FDI

The 4.3" No Touch LCD GUI, **uEZGUI-1788-43WQT-BA**, provides a cost effective no touch option in the standalone microcontroller-based µEZ® GUI product family. This product is optimal for applications requiring a membrane keypad, rugged cap touch buttons or hot keys next to a beautiful TFT LCD display.

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.

11.9 mm

Module Features

- 4.3" WQVGA 480 x 272 No Touch LCD Panel
- NXP LPC1788 120MHz CPU with 512KB internal Flash
- 8MB of NOR Flash (optional to 32MB)
- 8MB of SDRAM (optional to 32MB)
- 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
- 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-1788-43WQT**

Production Module Part #: **uEZGUI-1788-43WQT-BA**

Production guaranteed until 2024 or longer.

partner of NXP

Technical Specifications

Production Module

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

• Contrast Ratio: 500 : 1 typical
• Brightness: 360 nits typical
• Horizontal Viewing Angle: 80° L / 80° R
• Vertical Viewing Angle: 55° U / 80° D
• Power consumption typ/max: 350 / 500mA
• Overall Size: 116.8(W) x 72.1(H) x 11.9(D) mm
• Operating Temperature Range: -20°C to +70°C
• Viewable area: 95.0(W) x 53.9(H) mm
• Weight: 85g
• Resolution: 480x272
• Glass Overlay: 0.55mm
• Glass Hardness: 2H

Development Kit

• Part number: **uEZGUI-1788-43WQT**

• Includes uEZGUI-1788-43WQT-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+)