

# Renesas Synergy™ Development Kit DK-S3A7

## Product Overview

The DK-S3A7 development kit is host to a Synergy S3 Series MCU from the S3A7 group, a super-efficient MCU because of its ARM® Cortex®-M4 CPU core with FPU running at moderate speed on an ultra-low power silicon process. The DK-S3A7 kit is engineered to allow you to harness and measure this efficiency while developing software for your end-product using the Synergy Platform. The kit is comprised of two circuit boards, the upper board hosting the MCU and close-coupled connectors for adding capacitive touch expansion boards, and the lower board for signal expansion and implementation special functions, and to provide connectivity such as USB-FS host and device, CAN with PHY, and more.

The lower expansion board can be replaced with your own custom board for rapidly prototyping your specific end-product. A custom segment LCD glass module board is also included for initial evaluation and software development – and the LCD glass can be replaced with your own glass for specific end-product development. Take advantage of the large on-chip 1 MB Flash memory in the MCU and the extended serial Flash memory on the board connected by QSPI for LCD menus and text.

Provisions for precise power consumption measurements are there in the kit to give visibility of current used over the profile of your program execution.

Expansion capability is designed into this kit with many connection points plus industry-standard Pmod™ connectors for attaching a variety of multi-function boards in the market, or for connecting custom boards.

The kit provides access, with no fee, to the e<sup>2</sup> studio Integrated Solution Development Environment (ISDE) for Synergy MCU device and software configuration plus extensive code development and debugging using the Renesas Synergy Software Package (SSP). Also included is a GCC C-compiler at no fee.



All Renesas Synergy development kits come with an industry standard high speed Segger J-Link OB debugger as well as an integrated Bluetooth<sup>®</sup> low energy (BLE) module.

\* In order to activate and register the software components, this product needs Internet access.

## Configuration

CPU board + Breakout board with I/O extensions

Multi region 5V power supply

Connection cables USB

Detachable segment LCD display

Plug-in industrial connector for RS232/485 and CAN. (green connector)

Quickstart guide with instructions how to download latest software and documentation

## PC System Requirements

To use the e<sup>2</sup> studio ISDE, ensure that your PC meets the following minimum requirements:

- Microsoft® Windows® 7 with Intel® Core™ family processor running at 2.0 GHz or higher (or equivalent processor)
- Memory: 8 GB minimum
- Minimum 250 GB hard disk minimum
- Connection to the Internet

## Ordering Information

Product Name	Part Number	Availability
Development Kit DK-S3A7	YSDKS3A7E20PWS2	Now