

The STSW-SRTC001 I²C demo code for serial RTC

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MCS51 COMPILER V5.50, I2C                                #07/22/93
DOS C51 COMPILER V5.50, COMPILATION OF PROJECT I2C
OBJECT MODEL PLACED IN I2C.OBJ
COMPILER INVOKED BY: C:\C51\BIN\I2C.I2C SR OR OF
start level source
1  /*****
2  /** Title: I2C code
3  /**
4  /** This example demo code is provided as is and has no warranty, implied
5  /** or otherwise. You are free to use/modify any of the provided code at
6  /** your own risk in your applications.
7  /**
8  /** LIMITATION OF LIABILITY: NEITHER STMicroelectronics NOR ITS VENDORS
9  /** OR AGENTS SHALL BE LIABLE FOR ANY LOSS OF PROFITS, LOSS OF USE, LOSS
10 /** OF DATA, INTERRUPTION OF BUSINESS, NOR FOR INDIRECT, SPECIAL,
11 /** INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHETHER UNDER THIS
12 /** AGREEMENT OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH
13 /** DAMAGES.
14 /**
15 /** Application Test Program for:
16 /**
17 /**
18 /** M41T00/T00/T11/T56 (I2C - 8 Bytes RTC Reg. Map)
19 /**
20 /** M41T80/T81 (I2C - 20 Bytes RTC Reg. Map)
21 /**
22 /** M41ST85W (I2C - 20 Bytes RTC Reg. Map)
23 /**
24 /** M41ST87W (I2C - 144 Bytes RTC Reg. Map)
25 /**
26 /** Rev. Description Date:
27 /**
28 /** 01 - Initial Rev. 03-01-03
29 /**
30 /**
31 /**
32 /**
33 #include <C:\ST51\INC\I2C.H> /* DEFINING RTC REGISTERS */

```

Features

- I²C demo sourcing code for the following serial IF RTC devices:
 - M41T0/T00/T11/T56 (I²C - 8 bytes RTC Reg. map)
 - M41T80/T81 (I²C - 20 bytes RTC Reg. map)
 - M41ST85W (I²C - 20 bytes RTC Reg. map)
 - M41ST87W (I²C - 144 bytes RTC Reg. map)

Description

The **STSW-SRTC001** is a demo software package that can be used, for example, to drive the real-time clock devices by the 8051 microcontroller using the I²C serial interface.

The software shows how to access and config the I²C serial interface, how to access the timekeeper registers and also how to write and read into the internal RAM registers.

Product status link

[STSW-SRTC001](#)

Related products

M41T0, M41T00

M41T11, M41T56

M41T80, M41T81

M41ST85W, M41ST87W

Revision history

Table 1. Document revision history

| Date | Version | Changes |
|-------------|---------|---------------------|
| 26-Apr-2023 | 1 | Initial release. |
| 15-Nov-2023 | 2 | Minor text changes. |

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