



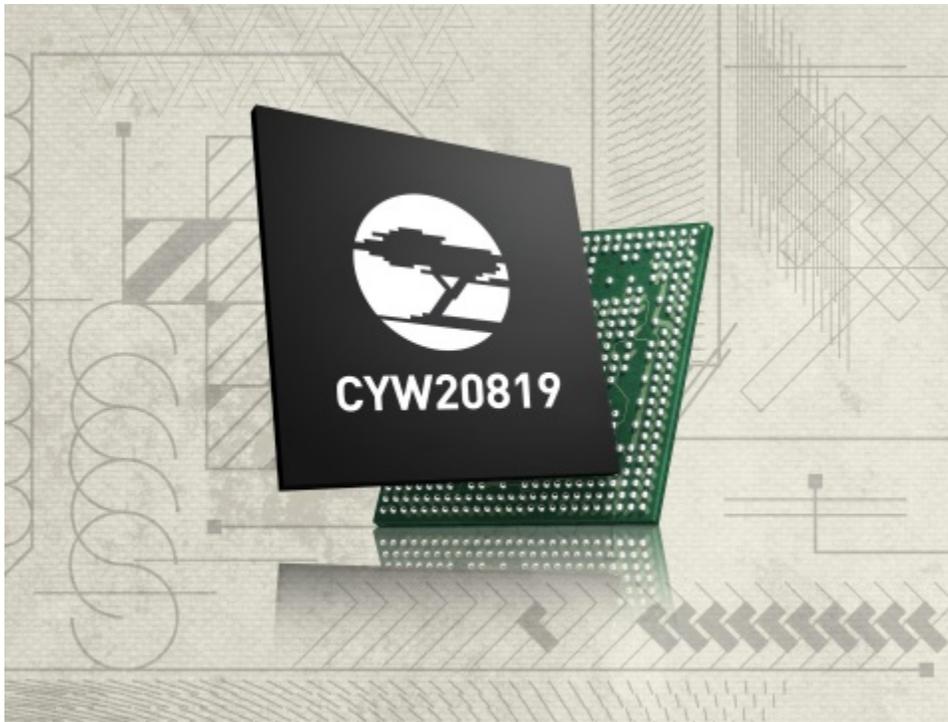
Cypress Low-Power Bluetooth® MCUs Deliver Mesh Networking with Ubiquitous Smartphone Connectivity

February 25, 2019

Solutions Prolong Battery Life, Provide Long-range Connections, and Deliver Voice and Audio for Wearables and Remotes

NUREMBERG, Germany--(BUSINESS WIRE)--Feb. 25, 2019-- EMBEDDED WORLD —Cypress Semiconductor Corp. (NASDAQ: CY), the embedded solutions leader, today announced it is sampling two low-power, dual-mode Bluetooth® 5.0 and Bluetooth Low Energy (BLE) microcontrollers (MCUs) that include support for Bluetooth mesh networking for the Internet of Things (IoT). The new CYW20819 and CYW20820 MCUs each provide simultaneous Bluetooth 5.0 audio and BLE connections, delivering low-power wireless solutions that enable music and voice commands for battery-powered fitness bands, health monitoring devices, and voice remotes. Designers can also use the solutions to develop low-cost, low-power Bluetooth mesh network devices that can communicate with each other—and with smartphones, tablets and voice-controlled home assistants—via simple, ubiquitous, and hub-free Bluetooth connectivity.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20190225005323/en/>



Pictured is Cypress' CYW20819 low-power dual-mode Bluetooth 5.0 and Bluetooth Low Energy microcontroller that include support for Bluetooth mesh networking for the IoT. (Graphic: Business Wire)

the IoT Compute and Wireless Business Unit at Cypress. “These MCUs are key additions to our industry-leading IoT connectivity portfolio, providing low-power, cost-efficient, and high-performance solutions that meet demands for rigorous reliability for interoperable Bluetooth mesh applications, voice remotes, and audio-enabled wearables.”

Previously, users needed to be in the immediate vicinity of a Bluetooth device to control it without an added hub. Using Bluetooth mesh networking technology, combined with the high-performance integrated PA in the CYW20820, the devices within a network can communicate with each other to easily provide coverage throughout even the largest homes, allowing users to conveniently control all of the devices via apps on their smartphones, tablets, and smart-speakers.

