

<b>STN</b>	<b>Rozhrania univerzálnej sériovej zbernice pre dáta a napájanie Časť 1-3: Spoločné súčasti Špecifikácia USB kábla a konektora typu C</b>	<b>STN EN IEC 62680-1-3</b>  36 8365
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Universal serial bus interfaces for data and power - Part 1-3: Common components - USB Type-C Cable and Connector Specification

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/21

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Supersedes EN IEC 62680-1-3:2018 and all of its amendments and corrigenda (if any)

English Version

**Universal serial bus interfaces for data and power - Part 1-3:  
Common components - USB Type-C(r) Cable and Connector  
Specification  
(IEC 62680-1-3:2021)**

Interfaces de bus universel en série pour les données et  
l'alimentation électrique - Partie 1-3: Composants communs  
- Spécification des câbles et connecteurs USB Type-C(r)  
(IEC 62680-1-3:2021)

Schnittstellen des Universellen Seriellen Busses für Daten  
und Energie - Teil 1-3: Gemeinsame Bauteile - Festlegung  
für USB-Typ-CTM-Kabel und -Steckverbinder  
(IEC 62680-1-3:2021)

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**EN IEC 62680-1-3:2021 (E)****European foreword**

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IEC 62680-1-3

Edition 4.0 2021-02

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Universal serial bus interfaces for data and power –  
Part 1-3: Common components – USB Type-C® Cable and Connector  
Specification**

**Interfaces de bus universel en série pour les données et l'alimentation  
électrique –  
Partie 1-3: Composants communs – Spécification des câbles et connecteurs  
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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



**Universal serial bus interfaces for data and power –  
Part 1-3: Common components – USB Type-C® Cable and Connector  
Specification**

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électrique –  
Partie 1-3: Composants communs – Spécification des câbles et connecteurs  
USB Type-C®**

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### Part 1-3: Common components – USB Type-C® Cable and Connector Specification

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The text of this standard was prepared by the USB Implementers Forum (USB-IF). The structure and editorial rules used in this publication reflect the practice of the organization which submitted it.

The text of this International Standard is based on the following documents:

CDV	Report on voting
100/3439/CDV	100/3501/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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The IEC 62680 series is based on a series of specifications that were originally developed by the USB Implementers Forum (USB-IF). These specifications were submitted to the IEC under the auspices of a special agreement between the IEC and the USB-IF.

This standard is the USB-IF publication Universal Serial Bus Type-C Cable and Connector Specification Revision 2.0.

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# Universal Serial Bus Type-C<sup>®</sup> Cable and Connector Specification

**Release 2.0  
August 2019**

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## CONTENTS

Specification Work Group Chairs / Specification Editors .....	19
Specification Work Group Contributors .....	19
Pre-Release Draft Industry Reviewing Companies That Provided Feedback.....	24
Revision History.....	25
<b>1 Introduction .....</b>	<b>26</b>
1.1 Purpose .....	26
1.2 Scope.....	26
1.3 Related Documents .....	27
1.4 Conventions.....	27
1.4.1 Precedence .....	27
1.4.2 Keywords .....	27
1.4.3 Numbering.....	28
1.5 Terms and Abbreviations .....	28
<b>2 Overview .....</b>	<b>33</b>
2.1 Introduction .....	33
2.2 USB Type-C Receptacles, Plugs and Cables .....	34
2.3 Configuration Process .....	35
2.3.1 Source-to-Sink Attach/Detach Detection.....	36
2.3.2 Plug Orientation/Cable Twist Detection.....	36
2.3.3 Initial Power (Source-to-Sink) Detection and Establishing the Data (Host-to-Device) Relationship.....	36
2.3.4 USB Type-C VBUS Current Detection and Usage .....	37
2.3.5 USB PD Communication.....	37
2.3.6 Functional Extensions.....	38
2.4 VBUS.....	38
2.5 VCONN.....	39
2.6 Hubs.....	39
<b>3 Mechanical.....</b>	<b>40</b>
3.1 Overview .....	40
3.1.1 Compliant Connectors.....	40
3.1.2 Compliant Cable Assemblies .....	40
3.1.3 Compliant USB Type-C to Legacy Cable Assemblies .....	40
3.1.4 Compliant USB Type-C to Legacy Adapter Assemblies .....	41
3.2 USB Type-C Connector Mating Interfaces .....	41
3.2.1 Interface Definition .....	42
3.2.2 Reference Designs .....	63
3.2.3 Pin Assignments and Descriptions.....	70
3.3 Cable Construction and Wire Assignments.....	71
3.3.1 Cable Construction (Informative) .....	71
3.3.2 Wire Assignments .....	73
3.3.3 Wire Gauges and Cable Diameters (Informative).....	74
3.4 Standard USB Type-C Cable Assemblies .....	76

