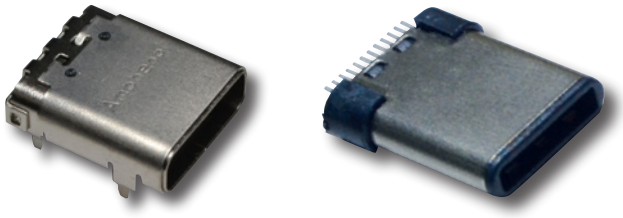
NEW REVERSIBLE USB-CONNECTOR, UP TO 100 W



The new USB connector is rotatable and reversible, delivers up to 100 watts and is smaller, faster and more stable than ever.

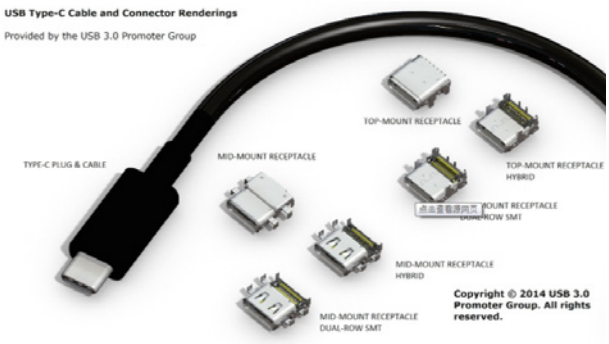
PIN ASSIGNMENT FOR REVERSIBLE USB-TYPE-C

Pin	Signal Name	Description	Mating Sequence	Pin	Signal Name	Description	Mating Sequence
A1	GND	Ground return	First	B12	GND	Ground return	First
A2	SSTXp1	Positive half of first SuperSpeed TX differential pair	Second	B11	SSRXp1	Positive half of first SuperSpeed RX differential pair	Second
A3	SSTXn1	Negative half of first SuperSpeed TX differential pair	Second	B10	SSRXn1	Negative half of first SuperSpeed RX differential pair	Second
A4	VBUS	Bus Power	First	B9	VBUS	Bus Power	First
A5	CC1	Configuration Channel	Second	B8	SBU2	Sideband Use (SBU)	Second
A6	Dp1	Positive half of the USB 2.0 differential pair – Position 1	Second	B7	Dn2	Negative half of the USB 2.0 differential pair – Position 2	Second
A7	Dn1	Negative half of the USB 2.0 differential pair – Position 1	Second	B6	Dp2	Positive half of the USB 2.0 differential pair – Position 2	Second
A8	SBU1	Sideband Use (SBU)	Second	B5	CC2	Configuration Channel	Second
A9	VBUS	Bus Power	First	B4	VBUS	Bus Power	First
A10	SSRXn2	Negative half of second SuperSpeed RX differential pair	Second	B3	SSTXn2	Negative half of second SuperSpeed TX differential pair	Second
A11	SSRXp2	Positive half of second SuperSpeed RX differential pair	Second	B2	SSTXp2	Positive half of second SuperSpeed TX differential pair	Second
A12	GND	Ground return	First	B1	GND	Ground return	First

USB-TYP-C KEY ASPECTS

- Entirely new design - tailored for emerging product designs
- New smaller size - similar to size of USB2.0 Micro-B
- Usability enhancements - reversible plug orientation & cable direction
- Rugged construction with up to 10,000 plug cycles
- Powerful with up to 100 watts
- Speed doubling compared to 3.0 to 10 Gbit/s

USB-TYPE-C CABLE AND PLUG MODELS



A special feature of the new **USB Type-C** is its reversibility, i. e. it can be plugged in both directions.
The USB Type-C allows for devices a power consumption of up to 100 watts. The flexibility of the new connector allows to realize different standards on the multiple occupancy.

What the new standard also distinguishes is its over previous USB connectors small size similar to that of USB2.0 Micro-B. Therefore, it is also on devices such as smartphones and tablets of the next generation space.

In addition, USB 3.1 doubles the transfer rate of 5 Gb/s (USB 3.0) to 10 Gbit/s, but remains backward compatible with its predecessors.

APPLICATIONS

- Smart phone
- Tablet
- Mobile device
- Ultra notebook

BENEFIT - CHARGE CURRENT

With a USB Type-C connector to devices with a power up to 100 W they can be operated without additional power supply, e. g. as monitors, inkjet printer and powered speakers. Various profiles define the possible current levels (up to 5 A) and possible voltages (up to 20 V). In addition to the usual voltage of 5 V, 12 V or 20 V are also possible. V_{bus} is when connecting a device 5 V and can be increased by means of negotiations of the serial protocol to V_{bus} of 12 V or 20 V. Another fundamental change is the release of the flow direction of the power supply. A computer can a monitor with electricity just like a monitor can provide a computer with power.

POWER PROFILE

Profil	+5 V	+12 V	+20 V
1	2 A	-	-
2		1,5 A	
3		3,0 A	
4		3,0 A	
5		5,0 A	

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