

Usb 4

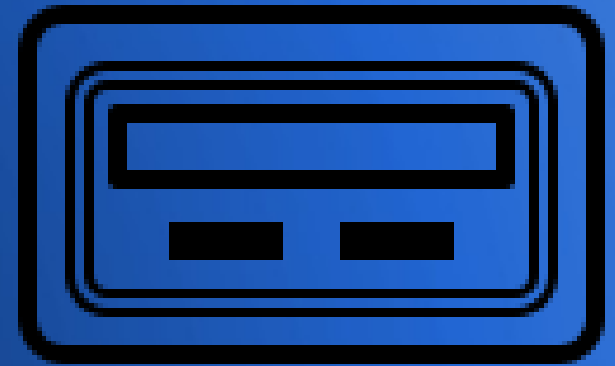


INTRODUCTION

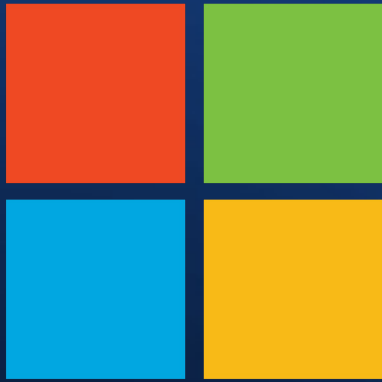
- Usb 1.
- Usb evolution.
- Thunderbolt.
- Advantage of Usb.
- New usb (Usb 4.2).
- Difference between Usb 3.2 and 4.
- Connectic.
- Conclusion.



USB



USB 1



Microsoft



Quickly Adopted in 1996

USB EVOLUTION

USB 2.0



USB Type A



USB Type B



USB Mini A



USB Mini B

USB 3.0



USB Type A



USB Type C



USB MICRO B



USB MICRO A



USB MICRO AB

USB 3.2



USB Type C

Thunderbolt



Advantage of USB

What is USB4?

40Gb/s
Data Transfer
Speed


Thunderbolt 3
Compatible


Dynamic
Bandwidth
Sharing

100W
Power
Delivery


USB-C



NEW USB



Usb 4.2

USB 4.2

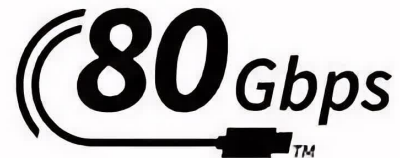
USB 80Gbps Branding Overview

For certified solutions based upon the USB4® Specification

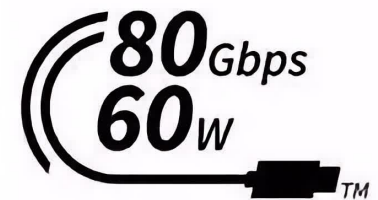
Packaging Logo



Port Logo



USB Type-C® Cable Logos*



*USB Type-C® Cable Logos identify the supported performance and power capabilities.

