

Leading the Digital
ENTERTAINMENT REVOLUTION™



Extreme
Entertainment
Experience™





Portable MP3 Players
Cirrus is the leader in Internet audio with embedded processors in top-selling brands including this Sanyo unit.



Game Boxes/DVD Players
Cirrus is Leading the Digital Entertainment Revolution™ with technology that delivers impressive performance in DVD Players, Game Boxes and many other top-selling home electronics.



*Every room. Every corner.
With Cirrus, you create an...*

Extreme Entertainment Experience™

An exciting revolution is taking place in digital entertainment electronics. And it's sweeping across 650 million households worldwide as living rooms magically transform into thrilling home theaters. In the vanguard are DVD players, which have rocketed to widespread acceptance faster than any consumer electronics product. The popularity of DVD is prompting more and more consumers to expand and upgrade their entertainment systems. The market opportunity is enormous for DVD-based systems as well as Audio/Video Receivers, Game Boxes, Personal Video Recorders, Set-top Boxes, MP3/CD Players and Wireless Residential Gateways. Winning in these growth markets will require powerful IC-plus-software solutions that deliver the state-of-the-

art features that consumers demand. One semiconductor company is exceptionally well positioned to provide such solutions. A US-based company with operations in Japan, Taiwan, China and Europe. A company that stands ready to offer the worldwide support and digital entertainment focus needed to capitalize on this timely window of opportunity. A company that offers Total Entertainment (Total-E™) OEM solutions for every room and every corner. Enabling consumers to experience extreme entertainment from digital content like never before. That company is Cirrus.



Automotive Entertainment
The PhatNoise Car Audio System features a removable hard drive that can store up to 600 hours of digital music and runs on system-on-chip technology from Cirrus.



SACD Players
Incorporating technology from Cirrus, the exceptional performance of the Philips SACD 1000 impressed judges so convincingly that it received the *Audio Player of the Year* award from the European Imaging and Sound Association.





Cirrus

Makes the Living Room Come Alive



Total-E Solutions Enhance Performance – Simplify Design Process

This integrated platform provides all the vital ICs needed to create a world-class DVD-based Mini System in today's high-demand Home Theater in a Box products. A Cirrus front-end optical controller achieves precise and reliable DVD disk movement, while a Cirrus back-end DVD video processor delivers lifelike images. An advanced, Class-D digital power amplifier provides efficient, low-power operation. And high-impact audio is delivered with mixed-signal CODECs, digital interface transceivers, and a DSP Surround Sound® decoder.

Fueled by the enthusiastic acceptance of DVD movie players, the consumer electronics market has soared into the digital entertainment era at the speed of light. Indeed, the mass-market success of CD digital content has sparked consumer demand for increasingly sophisticated digital electronics for both audio and video applications.

Cirrus moved quickly to meet this demand with technology solutions for Audio/Video Receivers (AVRs), the natural "next-purchase" for owners of DVD players wanting to add the high impact of true-to-life audio to their home entertainment systems. Leveraging its strong position as the

world's largest audio IC supplier, Cirrus captured market leadership in the AVR segment, winning designs with 9 of the 11 top Japanese manufacturers.

As DVD players continue to eclipse VCRs as the preferred movie player in the home, they are also being integrated into AVRs to create a "Home Theater in a Box Mini System" – a new class of home entertainment electronics that is enabled by a suite of complementary Cirrus products. The Home Theater in a Box (see photo below) is a good example of how Cirrus is extending its consumer audio leadership into the broader digital entertainment market.

