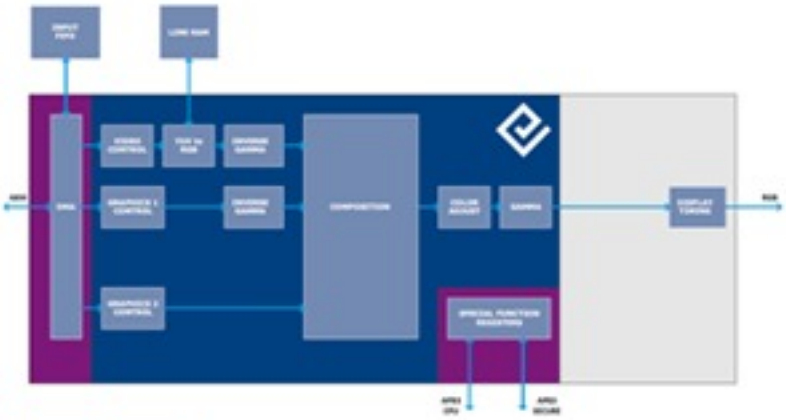
Display controller core family targeted at high-end mobile/portable products



Silicon intellectual property (IP) provider Evatronix SA has announced the release of the first member of its PANTA high performance display controller core family. Developed using ARM technology the PANTA DP20 is targeted specifically at high-end mobile/portable products, like smartphones and tablet PCs, with ultra-low power consumption that does not sacrifice processing performance.

The PANTA DP20 off-loads the general purpose central processing units (CPUs) from power-consuming video processing tasks, like composition of up to 3 graphics or video layers, YUV to RGB conversion, alpha-blending and gamma correction. It supports a variety of display standards and features programmable resolutions of up to 8191x8191 pixels. The processor's output pixel interface, with HSYNC, VSYNC and blanking signals, is compatible with HDMI (also 3D) and MIPI DPI interfaces. A plethora of RGB and YUV pixel formats are supported, as well as progressive/interlaced video input.

The processor features support the advanced AMBA 4 AXI4 system bus protocol, which increases performance and lowers data transfer latency within the application. As the same bus is supported by the latest ARM Cortex™ processors and Mali™ graphics processing units (GPUs), the integration of the PANTA DP20 into the ARM environment is made straightforward.

The PANTA DP20 is the world's only licensable display controller IP to currently

support ARM TrustZone technology. Access to the PANTA DP20 can be controlled by secure signals exported from an ARM TrustZone enabled processor and are able to prevent unauthorized transformations or capture of secured images.

Ben Cade, Vice President & General Manager, secure services division, ARM commented: “We are pleased to be working with Evatronix to provide TrustZone capable IP that enables system-wide hardware security.” He continued, “When ARM security technology is integrated into innovative solutions, such as the Evatronix PANTA DP20, higher levels of protection are possible. This makes it easier for consumers to carry out mobile payments, share personal data and view premium content using their smart connected devices.”

ABOUT THE EVATRONIX PANTA FAMILY
Evatronix PANTA is a family of high-resolution display controller and processor IP cores for advanced multimedia applications. Developed as a result of a strategic partnership with ARM, these cores feature the latest technologies available for mobile devices, thus enabling creation of revolutionary applications and greatly enhanced user experience.

For more information please visit the company’s web site at www.evatronix.com/ip [1]

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