**Document Number: DSP0241**

**Date: 2009-04-23**

**Version: 1.0.0**

# Platform Level Data Model (PLDM) over MCTP Binding Specification

**Document Type: Specification**

**Document Status: DMTF Standard**

**Document Language: E**

DMTF is a not-for-profit association of industry members dedicated to promoting enterprise and systems management and interoperability. Members and non-members may reproduce DMTF specifications and documents, provided that correct attribution is given. As DMTF specifications may be revised from time to time, the particular version and release date should always be noted.

Implementation of certain elements of this standard or proposed standard may be subject to third party patent rights, including provisional patent rights (herein "patent rights"). DMTF makes no representations to users of the standard as to the existence of such rights, and is not responsible to recognize, disclose, or identify any or all such third party patent right, owners or claimants, nor for any incomplete or inaccurate identification or disclosure of such rights, owners or claimants. DMTF shall have no liability to any party, in any manner or circumstance, under any legal theory whatsoever, for failure to recognize, disclose, or identify any such third party patent rights, or for such party's reliance on the standard or incorporation thereof in its product, protocols or testing procedures. DMTF shall have no liability to any party implementing such standard, whether such implementation is foreseeable or not, nor to any patent owner or claimant, and shall have no liability or responsibility for costs or losses incurred if a standard is withdrawn or modified after publication, and shall be indemnified and held harmless by any party implementing the standard from any and all claims of infringement by a patent owner for such implementations.

For information about patents held by third-parties which have notified the DMTF that, in their opinion, such patent may relate to or impact implementations of DMTF standards, visit http://www.dmtf.org/about/policies/disclosures.php.

# CONTENTS



## Figures



## Tables

57

# Foreword

The *Platform Level Data Model (PLDM) over MCTP Binding Specification* (DSP0241) was prepared by the Platform Management Components Intercommunications (PMCI) Working Group.

DMTF is a not-for-profit association of industry members dedicated to promoting enterprise and systems management and interoperability.

# Introduction

PLDM is designed to be an interface and data model that provides efficient access to low-level platform inventory, monitoring, control, event, and data/parameters transfer functions. For example, temperature, voltage, or fan sensors can have a PLDM representation that can be used to monitor or control the platform using a set of PLDM messages. PLDM over MCTP binding defines the format of PLDM over MCTP messages.

# Platform Level Data Model (PLDM) over MCTP Binding Specification

## 1 Scope

This document defines the format of Platform Level Data Model (PLDM) over MCTP messages.

This document specifies the following information:

- PLDM over MCTP binding
- common format for PLDM over MCTP messages

## 2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

### 2.1 Approved References

DMTF DSP0240, *Platform Level Data Model (PLDM) Base Specification,*
http://www.dmtf.org/standards/published_documents/DSP0240_1.0.0.pdf

DMTF DSP0245, *Platform Level Data Model (PLDM) IDs and Codes,*
http://www.dmtf.org/standards/published_documents/DSP0245_1.0.0.pdf

### 2.2 References under Development

DMTF DSP0248, *Platform Level Data Model (PLDM) for Platform Monitoring and Control*

### 2.3 Other References

ISO/IEC Directives, Part 2, *Rules for the structure and drafting of International Standards,*
http://isotc.iso.org/livelink/livelink.exe?func=ll&objId=4230456&objAction=browse&sort=subtype

OMG, *Unified Modeling Language (UML) from the Open Management Group (OMG)*, http://www.uml.org/

## 3 Terms and Definitions

Refer to DSP0240 for terms and definitions that are used across the PLDM specifications.

## 4 Symbols and Abbreviated Terms

Refer to DSP0240 for symbols and abbreviated terms that are used across the PLDM specifications.

# 5 Conventions

Refer to DSP0240 for conventions, notations, and data types that are used across the PLDM specifications.

# 6 PLDM over MCTP Binding

This specification defines how the platform-level data models and platform functions are implemented using MCTP communications. PLDM is supported as a message type over MCTP. PLDM over MCTP binding defines the format of PLDM over MCTP messages. (DSP0240 defines the common fields for PLDM messages and their usage.)

## 6.1 PLDM over MCTP Message Fields

Figure 1 shows the fields of an MCTP message body carrying a PLDM message.

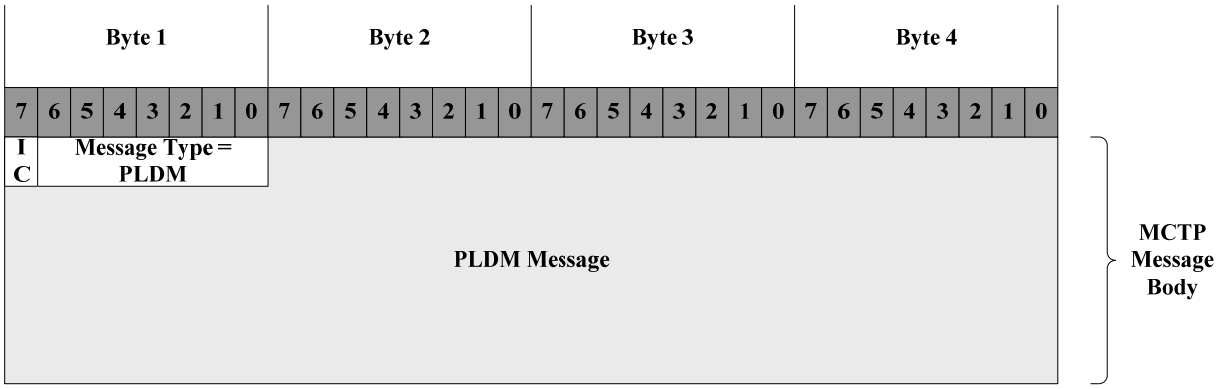


**Figure 1 – PLDM over MCTP Message Fields**

Table 1 defines the fields for the PLDM over MCTP message.

**Table 1 – PLDM over MCTP Message Field Descriptions**

| Field Name | Field Size | Description |
|---|---|---|
| IC | 1 bit | Message Integrity Check bit = `0b`<br>PLDM over MCTP messages do not include an overall Message Integrity check field. |
| Message Type | 7 bits | PLDM = `0x01` (`000_0001b`)<br>This field identifies the MCTP message as carrying a PLDM message. |
| PLDM Message | Variable | The base PLDM message fields are defined in DSP0240. |

# 7 Event Receiver Address Format for PLDM over MCTP Binding

The destination for Event Messages within PLDM is called the Event Receiver, as described in DSP0248. The Event Receiver function is implemented by a PLDM Terminus within the platform management subsystem. For PLDM over MCTP binding, the Event Receiver Address (eventReceiverAddress) format described in Table 2 shall be used.

**Table 2 – Event Receiver Address Format for PLDM over MCTP Binding**

| transportProtocolType | eventReceiverAddress |
|---|---|
| MCTP (see DSP0245 for transport protocol types) | Endpoint ID (EID) of Event Receiver |

The MCTP transport layer may have to resolve the EID into a physical address in order to be able to send messages to the Event Receiver.

# ANNEX A (informative)

# Change Log

| Version | Date | Author | Description |
|---|---|---|---|
| 1.0.0a | 9/17/2008 | Hemal Shah | 1.0.0 Preliminary release |
| 1.0.0 | 4/23/2009 | | DMTF Standard Release |