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## NVM Express™ Technical Errata

Errata ID	003
Revision Date	12/15/2016
Affected Spec Ver.	NVMe over Fabrics 1.0
Corrected Spec Ver.	

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### Errata Overview

The I/O Queue Command Capsule Supported Size field and its use for RDMA is clarified.

The Authentication Send and Authentication Receive SGL Descriptor 1 fields are updated to show that the SGL must describe the entire data transfer.

**Revision History**

Revision Date	Change Description
10/17/2016	Initial draft
11/14/2016	Updates for IOCCSZ that Judy suggested.
11/16/2016	Updates based on 11/15 optional errata call.
12/15/2016	Removed the size indication that should not be present under the "SGL Type" heading.
2/6/2017	Change to the Capsule Size in the RDMA and the SGL Mapping Figure

## Description of Specification Changes

**Modify Figure 39 as shown below:**

**Figure 39: RDMA Capsule Size and SGL Mapping**

Capsule Type	Capsule Size	SGL Type
Fabrics and Admin Commands	64 bytes	Host-resident data buffer only
Fabrics and Admin Responses	16 bytes	n/a
I/O Queue Command	MDTS (IOCCSZ * 16) bytes	Host-resident data buffer or in-capsule data; <del>maximum size up to the Maximum Data Transfer Size indicated in the Identify Controller data structure</del>
I/O Queue Response	16 bytes	n/a

**Modify a portion of Figure 28 (Identify Controller Attributes) as shown below:**

1795:1792	M	<b>I/O Queue Command Capsule Supported Size (IOCCSZ):</b> This field defines the <del>maximum</del> I/O command capsule size in 16 byte units. The minimum value that <del>shall be indicated may be specified</del> is 4 corresponding to 64 bytes.
1799:1796	M	<b>I/O Queue Response Capsule Supported Size (IORCSZ):</b> This field defines the <del>maximum</del> I/O response capsule size in 16 byte units. The minimum value that <del>shall be indicated may be specified</del> is 1 corresponding to 16 bytes.

**Modify a portion of Figure 15 as shown below:**

39:24	<p><del><b>SGL Descriptor 1 (SGL1):</b> This field contains the first SGL descriptor for the command. If the SGL descriptor is an SGL Data Block or Keyed SGL Data Block descriptor, then it describes the entire data transfer. If more than one SGL descriptor is needed to describe the data transfer, then the first SGL descriptor is a Segment or Last Segment descriptor. Refer to section 4.4 of the NVMe Base specification for the definition of SGL descriptors.</del></p> <p>This field contains an SGL Data Block or Keyed SGL Data Block descriptor that describes the entire data transfer. Refer to section 4.4 of the NVMe Base specification for the definition of SGL descriptors.</p>
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**Modify a portion of Figure 17 as shown below:**

39:24	<p><del><b>SGL Descriptor 1 (SGL1):</b> This field contains the first SGL descriptor for the command. If the SGL descriptor is an SGL Data Block or Keyed SGL Data Block descriptor, then it describes the entire data transfer. If more than one SGL descriptor is needed to describe the data transfer, then the first SGL descriptor is a Segment or Last Segment descriptor. Refer to section 4.4 of the NVMe Base specification for the definition of SGL descriptors.</del></p> <p>This field contains an SGL Data Block or Keyed SGL Data Block descriptor that describes the entire data transfer. Refer to section 4.4 of the NVMe Base specification for the definition of SGL descriptors.</p>
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