



VMIVME-REPEAT L VMEbus Repeater Link

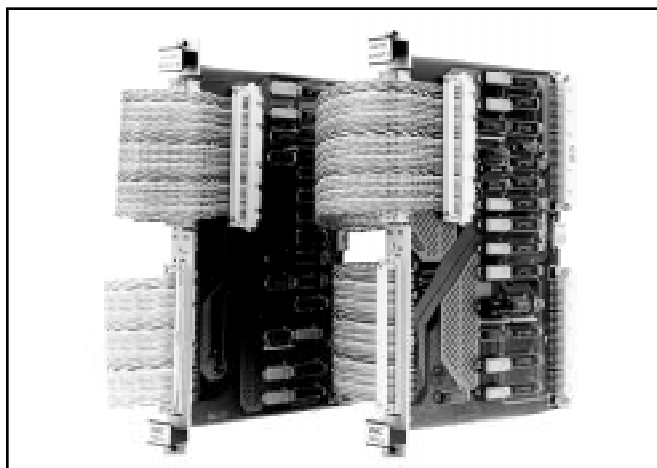
- Supports 8-, 16-, 32-bit transfers
- Supports 16-, 24-, and 32-bit addressing
- Repeats VMEbus P1 and P2
- Propagation delay is approximately 150 ns
- Supports all seven interrupt levels
- Supports VMEbus slaves on a *slave-only* VMEbus
- Supports up to 50-foot cables
- Allows expansion to 19 x 19 slots using 20-slot backplanes in a star configuration
- Double Eurocard form factor
- DIN-type I/O connectors
- Links include one model REPEAT M, one model REPEAT S, and a variety of cable lengths

REPEATER LINK OVERVIEW — The VMIVME-REPEAT L 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 VMIVME-REPEAT Links, as shown in Figure 2.

The VMIVME-REPEAT 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. Thus, any slot in the slave chassis can generate an interrupt.

SPECIFICATIONS

- Supports 8-, 16-, and 32-bit data transfers
- Supports 16-, 24-, and 32-bit addressing
- Supports all seven interrupt levels
- Supports bus slaves and interrupters in slave chassis
- Propagation delay is approximately 150 ns with 5-foot cables (add 4 ns per foot for longer cables)
- Allows expansion to 19 x 19 slots using 20-slot backplanes in a star expansion configuration
- DIN format connectors
- Inexpensive ribbon-cable interconnects
- 50-foot maximum cable length
- Double Eurocard form factor
- Low power consumption
- VMIVME-REPEAT S 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

Ordering Options	
June 7, 1999 800-00REPL-000 E	
VMIVME-REPEAT L	
REPEAT L-xx: Includes a REPEAT M, REPEAT S, and three cable assemblies, xx ft long	
Standard Links:	REPEAT L-05 REPEAT L-10 REPEAT L-25 REPEAT L-50
For Nonstandard Links, Order:	REPEAT M and REPEAT S, plus three each cable assemblies
Cable Requirements	
Cable may be ordered from VMIC according to the following model numbers. Three each are required.	
Description	Model Number
Cable Assembly - 5 ft	VMIVME-000-64-005
Cable Assembly - 10 ft	VMIVME-000-64-010
Cable Assembly - 25 ft	VMIVME-000-64-025
Cable Assembly - 50 ft	VMIVME-000-64-050
Connector Data	
Compatible Cable Connector	Panduit No. 120-964-435
Strain Relief	Panduit No. 100-000-072
PC Board Header Connector	Panduit No. 120-964-033A
Note	
Panduit is also known as ITW/Pancon.	
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.	

Power Requirements:

REPEAT M: 5 V at 0.977 mA

REPEAT S: 5 V at 1.029 mA

MTBF: 242,000 hours (217F)

The VMIVME-REPEAT Link buses the following VMEbus signals:

D00 to D31	WRITE*	SYSFAIL*
A01 to A31	SYSRESET*	BERR*
DS0*	SYSCLK	DTACK*
DS1*	LWORD*	IRQ1* to IRQ7*
AS*	IACK*	GND
AM0 to AM5	IACKOUT*	IACKIN ¹

TRADEMARKS

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1. IACKIN* is daisy chained through the slave chassis and back to the master bus.

