

Power Your Next Product with Any USB-C Adapter



How many types of charging adapters do you have in your house right now? I bet at least five and probably a lot more than that.

Consumers want to carry **just one** adapter to power **any** device. The desire to simplify is driving the adoption of USB 3.2, or a standard way to charge everything from your cell phone to your toothbrush.

Mouser Electronics, *Electronic Design*, Molex and Cypress Semiconductor Corp. joined forces in July to present a live technical online training, and Molex's Alfonso Pena joined Cypress' Mark Fu to discuss how to power products with any USB Type-C power adapter. Registration and attendance were unusually high, reflecting the timeliness of the webinar topic. Below summarizes part of our training:



Molex USB Type-C Connectors

The Change to USB Type-C

While it's clear that USB 3.2 Type-C and USB power delivery will soon become the universal power standard – replacing incompatible, traditional barrel connectors – the transition presents challenges for manufacturers, designers and engineers, including:

1. Integrating barrel connector replacement (BCR) controllers and USB Type-C receptacles into designs easily and quickly.

2. Allowing any electronic device consuming less than 100W to be powered by a USB Type-C adapter with an easy-to-use reference design and no firmware development.
3. Addressing constantly evolving industry challenges with unique connector and cable designs.
4. Doing all of this with a price that's compatible with traditional connectors.

One Size Can Fit All

While almost every one of your favorite devices has a different charging interface, you've likely become accustomed to the status quo, so anything new requires a change in thinking and behavior.

Molex is collaborating with Cypress Semiconductor Corp. to offer a USB 3.2 charging solution. [Molex's USB-Type C Connector](#) works with [Cypress' EZ-PD Barrel Connector](#) to enable designers to test the USB 3.2 charging protocol. The "one cable fits all" model meets consumer demand in the Internet of Things era and creates a better user experience.

This is the right product at the right time. So, what's the hold-up?

Honestly, it's letting the world – manufacturers and consumers – know that this product exists. There's a comfort with the familiar, a specific cable for a specific device.

As tech companies begin to adopt USB 3.2, and consumers become more familiar with the new, smart technology, cable manufacturers who successfully navigate the four biggest challenges will heavily influence the direction of the technology and amass a grateful following of cable users desperate to be cut free from incompatible cords.

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