OMAP35x Application Processors

OMAP35x processors inspire new applications with unprecedented performance at handheld power levels
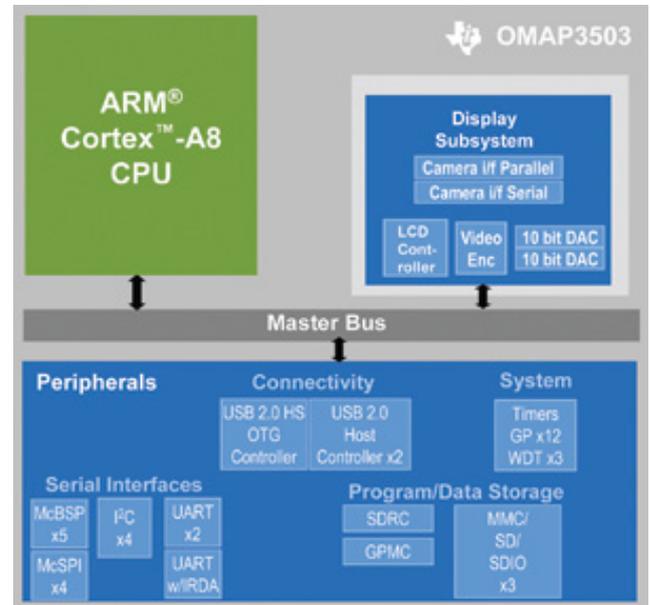
OMAP35x processors are the fi rst to market with the high-performing ARM® Cortex™-A8 core offering 600 MHz for four times performance improvements over today's ARM9 devices. These applications processors offer the industry's best combination of general purpose, multimedia and graphics processing in any single-chip combination and will allow OEMs to redefi ne the standards for advanced user interfaces, web browsing, productivity, enhanced graphics and the multimedia experience.

The best general-purpose, multimedia and graphics in any combination

The OMAP™ platform offers four different combinations of the ARM Cortex-A8 core, multimedia rich peripherals, OpenGL® ES 2.0 compatible graphics engine and DaVinci™ technology for applications incorporating video. Rich peripherals and display subsystems allow for seamless connectivity for lower bill of materials cost and reduced board footprint and power usage. With pin-for-pin compatibility, OMAP35x processors minimize development costs by leveraging software and hardware reuse. The OMAP35x generation of processors includes:

• **OMAP3503** – The OMAP3503 processor features a 600-MHz ARM Cortex-A8 along with a rich set of peripherals and memory. With 1200 Dhrystone MIPS performance, the OMAP3503 processor can run operating systems, such as Windows®CE and Linux and will allow faster boottimes, web browsing and compelling Java applications.

• **OMAP3515** – The OMAP3515 processor consists of the same peripheral set and ARM core as the OMAP3503 processor with the addition of the fi rst broadly available, integrated OpenGL ES 2.0 graphics engine. The OMAP3515 processor can achieve PC gaming quality graphics, making it the processor of choice for embedded gaming or simple portable navigation systems. Based on Imagination Technologies PowerVR SGX graphics accelerator, the OMAP3515 processor brings photorealistic graphics to handheld devices.

• **OMAP3525** – The OMAP3525 processor has the same features as the OMAP3503 processor with the addition of integrated DaVinci technology for audio, video and imaging and multimedia acceleration capabilities.Integrated DaVinci technology combined with hardware-enabled video and image processing as well as dedicated video-centric peripherals allows the OMAP3525 processor to decode up to high-defi nition video at MPEG-4 SP at 720p, 30 fps, all at under 500 mW.

• **OMAP3530** – The OMAP3530 processor brings all the features of the OMAP3503, 3515 and 3525 processors together on one chip. With an integrated ARM®, DSP, graphics engine, DaVinci™ technology and a rich peripheral set, the OMAP3530 processor brings high performance and power effi ciency to productivity and entertainment applications.

Please contact our TI specialists for more information:
SILICA / Avnet EMG Ltd.
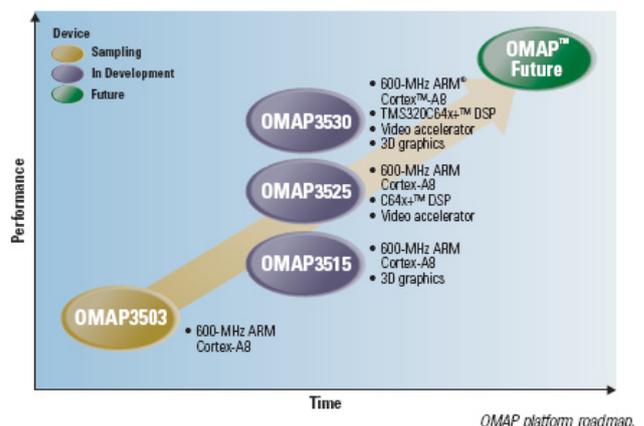Phone: +44 (0)1438 788310
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TI's SmartReflex™ technologies

TI's SmartRefl ex Power and Performance Management Technologies reduce power consumption and optimized performance. SmartRefl ex technologies are a broad range of intelligent and adaptive hardware and software techniques that dynamically control voltage, frequency and power based on device activity, modes of operation and temperature.

Complementary analog

The TPS62350 is a high-frequency synchronous step-down DC/DC converter optimized for portable applications. Intended for low-power operation, the TPS62350 supports up to 800-mA load current and allows the use of tiny, low cost inductors and capacitors. The TPS62350 operates at a 3-MHz fixed switching frequency, and enters into a power-save mode operation at light-load currents to maintain high effi ciency over the entire load current range. The device's serial interface is compatible with fast/standard and high-speed mode I2C specifi cation, allowing transfers at up to 3.4 Mbps.

OMAP platform roadmap.