DE1-SoC-MTL

Quick Start Guide ▸▸▸

- FPGA
- HPS
- System

JTAG Header
Mic In
Line In
Line Out
Video-In
VGA 24-bit DAC
VGA Out
HPS Gigabit Ethernet
HPS USB Host
USB HUB
UART-to-USB Controller
UART-to-USB
micro SD Card
7" touch-screen display

Ethernet PHY
Audio Codec
Video Decoder
PS2
USB PHY
USB-Blaster II
1GB DDR3 SDRAM
Power DC Jack
Altera 28-nm Cyclone V FPGA with ARM Cortex-A9
Power ON/OFF
2x20 GPIO x2
Accelerometer
ADC
ADC Header

7-Segment Display
Switch x10
LED x10
2x7 LTC Expansion Header
64MB SDRAM
Button x4
HPS User LED
WARM_RST
HPS_RST
HPS User Button
IR-in
IR-out

Connector for LCD Panel
Multi-touch Controller
FPGA Configuration Mode Switch
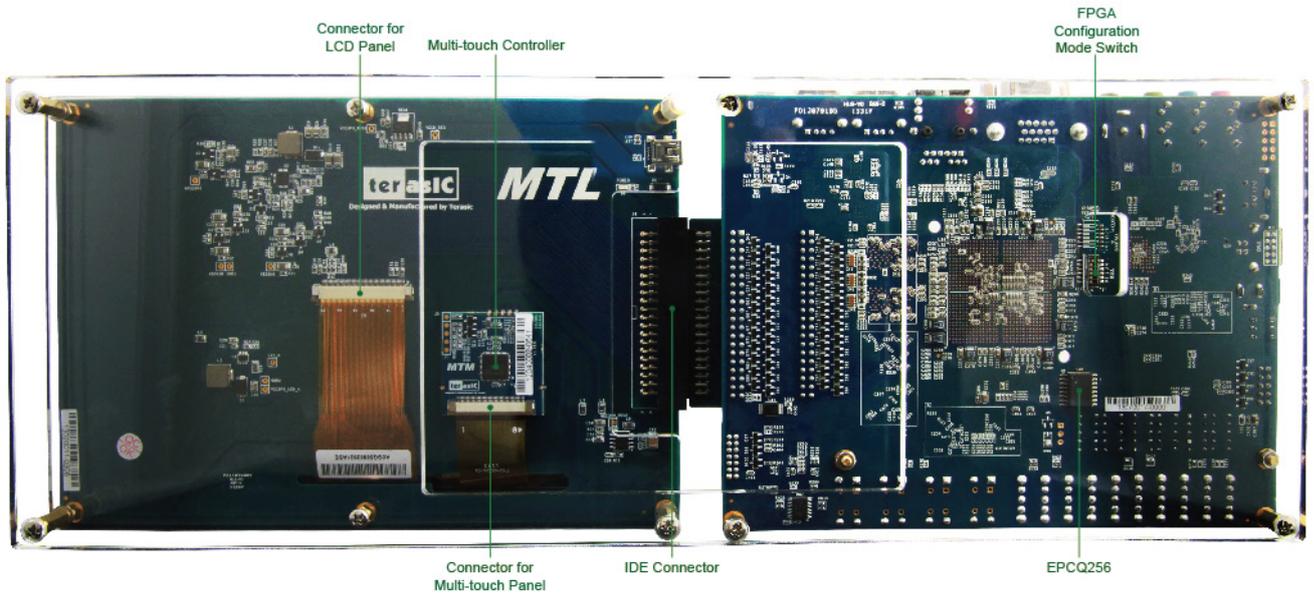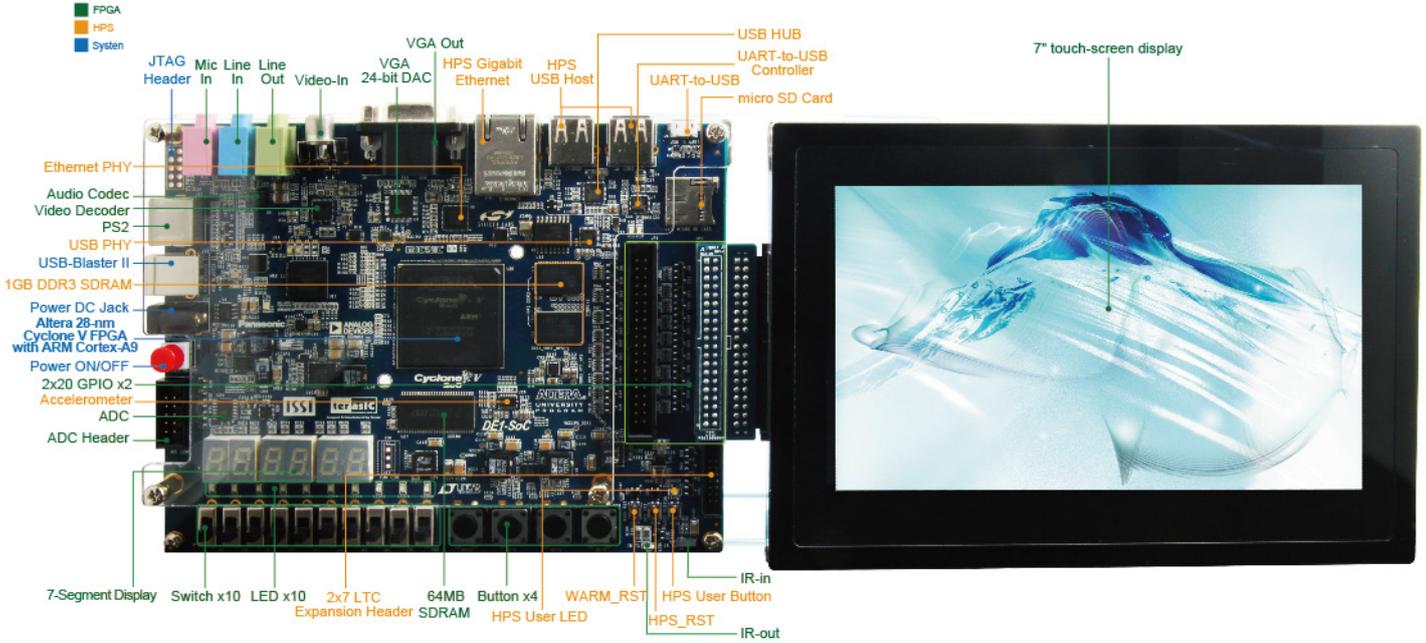
Connector for Multi-touch Panel
IDE Connector
EPCQ256

