

uEZ® GUI Family

Instant Graphical User Interfaces

- ▶ **Off the Shelf options for GUI / HMI**
- ▶ **Can be the main CPU or just a GUI**
- ▶ **Various Processor options**
- ▶ **Various LCD sizes like 4.3 / 5.7 / 7.0”**
- ▶ **Touch Screen 4 or 5 wire resistive**
- ▶ **Cap Touch options coming**
- ▶ **Standard versions available in distribution**
- ▶ **Expansion Boards available for common I/O**
- ▶ **Customization options for >1Ku volumes**
- ▶ **Plastic and machined housings available**
- ▶ **Available as Dev Kits and as cost effective volume assemblies**



uEZGUI-2478-43WQS

TOUCH SCREEN LCD GUI

Less than \$150 in volume

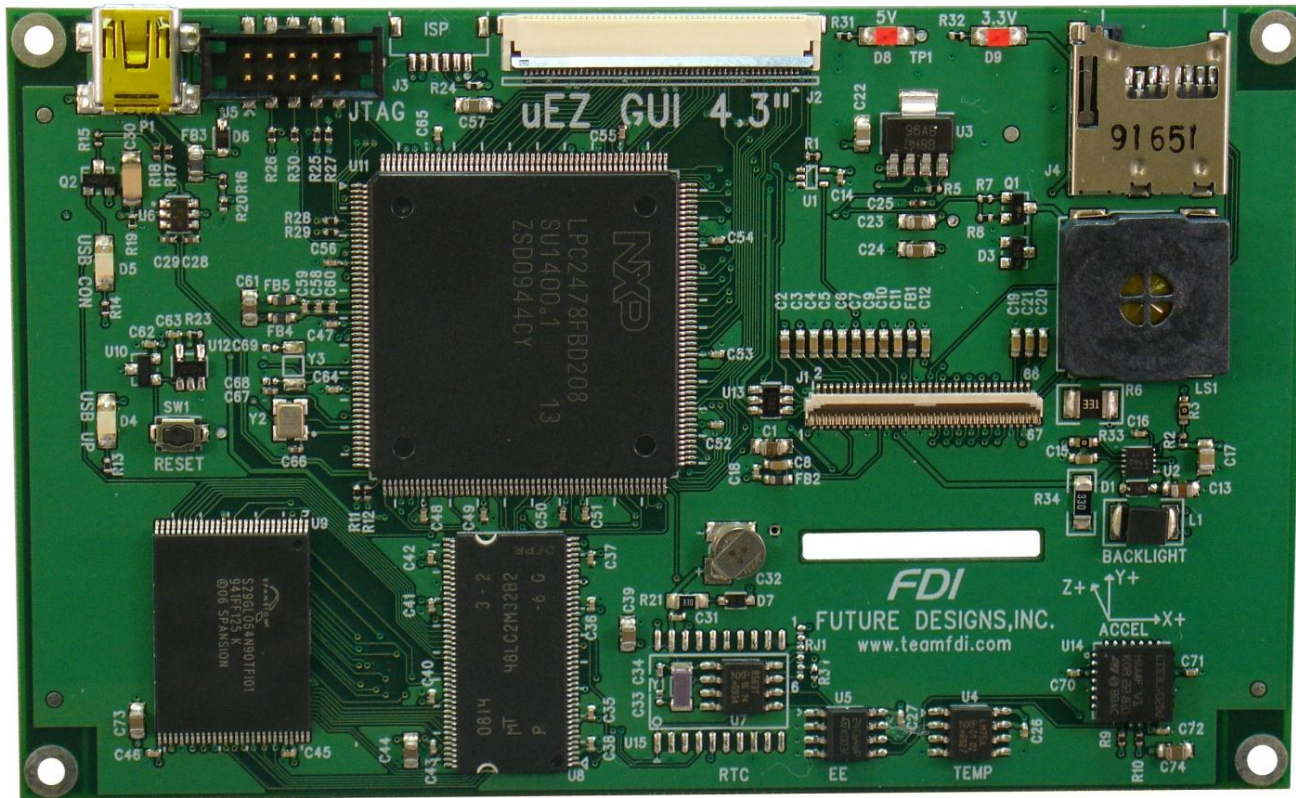
uEZ® GUI LPC2478 Features

- ▶ NXP LPC2478 Microcontroller
- ▶ 8MB External SDRAM
- ▶ 8MB External NOR Flash
- ▶ microSD Memory Card
- ▶ USB Device Port for power & comm
- ▶ Real Time Clock with SuperCap backup
- ▶ 3-axis Accelerometer , Temp Sensor
- ▶ Mini JTAG Connector
- ▶ 4.3" WQVGA TFT LCD from Sharp
- ▶ 4-Wire Resistive Touch Screen



uEZ® GUI 4.3

LPC2478 PCB Assembly Overview



PCB dimensions: 4.60" x 2.84"
Mates directly to back of 4.3" LCD



Future Designs, Inc.
Your Development Partner

uEZ® GUI Assembly

4.3" Sharp LQ043T3DG01 LCD with Touch Screen

4.3" Sharp WQVGA TFT LCD
with 4 wire Resistive Touch Screen

0.545"
thick



SHARP
MICROELECTRONICS
OF THE AMERICAS

uEZGUI-2478-70WVE

TOUCH SCREEN LCD GUI

uEZ® GUI LPC2478 Features

- ▶ NXP LPC2478 Microcontroller
- ▶ 8MB External SDRAM
- ▶ 8MB External NOR Flash
- ▶ microSD Memory Card
- ▶ USB Device Port for comm
- ▶ 2nd USB Port for +5VDC power
- ▶ Real Time Clock with SuperCap backup
- ▶ 3-axis Accelerometer , Temp Sensor
- ▶ Mini JTAG Connector
- ▶ 7.0" WVGA TFT LCD from Seiko
- ▶ 4-Wire Resistive Touch Screen

