



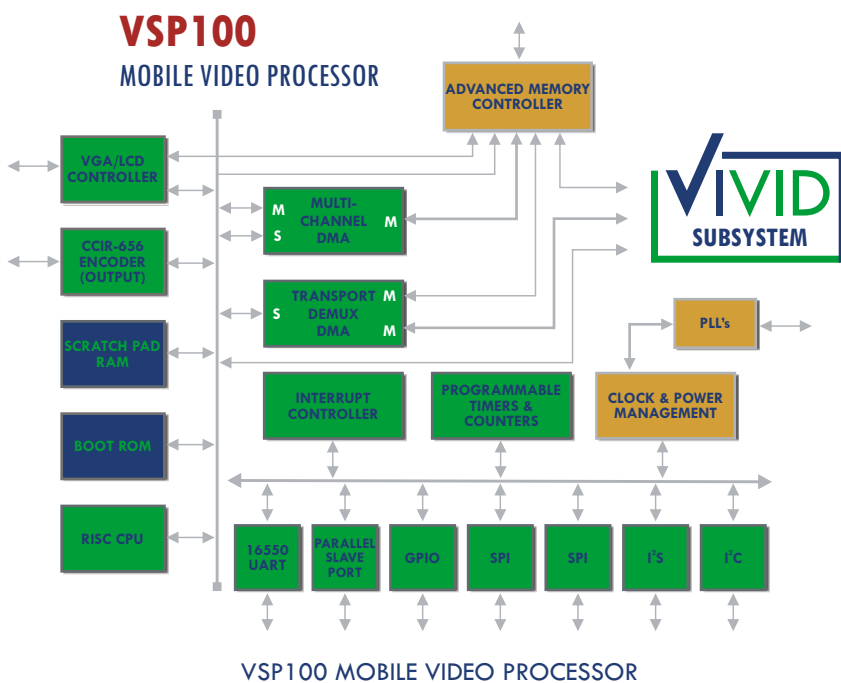
VSP100

MOBILE VIDEO PROCESSOR

The VSP100 Mobile Video processing chip is ideal for low cost, next generation consumer devices that require up to D1 video performance capabilities. These include MP3 players (including low quality "MP3.5" and "MP4" devices), video cell phones and embedded video devices. The low power, small die size solution enables high quality video on mobile devices at very low silicon cost. It supports multiple video and audio media standards and comes complete with a full application library. The VSP100 is supported by a complete development environment.

The advanced ViViD Media Subsystem, a highly optimized multi-processor core for video, image and audio processing, powers the VSP100. The ViViD Subsystem provides high performance processing at low clock rates through a combination of parallel processing and customized instructions and accelerators. It supports a wide range of video, audio and image standards.

In addition, the VSP100 is fully programmable enabling you to create value-added features and adapt to changes in your product requirements.



KEY ADVANTAGES

- Optimized specifically for media decoding and the needs of portable video players and MP3 video devices (MP4)
- Low Cost chip designed for easy integration into existing consumer device systems
- Low Power operation and advanced power management capabilities increase battery life
- Fully programmable platform to extend product life, enhance differentiation and increase product depth

PRODUCT FEATURES

- High performance multi VLIW core processor - ViViD Subsystem
- Low Power with integrated power management features
- Multiple Video Standards – H.264/AVS, MPEG4, MPEG2, WMV9, Real Media 10
- Digital Image – JPEG Compression and Decompression
- Complete Media Software Suite and Application Framework



Powering the **NEXT** Generation
of Consumer Electronics

VSP100

MOBILE VIDEO PROCESSOR

On-Chip Processors

- ~25 to 50 mW operation for media playback
- Up to 150 MHz OpenRISC Host CPU
- 125 MHz ViViD Core

High Quality Real-time Video

- Up to D1 in real-time at 30 fps
- Video post processing including deblocking, deringing, scaling, rotation, etc.
- High performance, video-aware DMA engine
- Integrated LCD controller including user programmable resolution, timing and control and up to 32 bit internal precision

Low Power Consumption For Extended Battery Life

- Integrated power management features
- Very low clock frequency requirements for advanced video functions
- Modes: Active, Sleep, Power-Down

Multiple Media Standards

- All media components are provided in complete source code/firmware
- H.264/AVS Baseline Profile
- MPEG-4 Advanced Simple Profile
- DivX support
- MPEG-2 Video MP@ML
- WMV9 and Real Media10
- JPEG Image Compression/Decompression

Complete Software Suite

- All video codecs
- Full media framework API for interaction with media codecs

Fully Programmable platform

- Development Platform on PCI boards with full software drivers

DEVELOPMENT TOOLS & BOARDS

The Vivace Development System enables quick and easy development, debug, integration and test of hardware and software for a wide range of CE and wireless devices. The system is PC-based, running under the Windows environment and can be used with Vivace's development boards or customer-designed hardware. Combined with the RISC-based family of video and baseband processors, the system enables fast time-to-market and easy software/hardware re-use.

ABOUT VIVACE

Vivace Semiconductor develops high-performance, low-power video processing chips that are optimized for the needs of high-growth consumer market segments. Its chips support a full range of video and audio standards, are based on the company's proprietary ViViD™ Media engine and include a complete software suite for media processing and a fully programmable, open platform for additional software integration.



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