

- Provides parallel DR11W-A and DRV11-WA-compatible interface from VMEbus to DEC, Concurrent/Masscomp, Prime, Sun Workstations, Data General, Harris Night Hawk, IBM PC/AT, Multibus, and VERSAbus
- 32-bit data transfers
- 32-bit addressing
- Provides interface to high-resolution graphics terminals such as Raster Technologies, Megatek, and Chromatics
- Byte and word swapping (selectable under software control)
- Watchdog timers prevent transfer lockout on VMEbus and cables
- Front panel fail LED
- Supports off-line Built-in-Test plus single board loopback testing (with test cable)
- Meets VMEbus spec. C.1 - compatible address pipelining
- Fully programmable operation (includes selection of 16-/32-bit transfer, burst mode, etc.)
- Fully programmable interrupt levels and vectors
- Software compatible with VMIC's DR11W and DR11W-485 boards with allowances for longwords and defined function 1-bit (direction)
- Two VMIVME-DR11W-As form VMEbus-to-VMEbus link
- UNIX system V.3 driver available

### SPECIFICATIONS

**As a Master:** A24:A32:D8:D16:D32  
Bus request levels 0, 1, 2, or 3 (jumper-selectable)

**As a Slave:** A16:A24:D8:D16  
Addressable on 256-byte boundaries in short I/O space  
Addressable in top 64 Kbyte or bottom 64 Kbyte of standard address space

**Bus Grant Delay:** 70 ns (see note)

### TRANSFER SPECIFICATIONS

#### Maximum Transfer Rate:

Burst: 1.8 Mbyte/s<sup>1</sup> (VME-to-VME)  
1.0 Mbyte/s (Q-Bus)

Single cycle: 1.1 Mbyte/s<sup>1</sup> (VME-to-VME)  
0.5 Mbyte/s (Q-Bus)

**Maximum Block Size:** 256 Kbyte minus 4 bytes

**Transfer Size:** 8, 16, 32 bits<sup>2</sup>

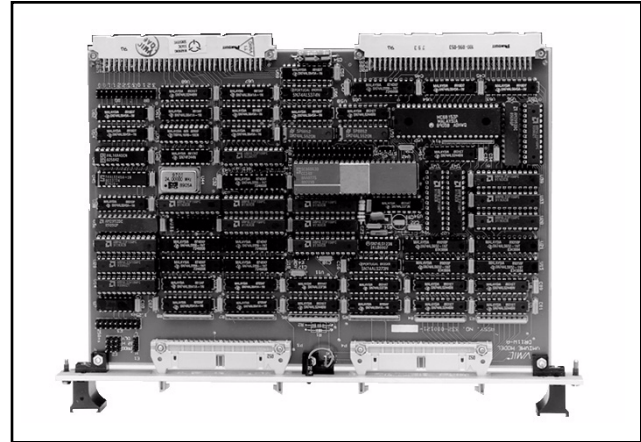
**Transfer Mode:** Bidirectional half-duplex

**Addressing Range:** 32 bits

### I/O CABLES (Not Included)

**Connection Cables:** Two 40-conductor flat-ribbon cables (high quality shielded cables required)

1. Measured transfer rate when two VMIVME-DR11W-A's interfaces are used back-to-back for a VME-to-VME link (10 ft in 32-bit data transfer mode).
2. A 32-bit global memory is required for 32-bit transfers.



**Maximum Cable Length:** 50 ft<sup>3</sup>

### POWER REQUIREMENTS

4.5 A (estimate) typical at +5 VDC

### PHYSICAL/ENVIRONMENTAL

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

**Relative Humidity Range:** 20 to 80 percent, noncondensing

**Cooling:** Convection

**Dimensions:** Double Eurocard 160 x 233.4 x 12.5 mm

**Fail LED:** A Fail LED is provided which is illuminated at power up and extinguished under program control upon successful diagnostic execution

### TRADEMARKS

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3. If used with a non-VMIC DR11W product, the maximum cable length may be limited by that product.

Note — For optimum system performance, VMIC recommends that a different bus request level be used for each DR11W-A controller located on the same VMEbus chassis. Up to 19 DR11W-A controllers may use the same request level; however, the total bus grant delay will significantly reduce the throughput of the controllers near the end of the daisy chain.

Ordering Options
October 28, 1994 800-000121-000 C
VMIVME-DR11W-A
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 © March 1989 by VMIC Specifications subject to change without notice.

