



## **NXP Introduces the Industry's Best-in-Class, End-to-End USB Type-C Solution for Fast Charging**

*Company's total solution features easy integration of AC-DC converter, protocol controller, USB PD Phy and direct charger for the industry's first fully compliant Type-C solution*

**LAS VEGAS – (CES 2017) – January 4, 2017** – NXP Semiconductors N.V. (NASDAQ:NXPI) today introduced the industry's best-in-class USB Type-C solution for rapid charging. The end-to-end solution is the smallest in the market, highly efficient, and includes unique rapid charging coupled with USB PD PHY for a fully compliant Type-C Port Controller (TCPC) implementation. NXP's new offering makes it easier for manufacturers to integrate USB Type-C functionality into their mobile products to meet the growing consumer demand for faster, more convenient ways to charge a broad range of popular devices while also connecting to video and data.

"Our latest solution provides multi-protocol standard USB Type-C power and high-speed switching for seamless connectivity and charging over one reversible cable," said Chae Lee, SVP and GM, secure interfaces & power business with NXP. "USB Type-C is the fastest growing application for the mobile market and NXP is the only supplier to offer a feature-rich, end-to-end solution that provides easy integration and highest efficiency."

NXP's new offering includes a Type-C port controller, new 6A direct charger and direct charging interface and USB-PD controllers for a complete fast charging solution from wall to battery. The solution supports USB Type-C connector to transmit data, video and power simultaneously, while enabling true power on-demand for phone charging, as well as rapid charging for both mobile and computing devices in one unit. The direct charger also allows consumers to charge their smartphones faster while reducing the amount of heat generated by providing accurate voltage and current regulation loops designed to protect the battery and system. For broad interoperability, the solution is one of the first to offer USB power delivery with the USB-IF standards body.

### **New Product Details:**

- **PTN5110 Type-C Port Controller:** Industry-first USB-IF TCPC PHY featuring lower-power consumption, only 30uA in active sink mode, industry-standard programmable USB power delivery, faster battery charging delivered in a 57% smaller package than the first generation part. Using the new TCPC PHY reduces the overall system BOM cost by simplifying the system architecture, via reducing the duplicated MCU. This allows the MCU to be used for more sophisticated functions without the extra cost. Production quantities are expected to be available January, 2017.
- **PCA9491UK 6A Direct Charger:** Low ON resistance switch (13 mohm) reduces the amount of heat generated on the mobile device and enables programmable options that can be



optimized for unique customer needs. Best-in-class features are delivered in the smallest package size: 42-pin WLCSP. This product also provides extensive voltage and current regulation loops, provides accurate temperature sensor reading for die, VBUS and battery and 30V capable technology that allows for future integration with high-voltage direct chargers. Production quantities are expected to be available March, 2017.

- TEA1901 SCP Direct Charging Interface Controller / TEA1905x USB-PD/Quick Charge™ Interface Controller: One of the first to market combining USB PD 3.0 & Quick Charge 2.0, 3.0. These products are tailored to be used in combination with TEA1936x and TEA199x, enabling power efficiency in small mobile phone wall chargers -- utilizing the industry's latest interface protocols without the use of sophisticated technologies. Controllers combine various state-of-the-art, fast-charging protocols that provide extensive voltage and current regulation loops and protection for the battery and system.

#### **See NXP Technologies in Action at CES 2017**

Visit NXP during CES 2017 from January 5-8 in Las Vegas. Interact with innovative demonstrations and experience how NXP truly enables secure connections for a smarter world in the company's booth at the Las Vegas Convention Center, Central Plaza, CP#25, and the NXP Smarter World Tour Truck.

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#### **About NXP Semiconductors**

NXP Semiconductors N.V. (NASDAQ: NXPI) enables secure connections and infrastructure for a smarter world, advancing solutions that make lives easier, better and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the secure connected vehicle, end-to-end security & privacy and smart connected solutions markets. Built on more than 60 years of combined experience and expertise, the company has 44,000 employees in more than 35 countries and posted revenue of \$6.1 billion in 2015. Find out more at [www.nxp.com](http://www.nxp.com).

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