

# ARM 3.5" Touch Screen LCD Kit



**ARM-35TS-LPC2478**  
For the NXP LPC2478



## Highlights

- **ARM7DIMM – CPU Module based on SODIMM form factor (Dual Inline Memory Module)**
  - LPC2478 72MHz ARM7TDMI-S microcontroller
  - 512KB of Internal FLASH, 96KB of Internal SRAM, 8MB of External SDRAM
  - 10/100 Ethernet PHY
  - Mini-JTAG Debug Connector
- **ARMCARRIER – Generic Carrier Board for ARM CPU and LCD Modules**
  - 200-pin ARMDIMM Socket, supporting ARM7, ARM9, & Cortex-M3 Modules
  - 10/100 Ethernet Port, USB Host and Device ports
  - One CAN port (Male DB9), 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**
  - 3.5" QVGA Display (320 x 240) with Touch Screen Interface
  - Optional 5.7" QVGA or VGA board, up to 10.4" XGA Board
- **Software Included**
  - FreeRTOS Operating System
  - uEZ™ Rapid Development Platform
  - 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 ARM-35TS-LPC2478 is optimized to save development time in typical embedded control applications. The modular format uses a base Carrier Board, a core CPU DIMM Module 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.



## ARM7DIMM-LPC2478 Module Description

The ARM7DIMM-LPC2478 Module includes an NXP ARM7TDMI-S LPC2478 microcontroller running the open source  $\mu$ EZ™ +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 ARM7DIMM-LPC2478 Module also includes 8MB of external SDRAM.

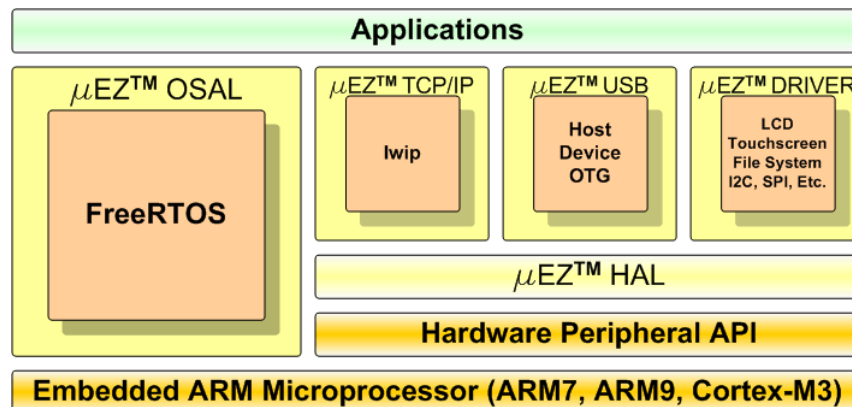
Actual PCB dimensions are 2.66" x 1.89"

## Software Included

$\mu$ EZ™ (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.  $\mu$ EZ™ 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  $\mu$ EZ™ components comprise three primary categories to simplify embedded application development:

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



## Ordering Information

Part Number: ARM-35TS-LPC2478  
 Suggested Resale Price: \$375.00(USD)  
 Order Online at: [www.digikey.com](http://www.digikey.com)

Warranty: 30-day money back guarantee  
 NXP Part Number: OM11xxx  
 Phone 256-883-1240 Fax 256-883-1241  
 sales@teamfdi.com [www.teamfdi.com](http://www.teamfdi.com)

### Kit Contents:

- ARM7DIMM-LPC2478 Board
- ARMCARRIER Board
- LCDCARRIER Board & 3.5" QVGA LCD Touch Screen
- 5VDC, 2.3A North American Power Supply
- USB and Ethernet Cables
- USP-ICP-LPC2K ISP Programmer with cable

$\mu$ EZ™ Software and Users Manual Included

**FDI** *Future Designs, Inc.*  
 Your Development Partner