



BENEFITS OF UltraGUI



- ▣ Appealing graphics and user interface developed in HTML environment ensuring low development cost and fast time to market
- ▣ Fast and easy integration of the UltraGUI controllers in existing and new products
- ▣ Versatile I/O port set for interoperability with various devices (2xUART, 1xSPI 1xTWI)
- ▣ Directly programmable via USB or UART

UFX-772-402

UltraGUI 5.7" Touchscreen LCD Controller Module

The UltraGUI touch screen kit consists the UltraGUI Board, an interface board, and a TFT LCD panel. The kit can be directly placed into the end user's device panel frame. It can be fitted or retrofitted in any system, replacing the expensive electro-mechanical panel assemblies. The GUI interface is μ HTML based and is both visually appealing and ergonomic. The controller board includes multiple commonly used ports and interfaces, such as UART and SPI. The communication protocol is user defined so it can communicate with the controlled devices. This makes UltraGUI a versatile and cost effective device. The touch screen kit provides the possibility of having the same panel used across an entire product range, while giving all the different products a unique appearance and flexibility of operation.





BENEFITS

- Functionality will no longer be predetermined by buttons and indicators that are already fixed in the system. By UltraGUI's use of μ HTML web page design, the screen layout of the panel can be easily updated to accommodate new designs
- The UltraGUI touch screen set is easy to integrate and is directly portable to production
- Manufacturing and labor cost of a device could be significantly reduced with the use of UltraGUI. This is achieved by fitting only one panel instead of numerous different control/signaling devices, such as various buttons, lamps, 7-segment LEDs, rotary or sliding controls, and all of the control circuitry for them

FEATURES

- 640X480 pixels 5.7" TFT LCD Touchscreen with 18bpp color + alpha blending
- UltraGUI board Powered by Amulet Technologies GEM Graphical OS Chip that executes HTML applications and a royalty free μ HTML compiler
- The complete set of Amulet Technologies HTML widgets is provided
- A versatile I/O port set for interoperability with various devices (4x GPIOs controllable via μ HTML code, 2xUARTs, 1xSPI 1xTWI). The board can also be operated as a stand alone embedded controller
- Directly programmable via USB or UART
- Wide input voltage range 6VDC-24VDC

TECHNICAL DATA

MCU

- Amulet Technologies AGB75LC04-QU-E color embedded GUI chip

POWER SUPPLY

- Voltage input: Unregulated 6Vdc -30Vdc / 8Watts (Power requirements vary across the Vin range)

INTERFACES

- 2x UARTs (3,3v TTL level) + 1 programming UART via USB
- 1xSPI
- 1xTWI
- Four GPIO 3.3v level pins
- Power 3.3v level control pins

APPLICATIONS

- Process automation consoles - UltraGUI is able to display various process variables and measured data from sensors. Alerts could be sent via GPIOs to request a user reaction. Serial communication port could be used for issuing of control commands
- Building automation - Displays various data, allows implementation of remote appliance control, etc.
- HVAC control front panel to multiple systems incorporating UART interface
- Access management systems - Can be connected with biometric input devices via UART. For example, a control panel may allow access, log attendance, and control electric locks.
- Vending machines
- Small information kiosks
- Retrofit existing products