3.4.1	USB Full-Featured Type-C Cable Assembly .....	76
3.4.2	USB 2.0 Type-C Cable Assembly.....	77
3.4.3	USB Type-C Captive Cable Assemblies.....	78
3.5	Legacy Cable Assemblies .....	78
3.5.1	USB Type-C to <i>USB 3.1</i> Standard-A Cable Assembly .....	79
3.5.2	USB Type-C to <i>USB 2.0</i> Standard-A Cable Assembly .....	80
3.5.3	USB Type-C to <i>USB 3.1</i> Standard-B Cable Assembly .....	81
3.5.4	USB Type-C to <i>USB 2.0</i> Standard-B Cable Assembly .....	82
3.5.5	USB Type-C to <i>USB 2.0</i> Mini-B Cable Assembly .....	83
3.5.6	USB Type-C to <i>USB 3.1</i> Micro-B Cable Assembly.....	84
3.5.7	USB Type-C to <i>USB 2.0</i> Micro-B Cable Assembly.....	86
3.6	Legacy Adapter Assemblies .....	87
3.6.1	USB Type-C to <i>USB 3.1</i> Standard-A Receptacle Adapter Assembly .....	87
3.6.2	USB Type-C to <i>USB 2.0</i> Micro-B Receptacle Adapter Assembly.....	89
3.7	Electrical Characteristics .....	90
3.7.1	Raw Cable (Informative).....	90
3.7.2	USB Type-C to Type-C Passive Cable Assemblies (Normative).....	91
3.7.3	Mated Connector (Informative – <i>USB 3.2 Gen2</i> and <i>USB4 Gen2</i> ) .....	109
3.7.4	Mated Connector (Normative – <i>USB4 Gen3</i> ).....	113
3.7.5	USB Type-C to Legacy Cable Assemblies (Normative).....	114
3.7.6	USB Type-C to USB Legacy Adapter Assemblies (Normative) .....	118
3.7.7	Shielding Effectiveness Requirements (Normative).....	120
3.7.8	DC Electrical Requirements (Normative) .....	122
3.8	Mechanical and Environmental Requirements (Normative).....	125
3.8.1	Mechanical Requirements.....	125
3.8.2	Environmental Requirements .....	130
3.9	Docking Applications (Informative) .....	131
3.10	Implementation Notes and Design Guides .....	132
3.10.1	EMC Management (Informative) .....	132
3.10.2	Stacked and Side-by-Side Connector Physical Spacing (Informative) .....	134
3.10.3	Cable Mating Considerations (Informative).....	135
4	Functional .....	136
4.1	Signal Summary.....	136
4.2	Signal Pin Descriptions .....	136
4.2.1	SuperSpeed USB Pins .....	136
4.2.2	USB 2.0 Pins .....	137
4.2.3	Auxiliary Signal Pins.....	137
4.2.4	Power and Ground Pins .....	137
4.2.5	Configuration Pins .....	137
4.3	Sideband Use (SBU) .....	137
4.4	Power and Ground.....	137
4.4.1	IR Drop .....	137
4.4.2	V <sub>BUS</sub> .....	138
4.4.3	V <sub>CONN</sub> .....	141

4.5	Configuration Channel (CC).....	145
4.5.1	Architectural Overview .....	145
4.5.2	CC Functional and Behavioral Requirements .....	159
4.5.3	USB Port Interoperability Behavior.....	194
4.6	Power .....	213
4.6.1	Power Requirements during USB Suspend.....	214
4.6.2	VBUS Power Provided Over a USB Type-C Cable .....	215
4.7	USB Hubs .....	220
4.8	Power Sourcing and Charging.....	220
4.8.1	DFP as a Power Source .....	221
4.8.2	Non-USB Charging Methods .....	223
4.8.3	Sinking Host .....	224
4.8.4	Sourcing Device.....	224
4.8.5	Charging a System with a Dead Battery .....	224
4.8.6	USB Type-C Multi-Port Chargers .....	224
4.9	Electronically Marked Cables.....	227
4.9.1	Parameter Values .....	228
4.9.2	Active Cables.....	229
4.10	VCONN-Powered Accessories (VPAs) and VCONN-Powered USB Devices (VPDs).....	229
4.10.1	VCONN-Powered Accessories (VPAs).....	229
4.10.2	VCONN-Powered USB Devices (VPDs) .....	229
4.11	Parameter Values.....	231
4.11.1	Termination Parameters .....	231
4.11.2	Timing Parameters.....	233
4.11.3	Voltage Parameters.....	236
5	USB4 Discovery and Entry .....	238
5.1	Overview of the Discovery and Entry Process.....	238
5.2	USB4 Functional Requirements.....	239
5.2.1	USB4 Host Functional Requirements .....	239
5.2.2	USB4 Device Functional Requirements .....	239
5.2.3	USB4 Alternate Mode Support.....	239
5.2.3.1	USB4 Alternate Mode Support on Hosts.....	239
5.2.3.2	USB4 Alternate Mode Support on Hubs and USB4-based Docks.....	239
5.3	USB4 Power Requirements.....	240
5.3.1	Source Power Requirements.....	240
5.3.2	Sink Power Requirements .....	240
5.3.3	Device Power Management Requirements .....	240
5.4	USB4 Discovery and Entry Flow Requirements .....	241
5.4.1	USB Type-C Initial Connection .....	241
5.4.2	USB Power Delivery Contract.....	241
5.4.3	USB4 Discovery and Entry Flow .....	241
5.4.3.1	USB4 Device Discovery (SOP).....	242
5.4.3.2	USB4 Cable Discovery (SOP') .....	243
5.4.3.3	USB4 Operational Entry .....	245

5.4.4	USB4 Post-Entry Operation.....	245
5.4.4.1	During USB4 Operation .....	245
5.4.4.2	Exiting USB4 Operation .....	245
5.5	USB4 Hub Connection Requirements .....	246
5.5.1	USB4 Hub Port Initial Connection Requirements.....	246
5.5.2	USB4 Hub UFP and Host Capabilities Discovery.....	246
5.5.3	Hub DFP Connection Requirements.....	247
5.5.3.1	Speculative Connections .....	247
5.5.3.2	Operational Connections.....	247
5.5.4	Hub Ports Connection Behavior Flow Model .....	247
5.5.5	Connecting to Downstream USB4 Hubs.....	253
5.5.6	Fallback Functional Requirements for USB4 Hubs .....	253
5.6	USB4 Device Connection Requirements .....	254
5.6.1	Fallback Mapping of USB4 Peripheral Functions to USB Device Class Types..	254
5.7	Parameter Values.....	255
5.7.1	Timing Parameters.....	255
6	Active Cables.....	256
6.1	USB Type-C State Machine .....	257
6.2	USB PD Requirements .....	258
6.2.1	Active Cable USB PD Requirements .....	259
6.2.2	USB PD Messages for OIAC .....	259
6.2.3	Short Active Cable Behaviors in Response to Power Delivery Events .....	271
6.3	OIAC Connection Flow and State Diagrams .....	271
6.3.1	OIAC Connection Flow – Discovery – Phase 1 .....	272
6.3.2	OIAC Connection Flow – Reboot – Phase 2 .....	273
6.3.3	OIAC Connection Flow – Configuration – Phase 3.....	274
6.3.4	OIAC Connection State Diagram Master .....	277
6.3.5	OIAC Connection State Diagram Slave .....	285
6.4	Active Cable Power Requirements .....	290
6.4.1	VBUS Requirements .....	290
6.4.2	OIAC VBUS Requirements.....	290
6.4.3	USB PD Rules in Active State .....	291
6.4.4	VCONN Requirements .....	292
6.5	Mechanical .....	293
6.5.1	Thermal .....	293
6.5.2	Plug Spacing.....	293
6.6	Electrical Requirements .....	294
6.6.1	Shielding Effectiveness Requirement.....	294
6.6.2	Low Speed Signal Requirement.....	294
6.6.3	USB 2.0.....	294
6.6.4	USB 3.2.....	295
6.6.5	Return Loss .....	301
6.7	Active Cables That Support Alternate Modes.....	302
6.7.1	Discover SVIDs .....	302