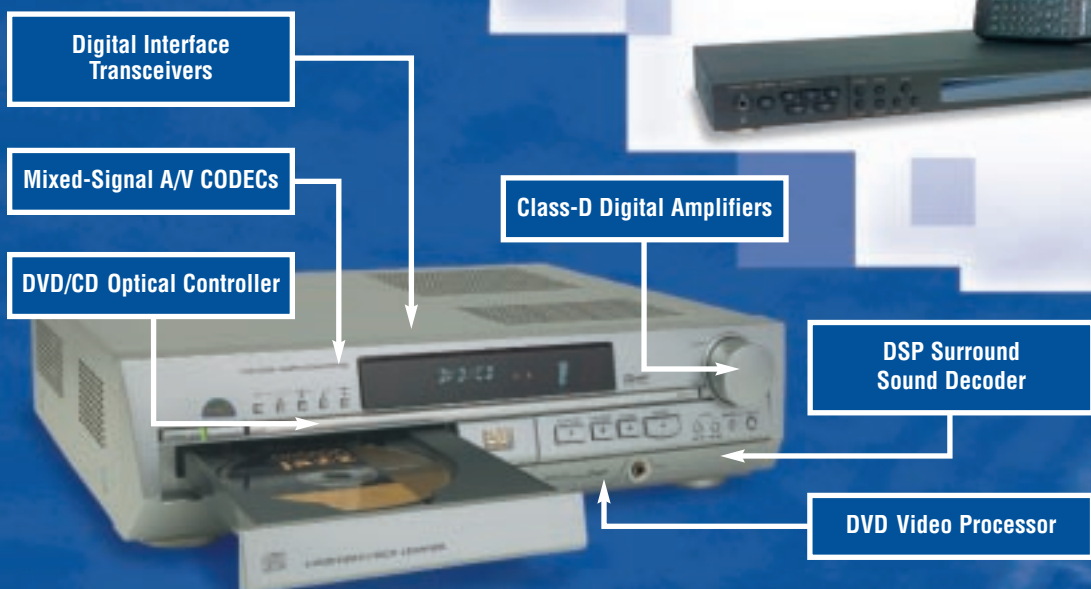
Significantly, the Cirrus product roadmaps call for an increasing convergence of audio, video and networking functions – complemented by highly efficient digital amplifiers that draw little power and facilitate compact designs. This strategic direction places Cirrus in a very strong position to integrate key Total Entertainment technologies as DVD players/recorders and high-end audio come together in Home Media Servers, Set-top Boxes, Personal Video Recorders, and other integrated DVD-based form factors.

The DVD player ranks as the most rapidly accepted consumer electronics product – outpacing TVs, VCRs and CD players in units sold during

the first year after introduction. The increasing availability of digital content with life-like image quality has been a key factor in its rapid adoption rate. As DVD continues to be the prime driver for consumers to upgrade their entertainment electronics, Cirrus will be one step ahead with total hardware and software solutions that enable exciting new generations of products that deliver high quality audio and video.



DVD Players
Cirrus Total-E technology enhances performance in this Bose® 3-2-1 DVD home entertainment system. Cirrus ICs are also found in DVD players from Aiwa, RCA and others.



Internet Audio Receivers
Connecting to a single hard drive through Ethernet or HPNA connections, the Voyetra Turtle Beach AudioTron™ enables Internet audio enjoyment from any room in the house.



Anywhere,

Anytime Enjoyment



Wireless Residential Gateways
Designed for home or small office networking, this Panasonic Gateway includes Cirrus' wireless technology.



Portable MP3 Players
Cirrus processors have enabled many innovative MP3 players, including this design from SongPro™ which allows users to enjoy digital music while playing a handheld game.

Just as the DVD player is prompting consumers to upgrade their home entertainment systems, the ever-expanding volume of digital content combined with the availability of broadband services is expected to increase consumer demand for anywhere, anytime entertainment.

Cirrus is no stranger to satisfying this consumer appetite, as the company's embedded product line established early market leadership in nearly all Internet audio growth segments, including portable MP3 players, automotive entertainment systems, cell phones, eBooks, and home audio server jukebox applications.

