

**PICMG 1.3 CPU Card supports Intel® 45nm LGA 775 Core™ 2Duo/Quad CPU at FSB 800/1066/1333MHz, Intel® Q35 & ICH9-DO platform, Single Intel® GbE, 6 SATAAll with RAID Functions, USB 2.0**

# **PCIE-Q350-R13**

## **Quick Installation Guide**

### **Version 1.3**

May. 10, 2013

#### **Package Contents**

PCIE-Q350-R13 package includes the following items:

- 1 x PCIE-Q350-R13 Single Board Computer
- 6 x SATA cables
- 3 x SATA power Cables
- 1 x Dual RS-232 Cable
- 1 x USB cable
- 1 x Mini jumper pack
- 1 x Utility CD
- 1 x QIG (Quick Installation Guide)



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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 667/800MHz up to 8GB
- Ethernet: One Intel® 82566DM(PHY) and Intel® ICH9DO(MAC)
- I/O Interface:
  - 12 x USB 2.0 (2 External ports, 6 on board, 4 on backplane)
  - 6 x SATA II 2 x RS-232 1 x keyboard/mouse pin header
- Super I/O: ITE IT8718F
- Digital I/O:16-bit digital I/O, 8-bit input/ 8-bit output
- IrDA:1x IrDA by pin header
- Audio: 7.1 Channel HD Audio kit with Realtek ALC888 codec and dual audio stream supported
- 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: On board 4-pin 12V ATX power connector
  - Backplane 24-pin ATX power on PICMG1.3 backplane
- Power consumption :
  - 5V@5.1A,+12V@4.23A,+3.3V@3A,5VSB@0.28A
  - (2.66GHz E6700 Intel® Core™ 2 Duo CPU with 1066MHz FSB and 2GB 667 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

### PCIE-Q350-R13

PICMG 1.3 CPU Card supports Intel® 45nm LGA 775 Core™ 2Duo/Quad CPU at FSB 800/1066/1333MHz, Intel® Q35 & ICH9-DO platform, Single Intel® GbE, 6 SATAII with RAID Functions, USB 2.0

### AC-KIT-888HD-R10

7.1 Channel HD Audio kit with Realtek ALC888 supports dual audio streams

### CF-520-RS:

High Performance CPU Cooler (115mmx115mmx67mm, 115W)

### TPM-IN01-R10:

Infineon 20-pin Trusted Platform Module with S/W Management Tool

### TPM-SI01-R10:

Sinosun 20-pin Trusted Platform Module with S/W Management Tool

### TPM-WI01-R10:

Winbond 20-pin Trusted Platform Module with S/W Management Tool

### 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)

### 19800-000075-RS

KEYBOARD/MOUSE CABLE WITH BRACKET

### CF-775A-RS

LGA 775 CPU Cooler (92mmx92mmx73mm, 130W)

## Jumpers setting & Connector

| <b>CLR_CMOS1 : Clear CMOS Setup<br/>(1*3 pin header, pitch 2.00mm)</b> |                  |
|--|------------------|
| <b>JP1</b>   | DESCRIPTION      |
| 1-2  | Normal (default) |
| 2-3  | Clear CMOS Setup |

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

| <b>COM1,2 : 10-Pin Serial Port Connector</b> |             |     |             |
|--|-------------|-----|-------------|
| PIN  | DESCRIPTION | PIN | DESCRIPTION |
| 1  | DCD         | 2   | DSR         |
| 3  | RXD         | 4   | RTS         |
| 5  | TXD         | 6   | CTS         |
| 7  | DTR         | 8   | RI          |
| 9  | GND         | 10  | NC          |

| <b>USB1,2,3 : 2 ports USB Connector</b> |             |     |             |
|---|-------------|-----|-------------|
| PIN                                     | DESCRIPTION | PIN | DESCRIPTION |
| 1                                       | VCC         | 2   | GND         |
| 3                                       | DATA0-      | 4   | DATA1+      |
| 5                                       | DATA0+      | 6   | DATA1-      |
| 7                                       | GND         | 8   | VCC         |

