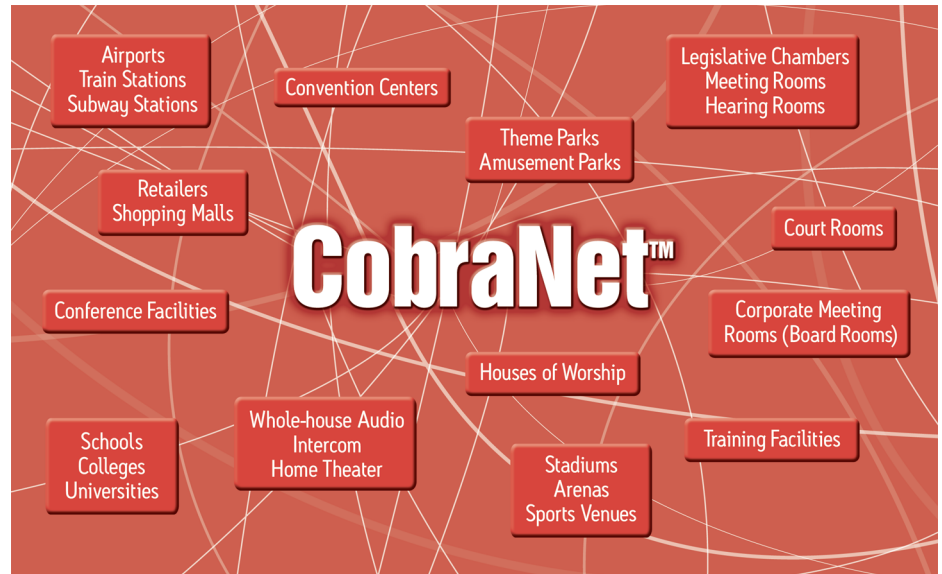


# Networked Digital Audio Technology



## Over a Half Million Connected By CobraNet™ Technology

CobraNet™ technology is the de facto standard for transporting high fidelity, uncompressed digital audio in real time over off-the-shelf, switched Ethernet networks. Imagine the flexibility of dynamically routing digital audio from

various sources to one, some, or all points in a network of devices. Cirrus Logic provides OEMs with a family of CobraNet solutions for compelling commercial, professional and consumer networked audio products.

Cirrus Logic offers CobraNet audio system processors, network interface modules, software, development tools and support, making the selection of CobraNet technology for your audio products a smart choice.

### TYPICAL EQUIPMENT APPLICATIONS

- Facility audio distribution
- Power amplifiers
- Paging stations and Intercoms
- Media servers
- Signal processors
- Mixing consoles
- Voice audio recording, archival and playback
- Microphone preamps
- Audio snakes
- Stand-alone A/D and D/A interfaces
- Ceiling speakers
- Self-powered speakers
- Whole-house audio
- Security and surveillance

### KEY BENEFITS OF COBRANET TECHNOLOGY

- No-compromise, high-fidelity, multichannel audio.
- Use of standard Ethernet equipment leverages the most common, low-cost digital networking infrastructure in the world.
- Audio routing enables real-time reconfiguration of connections between sources and destinations.
- Digital audio transport alongside LAN traffic eliminates additional infrastructure costs.
- Use of SNMP provides powerful control and monitoring of the network and devices.
- True audio networking enables audio, control and monitoring flows between nodes at any time regardless of physical layout.
- Numerous fault tolerant features ensure reliability of mission critical applications.
- Widespread use of the CobraNet standard provides a strong CobraNet community.

## CobraNet™ Products from Cirrus Logic

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### CS1810xx CobraNet Networked Digital Audio Interfaces

The CobraNet CS1810xx Silicon Series features three IC models that provide 2, 8 or 16 full-duplex channels of audio input and output at configurable network sample rates of 48 kHz and 96 kHz and configurable sample sizes of 16, 20 or 24 bits. The integrated CobraNet interface manages real-time audio transport across a switched Fast Ethernet network. Using an external VCXO, the CS1810xx delivers a studio-grade, low-jitter clock source and supports dual Ethernet connections for “mission-critical” applications. Control, monitoring, and management functions are provided by a high-speed parallel host processor interface or via Ethernet using industry standard SNMP. Firmware can be updated over Ethernet or via the host interface with additional control and monitoring functions provided by the innovative, built-in asynchronous or packet-bridge functions.

### CS4961xx CobraNet Audio System Processors

The CS4961xx Silicon Series adds Cirrus Logic’s highly regarded 32-bit, 120 MIPS audio DSP to the robust feature set of the CS1810xx models, enabling local signal processing of CobraNet audio streams into or out of the audio product. This level of integration and optimization can provide dramatic cost-savings in end products while enabling new benefits for the user. The CS4961xx is supported by DSP Conductor™, a powerful, graphical DSP programming tool for rapid audio signal processing development and end product implementation.

### CM-1 and CM-2 CobraNet network interface modules

Cirrus Logic makes the addition of CobraNet technology to an audio product even easier with the CM-1 and CM-2 embeddable modules. These modules look like dual-port Ethernet interface cards with a plug-in connector interface to the embedded system. Various CobraNet channel counts and DSP processing resources are available. Consult Cirrus Logic for your particular needs.

## CobraNet Development Tools

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### CobraNet Discovery™

CobraNet Discovery is a CobraNet network maintenance utility that configures, queries and reports the working state of a CobraNet network and its nodes. Discovery also provides a CobraNet firmware update function.

### CobraCAD™

CobraCAD is a graphical tool for modeling and validating a CobraNet network design. This tool is ideal for contractors or end users installing CobraNet-enabled systems.

### DSP Conductor

DSP Conductor is a powerful, graphical tool for rapid, drag-and-drop audio signal processing firmware development on CS4961xx platforms. Drawing upon a comprehensive library of DSP functions, any CS4961xx CobraNet node on an Ethernet LAN can be programmed in real time from a PC. An assembler/linker is available for designs requiring further customized signal processing development.

### CobraNet Object Tools

CobraNet Object Tools is a Microsoft® COM object library that provides the low-level functions around which an end user application can be built to easily control and exploit the flexible functionality of CobraNet devices.

### EV-2 Evaluation & Developer’s Kit

The EV-2 kit provides a convenient means of evaluating CM-2 CobraNet modules. The EV-2 serves as a CobraNet interface reference design and can be used as a development platform for CobraNet products.

## Resources

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[www.cirrus.com](http://www.cirrus.com)

For details on the Cirrus Logic CobraNet products described above.

[www.cobranet.info](http://www.cobranet.info)

For information about CobraNet system development, installations, OEMs and third-party developers.

To locate your nearest Cirrus Logic sales representative, please go to

<http://www.cirrus.com/en/contacts/sales/index.html>

[www.cirrus.com](http://www.cirrus.com)

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