The CYW20819 and CYW20820 MCUs are supported by Cypress' ModusToolbox™ development tools, which provide sample code and applications for Bluetooth mesh and sensor kits. Cypress also offers the CYW20719, CYW20706, and CYW20735 BLE solutions and the CYW43438 and CYW43570 Wi-Fi® and Bluetoothcombo solutions, delivering fully compliant Bluetooth mesh for devices and Wi-Fi connected smart homes. More information on Cypress' Bluetooth mesh solutions is available at www.cypress.com/ble-mesh. Additionally, Cypress offers a CYW20819-based certified Bluetooth module (CYBT-213043-02) and two evaluation kits that are now open for pre-ordering:

- The Cypress CYW20819EVB-02 Evaluation Kit for evaluation and development with the CYW20819 MCU will be available

The CYW20819 Bluetooth/BLE MCU has the ability to maintain Serial Port Profile (SPP) protocol connections and Bluetooth mesh connections simultaneously. The CYW20820 offers the same features and integrates a power amplifier (PA) with up to 10dBm output power for long-range applications up to 400 meters and whole-home coverage. This provides classic Bluetooth tablet and smartphone connections while enabling a low-power, standards-compliant mesh network for sensor-based smart home or enterprise applications. The Arm® Cortex®-M4 core enables operation at 60% lower active power for connected 200ms beacons compared to current solutions—delivering up to an industry-leading 123 days of battery life from a CR2032 coin cell battery. The MCU is ideal for wearables, sensors, remote controls, smart home lighting and medical devices, and they are forward and backward compatible for dual-mode mouse and keyboard HID applications.

“Providing the convenience and enjoyment of voice control, music and even audio coaching for fitness bands and health monitoring devices has not been possible without sacrificing battery life, but Cypress' new low-power Bluetooth MCUs have solved this challenge,” said Brian Bedrosian, vice president of marketing for

in March 2019;

- And the Cypress Mesh Evaluation Kit (CYBT-213043-MESH), featuring a Bluetooth 5.0-qualified and regulatory-certified module based on the CYW20819 MCU for development of Bluetooth mesh applications, will be available in the second quarter of 2019.

Cypress' Bluetooth solutions share a common, widely-deployed Bluetooth stack and are supported in the latest version of Cypress' Wireless Internet Connectivity for Embedded Devices (WICED[®]) software development kit (SDK), applied in the ModusToolbox suite, which streamlines the integration of wireless technologies for developers of smart home lighting and appliances, as well as healthcare applications. More information on Cypress' wireless solutions can be found at www.cypress.com/wireless.

Cypress' IoT Portfolio at Embedded World

Cypress is demonstrating its Bluetooth MCUs, along with its complete embedded systems solution portfolio, here at the Embedded World 2019 trade show in hall 4A, stand 148 of the Nuremberg Exhibition Center from February 26-28.

About Cypress' ModusToolbox

Cypress' ModusToolbox suite brings best-in-class connectivity, computing, security, and sensing together in a single platform. It combines the rich design resources of Cypress' wireless libraries and the analog and digital peripheral libraries of its PSoC[®] microcontrollers with an open-source, Eclipse-based Integrated Design Environment (IDE). Purpose-built hardware, multi-vendor RTOS support, and standards-based security solutions provide a solid foundation, that is validated by various cloud services. ModusToolbox unifies Cypress' offerings, providing open access to third-party solutions, and freeing engineers to focus on delivering high-value, differentiated products. The IDE is available for download at www.cypress.com/modustoolbox.

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About Cypress

Cypress is the leader in advanced embedded solutions for the world's most innovative automotive, industrial, smart home appliances, consumer electronics and medical products. Cypress' microcontrollers, wireless and USB-based connectivity solutions, analog ICs, and reliable, high-performance memories help engineers design differentiated products and get them to market first. Cypress is committed to providing customers with the best support and development resources on the planet enabling them to disrupt markets by creating new product categories in record time. To learn more, go to www.cypress.com.

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