

Microchip's Dual-Channel USB Port Power Controller Maximizes System Reliability and Uptime Using Dynamic Thermal Management

Faster Charging at Higher Currents Enabled by Up to 3 Amps of Continuous Current Per Port With Integrated Current Monitoring for Increased System Uptime

CHANDLER, Ariz., Nov. 9, 2015 /PRNewswire/ -- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today announced the expansion of its programmable USB-port power controller portfolio with the dual-channel <u>UCS2112</u>. This new port power controller supports two ports, with eight programmable continuous current limits for each port, ranging from 0.53 to 3.0 Amps for faster charging times at higher currents. Features for protecting and increasing overall system uptime also include integrated current monitoring, precision current limiting, charge rationing and dynamic thermal management. The UCS2112 helps designers address a wide breadth of host devices, such as the laptops, tablets, monitors, docking stations and printers found in automotive, computing, education and aviation applications, as well as multi-port charging accessories and storage. This device has the flexibility of working individually or in concert with USB hubs, to create a complete charging and/or USB-communication system.



For an overview of Microchip's USB Hubs and Devices, please visit <u>http://www.microchip.com/USB-102615a</u>.

"There is a trend toward higher-current capabilities for USB charging, mainly driven by the larger phones and tablets which have higher-capacity batteries," said Rich Simoncic, vice president of Microchip's Analog Power and Interface Division. "Our UCS2112 addresses the requisite safety features of these solutions while also incorporating current monitoring and a thermal-management scheme to maximize system uptime and reliability."

For a better end-user experience, the UCS2112's dynamic thermal-management feature throttles back the current limit as it approaches the thermal limit, preventing shutdown and allowing for charging where other devices have stopped completely. The UCS2112's integrated current monitor eliminates the need for an external sense resistor and enables an "attach detect" signal that does not rely on the main power to be active for hosts that are off or sleeping. Current monitoring and rationing also helps manage multiple charging devices and can balance a dynamic load current for systems with smaller power supplies.

The UCS2112 also aligns with the USB Power Delivery initiatives from the USB Industry Forum, and is in compliance with various charging specifications, including the USB-IF BC1.2.

Development Support

The UCS2112 port power controller is supported by Microchip's new <u>UCS2112 Evaluation</u> <u>Board</u> (Part # ADM00639, \$140), which is available today from <u>microchipDIRECT</u>, any Microchip sales representative and all authorized worldwide distributors.

Pricing & Availability

The <u>UCS2112</u> is available now for sampling and volume production in a 20-pin QFN package. Pricing starts at \$1.80 each, in 5,000-unit quantities. For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <u>http://www.microchip.com/UCS2112-102615a</u>. To purchase products mentioned in this press release, go to <u>microchipDIRECT</u> or contact one of Microchip's authorized distribution partners.

Resources

High-res Images Available Through Flickr or Editorial Contact (feel free to publish):

- Chip Graphic: <u>http://www.microchip.com/Graphic-102615a</u>
- Block Diagram: <u>http://www.microchip.com/Diagram-102615a</u>
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About Microchip Technology

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller, mixedsignal analog and Flash-IP solutions, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at <u>http://www.microchip.com/Homepage-102615a</u>.

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Tags / Keywords: USB 3.0, USB 3.1, BC1.2, USB Type-C, Port Power Controller, Port Power, USB Port, USB Port Protection, USB Charger, USB Charging, Overcurrent Limiting,

Charge Rationing, Dynamic Thermal Management, Current Monitor, Tablet Charger, Smart Phone Charger

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