

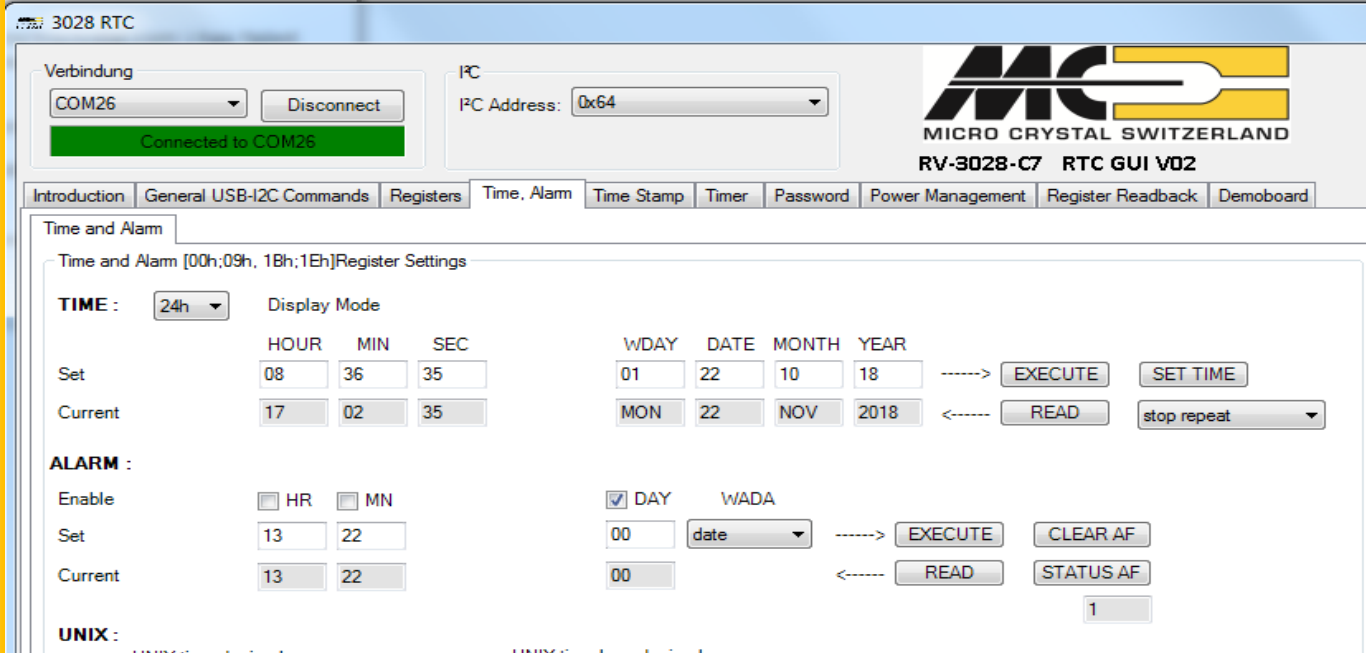


RV-3028-C7 Real-Time Clock Module consumes just 40nA @ 3V. An Industry benchmark.  
 Wide operating voltage range: 1.2 V to 5.5 V.  
 Time accuracy:  $\pm 1$  ppm @ 25°C  
 Auto Backup Switchover and Trickle Charger  
 Provides time and date from seconds to years  
 32 bit UNIX time counter  
 Timer, Alarm  
 External event input with Time Stamp function  
 Clock output: 32.768 kHz... 1 Hz  
 43 bytes non-volatile user memory,  
 I<sup>2</sup>C-bus interface: 400 kHz.

### 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 I<sup>2</sup>C-Bus
- The development board RV-3028-C7. All components including the tiny RTC package and a row of pins are preassembled
- The Graphical User Interface (GUI) is ready for download.



**3028 RTC**

Verbindung: COM26 [Disconnect] Connected to COM26

I<sup>2</sup>C Address: 0x64

**MICRO CRYSTAL SWITZERLAND**  
**RV-3028-C7 RTC GUI V02**

Introduction | General USB-I2C Commands | Registers | **Time, Alarm** | Time Stamp | Timer | Password | Power Management | Register Readback | Demoboard

