RENESAS
BIG IDEAS FOR EVERY SPACE

CREATING SECURE IoT CONNECTIONS

Learn more about IoT technologies for communicating with cloud service providers no matter which networking technology you use.

Engineer-to-Engineer Workshops

CLEVELAND | AUG. 23

WHERE

Trapped! Escape Room
6749 Eastland Rd.
Middleburg Heights, OH 44130
(216) 309-1796

WHEN

Thursday, Aug. 23
8:30am to 4:15pm
Lunch Provided

- ***Don't miss the "Trapped! Escape Room Adventure" right after lunch***

REGISTER NOW

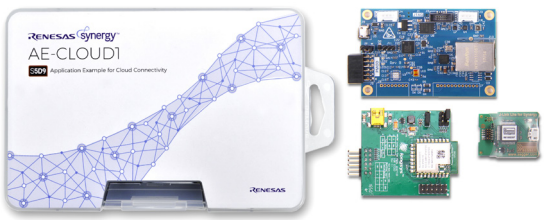
Seating is limited; register at:
https://info.renesas.com/workshops

Join our team as they demonstrate, step-by-step, how easily you can secure your projects connectivity with Renesas Synergy™.

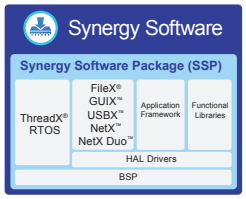
You will learn about IoT technologies for communicating with cloud service providers and how you can utilize Synergy Software Package (SSP) stacks with Ethernet and Wi-Fi to seamlessly switch from one networking technology to the other.
We will also show you how to add security to your project using the SSP NetX™ TLS stack and teach you how to generate and use certificates.

Attendees will receive:

Free Renesas AE-CLOUD1 Kit



Full access to the Synergy SSP



Join us and learn how to simplify IoT development

- Generate and use certificates with the SSP NetX TLS stack
- Design a project with the SSP NetX MQTT stack
- Learn how to subscribe/publish messages to communicate
- Complete an end-to-end IoT connectivity design

RENESAS synergy™

In partnership with: ARROW | Catalyst Sales — At The Heart Of Design Innovation

Renesas Engineer-to-Engineer Workshop Course Descriptions

8:30am - 9:00am		Registration / Demo Preview
9:00am - 10:00am	LEC	Architecture of the Renesas Synergy™ Platform – In this section, we will focus on the key enhancements and updates that have been made to the platform, both hardware and software, and show you why it is ideal for IoT solutions. These enhancements will be discussed in detail, and many of them will be used in the Labs.
10:00am - 11:30am	LAB	Synergy Enterprise Cloud Toolbox – Running on the AE-CLOUD1 kit, this lab displays the Synergy Enterprise Cloud Toolbox (SECT) connecting to Amazon AWS, Google Cloud, and Microsoft Azure IoT cloud service providers. SECT won the Special Mention Award in the Software/Service category at Embedded World 2018. It is a complete end-to-end IoT connectivity reference design and implementation example. It utilizes the Synergy Software Package (SSP) and NetX™ Secure and NetX MQTT stacks to communicate with IoT cloud providers. The lab showcases how to integrate on-board accelerometer, barometric pressure, and temperature and humidity sensors, and how the sensor data can be sent to the cloud over Ethernet or Wi-Fi network interfaces. You will also send commands from the cloud to the AE-CLOUD1 kit.
11:30am - 12:00pm		Lunch (Food Provided)
12:00pm - 1:00pm		Trapped! Escape Room Adventure (Prizes!)
1:00pm - 4:00pm	LAB	Deep Dive into Embedded IoT Technologies – In this lab, you will learn about IoT technologies developed to communicate with cloud service providers. You will utilize Synergy Software Package (SSP) stacks with Ethernet and Wi-Fi and see how seamlessly you can switch from one networking technology to the other. The lab includes setting up an MQTT broker on a PC for a standalone development and test environment. You will design a project using the SSP NetX MQTT stack and subscribe/publish messages to communicate with the AE-CLOUD1 kit. The messages will include accelerometer, barometric pressure, and temperature and humidity sensor data. You will also use your smartphone to subscribe/publish MQTT messages. Lastly, you will add security to the project using the SSP NetXTLS stack and learn how to generate and use certificates.
4:00pm - 4:15pm		Closing Remarks

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Accelerate. Innovate. Differentiate.

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