

## 5" Format Arduino-Compatible Touch-Enabled Display Shield Delivers Abundance of Added Value

Superior IC technology heightens performance plus expanded interfacing enables connection with Arduino & mikroBUS<sup>TM</sup> related hardware

Having already seen strong market uptake of the initial *CleO* smart display solution for rapid development of human machine interfaces (HMIs), Bridgetek and FTDI are now expanding this product family to include a higher end version. Based on the widely-praised Embedded Video Engine (EVE) technology, the new CleO50 shield has a larger 5.0" diagonal 800 x 480 pixel resolution TFT with built-in resistive touch screen, plus enhanced audio capabilities. As with the previous CleO solution, the CleO50 relies on advanced semiconductor devices. To take care of processing tasks, as well as bridging between connected hardware and fast interface accessories (such as the camera module option), it incorporates an FT900 low power, performance-optimised 32-bit microcontroller with 8MBytes of on-board Flash memory. For this latest display solution, the graphics controller element has also been upgraded to an FT812 EVE IC, in order to support the larger, higher resolution screen and furthermore so that the CleO50 can benefit from 24-bit colour depth and video playback capabilities. Another important new feature is the mikroBUS<sup>TM</sup> interface, via which the shield can connect to a vast array of different plug-andplay 'click boards' from MikroElektronika and thereby add extra functionality as required (such as heart rate monitors, rotary switches, communication modules, real-time clocks, accelerometers, GPS transceivers, etc.), without the inconvenience of having to alter the hardware settings. The shield's Micro SD card slot can accommodate both standard SD (up to 2GByte) and high capacity SD (4GByte to 32GByte) memory cards. A PWM audio output with in-built speaker amplifier ensures elevated audio quality.

"Through the *CleO* product offering engineers are provided with an intelligent TFT display platform on to which they can create HMIs that have more sophisticated features and greater operational effectiveness than would be possible with normal Arduino display shields, while still having all the advantages associated with Arduino when it comes to accessing a broad range of different add-on boards. With *CleO50* we are able to take this concept even further, bringing boosted performance, better interoperability and more scope for differentiation." states Fred Dart FTDI Chip's founder and CEO. "These units are suitable for everyone, from the most adept of engineers right through to complete beginners, with a comprehensive supply of education material and in-depth example projects to accompany them."

To get more information on the CleO product offering there is a dedicated website: www.CleOstuff.com