The next phase in the digital revolution is to connect the various entertainment electronics products so that the rich media flooding into the home can be conveniently captured, managed, and distributed, allowing consumers to watch what they want, when they want, wherever

they want. Cirrus is a one-stop shop for chip-plus-software solutions that can streamline the in-home networking of multiple entertainment devices served by a single broadband residential gateway. Within the Cirrus portfolio of home network solutions are chips that enable multi-channel distribution of digital content over Ethernet or wireless LAN (802.11).

When it comes to delivering advanced video compression and processing multi-channel video streams, Cirrus DVD processors enable excellent viewing quality while efficiently using available bandwidth and storage. Advanced Set-top Boxes designed with Cirrus IC solutions can pack more content onto hard disk drives without sacrificing quality, thus making available more storage capacity for consumers while lowering the cost to OEMs and cable operators.



Smart Handhelds
Featuring an embedded processor from Cirrus, the RCA eBook is portable, compact, and can store numerous titles.



Internet Audio Receivers
The Rio Receiver allows users to enjoy MP3 files throughout their home.



Internet TVs
Available in Asia, the Xococo Internet TV allows users to surf the Internet and watch TV.

Portable Audio
The RioVolt™ plays conventional and MP3-encoded CDs and features an embedded processor from Cirrus.



Leaders

Choose

Leaders

Since Cirrus was founded in 1984, the company has adhered to a system-level approach to designing integrated circuits. Such system-level orientation demands innovation that goes far beyond the processing of silicon. It requires the development of system-specific algorithms, customer software support and a timely compliance with emerging industry standards. In some instances, it means pioneering de facto standards.

Cirrus today has strategically focused its well-honed system design skills on digital entertainment electronics. Targeting growth opportunities created by the increasing use of the Internet and availability of DVD content, Cirrus paves the way for competitive differentiation by combining high-performance analog functions



Audio/Video Receivers
Cirrus processors are in 9 of the top 11 AVR brands, including this Harman Kardon unit.

and powerful algorithms with ARM, DSP and/or DVD processing.

The Cirrus focus on digital entertainment derives impetus from the company's well-regarded technology leadership in developing analog and mixed-signal chips for industrial applications, as well as broader internal R&D efforts and strategic acquisitions (see "Cirrus Technology Drivers," page 8).

As the industry's premier pure-play chipmaker serving the digital entertainment electronics market, Cirrus offers unmatched experience as a fabless semiconductor company. The company pioneered the fabless model before numerous foundries were established to process wafers.

Cirrus also pioneered the use of

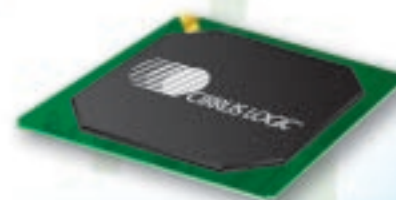
mainstream CMOS to implement high-performance analog functions, a feat that still gives its customers a competitive edge today. Use of mainstream CMOS to combine analog and digital functions on a single chip translates to lower cost chips, and ultimately more affordable retail pricing for new generations of consumer products.

Cirrus takes special care to achieve the highest levels of product quality and reliability. While wafer fabrication and many other aspects of manufacturing can be reliably outsourced today, Cirrus continues to operate its own test facility given the complex nature of its system-level designs. With ISO 9001/ 9002 certification, Cirrus is committed to maximizing the quality and reliability of its customers' products.

If you're targeting digital entertainment electronics markets, then look to Cirrus as your definitive one-stop shop for the most advanced IC solutions. When you select Cirrus as your supplier, you will join the ranks of leading consumer electronics companies with highly respected brands worldwide.



Home Theater
The Bose Lifestyle® 28 features a Total Entertainment IC platform from Cirrus.



Consumer Electronics Leadership Momentum

The strong leadership momentum that Cirrus has established in consumer electronics is clearly evident in the numerous industry firsts the company has logged over more than 15 years in business. Listed below, are just a few of the company's more than 75 industry firsts, which provide ample proof why Cirrus today is the definitive source for digital entertainment electronics solutions.

