**ARM** The Architecture for the Digital World®

Digital Still Cameras

ARM is the world's leading provider of physical semiconductor intellectual property (IP) for the design of complex System-on-Chip (SoC) integrated circuits. ARM is at the heart of Digital Still Camera (DSC) technology, enabling our silicon partners to integrate the IP functionality into a single System On Chip (SOC). Designers are free to choose from a family of Processors, Graphics Processors, System IP and Physical IP that provide the best performance, cost and power optimization.

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(1/2) Autoscope Solo Terra
Video Detection System

Request More Information

Optimized ARM Digital Still Camera Block Diagram
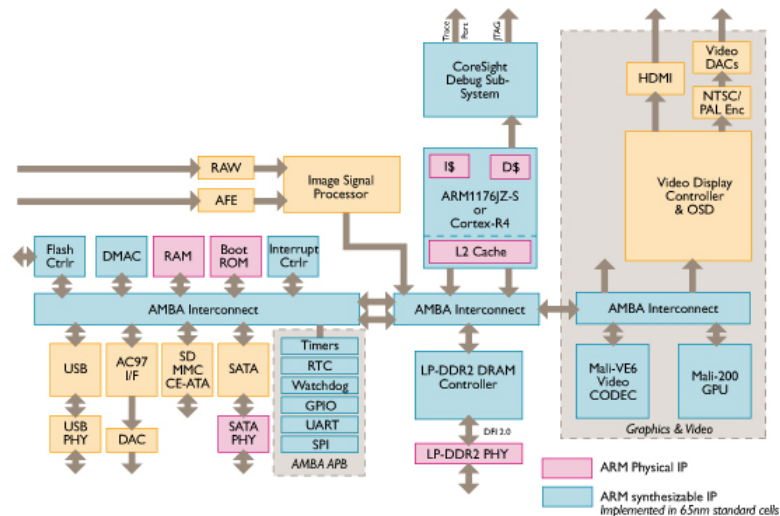
Overview   ARM Value   Relevant ARM
                  Proposition   Products

The DSC is the portable imaging device that enables one to record beautiful and memorable pictures, with easy manual or automatic operation. The DSC must include these features:

- high resolution picture quality
- motion picture capture
- recognition of object behavior
- longer battery life
- 3D user-friendly interface
- all with decreased cost constraints

ARM Home solutions for the DSC leverage the same ARM technologies that have powered the vast majority of the world's mobile phones.

Similar to today's mobile phones, portable applications such as DSCs require extremely efficient operation due to battery life requirements. ARM is an excellent fit for this market and is the main controller of choice in imaging applications.

ARM offers a very wide range of Processors, GPUs, and now video processing IP blocks for every segment of the DSC market.

- ARM NEON technology accelerates software audio and video CODECs downloaded from the internet.
- ARM TrustZone technology provides the underlying foundation for strong security enabling DRM services.
- ARM CoreSight technology eases SoC and board bring-up and speeds time-to-market by enabling real-time high-speed trace of the multiple on-chip processors within a SoC.

- ARM AMBA Interconnect maximizes the ARM CPU performance by providing a low-latency path to memory whilst its QoS (quality-of-service) feature balances the system loads within the SOC.
- ARM Physical Logical IP, including Standard Cell Libraries and Power Management Kits at 28 nm to 65 nm, reduce cost and power usage by minimizing silicon area and leakage, while optimizing performance.
- ARM Physical IP Embedded Memory at 28 nm to 65 nm creates the high-density on-chip memories on a SoC that can exceed 1 MByte today. The resultant memories, optimized for both performance and power, offer fault tolerance to increase manufacturing yields.
- ARM Physical IP DDR PHY enables robust off-chip memory interface performance at high clock-speed and low power.

Additionally, the ARM Connected Community provides a wide range of OS, Middleware and tools support for all ARM IP.

Application Processors

- ARM926
- ARM946
- ARM11MPCore
- Cortex-A5
- Cortex-A9

Embedded Processors

- Cortex-M0
- Cortex-M3
- Cortex-R4

‣ ## Graphics and Video Processors

- Mali-55
- Mali-200
- Mali-400 MP
- Mali-VE

Technologies

System IP

- AMBA AXI Network Interconect (NIC-301)
- Prime Cell Level 2 Cache Controllers
- PrimeCell Memory Controllers
- CoreSight

Physical IP

- Logic IP – Standard Cell Libraries for 28nm to 65nm
- Embedded Memory for 28nm to 65nm
- DDR PHY

Tools

- DS-5 Development Studio
- Streamline Performance Analyzer
- Fast model & Fixed Virtual Platforms

Services

- Training
- On-site Services
- Support & Maintenance