6.7.2	Discover Modes .....	302
6.7.3	Enter/Exit Modes .....	302
6.7.4	Power in Alternate Modes .....	302
A	Audio Adapter Accessory Mode .....	303
A.1	Overview .....	303
A.2	Detail .....	303
A.3	Electrical Requirements .....	304
A.4	Example Implementations .....	306
A.4.1	Passive 3.5 mm to USB Type-C Adapter – Single Pole Detection Switch .....	306
A.4.2	3.5 mm to USB Type-C Adapter Supporting 500 mA Charge-Through .....	306
B	Debug Accessory Mode .....	308
B.1	Overview .....	308
B.2	Functional .....	308
B.2.1	Signal Summary .....	309
B.2.2	Port Interoperability .....	309
B.2.3	Debug Accessory Mode Entry .....	309
B.2.4	Connection State Diagrams .....	310
B.2.5	DTS Port Interoperability Behavior .....	318
B.2.6	Orientation Detection .....	327
B.3	Security/Privacy Requirements: .....	328
C	USB Type-C Digital Audio .....	329
C.1	Overview .....	329
C.2	USB Type-C Digital Audio Specifications .....	329
D	Thermal Design Considerations for Active Cables .....	331
D.1	Introduction .....	331
D.2	Model .....	331
D.2.1	Assumptions .....	331
D.2.2	Model Architecture .....	332
D.2.3	Heat Sources .....	333
D.2.4	Heat Flow .....	333
D.3	USB 3.2 Single Lane Active Cable .....	334
D.3.1	USB 3.2 Single-Lane Active Cable Design Considerations .....	334
D.4	Dual-Lane Active Cables .....	337
D.4.1	USB 3.2 Dual-Lane Active Cable Design Considerations .....	337
D.4.2	USB 3.2 Dual-Lane Active Cable in a Multi-Port Configuration .....	339
D.5	USB 3.2 Host and Device Design Considerations .....	341
D.5.1	Heat Spreading or Heat Sinking from Host or Device .....	341
D.5.2	Motherboard Temperature Control .....	342
D.5.3	Wider Port Spacing for Multi-Port Applications .....	342
D.5.4	Power Policies .....	342
E	Alternate Modes .....	343
E.1	Alternate Mode Architecture .....	343
E.2	Alternate Mode Requirements .....	343
E.2.1	Alternate Mode Pin Reassignment .....	344



E.2.2	Alternate Mode Electrical Requirements .....	344
E.3	Parameter Values.....	347
E.4	Example Alternate Mode – USB DisplayPort™ Dock .....	348
E.4.1	USB DisplayPort™ Dock Example .....	348
E.4.2	Functional Overview .....	349
E.4.3	Operational Summary .....	350
F	Thunderbolt 3 Compatibility Discovery and Entry .....	351
F.1	TBT3 Compatibility Mode Functional Requirements .....	351
F.1.1	TBT3-Compatible Power Requirements.....	351
F.1.2	TBT3-Compatible Host Requirements .....	351
F.1.3	TBT3-Compatible Device Upstream Requirements .....	351
F.1.4	TBT3-Compatible Device Downstream Requirements.....	351
F.1.5	TBT3-Compatible Self-Powered Device Without Predefined Upstream Port Rules.....	352
F.1.6	TBT3-Compatible Devices with a Captive Cable .....	352
F.2	TBT3 Discovery and Entry Flow .....	352
F.2.1	TBT3 Passive Cable Discover Identity Responses.....	354
F.2.2	TBT3 Active Cable Discover Identity Responses .....	356
F.2.3	TBT3 Device Discover Identity Responses .....	359
F.2.4	TBT3 Discover SVID Responses .....	360
F.2.5	TBT3 Device Discover Mode Responses .....	361
F.2.6	TBT3 Cable Discover Mode Responses .....	362
F.2.7	TBT3 Cable Enter Mode Command .....	363
F.2.8	TBT3 Device Enter Mode Command .....	364
F.2.9	TBT3 Cable Functional Difference Summary .....	365