Difference USB 3.2 AND USB 4

USB 3.2

USB Spec

USB 2

USB 3

USB-PD

Alt Modes

DisplayPort

Thunderbolt

USB4

USB Spec

USB 2

USB 3

USB-PD

DisplayPort

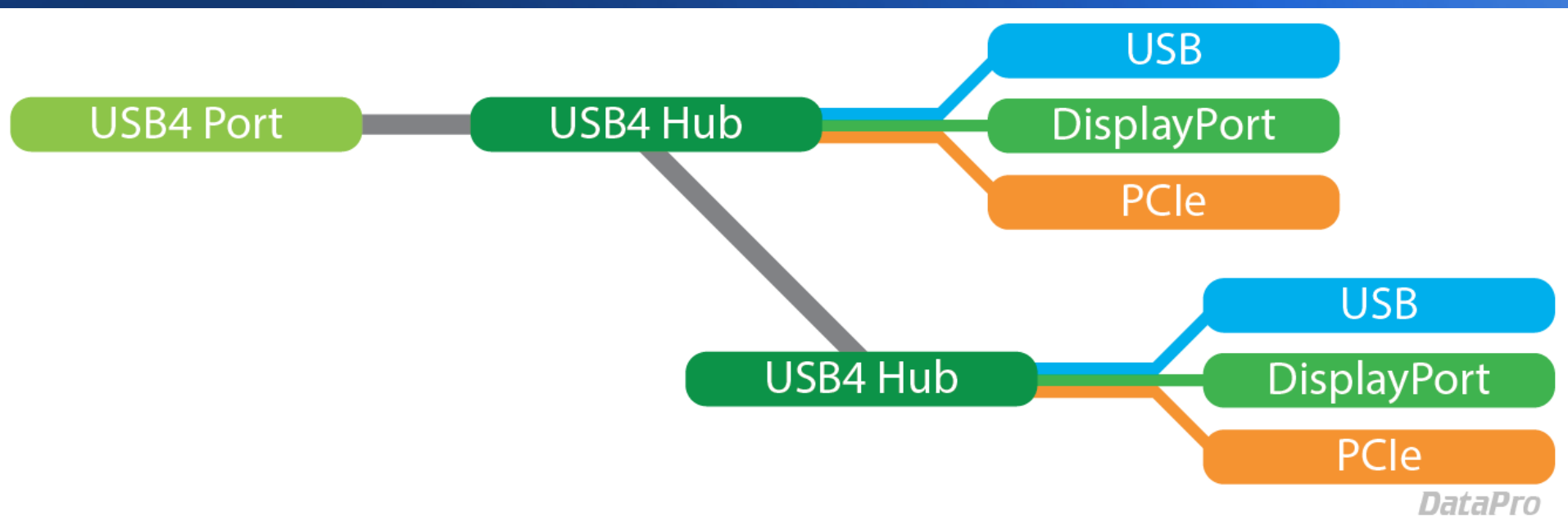
PCIe

Alt Modes

Thunderbolt

DataPro

USB CONNECT



Connectic

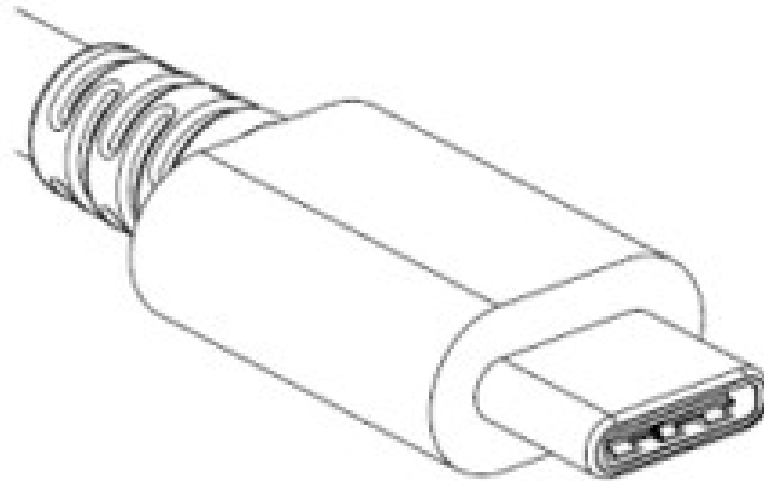


Figure 1-1: USB4 Gen3 Type C Cable

This document focuses on the high speed requirements and evaluation of the full-featured USB4 Gen3 Type-C plug connector. The pinout of a full-featured Type-C plug connector is shown in Figure 1-2.

A12	A11	A10	A9	A8	A7	A6	A5	A4	A3	A2	A1
GND	RX2+	RX2-	Vbus	SBU1	D-	D+	CC	Vbus	TX1-	TX1+	GND
GND	TX2+	TX2-	Vbus	Vconn			SBU2	Vbus	RX1-	RX1+	GND
B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12

Conclusion and point of view



Thanks for your attention