Less than \$200 in volume



Optional Features

- ▶ 802.11n Wi-Fi module
- ▶ 128Mbit Serial Memory

uEZ® GUI 7.0

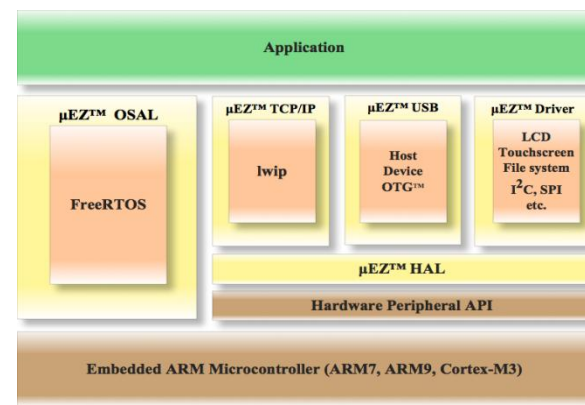
LPC2478 PCB Assembly Overview



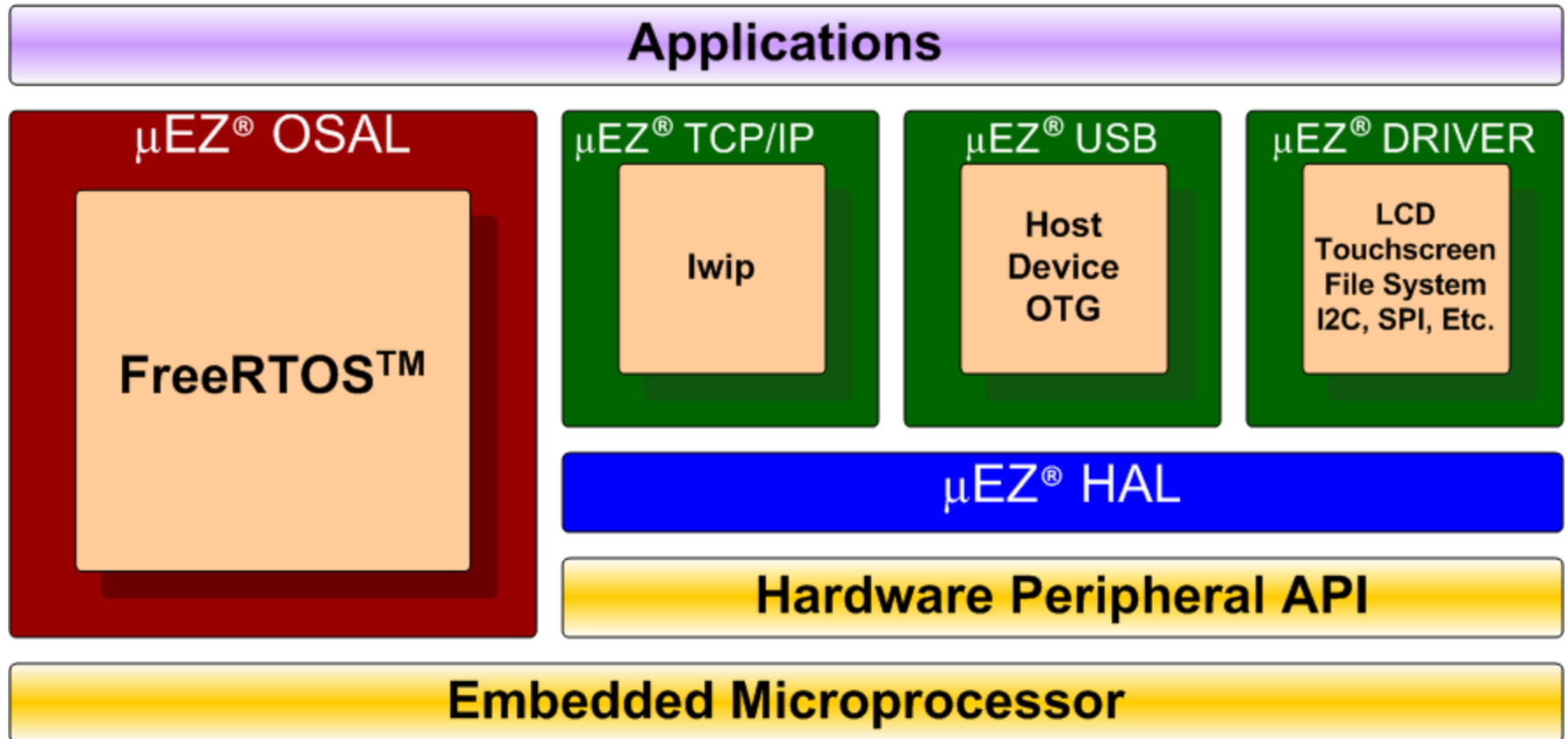
PCB dimensions: 6.70" x 5.20"
Mates directly to back of 7.0" LCD

uEZ® GUI *Kit Overview*

- ▶ Developed by Future Designs, Inc.
- ▶ uEZ™ Rapid Development Platform
- ▶ FreeRTOS Real Time Operating System
- ▶ IDE environment: Rowley Associates
 - **CrossWorks Version 2.0**
 - **30 Day Free Trial Period (Full Tool Chain)**
- ▶ Segger J-Link Lite JTAG Debugger
- ▶ Middleware Components:
