



Extreme performance with
Green Technologies

Samsung S5PC110/S5PV210

ARM Cortex-A8 based 1GHz Mobile Application Processor

Experience the performance advantages offered by Samsung's 1GHz mobile CPU. The S5PC110/S5PV210 provides state-of-the-art 3D performance and a rich collection of multimedia support, while achieving the lowest power consumption. It is the only sensible processor choice for Smartphone and Tablet PC products.



SAMSUNG

Samsung S5PC110/S5PV210*

ARM Cortex-A8 based Mobile Application Processor

Key Features & Benefits



Low power consumption without compromising performance

- World 1st Cortex-A8 based AP in 45nm LP process that runs at 1GHz
- Ample memory bandwidth from 200MHz LPDDR/LPDDR2/DDR2 Dual channel support
- Multi power domain and Dynamic voltage/frequency scaling



State-of-the-art 3D graphics performance

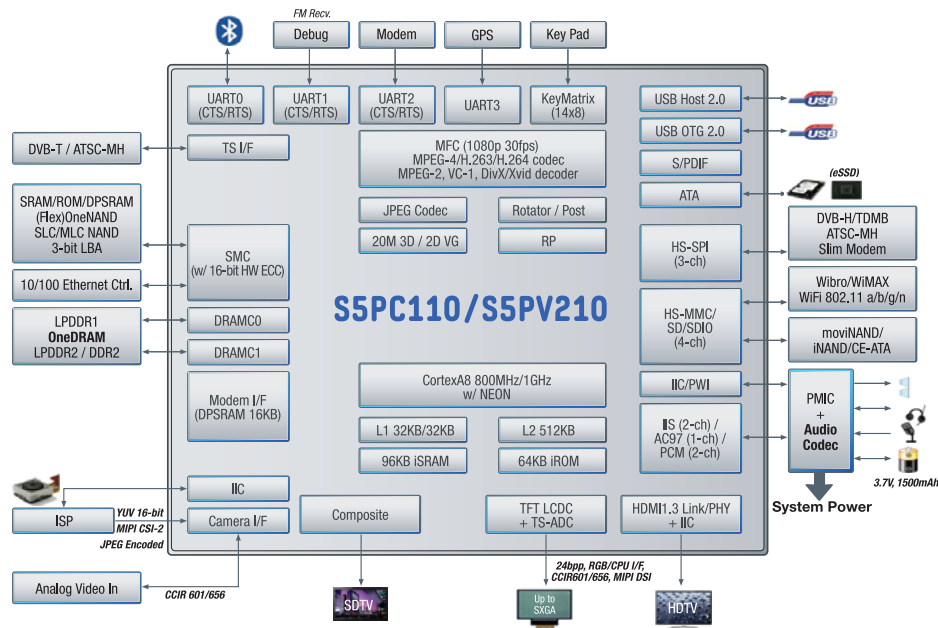
- 1,000M pixels/sec rendering performance
- 3,200M Bytes/sec data bandwidth via dual channel memory interface
- Supports a variety of OS platforms



High performance hardware video codec

- 1080p 30fps video encoding and decoding
- Full support of the most complex video codec and profiles: H.264 HP and MPEG4 ASP

System Block Diagram



Tablet Reference platform

S5PC110 Tablet reference platform (ODROID-T)

Processor	Samsung S5PC110 Cortex-A8 1Ghz with 512KB L2 cache	Audio	Built-in speaker and microphone, standard 3.5mm headphone jack
3D Accelerator	SGX540 (up to 20M triangles/s and 1000M pixels/s)	I/O	USB 2.0 HS Device for ADB/Mass storage, UART/JTAG for development
Memory	512MB Mobile DDR 400Mhz data rate	DC Jack	5V/2A power
Flash	OneNAND 512MB	USB	USB 2.0 HS Host (standard A type connector)
Slot	Micro-SD slot (2GB bundle) Standard SDHC slot	WiFi	802.11 b/g
Display	10.1-inch, 1366 x 768 LVDS interface with capacitive touch screen.	Bluetooth	2.0 + EDR
Video	Supports 1080p via HDMI cable (H.264+AAC based MP4 container format)	Other Features	3-axis accelerometer, External GPS
Video Out	Mini-HDMI connector with SPDIF audio	System Software	u-boot 1.3.4, Kernel 2.6.29, Android Eclair 2.1



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