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Foreword

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This document was prepared by DMTF [as DMFT Network Controller Sideband Interface (NC-SI) Specifications Collection] and drafted in accordance with its editorial rules. It was adopted, under the JTC 1 PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

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Foreword

The *Network Controller Sideband Interface (NC-SI) Specification* was prepared by the PMCI Working Group. DMTF is a not-for-profit association of industry members dedicated to promoting enterprise and systems management and interoperability.

Component documents

Table 1 lists the component documents for this specification:

Table 1 – Component documents

Document number	Document title	Version
DSP0222	Network Controller Sideband Interface (NC-SI) Specification (DSP0222)	1.1.1
DSP0261	Network Controller Sideband Interface (NC-SI) Collection (DSP0261)	1.2.3

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Introduction

Network Controller Sideband Interface (NC-SI) Specification (DSP0222)

In out-of-band management environments, the interface between the out-of-band Management Controller and the Network Controller is critical. This interface is responsible for supporting communication between the Management Controller and external management applications. Currently there are multiple such proprietary interfaces in the industry, leading to inconsistencies in implementation of out-of-band management.

The goal of this specification is to define an interoperable sideband communication interface standard to enable the exchange of management data between the Management Controller and Network Controller. The Sideband Interface is intended to provide network access for the Management Controller, and the Management Controller is expected to perform all the required network functions.

This specification defines the protocol and commands necessary for the operation of the sideband communication interface. This specification also defines physical and electrical characteristics of a sideband binding interface that is a variant of RMII targeted specifically for sideband communication traffic.

The specification is primarily intended for architects and engineers involved in the development of network interface components and Management Controllers that will be used in providing out-of-band management**.**

NC-SI over MCTP Binding Specification (DSP0261)

The *NC-SI over MCTP Binding Specification* defines new MCTP messages used to convey NC-SI Control packets and Ethernet traffic over MCTP to allow NC-SI Pass-through traffic over MCTP. This specification is based on the DSP0222 1.1 specification and uses the same NC-SI Control packet definitions.

Document conventions

Typographical conventions

The following typographical conventions are used in this document:

- Document titles are marked in *italics*.
- Important terms that are used for the first time are marked in *italics*.
- Terms include a link to the term definition in Terms and definitions, enabling easy navigation to the term definition.
- ABNF rules are in `monospaced font`.

ABNF usage conventions

Format definitions in this document are specified using ABNF (see RFC5234), with the following deviations:

- Literal strings are to be interpreted as case-sensitive Unicode characters, as opposed to the definition in RFC5234 that interprets literal strings as case-insensitive US-ASCII characters.

Reserved and unassigned values

Unless otherwise specified, any reserved, unspecified, or unassigned values in enumerations or other numeric ranges are reserved for future definition by the DMTF.

Unless otherwise specified, numeric or bit fields that are designated as reserved shall be written as 0 (zero) and ignored when read.

Byte ordering

Unless otherwise specified, byte ordering of multibyte numeric fields or bit fields is "Big Endian" (that is, the lower byte offset holds the most significant byte, and higher offsets hold lesser significant bytes).

Other conventions

See ANNEX C (informative) Notation and conventions for other conventions.