 - **Ethernet: lwIP**
 - **USB: Host and Device Stacks**



What is μ EZ[®]



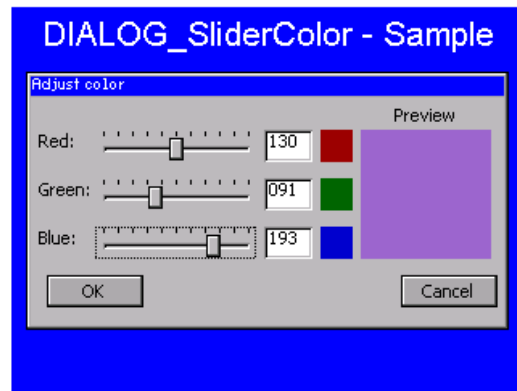
Third Party Support

For more advanced Graphics Requirements

Swell Software: PEG+
www.swellsoftware.com



Prism Graphics Toolkit
www.bwembedded.com



Segger: emWIN
www.segger.com

Also: FDI SWIM Library &
Renesas GAPI Library

uEZ® GUI 4.3

Kit Contents

- ▶ uEZ® GUI PCB Assembly
- ▶ Sharp 4.3" TFT WQVGA LCD
- ▶ Stylus for touch Screen
- ▶ USB Cable
- ▶ Documentation on microSD Card
- ▶ Quick Start Guide
- ▶ Graphical User Interface demos
- ▶ Segger J-Link Lite Debugger



