

SM R8C2C General Purpose Board Quick Start (V1.0)



Name	Date	Reason for changes	Version
SM R8C2C GPB	30/8/2011	First version released	1.0

REVISION HISTORY

Introduction

The Evaluation board for R8C2C is intended as a user friendly introductory for the R8C2C 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 R8C2C General Purpose Board

❖ MCU part number

- Program ROM : 128K bytes
- RAM Capacity:7.5K bytes
- Package type: PLQP0080KB-A
- Number of Pins: 80

❖ Power Supply Section

- Input Voltage: Upto 12V
- Output Voltage: 3.3V
- Voltage Regulator: AP1501

❖ Peripherals Details

- SPI Serial port: Two Serial ports used is UART0 and UART1.
- Clock: External crystal oscillator of 20 MHz.
- Sub Clock: External crystal oscillator of 32.768 KHz.
- Key interrupts: Two Key Input Interrupts used i.e. K10 & K11.
- Input port: 14, Output port: 8, Input/output: 11

❖ Tianma Graphic Display

- The TM12864H6CCOWA 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 8 bit Parallel 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 $V_{DD}=3.0V$ and Backlight drive current $I=15mA$ & $V=3.2V$.