

# 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

IRVINE, CA | SEPT. 18

### WHERE

**Avnet**  
220 Commerce, #100  
Irvine, CA 92602  
(949) 789-4100

### WHEN

Tuesday, September 18  
9:00am to 4:15pm  
Lunch Provided

### REGISTER NOW

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

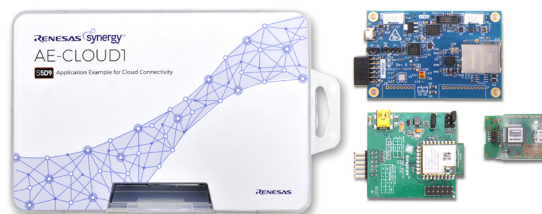
Join our team as they demonstrate, step-by-step, how easily you can secure your projects connectivity with Renesas Synergy™.

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

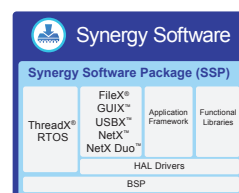


### Join us and learn how to simplify IoT development

- 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™**

### Full access to the Synergy SSP



In partnership with:

**AVNET®**  
Reach Further™

**Tech Coast Sales**

# Renesas Engineer-to-Engineer Workshop Course Descriptions

9:00am - 9:30am		Registration / Demo Preview
9:30am - 10:30am	LEC	<b>Architecture of the Renesas Synergy™ Platform</b> <ul style="list-style-type: none"> <li>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.</li> </ul>
10:30am - 12:00pm	LAB	<b>Introduction to Synergy Software Package (SSP)</b> <ul style="list-style-type: none"> <li>The purpose of this lab is to familiarize the user with the SSP (Synergy Software Package) and how it works with e² studio. The lab will begin by creating a base project with only the BSP (Board Support Package). The user will use the various features of the SSP and e² studio to configure the BSP and become familiar with the interface. A game that measures the user's response time will then be created using multiple frameworks and modules. The ability to swap out modules with the same interface will also be demonstrated.</li> </ul>
12:00pm - 1:00pm		Lunch (Food Provided)
1:00pm - 4:00pm	LAB	<b>Deep Dive into Embedded IoT Technologies</b> <ul style="list-style-type: none"> <li>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 NetX TLS stack and learn how to generate and use certificates.</li> </ul>
4:00pm - 4:15pm		Closing Remarks



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<b>RENESAS</b>	Renesas Electronics America Inc.   <a href="https://www.renesas.com">renesas.com</a> 1001 Murphy Ranch Road, Milpitas, CA 95035   Phone: 1-888-468-3774
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