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FTDI Indiegogo Project: Highly Sophisticated Touch-Enabled HVGA Display Shield Takes Work-load off Arduino Units

New CleO offering addresses needs of educational, hobbyist & OEM markets

23rd February 2016 - Following the success of its previous crowdfunding project, *NerO*, FTDI Chip has just announced a new Arduino-related product for which it is once again using Indiegogo to promote to the global engineering fraternity.

The objective of *CleO* is to bring to market a family of intelligent, simple to program TFT display boards through which engineers can develop imaginative, compelling human machine interfaces (HMIs) regardless of their experience level. Using Arduino as a foundation, this hardware is able to leverage FTDI Chip's high speed bridging and display technology so that improved performance and greater functionality can be benefitted from.

The first member of the *CleO* family to be introduced has a HVGA 320 x 480 pixel resolution, 3.5" format TFT display with a resistive touchscreen. The display supports both portrait and landscape implementations. An FTDI Chip

FT810 embedded video engine (EVE) second generation graphic controller is responsible for the HMI operation, while the company's 310DMIPs FT903 microcontroller deals with any additional processing tasks. Its advanced file system supports up to 8 file operations simultaneously. An 8MByte eFlash memory is incorporated for embedded data storage purposes, with a Micro-SD card socket allows external storage up to 32MB. Connectivity options include an Arduino UNO SPI interface, a camera interface, FT903 IO expansion and USB DFU port for firmware updates. The PWM audio output and built-in speaker amplifier facilitate incorporation of sound (beeps, chirps, key taps, musical notes, etc.) into the HMI implementation. *CleO* does not require any prior knowledge of complex graphics programming or mathematical algorithms. Engineers, students and hobbyists will be able to refer to an extensive tutorial – 20 chapters covering over 80 different programming topics combined with 20 fun DIY example projects.

"Though Arduino units have provision for inclusion of a display element, in many cases it will be necessary to connect the display to the outside world, so that data can be acquired from sensors, actuators, switches and various communication mechanisms, " explains Fred Dart, FTDI Chip's CEO and Founder. "Having so many different tasks to address will put a lot of strain on the UNO architecture. However, via *CleO*, a large proportion of the heavier computational tasks can be offloaded, not just the HMI, but also file system, camera and sound output can all be taken care of. This means that more exciting and ambitious Arduino design projects may be embarked upon, while still having access to the vast scope of shields and supporting documentation that accompanies Arduino UNO."

CleO enables smooth animation of graphical content at rates of up to 60fps. Its anti-aliased graphics result in the rendering of finer detail images, with no jag-

ged edges being witnessed. Fast direct file transfers between the *CleO* graphics subsystem and the micro-SD/eFlash memories can be completed without needing to use the Arduino's resources. Accessories for *CleO* include cameras, speakers and power adaptors.

Indiegogo backers will be able to get FTDI Chip's *CleO* at a special discounted unit price of $49/£35 (~25% off the retail price). This discount applies to any *CleO* accessories purchased on Indiegogo too.

To learn more about this project and make your pledge, go to: http://www.ftdichip.com/CleO

About FTDI Chip

FTDI Chip develops innovative silicon solutions that enhance interaction with the latest in global technology. The major objective from the company is to 'bridge technologies' in order to support engineeers with highly sophisticated, feature-rich, robust and simple-to-use product platforms. These platforms enable creation of electronic designs with high performance, low peripheral component requirements, low power budgets and minimal board real estate.

FTDI Chip's long-established, continuously expanding Universal Serial Bus (USB) product line boasts such universally recognized product brands as the ubiquitous R-Chip, X-Chip, Hi-Speed and SuperSpeed USB 3.0 series. In addition to both host and bridge chips, it includes highly-integrated system solutions with built-in microcontroller functionality. The company's Embedded Video Engine (EVE) graphic controllers each pack display, audio and touch functionality onto a single chip. The unique, streamlined approach utilised by these ICs allow dramatic reductions in the development time and bill-of-materials costs involved in next generation Human Machine Interface (HMI) implementation. FTDI Chip also provides families of highly-differentiated, speed-optimised microcontroller units (MCUs) with augmented connectivity features, specifically designed with compatibility to its USB and Display product lines in mind. These MCUs are targeted for key applications where they can add value with their superior processing performance and high levels of operational efficiency.

FTDI Chip is a fab-less semiconductor company, partnered with the world's leading foundries. The headquarter is located in Glasgow, UK and is supported with research and development facilities in Glasgow, Singapore and Taipei (Taiwan) plus regional sales and techical support sites in Glasgow, Taipei, Tigard (Oregon, USA) and Shanghai (China).

For more information go to http://www.ftdichip.com

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