACZ_SDIN	6	ACZ_RST#
7	ACZ_VCC(+5V)	8	ACZ_GND
9	ACZ_12V	10	ACZ_GND

PIN	DESCRIPTION	PIN	DESCRIPTION
1	FWHPCLK	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#

CPU_FAN1 : CPU Fan Connector	
PIN	**DESCRIPTION**
1	Ground
2	+12V
3	Rotation Signal
4	Control

DIO1 : Digital Input / Output 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

F_PANEL1 : External Switches and Indicators panel					
	PIN	**DESCRIPTION**	**PIN**	**DESCRIPTION**	
Power LED	1	+5V	2	+5V	Speaker
	3	N/C	4	N/C	
	5	GROUND	6	N/C	
PWRBTN	7	PWRBTN+	8	Speaker	
	9	PWRBTN-	10	N/C	RESET
HDDLED	11	+5V	12	Reset-	
	13	HDLED-	14	GND	

CPU12V1: ATX-12V1 (CPU)			
PIN NO.	**DESCRIPTION**	**PIN NO.**	**DESCRIPTION**
1	GND	2	GND
3	+12V	4	+12V

Board Layout: Jumper and Connector Locations