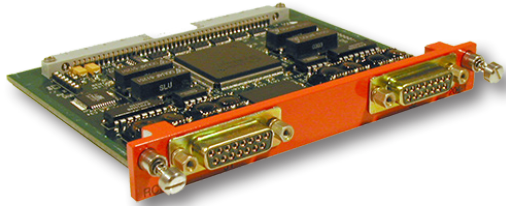


RCI-204

Remote CAIS Bus Expansion Card

**CURTISS-
WRIGHT**

CURTISSWRIGHTDS.COM



Key Features

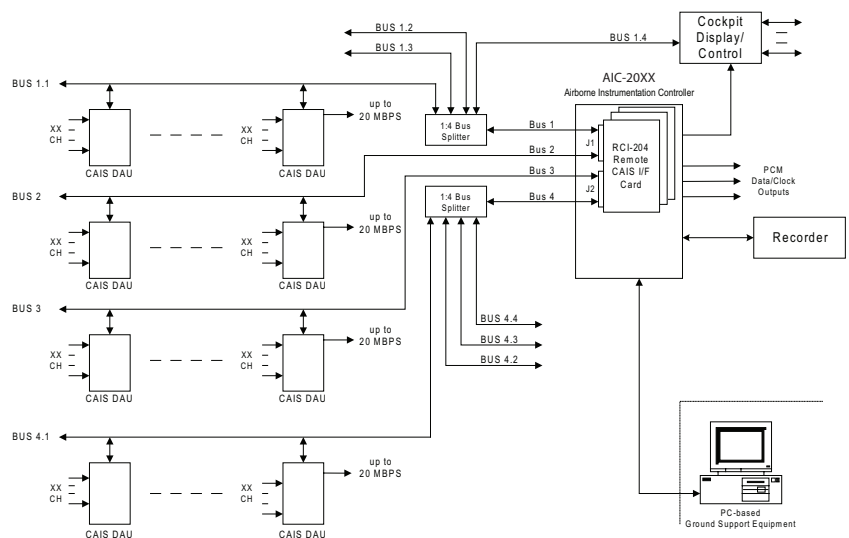
- Plug-in CAIS Bus expansion card for the AIC-200X
- Provides four (4) independent CAIS Bus expansion ports
- Multiple RCI-204 cards can be placed within a single chassis
- Each port can be enabled/disabled on a format basis under program control
- Each port can support up to sixty (60) remote CAIS Bus DAUs
- 5 Mbps maximum data rate on each port
- Operation at 10, 12, 14 or 16 bpw

Applications

- Distributed data acquisition systems
- Single-point system programming
- Recorder status/control interface
- Cockpit display interface

Overview

The RCI-204 card can be used to add multiple CAIS Bus Expansion Ports to Curtiss-Wright's AIC-200X Airborne Instrumentation Controller. These ports can be used to configure a distributed data acquisition system in which the AIC-200X operates as a CAIS Master Controller over each CAIS Bus port. Various CAIS Remote units can reside on each CAIS Bus port, including DAUs, recorders, cockpit displays, etc. Each card provides an additional 4 CAIS Bus ports and multiple cards can be used within a single AIC-200X chassis.



RCI-204 block diagram



Specifications

General

- Supply current: +3.3V @ 300mA; -5V @ 0mA; +5V @ 300mA; +12V @ 0mA; -12V @ 0mA
- Power consumption: 2.5W typical from the 28V supply
- Operating temperature: -35 to 85°C (box ambient temp)
- Storage temperature: -55 to 100°C

Dimensions and Mechanical

- Compatibility: Multiple RCI-204 cards can be used with the AIC-200X. Must be placed in slot #2 or greater.
- Weight: 5 oz (142 grams) not including the mating connectors
- Unit connectors (2): Cannon™ DAM-15S
- Mating connectors (2): Cannon™ DAM-15S
- Backshell (optional): DA24658

Electrical

- Capacity: Four (4) independent CAIS Buses per card
- Control: Each RCI-204 CAIS Bus port can be enabled/disabled on a format basis under program control
- Remote DAUs: Up to sixty (60) remote CAIS Bus DAUs
- Signals: Uses a 4-wire communication bus (two 2-wire cables). Signals include “Command” (CMD) and “Reply” (RPLY).
- Requirements: Operates per the “CAIS Bus” communication standard (document A00.00-C001, “CAIS Bus Interface Standard”, Rev A) as a master controller
- Data rate: CAIS operates at a fixed 10 Mbps rate. Maximum effective rate is 5 Mbps.
- Resolution: CAIS operates at either 10, 12, 14 or 16 bits per word
- Coupling: Transformer coupling on all interface signals
- Termination: 75 ohms ±5%

Ordering Information

Contact [Curtiss-Wright](#) for ordering information