## FIGURES

Figure 2-1	USB Type-C Receptacle Interface (Front View).....	33
Figure 2-2	USB Full-Featured Type-C Plug Interface (Front View) .....	34
Figure 3-1	USB Type-C Receptacle Interface Dimensions.....	44
Figure 3-2	Reference Design USB Type-C Plug External EMC Spring Contact Zones.....	47
Figure 3-3	USB Full-Featured Type-C Plug Interface Dimensions.....	48
Figure 3-4	Reference Footprint for a USB Type-C Vertical Mount Receptacle (Informative) .....	51
Figure 3-5	Reference Footprint for a USB Type-C Dual-Row SMT Right Angle Receptacle (Informative) .....	52
Figure 3-6	Reference Footprint for a USB Type-C Hybrid Right-Angle Receptacle (Informative).....	53
Figure 3-7	Reference Footprint for a USB Type-C Mid-Mount Dual-Row SMT Receptacle (Informative) .....	54
Figure 3-8	Reference Footprint for a USB Type-C Mid-Mount Hybrid Receptacle (Informative).....	55
Figure 3-9	Reference Footprint for a USB 2.0 Type-C Through Hole Right Angle Receptacle (Informative) .....	56
Figure 3-10	Reference Footprint for a USB 2.0 Type-C Single Row Right Angle Receptacle (Informative) .....	57
Figure 3-11	USB 2.0 Type-C Plug Interface Dimensions.....	59
Figure 3-12	USB Type-C Plug EMC Shielding Spring Tip Requirements.....	62
Figure 3-13	Reference Design of Receptacle Mid-Plate.....	63
Figure 3-14	Reference Design of the Retention Latch.....	64

Figure 3-15	Illustration of the Latch Soldered to the Paddle Card Ground .....	64
Figure 3-16	Reference Design of the USB Full-Featured Type-C Plug Internal EMC Spring.....	65
Figure 3-17	Reference Design of the <i>USB 2.0</i> Type-C Plug Internal EMC Spring .....	66
Figure 3-18	Reference Design of Internal EMC Pad .....	67
Figure 3-19	Reference Design of a USB Type-C Receptacle with External EMC Springs .....	68
Figure 3-20	Reference Design for a USB Full-Featured Type-C Plug Paddle Card .....	69
Figure 3-21	Illustration of a USB Full-Featured Type-C Cable Cross Section, a Coaxial Wire Example with VCONN.....	72
Figure 3-22	Illustration of a USB Full-Featured Type-C Cable Cross Section, a Coaxial Wire Example without VCONN.....	72
Figure 3-23	USB Full-Featured Type-C Standard Cable Assembly.....	76
Figure 3-24	USB Type-C to USB 3.1 Standard-A Cable Assembly .....	79
Figure 3-25	USB Type-C to <i>USB 2.0</i> Standard-A Cable Assembly.....	80
Figure 3-26	USB Type-C to <i>USB 3.1</i> Standard-B Cable Assembly.....	81
Figure 3-27	USB Type-C to <i>USB 2.0</i> Standard-B Cable Assembly.....	82
Figure 3-28	USB Type-C to <i>USB 2.0</i> Mini-B Cable Assembly.....	83
Figure 3-29	USB Type-C to <i>USB 3.1</i> Micro-B Cable Assembly.....	84
Figure 3-30	USB Type-C to <i>USB 2.0</i> Micro-B Cable Assembly.....	86
Figure 3-31	USB Type-C to <i>USB 3.1</i> Standard-A Receptacle Adapter Assembly.....	87
Figure 3-32	USB Type-C to <i>USB 2.0</i> Micro-B Receptacle Adapter Assembly.....	89
Figure 3-33	Illustration of Test Points for a Mated Cable Assembly .....	91
Figure 3-34	Recommended Differential Insertion Loss Requirement (USB 3.2 Gen2 and USB4 Gen2).....	92
Figure 3-35	Recommended Differential Return Loss Requirement .....	92
Figure 3-36	Recommended Differential Crosstalk Requirement.....	93
Figure 3-37	Recommended Differential Near-End and Far-End Crosstalk Requirement between USB D+/D- Pair and TX/RX Pair.....	94
Figure 3-38	Recommended Differential Insertion Loss Requirement (USB4 Gen3).....	94
Figure 3-39	Illustration of Insertion Loss Fit at Nyquist Frequency .....	95
Figure 3-40	Input Pulse Spectrum .....	96
Figure 3-41	IMR Limit as Function of ILfitatNq .....	97
Figure 3-42	IRL Limit as Function of ILfitatNq .....	99
Figure 3-43	Differential-to-Common-Mode Conversion Requirement .....	99
Figure 3-44	IMR Limit as Function of ILfit at 10 GHz (USB4 Gen3).....	100
Figure 3-45	Definition of Port, Victim, and Aggressor .....	101
Figure 3-46	I <sub>X</sub> T <sub>DP</sub> and I <sub>X</sub> T <sub>USB</sub> Limit as Function of ILfit at 10 GHz (USB4 Gen3).....	101
Figure 3-47	IRL Limit as Function of ILfitatNq (USB4 Gen3) .....	102
Figure 3-48	Differential-to-Common-Mode Conversion Requirement (USB4 Gen3).....	102
Figure 3-49	Cable Assembly in System .....	103
Figure 3-50	Requirement for Differential Coupling between CC and D+/D- .....	105
Figure 3-51	Requirement for Single-Ended Coupling between CC and D- in USB 2.0 Type-C Cables.....	105
Figure 3-52	Requirement for Single-Ended Coupling between CC and D- in USB Full-Featured Type-C Cables .....	106
Figure 3-53	Requirement for Differential Coupling between V <sub>BUS</sub> and D+/D-.....	106
Figure 3-54	Requirement for Single-Ended Coupling between SBU_A and SBU_B.....	107
Figure 3-55	Requirement for Single-Ended Coupling between SBU_A/SBU_B and CC .....	108
Figure 3-56	Requirement for Coupling between SBU_A and differential D+/D-, and SBU_B and differential D+/D-.....	108
Figure 3-57	Illustration of USB Type-C Mated Connector .....	109
Figure 3-58	Recommended Impedance Limits of a USB Type-C Mated Connector .....	110
Figure 3-59	Recommended Ground Void Dimensions for USB Type-C Receptacle.....	111
Figure 3-60	Recommended Differential Near-End and Far-End Crosstalk Limits between D+/D- Pair and TX/RX Pairs .....	112
Figure 3-61	Recommended Limits for Differential-to-Common-Mode Conversion.....	113
Figure 3-62	IMR Limit as Function of ILfitatNq for USB Type-C to Legacy Cable Assembly .....	117
Figure 3-63	IRL Limit as Function of ILfitatNq for USB Type-C to Legacy Cable Assembly .....	117
Figure 3-64	Cable Assembly Shielding Effectiveness Testing .....	120

