

uEZGUI-2478-43WQS

Instant GUI Touch Screen LCD Kit

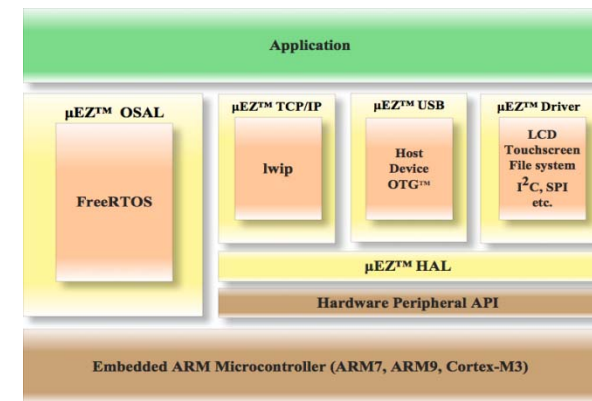
uEZ™ GUI LPC2478 Features

- ▶ 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

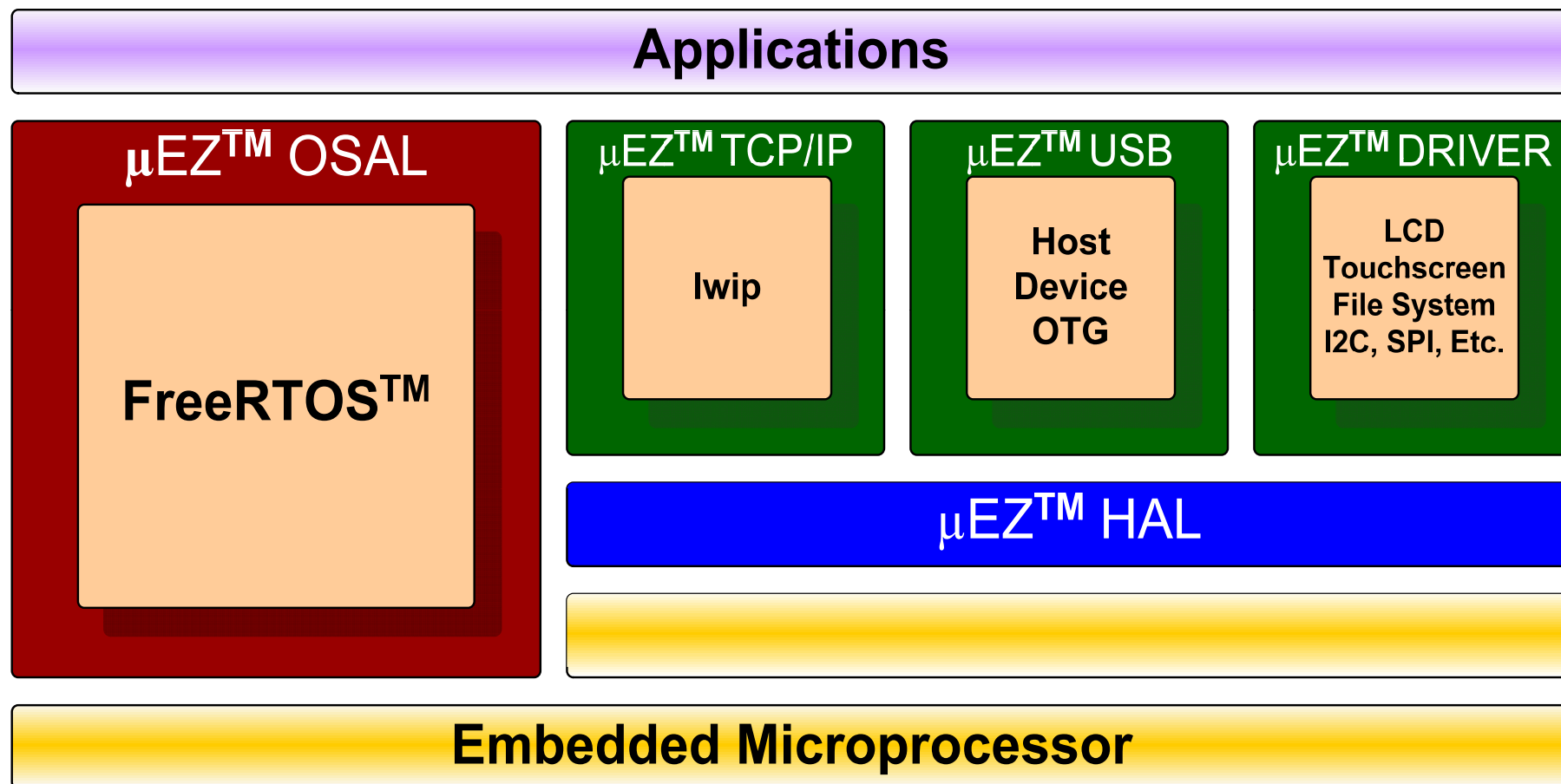


uEZ™ GUI *Kit Overview*

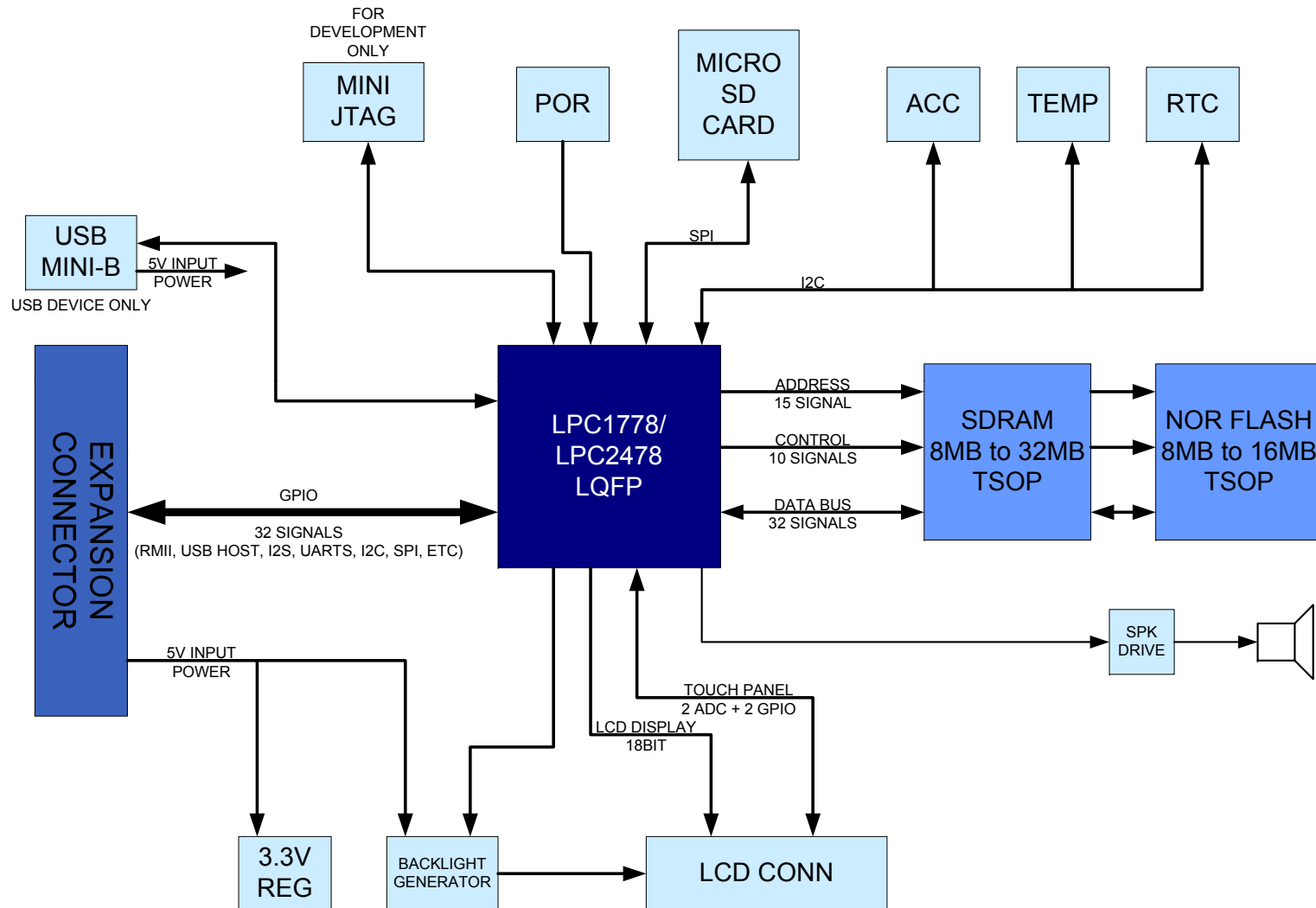
- ▶ Developed by Future Designs, Inc.
- ▶ uEZ™ Rapid Development Platform
- ▶ FreeRTOS Real Time Operating System
- ▶ IDE environment: Rowley Associates
 - **CrossWorks Version 2.0**
 - **30 Day Free Trial Period (Full Tool Chain)**
- ▶ Segger J-Link Lite JTAG Debugger
- ▶ Middleware Components:
 - **Ethernet: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