Getting Help

Should you encounter any problems, please contact us via:

✉ Email: **support@terasic.com**   ☎ Tel: **+886-3-5750-880**

www.terasic.com

What's in the box?

1. DE1-SoC-MTL Kit
2. Quick Start Guide
3. microSD Adapter
4. 8GB microSD Card
5. Card Reader
6. Type A to Mini-B USB Cable
7. Type A to B USB Cable
8. Power DC Adapter (12V)

▲ The 8GB microSD card is pre-programmed to contain the LXDE Linux Dektop.

Resources

▲ For the System CD and Linux image files of this package, please download from the link below:

http://cd-de1-sock-mtl.terasic.com

▲ For the FPGA project design, please refer to the document "*DE1-SoC-MTL_User_manual.pdf*".

▲ For the touch-screen software project design, please refer to the document "*Software Development Guide for touch-screen display.pdf*".

http://cd-de1-sock-mtl.terasic.com

DE1-SoC-MTL System CD Contents

Directory Name	Contents
Manual	Documents including the user manual and software programming guide
Demonstrations	FPGA and SoC design examples
Datasheet	Datasheets of major components on the touch-screen display module
Schematic	Schematic of the touch-screen display module
IP	Encrypted touch controller
License	IP license of touch controller

Power On Test

1. Plug in a USB keyboard to the DE1-SoC board as shown below.
2. Plug in the 12VDC power to the DE1-SoC board.
3. Power on the DE1-SoC board.
4. When a login prompt message appears on the LCD, scroll down from the keyboard and select "More..." then press ENTER.
5. Type "root" and press ENTER.
6. Type "terasic" and press ENTER.
7. The LXDE Desktop will appear on the LCD display.
8. Use touch-screen to select the system menu.

USB Keyboard

12VDC power