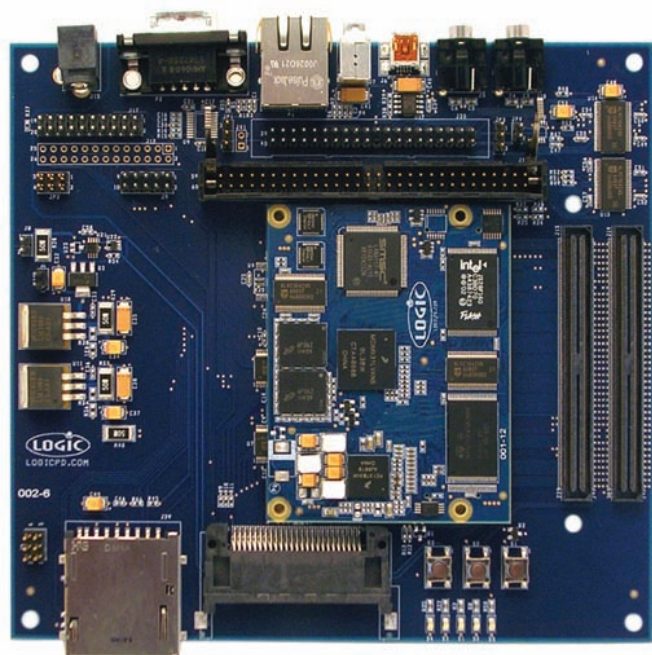


Freescale's i.MX31 Combines ARM11's Core Performance with Smart Speed Technology for Low Power

Top-level support ensures enhanced product development.



The Freescale i.MX31 multimedia applications processor is ideal for power-thirsty applications such as video and audio media players, mobile gaming consoles, and GPS systems, as well as smartphones, PDAs, ultra-portable handheld computers, and other wireless mobile devices. Based on an ARM11 core, the i.MX31 processor includes leading power management, security, digital rights management, and image-processing technology, a formidable combination of features to drive high-performance video, audio, and 3D gaming content on wireless mobile devices. The processors are designed with Freescale's Smart Speed Technology that enables ultra low power consumption and performance equivalent to processors with much higher megahertz.

Hardware Development Tools

- The MCIMX31ADS consists of a base board, a CPU board, and a power management board. An LCD display panel, an image sensor, and a separate keypad are supplied with the ADS.
- The MCIMX31LITEKIT (available Q4 2006) is a more cost effective kit that includes a smaller form-factor base board and system on a module card engine to enable rapid evaluation and design with the i.MX31.
- Complete board support packages, including Linux and Microsoft WindowsCE.net and Windows Mobile, and Symbian, are available for use with this development system.

Smart Speed Technology

The i.MX31 is built using Freescale's proprietary Smart Speed technology architecture. Among the many innovative power-saving techniques Freescale engineers designed into the processors is a patent-pending Dynamic Process Temperature Compensation (DPTC) mechanism, Dynamic Voltage and Frequency Scaling (DVFS). Parallelism is achieved via the 6 x 5 Smart Speed Crossbar Switch that virtually eliminates wait states and enables the processor to drive equivalent performance to processors with much higher clock speeds.

Based on an ARM11 core, the i.MX31 processor includes leading-power management, security management, digital rights management, and image processing technology.

i.MX Family

Freescale's i.MX family of applications processors has demonstrated leadership in the portable handheld market. The i.MX31 multimedia applications processor is the latest addition to this family and builds on its low-power, high-performance heritage. Freescale has shipped more than 60 million chips of its industry-founding applications processors. That means designers can choose products with a technology pedigree to handle all the creativity they can imagine.

▶ **FEATURES:**

- CPU complex with ARM1136JF-S core
- Advanced power management
- Display/TV controller and CMOS/CCD sensor interface
- Multimedia support
- Enhanced connectivity including High Speed USB 2.0 On-The-Go

To download datasheets, request product availability, pricing, or other information, visit www.arrow.com/resource. To speak to an Arrow representative, call 800-241-3902.