

**PICMG 1.0 CPU Card support LGA775 Intel® Core 2 Duo,
Pentium® D/4, Celeron® D CPU with VGA/DVI,
Dual PCIE GbE LAN and SATAII**

WSB-9454

Quick Installation Guide

Version 4.0

Nov. 25, 2010

Package Contents

WSB-9454 package includes the following items:

- 1 x WSB-9454 Single Board Computer
- 1 x mini jumper pack
- 1 x ATA flat cable
- 1 x Dual RS-232 cable
- 1 x SATA Power cable
- 2 x SATA cable
- 1 x KB/MS Y cable
- 1 x Dual Ports USB cable
- 1 x IO-KIT-001-R20 (WSB-9454DVI only)
- 1 x Utility CD
- 1 x QIG (quick installation guide)



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Specifications

- CPU: LGA 775 Intel® Core 2 duo, Pentium® D/4, Celeron® D with 533/800/1066 MHz FSB
- System Chipset: Intel® 945G + ICH7
- BIOS: AMI Flash BIOS
- System Memory
 - 4 x 240-pin Dual-channel DDR2 400/533/667 MHz DRAM up to 4GB
- Ethernet: Dual Realtek RTL8111E PCIe interface GbE controller
- I/O Interface
 - 2 x RS232
 - 7 x USB 2.0 (1 on rear, 6 on board by pin-header)
 - 1 x IDE
 - 1 x LPT
 - 1 x FDD
 - 4 x SATAII
 - 1 x PS/2 for KB/MS
 - 1 x 5-pin header for KB
 - 1 x Infrared Interface
- Display:
 - VGA integrated in Intel® 945G
 - DVI by Silcon image SIL1362(WSB-9454DVI Only)
- Digital I/O: 8 bit digital I/O, 4 input /4 output
- Audio: 5.1 Channel AC'97 Audio Kit with Realtek ALC655
 - 7.1 Channel HD Audio Kit with Realtek ALC883
- WDT: Software programmable supports 1-255 sec. System reset
- Power Supply: ATX Power, AT/ATX Mode
- Power Consumption: 5V@7.68A, 12V@0.15A, Vcore@ 2.26A
(Intel Core 2 Duo E7400 2.8 GHz/1066 MHz CPU with 4 x 1GB DDR2 800 MHz)
- Temperature: 0 ~ 60°C(32 ~ 140°F)
- Humidity: 5% ~ 95% non-condensing
- Dimension: (L)338mm x (W)122mm
- Weight: GW: 1.2Kg

Ordering Information

WSB-9454-R40

PICMG 1.0 CPU Card support LGA775 Intel® Core 2 Duo, Pentium® D/4, Celeron® D 1066MHz processor, VGA, Dual PCIE GbE and SATAII

WSB-9454DVI-R40

PICMG 1.0 CPU Card support LGA775 Intel® Core 2 Duo, Pentium® D/4, Celeron® D 1066MHz processor, VGA/DVI, Dual PCIE GbE and SATAII

AC-KIT08R-R10

5.1 Channel AC'97 Audio Kit with Realtek ALC655

AC-KIT883HD-R10

7.1 Channel HD Audio Kit with Realtek ALC883 supports dual audio streams

CF-520-RS-R11: CPU Clooer

32200-000017-RS: FDD cable

19800-000049-RS: LPT cable

CF-775A-RS: CPU cooler

Jumpers setting and Connectors

LABEL	FUNCTION
J_CMOS1	Clear CMOS Jump
JLAN_PWR1	WOL Setting Jump
KB_MS1	PS/2 MOUSE & KEYBOARD connector
LAN1 LAN2	RJ45 LAN Connectors
VGA1	VGA 15-pin Female connector
USB_C6	External USB Port connector
PIDE1	IDE connector
FDD1	FDC connector
LPT1	Parallel Port connector
COM1 COM2	Internal Serial Port 10-pin connectors
USB01 USB23 USB45	Internal 6 Ports USB connectors
IR1	Infrared Interface connector
CPU_FAN1	CPU Fan Connector
ATXCTL1	AT/ATX Mode Select jump
SATA1 SATA2 SATA3 SATA4	Serial ATA connectors
DIO1	Digital I/O connector
F_PANEL1	PWR & RST Buttons & Speaker and Indicators
J_AUDIO1	Audio Connector
KB1	Internal 5-pin Header Keyboard connector
DVI1	DVI-D connector (WSB-9454DVI Only)
CPU12V1	ATX-12V CPU Power Input connector
JSPI1	Flash SPI ROM connector
DDRII-1 DDRII-2 DDRII-3 DDRII-4	DDR2 DRAM Slots

