

DUAL REDUNDANT MIL-STD-1553 RTU HYBRID

FEATURES

- **SMALL SIZE**
- **LOW POWER**
- **FULL COMPLIANCE WITH MIL-STD-1553B**
- **ALL MODE CODES**
- **WRAP AROUND TEST**
- **TIME OUT**
- **32 WORD FIFO**

DESCRIPTION

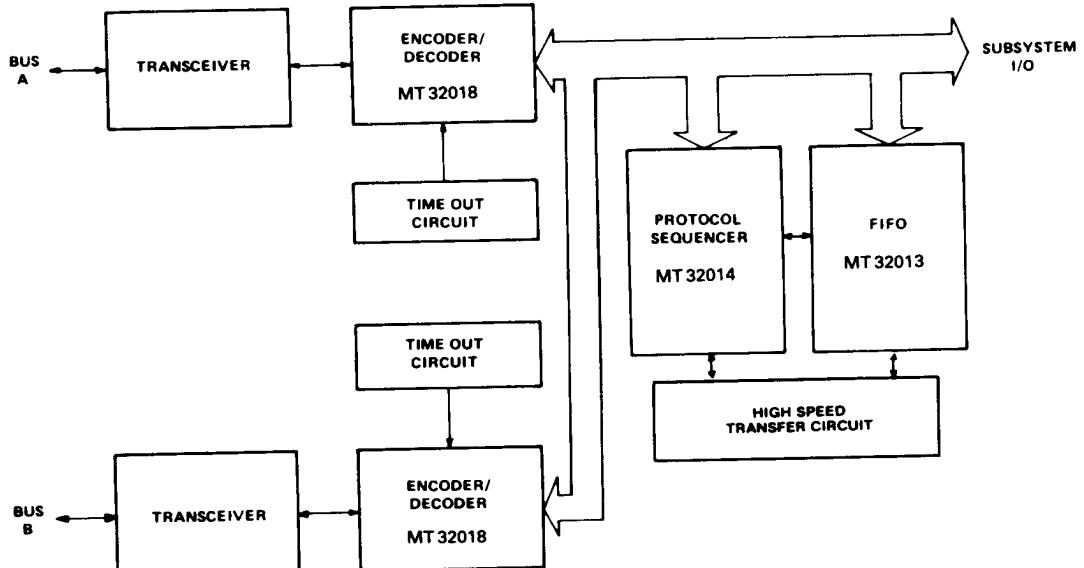
The BUS-65125 is a dual redundant MIL-STD-1553 Remote Terminal Unit (RTU) packaged in a small 1.9" x 2.1" hybrid. It is fully compliant with MIL-STD-1553B and features implementation of all mode codes, wrap-around test, and terminal fail-safe time out.

The BUS-65125 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-65125 has monolithic transceivers (two)

encoder/decoders (two), protocol sequencer, and 32 word FIFO.

The dual transceivers in the BUS-65125 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-65125 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.

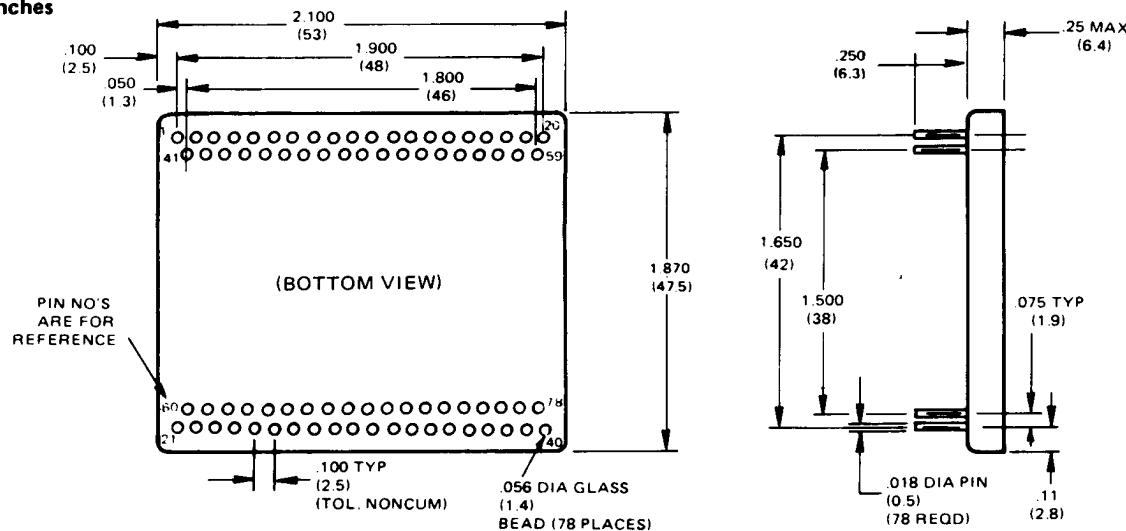
FIGURE 1. BLOCK DIAGRAM



SPECIFICATIONS — Values at nominal power supply voltages over operating range.

PARAMETER	UNITS	VALUE			
Logic					
V_{IH} high level input voltage	V	2.4 min			
V_{IL} low level input voltage	V		0.8 max		
V_{OH} high level output voltage	V	4.5 min			
V_{OL} low level output voltage	V		0.4 max		
I_{OH} high level output current	μ A	400 min			
I_{OL} low level output current	mA	-1.6 min			
I_{IL} low level input current	mA		1.6 max		
I_{IH} high level input current	μ A		10 max		
C_{IN} input capacitance	pf		10 max		
C_{OUT} output capacitance	pf		10 max		
Temperature Range					
Operating (Case)	$^{\circ}$ C	-55 to +125			
Storage	$^{\circ}$ C	-55 to +125			
Power Supplies					
Voltage	V	+15		-15	+5
Tolerance	%	5%		5%	10%
Total Current					
Idle	mA	Typ 50	Max 65	Typ 40	Max 60
25% transmit	mA	95	120	40	60
100% transmit	mA	200	225	40	60

MECHANICAL OUTLINE

Dimensions in inches
(millimeters)

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ORDERING INFORMATION

BUS-65125-B

Power Supply Option:

5 = ± 15 VDC6 = ± 12 VDC