

# 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)**
  - **LPC3250 266MHz ARM926EJ-S based microcontroller**
  - **256KB of Internal SRAM, 512MB\* NAND FLASH, 64MB\* of External SDRAM**
  - **10/100 Ethernet PHY**
  - **Micro SD Memory Socket**
  - **Mini-JTAG Debug Connector**
- **CARRIER – Generic Carrier Board for CPU and LCD Modules**
  - **200-pin SOMDIMM Socket, supporting various processor modules**
  - **10/100 Ethernet Port, USB Host and Device ports**
  - **One RS-232 port (Male DB9), External I2C interface**
  - **3-axis Digital Accelerometer & Temperature Sensor**
  - **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**
  - **5.7" VGA Display (640 x480) with Touch Screen Interface**
  - **Optional 3.5" or 5.7" QVGA board, up to 10.4" XGA Board**
- **Software Included**
  - **Linux Operating System**
  - **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



## 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.

Actual PCB dimensions are 2.66" x 1.89"

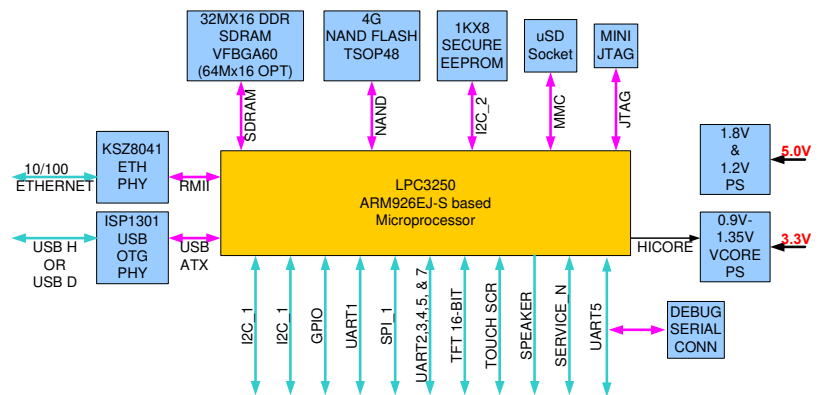
### Software Included:

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](http://www.digikey.com)

Warranty: 30-day money back guarantee  
Phone 256-883-1240 Fax 256-883-1241  
[www.teamfdi.com](http://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](http://www.teamfdi.com/SOMDIMM-LPC3250)

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