**News Release**

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**Renesas Launches World’s Most Highly Integrated Advanced Bluetooth Low Energy SoC**

*New SmartBond DA1470x Family Features Small Form Factor with Integrated Applications and 2D Graphics Processors, Voice Activity Detector and Power Management Enables Small Form Factor for IoT Product Designs*

**Düsseldorf, June 21, 2022 ―** Renesas Electronics Corporation (TSE: 6723) today announced the SmartBond™ DA1470x Family of Bluetooth® low energy (LE) solutions**―**the world’s most advanced, integrated System-on-Chip (SoC) family for wireless connectivity.

The DA1470x Family is the only solution in the [Bluetooth LE](https://www.renesas.com/products/interface-connectivity/wireless-communications/bluetooth-low-energy?utm_campaign=conn_ble_da1470x&utm_source=press_release&utm_medium=press_release&utm_content=ble) space to integrate a power management unit, a hardware voice activity detector (VAD), a Graphics Processing Unit (GPU) and Bluetooth LE connectivity all into a single chip. This combined functionality provides smart IoT devices with the most advanced sensor and graphical capabilities and seamless, ultra-low-power, always-on audio processing. The new family is ideal for wearables like smartwatches and fitness trackers; glucose monitor readers and other consumer medical and healthcare devices; home appliances with displays; industrial automation and security systems; and Bluetooth consoles such as e-bikes and gaming equipment.

“The DA1470x family expands on our successful strategy of integrating more functions, including greater processing power, expanded memory and improved power modules, along with VAD for always-on wake and command word detection,” said **Sean McGrath, Vice President of the Connectivity and Audio Business Division in Renesas’ IoT, Industrial and Infrastructure Business Unit**. “This feature-packed SoC product family enables developers to push the boundaries of connected consumer and industrial applications and future-proof their IoT products to fit the needs of multiple applications, while optimizing their bill of materials.”

The high level of integration further results in significant cost savings on the Bill of Materials (BoM), enabling cost-effective system solutions. It also reduces component count on the PCB enabling smaller form factor designs and freeing up space for additional components or larger batteries. With less components on the PCB, the reliability of the system is also improved, delivering a further reduction in the total cost of goods sold (COGS) of the end product.

The SmartBondDA1470x Family is already gaining acceptance in the market. For example**, the DA14706 is at the heart of the newly launched Xiaomi Mi band 7** with an eye catching 1.62“, 192x490 AMOLED display, 120 sports modes and a 15-day battery life for typical use.

**Key Features of the DA1470x Wireless SoCs**

* Multi core system – Arm® Cortex®-M33 processor as the main application core and Cortex -M0+ as the sensor node controller.
* Integrated 2D GPU & Display controller supporting DPI, JDI parallel, DBI and Single/Dual/Quad SPI interfaces.
* Configurable MAC supporting Bluetooth® LE 5.2 and proprietary 2.4 GHz protocols.
* Integrated 720mA JEITA-compliant USB charger supports rechargeable Li-ion/Li-Po batteries.
* Integrated low quiescent current SIMO DC/DC converter of the PMU efficiently supplies internal system and external components
* Ultra-low power hardware VAD enables seamless and always on audio processing

**Winning Combination**

Renesas has combined the new DA1470x with multiple components from its broad range of embedded processing, analog, power and connectivity portfolio to create two new Winning Combinations: a [Wearable Activity Tracker](https://www.renesas.com/application/consumer-electronics/wearables-non-medical/wearable-activity-tracker?utm_campaign=conn_ble_da1470x&utm_source=press_release&utm_medium=press_release&utm_content=activity_tracker) and an [Instrument Panel for Light EVs and eBikes](https://www.renesas.com/application/automotive/connected-infotainment/instrument-panel-light-electric-vehicles?utm_campaign=conn_ble_da1470x&utm_source=press_release&utm_medium=press_release&utm_content=lev_ebike). Renesas offers more than 300 Winning Combinations with compatible devices from the Renesas product portfolio to enable customers to speed up the design process and bring products to market more quickly. They can be found at [renesas.com/win](file:///C%3A%5CUsers%5Ckrkelly%5CDocuments%5CDialog%20PLs%5CConnectivity%5CBLE%5CDA1470x%5Crenesas.com%5Cwin).

**Demo at Embedded World**

The DA1470x Family will be demonstrated at Embedded World June 21-23, 2022, in Nuremberg, Germany (hall 1; booth 1-234).

**Availability**

The DA1470x Family consists of four new devices, all of which are in mass production and widely available now. More information about all the new devices is available at [renesas.com/DA1470x](https://www.renesas.com/products/interface-connectivity/wireless-communications/bluetooth-low-energy/da14706-highly-integrated-advanced-bluetooth-52-soc?utm_campaign=conn_ble_da1470x&utm_source=press_release&utm_medium=press_release&utm_content=da14706).

**About Renesas Electronics Corporation**

Renesas Electronics Corporation ([TSE: 6723](http://www.jpx.co.jp/english/)) empowers a safer, smarter and more sustainable future where technology helps make our lives easier. A leading [global](https://www.renesas.com/about/company/profile/global.html) provider of microcontrollers, Renesas combines our expertise in embedded processing, analog, power and connectivity to deliver complete semiconductor solutions. These Winning Combinations accelerate time to market for automotive, industrial, infrastructure and IoT applications, enabling billions of connected, intelligent devices that enhance the way people work and live. Learn more at [renesas.com](http://www.renesas.com/). Follow us on [LinkedIn](https://www.linkedin.com/company/renesas/), [Facebook](https://www.facebook.com/RenesasElectronics/), [Twitter](https://twitter.com/renesasglobal), [YouTube](https://www.youtube.com/user/RenesasPresents) and [Instagram](https://www.instagram.com/renesas_global/).

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