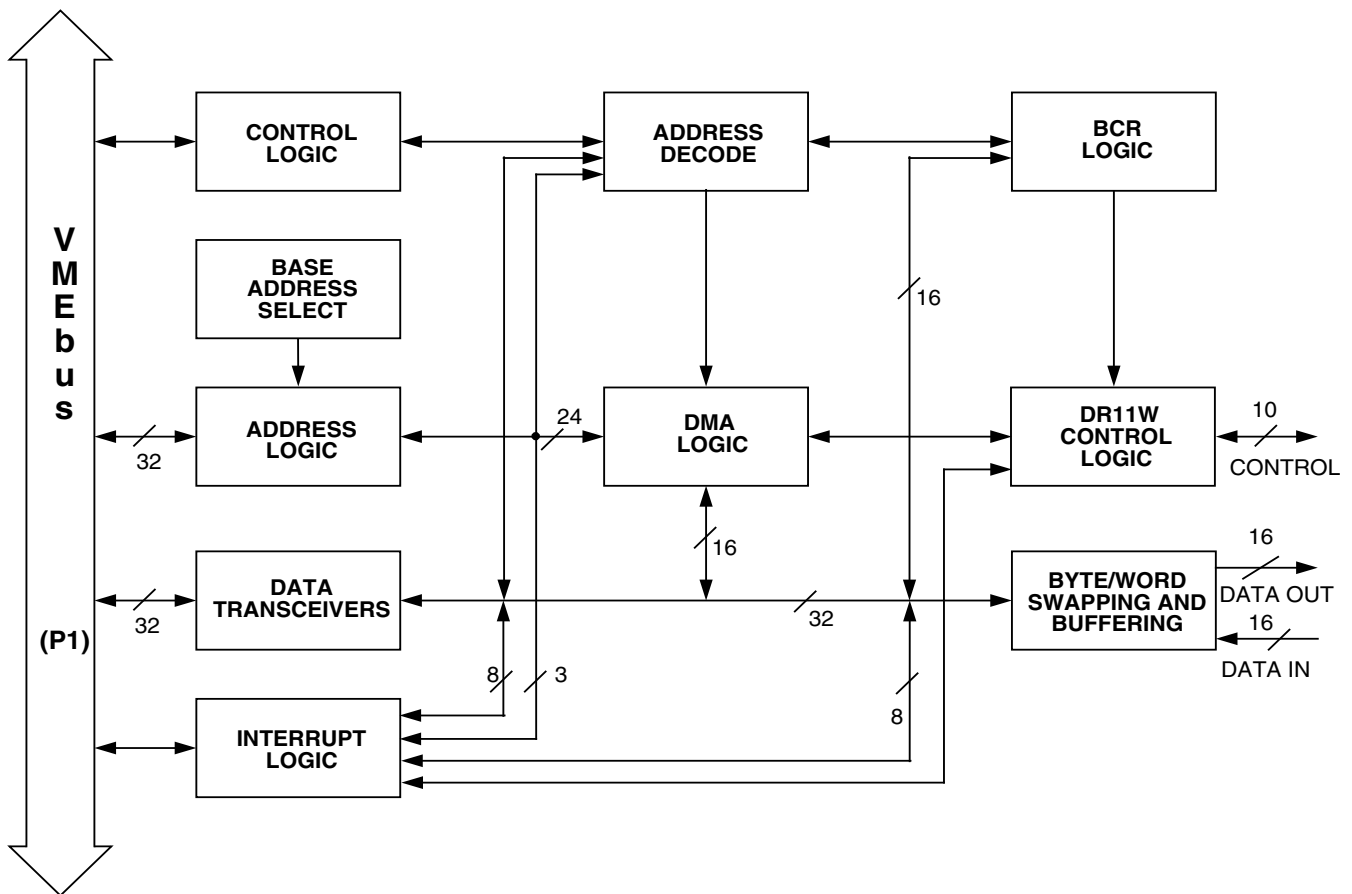


Figure 1. VMIVME-DR11W-A Functional Block Diagram

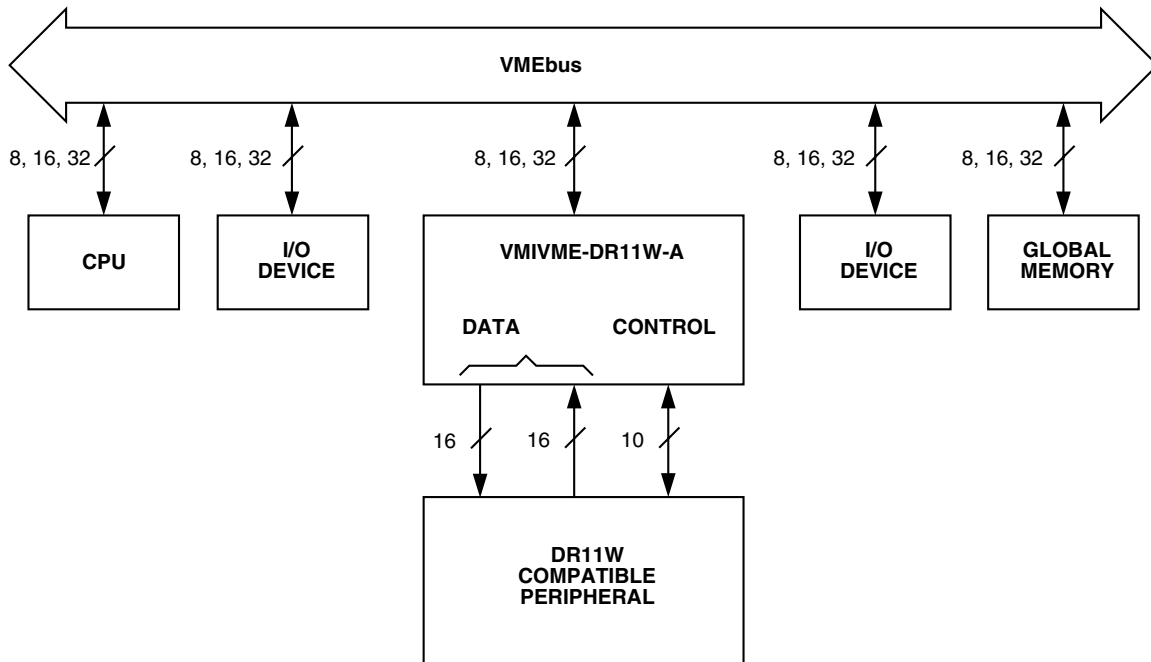
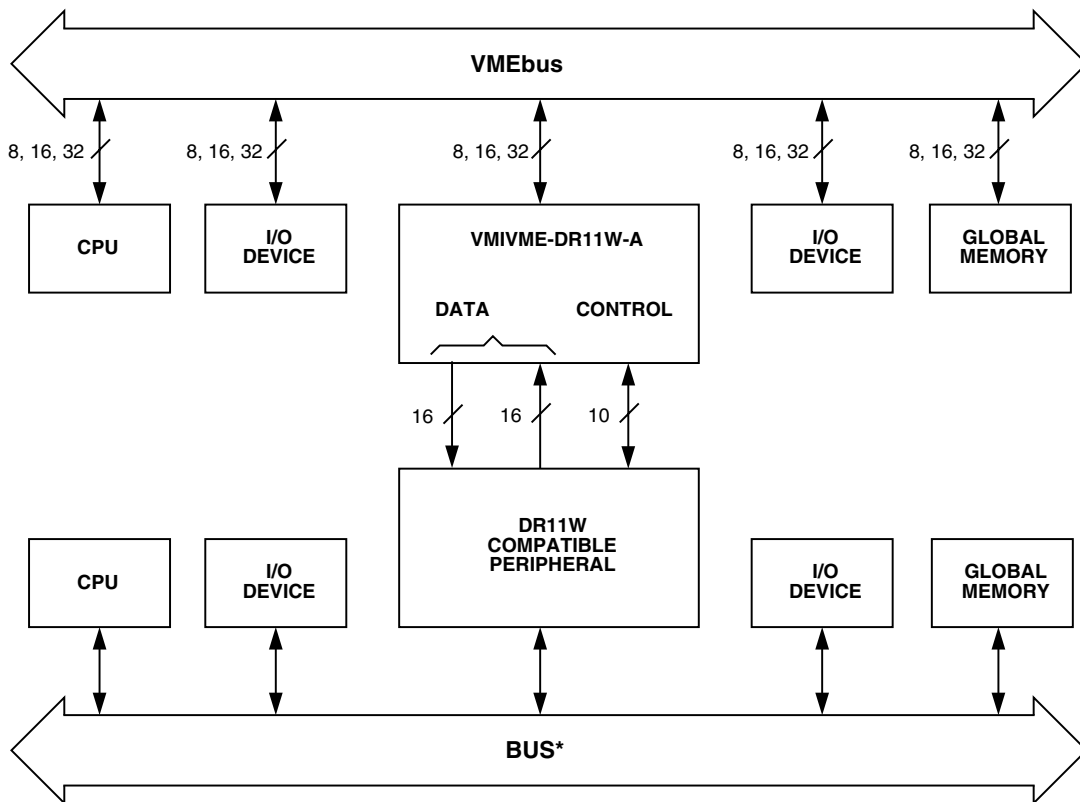


Figure 2. VMIVME-DR11W-A Connection to User Device



\*DEC, Concurrent/Masscomp, Data General, Harris Night Hawk, Prime, IBM PC/AT, Sun Workstations, or other VMEbus-based machines.

Figure 3. DR11W-A CPU-to-CPU Link