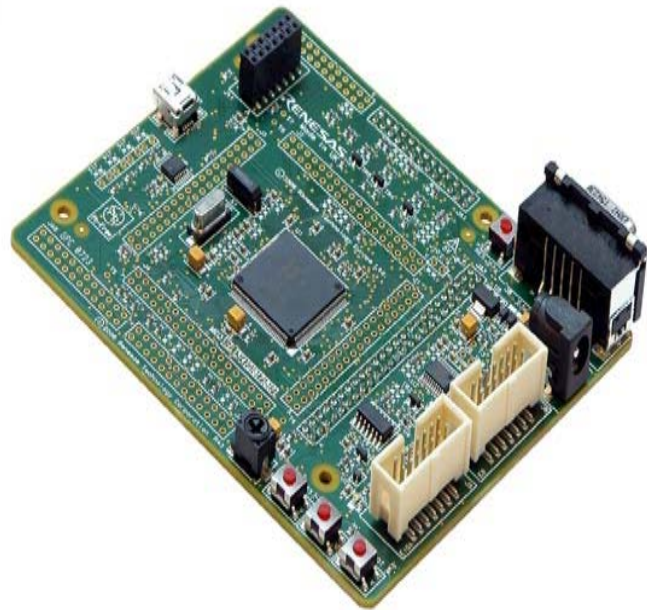# Renesas - R0K561664S001BE Starter Kit

Product Overview:

The Renesas Starter Kit for H8SX/1664F is intended as a user-friendly introductory and evaluation tool for the H8SX/1664 microcontroller. The board also provides a useful platform for evaluating the Renesas suite of development tools for coding and debugging, using High-performance Embedded Workshop as well as programming the device using E10A emulator.

The Renesas Starter Kit for H8SX/1664F may be connected to the host PC using a simple RS232 serial connection or via the included USB E10A on chip debugging interface.

The purpose of the board is to enable the user to evaluate the capabilities of the device and its peripherals by giving the user a simple platform on which code can be run only minutes from opening box. It can also prove an invaluable tool in development by providing a useful test platform for code already debugged using one of our more powerful emulation tools.

Kit Contents:

- CPU Board (with through-holes for common expansion board interface)

- Detachable LCD Display Module

- Detachable AD Adjustment Shaft

- Renesas E-Series Emulator

- Connection Cable (USB Cable, User Interface Cable)

- Quick Start Guide

- CD-ROM

    - Documents

- IDE: High-performance Embedded Workshop

- C Compiler: It differs according to each Renesas Starter Kit. For more details, see each product page.

- Debugger: Renesas E-Series Emulator Debugger

- Flash Memory Programmer: Flash Development Toolkit Evaluation

- Multi region power supply (only E10A product)

- Voltage Conversion Board for QzROM microcontrollers (only 740 Family product)

Key Features:

- CPU

    - 32-bit bus

    - Maximum operating frequency: 50 MHz

    - 32-bit internal multiplier/ divider

- Bus controller (BSC)

    - SDRAM I/F

- DMA controller (DMAC) : 4 ch

- Data transfer controller (DTC)

- I/O ports: 92 input/output ports, 9 input ports

- 16-bit timer pulse unit (TPU) : 6 ch

- Programmable pulse generator (PPG)

- 8-bit timers (TMR) : 8 ch

- Watchdog timer (WDT)

- A/D, D/A converters

- Built-in USB2.0 (Full speed)

    - Control, bulk, and interrupt modes supported

- 32 kHz sub clock

- Serial communication interface(SCI) : 6 ch

    - Asynchronous/ clocked synchronous: 4 ch (SCI_0, 1, 2, and 4), asynchronous: 2 ch (SCI_5 and 6)

- Smart card I/F : 6 ch

- Hi-speed SCI (720kbps) : 2 ch

- I^2C bus: 2 ch

- Package

    - LQFP-144V (FP-144LV)

- Development environment

    - Full ICE (E6000H)

    - On-chip emulator (E10A-USB)

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
R0K561664S001BE	Renesas	1677741	40P3221

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
R0K0APPBDB020BE	Renesas	Renesas Starter Kit Ethernet & USB Application Board	NA	NA
R0K0APPBDB010BE	Renesas	Renesas Starter Kit LCD Application Board	NA	NA

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
R0K572011S001BE	Renesas	Starter Kit for SH7201	R5S72011B120FP	1677745	40P3224
R0K33062PS001BE	Renesas	Starter Kit for RSKM16C62P	M16C/62P	1677729	40P3210
R0K436079S000BE	Renesas	Starter Kit for H8/36079	HD64F36079 GFZ	1677732	40P3212

R0K330879S001BE	Renesas	Starter Kit for M32C/87	M30879FLGP	1677730	40P3211

Document List:

Datasheets:

Part Number	Description	Size
R0K561664S001BE	Renesas Starter Kit H8SX/1664	518KB
R5F61664W50FPV	H8SX/1663 Group Hardware Manual	7567 KB

Application Notes:

File Name	Size
H8SX1664 Renesas Starter Kit Sample Code	47 KB
H8SX1664 Renesas Starter Kit Sample Code	48 KB
H8SX1664 Renesas Starter Kit Sample Code	48 KB
H8SX1664 Renesas Starter Kit Sample Code	47 KB

Hardware & Software:

File Name	Size
[E10A version] Renesas Starter Kit for H8SX/1664 CPU Board Schematics	120 KB
[E10A version] Renesas Starter Kit for H8SX/1664 USB Sample Code User's Manual	387 KB

Others Resources:

File Name	Size
[E10A version] Renesas Starter Kit for H8SX/1664 Quick Start Guide	144 KB