

uEZGUI Users Manual

Covers the following products:
uEZGUI-1788-70WVT



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1. Introduction

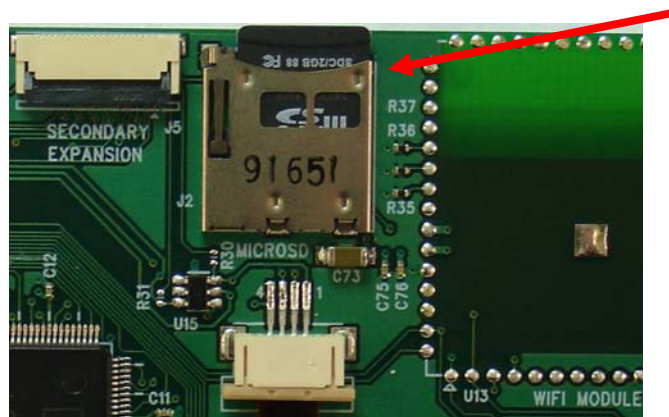
The uEZGUI is optimized to save development time in typical embedded control applications. The uEZGUI is packaged several different ways. Regardless of the hardware configuration, the software all works the same. An optional board, uEZGUI7-EXP, is available separately and includes expansion connectors for added flexibility and a range of hardware options.

2. Kit Contents

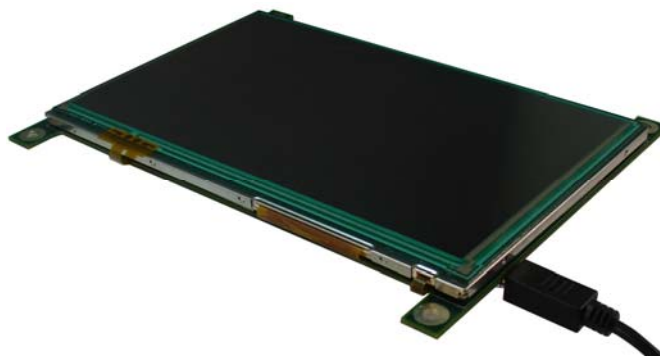
- uEZGUI-1788-70WVT Touch Screen Kit with LCD
- Segger Mini-JTAG Debugger and USB Cable
- FDI JTAG Adapter Board
- 2GB Micro SD card
- Stylus for Touch Screen
- Quick Start Guide
- Download Link for Rowley Crossworks IDE

3. Startup Procedure

The uEZGUI kit comes with a pre-installed 2 GB micro SD card that contains files required for the slide show to run. It also contains users' manuals, schematics, and documentation for the product.



Power is supplied via a USB cable and power supply provided in the kit. Connect the USB cable to the mini B USB connector labeled 5V 1A min input only.



The following screens should appear once power has been applied to the kit:



At this point the unit is ready for software demonstrations and user operation.

The uEZGUI will appear as a USB Flash Drive to the PC, thus allowing the user to read and write files directly to the Micro SD card.

4. Demonstration Software Main Menu

The Demonstration Software has the following options:

Slideshow

Selecting the slideshow icon will cause the Micro SD card to be read. This demonstration allows the user to select between several example slideshow options such as “Introduction to uEZ GUI”, “Demonstration Pictures”, “FDI Overview”, “Strategic Partners”, etc. Select the play button to begin the automated slide show or manually “drag” a stylus or finger at least half way across the screen. After approximately 30 seconds of inactivity the slideshow will begin to auto scroll. The user can regain manual control at any time by “dragging” forward or backwards to the next slide. Click on the “X” to return to the main menu.

Setting up a slideshow:

The Slideshow demonstration loads and scrolls between images provided on a micro SD card. Images must be in 24 bit uncompressed Targa (.TGA) format. Adobe Photoshop and many other graphics programs can save images in this format. The images must be 800x480 and 11.11”x6.67” in size and use the file names WVSLIDExx.TGA where xx is 00 thru 99. (i.e. WVSLID01.tga, WVSLID02.tga, etc)

Under the “Apps” Icon are the following programs:

Accelerometer

Selecting this icon demonstrates the accelerometer feature by moving a simulated ball across the screen as the uEZGUI board is tilted along the X and Y axis. To return to the main menu touch the exit icon.

Time and Date

This feature displays the current time and date from the external Real Time Clock (RTC). Touch “Time” to advance to the “Set Time” screen or touch “Date” to advance to the “Set Date” screen and set or update the date as necessary. To change the time or date simply click on the section you want to change and increase or decrease using the up and down indicators. Once time/date are set an on-board super cap will back-up the data for several days (typically) if the unit is powered off. To return to the main menu touch the exit icon.

Temperature

Selecting this icon displays the temperature from an LM75 temperature sensor. To select between Celsius and Fahrenheit click the “C” or “F” to change. Verify that a valid temperature is displayed. To return to the main menu touch the exit icon.

Exit the “Apps” Icon to the main screen are the following programs

Communications

This option is inactive in the basic kit and is only valid on uEZGUI-1788-70WVT with the optional Expansion Board added for Ethernet communications.

Settings ICON

Calibrate use this feature to calibrate the LCD for the first time or if the calibration settings need to be updated.

Functional Test a step by step test of the following parameters:

- Real Time Clock
- Speaker test
- LCD color test
- SDRAM size test
- Temperature
- EEPROM test
- NOR Flash Memory test

Draw

A very simple art program is provided. Use the touch screen to draw lines in the box to the right. Clicking on **Color** allows the color to be changed between various options. Hint – use black to erase. **Save** stores the graphic image as the file IMAGE.RAW on the Micro SD card. **Load** recalls the saved graphic image from the Micro SD card.

Additional Documentation and Software Updates

Complete Users Manuals, Schematics, and documentation are available on the Micro SD card provided with the uEZGUI Kit and are also available from the following websites (please refer to the websites for the latest updates):

- Future Designs Support Page - www.teamfdi.com/uEZGUI
- uEZ Source Code - <https://sourceforge.net/projects/uez/>
- Segger Mini-JTAG Debugger - <http://www.segger.com/cms/jlink-software.html>
- Rowley Crossworks IDE download for 30-day evaluation - <http://www.rowley.co.uk/>