

Advme1525

VME Bus Expander (Slave)

Features

VME bus expander slave board which can be used in combination with the Advme 1524 board (master board) to expand the number of VME bus slots

Bridges the read/write cycle and interrupt acknowledge cycle of the VME bus on the master side to the VME bus on the slave side

Has a bus arbiter function and bus master function, so there is no need for a CPU board or similar component on the slave side

Supports bus cycles for 16-bit data buses and 24-bit address buses, and is ideal when you want to expand the number of slots in a system that uses a large number of

DI, DO, AI, AO and other I/O boards

Can be used to expand the number of VME bus slots

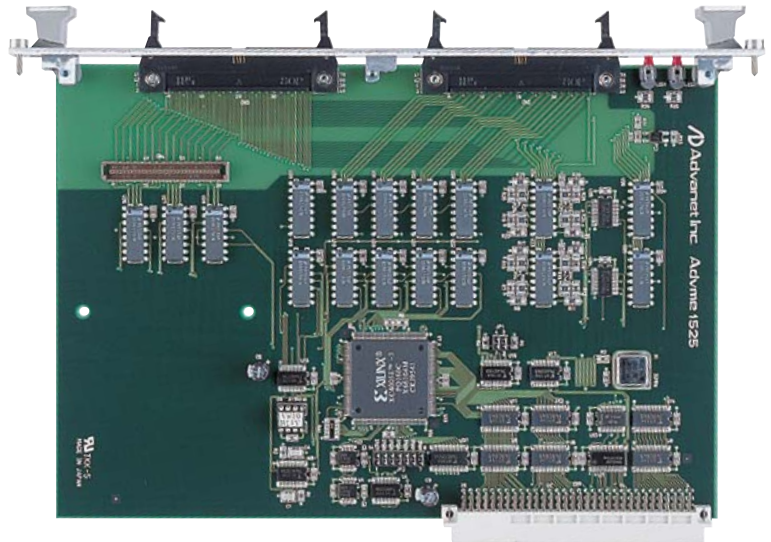
Daisy-chain connections are possible, allowing I/O boards to be distributed to multiple VME racks

Daisy-chain connections allow overall cable length to be extended to 30m, and up to

16 slave boards can be connected to one master board

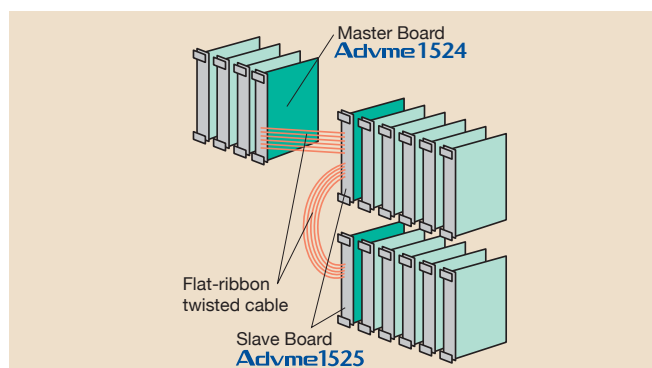
Inserting an I/O board with an interrupter function into the slot on the slave side enables the execution of an interrupt process with the CPU board on the master side

A setting can be specified so that only interrupt requests of a certain level are sent to the master board



VME Bus Expander Configuration Example

The VME bus expander can control I/O boards and memory boards distributed to multiple racks with one CPU board. The configuration below is achieved by using a twisted flat cable to connect a master board (Advme1524) installed in the same rack as the CPU board with a slave board (Advme1525) installed on another rack. This master/slave configuration allows direct access from the CPU board to I/O boards and memory boards in other racks.



Specifications

Signal system : RS-485 multidrop (Interrupt request line only RS-485 point-to-point daisy chain)
Transmission method : Parallel, Multiplex, Source synchronous forwarding
Permissible common input voltage : Up to $\pm 7V$
Maximum number of boards connectable Up to 16 Advme1525 boards can be connected to one Advme1524 board
Maximum overall cable length : Up to 30m
Number of actual signals : 39 pairs
Connector : 80-pin half-pitch connector
Cable : Two 20 pair flat-ribbon type twisted cables
Termination : 130 Ohms (only required for last slave board)
Terminator board available in daughter board format (Advme1524-TERM)
Power-down process : Power up/down information received from Advme1524 board to control receiver
Synchronous clock settings 125ns, 250ns, 500ns or 1us selectable by jumper pin
Bus interface : VMEbus Revision C.3 compliant
Supports A24 and A16 / Supports D16 and D08 (EO)
Power requirements : $+5V \pm 5\%$ (received from VME bus)
Board size : 262mm x 160mm x 20mm Double height, single width (excluding protrusions such as connectors)
Weight : 270g