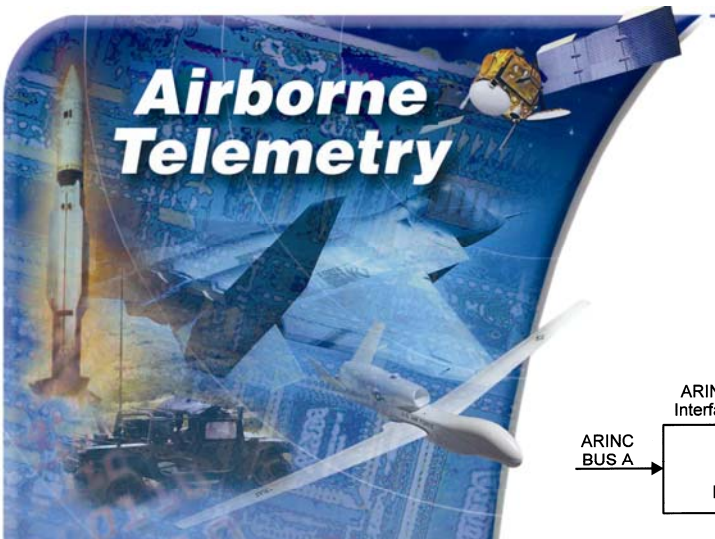
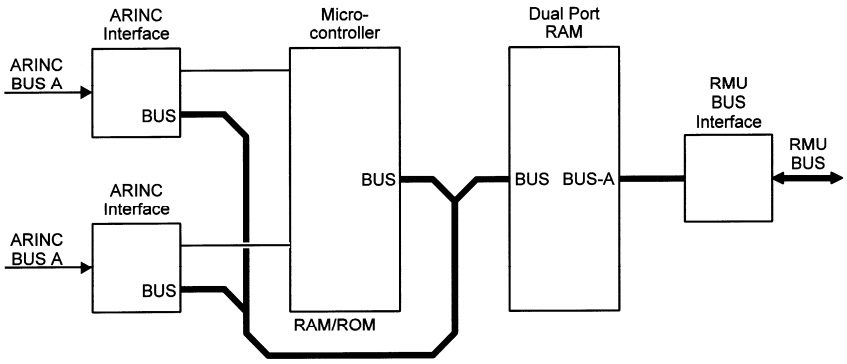


MSC1000-013
ARINC 429 Bus Monitor Module (2 Channel)

Airborne Data Acquisition Products



FEATURES

- **Each input port meet the characteristics of the ARINC specification for receiver input impedance and receiver external voltage tolerance.**
- **Two modes of operation: “Label Only” and “Label and SDI”.**
- **“Label Only” mode captures each message and stores it in local memory by it’s labeled value.**
- **“Label and SDI” mode pre-processes the label and SDI bits to save data into memory only on a unique occurrence of the Label and SDI pattern.**
- **Programmable to acquire up to 256 labels from each bus.**
- **Programmable for slow (12-14 KHz) or fast (100KHz) bit rates.**

DESCRIPTION

The MSC1000-013 is a fully programmable, two channel ARINC Bus Monitor module. The module is a standard I/O configured unit, which can be installed in any RMU slot, and is used in conjunction with the aircraft ARINC 429 data bus signals. Selected data from either or both ARINC buses can be inserted into the RMU PCM stream. The module is a “listen only” unit and does not interfere with normal bus operation.

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ELECTRICAL SPECIFICATIONS

Input Impedance

- 12 Kohms per ARINC specification

Output

- Each selected work is stripped of its label (bits 1 through 8) and output as two continuous 12-bit syllables.

Miscellaneous

- The message counter operates such that two successive readings of the counter that yield the same count mean the data is stale. If successive readings of the message counter yield a difference of one, then the message is new. If successive readings of the message counter yield a difference of more than one, some data was unsampled.
- All data bits are frozen during the time data words are being read into the RMU bus, preventing possible data corruption.
- Programmable to acquire up to 256 labels (24-bit message packet) from each of the two buses.
- Programmable for slow (12-14 KHz) or fast (100 KHz) bit rates.

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