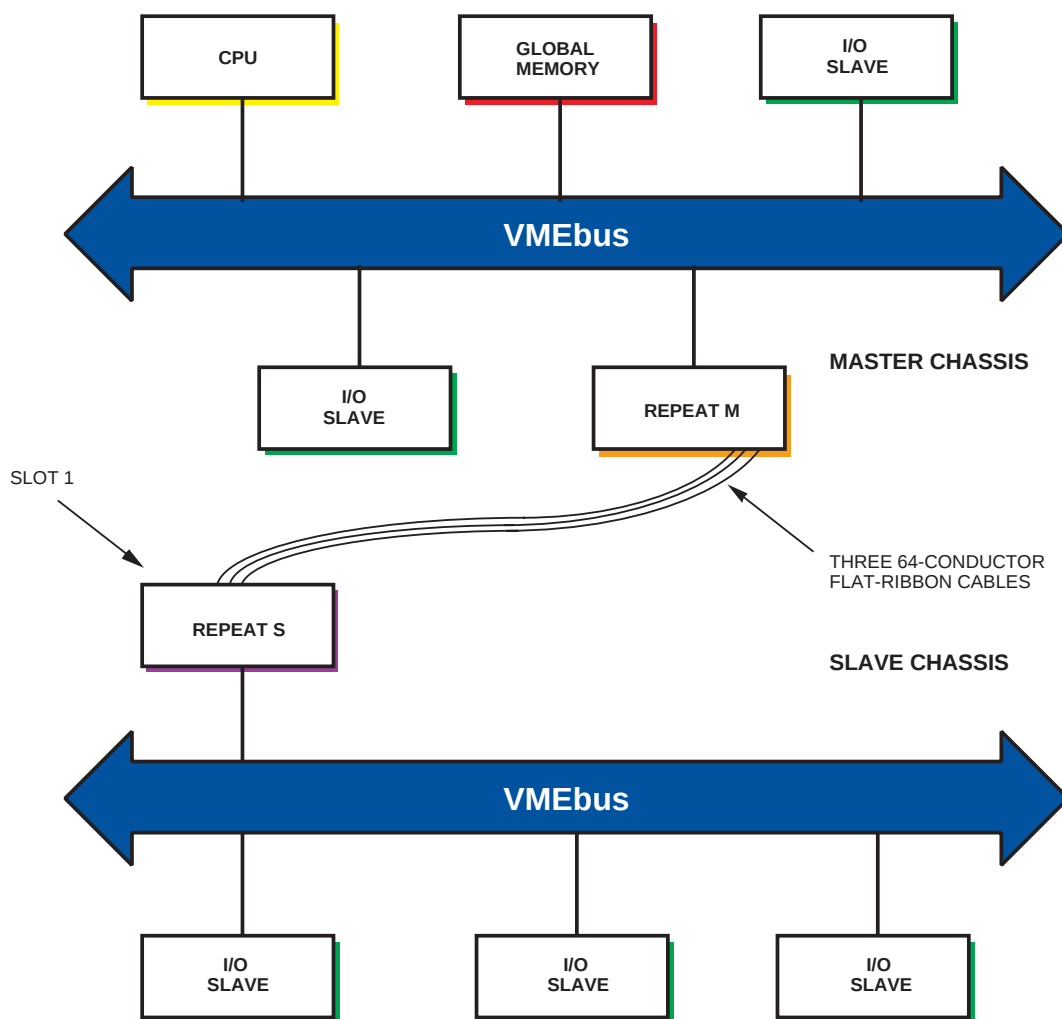


Figure 1. Typical VMEbus Configuration Using the VMIC VMIVME-REPEAT Link

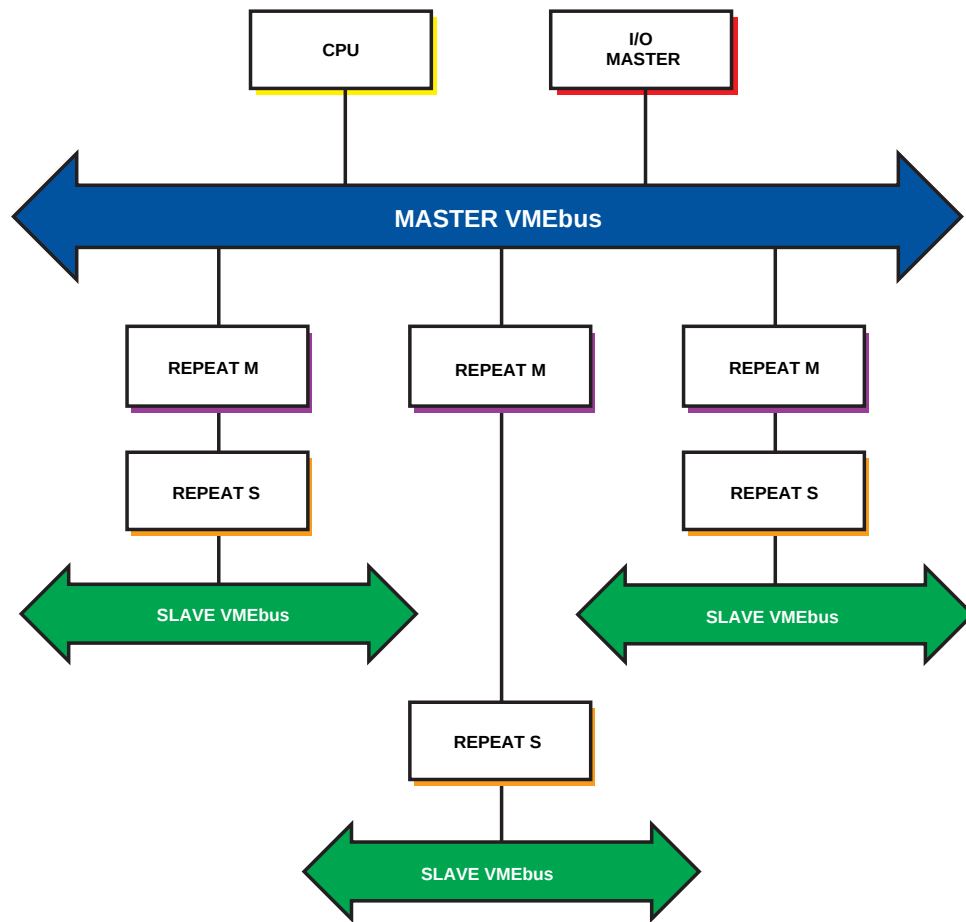


