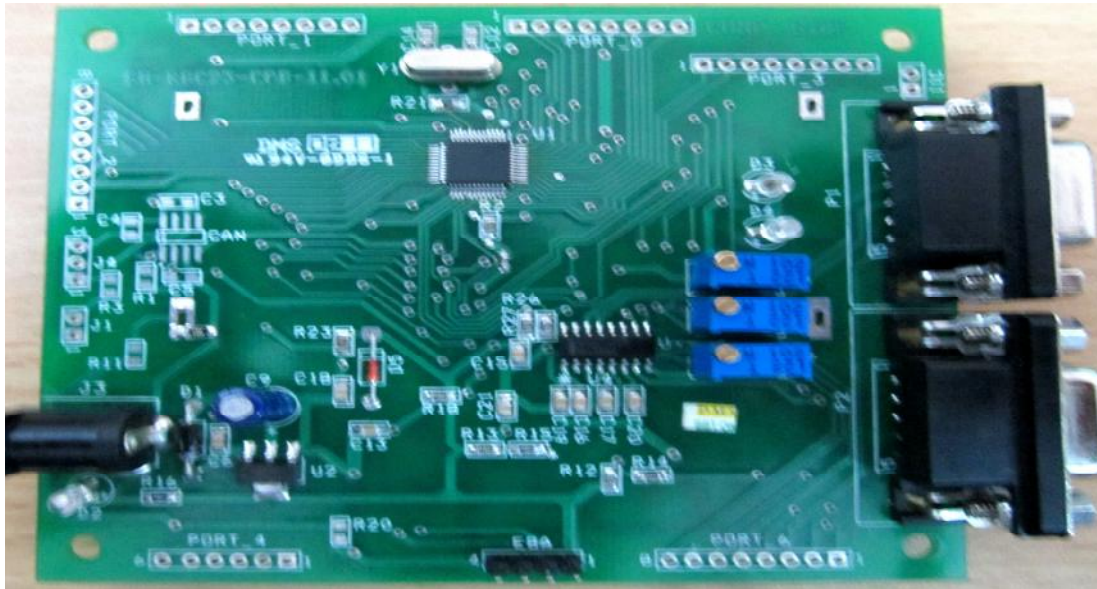
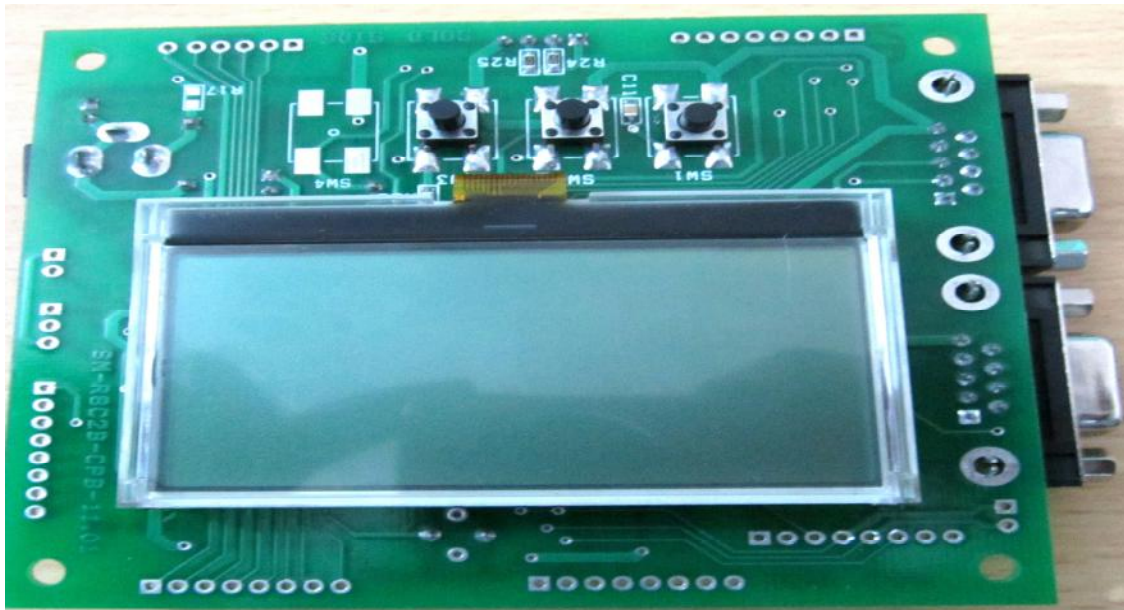


# SM R8C23 General Purpose Board Quick Start (V1.0) TOP VIEW



BOTTOM VIEW



## REVISION HISTORY

Name	Date	Reason for changes	Version
SM R8C23 GPB	17/8/2011	First version released	1.0

### Introduction

The Evaluation board for R8C23 is intended as a user friendly introductory for the R8C23 microcontroller. The board provides useful platform for evaluating tools for coding and debugging, using the High-Performance Embedded workshop as well as programming the device using E8a emulator.

The purpose of the board is to enable the user to evaluate the capabilities of the device and its peripherals for this all the I/O pins are pulled out.

### Features supported on R8C23 General Purpose Board

❖ MCU part number R5F21236KFP

- Program ROM :32K bytes
- RAM Capacity: 2K bytes
- Package type: PLQP0048KB-A
- Number of Pins: 48

### ❖ Power Supply Section

- Input Voltage: Upto 9V
- Output Voltage:3.3V
- Voltage Regulator:AP1117

### ❖ Peripherals Details

- Serial port: Two Serial ports are used UART0 and UART1.
- IIC Serial port: SCL & SDA pins are pulled out (J11).
- Key Input Interrupt: Three Key Input Interrupt is used i.e. KI0, KI1 & KI2.
- Clock: External Crystal oscillator 20MHz.
- A/D converter: Three A/D converter is used i.e.AN5, AN6 & AN7.
- CAN Module : R2A25416
- Input port : 13
- Output port: 5
- Input/Output: 30

### ❖ Tianma Graphic Display

- The TM12864G3CCWGWA of 128x64dot-matrix LCD, and a single-chip S7567 which incorporates LCD controller and common/segment driver. This module can be connected directly to microprocessor with serial data interface.

Built in a RAM with 65x132 bit capacity for storing the display data, so the unit can efficiently display the desired content under microprocessor control. Operating at a voltage of VDD=3.0V and Backlight drive current I=60mA.