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**The Authoritative Dictionary of**  
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- I. Institute of Electrical and Electronics Engineers.

**bus implementation extra information for testing pro forma (BIXIT pro forma)** This questionnaire provides extra information about the module that might be necessary to configure and perform the tests. (C/BA) 896.4-1993w

**business area (BA)** The logical subdivision of an enterprise into areas of similar business directions, e.g., finance, sales, and marketing. (C/PA) 1003.23-1998

**business data processing** The use of computers for processing information to support the operational, logistical, and functional activities performed by an organization. (C) 610.2-1987

**business function** A set of processes that support the attainment of a particular business goal. (C/PA) 1003.23-1998

**business graphics** The use of computer graphics to display business data; for example, bar charts, histograms, pie charts. (C) 610.6-1991w

**business information system** *See:* management information system.

**business system requirement (BSR)** The enterprise-driven requirement for a business system, i.e., a set of processes, procedures, and documentation supported by technology to deliver either a major CSF or a KPI in the measurement of the attainment of the enterprise business goals and vision. *See also:* critical success factor; key performance indicator. (C/PA) 1003.23-1998

**bus interface unit (BIU)** The logic on a module that converts bus signals to and from signals that are compatible with the functional logic of the module. (C/BA) 896.3-1993w

**bus line (1) (railways)** A continuous electric circuit other than the electric train line, extending through two or more vehicles of a train, for the distribution of electric energy. *See also:* multiple-unit control. (EEC/PE) [119]

(2) Signal transmission line, that may be driven by several modules simultaneously using drivers with wire-OR capability. Therefore, a signal carried by a bus line is the combination of signals applied to that line from each module. (C/BA) 896.3-1993w

(3) The medium for the transmission of signals. Since Futurebus+ uses open collector drivers, a bus line may be driven by several boards simultaneously. Therefore, the signal carried by the bus line is the combination of signals applied to that line from each board. (C/BA) 896.2-1991w

(4) The medium for the transmission of signals. Since Futurebus+ requires drivers with wire-OR capability, a bus line may be driven by several modules simultaneously. Therefore, the signal carried by the bus line is the combination of signals applied to that line from each module. (C/BA) 10857-1994, 896.4-1993w

(5) The medium for the transmission of signals. Futurebus+ Spaceborne Profile uses both open collector and push-pull drivers to match whether a signal is expected to be driven by more than one board simultaneously. A bus line is driven by only one board for those signals that are push-pull. A bus line may be driven by several boards simultaneously for those signals that are open collector. Therefore, the signal carried by the bus line is the combination of signals applied to that line from each board in the open collector case or from the one board in the push-pull case. (C/BA) 896.10-1997

**bus lock** Method of a master ensuring continued tenure of the bus. Not identical to resource lock. (C/MM) 1196-1987w

**bus loss** The amount of time required for a valid signal transition to occur at every point on the backplane. This value is equivalent to two bus propagation delays plus the clock skew. (C/MM) 1296-1987s

**bus manager (1)** The node that provides advanced power management, optimizes Serial Bus performance, describes the

(2) The node that provides power management, sets the gap count in the cable environment, and publishes the topology of the bus and the maximum speed for data transmission between any two nodes on the bus. The bus manager node may also be the isochronous resource manager node. (C/MM) 1394a-2000

**bus master** A device connected to a bus which controls all other devices connected to the same bus. *Note:* The bus master controls which slave devices may, and when they may, place data on the bus. *Contrast:* bus slave. (C) 610.10-1994w

**bus mouse** A mouse that connects to the computer system using a bus, generally contained within a special expansion board. *Contrast:* serial mouse. (C) 610.10-1994w

**bus node** In the device tree, a descendant node that represents the interface, or "bridge," between an SBus and its parent (which could be another bus). (C/BA) 1275.2-1994w, 1275.4-1995

**bus operation** The basic unit of processing whereby digital signals effect the transfer of data across an interface by means of a sequence of control signals and an integral number of bus clock cycles. (C/MM) 1296-1987s

**bus owner** The agent that enters the acquisition phase of the arbitration operation and initiates one or more transfer operations. *See also:* transfer operation; arbitration operation; acquisition phase. (C/MM) 1296-1987s

**bus reactor (power and distribution transformers)** A current-limiting reactor for connection between two different buses or two sections of the same bus for the purpose of limiting and localizing the disturbance due to a fault in either bus. *See also:* reactor. (PE/TR) C57.12.80-1978r, [57]

**bus request sequence** A set of one or more arbitration operations in which all agents that simultaneously request the bus become the bus owner, one at a time. *See also:* bus owner; arbitration operation. (C/MM) 1296-1987s

**bus-ring topology** A topology where the stations are physically wired as a bus but logically act like a ring. Every station on the bus knows its logical predecessor and successor. Transmissions can be broadcast to all stations on the bus or addressed to another individual station. *See also:* bus topology; star-ring topology; ring topology; star topology; star-bus topology; loop topology; tree topology. (C) 610.7-1995

**Bus Sizing** The dynamic modification of the data transfer width to meet the SBus Slave's bus width requirements. (C/BA) 1496-1993w

**bus slave (A)** A device which responds to signals on a bus. *Contrast:* bus master. **(B)** A device connected to a bus which cannot put data onto the bus until given permission by the bus driver or bus master. (C) 610.10-1994

**bus standard** An abbreviated notation used throughout this document, rather than the more exact "bus standard document that claims conformance to this specification." (C/MM) 1212-1991s

**bus state (696 interface devices) (signals and paths)** A bus state is one clock cycle long and begins and ends just before the rising edge of  $\phi$ . There are at least three bus states in every bus cycle. (C/MM) 696-1983w

**bus structure** An assembly of bus conductors, with associated connection joints and insulating supports. (PE/SUB) 605-1998

**bus support (1)** An insulating support for a bus. It includes one or more insulator units with fittings for fastening to the mounting structure and for receiving the bus. (SWG/PE) C37.100-1992

(2) An insulating support for a bus. *Note:* A bus support includes one or more insulator units with fittings for fastening to the mounting structure and for receiving the bus. (PE/SUB) 605-1998

**bus tenure** The duration of a master's control of the bus; i.e., the time during which a module has the right to initiate and

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