Renesas Synergy^{TM} Starter Kit SK-S7G2

Product Overview

The SK-S7G2 Starter Kit is an extremely low-cost way to access the entire Synergy Platform enabling full development using the vast majority of all Synergy Software Package (SSP) functions. High speed connectivity over Ethernet, USB-HS host and USB-FS device, CAN, plus wireless connectivity to mobile Internet devices via BLE 4.0 can be exercised and tailored to your needs. Color graphics, audio, and capacitive touch user interface features of SSP are operative with the ability to exercise the SSP's Application Framework to balance simultaneous connectivity and user interface activities all managed by the ThreadX® RTOS. Within minutes you can experience the capabilities of the Synergy Series S7 MCU from the S7G2 MCU group plus all the ingredients of the Synergy Platform. Expansion of the SK-S7G2 board is available via Arduino^{TM} and Pmod^{TM} connection points enabling you to add your own functionality to the baseline.

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

The S7G2 MCU has inherent features to support a Graphical User Interface (GUI), in particular it has a very large 4 MB on-chip flash memory in combination with 640 KB of on-chip SRAM, where the internal SRAM can host graphic frame buffers for the QVGA display panel. No external SRAM is needed for many graphic applications, and this SK-S7G2 kit demonstrates how to take advantage of the internal memory. This kit supports GUI development on the QVGA color display by providing access, with no fee, to the GUIX^{TM} Studio desktop design tool to create UI graphics and flow before compiling to the MCU target.

All Renesas Synergy starter kits come with an industry standard high speed Segger J-Link OB debugger as well as an integrated Bluetooth® low energy (BLE) module. The Bluetooth chipset used on the SK-S7G2 is based on the Renesas RL78/G1D.

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

CPU board

Connection cable USB

Fix installed 2.4" resistive touch QVGA color LCD display

Quickstart guide with instructions how to download latest software and documentation

PC System Requirements

To use the e^2 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
- USB 2.0
- Connection to the Internet

Ordering Information

Product Name	Part Number	Availability
Starter Kit SK-S7G2	YSSKS7G2E20PWS2	Now