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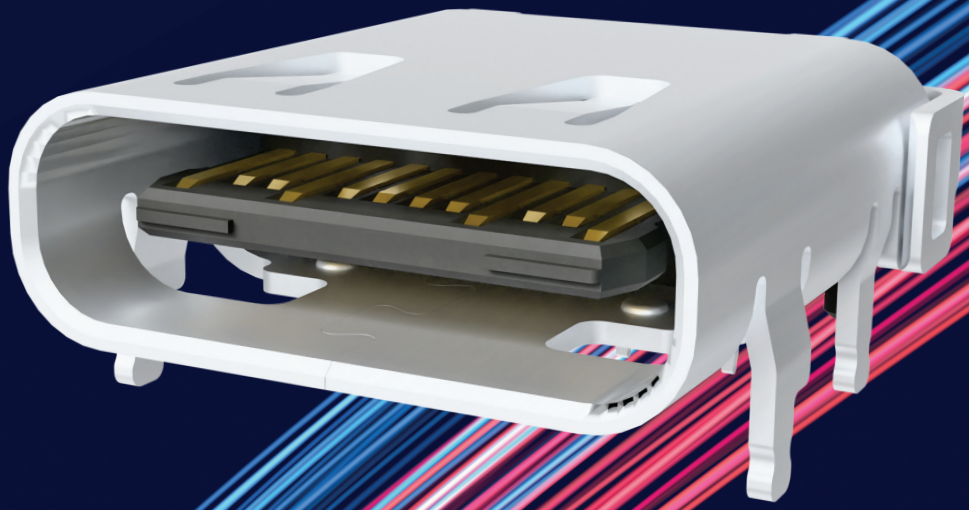
CONNECT TECHNOLOGY
WITH CONFIDENCE

BBi
RANGE

INDESS

USB TYPE-C® UNIVERSAL CONNECTORS

HIGH PERFORMANCE, INDUSTRY STANDARD



HARWIN

INDESS

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BBi CONNECTORS FROM HARWIN.

STANDARDIZED INTERFACE, VERSATILE PCB CONNECTIONS

Industrial-grade USB Type-C connectors offering high-speed data transfer and power delivery in a compact, standardized format. Multiple performance levels, mounting styles, and contact finishes provide flexibility for a wide range of applications.

Harwin's USB Type-C connector range offers reliable connections for applications requiring high-speed data transfer and high-power performance. With USB 2.0, USB 3.2 Gen 2, and USB4 options, the range supports data rates up to 40Gbps and power ratings up to 240W.

Available in 16 and 24 contact configurations, the range includes female receptacles and male plugs. Standardized USB Type-C interfaces provide a compact, reversible connection, with USB-IF certified options available.

A choice of top mount, edge mount, mid mount, and side-entry configurations provides flexibility for PCB design and assembly. Contact plating options of gold flash and 30µ" gold.

IPX7 waterproof receptacles are available for applications requiring protection against water ingress. Environmental testing includes elevated temperature, humidity, and vibration conditions.

Supplied in tape-and-reel packaging for automated PCB assembly.

FEATURES

- High-speed data transfer up to 40Gbps and power ratings up to 240W
- Multiple PCB mounting styles for flexible product design, waterproof and gold plating options
- Supplied in tape & reel for high volume surface mount assembly

APPLICATIONS

- Handheld monitoring
- Infotainment systems
- Portable data/displays
- Industrial to medical

VIEW FULL SERIES & SPECIFICATIONS **HERE**

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USB-C

SPECIFICATIONS

MATERIALS	ELECTRICAL	MECHANICAL	ENVIRONMENTAL
Housings: **High Temperature LCP, UL94V-0**	Current per contact: **5.0A max (VBUS)** **6.25A max (GND)** **1.25A max (VCONN)** **0.25A min (others)**	Durability: **10,000 operations min**	Operating temperature: **-40°C to +85°C**
Contacts: **Copper Alloy**			Vibration resistance: **20-500Hz**
Contact finish: **Gold on contact area,** **Tin or Gold on termination**	Power rating: **240W max (USB4)** **150W max (others)**	Insertion force: **5N min, 20N max**	Humidity: **40±2°C, 90–95% RH for 96 hours**
Outer shell: **Stainless Steel**			Sealing / Ingress: **IPX7 (1.0m for 30 minutes)**
Waterproof seal: **Silicone**	Data rate: **40 Gbps (USB4)** **10 Gbps (USB 3.2 Gen 2)** **480 Mbps (USB 2.0)**	Withdrawal force: **6N min, 20N max**	Compliance: **RoHS Compliant** **REACH / CMRT statements**

Specifications are subject to change.

