1. **News Release**

No.: REN0754(A)

**Renesas Synergy™ Strengthens Chip-to-Cloud IoT Connectivity**

**with New Enterprise Cloud Toolbox**

*Quickly Connects Users Applications to Enterprise Cloud Vendors, Enables Wireless Connectivity Evaluation from Multiple Vendors with Minimum Effort and No Licensing*

Düsseldorf, February 27, 2018 — Renesas Electronics Corporation (TSE: 6723), a premier supplier of advanced semiconductor solutions, today announced the new Renesas Synergy™ [Enterprise Cloud Toolbox v1.1](http://www.renesas.com/cloudtoolbox) -- a software Application Project that together with the Synergy AE-CLOUD1 kit provides a reference design and starting point for users to connect in 10 minutes or less to enterprise clouds such as Microsoft Azure™, Amazon Web Services*™*, and Google Cloud Platform*™*. The Enterprise Cloud Toolbox saves embedded developers weeks or even months to create a secure end-to-end Internet of Things (IoT) application for monitoring and controlling the surrounding environment in home, building, or industrial automation systems.

The Enterprise Cloud Toolbox software, unlike competitive cloud kits, can be cut and paste into real projects, enabling code reuse to accelerate product development. The software includes project files and C source code for the microcontroller (MCU) based on the Synergy Software Package (SSP) v1.3.3, and Java/JavaScript source code for the web dashboard. The MCU software executes on the companion AE-CLOUD1 kit, which contains a Synergy S5D9 fast prototyping board, Wi-Fi module, and a SEGGER J-Link® Lite debugger/programmer. To start an IoT application, developers simply download the Cloud Toolbox Application Project for use with either of Synergy development environments--e2studio or IAR Embedded Workbench®--to build and modify the embedded MCU and dashboard source code.

The Enterprise Cloud Toolbox allows developers to use the SSP’s integrated Message Queue Telemetry Transport for NetX Duo™ and NetX Secure™ Transport Layer Security to connect to their cloud vendor of choice. At no cost, developers can also make this connection using a Renesas-hosted cloud account. The Enterprise Cloud Toolbox makes it easy for users to visualize their sensor data on a password protected, private dashboard streaming live to the cloud from Synergy MCU-based hardware over Ethernet or Wi-Fi connection.

“The Renesas Synergy Platform has simplified the daunting task of creating an end-to-end IoT application by lowering the barriers to entry and reducing the total cost of ownership,” said Peter Carbone, Vice President, Synergy Platform Business Division, Renesas Electronics Corporation. “Our new Enterprise Cloud Toolbox and AE-CLOUD1 kit enables Synergy users to easily connect their applications to enterprise cloud vendors and evaluate wireless connectivity with no cumbersome licensing fees.”

Renesas is demonstrating the new Enterprise Cloud Toolbox v.1.1 and AE-CLOUD1 kit, along with other new Synergy solutions, at [embedded world 2018](https://www.embedded-world.de/en/ausstellerprodukte), February 27-March 1, 2018, Nuremburg, Germany, in the Renesas booth Hall 1, Stand 310.

**About the Synergy Platform**

The Synergy Platform is the first qualified, maintained and fully supported software/hardware platform that accelerates time to market, reduces total cost of ownership, and removes the obstacles engineers face designing IoT products. It is the only embedded platform qualified using a published software quality process based on international standards. By enabling development to begin at the application programming interface level, Renesas reduces the complexity with designing security-aware connected devices and HMI systems with graphical user interfaces (GUI) and capacitive touch.The Synergy Platform consists of fully integrated software, development tools and a wide range of scalable Arm® Cortex®-M-based Synergy MCUs fully accessible through the software APIs. There are no upfront licensing fees or back-end royalties – everything is included in the purchase price of the MCU.

**Pricing and Availability**

The Enterprise Cloud Toolbox v1.1 is available now (no charge) at [www.renesas.com/cloudtoolbox](http://www.renesas.com/cloudtoolbox). The AE-CLOUD1 Kit is available now from Renesas Electronics’ worldwide distributors with a recommended resale price of USD $149.00. For more information and to jumpstart development of your next IoT connectivity application, please visit: <http://renesassynergy.com/kits/ae-cloud1>. Download the latest version of the Synergy Platform from the Synergy Gallery at [www.renesassynergy.com](http://www.renesassynergy.com).

(Pricing and availability are subject to change without notice.)

**About Renesas Electronics Corporation**

Renesas Electronics Corporation ([TSE: 6723](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.jpx.co.jp_english_&d=DwMFAg&c=9wxE0DgWbPxd1HCzjwN8Eaww1--ViDajIU4RXCxgSXE&r=mWLUx0QVt25BWK-MZ29zLPLQHyv8UpUkXzcgXaA3aWQ&m=DYdTH9hu-7LaulV1SVM6YKpZz_t6AqnyxumFHk-LqFg&s=UlMPBZIH1yicvEPu6e6QHB45plYIXPqV-0XV5KGZZl0&e=)) delivers trusted embedded design innovation with complete semiconductor solutions that enable billions of connected, intelligent devices to enhance the way people work and live—securely and safely. A [global](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.renesas.com_en-2Dhq_about_company_profile_global.html&d=DwMFAg&c=9wxE0DgWbPxd1HCzjwN8Eaww1--ViDajIU4RXCxgSXE&r=mWLUx0QVt25BWK-MZ29zLPLQHyv8UpUkXzcgXaA3aWQ&m=DYdTH9hu-7LaulV1SVM6YKpZz_t6AqnyxumFHk-LqFg&s=QqlGBR6MYbo1eiGXo2ZMywSeWE80hPtBOrhrwz73p94&e=) leader in microcontrollers, analog, power and SoC products, Renesas provides the expertise, quality, and comprehensive solutions for a broad range of Automotive, Industrial, Home Electronics, Office Automation and Information Communication Technology applications to help shape a limitless future. Learn more at [renesas.com](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.renesas.com_&d=DwMFAg&c=9wxE0DgWbPxd1HCzjwN8Eaww1--ViDajIU4RXCxgSXE&r=mWLUx0QVt25BWK-MZ29zLPLQHyv8UpUkXzcgXaA3aWQ&m=DYdTH9hu-7LaulV1SVM6YKpZz_t6AqnyxumFHk-LqFg&s=K6LsuehJosLLwcPcYTcAHq30edFyKPiV7ZQDlE_PO1A&e=).

###

(Remarks) Renesas Synergy is a trademark of Renesas Electronics Corporation. Amazon Web Services is a trademark of Amazon.com, Inc. or its affiliates in the United States and/or other countries. Google Cloud Platform is a trademark of Google Inc. Microsoft Azure is a trademark of Microsoft Corporation. SEGGER J-Link® Lite is a trademark of SEGGER Microcontroller GmbH & Co. KG. IAR Embedded Workbench is a registered trademark of IAR Systems AB. NetX Secure and NetX Duo are trademarks of Express Logic, Inc. Arm and Cortex are registered trademark of Arm Limited (or its subsidiaries) in the EU and/or elsewhere. All registered trademarks or trademarks are the property of their respective owners.

**Company contact for reader and customer inquiries:**Simone Kremser-Czoer

Renesas Electronics Europe GmbH, Karl-Hammerschmidt-Str. 42, 85609 Aschheim-Dornach

Tel.: +49 89 38070-216
Email: simone.kremser-czoer@renesas.com
Web: [www.renesas.com](http://www.renesas.com)

**Agency contact for further media 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

Fax: +49 89 930 24 45

Email: alexandra\_janetzko@hbi.de / martin\_stummer@hbi.de

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