5.7” QVGA Touch Screen LCD Kit

DK-57TS-LPC2478
For the NXP LPC2478

Highlights

• SOMDIMM – CPU Module based on SODIMM form factor (Dual Inline Memory Module)
  o LPC2478 72MHz ARM7TDMI-S based microcontroller
  o 512KB of Internal FLASH, 96KB of Internal SRAM, 8MB of External SDRAM
  o 10/100 Ethernet PHY
  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
  o One CAN port (Male DB9), One RS-232 port (Male DB9), External I2C interface
  o 3-axis Digital Accelerometer & Temperature Sensor
  o Real-time Clock with SuperCap backup
  o TFT interface for Graphics LCD displays up to 1024x768 resolution, 18-bit color
  o Flexible Power Supply input can be wall supply or 5V USB

• LCDCARRIER
  o 5.7” QVGA Display (320 x 240) with Touch Screen Interface
  o Optional 3.5” QVGA board, up to 10.4” XGA Board

• Software Included
  o FreeRTOS Operating System
  o uEZ™ Rapid Development Platform
  o Complete COM Drivers and APIs with documentation

• 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-57TS-LPC2478 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.
SOMDIMM-LPC2478 Description

The SOMDIMM-LPC2478 includes an NXP LPC2478 ARM7TDMI-S based microcontroller running the open source uEZ™ +FreeRTOS software platform. The LPC2478 has 512KB of internal Flash memory, 96KB of internal SRAM, a 10/100 Ethernet Media Access Controller (MAC), a USB full speed device/host/OTG controller, four UARTs, two CAN channels and a collection of serial communications interfaces. The SOMDIMM-LPC2478 also includes 8MB of external SDRAM.

Actual PCB dimensions are 2.66” x 1.89”

Software Included

μEZ™ (pronounced Muse) is an open source rapid development platform that supplies application developers with an extensive library of open source software, drivers, and processor support - all under a common framework. μEZ™ allows companies to focus on innovation and their value-added applications while minimizing development time and maximizing software reuse.

The diagram below shows a typical embedded application stack. The μEZ™ components comprise three primary categories to simplify embedded application development:

- Operating System Abstraction Layer (μEZ™ OSAL)
- Sub-system drivers (ex: μEZ™ TCP/IP, μEZ™ USB, μEZ™ Driver)
- Hardware Abstraction Layer (μEZ™ HAL)

Ordering Information

Part Number: DK-57TS-LPC2478
NXP Part Number: OM11076
Suggested Resale Price: $425.00(USD)
Order Online at: www.digikey.com
www.mouser.com

Warranty: 30-day money back guarantee
Phone 256-883-1240    Fax 256-883-1241
sales@teammfdi.com   www.teammfdi.com

Kit Contents:
- SOMDIMM-LPC2478 Board
- CARRIER Board
- LCDCARRIER Board & 5.7” QVGA 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.teammfdi.com/SOMDIMM-LPC2478