

Extreme performance with
Green Technologies



Samsung Orion

Dual ARM Cortex-A9 based 1GHz Mobile Application Processor

Come experience the performance edge of Samsung's dual core processor. The Orion offers the best mobile 3D performance and native triple display capability, while achieving the lowest power consumption in its class. Orion is the perfect choice for your next-generation cutting-edge Smartphone and Tablet PC products.



Samsung Orion

Dual ARM Cortex-A9 based Mobile Application Processor

Key Features & Benefits



The Best CPU and memory architecture for Smartphone & Tablet PC

- World best low power dual core processor in 45nm LP process to run at 1GHz
- Dynamic virtual address mapping and Automatic interleaving unit
- Multiple power domains and Dynamic voltage/frequency scaling
- System level performance & power optimization: DDR3, Backlight control, LP audio DSP



The best 3D graphics and display performance

- 3,200M pixels/sec rendering performance
- High memory bandwidth support: 6,400M Bytes/sec
- Native triple display: WVGA dual display & simultaneous 1080p HDMI output



Rich high speed interfaces to reduce system BOM cost

- DDR3 support: Bit cross in 2011
- MMC 4.4 DDR 8-bit interfaces
- High-speed Link and PHY integration: USB, HSIC, SATA & PCI express
- Integrated GPS

System Block Diagram

