**News Release**

No.: REN2247(A)

**Renesas Introduces New ASIL B Power Management IC Ideal for Automotive Camera Applications**

*Highly Integrated RAA271082 PMIC Complements Renesas’ Award-Winning AHL Technology; Flexibility Enables Support for MCUs in Safety-Related Applications*

**Düsseldorf, November 2, 2022 ―** Renesas Electronics Corporation (TSE:6723), a premier supplier of advanced semiconductor solutions, today unveiled an innovative automotive power management IC (PMIC) for next-generation automotive camera applications. The RAA271082 is a versatile ISO-26262 compliant multi-rail power IC with a primary high voltage synchronous buck regulator, two secondary low voltage synchronous buck regulators, and a low voltage LDO regulator. It offers four overvoltage and undervoltage (OV/UV) monitors, I2C communications, a configurable general-purpose I/O pin, and a dedicated reset output/fault indicator. To meet stringent ASIL B metrics, the RAA271082 includes a second independent reference for OV/UV monitors, built-in self-test at power-up, independent OV/UV monitoring, and continuous CRC error checking on internal registers and I2C communications.

The highly integrated RAA271082 provides a universal power solution for automotive cameras. It is an ideal companion for [Renesas’ Automotive High-Definition Link (AHL)](https://www.renesas.com/eu/en/about/press-room/new-renesas-solution-automotive-cameras-enables-high-definition-video-using-low-cost-cables-and) technology that enables car manufacturers to deliver high-definition video using low-cost cables and connectors. The new PMIC simplifies power supply design for automotive camera applications requiring functional safety compliance, modules that include surround view/satellite, rearview, driver monitor, and e-mirror. The RAA271082 supports the power requirements of almost any combination of image sensor, image signal processor (ISP) and encoder technology, while also supporting direct-from-battery as well as power-over coax supply.

In addition to imaging systems, the RAA271082’s high integration and comprehensive safety features make it an excellent solution for 16- and 32-bit automotive MCUs in a variety of applications.

“Cameras are now an indispensable feature for all new vehicles,” **said Niall Lyne, Vice President of the Automotive Analog Power and Video Business Division at Renesas**. “Our new PMIC delivers all the functionality our customers need in a compact form factor suitable for almost all automotive camera modules. It is an excellent companion for our AHL solution, recently named as one of the most innovative applications of computer vision technology.”

**Key Features of the RAA271082 PMIC**

* Developed on an ISO-26262 compliant process, to support system safety goals reaching ASIL B
* High degree of programmability supports a wide assortment of automotive image sensors from all major vendors
* Provides 1A output current capability per switching regulator to support the growing power demands of the latest generation of high-resolution automotive image sensors.
* Supports general-purpose automotive MCUs with integrated reset generation, watchdog timer and programmable GPIO
* Integrates multiple components and functions to reduce overall power consumption

**Winning Combination with RAA271082 and AHL**

Renesas has developed a Winning Combination to assist customers in designing automotive camera systems using both the RAA271082 and AHL: [Full Digital Cluster with AHL](https://www.renesas.com/application/automotive/connected-infotainment/full-digital-cluster-solution-ahl#overview?utm_campaign=abu_pmic_raa271082&utm_source=press_release&utm_medium=press_release&utm_content=raa271082_wc). Renesas Winning Combinations are technically vetted system architectures that work together seamlessly to bring an optimized low-risk design for a faster time to market. Renesas offers more than 300 Winning Combinations with a wide range of products from its portfolio. They can be found at <https://www.renesas.com/win>.

**Availability**

The RAA271082 is available today, along with the RTKA271082DE0000BU Evaluation Board. More information is available at [www.renesas.com/RAA271082](https://www.renesas.com/products/automotive-products/automotive-power-management/automotive-power-management-ics-pmics/raa271082-automotive-asil-b-pmic-three-synchronous-buck-regulators-and-one-low-dropout-linear-regulator?utm_campaign=abu_pmic_raa271082&utm_source=press_release&utm_medium=press_release&utm_content=raa271082_pp).

**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 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/).

###

**Media contact for further information, text and graphics or to discuss feature article opportunities:**

Alexandra Janetzko / Martin Stummer

HBI Helga Bailey GmbH (PR agency), Stefan-George-Ring 2, 81929 Munich, Germany

Tel.: +49 89 99 38 87-32 / -34

Email: [alexandra\_janetzko@hbi.de](mailto:alexandra_janetzko@hbi.de) / [martin\_stummer@hbi.de](mailto:martin_stummer@hbi.de)

Web: [www.hbi.de](http://www.hbi.de/)