Cypress Samples the First Integrated, Single Chip USB Type-C Port Controllers for Next-Generation USB Cables, Power Adapters, Notebooks and Monitors

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Cypress's CCG1 Type-C Port Controller Family Leverages Its PSoC® 4 Programmable System-on-Chip Architecture to Enable Fast Time to Market for Top-Tier PC OEMs

SAN JOSE, Calif., February 9, 2015 – Cypress Semiconductor Corp. (NASDAQ: CY), the USB market leader, today sampled the industry's first integrated, programmable USB Type-C port controller solution. The USB Type-C standard is gaining rapid support with top-tier PC makers by enabling slim industrial designs, easy-to-use connectors and cables, the ability to transmit multiple protocols, and delivery of 100W of power – a significant improvement over the previous 7.5W standard. These companies have been keenly awaiting the controller solutions required to bring a revolutionary generation of cables, power adapters, notebooks and monitors to market.

Cypress's new CCG1 USB Type-C port controllers are based on its PSoC® 4 programmable system-on-chip architecture. PSoC's programmability enabled Cypress to integrate the transceiver for Type-C communication within a matter of weeks and to get its product to market fast and first, gaining a beachhead in the Type-C port controller market, which is expected to be $65 million in 2015 and to grow to $350 million in 2019 at a CAGR of 40%. The CCG1 controllers integrate voltage-monitoring and current-monitoring circuitry that is critical for power adapter applications. The controllers also provide design flexibility with firmware that can be upgraded during product development, in the production line, or in the field. This feature is particularly helpful for future USB-IF specification changes, which can be addressed simply with a firmware revision to achieve compliance.

The Type-C standard's 2.4-mm-high connector plug is significantly smaller than current 4.5-mm USB Type-A standard connectors. It also allows for transport of USB signals and PCIe or DisplayPort signals on the same connector. A CCG1 product video, which demonstrates the transmission of DisplayPort signals over a Type-C connection, is available at www.cypress.com/ccg1video.

"The unmatched flexibility of our PSoC architecture enabled us to quickly develop our CCG1 controllers to meet the growing market demand for an integrated solution," said Badri Kothandaraman, Executive Vice President of Cypress's Data Communications Division. "CCG1 enables a single connector and cable solution for the next-generation PCs and notebooks that will begin to hit the market later this year. It expands our broad portfolio of USB solutions and builds upon our two decades of history as an innovator in the USB business."

"The concurrent introduction of the Type-C Specification and the Power Delivery 2.0 Specification by the USB 3.0 Promoter Group last August took the industry by surprise since it introduced new implementation methods," said John Hyde, Principal at USB Design By Example. "I was impressed that Cypress was able to demonstrate working prototypes in September at the first USB 3.1 Developer Day."

Cypress's PSoC 4 architecture integrates a low-power ARM® Cortex™-M0 core with PSoC's unique programmable analog and digital peripherals. The result is the industry's most flexible and scalable low-power mixed-signal architecture. PSoC "future-proofs" designs, protecting them against last-minute specification changes. It enables firmware-based changes at any point in the design cycle—even out in the field. All PSoC devices are dynamically reconfigurable, enabling designers to transform resources on-the-fly and to execute tasks with fewer ICs. For more information, please visit www.cypress.com/psoc.

Product Availability
The CYPD11XX CCG1 Type-C Port controller family is sampling now and will be available for production in March. CCG1 is available in a 40-pin QFN for notebook applications, a 16-pin SOIC and a 28-pin SSOP for power adapters, and a 35-ball WLCSP for cable and mobile applications. More information on Cypress's Type-C and USB power delivery solutions is available at www.cypress.com/Type-C.

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Cypress delivers high-performance, mixed-signal, programmable solutions that provide customers with rapid time-to-market and exceptional system value. Cypress offerings include the flagship PSoC® 1, PSoC 3, PSoC 4 and PSoC 5LP programmable system-on-chip families. Cypress is the world leader in capacitive user interface solutions including CapSense® touch sensing, TrueTouch® touchscreens, and trackpad solutions for notebook PCs and peripherals. Cypress is a world leader in USB controllers, which enhance connectivity and performance in a wide range of consumer and industrial products. Cypress is also the world leader in SRAM and nonvolatile RAM memories. Cypress serves numerous major markets, including consumer, mobile handsets, computation, data communications, automotive, industrial and military. Cypress trades on the NASDAQ Global Select Market under the ticker symbol CY. Visit Cypress online at www.cypress.com.

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