What is μ EZ™

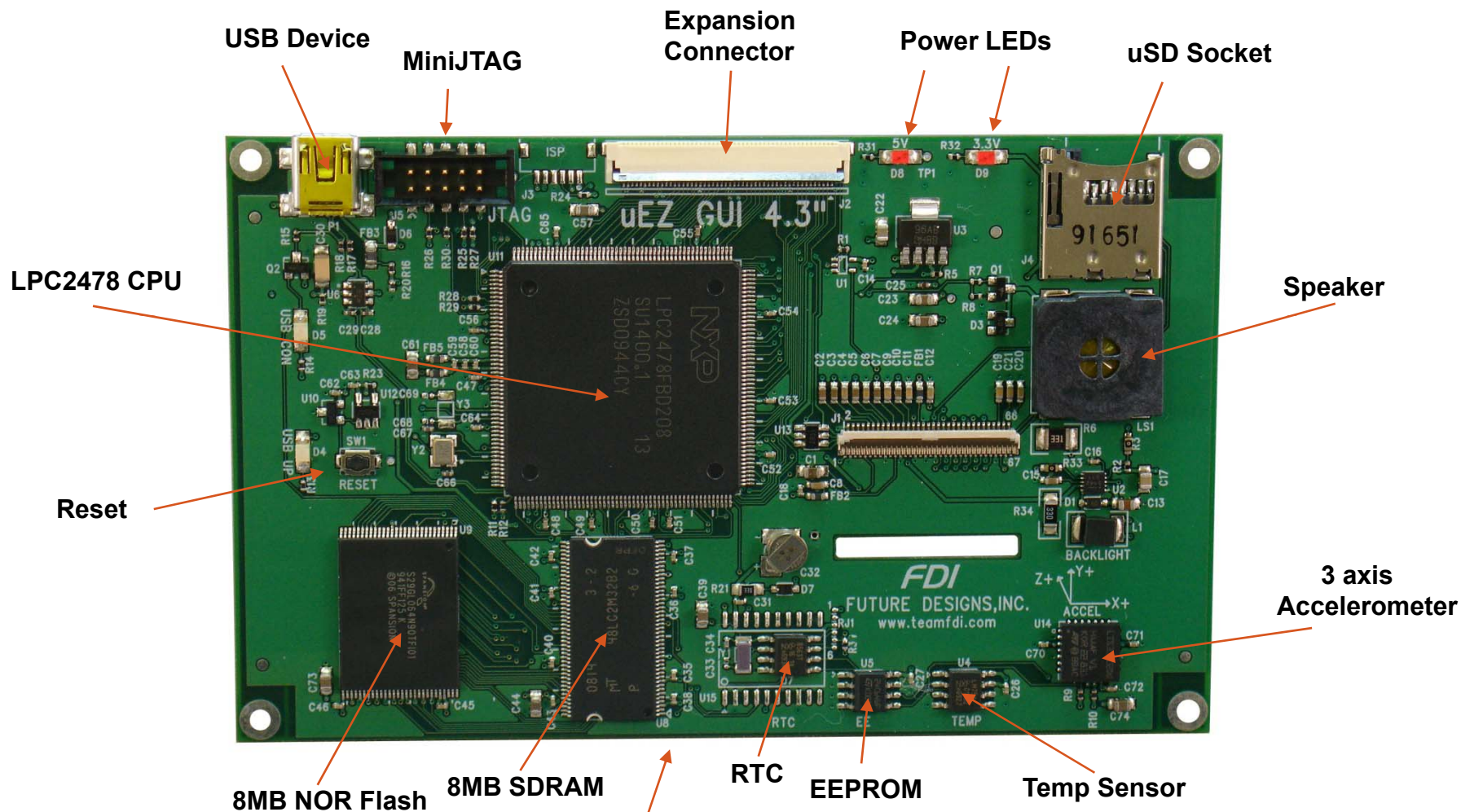


uEZ™ GUI Block Diagram



uEZ™ GUI

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**

