FDI

4.3" Resistive Touch Screen LCD GUI

The 4.3" Resistive Touch Screen LCD GUI, **UEZGUI-4088-43WQH-BA**, adds enhanced processing capabilities and display features to FDI's standalone microcontroller-based µEZ® GUI product family. Featuring the high performance NXP LPC4088 microcontroller with Floating Point Unit and high speed SPIFI Flash, it provides wider IPS-like viewing angles and a brilliant 650 nit display. This product is optimal for math intensive applications including graphics processing at high speeds.

The Future Designs, Inc. µEZ® GUI product family is our standalone microcontroller-based solution designed for the easy integration of modern human machine interfaces (HMI) into a variety of end applications. Each µEZ GUI product includes a display with supporting hardware and FDI's open source µEZ / FreeRTOS software. FDI's µEZ GUI development kits include everything needed to kick off a µEZ GUI project including JTAG debugger, power supply, cables, microSD card and full documentation. Once your design is complete, we offer cost-effective production modules for prototypes or high-volume production.

FDI also offers engineering design and production support services. We are committed to saving our customers time, money and hassle. So, no matter how much (or little) support you need along the way, we can make your project concept a reality.

µEZ GUI Products are available for immediate order at www.TeamFDI.com or from any of our franchised distributors.

12.9 mm

Module Features

- 4.3" WQVGA 480 x 272 4-Wire Resistive Touch Screen LCD Panel
- NXP LPC4088 120MHz CPU with 512KB internal Flash
- 16MB of SPIFI Flash (optional to 64MB)
- 8MB of SDRAM (optional to 32MB)
- High Speed SD interface supporting 15fps video playback
- MicroSD Memory Card Socket
- USB Device Mini-AB for 5.0 VDC power and PC communications
- USB Host support through adapter cable
- NV Data Storage via 4KB Internal EEPROM
- Internal Real-Time Clock with Supercap Backup
- Speaker, 3-axis Accelerometer, Temperature Sensor
- Pmod Type 2A connector with SPI and optional I2C
- Mini-JTAG Debug Connector
- External Expansion via two I/O Connectors (70 pins)
    - UART, I2C, SPI, USB Host/Device, RMII Ethernet

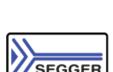Development Kit Part #: **uEZGUI-4088-43WQH**

Production Module Part #: **uEZGUI-4088-43WQH-BA**

Production gauranteed until 2024 or longer.

partner of
NXP

Technical Specifications

Production Module

• Part number: **uEZGUI-1788-43WQH-BA**

• Contrast Ratio: 500 : 1 typical
• Brightness: 705 nits typical
• Horizontal Viewing Angle: 75° L / 75° R
• Vertical Viewing Angle: 75° U / 75° D
• Power consumption typ/max: 600 / 750mA
• Overall Size: 116.8(W) x 72.1(H) x 12.9(D) mm
• Operating Temperature Range: -20℃ to +70℃
• Viewable area: 95.0(W) x 53.9(H) mm
• Weight: 102g
• Resolution: 480x272
• Glass Overlay: 0.55mm

Development Kit

• Part number: **uEZGUI-1788-43WQH**

• Includes uEZGUI-1788-43WQH-BA Production Module
• AC power supply
• Mini JTAG debugger with cables
• USB device cables for power and PC communications
• 4GB (or larger) microSD memory card
• Documentation and example software

Production Module

uEZ Software

    µEZ® (pronounced Muse) is an open source rapid development platform that allows companies to focus on innovation and their value-added applications while minimizing development time and maximizing software reuse. µEZ components comprise three primary categories to simplify embedded application development: Operating System Abstraction Layer (µEZ® OSAL), Sub-system drivers (ex: µEZ® TCP/IP, µEZ® USB, µEZ® Driver), and Hardware Abstraction Layer (µEZ® HAL)

FreeRTOS with Tasks, Semaphores, Mutex, Queues	SafeRTOS option for safety critical real-time applications	emWin Graphics library free with NXP ARM MCUs	FAT FS for USB/SD card with long-file name support	USB Host/Device including mass storage, HID Libraries
Wi-Fi library with integration into TCP/IP Stack from GainSpan	SEGGER JTAG development and production SW integration	10/100 Ethernet support with lwIP TCP/IP Stack	Memory SDRAM, NOR Flash, SPIFI Flash support	Audio PWM, DAC, and I2S support
TFT LCD support for QVGA, VGA, WQVGA, WVGA Displays	Multiple compilers and IDEs supported	Modbus TCP/IP and RTU support	Serial Comms I2C, SPI, UART, RS232, RS485, CAN & GPIO	Bootloader for field updates over SD/USB/Serial (affordable µEZ+)

Sales@TeamFDI.com
(256) 883-1240

TeamFDI.com

YouTube.com/ FDIProducts

All brand names and product names are trademarks or registered trademarks of their respective holder.   *Rev 1.0 12/23/15*