

RV-8263-C8 is a Real-Time Clock Module with low power consumption of 190nA @ 3V Wide operating voltage range: 0.9 V to 5.5 V

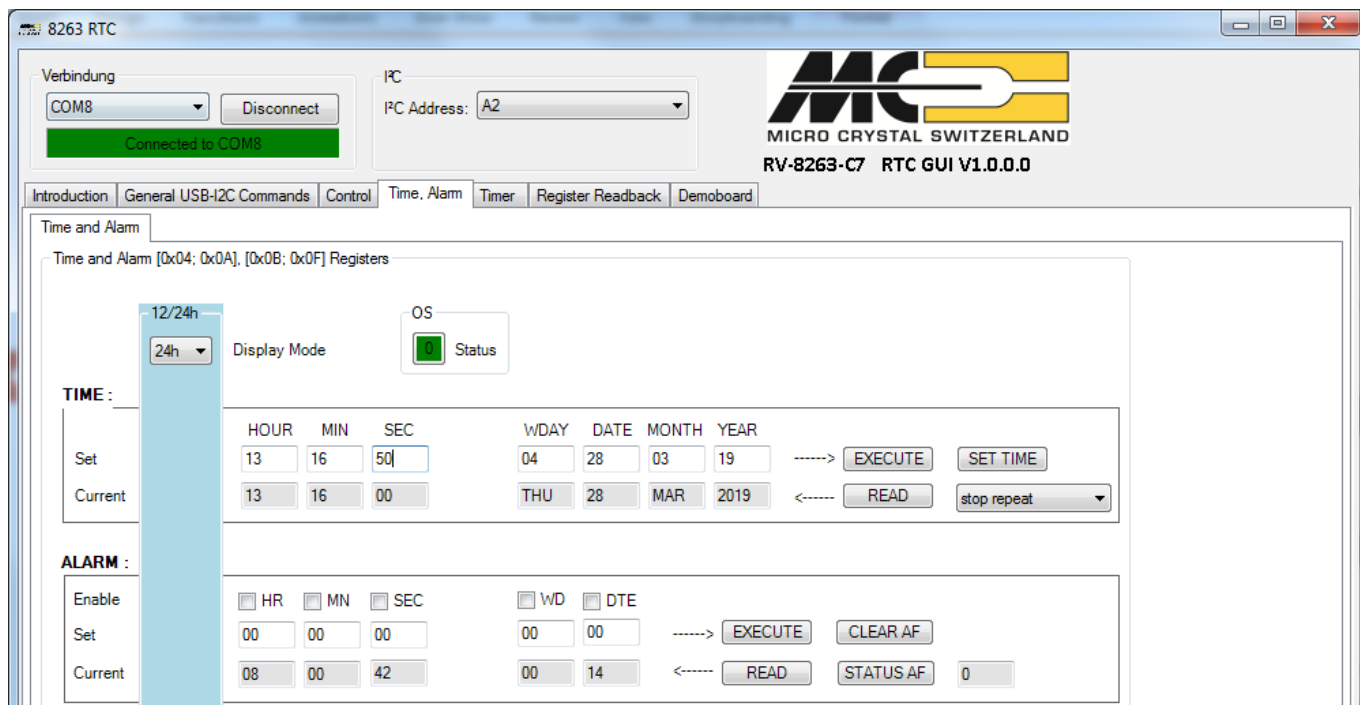
Provides time and date from seconds to years
Timer and Alarm functions
I²C-bus interface: 400 kHz

The RV-8263-C8 is a SMT Real-Time Clock Module that incorporates an integrated CMOS circuit together with an XTAL with small form factor 2.0 x 1.2 x 0.7 mm

Description:

The evaluation kit simplifies the system design. The RTC functions can be directly evaluated and tested. The kit has 3 parts:

- Dongle to establish the Interface between the USB-port of the PC and the I²C-Bus
- The development board RV-8263-C8. All components, including the tiny RTC package and a row of pins are preassembled
- The Graphical User Interface (GUI) is ready for download.



Graphical User Interface:

Software

The software control via the GUI allows a fast start to communicate with the Real-Time Clock via I²C-Bus. Every register is directly decoded and visualized. All the functions, e.g., setting / reading the actual time can be interactively accessed.

Aside from the detailed GUI pages for the Real-Time Clocks, a General USB-I²C Commands page allows communication with any I²C-bus RTC by directly entering the hex codes.

Verbindung
COM8
Disconnect
Connected to COM8

PC
PC Address: A2

Introduction

General USB-I2C Commands

Control

Time, Alarm

Timer

Register Readback

Demoboard

Time and Alarm

Time and Alarm [0x04, 0x0A], [0x0B, 0x0F] Registers

12/24h
24h
Display Mode
OS
Status

TIME :

Set
HOUR MIN SEC
12 34 00
WD: 04
THU

Current
12 34 00



ALARM :

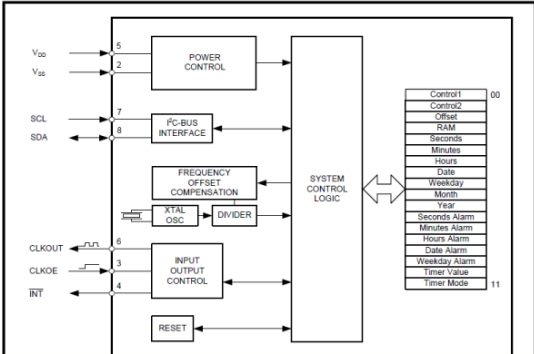
Enable
Set
Current

HR MIN SEC
00 00 00
08 00 42

RV-8263 Block Diagram

RTC Function evaluation and
Firmware programming made
easy through visualization in
the Graphical User Interface





Received Data

A s A2 00 s A3 01 p

B

C

D

String

Reset the dongle

Reset dongle (Y-Parameters)

Reset USB-PC

Status, Firmware, Y-Parameter

RV-8263-C7 RTC GUI V1.0.0.0

Timer

Timer [0x10, 0x11] Registers

Timer value (Address 0x10):

Total Steps 24
msb 0 0 0 1 1 0 0 0
lsb 0 0 0 1 1 0 0 0
Steps remaining 24

Timer Duration 24
Time remaining 24 seconds

SET BYTES
GET STATUS

Timer mode (Address 0x11):

TD 1 Hz
TE disabled
TIE no interrupt
TL_TP Interval Mode
0
STATUS TF
CLEAR TF

Received Data
18 18 10 00 18 10

Transmitted Data
s A2 11 18 p
s A2 01 s A3 01 p
s A2 11 s A3 01 p
s A2 11 10 p



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