



MicroComm DXI

ACB-101 Audio Control Board

Description

The Audio Control Board provides the digital audio switching and processing functions for all the audio cards installed in the card cage. It employs digital time/space switching to route digital audio signals between stations and various other audio devices. Digital signal processors (DSP) are used to control voice operated switching and conference calls, generate signal tones, and monitor intercom stations.

An Audio Control Board is required in any card cage containing audio boards for intercom stations or equipment interfaces. It must be located in the first (or the second, if it is a redundant control board) card cage slot.

Audio is transmitted between card cages via digital audio trunks, which may be either copper or fiber optics. Exchange Data Network connections are made via a LonWorks Free Topology network.

Features

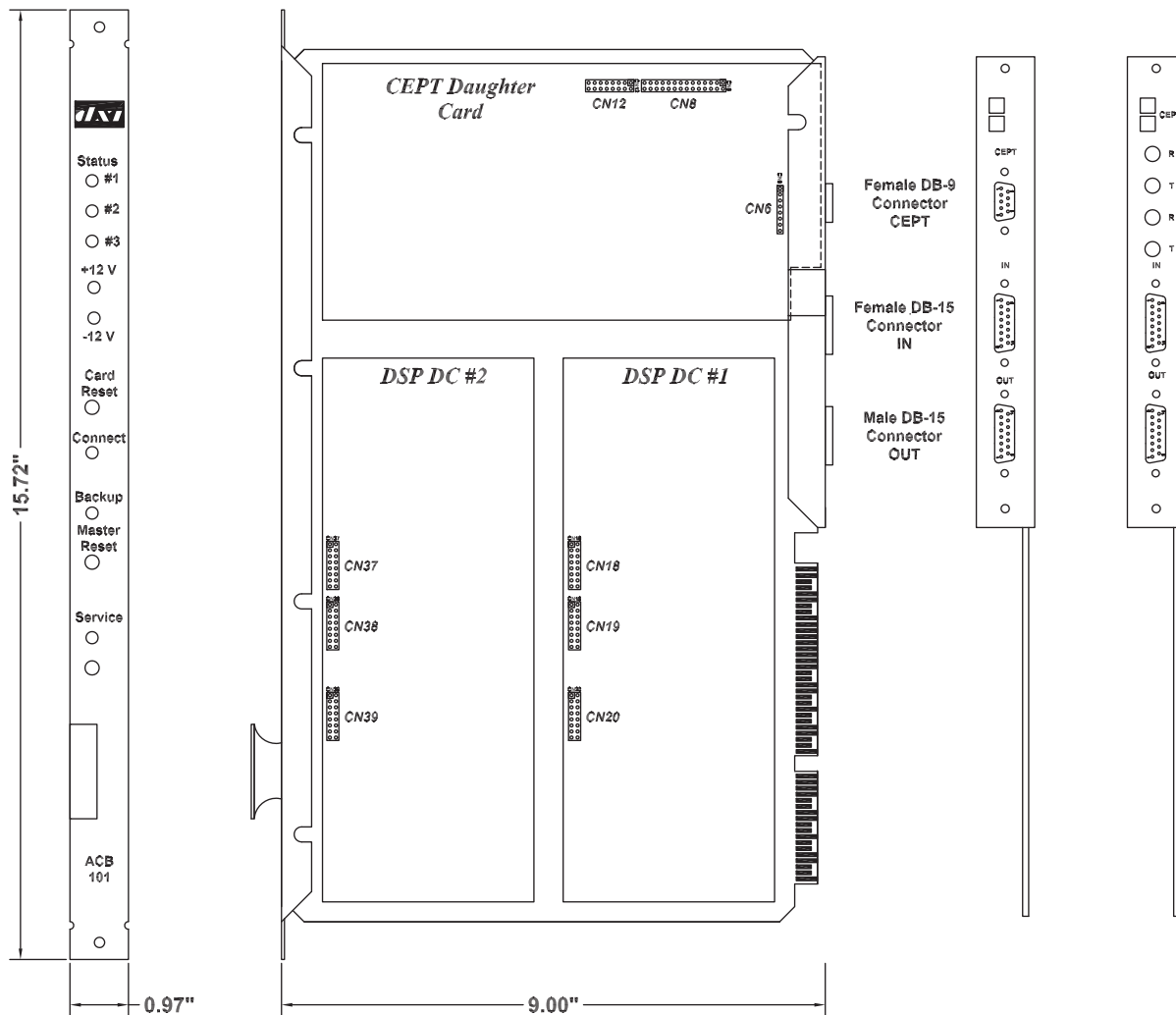
- noise free digital audio processing and switching
- fast interconnection of audio signals
- support for 2 optional digital signal processor expansion modules with 4 digital signal processors each to enable additional master stations and other functions such as conference calls
- support for optional digital audio trunk expansion module to provide audio interconnection with other card cages in distributed systems
- supports up to 256 intercom stations and up to 40 intercom master stations
- reliable hands free VOX switching for master stations
- can be linked directly to control cards in multiple card cages to expand I/O capacity
- audio bus connections supply a redundant signal to each I/O board
- support for redundant control cards
- automatic and manual switching between main and backup control boards in redundant configurations
- 1 LED indicates network status
- 2 LED's monitor card cage power supplies
- 3 LED's indicate operating status
- self test functions can be operated from the SAC computer
- external reset and backup inputs
- internal fuse protects circuitry
- live card insertion and removal to expedite installation and maintenance
- flash memory enables updating of the CPU and DSP firmware over the network
- all field connections on rear of card to expedite installation and maintenance



Specifications

Physical Form Factor	MicroComm DXI I/O Card
Environmental	
Operating Temperature	32 to 122 °F (0 to 50 °C)
Storage Temperature	-40 to 158 °F (-40 to 70 °C)
Humidity	0 to 95 % non-condensing
Power Supply	±12 Vdc ± 10% @ 2 A max provided by I/O Card Cage
Field Connections	DB-9 or; ST connectors for fiber optic
CEPT ports	Two (input and output) DB-15 with quick screw lock for link port
I/O Capacity	2 (input and output) card cage link ports and 1 copper digital audio trunk or; 1 fiber optic digital audio trunk
Cabling	
Copper CEPT	4 unshielded twisted pairs, maximum 8200 ft (2500 m) per segment
Fiber CEPT	4 fibers - 62.5/125 µm, 13 dB power budget per segment
Standards	FCC Part 15

Mechanical



Ordering Information

Part number ACB-101-ABC

- A DSP expansion slot 1 options
 - 0 none
 - 1 DSP module
- B DSP expansion slot 2 options
 - 0 none
 - 1 DSP module
- C CEPT digital audio trunk options
 - 0 none
 - 1 copper I/O
 - 2 fiber optic I/O

Accessories

Field Interface Cable	CBL-ATN-A
Card Cage Link Cable	CBL-221

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9564 Yellowhead Trail NW
Edmonton, AB T5G 0W4
sales@harding.ca

Tel 780.462.7100
Fax 780.450.8396
www.harding.ca



Represented by: