**News Release**

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# **Renesas’ ClockMatrix System Synchronizer Delivers Class D Compliance for O-RAN S-Plane Requirements**

*ClockMatrix Device Provides Synchronization and Software Solution for the AMD RFSoC DFE Development Platform and O-RU Reference Design*

**Düsseldorf, September 28, 2022 ―** Renesas Electronics Corporation (TSE:6723), a premier supplier of advanced semiconductor solutions, today announced that its 8A34001 System Synchronizer for IEEE 1588 is being used within the AMD Zynq® UltraScale+™ RFSoC DFE ZCU670 Evaluation Kit and reference design for 5G Next-Gen Radio (5G NR).

The [8A34001 System Synchronizer](https://www.renesas.com/products/clocks-timing/application-specific-clocks/network-synchronization/ieee-1588-and-synchronous-ethernet-clocks/8a34001-system-synchronizer-ieee-1588-eight-channels?utm_campaign=timing_8a34001_zcu670&utm_source=press_release&utm_medium=press_release&utm_content=8a34001_pp) for IEEE 1588 is part of Renesas’ ClockMatrix™ Family of high-performance, precision timing solutions designed to simplify clock designs for high-speed applications. The 8A34001 generates ultra-low jitter; precision timing signals based on the IEEE 1588 Precision Time Protocol (PTP) and Synchronous Ethernet (SyncE). It exceeds next-generation 5G radio requirements including synchronization and offers full ITU-T G.8273.2 T-BC/T-TSC class C and D compliance. Renesas offers open-source SYNCE4L and PCM4L, that is built on open source PTP4L, and device drivers already in a Linux kernel for the 8A34001; while competing solutions rely on proprietary software that are difficult for end-customers to integrate and customize on to their SW platforms.

The AMD ZCU670 is an evaluation and development platform based on Zynq UltraScale+ RFSoC DFE, the latest AMD silicon for 5G NR targeting both FR1 and FR2 (mmWave) O-RAN applications.

The 8A34001 performance has been verified on the ZCU670 evaluation platform and shown to exceed the 5G system requirements. The relevant compliance reports and test results are available from Renesas upon request. The solution will be made available as part of the AMD O-RAN reference design where it is used to implement the S-plane functionality in an O-RU reference design.

“We’re delighted that AMD chose our ClockMatrix Family as the timing platform for the Zynq RFSoC DFE Kit, the industry’s premier development platform for 5G applications,” said **Zaher Baidas, Vice President of the Timing Products Division at Renesas**. “It’s a testament to the performance of our devices as well the ease-of-use and design support that enables customers to reduce development time and effort.”

“Our close collaboration with Renesas provides the key functionality for our O-RU reference designs,” said **Brendan Farley, Corporate Vice President of Wireless Engineering at AMD**. “We believe working with Renesas as an ecosystem partner to deliver verified and supported solutions will greatly reduce our mutual wireless customers’ development efforts.”

**About Renesas Timing Solutions**

Renesas offers the broadest and deepest silicon timing portfolio in the industry. In addition to a wide line of buffers, oscillators and clock synthesizer products, the company delivers leading-edge system timing solutions to resolve timing challenges in wireless infrastructure, networking, data centers, and consumer applications. Proven expertise spanning more than twenty years in both analog and digital timing produces a portfolio that features the lowest phase noise and highest performance along with advanced timing technology. Renesas is the only “one-stop-shop” for timing solutions, offering expertise and products from full-featured system solutions to simple clock building-block devices. More information about Renesas’ timing solutions is available at [www.renesas.com/clocks](http://www.renesas.com/clocks).

**Availability**

The AMD Zynq UltraScale+ RFSoC DFE ZCU670 Evaluation Kit is available today for qualified customers. Visit [www.xilinx.com/products/boards-and-kits/zcu670.html](http://www.xilinx.com/products/boards-and-kits/zcu670.html) for more information. The entire ClockMatrix family of timing devices is available from Renesas and its authorized distributors. More information is available at [www.renesas.com/ClockMatrix](https://www.renesas.com/products/clocks-timing/clockmatrix-timing-solutions?utm_campaign=timing_8a34001_zcu670&utm_source=press_release&utm_medium=press_release&utm_content=clockmatrix_lp).

**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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