Figure 3-65 Shielding Effectiveness Pass/Fail Criteria .....	121
Figure 3-66 LLCR Measurement Diagram .....	122
Figure 3-67 Temperature Measurement Point .....	123
Figure 3-68 Example Current Rating Test Fixture Trace Configuration.....	124
Figure 3-69 Example of 4-Axis Continuity Test Fixture .....	126
Figure 3-70 Example Wrenching Strength Test Fixture for Plugs without Overmold .....	128
Figure 3-71 Reference Wrenching Strength Continuity Test Fixture .....	129
Figure 3-72 Example of Wrenching Strength Test Mechanical Failure Point.....	129
Figure 3-73 Wrenching Strength Test with Cable in Fixture .....	130
Figure 3-74 USB Type-C Cable Receptacle Flange Example .....	132
Figure 3-75 EMC Guidelines for Side Latch and Mid-plate .....	133
Figure 3-76 EMC Finger Connections to Plug Shell .....	133
Figure 3-77 EMC Pad Connections to Receptacle Shell .....	134
Figure 3-78 Examples of Connector Apertures .....	134
Figure 3-79 Recommended Minimum Spacing between Connectors .....	135
Figure 3-80 Recommended Minimum Plug Overmold Clearance.....	135
Figure 3-81 Cable Plug Overmold and an Angled Surface .....	135
Figure 4-1 Cable IR Drop .....	138
Figure 4-2 Cable IR Drop for powered cables.....	138
Figure 4-3 Logical Model for Single-Lane Data Bus Routing across USB Type-C-based Ports .....	147
Figure 4-4 Logical Model for USB Type-C-based Ports for a Single-Lane Direct Connect Device .....	147
Figure 4-5 Pull-Up/Pull-Down CC Model.....	149
Figure 4-6 Current Source/Pull-Down CC Model.....	149
Figure 4-7 Source Functional Model for CC1 and CC2 .....	152
Figure 4-8 Source Functional Model Supporting USB PD PR_Swap.....	153
Figure 4-9 Sink Functional Model for CC1 and CC2.....	153
Figure 4-10 Sink Functional Model Supporting USB PD PR_Swap and VCONN_Swap.....	154
Figure 4-11 DRP Functional Model for CC1 and CC2 .....	155
Figure 4-12 Connection State Diagram: Source .....	160
Figure 4-13 Connection State Diagram: Sink .....	161
Figure 4-14 Connection State Diagram: Sink with Accessory Support.....	162
Figure 4-15 Connection State Diagram: DRP .....	163
Figure 4-16 Connection State Diagram: DRP with Accessory and Try.SRC Support.....	164
Figure 4-17 Connection State Diagram: DRP with Accessory and Try.SNK Support .....	165
Figure 4-18 Connection State Diagram: Charge-Through VPD .....	166
Figure 4-19 Sink Power Sub-States .....	189
Figure 4-20 Cable eMarker State Diagram .....	190
Figure 4-21 Source to Sink Functional Model.....	194
Figure 4-22 Source to DRP Functional Model.....	195
Figure 4-23 DRP to Sink Functional Model .....	196
Figure 4-24 DRP to DRP Functional Model – CASE 1.....	197
Figure 4-25 DRP to DRP Functional Model – CASE 2 & 3 .....	198
Figure 4-26 Source to Source Functional Model.....	200
Figure 4-27 Sink to Sink Functional Model .....	201
Figure 4-28 DRP to VPD Model.....	201
Figure 4-29 Example DRP to Charge-Through VCONN-Powered USB Device Model.....	202
Figure 4-30 Source to Legacy Device Port Functional Model .....	210
Figure 4-31 Legacy Host Port to Sink Functional Model.....	211
Figure 4-32 DRP to Legacy Device Port Functional Model.....	212
Figure 4-33 Legacy Host Port to DRP Functional Model.....	213
Figure 4-34 Sink Monitoring for Current in Pull-Up/Pull-Down CC Model.....	216
Figure 4-35 Sink Monitoring for Current in Current Source/Pull-Down CC Model.....	217
Figure 4-36 USB PD over CC Pins .....	217
Figure 4-37 USB PD BMC Signaling over CC .....	218

