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inter-expander communications to at least one phys of the third SAS expander for inter-expander communications.

7. The method of claim 1, wherein the retrying the data transfer through the second SAS expander comprises: 5
 retrying the data transfer through the second SAS expander via a functional link between the second SAS expander and the port of the device.

8. The method of claim 1, wherein the inter-expander communications utilize a SAS Management Protocol.

9. The method of claim 1, wherein the first SAS expander and the at least one additional SAS expander each implement firmware configured to operate the first SAS expander and the at least one additional SAS expander as a single, cohesive expander.

10. The method of claim 1, wherein the port of the device comprises:
 a wide port of the device.

11. The method of claim 1, wherein the re-routing the data transfer from the second SAS expander to the first SAS expander or a third SAS expander, or retrying the data transfer through the second SAS expander comprises: 20
 repeatedly attempting to re-route the data transfer from the second SAS expander to the first SAS expander or to a third SAS expander or retrying the data transfer through the second SAS expander until a phy suitable for completing the data transfer to the port of the device becomes available.

12. The method of claim 1, wherein the re-routing the data transfer from the second SAS expander to the first SAS expander or a third SAS expander, or retrying the data transfer through the second SAS expander comprises: 30
 repeatedly attempting to re-route the data transfer from the second SAS expander to the first SAS expander or to a third SAS expander or retrying the data transfer through the second SAS expander until a timeout occurs.

13. A method for back-off retry in a single, cohesive serial attached small computer system interface (SAS) expander, comprising:
 routing a data transfer between an input of a single, cohesive SAS expander and an output of the single, cohesive SAS expander, wherein the single, cohesive expander includes a first SAS expander, and at least one additional SAS expander, wherein the first SAS expander is connected to the at least one additional SAS expander via at least one inter-expander link (IEL) for inter-expander communications; 35
 determining link availability between the first SAS expander and a port of a device;
 upon determination of a failed link or a busy link between the first SAS expander and the port of the device, re-routing the data transfer of the first SAS expander to a second SAS expander on an indirect alternate path via an IEL path connecting at least one phys of the first SAS expander for inter-expander communications to at least one phys of the second SAS expander for inter-expander communications; 40
 determining link availability between the second SAS expander and the port of the device; and
 upon determining the link availability between the second SAS expander and the port of the device to be a failed link or a busy link:
 re-routing the data transfer from the second SAS expander to the first SAS expander when the first SAS expander is available;

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re-routing the data transfer from the second SAS expander to the third SAS expander when first SAS expander is not available; and
 retrying the data transfer through the second SAS expander when the first SAS expander and third SAS expander is not available.

14. The method of claim 13, wherein the IEL between the first SAS expander and the at least one additional SAS expander connects the first SAS expander to the at least one additional SAS expander via at least one phy for inter-expander communications of the first SAS expander and at least one phy for inter-expander communications of the at least one additional SAS expander.

15. The method of claim 13, further comprising:
 sending a vendor unique status SAS PRIMITIVE from the second SAS expander to the first SAS expander upon determination that the second SAS is unable to complete the data transfer to the selected connector of the device.

16. The method of claim 13, wherein the determining link availability between the second SAS expander and the port of the device comprises:
 receiving an SAS PRIMITIVE status sent by the second SAS expander, the SAS PRIMITIVE status received by the first SAS expander.

17. The method of claim 13, wherein the re-routing the data transfer from the second SAS expander to the first SAS expander or a third SAS expander comprises:
 re-routing the data transfer from the second SAS expander to the first SAS expander via an IEL path connecting at least one phys of the first SAS expander for inter-expander communications to at least one phys of the second SAS expander for inter-expander communications or re-routing the data transfer from the second SAS expander to a third SAS expander via an IEL path connecting at least one phys of the second SAS expander for inter-expander communications to at least one phys of the third SAS expander for inter-expander communications.

18. The method of claim 13, wherein the retrying the data transfer through the second SAS expander comprises:
 retrying the data transfer through the second SAS expander via a functional link between the second SAS expander and the port of the device.

19. The method of claim 13, wherein the port of the device comprises:
 a wide port of the device.

20. The method of claim 13, wherein the re-routing the data transfer from the second SAS expander to the first SAS expander or a third SAS expander, or retrying the data transfer through the second SAS expander comprises:
 repeatedly attempting to re-route the data transfer from the second SAS expander to the first SAS expander or to a third SAS expander or retrying the data transfer through the second SAS expander until a phy suitable for completing the data transfer to the selected connector of the device becomes available.

21. The method of claim 13, wherein the re-routing the data transfer from the second SAS expander to the first SAS expander or a third SAS expander, or retrying the data transfer through the second SAS expander comprises:
 repeatedly attempting to re-route the data transfer from the second SAS expander to the first SAS expander or to a third SAS expander or retrying the data transfer through the second SAS expander until a timeout occurs.