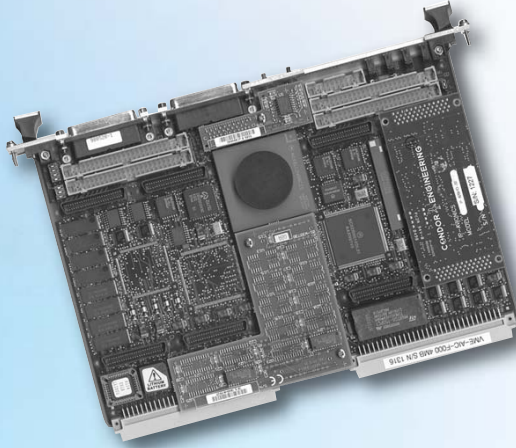


ARINC 429 BUS MONITOR MODULE

ARC536-2, -16 & -32



The ARINC 429 Bus Monitor module is a Motorola 680x0 SBC single-slot module that provides bus monitoring functions for use with the System 550 and Avalon systems. It is available in 2-, 16-, or 32-channel configurations to meet your application requirements. This module, coupled with a Bridge and Field Programmable Processor, connects directly to the ARINC 429 bus to provide bus monitoring, data capture, acquisition, parameterization, display, and archiving.

KEY FEATURES

- Complies with ARINC 429 Mark 33 Digital Information Transfer System (DITS)
- Features variable data rate operation: 12.5 kbps or 100 kbps
- Merges data from multiple channels and other modules for display, processing, and archiving
- Acquires data, identifies data by label, and outputs selected parameters onto the MUXbus II for display, processing, and archiving
- Includes ARINC 429 transmit channels for self-test

A standard FPP algorithm manipulates data originating from an ARINC 429 channel, decodes the word's label, and, based on user-defined parameters, outputs data to the MUXbus II with a tag value of the FPP parameter's tag plus the ARINC word's label. Alternatively, the algorithm can output the original ARINC word received from the input channel back onto the MUXbus II. This ARINC word contains the tag value of the FPP parameter's tag plus the ARINC word's label so that workstations on the network can transform the data.

If the FPP encounters ARINC errors, a unique parameter is used to indicate that an ARINC word has a parity error, degraded accuracy, or invalid data.



Excellence You Can Measure

ARINC 429 BUS MONITOR MODULE

ARC536-2, -16 & -32 SPECIFICATIONS

Single Board Computer

Model ARC536-.....2	16	32
Receive Channels2	16	32
Processor :		
Motorola MC68LC040	040	060
Clock Frequency (MHz)25	25	66
Performance (MIPS)27.8	27.8	99
Memory:		
RAM (MB)1	4	4
Flash (MB)1	1	2
SRAM (kB)512	512	512
with battery backup		
ROM (Opt. EPROM)1	1	1
VMEbus:		
Data Path32-bit data path		
Address32 bits		
Interrupts7		
ModesMaster or slave		
Arbitration4 levels		

Real-Time Executive: VxWorks

Multi-tasking	Interrupt-driven kernel; priority is based on scheduling, featuring very fast context switching and low interrupt latency
Interprocess	Supports pipes, sockets, semaphores, and signals
Network Facilities	"Transparent" access to other systems via sockets, remote command execution, remote login, and remote procedure calls (RPCs)
Module Loading	UNIX-formatted object modules are dynamically loaded over the network
I/O System	UNIX source compatible, including standard buffered I/O
Performance	Tools to measure timing routines, a group of routines, or CPU utilization
Module Integration	Requires optional UNIX-hosted development environment

ARINC Receive Channels

Quantity:	
ARC536-22	
ARC536-1616	
ARC536-3232	
Bus speed	100 kHz or 12.5 kHz bit rates
Input levels	±6.5 to ±13.5 VDC
	Differential tri-state
Parity	Odd, even, or no
Filter By:	Label, channel, SDI
Self-Test	Onboard transmitters provide ARINC 429 test data

General Requirements

Size6U [9.2 in. (23.35 cm) x 6.3 in. (16.0 cm)]
Chassis System1 6U or 9U slot
Power (DC)5V @ 4 A, 12V @ 1 A, -12V @ 0.1 A
Rear Panel:	
ARC536-22 DB-25
ARC536-164 DB-25
ARC536-328 DB-25
Environment	See Base System Chassis data sheet
Diagnostic Display4 status LEDs

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