

- Differential line drivers and receivers provide ±7 V noise rejection
- Software transparent link
- Supports up to 2,000-foot cables
- Supports all seven interrupt levels
- Allows expansion to 19 x 19 slots using 20-slot backplanes in a star configuration
- Supports 8- and 16-bit data transfers
- Supports 16- and 24-bit addressing
- Double Eurocard form factor
- Link includes one model REPEAT M-485, one model REPEAT S-485, and a wide variety of cable length options
- DIN-type I/O connectors
- Supports VMEbus slaves on a "slave-only" VMEbus

#### **REPEATER LINK OVERVIEW** — The VMIC

Repeater Link is a two-board set which allows VMEbus slave I/O boards residing in one VMEbus chassis to be controlled by a VMEbus master residing in another chassis. The VMEbus chassis in which VMEbus masters reside is referred to as a master chassis, while the VMEbus slave boards reside in a slave chassis. The two-board set is configured as shown in Figure 1 with one board designated for the master chassis while the other board is designated for the slave chassis. A master VMEbus chassis can communicate with several slave chassis by using multiple Repeater Links as shown in Figure 2.

The REPEATER Link supports all seven interrupt levels. Interrupts are acknowledged by the IACKIN\*/IACKOUT\* daisy chain which is routed through all of the slave chassis slots before going on to the next VMEbus master chassis slot, as shown in Figures 3 and 4. This design concept allows any slave board mounted in a slave chassis to generate an interrupt.

### **SPECIFICATIONS**

- Maximum cable length 2,000 ft
- Supports 8- and 16-bit data transfers
- Supports 16- and 24-bit addressing
- Supports all seven interrupt levels
- Propagation delay is approximately 400 ns with 5-foot cables (add 4 ns per foot for longer cables)
- · Supports bus slaves and interrupters in slave chassis
- Allows expansion to 19 x 19 slots using 20-slot backplanes in a star expansion configuration
- DIN format connectors (optional keying capability)
- · Inexpensive ribbon-cable interconnects
- Double Eurocard form factor



• The VMIVME-Repeat S-485 board must be installed in slot 1 of the VMEbus slave chassis

## PHYSICAL/ENVIRONMENTAL

**Temperature Range:** 0 to 55 °C, operating -20 to 85 °C, storage

Relative Humidity Range: 20 to 80 percent, noncondensing

**Cooling:** Convection

Power Requirements: +5 V at 2.5 A (maximum) -REPEAT M-485 +5 V at 2.0 A (maximum) - REPEAT S-485

Ordering Options		
October 28, 1994 800-00RL85-000 B		
VMIVME-REPEAT L-485		
Cable Requirements		
The VMIVME- <b>REPEAT</b> L-485 requires two cables each. Cables may be ordered from VMIC according to the following model numbers.		
Item	Description	Model Number
1.	Cable Assembly - 5 ft	VMIVME-000-64-005
2.	Cable Assembly -10 ft	VMIVME-000-64-010
3.	Cable Assembly - 25 ft	VMIVME-000-64-025
4.	Cable Assembly - 50 ft	VMIVME-000-64-050
5.	Cable Assembly -100 ft	VMIVME-000-64-100
6.	Cable Assembly -150 ft	VMIVME-000-64-150
7.	Cable Assembly - 200 ft	VMIVME-000-64-200
8.	Cable Assembly -250 ft	VMIVME-000-64-250
Connector Data		
Compatible Connector 120-		-964-435E
Strain Relief 100-		-000-032
PC Board Connector 120-964-033A		
For Ordering Information, Call: 1-800-322-3616 or 1-256-880-0444 • FAX (256) 882-0859 E-mail: info@vmic.com Web Address: www.vmic.com Copyright @ January 1986 by VMIC Specifications subject to change without notice.		



The VMIVME-REPEAT Link regenerates the following VMEbus signals:

D00 to D15LWORD\* A01 to A23IACK\* DS0\* IACKOUT\* DS1\*SYSFAIL\* AS\*BERR\* AM0 to AM5DTACK\* WRITE\*IRQ1\* to IRQ7\* SYSRESET\*GND SYSCLKIACKIN\* (see Note)

Note: IACKIN is daisy chained through the slave chassis and back to the master bus.

## TRADEMARKS

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Figure 1. Typical VMEbus Configuration Using the VMIC VMIVME-Repeater Link

### VMIVME-REPEAT L-485











Install wire jumper between P1, A22 and P1, B22 if an interrupter resides in the last slot of the chassis. Install a jumper between P1, A21 and P1, B22 if an interrupter is not present.

# Figure 4. Interrupt Configuration Jumpers