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SanDisk Ultra® USB Type-C™ Flash Drive (CZ450)

What is USB Type-C™?

- USB Type-C™ (also USB -C™) technology is to serve newer computing platforms and devices as they trend toward _smaller, thinner and lighter_ form-factors*

- Key messages:

  - Slim and sleek connector tailored to fit mobile device product designs, yet robust enough for laptops and tablets

  - Features reversible plug orientation and cable direction

  - Supports scalable power and performance to future-proof your solution

USB Standard Revision Summary

USB Revisions*	Theoretical Top Speed	Max. Power Output	Power Direction	Cable Configuration	Availability
USB 1.1	12MB/s	2.5V, 500mA	Host to peripheral	Type-A to Type-B	1998
USB 2.0	480MB/s	2.5V, 1.8A	Host to peripheral	Type-A to Type-B	2000
USB 3.0	5GB/s	5V, 1.8A	Host to peripheral	Type-A to Type-B	2008
USB 3.1, generation 1	5GB/s	20V, 5A	Bi-directional	Type-C both ends – reversible plug orientation	2015
USB 3.1, generation 2	10GB/s	20V, 5A	Bi-directional	Type-C both ends – reversible plug orientation	2015

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Understanding USB 3.1

- Sometimes USB 3.1 is really USB 3.0
    - USB 3.1 Gen 1 = USB 3.0
    - USB 3.1 Gen 2 is much faster
- USB Type-C ≠ USB 3.1
    - USB 3.1 Gen 1 vs. Gen 2 is the protocol
    - USB Type-C vs. Type-A is the physical connector
- USB 3.1 Gen 2 availability is limited, but coming
    - Enthusiast level boards shipping since ~April
    - Intel's new Skylake/Z170 platform will drive more

Market

Estimated WW USB Type-C™ Connector Host TAM

USB Type-C Unit TAM* (M)	2015	2016	2017	2018
Total Devices with Type-C	4	101	257	544
Total Smartphones with Type-C	-	77	198	433
Total Personal Computers with Type-C	4.0	23.9	58.5	110.5
Total Apple Computers	1.0	4.4	11.7	22.1
MacBook	.81	3.5	9.25	17.55
iMac	0.2	0.9	2.4	4.5
Total Non Apple Computers	3.0	19.5	46.8	88.4
Desktop PCs	0.0	2.4	5.9	11.6
Standard Notebook PCs	0.0	6.2	11.6	21.9
Premium Ultra-mobile Notebook PCs	1.8	6.2	15.5	27.5
Premium Ultra-mobile Hybrid PCs	1.1	4.7	13.9	27.4

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Host Devices with USB Type-C™/ USB-C™ (Sept '15)

Apple MacBook

Nokia N1

Google Chromebook Pixel

LeTV (X600)

OnePlus 2

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Expected Host Devices with USB Type-C™/ USB-C™ *

- Apple MacBook (n)
- Google Chromebook Pixel (t)
- Nokia N1 (t)
- Dell Venue 8 Pro (t)
- Dell Venue 10 Pro (t)
- Dell XPS 13 (n)
- Dell XPS 15 (n)
- Dell XPS 12 (n)
- Dell Latitude 12 (7000 series) (t)
- Dell Latitude 11 (t)
- Samsung Galaxy Tab Pro S (t)
- Samsung Notebook 9 15" (n)
- HP Pro Tablet 608 (t)
- HP Spectre X360 (t)
- HP Pavilion X2 (n)

- LeTV Le 1 Pro (s)
- LeTV 1 (X600)
- LeTV LeMax Pro (s)
- Umi Hammer S (s)
- OnePlus 2 (s)
- OnePlus 2 Mini (s)
- Huawei Nexus 6P (s)
- Microsoft Lumia 950 (s)
- Microsoft Lumia 950XL (s)
- Gionee S6 (s)
- Gionee Elife S Plus (s)
- Gionee Marathon M5 Plus (s)
- BLU Vivo 5
- BLU Vivo XL
- ZTE Grand X3

- Xiaomi Mi 4C (s)
- Xiaomi Mi 5 (s)
- Xiaomi Mi 5 Plus (s)
- Lenovo ZUK Z1 (s)
- Lenovo ThinkPad 13 (n)
- Meizu PRO 5 (s)
- Acer Jade Primo (s)
- Acer Liquid Jade (s)
- Asus ZenPad S 8.0 (s)
- Asus Pro Z240 (d)
- Asus VivoBook Flip TP301 (n)
- Asus VivoBook Flip TP510
- LG Nexus 5X (s)
- LG Gram 15 (n)

Announced Monitors with USB Type-C™ (CES 2016)

- Acer

- Asus (portable)

- Dell (4K OLED)

- LG (4K)

Other Possible USB Type-C™ Uses …

"This year, the e-Golf Touch features a big 9.2-inch touchscreen, gesture controls so adjust simple controls like volume with a wave of the hand, wireless phone charging in both the front and rear seats, and a *USB Type-C port*, which is pretty wild considering that VW didn't even offer USB ports at all until recently."

Source: The Verge, January 5, 2016

SanDisk Ultra® USB Type-C™ Flash Drive

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SanDisk Ultra® USB Type-C™

Brushed metal

Translucent plastic

Designed with thinness in mind! - 0.26" (6.6mm) height

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Flash Drive for USB Type-C™ Devices

Reversible USB Type-C connector
- **no wrong way to connect**

- Designed for next-gen devices with USB Type-C™

- Free up space on your smartphone or transfer files between USB Type-C devices

- High-speed USB 3.1[1] performance *up to 150MB/s*[1]

- Easily manage and back-up content on your Android smartphone or tablet with the SanDisk Memory Zone application (available on Google Play™)[3]

- *Planned Announce: MWC 2016*

Our thinnest USB 3.1[1] flash drive

128GB*	
64GB	**Up to 150MB/s Read**[1]
32GB	
16GB	**Up to 130MB/s Read**[1]

SanDisk Memory Zone App[2]	**5-Year Warranty**[4]

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SanDisk Ultra® USB Type-C™ Flash Drive

<u>Differentiators:</u>

- Dedicated Flash Drive for USB Type-C™ devices

- Designed to complement thin next-gen devices

- Retractable design to protect the small reversible connector

- High-speed USB 3.1 (Gen 1) performance up to 150MB/s

- SanDisk Memory Zone app for Android

- 5-year warranty

SanDisk Ultra® USB Type-C™ Flash Drive

SanDisk Memory Zone for Android
Companion app for SanDisk Ultra® USB Type-C™ Flash Drive

❖ Free up space from your Android smartphone or tablet's internal memory

❖ Back up photos, music, and other important files

❖ Easy file management with password protection

Marketing Assets (*Marketing Studio*)

✓ Set-up sheets

✓ Product images

✓ Datasheets

✓ Web banners

✓ Etail video

✓ 360° product image

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