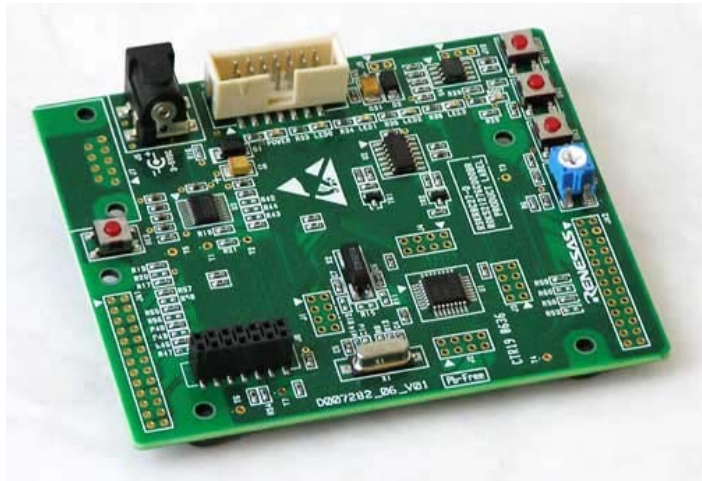**RENESAS**

Renesas - R0K521256S001BE Starter Kit

Product Overview:

The Renesas Starter Kit for R8C/25 is intended as a user-friendly introductory and evaluation tool for the R8C/25 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 R8C/25 may be connected to the host PC using a simple RS232 serial connection (not normally fitted) 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 Compiler : M3T-NC30WA Evaluation Version

- Debugger : E8a Emulator Debugger

- Flash Memory Programmer : Flash Development Toolkit Evaluation Version

Key Features:

- 8-bit Multifunction Timer with 8-bit prescaler (Timer RA and RB): 2 channels
- Input Capture/Output Compare Timer (Timer RC): 16-bit x 1 channel
- Real-Time Clock Timer with compare match function (Timer RE): 1 channel
- UART/Clock Synchronous Serial Interface: 2 channels
- I^2C-bus Interface (IIC)/Chip-select Clock Synchronous Serial Interface: 1 channel
- LIN Module: 1 channel (Timer RA, UART0)
- 10-bit A/D Converter: 12 channels
- Watchdog Timer
- Clock Generation Circuits: XIN Clock Generation Circuit, On-chip Oscillator (High/Low Speed), XCIN Clock Generation Circuit
- Oscillation Stop Detection Function
- Voltage Detection Circuit
- Power-On Reset Circuit
- I/O Ports: 25 (incl. LED drive ports)
- External Interrupt Pins: 7
- Data Flash: 2KB

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
R0K521256S001BE	Renesas	1677736	40P3217

Associated Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
1241.1602	Schurter	SWITCH, PCB, PUSH, IP40	Reset switch	1217754	23B7170
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
R0K5211B4S001BE	Renesas	Starter Kit for R8C/1B	R5F211B4SP	1677734	40P3214
R0K521276S001BE	Renesas	Starter Kit for R8C/27	R5F21276SNFP	1677737	40P3218
R0K5212D8S001BE	Renesas	Starter Kit for R8C/2D	R5F212D8SNFP	1677738	40P3215
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
R5F21256SNFP	R8C/24, R8C/25 Group Datasheet	529KB
R5F21256SNFP	R8C/24, R8C/25 Group Hardware Manual	5393KB

Application Notes:

File Name	Size
Rewriting the Data Flash (EW1 Mode, Suspend Operation)	245KB
Using Memory Beyond the 64K Boundary	592KB
Utility To Convert S-Record Data To A C-Structure	259KB
Perl Script to Convert S-Record Data to a C Structure	632KB
Flash-o-CAN sample code for R8C, M16C, R32C, SH-RCAN-ET with F-o-CAN application note.	545KB
Concept of the Power Control	491KB
Data Flash Table	250KB
Program ROM Rewrite Using EW0 Mode	591KB
Low Power Consumption Mode Using Low Speed Periodic Wakeup	114KB
Serial EEPROM of HN58X25xxx Series Control Using Clock Synchronous Serial I/O (UART) of M16C	208KB
Power Control	143KB

Hardware & Software:

File Name	Size
R8C25 Renesas Starter Kit Sample Code	47KB
M3T-NC30WA V.5.45 Assembler User's Manual (C Compiler Package for M16C Series and R8C Family)	799KB
MISRA C Rule Checker SQMlint	248KB
Simulator Debugger for M16C Series and R8C Family	NA
E8a	NA
R0E521276CPE00 (compact emulator)	NA
R0E521276EPB00 (In Circuit programmer)	NA