# **Transduction**

# Intel Core i7/i5/Xeon Processor up to 3.4GHz

# **TR-981**



### **Features**

- Modern PICMG 1.0 industrial single board computer.
- For Intel Core i7 (Quad), i5 (Quad) and Xeon processors in LGA1155 package.
- 2 x DDR3 1600/1333MHz DIMM sockets, supports up to 16GB memory.
- Dual Intel Gigabit LAN with iAMT 8.0 support.
- Multiple I/O functions: 4 x USB 3.0, 6 x USB 2.0, 4 x COM, 6 x SATA, 1 x LPT, 1 x FDD, 8bits DIO, 1 x SMbus and 1 x keyboard/mouse.
- Expansion slots: 2 x mini PCI-E, one supports mSATA option.
- Multiple displays: CRT, HDMI/DVI, Dual 24-bits LVDS LCD, three independent displays.
- TPM includes security functions.
- System reset programmable watchdog timer, 1-255sec.
- Realtek ALC888 high-definition audio chip on board.
- 0 ~ 60°C operating temperature with full software load.
- No electrolytics, only polymer capacitors.
- Actual MTBF >100,000 hours

# **IR-981 Industrial PICMG 1.0 Single Board Computer**

# **Transduction**

# Intel Core i7/i5/Xeon Processor up to 3.4GHz

## **TR-981**

### **Specification**

### Processor

 latest generation Intel Core i7/i5/Xeon processors, up to 3.4GHz

### **Processor Socket**

LGA1155

### Chipset

Intel B75

### Memory

 2 x DDR3 sockets, upto 16GB 1600/1333MHz dual channel

### **BIOS**

- uEFI BIOS
- 64Mbit FlashROM with DOS and Windows update utility

### **Gigabit LAN**

- Intel 82579LM and Intel 82574L dual Gigabit ethernet controllers with Dual RJ45 on bracket
- Support Wake-on-LAN, teaming, fault-tolerance and remote boot
- Support AMT 8.0

### Video

- Intel Core i processors intergrated graphics engine
- One D-Sub connector on bracket for CRT display
- One 20-pin connector for HDMI/DVI display
- One 20-pin connector for Display port display
- One 40-pin connector for dual 24-bit LVDS LCD

### On Board I/O

- 1 x keyboard/mouse
- 4 x serial ports as COM1 ~ COM4, COM1 is RS232/422/485 selectable by jumper with autoflow support
- 2 x SATA-III and 4 x SATA-II support IDE, AHCI and RAID
- 1 x LPT port supports SPP/ECP/EPP mode
- 4 x USB 3.0 and 6 x USB 2.0 ports

### **Expansion Slots**

- 2 x Mini PCI-E slots, one supports mSATA by jumper
- Supports PCI slot backplanes compliant to PICMG 1.0
- ISA bus supports basic I/O access cycles and limited IRQ

### **Audio**

- RealTek ALC888 high-definition audio chip on-board
- Support Line-OUT, Line-IN, MIC, SPDIF and CD-IN

### **TPM**

Infineon TPM 1.2 on board supports security functions

### Watch-Dog Timer

Programmable watchdog timer for 1 ~ 255sec.

### Cooling

- One CPU fan connector near CPU socket
- One system fan connector for system cooling
- Supports Smart fan speed control

### **Operating Temperature**

- 0 ~ 60°C (32 ~ 140°F)
- Relative humidity 5 ~ 95%, non-condensing

### **Storage Temperature**

• -40 ~ 70°C (-40 ~ 158°F)

### **Form Factor**

338mm (L) x 122mm (W) (13.3" (L) x 4.8" (W))
PICMG 1.0 compliant

### **Power**

- One 4-pin power connector for system power
- One ATX 12V 4-pin connector for CPU power
- Supports both AT and ATX mode operation by jumper
- · Fail-Safe AC power resume wake up function

Compatible with all Windows including 7, XP, Vista, Windows NT, LINUX and DOS 6.22

Warranty: 3 years