5.7" VGA Touch Screen LCD Kit



DK-57VTS-LPC3250 For the NXP LPC3250



Highlights

- SOMDIMM CPU Module based on SODIMM form factor (Dual Inline Memory Module)
 - o LPC3250 266MHz ARM926EJ-S based microcontroller
 - o 256KB of Internal SRAM, 512MB* NAND FLASH, 64MB* of External SDRAM
 - o 10/100 Ethernet PHY
 - o Micro SD Memory Socket
 - o Mini-JTAG Debug Connector
- CARRIER Generic Carrier Board for CPU and LCD Modules
 - o 200-pin SOMDIMM Socket, supporting various processor modules
 - o 10/100 Ethernet Port, USB Host and Device ports
 - One RS-232 port (Male DB9), External I2C interface
 - o 3-axis Digital Accelerometer & Temperature Sensor
 - o Real-time Clock with SuperCap backup
 - TFT interface for Graphics LCD displays up to 1024x768 resolution, 18-bit color
 - Flexible Power Supply input can be wall supply or 5V USB

LCDCARRIER

- o 5.7" VGA Display (640 x480) with Touch Screen Interface
- o Optional 3.5" or 5.7" QVGA board, up to 10.4" XGA Board

• Software Included

- o Linux Operating System
- **o VMWare Development Virtual Machine Image**
- Linux Driver support: LCD frame buffer, Touch screen, NAND-Flash, SDRAM, MMC, USB, I2C, SPI, DMA, Ethernet, RS232, and RTC.
- Supplied with easy-to-use application documents for all hardware and software
- Platform is based on a modular design for maximum flexibility
- Additional CPU DIMM and LCD Carrier boards under development

The DK-57VTS-LPC3250 is optimized to save development time in typical embedded control applications. The modular format uses a base Carrier Board, a core CPU SOMDIMM and an LCD Carrier Board. The base Carrier Board includes expansion connectors for added flexibility and a range of configurations. FDI offers low cost customization services for customer specific hardware, software or packaging applications at volumes of 500 units or more.

Features



Actual PCB dimensions are 2.66" x 1.89"

SOMDIMM-LPC3250 Description

The SOMDIMM-LPC3250 includes an NXP LPC3250 ARM9EJ-S based microcontroller running the open source Linux software platform. The LPC3250 has 256KB of internal SRAM memory, a 10/100 Ethernet Media Access Controller (MAC), a USB full speed device/host/OTG controller, seven UARTs, and a collection of serial communications interfaces. The SOMDIMM-LPC3250 also includes 64MB* of external SDRAM and 512MB* of external NAND FLASH.

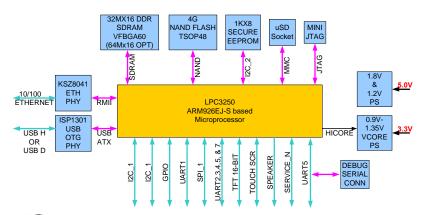
Software Included:

Linux Board Support Package

- Linux Operating System
- Bootloader (both primary boot loader and u-boot bootloader)
- VMWare Development Virtual Machine Image

Linux Drivers support:

- LCD frame buffer
- Touch Screen
- NAND-Flash, SDRAM, MMC
- USB, SPI, DMA, Ethernet, RS232, I2C, RTC.





SOMDIMM Block Diagram

Ordering Information

Part Number: DK-57VTS-LPC3250 NXP Part Number: OM11082

Order Online at: www.digikey.com

Warranty: 30-day money back guarantee Phone 256-883-1240 Fax 256-883-1241

www.teamfdi.com

* Rev 2 SOMDIMM-LPC3250 and later

Kit Contents:

- SOMDIMM-LPC3250 Board
- CARRIER Board
- LCDCARRIER Board & 5.7" VGA LCD Touch Screen
- 5VDC, 2.3A North American Power Supply
- USB and Ethernet Cables
- Segger JTAG Debugger with cables

Download Users Manual, documents, schematics, and software examples at:

www.teamfdi.com/SOMDIMM-LPC3250

