



EV-2

## EV-2 CobraNet™ Evaluation/Developer's Kit

### Innovative Development Platform for CobraNet™ Products

#### EV-2

CobraNet™, the industry-leading digital audio networking technology from Cirrus Logic®, has established itself as the product of choice for networked audio. The CobraNet solution leverages the rapid developments in the computer networking industry to provide an increasingly cost-effective solution for audio professionals worldwide.

The EV-2 provides a means of easily evaluating CM-2 CobraNet modules. It also provides an example CobraNet

interface and can be used as a development platform for CobraNet products. The EV-2 comes standard with CM-2 modules, but will work equally well with CM-1 modules if needed.

The EV-2 Evaluation / Developers kit is available for purchase with a signed evaluation agreement. For additional information on how to obtain the EV-2 kit, please contact our office directly at the numbers provided.

The EV-2 Evaluation / Developers kit includes:

- Two EV-2 boards
- One Ethernet cross-over cable
- Two CM-2 CobraNet modules
- One software CD
- One printed manual

#### EV-2 FEATURES & BENEFITS

##### Analog Audio I/O:

- 2-channel input converted to 16, 20 or 24-bit data at 48 or 96 kHz sample rates
- 2-channel 48 or 96 kHz digital audio converted to analog audio output

##### Digital Audio I/O

- AES3 input and output streams

##### Field Programmable

- Supplied EV-2 software allows firmware reprogramming

##### RS232 Interfaces

- Direct to CM-2 module
- Direct to microcontroller

##### Microcontroller

- 64 KB on-chip Flash program memory
- 1 KB RAM
- In-system programmability

##### Routing Flexibility

- Route analog and digital audio to/from the CM-2 as well as within the EV-2

##### Sine Wave Generation

- Configurable sine wave test tones for alternate audio test source

##### Hex Switches

- For setting location ID of the CM-1/CM-2 and user development

##### LED Display

- 3 indicators are supplied for user development

#### COBRANET TECHNOLOGY ADVANTAGES

- Available as low-cost ICs without licensing or royalty fees
- CobraNet technology can coexist with data traffic over existing Ethernet networks, saving money by eliminating additional infrastructure costs
- De-facto industry standard with tens-of-thousands of installed nodes in high-profile "mission-critical" venues worldwide
- Networked audio, control and monitoring (bi-directional)
- Uses SNMP for control and monitoring (IT-friendly)
- Incorporates multiple fault-tolerant features
- Ability to send audio from any CobraNet interface to any other – unlimited addressing, unlimited capacity

## Audio Specifications

### Audio Inputs

Description	Notes
A/D Converter	CS5381
Input Channels	2
Frequency Response	0.1 dB, 20 Hz to 20 kHz, 48 kHz sample rate mode +0.1 dB, -4 dB, 20 Hz to 40 kHz, 96 KHz sample rate mode
THD + N	< -114 dB, 48 kHz sample rate mode < -110 dB, 96 kHz sample rate mode
Dynamic Range	> 115 dB, 48 kHz sample rate mode > 110 dB, 96 kHz sample rate mode
Maximum Input Level	8.3 dBu
Input Impedance	20 k $\Omega$ balanced differential

### Audio Outputs

Description	Notes
D/A Converter	CS4398
Output Channels	2
Frequency Response	0.1 dB, 20 Hz to 20 kHz 48 kHz sample rate mode +0.1 dB, -10 dB, 20 Hz to 40 kHz, 96 kHz sample rate mode
THD + N	< -106 dB
Dynamic Range	> 112 dB
Maximum Output Level	9.75 dBu into differential input
Output Impedance	200 $\Omega$

## Other Specifications

### Digital I/O: CS8420-CS

Description	Notes
AES/EBU Digital I/O	CS8420-CS Input sample rate converted.
Power Consumption	< 10 watts (includes CM-2)
Power Connector	Standard ATX power supply connector (ATX power supply is not included)
RS232 Connection	Non-standard (Rx/Tx only) EIA-RS232C connection.
RS232 Connectors	9-pin D-sub type