P/N uEZGUI-2478-43WQS

Resale Price \$299.00

uEZ® GUI 7.0

Kit Contents

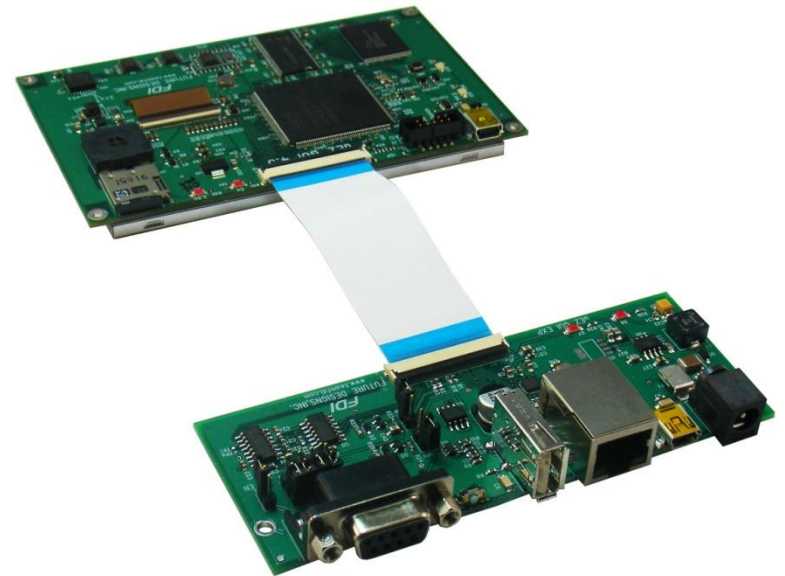
- ▶ uEZ® GUI PCB Assembly
- ▶ Seiko 7.0" TFT WVGA LCD
- ▶ Stylus for touch Screen
- ▶ USB Cable
- ▶ Documentation on microSD Card
- ▶ Quick Start Guide
- ▶ Graphical User Interface demos
- ▶ Segger J-Link Lite Debugger



P/N uEZGUI-2478-70WVE
Resale Price \$405.00

uEZ® GUI with Expansion Board

- ▶ Expansion Board
 - Compatible with all uEZ GUI Kits
 - Ethernet, USB Host, RS232/RS485 and AC Power options
 - DALI and DMX Lighting Demos?



uEZ® GUI 4.3 in OEM Enclosure

- ▶ Custom Enclosure for OEM Applications
 - Volume pricing and OEM customization options available
 - Front label can be branded for volume customers



uEZ® GUI 7.0 in uTABLET Enclosure

- ▶ Machined AL Housing for OEM Applications
 - Volume pricing and OEM customization options available
 - DALI, DMX, RS485 and I2S Audio for SSL demo support
 - Rechargeable Li-Ion Battery Pack



uEZ® GUI for other Microcontrollers

- ▶ NXP LPC1778 based uEZ® GUI
 - 100MHz Cortex-M3 based
 - 4.3" WQVA, 5.7" VGA & 7.0" WVGA options
 - Backward compatible upgrade for LPC2478 based uEZ® GUI
- ▶ Renesas RX62N & RX63N based Direct Drive uEZ® GUI
 - Up to 200MHz 32-bit Family with 1.65 MIPS/MHz and low power
 - Paired with 3.5" or 5.7" NEC QVGA LCDs
- ▶ Cypress PSoC5 based uEZ® GUI
 - 80MHz Cortex-M3 with Programmable Analog & Digital Blocks

