

# Instant GUI 5.6" Touch Screen LCD Kit



**uEZGUI-1788-56VI**  
**for the NXP LPC1788**



**0.545"**  
**thick**



## Highlights

### Features

- 5.6" TFT VGA 640x480 LCD Panel with integrated Touch Screen
- NXP LPC1788 CPU running at 120MHz (with 512KB internal Flash)
- 8MB of SDRAM (optional to 32MB)
- 8MB of NOR FLASH (optional to 16MB)
- 2GB microSD Memory Card
- USB Device Mini-AB PC communications
- USB Device Mini-B connector for power
- NV Data Storage via 4KB Internal EEPROM
- Low power, Real-Time Clock with Supercap Backup
- Speaker, 3-axis Accelerometer, Temperature Sensor
- Mini-JTAG Debug Connector
- External Expansion (70pins) via two I/O connectors
- Actual Size: 5.0" x 4.54" x 0.54"
- USB Host support through adapter cable
- Optional GainSpan 802.11b/g or 802.11b/g/n Wi-Fi module
- Optional Ambient Light Sensor



### Software

- uEZ® / FreeRTOS Rapid Development Platform
- uEZ® / SafeRTOS option for Medical/Safety Apps
- MicroSD card maps as USB Flash Drive to the PC
- Rowley CrossWorks Compiler and Tool Suite
- Segger J-Link Lite JTAG for programming and debug
- Customized versions available



Rowley Associates



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



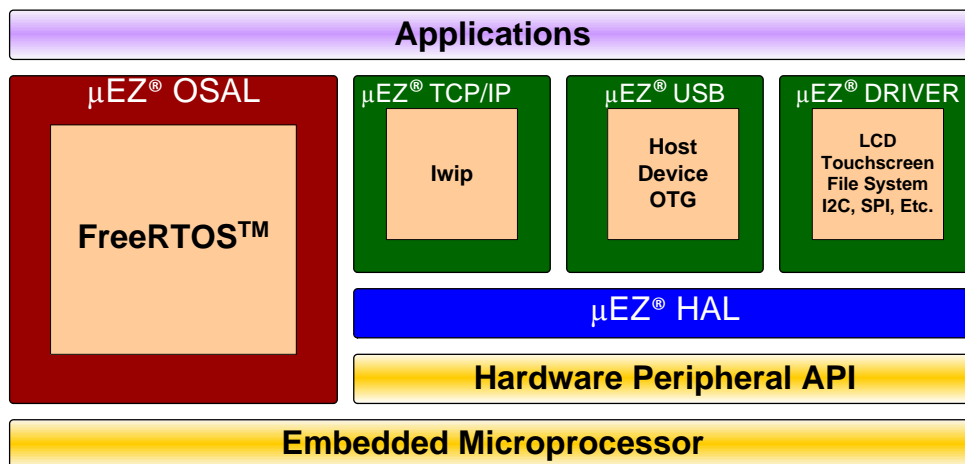
The NXP LPC1788 ARM Cortex-M3 based microcontroller runs the open source  $\mu$ EZ<sup>®</sup> + FreeRTOS software platform. The LPC1788 has 512KB of internal Flash memory, 96KB of internal SRAM, a 10/100 Ethernet Media Access Controller (MAC), a USB full speed device/host/OTG controller, four UARTs, two CAN channels and a collection of serial communications interfaces. The  $\mu$ EZ GUI board also includes 8MB of external SDRAM and 8MB of external NOR Flash.

## Software Included

$\mu$ EZ<sup>®</sup> (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<sup>®</sup> 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<sup>®</sup> components comprise three primary categories to simplify embedded application development:

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



The  **$\mu$ EZGUI-1788-56VI** 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 (the  **$\mu$ EZGUI-1788-56VI-BA** is available for < \$200.00 in volume). 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:  **$\mu$ EZGUI-1788-56VI**  
 Suggested Kit Resale Price: **\$399.00 USD**  
 Board Assembly < \$200.00 in volume  
 Order Online at: [www.teamfdi.com/uezugui](http://www.teamfdi.com/uezugui)

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

### Kit Contents:

- $\mu$ EZ<sup>®</sup> GUI 5.6” Board with LPC1788
- 5.6” VGA Touch Screen LCD
- USB Device cables for Power and PC communications
- Mini JTAG Debugger with cables
- USB Host Adapter cable

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