**0.50"
thick**



SHARP®
MICROELECTRONICS
OF THE AMERICAS



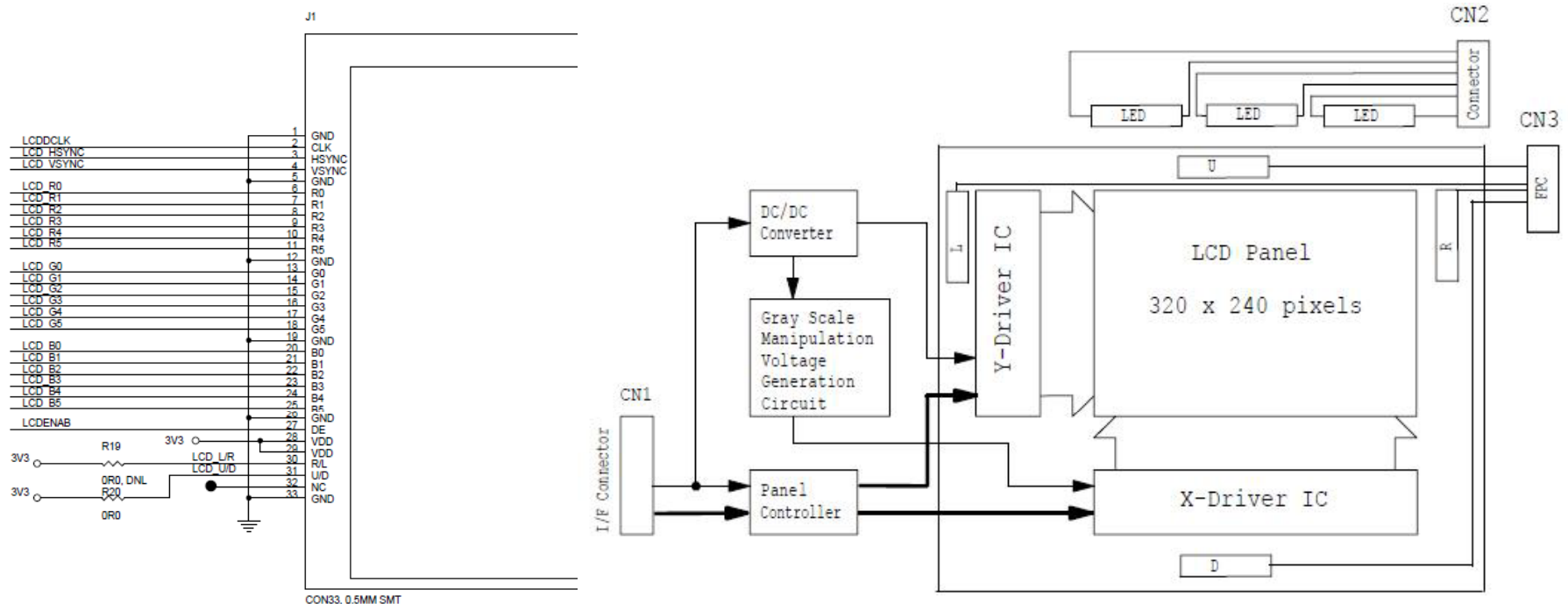
FDI *Future Designs, Inc.*
Your Development Partner

