Universal serial bus interfaces for data and power –
Part 1-3: Universal Serial Bus interfaces – Common components –
USB Type-C™ cable and connector specification
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The text of this standard is based on the following documents:

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Universal Serial Bus
Type-C Cable and Connector Specification

Revision 1.1
April 3, 2015
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Specification Work Group Chairs / Specification Editors

Intel Corporation (USB 3.0 Promoter company)
Yun Ling – Mechanical WG co-chair, Mechanical Chapter Co-editor
Bob Dunstan – Functional WG co-chair, Specification Co-author
Brad Saunders – Plenary/Functional WG chair, Specification Co-author
Seagate
Alvin Cox, Mechanical WG co-chair, Mechanical Chapter Co-editor

Specification Work Group Contributors

Advanced-Connectek, Inc. (ACON)
Glen Chandler
Vicky Chuang
Alan Tsai
Jeff Chien
Aven Kao
Stephen Yang
Lee (Dick Lee) Ching
Danny Liao
Conrad Choy
Alan MacDougall

Advanced Micro Devices
Steve Capezza
Walter Fry
Will Harris
Agilent Technologies, Inc.
James Chaote

Apple
Mahmoud Amini
William Ferry
Nathan Ng
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Sean O’Neal
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David Meyers
Ernesto Ramirez

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Simula Technology Corp.
SMK Corporation
Sony Corporation
Sumitomo Electric Industries
Toshiba Corporation

Revision History

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
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<tr>
<td>1.0</td>
<td>August 11, 2014</td>
<td>Initial Release</td>
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<tr>
<td>1.1</td>
<td>April 3, 2015</td>
<td>Reprint release including incorporation of all approved ECNs as of the revision date plus editorial clean-up.</td>
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1 Introduction

With the continued success of the USB interface, there exists a need to adapt USB technology to serve newer computing platforms and devices as they trend toward smaller, thinner and lighter form-factors. Many of these newer platforms and devices are reaching a point where existing USB receptacles and plugs are inhibiting innovation, especially given the relatively large size and internal volume constraints of the Standard-A and Standard-B versions of USB connectors. Additionally, as platform usage models have evolved, usability and robustness requirements have advanced and the existing set of USB connectors were not originally designed for some of these newer requirements. This specification is to establish a new USB connector ecosystem that addresses the evolving needs of platforms and devices while retaining all of the functional benefits of USB that form the basis for this most popular of computing device interconnects.

1.1 Purpose

This specification defines the USB Type-C™ receptacles, plug and cables.

The USB Type-C Cable and Connector Specification is guided by the following principles:

- Enable new and exciting host and device form-factors where size, industrial design and style are important parameters
- Work seamlessly with existing USB host and device silicon solutions
- Enhance ease of use for connecting USB devices with a focus on minimizing user confusion for plug and cable orientation

The USB Type-C Cable and Connector Specification defines a new receptacle, plug, cable and detection mechanisms that are compatible with existing USB interface electrical and functional specifications. This specification covers the following aspects that are needed to produce and use this new USB cable/connector solution in newer platforms and devices, and that interoperate with existing platforms and devices:

- USB Type-C receptacles, including electro-mechanical definition and performance requirements
- USB Type-C plugs and cable assemblies, including electro-mechanical definition and performance requirements
- USB Type-C to legacy cable assemblies and adapters
- USB Type-C-based device detection and interface configuration, including support for legacy connections
- USB Power Delivery optimized for the USB Type-C connector

The USB Type-C Cable and Connector Specification defines a standardized mechanism that supports Alternate Modes, such as repurposing the connector for docking-specific applications.

1.2 Scope

This specification is intended as a supplement to the existing USB 2.0, USB 3.1 and USB Power Delivery specifications. It addresses only the elements required to implement and support the USB Type-C receptacles, plugs and cables.

Normative information is provided to allow interoperability of components designed to this specification. Informative information, when provided, may illustrate possible design implementations.