# Terasic TREX C1 Dev. Kit

1. Overview



The TREX C1 Development Kit provides a complete, high-quality, multimedia platform featuring Altera Cyclone (EP1C6Q248C8) FPGA device. With the built-in USB blaster circuits, the TR1 development board has many multimedia features for users to develop advanced video, audio, memory and storage applications using the most popular components in consumer electronic products such as DVD and VCD players.

The TR1 Development Kit also includes a C++ program and controller IPs for peripheral controls to allow users to build up advanced applications in shortest timeframe. Users can use either the USB blaster link or RS-232 link to control the board.

## 2. Specification

- TREXC1 development board
  - Altera EP1C6Q240C8
  - Altera EP1S Serial Configuration Device
  - Built-in USB Blaster programming circuitry.
  - Support both JTAG and AS mode programming
  - Option to power via universal serial bus (USB)
  - Eight LEDs
  - Eight Schmitt-trigger de-bounced push buttons
  - 1MByte Flash Memory
  - $\circ$  8MByte SDRAM (1M x 4 x 16)
  - CF Card Socket (True IDE mode)
- Company: Terasic
- Tel: +886-3-5750880
- Fax:+886-3-5726690
- Add: 9F., No.176, Sec.2, Gongdao 5th Rd, East Dist, Hsinchu City, 30070. Taiwa

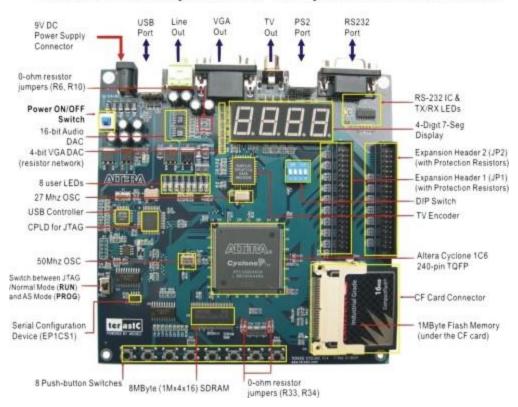
- o 16-bit CD-quality Audio DAC with line-out connector
- TV Encoder with TV Out jack
- RS-232 Transceiver with 9-pin connector
- VGA DAC (4-bit resistor network) with VGA-out connector
- PS2 Keyboard/mouse connector
- 4-bit DIP switches
- 4-bit 7-SEG display module
- Two-40 pin expansion slots.
- Size : 151.5\*151.3 mm
- Cables and accessories
  - USB A->B cable (for both USB-blaster programming and the TREX C1 API controll)
  - 7.5V DC Power Supply (We ship UK Plug for Europe/UK areas)
  - Quartus ® II Web Edition design software
- Reference designs and C++ applications
  - $\circ$  Lab manual for using the C++
  - Lab Manuals for using the reference designs

## 3. Kit content



- Company: Terasic
- Tel: +886-3-5750880
- Fax:+886-3-5726690
- Add: 9F., No.176, Sec.2, Gongdao 5th Rd, East Dist, Hsinchu City, 30070. Taiwa

#### 4. Layout



#### **T-REX C1 Development Kit Components & Interfaces**

- Company: Terasic
- Tel: +886-3-5750880
- Fax:+886-3-5726690
- Add: 9F., No.176, Sec.2, Gongdao 5th Rd, East Dist, Hsinchu City, 30070. Taiwa

- Company: Terasic
- Tel: +886-3-5750880
- Fax:+886-3-5726690
- Add: 9F., No.176, Sec.2, Gongdao 5th Rd, East Dist, Hsinchu City, 30070. Taiwa