

# Instant GUI 4.3" Touch Screen LCD Kit



**0.545"  
thick**



**uEZGUI-2478-43WQS  
for the NXP LPC2478**



**SHARP**  
MICROELECTRONICS  
OF THE AMERICAS

## Highlights

### Features

- Sharp 4.3" TFT WQVGA 480 NIT LCD Panel with integrated Touch Screen
- NXP LPC2478 CPU running at 72MHz (with 512KB internal Flash)
- 8MB of SDRAM (opt to 32MB)
- 8MB of NOR FLASH (opt to 16MB)
- 2GB microSD Memory Card
- NV Data Storage via I2C EEPROM
- USB Device Mini-B for power and PC communications
- Low power, Real-Time Clock with Supercap Backup
- Speaker, 3-axis Accelerometer, Temperature Sensor
- Mini-JTAG Debug Connector
- Fine Pitch I/O Connector for External Expansion
  - Serial Ports, UART, I2C, SPI, USB Host/Device
  - RMI interface for Ethernet 10/100



### Software

- uEZ® / FreeRTOS Rapid Development Platform
- uEZ® GUI enhancements with Nano-X/FLNX
- MicroSD card maps as USB Flash Drive to the PC
- Support for customer down load of logos, JPEG images and menu keys
- Rowley CrossWorks Compiler and Tool Suite
- Segger J-Link Lite JTAG for programming and debug



Rowley Associates



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

# Features



The NXP LPC2478 ARM7TDMI-S based microcontroller runs 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 uEZ GUI board also includes 8MB of external SDRAM and 8MB of external NOR Flash.

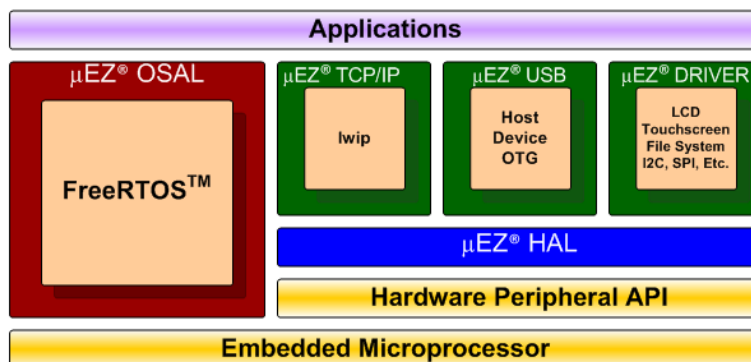
## Software Included

uEZ® (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.

uEZ® 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 uEZ® components comprise three primary categories to simplify embedded application development:

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



The **uEZGUI-2478-43WQS** is designed to be used as an “off-the-shelf” Graphical User Interface (GUI) or Human Machine Interface (HMI) in a variety of end customer applications. The miniature, self-contained design is well suited to be embedded directly into your product or FDI offers prepackaged versions for stand-alone use. FDI also offers low cost customization services for customer specific hardware, software or packaging applications at volumes of 500 units or more.

## Ordering Information

Part Number: **uEZGUI-2478-43WQS**

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)

### Kit Contents:

- uEZ® GUI 4.3” Board with LPC2478
- Sharp 4.3” WQVGA Touch Screen LCD
- USB Device cable for Power and PC communications
- Mini JTAG Debugger with cables
- uEZ® / FreeRTOS E-Book on microSD card

Download Users Manual, documents, schematics, and software examples at: [www.teamfdi.com/uEZGUI](http://www.teamfdi.com/uEZGUI)