**Time and Alarm**

Time and Alarm [00h:09h, 18h:1Eh] Register Settings

**TIME :** 24h Display Mode

	HOUR	MIN	SEC	WDAY	DATE	MONTH	YEAR
Set	08	36	35	01	22	10	18
Current	17	02	35	MON	22	NOV	2018

EXECUTE SET TIME READ stop repeat

**ALARM :**

Enable ☐ HR ☐ MN

Set 13 22

Current 13 22

☒ DAY WADA

00 date EXECUTE CLEAR AF

00 READ STATUS AF

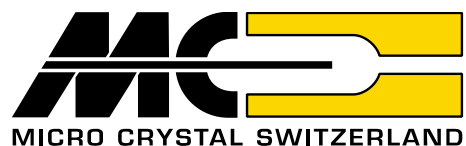
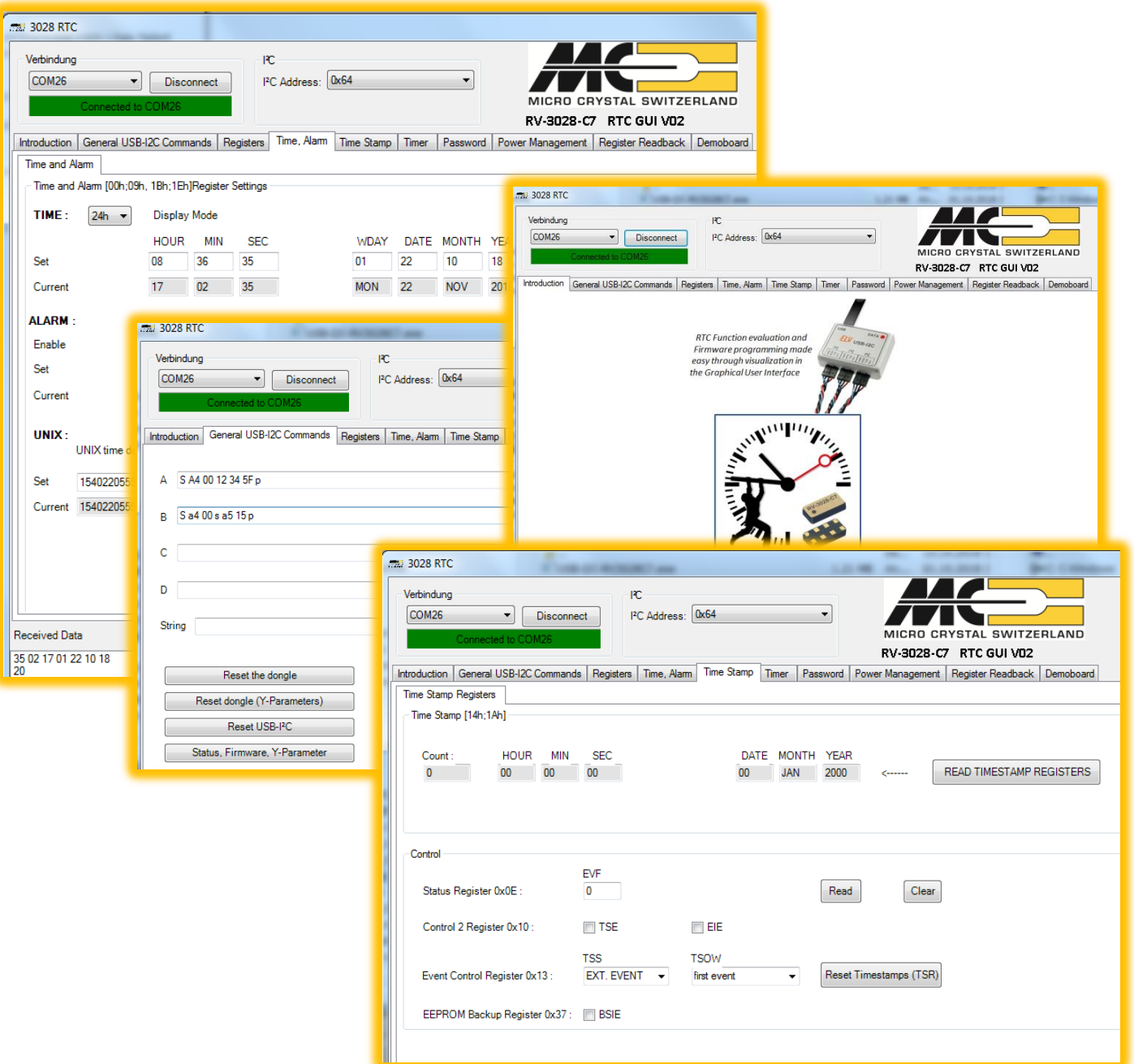
**UNIX :** 1

# Graphical User Interface:

## Software

The software control via the GUI allows a fast start to communicate with the Real-Time Clock via I<sup>2</sup>C-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 Clock, a General USB-I<sup>2</sup>C Commands page allows communication with any I<sup>2</sup>C-bus RTC by directly entering the hex codes.



Micro Crystal AG  
Muehlestrasse 14  
CH-2540 Grenchen  
Switzerland

Tel. +41 32 655 82 82  
Fax. +41 32 655 82 83  
sales@microcrystal.com  
www.microcrystal.com