Advanced HMI Development Modules Feature 5" WVGA Resolution Touch-Enabled LCDs & Audio Capabilities

New arrival on the embedded systems market Bridgetek has just introduced a series of development modules. These items of hardware are designed to assist engineering professionals as they strive to implement more sophisticated and functionality-rich human machine interfaces (HMIs) and ensure market differentiation. Based on the second generation of the multi-award winning Embedded Video Engine (EVE) devices, the modules provide engineers with a foundation on which to rapidly prototype, or even directly construct superior HMIs. They each have a 5.0" format 800 x 480 pixel TFT display capable of supporting both portrait and landscape orientations. A built-in audio amplifier is also included on these units so that an external 1W speaker can be attached to them.

The first 2 products in this new series are the ME812A-WH50R and ME813A-WH50C, which respectively utilise the FT812 and FT813 EVE advanced graphic controller ICs, and correspondingly support resistive and capacitive touch screens. Each of these modules behaves as a SPI slave,

consequently requiring use of a SPI Master in order to take care of microcontroller interfacing and system integration. Further modules that behave as USB devices, and can be accessed from a PC or any other form of USB host, will be added to the series shortly. The capacitive touch screen based modules offer multi-touch operation (with provision for up to 5 simultaneous touch points), while the resistive touch screen module allows touch operation through gloved hands (something of great value in industrial applications).

EVE graphics controller ICs combine display, touch and audio functionality within a single chip and take an innovative object-oriented approach to HMI implementation that is proving highly effective. It leads to more streamlined solutions that are simpler to create, with significantly lower component counts, reduced board space requirements, curbed power consumption, etc. The second generation EVE devices at the heart of these new development modules have greater pixel resolution than the previous EVE ICs, resulting in sharper image rendering and greater colour depth. They also have accelerated data transfer and image/video loading capabilities, enhanced video playback, plus expanded memory resources. All of the modules are supplied with a bezel that has 4 mounting holes to facilitate system assembly.