Figure 4-38 USB Type-C Cable's Output as a Function of Load for Non-PD-based USB Type-C Charging .....	222
Figure 4-39 0 – 3 A USB PD-based Charger USB Type-C Cable's Output as a Function of Load .....	223
Figure 4-40 3 – 5 A USB PD-based Charger USB Type-C Cable's Output as a Function of Load .....	223
Figure 4-41 Electronically Marked Cable with VCONN connected through the cable .....	228
Figure 4-42 Electronically Marked Cable with SOP' at both ends .....	228
Figure 4-43 Example Charge-Through VCONN-Power USB Device Use Case .....	231
Figure 4-44 DRP Timing .....	234
Figure 5-1 USB4 Discovery and Entry Flow Model .....	242
Figure 5-2 USB4 Hub with USB4 Host and Device Connection Flow Alignment .....	248
Figure 5-3 USB4 Hub with USB 3.2 Host and USB4 Device Host Connection Flow Model .....	249
Figure 5-4 USB4 Hub with USB4 Host and USB 3.2 Device Connection Flow Model .....	250
Figure 5-5 USB4 Hub with USB 3.2 Host and Device Connection Flow Model .....	251
Figure 5-6 USB4 Hub with USB4 Host and DP Alt Mode Device Connection Flow Model .....	252
Figure 5-7 USB4 Hub with USB 3.2 Host and DP Alt Mode Device Connection Flow Model .....	253
Figure 6-1 Electronically Marked Short Active Cable with SOP' Only .....	258
Figure 6-2 Electronically Marked Short Active Cable with SOP' and SOP" .....	258
Figure 6-3 Electronically Marked Optically Isolated Active Cable .....	259
Figure 6-4 OIAC USB PD Message Forwarding .....	265
Figure 6-5 OIAC Successful Data Role Swap .....	268
Figure 6-6 OIAC Rejected Data Role Swap .....	269
Figure 6-7 OIAC Wait Data Role Swap .....	269
Figure 6-8 OIAC Initiator Reject Data Role Swap .....	270
Figure 6-9 OIAC Initiator Wait Data Role Swap .....	271
Figure 6-10 OIAC Discovery – Phase 1 .....	273
Figure 6-11 OIAC Reboot – Phase 2 .....	274
Figure 6-12 OIAC Master Plug Configure as DFP – Phase 3 .....	275
Figure 6-13 OIAC Master Plug Configure as UFP – Phase 3 .....	276
Figure 6-14 OIAC Master Plug No Connection Possible Billboard – Phase 3 .....	277
Figure 6-15 OIAC Master Plug State Diagram Part 1 (Phase 1 and 2) .....	278
Figure 6-16 OIAC Master Plug State Diagram Part 2 (Phase 3) .....	279
Figure 6-17 OIAC Slave Plug State Diagram .....	286
Figure 6-18 Active Cable Topologies .....	295
Figure 6-19 Illustrations of Usages for OIAC That Require an Adapter or Hub .....	298
Figure 6-20 SuperSpeed USB Electrical Test Points .....	299
Figure 6-21 SuperSpeed USB Compliance Test Setup .....	299
Figure A-1 Example Passive 3.5 mm to USB Type-C Adapter .....	306
Figure A-2 Example 3.5 mm to USB Type-C Adapter Supporting 500 mA Charge-Through .....	307
Figure B-1 USB Type-C Debug Accessory Layered Behavior .....	308
Figure B-2 DTS Plug Interface .....	309
Figure B-3 Connection State Diagram: DTS Source .....	310
Figure B-4 Connection State Diagram: DTS Sink .....	311
Figure B-5 Connection State Diagram: DTS DRP .....	312
Figure B-6 TS Sink Power Sub-States .....	316
Figure D-1 Active Cable Model (Single Port, Top Mount Receptacle) .....	332
Figure D-2 Model Architecture .....	332
Figure D-3 Heat Sources and Heat Flow Paths .....	333
Figure D-4 Vertically Stacked Horizontal Connectors 3x1 Configuration (VERT) .....	335
Figure D-5 Horizontally Stacked Vertical Connectors 1x3 Configuration (HZ90) .....	335
Figure D-6 Horizontally Stacked Horizontal Connector 1x3 Configuration (HORZ) .....	335
Figure D-7 USB 3.2 Single-Lane 3A Active Cable in a 3-Port Configuration .....	336
Figure D-8 USB 3.2 Single-Lane 5A Active Cable in a 3-Port Configuration .....	337
Figure D-9 Impact of Over-mold Power $P_0$ and Thermal Boundary Temperature $T_{MB}$ at 3 A VBUS in a Single Port Configuration .....	338
Figure D-10 Impact of Over-mold Power $P_0$ and Thermal Boundary Temperature $T_{MB}$ at 5 A VBUS in a Single Port Configuration .....	339

Figure D-11 USB 3.2 Active Cable Dongle Design (One End Shown).....	339
Figure D-12 USB 3.2 Dual-Lane 3A Active Cable in a 3-Port Configuration .....	340
Figure D-13 USB 3.2 Dual-Lane 5A Active Cable in a 3-Port Configuration .....	341
Figure D-14 Example: Additional Heat Spreader on Receptacle in Host or Device .....	342
Figure D-15 Example: Heat Sinking by Chassis of Host or Device .....	342
Figure E-1 Pins Available for Reconfiguration over the Full-Featured Cable.....	344
Figure E-2 Pins Available for Reconfiguration for Direct Connect Applications.....	344
Figure E-3 Alternate Mode Implementation using a USB Type-C to USB Type-C Cable .....	346
Figure E-4 Alternate Mode Implementation using a USB Type-C to Alternate Mode Cable or Device.....	347
Figure E-5 USB DisplayPort Dock Example.....	349
Figure F-1 TBT3 Discovery Flow .....	353

