

New Family of 700V Buck Regulators From Renesas Offers Unmatched Feature Set for Home Appliances, Smart Homes, Sensing Systems, Power Meters and Industrial Controls

Devices Offer Very Low Power Consumption, Excellent EMI, No Audible Noise, and Reduced BOM Costs; Complement Renesas' MCU and Sensor Lines

June 24, 2021



700V Buck Regulators Deliver Lowest Standby Power and No Audible Noise

TOKYO, Japan — Renesas Electronics Corporation (TSE:6723), a premier supplier of advanced semiconductor solutions, today unveiled a family of new 700V buck regulators that offers designers numerous advantages over competitive solutions. The new RAA2230XX devices deliver superior power consumption, noise and EMI suppression, as well as reduced overall system cost. They are ideal for a wide range of applications, including home appliances, sensing systems such as smoke alarms and gas sensors, white goods, power meters and industrial controls.

The new RAA2230XX buck regulators consume only 10mW to 30mW when idle, helping system designers meet ever-tightening standby power regulations. They feature a unique switching algorithm which minimizes electromagnetic interference (EMI) and eliminates audible noise, such as 'humming' or 'whining' that can affect competitors' solutions. The new regulators also can supply as low as 3.3V output, enabling designers to eliminate a second-stage low dropout regulator (LDO), saving BOM cost and board space.

The new buck regulators connect to the AC line to power Renesas MCUs, sensors and other digital ICs. Renesas has developed numerous Winning Combinations that include the new devices. Winning Combinations consist of complementary analog, power, timing devices and embedded processing, and provide an easy to use architecture, simplifying the design process and significantly reducing design risk for customers in a wide variety of applications. Renesas offers over 200 winning combinations with compatible devices that work together seamlessly.

"The RAA2230XX family is a superior solution that complements our deep and broad line of products for the home and industrial markets," said Philip Chesley, Vice President of

the Industrial and Communications Business Division at Renesas. "This is an excellent example of Renesas' ability to combine great products with design and applications expertise to help our customers get to market faster with differentiated end products."

Key Features of the RAA2230XX Buck Regulators

- Support for both non-isolated buck and isolated flyback topologies, allowing customers to develop multiple types of AC input power supplies
- Ultra-low 10mW to 30mW idle power consumption, enabling compliance with strict standby power regulations
- Minimal EMI and no audible noise prevent last-minute product development headaches
- Available in TSOT23-5, SOIC-8 and SOIC-7 package options, delivering pin-to-pin compatibility with competitors' products for easy replacement

Availability

The new 700V RAA2230XX buck regulators are available today. The family includes 2W, 4W and 8W versions. Renesas also offers numerous evaluations boards for different package and output combinations.

About Renesas Electronics Corporation

Renesas Electronics Corporation (TSE: 6723) delivers trusted embedded design innovation with complete semiconductor solutions that enable billions of connected, intelligent devices to enhance the way people work and live. A global leader in microcontrollers, analog, power, and SoC products, Renesas provides comprehensive solutions for a broad range of automotive, industrial, infrastructure, and IoT applications that help shape a limitless future.

All names of products or services mentioned in this press release are trademarks or registered trademarks of their respective owners.