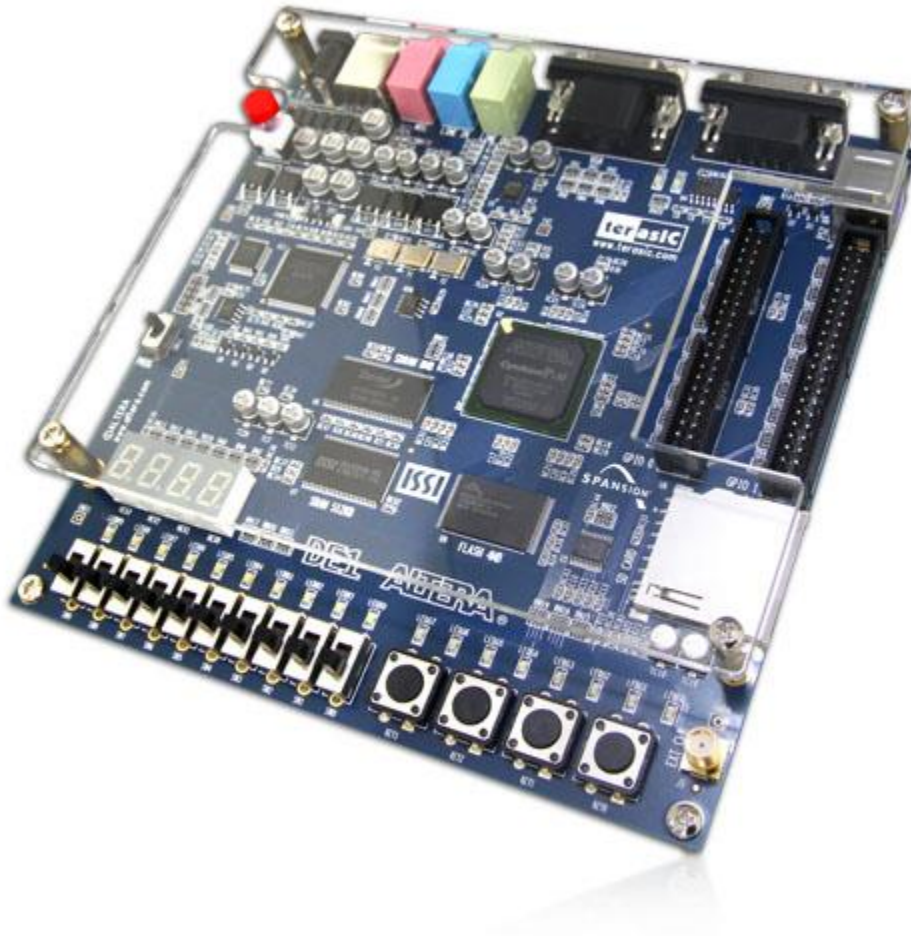


Altera DE1 Board

1. Overview



The purpose of the Altera DE1 Development and Education board is to provide the ideal vehicle for advanced design prototyping in the multimedia, storage, and networking.

It uses the state-of-the-art technology in both hardware and CAD tools to expose designers to a wide range of topics. The board offers a rich set of features that make it suitable for use in a laboratory environment for university and college courses, for a variety of design projects, as well as for the development of sophisticated digital systems. Altera provides a suite of supporting materials for the DE1 board, including tutorials, "ready-to-teach" laboratory exercises, and illustrative demonstrations

2. Specification

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

DE1 board provides users many features to enable various multimedia project development. Component selection was made according to the most popular design in volume production multimedia products. The DE1 platform allows users to quickly understand all the insight tricks to design projects for industry.