## TABLES

Table 2-1 Summary of power supply options.....	38
Table 3-1 USB Type-C Standard Cable Assemblies.....	40
Table 3-2 USB Type-C Legacy Cable Assemblies .....	41
Table 3-3 USB Type-C Legacy Adapter Assemblies.....	41
Table 3-4 USB Type-C Receptacle Interface Pin Assignments.....	70
Table 3-5 USB Type-C Receptacle Interface Pin Assignments for USB 2.0-only Support.....	71
Table 3-6 USB Type-C Standard Cable Wire Assignments .....	73
Table 3-7 USB Type-C Cable Wire Assignments for Legacy Cables/Adapters .....	74
Table 3-8 Reference Wire Gauges for standard USB Type-C Cable Assemblies .....	75
Table 3-9 Reference Wire Gauges for USB Type-C to Legacy Cable Assemblies .....	75
Table 3-10 USB Full-Featured Type-C Standard Cable Assembly Wiring .....	77
Table 3-11 <i>USB 2.0</i> Type-C Standard Cable Assembly Wiring.....	78
Table 3-12 USB Type-C to <i>USB 3.1</i> Standard-A Cable Assembly Wiring.....	79
Table 3-13 USB Type-C to <i>USB 2.0</i> Standard-A Cable Assembly Wiring .....	80
Table 3-14 USB Type-C to <i>USB 3.1</i> Standard-B Cable Assembly Wiring .....	81
Table 3-15 USB Type-C to <i>USB 2.0</i> Standard-B Cable Assembly Wiring .....	82
Table 3-16 USB Type-C to <i>USB 2.0</i> Mini-B Cable Assembly Wiring.....	83
Table 3-17 USB Type-C to <i>USB 3.1</i> Micro-B Cable Assembly Wiring .....	85
Table 3-18 USB Type-C to <i>USB 2.0</i> Micro-B Cable Assembly Wiring .....	86
Table 3-19 USB Type-C to <i>USB 3.1</i> Standard-A Receptacle Adapter Assembly Wiring .....	88
Table 3-20 USB Type-C to <i>USB 2.0</i> Micro-B Receptacle Adapter Assembly Wiring .....	89
Table 3-21 Differential Insertion Loss Examples for TX/RX with Twisted Pair Construction .....	90
Table 3-22 Differential Insertion Loss Examples for USB TX/RX with Coaxial Construction.....	91
Table 3-23 Key Parameters in COM Configuration File.....	103
Table 3-24 Electrical Requirements for CC and SBU wires.....	104
Table 3-25 Coupling Matrix for Low Speed Signals.....	104
Table 3-26 Maximum Mutual Inductance (M) between VBUS and Low Speed Signal Lines .....	107
Table 3-27 USB D+/D- Signal Integrity Requirements for USB Type-C to USB Type-C Passive Cable Assemblies .....	109
Table 3-28 USB Type-C Mated Connector Recommended Signal Integrity Characteristics (Informative) .....	111
Table 3-29 USB Type-C Mated Connector Signal Integrity Characteristics for USB4 Gen3 (Normative).....	113
Table 3-30 USB D+/D- Signal Integrity Requirements for USB Type-C to Legacy USB Cable Assemblies .....	115
Table 3-31 Design Targets for USB Type-C to <i>USB 3.1</i> Gen2 Legacy Cable Assemblies (Informative).....	115
Table 3-32 USB Type-C to <i>USB 3.1</i> Gen2 Legacy Cable Assembly Signal Integrity Requirements (Normative) .....	116
Table 3-33 USB D+/D- Signal Integrity Requirements for USB Type-C to Legacy USB Adapter Assemblies (Normative).....	118
Table 3-34 Design Targets for USB Type-C to <i>USB 3.1</i> Standard-A Adapter Assemblies (Informative).....	119

Table 3-35 USB Type-C to USB 3.1 Standard-A Receptacle Adapter Assembly Signal Integrity Requirements (Normative).....	119
Table 3-36 Current Rating Test PCB.....	124
Table 3-37 Maximum DC Resistance Requirement (Normative).....	124
Table 3-38 Force and Moment Requirements.....	127
Table 3-39 Environmental Test Conditions.....	130
Table 3-40 Reference Materials.....	131
Table 4-1 USB Type-C List of Signals.....	136
Table 4-2 VBUS Source Characteristics.....	139
Table 4-3 VBUS Sink Characteristics.....	140
Table 4-4 USB Type-C Source Port's VCONN Requirements Summary.....	141
Table 4-5 VCONN Source Characteristics.....	142
Table 4-6 Cable VCONN Sink Characteristics.....	143
Table 4-7 VCONN-Powered Accessory (VPA) Sink Characteristics.....	144
Table 4-8 VCONN-Powered USB Device (VPD) Sink Characteristics.....	145
Table 4-9 USB Type-C-based Port Interoperability.....	148
Table 4-10 Source Perspective.....	150
Table 4-11 Source (Host) and Sink (Device) Behaviors by State.....	151
Table 4-12 USB PD Swapping Port Behavior Summary.....	157
Table 4-13 Power Role Behavioral Model Summary.....	158
Table 4-14 Source Port CC Pin State.....	167
Table 4-15 Sink Port CC Pin State.....	167
Table 4-16 Mandatory and Optional States.....	192
Table 4-17 Precedence of power source usage.....	214
Table 4-18 USB Type-C Current Advertisement and PDP Equivalent.....	216
Table 4-19 Precedence of power source usage.....	219
Table 4-20 Example Charge-Through VPD Sink Maximum Currents based on VBUS Impedance and GND Impedance.....	220
Table 4-21 SOP' and SOP'' Timing.....	228
Table 4-22 Charge-Through VPD CC Impedance (RccCON) Requirements.....	230
Table 4-23 CTVPD Charge-Through Port VBUS Bypass Requirements.....	230
Table 4-24 Source CC Termination (Rp) Requirements.....	231
Table 4-25 Sink CC Termination (Rd) Requirements.....	232
Table 4-26 Powered Cable Termination Requirements.....	232
Table 4-27 CC Termination Requirements for Disabled state, ErrorRecovery state, and Unpowered Source.....	232
Table 4-28 SBU Termination Requirements.....	232
Table 4-29 VBUS and VCONN Timing Parameters.....	233
Table 4-30 DRP Timing Parameters.....	234
Table 4-31 CC Timing.....	235
Table 4-32 CC Voltages on Source Side – Default USB.....	236
Table 4-33 CC Voltages on Source Side – 1.5 A @ 5 V.....	236
Table 4-34 CC Voltages on Source Side – 3.0 A @ 5 V.....	237
Table 4-35 Voltage on Sink CC Pins (Default USB Type-C Current only).....	237
Table 4-36 Voltage on Sink CC pins (Multiple Source Current Advertisements).....	237
Table 5-1 Certified Cables Where USB4-compatible Operation is Expected.....	243
Table 5-2 Fallback Mapping USB4 Peripheral Functions to USB Device Class Types.....	254
Table 5-3 USB Billboard Device Class Availability Following USB4 Device Entry Failure.....	255
Table 6-1 Comparison of Active Cables.....	257
Table 6-2 Summary of Active Cable Features.....	257
Table 6-3 OIAC USB PD Message Behavior on Initial Connection.....	260
Table 6-4 OIAC USB PD Messages Which Do Not Traverse in Active State.....	262
Table 6-5 OIAC USB PD Messages Addressed to SOP Which Traverse the OIAC in the Active State.....	264
Table 6-6 OIAC USB PD Message Timing.....	265
Table 6-7 OIAC SOP Messages Which Terminate at the Cable Plug.....	266
Table 6-8 Port and Plug Capabilities.....	272