- 1st supplier of a single-chip DVD drive solution
- 1st multi-standard audio decoder for both DTS™ and Dolby® Digital
- 1st single-chip Dolby® AC-3 audio accelerator
- 1st 120 dB audio analog to digital converter (ADC)
- 1st multi-standard chip for Internet audio (MP3 and Windows™ Media Audio)
- 1st Delta-Sigma ADC for digital audio

Cirrus Technology Drivers

The Cirrus advantage includes a rich patent and product portfolio that includes more than 1100 patents issued and filed, plus a broad range of CMOS IC solutions that integrate high-performance analog and complex digital functions on a single chip. Cirrus mixed-signal solutions routinely push the performance envelope to give OEM customers a competitive edge in emerging growth markets.

Launching breakthrough solutions that target emerging growth markets is a top priority at Cirrus. The technology driving such innovations comes from substantial internal R&D investments and strategic acquisitions.

Analog & Mixed-Signal Legacy

The entertainment-centric chip solutions that Cirrus offers today often trace their high-performance analog and mixed-signal technologies back to the data acquisition and converter chips that the company first developed for demanding industrial applications. In fact, Cirrus gained an early competitive edge in the consumer audio IC market with its patented Delta-Sigma technology that was originally developed for industrial analog-to-digital converters. Cirrus expects to continue incubating advanced technologies in this manner, targeting applications including industrial Ethernet, energy management, and seismic data analysis for oil exploration. Accordingly, each new generation of digital entertainment electronics powered by Cirrus solutions may implement advanced analog and mixed-signal design techniques that were first developed for the industrial market.

Industrial Applications

Cirrus ICs are featured in dozens of industrial applications including this eTrex® global positioning device from Garmin Corporation.

Accordingly, each new generation of digital entertainment electronics powered by Cirrus solutions may implement advanced analog and mixed-signal design techniques that were first developed for the industrial market.

Strategic Acquisitions

Cirrus augments its internal R&D with strategic acquisitions. The following recent acquisitions have enriched the

company's consumer intellectual property portfolio with more than 65 patents issued and filed.

Stream Machine: MPEG-2 video recording technology with expertise in digital audio and video, including architecture, algorithms and compression technology.

LuxSonor: State-of-the-art processors (MPEG-2/DVD, RISC and DSP) plus video/audio compression and decompression technologies.

ShareWave: Whitecap™ wireless LAN (WLAN) technology, based on IEEE 802.11 standards, facilitates seamless sharing of high-quality audio and video throughout the home.

Peak Audio: CobraNet™ technology, the de facto standard for multi-channel audio distribution, allows many channels of real-time, high quality digital audio to stream over an Ethernet network.

AudioLogic: High-performance, all-digital pulse-width-modulation (PWM) technology to enable digital Class-D power amplifiers for consumer electronic applications.

Wireless Networking

Featuring wireless network controllers from Cirrus, this NETGEAR bridge transmits audio and video signals throughout the home.

Globally Positioned to Add High Value

The world of digital entertainment electronics knows no boundaries. In virtually every country and in any language, there exists market growth opportunities for manufacturers of affordable consumer products that

bring audio and video content to life. With design centers and applications specialists strategically located around the globe, Cirrus is well positioned to expand upon its renowned audio leadership to become the industry's pre-

mier pure-play chipmaker serving the digital entertainment electronics market. For more information on how Cirrus can add substantial value to your next consumer product design, visit our Web site at www.cirrus.com.

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With Cirrus, you create an...*

Extreme Entertainment Experience™

Today's leading consumer entertainment designers count on Cirrus for a broad selection of ICs including:

- DVD Drive Managers & Processors
- Audio Codecs, A/D & D/A Converters
- Audio DSPs
- Digital Audio Transmitters & Receivers
- Embedded System-on-Chip Processors
- Wireless Network Controllers
- Ethernet Controllers

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