WQVGA TFT LCD

Sharp 4.3" LQ043T3DG01

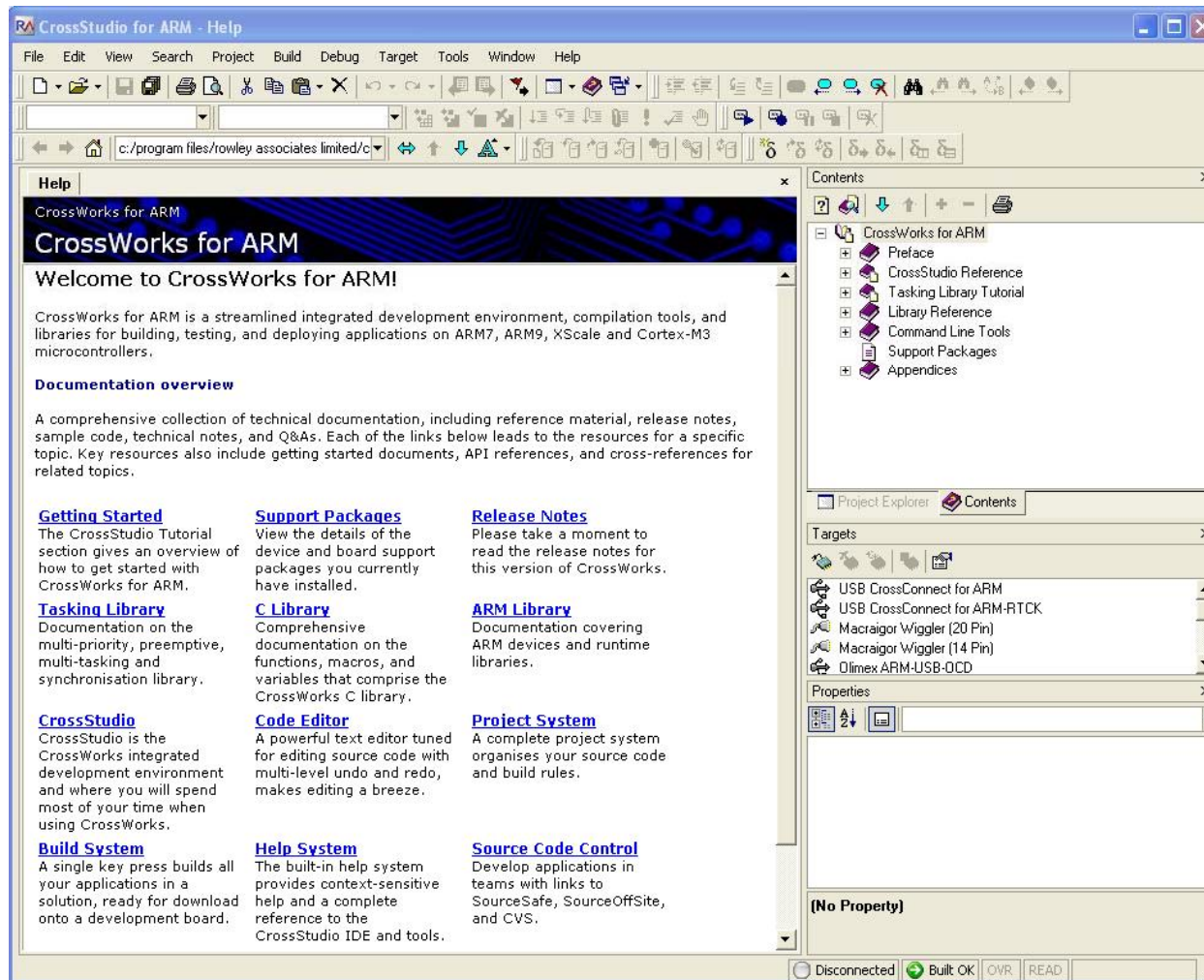
SHARP
MICROELECTRONICS
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- Wide Viewing Angle, 140deg Vertical, 160deg Horizontal
- 480 NIT Brightness, LED Backlight
- 480 x 272 resolution
- 4-wire resistive type touch screen implemented w/uC resources



uEZ GUI Development Environment

Rowley Associates CrossWorks IDE



- ▶ CrossWorks for ARM
 - Version 2.0
 - C,C++, Assembler code development supported
 - GNU based compiler
- ▶ 30 Day full featured trail (Free) licenses available
- ▶ Commercial license price: \$1,500.00
- ▶ Works with multiple JTAG adapters