Table 6-9	OIAC Sink_Capabilities PDO (SOP) on Initial Connection .....	290
Table 6-10	OIAC Sink_Capabilities_Extended PDO (SOP) on Initial Connection .....	291
Table 6-11	OIAC Sink RDO (SOP) on Initial Connection.....	291
Table 6-12	OIAC Active Sink RDO (SOP) .....	292
Table 6-13	OIAC Sink_Capabilities PDO (SOP) in Active .....	292
Table 6-14	Cable Temperature Requirements .....	293
Table 6-15	Summary of Active Cable Features .....	294
Table 6-16	Active Cable Power-on Requirements .....	296
Table 6-17	OIAC Maximum USB 3.2 U0 Delay .....	297
Table 6-18	Usages for OIAC That Require an Adapter or Hub .....	297
Table 6-19	USB 3.2 U-State Requirements.....	298
Table 6-20	Active Cable USB 3.2 Stressed Source Swing, TP1 .....	300
Table 6-21	Active Cable USB 3.2 Stressed Source Jitter, TP1.....	300
Table 6-22	Active Cable USB 3.2 Input Swing at TP2 (Informative).....	301
Table 6-23	Active Cable USB 3.2 Output Swing at TP3 (Informative) .....	301
Table A-1	USB Type-C Analog Audio Pin Assignments.....	304
Table A-2	USB Type-C Analog Audio Pin Electrical Parameter Ratings .....	305
Table B-1	DTS to TS Port Interoperability.....	309
Table B-2	Rp/Rp Charging Current Values for a DTS Source.....	316
Table B-3	Mandatory and Optional States.....	318
Table D-1	Heat Sources and Heat Dissipation Example (1.5 W cable and 5 A) .....	334
Table D-2	USB 3.2 Active Cable Design Single Port Case Study at 35 °C Ambient and 60 °C Thermal Boundary (Single Lane) .....	334
Table D-3	USB 3.2 Active Cable Design Single Port Case Study at 35 °C Ambient and 60 °C Thermal Boundary (Dual Lane) .....	338
Table E-1	USB Safe State Electrical Requirements .....	347
Table E-2	USB Billboard Device Class Availability Following Alternate Mode Entry Failure.....	348
Table E-3	Alternate Mode Signal Noise Ingression Requirements.....	348
Table F-1	TBT3 Passive Cable Discover Identity VDO Responses .....	354
Table F-2	TBT3 Passive Cable VDO for USB PD Revision 2.0, Version 1.3 .....	355
Table F-3	TBT3 Passive Cable VDO for USB PD Revision 3.0, Version 1.2 .....	355
Table F-4	TBT3 Active Cable Discover Identity VDO Responses.....	356
Table F-5	TBT3 Active Cable VDO for USB PD Revision 2.0, Version 1.3.....	357
Table F-6	TBT3 Active Cable VDO 1 for USB PD Revision 3.0, Version 1.2 .....	357
Table F-7	TBT3 Active Cable VDO 2 for USB PD Revision 3.0, Version 1.2 .....	358
Table F-8	TBT3 Device Discover Identity VDO Responses .....	359
Table F-9	TBT3 Discover SVID VDO Responses.....	360
Table F-10	TBT3 Device Discover Mode VDO Responses .....	361
Table F-11	TBT3 Cable Discover Mode VDO Responses.....	362
Table F-12	TBT3 Cable Enter Mode Command .....	363
Table F-13	TBT3 Device Enter Mode Command.....	364
Table F-14	TBT3 Cable Functional Difference Summary.....	365

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## Revision History

Revision	Date	Description
1.0	August 11, 2014	Initial Release
1.1	April 3, 2015	Reprint release including incorporation of all approved ECNs as of the revision date plus editorial clean-up.
1.2	March 25, 2016	Reprint release including incorporation of all approved ECNs as of the revision date plus editorial clean-up.
1.3	July 14, 2017	Reprint release including incorporation of all approved ECNs as of the revision date plus editorial clean-up.
1.4	March 29, 2019	Reprint release including incorporation of all approved ECNs as of the revision date plus editorial clean-up.
2.0	August 2019	New release primarily for enabling USB4 over USB Type-C connectors and cables. Also includes incorporation of all approved ECNs as of the revision date plus editorial clean-up.

## 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 3.2](#), [USB4™](#) 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.

### 1.3 Related Documents

- USB 2.0** *Universal Serial Bus Revision 2.0 Specification*  
This includes the entire document release package.
- USB 3.2** *Universal Serial Bus Revision 3.2 Specification*  
This includes the entire document release package.  
*USB 3.1 Legacy Cable and Connector Specification, Revision 1.0*
- USB4** *USB4™ Specification, Version 1.0, August 2019*  
(including posted errata and ECNs)
- TBT3** Chapter 13 of *USB4 Specification, Version 1.0, August 2019*
- USB PD** *USB Power Delivery Specification, Revision 2.0, Version 1.3, January 12, 2017*  
*USB Power Delivery Specification, Revision 3.0, Version 2.0, August 2019*  
(including posted errata and ECNs)
- USB BB** *USB Billboard Device Class Specification, Revision 1.21, September 8, 2016*
- USB BC** *Battery Charging Specification, Revision 1.2 (including errata and ECNs through March 15, 2012), March 15, 2012*
- DP AM** *DisplayPort™ Alt Mode on USB Type-C Standard, Version 1.0b, 03 November 2017*

All USB-specific documents are available for download at <http://www.usb.org/documents>. The DisplayPort Alt Mode specification is available from VESA (<http://www.vesa.org>).

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**