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program for use by or in connection with the instruction execution system, apparatus, or device, including the computer system **500**.

The medium **506** can be any tangible electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system (or apparatus or device). Examples of a computer readable medium **506** include a semiconductor or solid state memory, magnetic tape, a removable computer diskette, a random access memory (RAM), a read-only memory (ROM), a rigid magnetic disk and an optical disk. Current examples of optical disks include compact disk-read only memory (CD-ROM), compact disk-read/write (CD-R/W) and DVD.

The computing system **500**, suitable for storing and/or executing program code, can include one or more processors **502** coupled directly or indirectly to memory **508** through a system bus **510**. The memory **508** can include local memory employed during actual execution of the program code, bulk storage, and cache memories which provide temporary storage of at least some program code in order to reduce the number of times code is retrieved from bulk storage during execution. Input/output or I/O devices **504** (including but not limited to keyboards, displays, pointing devices, etc.) can be coupled to the system either directly or through intervening I/O controllers. Network adapters may also be coupled to the system to enable the computing system **500** to become coupled to other data processing systems, such as through host systems interfaces **512**, or remote printers or storage devices through intervening private or public networks. Modems, cable modem and Ethernet cards are just a few of the currently available types of network adapters.

What is claimed is:

1. A method operable in a Serial Attached Small Computer System Interface architecture, the method comprising:

linking a Peripheral Component Interconnect Express target device to a Serial Attached Small Computer System Interface expander;

linking the expander to a Serial Attached Small Computer System Interface controller;

opening a Serial Attached Small Computer System Interface connection between the controller and the expander;

buffering packets of data at an end point in the connection; issuing a number of the data packets to be transferred in the connection; and

transporting the issued number of data packets between the target device and a host system through the connection via the Peripheral Component Interconnect Express protocol.

2. The method of claim **1**, further comprising:

connecting the expander to a plurality of Peripheral Component Interconnect Express target devices; and routing Peripheral Component Interconnect Express data from the host system to the Peripheral Component Interconnect Express target devices.

3. The method of claim **2**, further comprising:

aggregating the plurality of Peripheral Component Interconnect Express target devices to represent the Peripheral Component Interconnect Express target devices to another Serial Attached Small Computer System Interface expander as a single Peripheral Component Interconnect Express target device.

4. The method of claim **1**, further comprising:

exchanging Data Link Layer Packets between the expander and the controller.

5. The method of claim **4**, further comprising:

terminating and processing the Data Link Layer Packets at the controller; and

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performing credit management of Transaction Layer Packets via the Data Link Layer Packets at the controller.

6. The method of claim **4**, further comprising:

terminating and processing the Data Link Layer Packets at the expander; and

performing credit management of Transaction Layer Packets via the Data Link Layer Packets at the expander.

7. The method of claim **1**, further comprising:

exchanging Data Link Layer Packets between the expander and another Serial Attached Small Computer System Interface expander configured between the expander and the controller.

8. The method of claim **1**, further comprising:

providing a pathway identifier field from the controller to switch packets to the target device.

9. A data system, comprising:

a Serial Attached Small Computer System Interface expander;

a Peripheral Component Interconnect Express target device coupled to the expander; and

a Serial Attached Small Computer System Interface controller communicatively coupled to a host system and the expander, wherein the controller is operable to open a connection with the expander via the Serial Attached Small Computer System Interface protocol, and to transport packet data between the target device and the host system through the connection via the Peripheral Component Interconnect Express protocol.

10. The data system of claim **9**, wherein:

the expander includes an aggregator operable to connect to a plurality of Peripheral Component Interconnect Express target devices and to route Peripheral Component Interconnect Express data from the host system to the Peripheral Component Interconnect Express target devices.

11. The data system of claim **10**, wherein:

the aggregator is further operable to represent the Peripheral Component Interconnect Express target devices to another Serial Attached Small Computer System Interface expander as a single Peripheral Component Interconnect Express target device.

12. The data system of claim **9**, wherein:

the expander includes an aggregator operable to provide a Serial Attached Small Computer System Interface to another Serial Attached Small Computer System Interface expander.

13. The data system of claim **9**, wherein:

the controller comprises an initiator operable to exchange Data Link Layer Packets with the expander.

14. The data system of claim **13**, wherein:

the initiator comprises:

a buffer operable to store the Transaction Layer Packets; and

a buffer manager operable to perform credit management of the Transaction Layer Packets via the Data Link Layer Packets.

15. The data system of claim **9**, wherein:

the controller is further operable to receive Peripheral Component Interconnect Express packet data from the host system, to translate the packet data to Serial Attached Small Computer System Interface data, and to route the Serial Attached Small Computer System Interface data to a Serial Attached Small Computer System Interface target device coupled to the expander.

16. The data system of claim **9**, wherein:

the controller is directly coupled to a plurality of Peripheral Component Interconnect Express target devices to