



The RV-4162-C7 is an ultra miniature Real-Time-Clock Module with embedded Crystal.

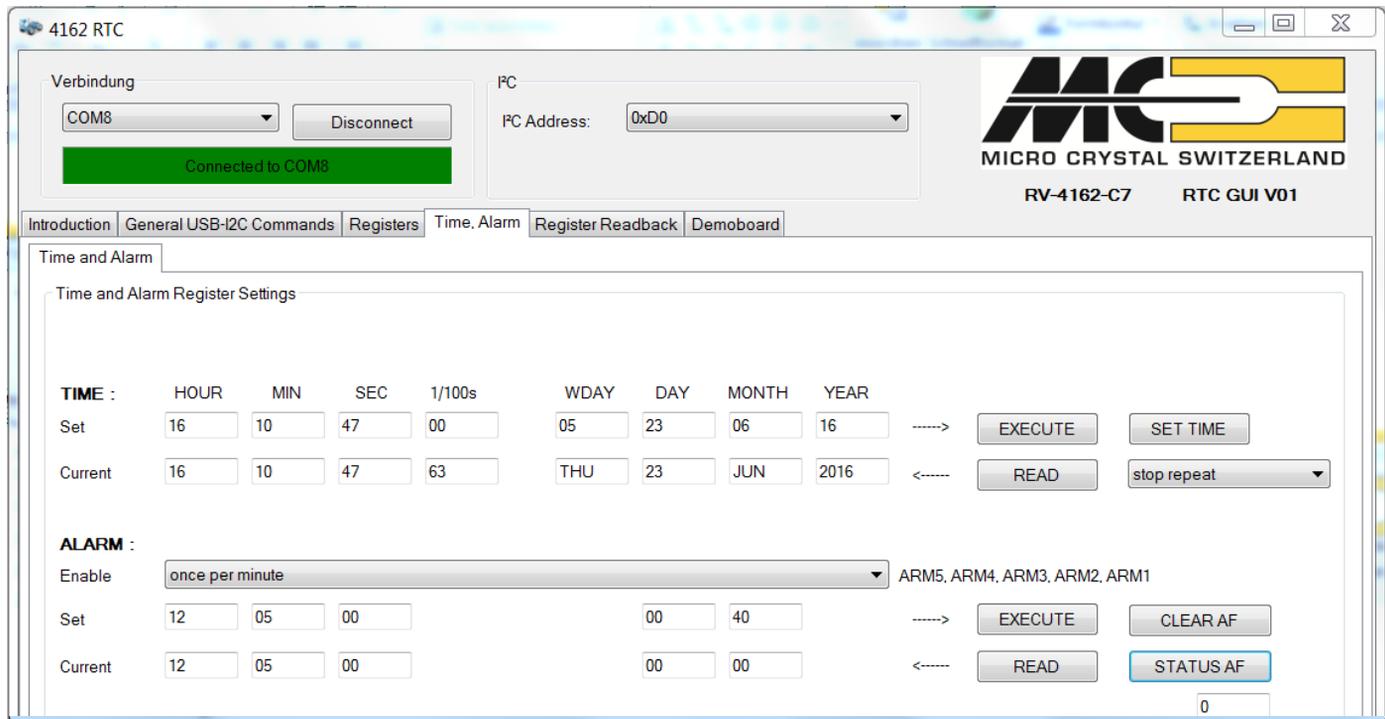
The key features include:

- Time, Date, Alarm, Timer
- $\frac{1}{100}$ s resolution
- Software clock calibration, can adjust timekeeping within +/-2 ppm
- 350 nA timekeeping current at 3.0 V
- Timekeeping down to 1.0 V
- 1.3 V to 4.4 V I²C bus operating voltage
- Low operating current of 35 μ A ($f_{SCL} = 400$ kHz)
- Ultra compact package size 3.2 x 1.5 x 0.8 mm

Description:

The evaluation kit simplifies the system design. The RTC functions can be directly evaluated and tested. The kit consists of 4 parts:

- Dongle to establish the Interface between the USB-port of the PC and the I²C-bus
- The translation board to convert the 5 V domain of the dongle to a 3.3V domain for the RTC
- The development board RV-4162-C7. All components including the small RTC package and a row of pins are assembled
- The Graphical User Interface (GUI) is ready for download



4162 RTC

Verbindung: COM8

PC: PC Address: 0xD0

Introduction | General USB-I2C Commands | Registers | Time, Alarm | Register Readback | Demoboard

