RENESAS

Renesas - R0K438099S000BE – Evaluation Kit

Product Overview:

The Renesas Starter Kit for H8/36079 is intended as a user-friendly introductory and evaluation tool for the H8/36079 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 E8a emulator and/or Flash Development Toolkit.

The Renesas Starter Kit for H8/36079 may be connected to the host PC using a simple RS232 serial connection or via the included USB E8a 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 Content:

- CPU Board

- Detachable LCD Display Module

- Detachable AD Adjustment Shaft

- E8a Emulator

- Connection Cable (USB Cable, User Interface Cable)

- Quick Start Guide

- CD-ROM

    - Documents: User Manual, Tutorial and more

    - IDE: High-performance Embedded Workshop

- C/C++ Compiler: C/C++ Compiler Package for H8SX, H8S, H8 Families Evaluation Version

- Debugger: E8a Emulator Debugger

- Flash Programmer: Flash Development Toolkit Evaluation Version

Key Features:

- High-speed H8/300H central processing unit with the internal 16-bit architecture

  - Upward-compatible with H8/300 CPU on the object level
  - Sixteen 16-bit general registers
  - 62 basic instructions

- Peripheral functions

  - RTC (can be used as a free running counter)
  - Timer B1 (8-bit timer)
  - Timer V (8-bit timer)
  - Timer Z (16-bit timer)
  - 14-bit PWM
  - Watchdog timer
  - SCI (asynchronous or clocked synchronous serial communication interface) × 2 channels
  - I2C bus Interface (conforms to the I2C bus interface format advocated by Philips Electronics)
  - 10-bit A/D converter
  - POR/LVD (Power-on reset and low-voltage detection circuits) (optional)
  - On-chip oscillator

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
R0K436079S000BE	Renesas	1677732	40P3212

Associated Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
RAPC712X	Switchcraft	DC Power Jack	JACK SOCKET, DC	1608726	65K7785

| 3386F-1-103TLF | Bourns | TRIMMER, 10K | Potentiometer | 9354565 | 62J2093 |
| 3-338168-2 | Tyco Electronics / AMP | PLUG, D, 40-40UNC, 9WAY | Connector | 3417128 | 60H6369 |

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
R0K561648S000BE	Renesas	Starter Kit for H8SX/1648F	R5F61648N50FPV	1677740	40P3220
R0K561664S001BE	Renesas	Starter Kit for H8SX/1664F	R5F61664N50FPV	1677741	40P3221
R0K571242S001BE	Renesas	Starter Kit for SH7124	R5F71242D50FP	1677744	40P3223
R0K572011S001BE	Renesas	KIT, STARTER, SH7201	R5S72011B120FP	1677745	40P3224
R0K570865S001BE	Renesas	Starter Kit for SH7086	R5F70865AD80FPV	1677742	40P3222
R0K572115S001BE	Renesas	Starter Kit for SH7211	R5F72115D160FPV	1677747	40P3226
C8051F060DK	Silicon Laboratories	DEVELOPMENT KIT, 16-BIT, 100TQFP	C8051F060, C8051F061, C8051F062 and more	1291469	24M1204
DM240311	Microchip	BOARD, DEV, 16BIT, NANOWATT XLP		1761254	34R3422
DM300027	Microchip	DEVELOPMENT BOARD KIT, 16-BIT, 28-PIN	PIC24	1367272	39M8082
APS12DT256SLK	Freescale Semiconductor	16-BIT HCS12DT256 STUDENT LEARNING KIT	HCS12DT256	1718220	27M3586
EVB9S12XEP100	Freescale Semiconductor	Evaluation Board for the 16-bit MC9S12XE and XS-Families	MC9S12XEP100	1437330	01M5533
LFEBS12UBLAB.	Freescale Semiconductor	16-bit HCS12 DG128 Learning Kit	MC9S12DG128	1535874	01M5577

Document List:

Datasheets:

Part Number	Description	Size
HD64F36079GFZ	H8/36079 Group H8/36077 Group Hardware Manual	6256KB
REG99J0019-0100	Renesas Starter Kit for H8/36079 CPU Board Schematics	87KB
REG10J0078-0100	Renesas Starter Kit for H8/36079 Quick Start Guide	235KB
REG10J0077-0100	Renesas Starter Kit for H8/36079 Tutorial Manual	248KB

Application Notes:

File Name	Size
Self Test Sample Code for Renesas Microcontrollers	339
H8/300H Series On-Chip Supporting Modules Application Note	2026
Stepper Motor Using 1-2 Phase Excitation	759
Stepper Motor Using Two-Phase Excitation	773
Brush-Type DC Motor	590
Monitoring Software	3224
Transmission/Reception with Terminal Software (H8/3664)	1826
Transmission/Reception with Terminal Software (H8/3687)	1823
Control of a Brushless DC Motor (H8/3664)	131
Control of a Brushless DC Motor (H8/3687)	143
1-2 Phase Excitation Control for a Stepping Motor	141
Two-Phase Excitation Control for a Stepping Motor	153
Using Timer V Output to Drive a Buzzer	67

Hardware & Software:

File Name	Size
Single Power Supply F-ZTAT On-Board Programming Application Note	1398
M3S-T2-Tiny: Ultracompact TCP/IP Protocol Stack Software	342
Compiler Package Application Note Call Walker	335
H8S H8/300 Series C/C++ Compiler Package Application Note	5449
HI Series RTOS Application Note	3079
M3S-TFS-Tiny: Original File System Software for Microcontrollers	428
H8/300H Tiny Series E8 Emulator Application Note Programming of On-Chip Flash	1806

Memory	
H8/300H Tiny Compact Emulator Operating Back Trace ([Trace] Window)	1141
H8/300H Tiny Compact Emulator Using GUI I/O Functions	987
E8 Emulator Application Notes Introductory Guide for H8/300H Tiny	1525
Flash Development Toolkit Application Note (Introduction)	2746
H836079 Renesas Starter Kit Sample Code	47