T10/02-427 revision 1

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To: T10 Committee (SCSI)

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Subject: SAS Target and Initiator Names

1 Overview

All SAS devices should have device names assigned to them that are unique. Currently only initiator ports, target ports, and expanders are required to have names. This proposal adds initiator devices and target devices to that list.

2 Changes to SAS

All references to SAS address need to be changed to SAS Name.

3.1.88 SAS name: A worldwide unique name assigned to an initiator port, <u>initiator device</u>, target port, <u>target device</u>, or expander device (see 4.2.2).

4.2.1 Names and identifiers overview

Device names are worldwide unique names for devices within a protocol (see SAM-3). Port names are worldwide unique names for ports within a protocol. Port identifiers are the values by which ports are identified within a domain, and are used as SAS names. Phy identifiers are unique within a device.

Table 1 shows the definition of names and identifiers for SAS.

Table 1 — Names and identifiers

Object	SAS implementation
Port identifier	SAS name
Port name	Not defined
Device name	Not defined SAS name
Phy identifier	Phy identifier

4.2.2 SAS names

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Each initiator port, <u>initiator device</u>, target port, <u>target device</u>, target/initiator port, <u>target/initiator device</u>, and expander device shall include a SAS name.

11.1 Names and identifiers

Table 2 describes how various SAM-3 objects are implemented in SSP.

Table 2 — SAM-3 object mapping

SAM-3 object	SSP implementation
Initiator port identifier	Initiator port SAS name
Initiator port name	Not defined
Target port identifier	Target port SAS name
Target port name	Not defined
Device name	Not defined SAS name

3 Changes to SAM-3

Table A.4 — Object name size for each SCSI transport protocol

Replace the 'not specified' entries in the SSP SAS column rows for target device and initiator device to '8 bytes'

Table A.5 — Object name format for each SCSI transport protocol

Replace the 'not specified' entries in the SSP SAS column rows for target device and initiator device to 'NAA IEEE Registered format per SPC-3'.