Time and Alarm

Time and Alarm Register Settings

TIME :	HOUR	MIN	SEC	1/100s	WDAY	DAY	MONTH	YEAR		
Set	16	10	47	00	05	23	06	16	----->	<input type="button" value="EXECUTE"/> <input type="button" value="SET TIME"/>
Current	16	10	47	63	THU	23	JUN	2016	<-----	<input type="button" value="READ"/> <input type="button" value="stop repeat"/>

ALARM :

Enable: once per minute

Set	12	05	00	00	40	----->	<input type="button" value="EXECUTE"/> <input type="button" value="CLEAR AF"/>
Current	12	05	00	00	00	<-----	<input type="button" value="READ"/> <input type="button" value="STATUS AF"/>

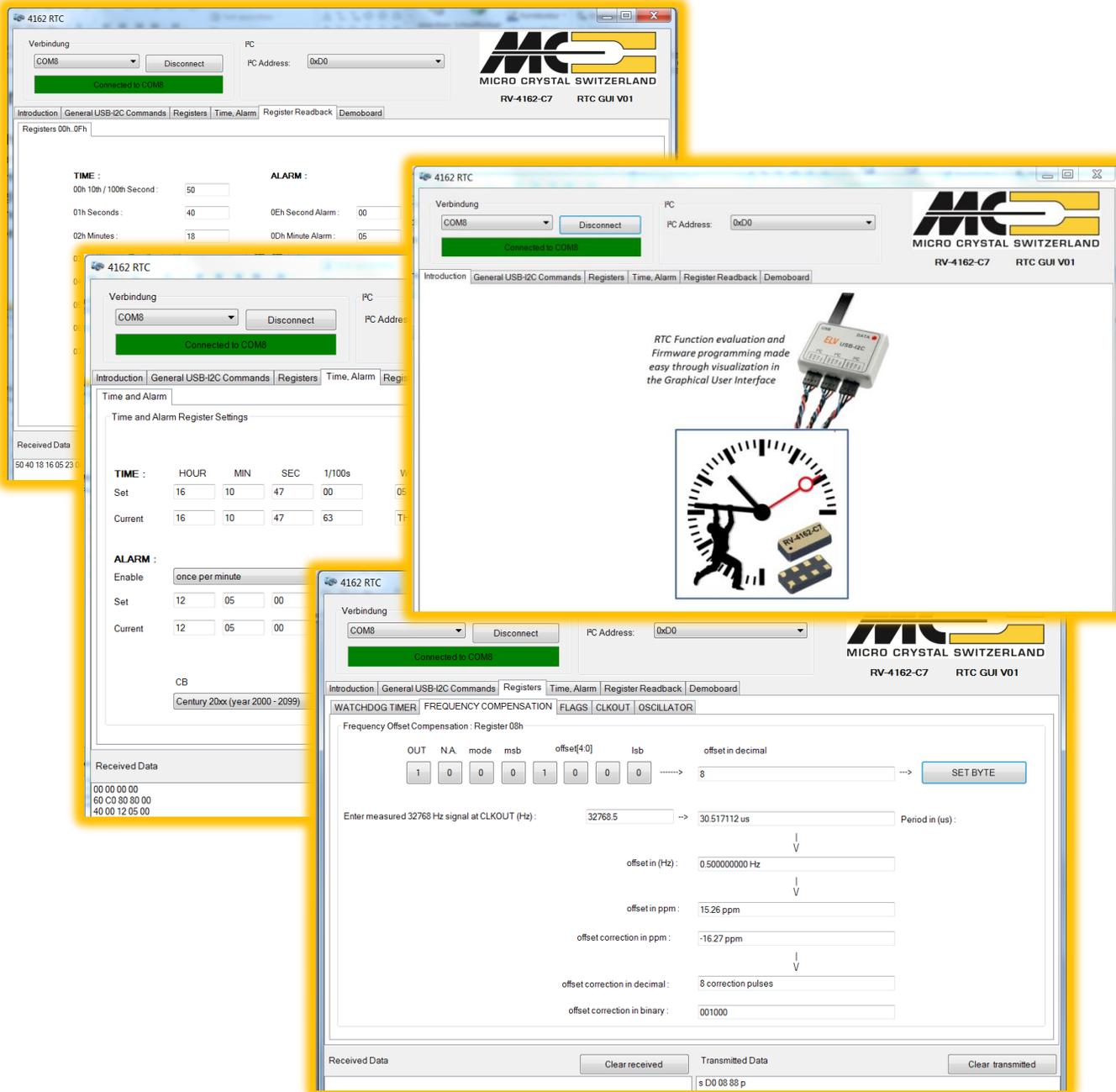
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Graphical User Interface:

Software

The software control via the GUI allows a fast start to communicate via I²C-Bus with the Real-Time Clock. 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.



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