J_CMOS1 : Clear CMOS Setup	
J_CMOS1	DESCRIPTION
Short 1-2 (default)*	Keep CMOS Setup (Normal Operation)
Short 2-3	Clear CMOS Setup

JLAN_PWR1:WOL setting	
JLAN_PWR1	DESCRIPTION
Short 1-3	LAN 2 WOL Enable
Short 2-4	LAN 1 WOL Enable(Default)
Short 3-5	LAN 2 WOL Disable(Default)
Short 4-6	LAN 1 WOL Disable

ATXCTL1 : AT/ATX Mode Select jump	
PIN NO.	DESCRIPTION
Short 1-2	AT Mode
Open (default)*	ATX Mode

ATXCTL1 : Backplane to Mainboard Connector	
PIN NO.	DESCRIPTION
1	GND
2	PS_ON#
3	5VSB

KB1 : Internal 5-pin Header Keyboard Connector	
PIN NO.	DESCRIPTION
1	KEYBOARD CLOCK
2	KEYBOARD DATA
3	N/C
4	GND
5	VCC +5V

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

IR1: Infrared Interface Connector	
PIN	DESCRIPTION
1	VCC +5V
2	NC
3	IR-RX
4	GND
5	IR-TX

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

FDD1: FDC Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	REDUCE WRITE
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#

COM1,COM2 :Internal Serial Port 10-pin Connectors			
Connector	Ports	Address	Interrupt
COM1	COM1	3F8	IRQ4
COM2	COM2	2F8	IRQ3

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

CPU12V1 : CPU POWER Input Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	GND
3	+12V	4	+12V

DIO1 : Digital Input / Output Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	GND	2	VCC +5V
3	Output 0	4	Output 1
5	Output 2	6	Output 3
7	Input 0	8	Input 1
9	Input 2	10	Input 3

F_PANEL1 : PWR & RST Buttons & Speaker and Indicators					
	PIN	DESCRIPTION	PIN	DESCRIPTION	
Power LED	1	PWRLED +	2	Speaker +	Speaker
	3	N/C	4	N/C	
	5	PWRLED -	6	N/C	
PWRBTN	7	PWRBTN-	8	Speaker -	RESET
	9	PWRBTN+	10	N/C	
HDDLED	11	HDLED+	12	Reset +	
	13	HDLED-	14	Reset -	

LPT1 : Parallel Port Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	STROBE#	14	AUTO FORM FEED #
2	DATA0	15	ERROR#
3	DATA1	16	INITIALIZE#
4	DATA2	17	PRINTER SELECT LN#
5	DATA3	18	GND
6	DATA4	19	GND
7	DATA5	20	GND
8	DATA6	21	GND
9	DATA7	22	GND
10	ACKNOWLEDGE#	23	GND
11	BUSY	24	GND
12	PAPER EMPTY	25	GND
13	PRINTER SELECT	26	N/C

J_AUDIO1: Audio Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	SYNC	2	BITCLK
3	SDOUT	4	PCBEEP
5	SDIN	6	RST#
7	VCC +5V	8	GND
9	+12V		

JSPI1:Flash SPI ROM connetor			
PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1	+3.3V	5	GND
2	CS0#	6	CLK
3	SO0	7	SI
4	N/C	8	N/C

DVI1 : DVI Connector (WSB-9454DVI Only)			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	Data 2-	14	VCC(+5V)
2	Data 2+	15	GND
3	GND	16	Hot Plug Detect.
4	N/C	17	Data 0-
5	N/C	18	Data 0+
6	DDC Clock	19	GND
7	DDC Data	20	N/C
8	N/C	21	N/C
9	Data 1-	22	GND
10	Data 1+	23	Clock +
11	GND	24	Clock -
12	N/C	25	GND
13	N/C		

PIDE1: IDE Interface Connector			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	RESET#	2	GND
3	DATA 7	4	DATA 8
5	DATA 6	6	DATA 9
7	DATA 5	8	DATA 10
9	DATA 4	10	DATA 11
11	DATA 3	12	DATA 12
13	DATA 2	14	DATA 13
15	DATA 1	16	DATA 14
17	DATA 0	18	DATA 15
19	GND	20	N/C
21	IDE DRQ	22	GND
23	IOW#	24	GND
25	IOR#	26	GND
27	IDE CHRDY	28	BALE – DEFAULT
29	IDE DACK	30	GND
31	INTERRUPT	32	N/C
33	SA1	34	PDIAG#
35	SA0	36	SA2
37	HDC CS0#	38	HDC CS1#
39	HDD ACTIVE#	40	GND

Board Layout: Jumper and Connector Locations

