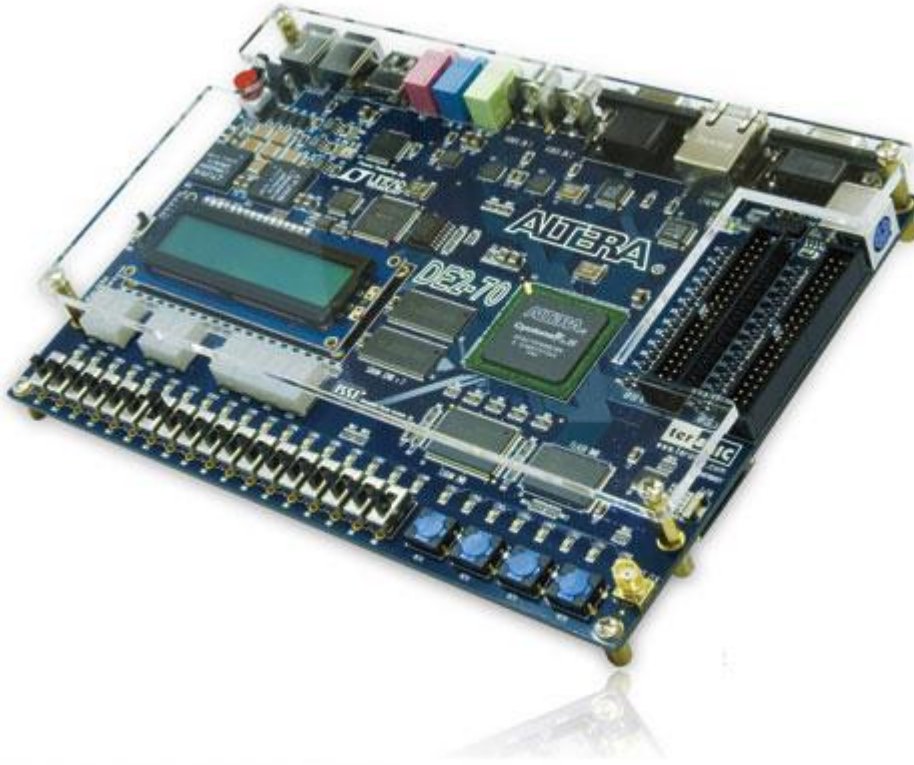# Altera DE2-70 Board

1. Overview

The Altera DE2-70 development and education board, equipped with almost 70,000 LEs of Altera Cyclone® II 2C70, not only adopts the advantages of the Altera DE2 board such as the multimedia, storage, and networking interfaces but also has larger memory components than ever before. The board offers a rich set of features that make it suitable to be used 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 DE2-70 board, including tutorials, "ready-to-teach" laboratory exercises, and illustrative demonstrations.

2. Specification

The DE2-70 board has many features that allow the user to implement a wide range of designed circuits, from simple circuits to various multimedia projects.

- USB Blaster (on board) for programming and user API control; both JTAG and Active Serial (AS) programming modes are supported
- 2-Mbyte SSRAM

- **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**

- Two 32-Mbyte SDRAM
- 8-Mbyte Flash memory
- SD Card socket
- 4 pushbutton switches
- 18 toggle switches
- 18 red user LEDs
- 9 green user LEDs
- 50-Mhz oscillator and 28.63-Mhz oscillator for clock sources
- 24-bit CD-quality audio CODEC with line-in, line-out, and microphone-in jacks
- VGA DAC (10-bit high-speed triple DACs) with VGA-out connector
- 2 TV Decoder (NTSC/PAL) and TV-in connector
- 10/100 Ethernet Controller with a connector
- USB Host/Slave Controller with USB type A and type B connectors
- RS-232 transceiver and 9-pin connector
- PS/2 mouse/keyboard connector
- IrDA transceiver
- 1 SMA connector
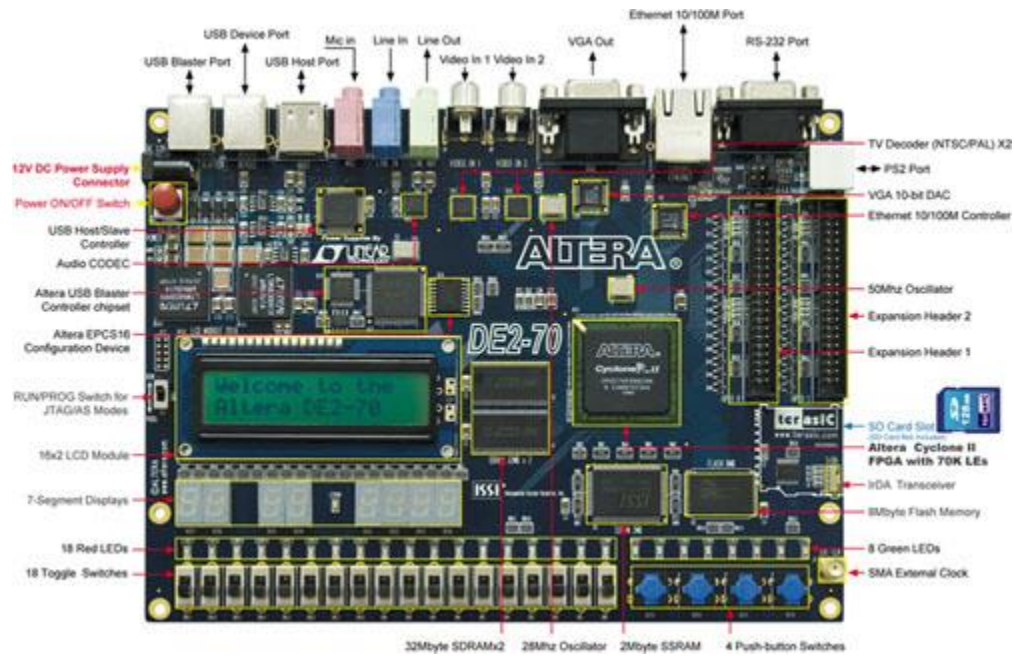- Two 40-pin Expansion Headers with diode protection

3. Kit content

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- Altera DE2-70 Board
- Altera Quartus II DVD with Nios II - Version 7.2 (We provide Quartus II Web Edition software. To learn more about the details please visit Quartus II Software—Subscription Edition and Web Edition Comparison)
- One DE2-70 System CD
- 1 USB Cable
- 1 Adapter DC 12V/2A & Power code
- 6 Silicon Footstands
- 2 Cables (black- and red-colored)
- 2 PIN Headers, 1P1N

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4. Layout

- Size：153*203 mm

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