- Altera Cyclone II 2C20 FPGA with 20000 LEs
- Altera Serial Configuration devices (EPCS4) for Cyclone II 2C20
- USB Blaster built in on board for programming and user API controlling
- JTAG Mode and AS Mode are supported
- 8Mbyte (1M x 4 x 16) SDRAM
- 4Mbyte Flash Memory
- 512Kbyte(256Kx16) SRAM
- SD Card Socket
- 4 Push-button switches
- 10 DPDT switches
- 8 Green User LEDs
- 10 Red User LEDs
- 4 Seven-segment LED displays
- 50MHz oscillator ,24MHz oscillator ,27MHz oscillator and external clock sources
- 24-bit CD-Quality Audio CODEC with line-in, line-out, and microphone-in jacks
- VGA DAC (4-bit R-2R per channel) with VGA out connector
- RS-232 Transceiver and 9-pin connector
- PS/2 mouse/keyboard connector
- Two 40-pin Expansion Headers (GPIO : voltage levels: 3.3V)
- DE1 Lab CD-ROM which contains many examples with source code



3. Kit content

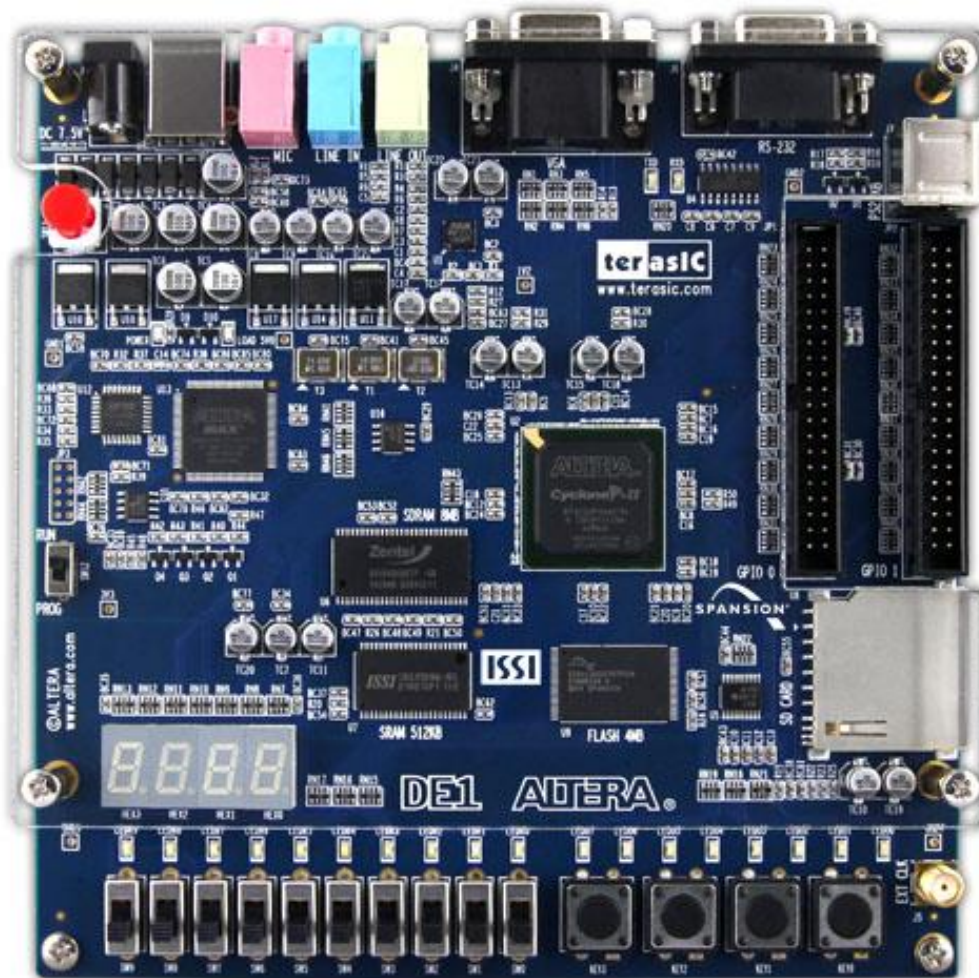
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4. Layout



- Size : 153*153 mm
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