Appendix A

Glossary of Additional VME64x Terms

Introduction

This is an extension of the terms defined in the VME64 Standard, Appendix A. Terminology described in the VME64 Standard are not repeated in this standard. Refer to the VME64 Standard for a listing of the VME64 Terminology.

3U

A term used to describe single high VME, VME64 and VME64x boards that are 100 mm in height. Also used to describe backplanes that interface to these same boards.

6U

A term used to describe double high VME, VME64 and VME64x boards that are 233.35 mm in height. Also used to describe backplanes that interface to these same boards.

9U

A term used to describe triple high boards that are 366.70 mm in height. Also used to describe backplanes that interface to these same boards. 9U VME, VME64 and VME64x boards and backplanes are not defined in this standard, but are generally considered an optional size.

*** (asterisk)**

When appended to a signal's name, the suffix "*" indicates that the logic state of the signal is the opposite state. A high is a logic zero and a low is a logic one.

Address Space Relocation

The ability to change the base address of a contiguous area within a module. Traditionally in VME, this has been done manually with jumpers or switches. Chapter 10 of this document specifies support for software-programmable address space relocation, thus supporting "plug and play" on VME. Also specified is a standard way to latch switch settings for software to read.

Amnesia Address

An address value used when a geographical address parity error is detected. The board does not know its real geographical address, therefore assigns itself a predefined address value stating "I am alive, but don't know the correct slot number".

BAR

Base Address Register in the CR/CSR. The value is set by the geographical address pins or via the auto slot identification function.

Bit Set/Clear Register

A register with two addresses. Writing a "1" to one address causes the referenced bit register to be set (set to a "1") and writing a "1" to the other address causes the bit to be cleared (set to a "0"). A read to either address will return the value of the bit register.

Configuration RAM (CRAM)

This optional area within CR/CSR space could provide "scratch pad" RAM for use

by system software. The intended use is storage of configuration data associated with the module, such as driver state data to enable automatic fail over.

Contact

A term used to describe the physical connection within a connector where two mechanical components mate to provide an electrical path between two mating elements, such as a board to a backplane or a cable to board. This term is used to describe the P0/J0 connector (IEC 61076-4-113) contact elements.

Data Beat

A time period in which a unit of data is transferred from the source to the destination in the 2eVME protocol. The unit of data is either 4 or 8 bytes.

Fixed Board Connector

An IEC term used to describe the "receptacle" (also called "male") connector for the 2 mm IEC 61076-4-101 connector system, which mount on the backplane.

Free Board Connector

An IEC term used to describe the "plug" (also called "female") connector for the 2 mm IEC 61076-4-101 connector system, which mount on plug in boards.

Geographical Addressing

An address mechanism which provides the binary number of the board slot.

Mate First Break Last (MFBL)

A set of one or more pins that contact before other pin(s) within a connector or connector group during connector mating, i.e. they mate first. During the disconnection of a connector pair, the set of one or more pins that break contact last.

Monarch

The processor that gains or is assigned control to manage the initialization and configuration of all boards plugged into the backplane. The monarch could also be the processor that manages the total system during normal operation.

On-Line

A board's operational state where it is ready to participate in VME bus transactions.

P0/J0 Connector Area

A term used to describe the area on VME64x boards between the P1 and P2 connectors and on VME64 backplanes between the J1 and J2 connectors. The area is used to mount additional connectors for user defined I/O off VME64x boards through VME64x backplanes.

Pins

A term used to describe a connectors physical mechanism of connecting a signal between a board and backplane. The IEC 61076-4-113 connector, provides additional contacts on the connector's outer shell. These are physically blade-on-beam style contacts. Within this standard, the term "pin" is also used to represent these connector contacts, used for P1/J1 and P2/J2 connectors.

Position

A term used to describe the "short row" of pins in a connector which runs the shorter length of the connector, such as pins z17, a17, b17, c17 and d17.

Precharge voltage

A voltage supplied to the board prior to a board's signal pins contact with the backplane connectors. This voltage is used to precharge bus signal pins on the board and to put the bus transceivers into a high impedance mode prior to live insertion. This voltage is also used by the hot swap control logic. This voltage is also used during the withdrawal of a board from a backplane.

Row

A term used to describe the set of pins in a connector which run the longer length of the connector.

User Defined I/O

A term used to describe the functional definition of a group of connector I/O signal pins. The user in this case can be either the supplier (manufacturer) of the board or the end user of the board. From a "standards" point of view, both are users of the standard, therefore the broad definition of "user defined".

User Space

A space within the CR/CSR address space where specific end user's application code (program or data) can be placed. Suppliers (manufacturers) are not allowed to use this space.