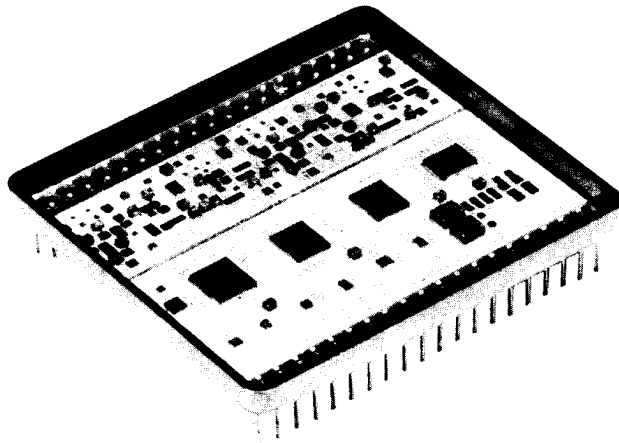


DUAL REDUNDANT MIL-STD-1553 RTU HYBRID



FEATURES

- IMPROVED PIN-FOR-PIN REPLACEMENT FOR BUS-65125
- SMALL SIZE
- LOW POWER
- FULL COMPLIANCE WITH MIL-STD-1553B
- ALL MODE CODES
- WRAP AROUND TEST
- TIME OUT
- 32 WORD FIFO

DESCRIPTION

The BUS-65127 is a dual redundant MIL-STD-1553 Remote Terminal Unit (RTU) packaged in a small 1.9" x 2.1" hybrid. It is fully compliant with MIL-STD-1553B and features implementation of all mode codes, wrap-around test, and terminal fail-safe time out.

The BUS-65127 contains all of the functions required to provide a terminal interface between a dual redundant MIL-STD-1553 serial data bus and a subsystem tri-state data highway. Utilizing a high level of integration, the BUS-65127 has transceivers (two), encoder/de-

coders (two), protocol sequencer, and 32 word FIFO.

The dual transceivers in the BUS-65127 are completely independent, including separate power and grounds, and feature low power dissipation, transmitter short circuit protection and low bit error rate (BER). The 32 word FIFO in the BUS-65127 minimizes subsystem overhead by allowing a full message to be transferred to the terminal without waiting for serial transmission, and by checking the validity of a full message before transfer to the subsystem.

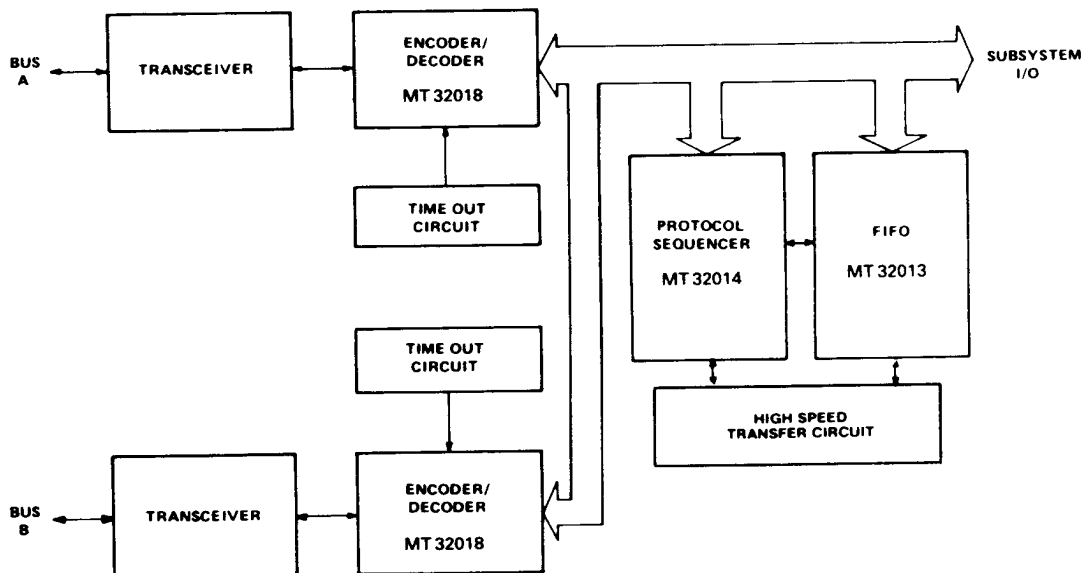


FIGURE 1. BUS-65127 BLOCK DIAGRAM

1. MIL-STD-1553 operation: The terminal receives an undefined mode command with the Broadcast Address.

BUS-65125 Response: No status response; set Message Error bit.

BUS-65127 Response: No status response; set Message Error and Broadcast bits.

2. MIL-STD-1553 Operation: The terminal receives a "Selected Transmitter Shutdown" or "Override Selected Transmitter Shutdown" mode command on the bus designated to be disabled or enabled.

BUS-65125 Response: Disregards command. Transmits status with Message Error bit set.

BUS-65127 Response: Disregards command. Transmits "clear" status.

3. Function: The condition of the 16 bit data I/O highway during and after an external reset is applied, and up until the time another command is received.

BUS-65125 Response: Indeterminate.

BUS-65127 Response: High impedance.

BOTTOM VIEW

Dimensions (inches in parentheses):

- Overall width: 2.100 (53)
- Distance from left edge to center of pin array: 1.900 (48)
- Distance from center of pin array to right edge: 1.800 (46)
- Distance from right edge to center of pin array: 0.050 (1.3)
- Overall height: 1.870 (47.5)
- Distance from top edge to center of pin array: 0.100 (2.5)
- Distance from bottom edge to center of pin array: 0.100 TYP (2.5) (TOL. NONCUM)
- Pin array dimensions: 41 (left), 59 (right), 60 (top), 78 (bottom), 21 (left), 40 (right)
- Pin array label: PIN NO'S ARE FOR REFERENCE
- Material: 0.056 DIA GLASS BEAD (78 PLACES)

SIDE VIEW

Dimensions (inches in parentheses):

- Overall height: 1.650 (42)
- Distance from top edge to center of pin array: 1.500 (38)
- Distance from center of pin array to bottom edge: 0.11 (2.8)
- Pin array dimensions: 0.018 DIA PIN (0.5) (78 PLACES)
- Pin array label: 0.075 TYP (1.9)
- Pin array label: 0.25 MAX (6.4)
- Pin array label: 0.250 (6.3)

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ORDERING INFORMATION

BUS-65127- B