| <b>CPU_FAN1: Fan Connector</b> |               |
|--------------------------------|---------------|
| PIN                            | DESCRIPTION   |
| 1                              | GND           |
| 2                              | +12V          |
| 3                              | Sense         |
| 4                              | Speed control |

| <b>SYS_FAN1: Fan Connector</b> |             |
|--------------------------------|-------------|
| PIN                            | DESCRIPTION |
| 1                              | GND         |
| 2                              | +12V        |
| 3                              | Sense       |

| <b>DIO1: 18-pin Digital I/O Connector</b> |             |     |             |
|---|-------------|-----|-------------|
| PIN                                       | DESCRIPTION | PIN | DESCRIPTION |
| 1   | D_GPI_0     | 2   | D_GPO_0     |
| 3   | D_GPI_1     | 4   | D_GPO_1     |
| 5   | D_GPI_2     | 6   | D_GPO_2     |
| 7   | D_GPI_3     | 8   | D_GPO_3     |
| 9   | D_GPI_4     | 10  | D_GPO_4     |
| 11  | D_GPI_5     | 12  | D_GPO_5     |
| 13  | D_GPI_6     | 14  | D_GPO_6     |
| 15  | D_GPI_7     | 16  | D_GPO_7     |
| 17  | GND         | 18  | +5V         |

| <b>F_PANEL1 : Front Panel Jumper</b> |               |     |               |
|--------------------------------------|---------------|-----|---------------|
| PIN                                  | DESCRIPTION   | PIN | DESCRIPTION   |
| 1                                    | Power LED+    | 2   | Speaker+      |
| 3                                    | GND           | 4   | NC            |
| 5                                    | Power LED-    | 6   | NC            |
| 7                                    | Power Button- | 8   | Speaker-      |
| 9                                    | Power Button+ | 10  | NC            |
| 11                                   | IDE LED+      | 12  | Reset Button+ |
| 13                                   | IDE LED-      | 14  | Reset Button- |

| <b>AUDIO1 : Front Audio Connector</b> |             |     |             |
|---------------------------------------|-------------|-----|-------------|
| PIN                                   | DESCRIPTION | PIN | DESCRIPTION |
| 1.                                    | SYNC        | 2.  | CLOCK       |
| 3.                                    | SDOUT       | 4.  | PC_BEEP     |
| 5.                                    | SDIN        | 6.  | RESET       |
| 7.                                    | +5V         | 8.  | GND         |
| 9.                                    | +12V        | 10. | GND         |

| <b>TPM1 : TPM Connector</b> |                    |            |                    |
|-----------------------------|--------------------|------------|--------------------|
| <b>PIN</b>                  | <b>DESCRIPTION</b> | <b>PIN</b> | <b>DESCRIPTION</b> |
| 1                           | TPM_CLOCK          | 2          | GND                |
| 3                           | LPC_FRAME#         | 4          | Key                |
| 5                           | RESET#             | 6          | +5V                |
| 7                           | LAD3               | 8          | LAD2               |
| 9                           | +3V                | 10         | LAD1               |
| 11                          | LAD0               | 12         | GND                |
| 13                          | SMB_CLOCK          | 14         | SMB_DATA           |
| 15                          | +3.3SBY            | 16         | SER_IRQ            |
| 17                          | GND                | 18         | CLKRUN#            |
| 19                          | LPC_PD#            | 20         | LDRQ#              |

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

| <b>MS/KB1 :Mini DIN Keyboard/Mouse Connector</b> |                    |
|--|--------------------|
| <b>PIN</b>                                       | <b>DESCRIPTION</b> |
| 1  | 5V_DUAL            |
| 2  | MOUSE DATA         |
| 3  | MOUSE CLOCK        |
| 4  | KEYBOARD DATA      |
| 5  | KEYBOARD CLOCK     |
| 6  | GND                |

| <b>SDVO1 : SDVO control signal connector</b> |                    |
|--|--------------------|
| <b>PIN</b>                                   | <b>DESCRIPTION</b> |
| 1  | EXP_EN             |
| 2  | SDVO_CLOCK         |
| 3  | SDVO_DATA          |

# Layout & Dimension

