

PCF85X3 RTC Commands

The PCF85x3 is a CMOS Real-Time Clock (RTC) and calendar optimized for low power consumption. A programmable clock output, interrupt output, and voltage-low detector are also provided. All addresses and data are transferred serially via a two-line bidirectional I²C-bus. Maximum bus speed is 400 kbit/s. The register address is incremented automatically after each written or read data byte.

The PCF8563 is more accurate than the DS13x7 RTCs. See the application note AN10652 for more details.

```
#include <PCF85X3.h>
```

Here follows a list of the commands..

PCF85X3_Enable(flag)

- enables the clock when flag is `TRUE`,
- disables the clock when flag is `FALSE`

PCF85X3_ResetClock

- resets clock completely to default original condition,
- set clock to default time/date.

PCF85X3_SetClock(hour, minute, second, date, dow, month, year)

- sets the entire clock to the specified values.

PCF85X3_SetTime(hour, minute, second)

- sets the clock to the specified values.

PCF85X3_ReadClock(hour, minute, second, date, dow, month, year)

- read the clock to the specified variables.

PCF85X3_ReadTime(hour, minute, second)

- read the clock to the specified variables.

PCF85x3_SetDate(date, dow, month, year)

- sets the clock to the specified values.

PCF85x3_ReadDate(date, dow, month, year)

- read the clock to the specified variables.

PCF85x3_SetAlarm(hour, minute, date , dow)

PCF85x3_SetAlarm(hour, minute)

PCF85x3_SetAlarm(minute)

- sets the alarm clock to the specified values to the specific clock registers.

PCF85x3_EnableAlarm (boolean_flag)

- set the state of the alarm to enable or disable for true and false respectively.

PCF85x3_DisableAlarms

- disables the alarm.

PCF85x3_ClearAlarm

- clear an active alarm state ready of next alarm event.

function PCF85x3_AlarmState returns (boolean_flag)

- returns the state of the alarm event flag.

function PCF85x3_ReadVL returns (boolean_flag)

- returns the state of the voltage integrity flag.

function PCF85x3_ReadAlarmState returns (boolean_flag)

- returns the state of the alarm event flag.

PCF85x3_SetInterrupt(boolean_flag)

- set the external interrupt port active

PCF85X3WriteRegister(address, value)

- writes to the internal registers.

PCF85X3_ReadRegister(address, out value)

- reads from the internal registers.