

Freescale Multimedia Entertainment Overview

In the Home

Chances are, if you have an analog or digital TV, cable set-top box or media gateway, DVD/R, game console, or computer TV tuner card at home, it uses one or more Freescale devices from a growing portfolio of multimedia advanced radio frequency (RF) products. Freescale provides the RF chips that help reduce cost and complexity, manage power consumption and improve the performance of your home multimedia equipment.

Upgrading your TV to sleek flat-panel and high-definition set? Freescale's low power Ultra-Wideband (UWB) products send high-definition broadband content, games and home video wirelessly to any television, eliminating the need for clumsy wires. Simply activate the home theater with a ZigBee-enabled remote and set-top box that not only controls the TV, but every entertainment device in the home.

What does the future hold for the telecommuter or home technophile? Freescale offers high-performance processors containing PowerPC™ cores, including the latest MPC7448 device. They provide exceptional performance and power efficiency for the next generation of home media servers, Web servers and game consoles.

On the Go

Whether to catch the end of the baseball game or watch movie trailers, the mobile phone is quickly becoming the alternative to the television and computer – the “third screen” for entertainment. Through its experience in RF technologies, Freescale has developed a postage stamp-sized architecture, which enables anything to become a mobile entertainment device or smart phone.

From lifelike 3D gaming graphics to unwavering digital audio to streaming video, Freescale's recently announced i.MX31 processor is driving the mobile entertainment experience with high-resolution graphics and lightning-fast downloads. The power consumption is so low you can play MP3s of every song on every album ever released by the Rolling Stones and U2 on a single battery charge.

Freescale also is helping to deliver live TV with crisp, quality pictures around the world with its solution for digital video broadcast to handheld devices (DVB-H). These devices feature an RF tuner that enables long battery life in ever-smaller, sleeker mobile devices. Full-length Hollywood movies and high energy games now zoom over the high speed HSDPA networks that Freescale is ready to support, allowing you to download any media content 10x faster.

As portable electronics become more central to your busy life, you worry about data loss and damage to your handheld devices. Freescale offers peace-of-mind with its MMA7260Q three-axis sensor that is designed to protect a device and its

data even if it is dropped, shaken, tilted, inverted or flipped. The sensor detects in three dimensions, so digital cameras, 3D games, cell phones and other portable devices respond to changes in position, orientation and movement. The sensor enabled advanced features in new audio players from Samsung Electronics.

One of the main considerations for portable consumer electronics is power consumption. Nothing is more frustrating than having your digital camera run out of juice in the middle of the family picnic. Thanks to Freescale's SMARTMOS™ power management products, that won't happen. They achieve extraordinarily low power consumption, so your camera will run longer without sacrificing performance.

Freescale's MPC5250 audio processor, widely used in hard drive MP3 players, supports USB On-the-Go connection technology. This means that you are no longer tethered to a PC, but can plug into any portable supporting device like a CD player or another MP3 player. Freescale also supports Microsoft's latest digital rights management format (WMA-DRM 10), which encourages content providers to make more of their inventories available to consumers while preserving the ownership rights of artists – music to everyone's ears.

On the Road

You deserve access to the same information and entertainment in your vehicle that you enjoy in your home. Freescale has the industry's most powerful processor for telematics and automotive infotainment systems. The single, easy-to-manage PowerPC core makes it easy for automotive designers to integrate systems across a variety of applications, from rear-seat DVD players to front-seat navigation systems. The simplified design lets manufacturers pass the savings on to consumers, making high-end electronics affordable in a wide spectrum of automobiles, from the typical family sedan to the top-of-the-line sports coupe.

As the leading supplier of automotive semiconductors, Freescale is also helping make cars safer, more comfortable and more efficient. Airbags and tire pressure monitors, as well as remote keyless entry, are just a few of the safety and security features that use Freescale semiconductors. Freescale also enables braking, steering and suspension systems; power windows, mirrors, seats and door locks; engine and transmission control; lighting; and cruise control. So the next time you get in your car, remember that semiconductors – many of them supplied by Freescale – are helping make your ride more comfortable, enjoyable and safe.

In the Pipes

Dial up a friend on your state-of-the-art cell phone or your packet-crunching voice-over-IP (VoIP) handset. Surf the internet, share digital photos and e-mail from your wireless laptop. Freescale processors, based on PowerPC cores, provide the processing intelligence necessary for the global network and everything connected to it. Chances are the voice, data and video signals are

being controlled and processed by a PowerQUICC™ communications processor, a high-performance PowerPC processor or a digital signal processor (DSP) from Freescale.

As the leading supplier of communications processors and the No. 2 supplier of programmable DSPs, Freescale is the embedded processor powerhouse behind the vast wired and wireless infrastructure that brings a world of information to you anytime, anywhere.

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