Figure 2. Multiple Slave I/O Chassis

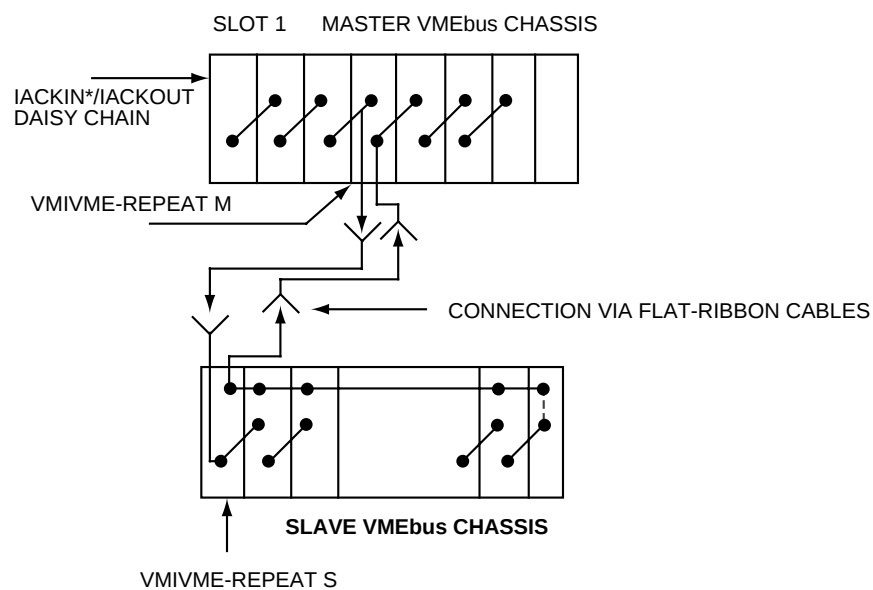


Figure 3. Interrupt Daisy Chain Structure