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USB-C

PRODUCT CATEGORIES

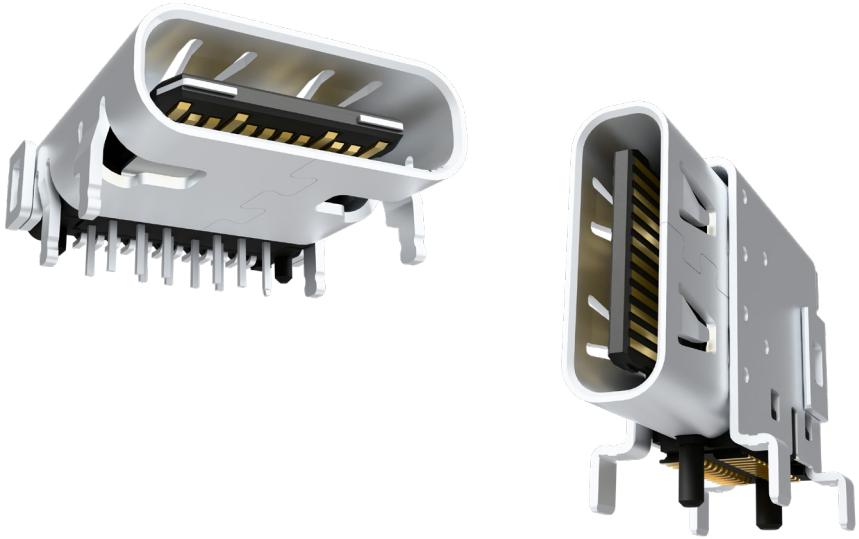
USB4® TYPE-C

Capable of 40Gbps data rate and 240W max power, these USB-C connectors provide maximum performance. Right-angle top-mount designs in both male plug and female receptacle formats, with throughboard solder tabs. Male plug has SMT contacts, female receptacle is hybrid SMT/THT with additional location pegs. Supplied in Tape and Reel ready for automated placement.



USB 3.2 GEN 2 TYPE-C®

Capable of 10Gbps data rate and 150W max power. Female receptacle top-mount options: right-angle hybrid SMT/THT with throughboard solder tabs and location pegs; upright flag right-angle SMT with throughboard solder tabs and location pegs. Supplied in Tape and Reel ready for automated placement.



Specifications are subject to change.

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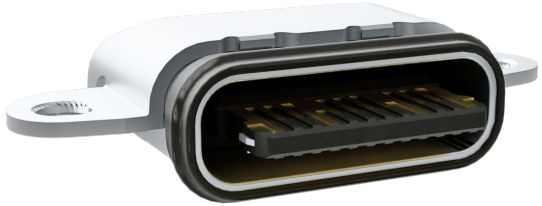
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USB-C

PRODUCT CATEGORIES

USB 3.2 GEN 2 TYPE-C®, WATERPROOF

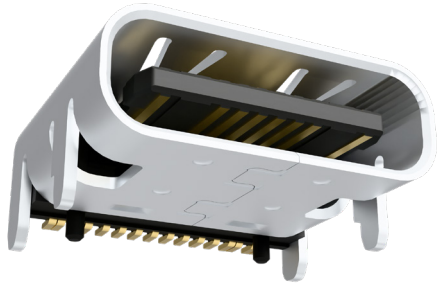
Rated to IPx7 (1 metre for 30 minutes), 10Gbps data rate and 150W max power. Female receptacle options, both surface mount: mid-mount for a cutout in a PCB with mounting lugs; edge-mount for mounting lugs to a PCB edge with SMT terminations for an FPC. Supplied in Tape and Reel ready for automated placement.





USB 2.0 TYPE-C™

Capable of 480Mbps data rate and 150W max power. Female receptacle right-angle top-mount with surface mount terminations, throughboard solder tabs and location pegs. Supplied in Tape and Reel ready for automated placement.



USB-IF CERTIFIED

USB-C4R24AZ42R = TID 11684

USB-C3R24AZ42R = TID 9570

Specifications are subject to change.

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USB-C

DOWNLOADS

TECHNICAL DOCUMENTS

Component Specification (including pin numbering system)

PRODUCT TRAINING

Product Training Module (PTM)

Specifications are subject to change.

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FOR FURTHER INFORMATION PLEASE CONTACT:

SUPPORT@HARWIN.COM