Multimedia-HSMC Card (Phased Out)

1. Overview

The NEEK upgrade package is perfectly for users who have Cyclone III FPGA Starter Kit to upgrade their Cyclone III Starter boards into a Nios II Embedded Evaluation Kit, Cyclone III Edition . This kit is a first-class, low-cost evaluation platform for embedded developers. Software developers, especially those new to FPGA design, can install and evaluate the Nios II Embedded Design Suite—a comprehensive software development suite for embedded applications—all at no cost. The included software tutorials and design examples also come with full source code showing applications such as Picture Viewer, Web Server, C-to-Hardware (C2H) acceleration and graphics.

The quality of the NEEK upgrade package is as high as Altera's Nios II Embedded Evaluation Kit, Cyclone III Edition designed and produced by Terasic Technologies. Having the NEEK upgrade package, users are able to connect the LCD multimedia daughter board directly to the Cyclone III FPGA Starter Board without using a cable (Please refer to the picture below).

- **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**

2. Specification

- Terasic Multimedia Touch Panel Daughter Board (MTDB)
  - Color LCD touch-screen display
    - 800 x 480 resolution
  - 24-bit CD-quality Audio CODEC with line-in, line-out, and microphone-in jacks
  - 10/100 Ethernet physical layer/media access control (PHY/MAC)
  - Connectors
    - VGA output
    - Composite TV-in
    - Audio-out, audio-in, and microphone-in
    - 4-bit Secure digital (SD) card
    - Serial connector (RS-232 DB9 port)
    - PS/2
    - Ethernet connector (RJ-45)
    - 8-pin debug I/O
  - Size：125*100 mm
- Cables and accessories
  - 128-Mbyte SD card and USB-to-SD card adapter
  - Ethernet (RJ-45) cable (7 ft.),Ethernet crossover adapter
- Nios II Evaluation Kit CD-ROM
  - Example applications
    - Application selector
    - Picture viewer
    - Mandelbrot acceleration with the Nios C2H compiler
    - Web server/Remote FPGA configuration
  - Hardware tutorials
    - Create an FPGA design in one hour
    - Build a 32-bit soft processor system inside an FPGA
  - Software tutorials

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- - My First Software Application
  - Complete documentation
    - Quick start guide
    - User guide
    - Reference manual
    - Board schematic, layout, and bill of materials
    - Product and partner information
- Altera Complete Design Suite DVD (Free):
  - Quartus® II Web Edition (FPGA design software)
    (We provide Quartus II Web Edition software. To learn more about the details please visit Quartus II Software—Subscription Edition and Web Edition Comparison)
  - ModelSim®-Altera Web Edition (FPGA simulation software from ModelSim)
  - Nios II Embedded Design Suite (32-bit microprocessor software)
  - MicroC/OS-II real-time operating system evaluation
  - Nios II C-to-Hardware acceleration compiler evaluation
  - NicheStack TCP/IP Network Stack - Nios II Edition evaluation
  - SD/MMC SPI IP Core evaluation licensing avaliable through El Camino
  - MegaCore® IP Library (Library of intellectual property cores)

3. Kit content

- Terasic Multimedia Touch Panel Daughter Board (MTDB)
- Cables and accessories
  - 128-Mbyte SD card and USB-to-SD card adapter
  - Ethernet (RJ-45) cable (7 ft.),Ethernet crossover adapter
- Nios II Evaluation Kit CD-ROM
- Altera Complete Design Suite DVD (Free)

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