Renesas RX63N –Embedded Systems

Book Errata - 2014-09-18

Page 15, top line should read:
Check State of Switch1 (Port 4 bit 0) and Turn off LED1 (Port D bit 0)

Page 23, whole page – there are several changes to the page:

1st) First, to match the figure, the first complete sentence on the page should be:
If the columns in Figure 2.9 are connected to Port 1 bits 0, 1, and 2 respectively, and the rows are connected to Port 3 bits 3, 4, and 5 respectively; code to read the keypad values of the right-most column would be:

2nd) For the design in figure 2.9, a pull down resistor must be added to each of Port 3's bits 3, 4, and 5.

3rd) The code on the page should be changed to:

```
// Set the output of the columns to 001
PORT1.PODR.BIT.B2 = 0;  PORT1.PODR.BIT.B1 = 0;  PORT1.PODR.BIT.B0 = 1;

if(PORT3.PIDR.BIT.B3 == 1){
   //Conditional code for Row 0
}

if(PORT3.PIDR.BIT.B4 == 1){
   //Conditional code for Row 1
}

if(PORT3.PIDR.BIT.B5 == 1){
   //Conditional code for Row 2
}
```

4th) An alternative design which does not require pull-down resistors for the circuit in Figure 3.9 is to set pull-up resistors for the ports (PCR registers). This would change the code to the following:

```
 //Set the internal pull-up resistors for port 3, bits 3, 4, 5
 PORT3.PCR.BIT.B3 = 1;  PORT3.PCR.BIT.B4 = 1;  PORT3.PCR.BIT.B5 = 1;

// Set the output of the columns to 001
PORT1.PODR.BIT.B2 = 1;  PORT1.PODR.BIT.B1 = 1;  PORT1.PODR.BIT.B0 = 0;

if(PORT3.PIDR.BIT.B3 == 0){
   //Conditional code for Row 0
}

if(PORT3.PIDR.BIT.B4 == 0){
   //Conditional code for Row 1
}

if(PORT3.PIDR.BIT.B5 == 0){
   //Conditional code for Row 2
}
```

Page 65, top (Example 3, #1) should read:

1. Can you, the user, store a variable value at memory location 0008 C067h? Why or why not?
   No, because address 0008 C067h corresponds to the memory address area that is used for peripheral registers. RAM, which is the proper location for variable values, is found between the memory addresses from 0000 0000h and 0001 7FFFh.

Page 83, problem 17 should read:

17. Assume a microcontroller's memory space is 256K bytes (remember K=1024). 4K is allocated at the top (starting at address 0) for the special function registers, followed by 8K of RAM, followed by 4K of EEPROM; 64K of flash is located all the way at the end of the memory space. Show the memory map of this microcontroller, including the beginning and ending address of each space. Include unused spaces, too.

Page 136, question 5 should read: Where in HEW are debugger options saved and why?

Page 165, Figure 5.10. "Evalute" should be "Evaluate".