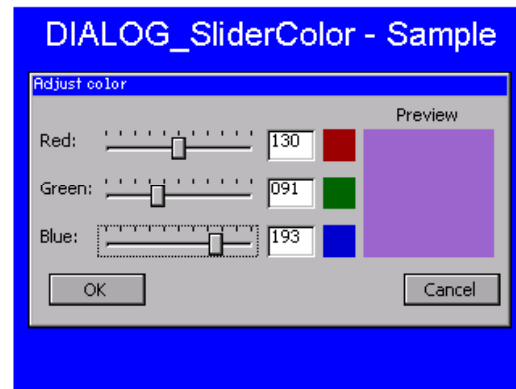
Third Party Support

For more advanced Graphics Requirements

Swell Software: PEG+
www.swellsoftware.com



Altia: PhotoProto
www.altia.com



Segger: emWIN
www.segger.com



uEZ™ GUI

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

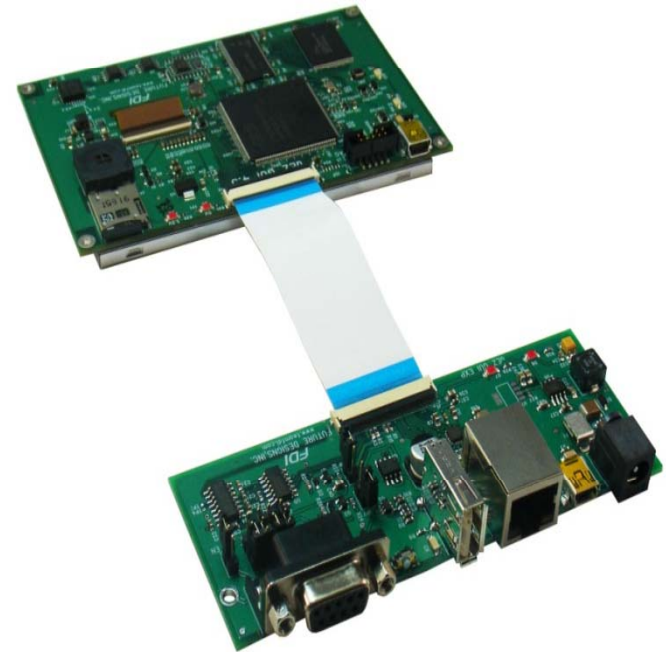


P/N uEZGUI-2478-43WQS
Resale Price \$299.00



uEZ™ GUI 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 in OEM Enclosure

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



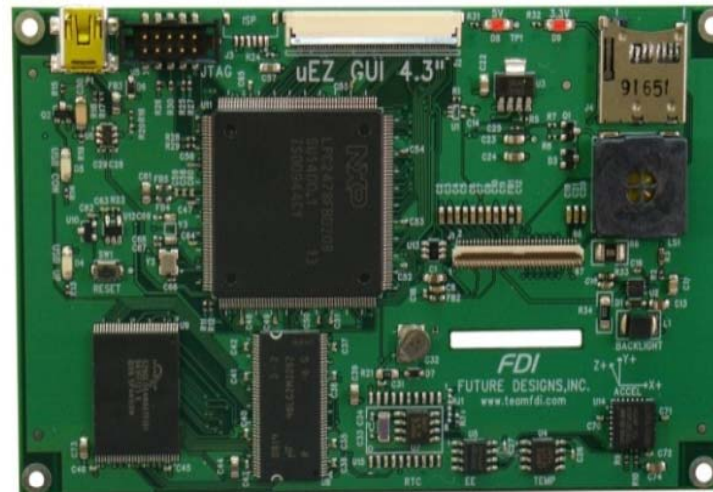
uEZ™ GUI with Larger LCD & OS options

- ▶ uEZ™ GUI with 7.0" WVGA LCD
 - LPC3250 Linux or WinCE based GUI Development Kit
 - Downloadable User Images and Customizable Menus
 - Rich set of I/O and Communication options



uEZ™ GUI for Other Microcontrollers

- ▶ NXP LPC1788 based uEZ™ GUI Kit
 - 100MHz Cortex-M3 based
 - 4.7" WQVA LCD targeted, but larger LCD's are possible
- ▶ Renesas RX based Direct Drive uEZ™ GUI Kit
 - Up to 200MHz 32-bit Family with 1.65 MIPS/MHz and low power
- ▶ Cypress PSoC5 based uEZ™ GUI Kit
 - 80MHz Cortex-M3 with Programmable Analog & Digital Blocks



Useful Links

- ▶ FDI Home Page

<http://www.teamfdi.com/>

- ▶ FreeRTOS Home Page

<http://www.freertos.org/>

- ▶ uEZ™ Home Page on Source-Forge

<http://www.sourceforge.net/projects/uez>

- ▶ NXP Standard IC MCU Home Page

<http://www.standardics.nxp.com/microcontrollers/>

- ▶ Rowley Associates Home Page

<http://www.rowley.co.uk/>

