

Date: October 23, 2002

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.

In addition this proposal recommends that all SAS port identifiers be world-wide unique.

## 2 Changes to SAS

3.1.88 SAS address: A worldwide unique name assigned to an initiator port, [initiator device](#), target port, [target device](#), 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~~ [worldwide unique](#) values by which ports are identified within a domain, and are used as SAS addresses. 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 address
Port name	Not defined
Device name	<del>Not defined</del> <a href="#">SAS address</a>
Phy identifier	Phy identifier

### 4.2.2 SAS addresses

Each initiator port, [initiator device](#), target port, [target device](#), target/initiator port, [target/initiator device](#), and expander device shall include a SAS address.

### 4.2.4 Port names

Port names are not defined in SAS.

NOTE 1 Port names are not defined in SAS, because ~~the SAS address used by ports in different SAS domains may be the same. Also,~~ there is no login process in SSP to exchange port names.

## 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 address
Initiator port name	Not defined
Target port identifier	Target port SAS address
Target port name	Not defined
Device name	<del>Not defined</del> SAS address

### 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'.