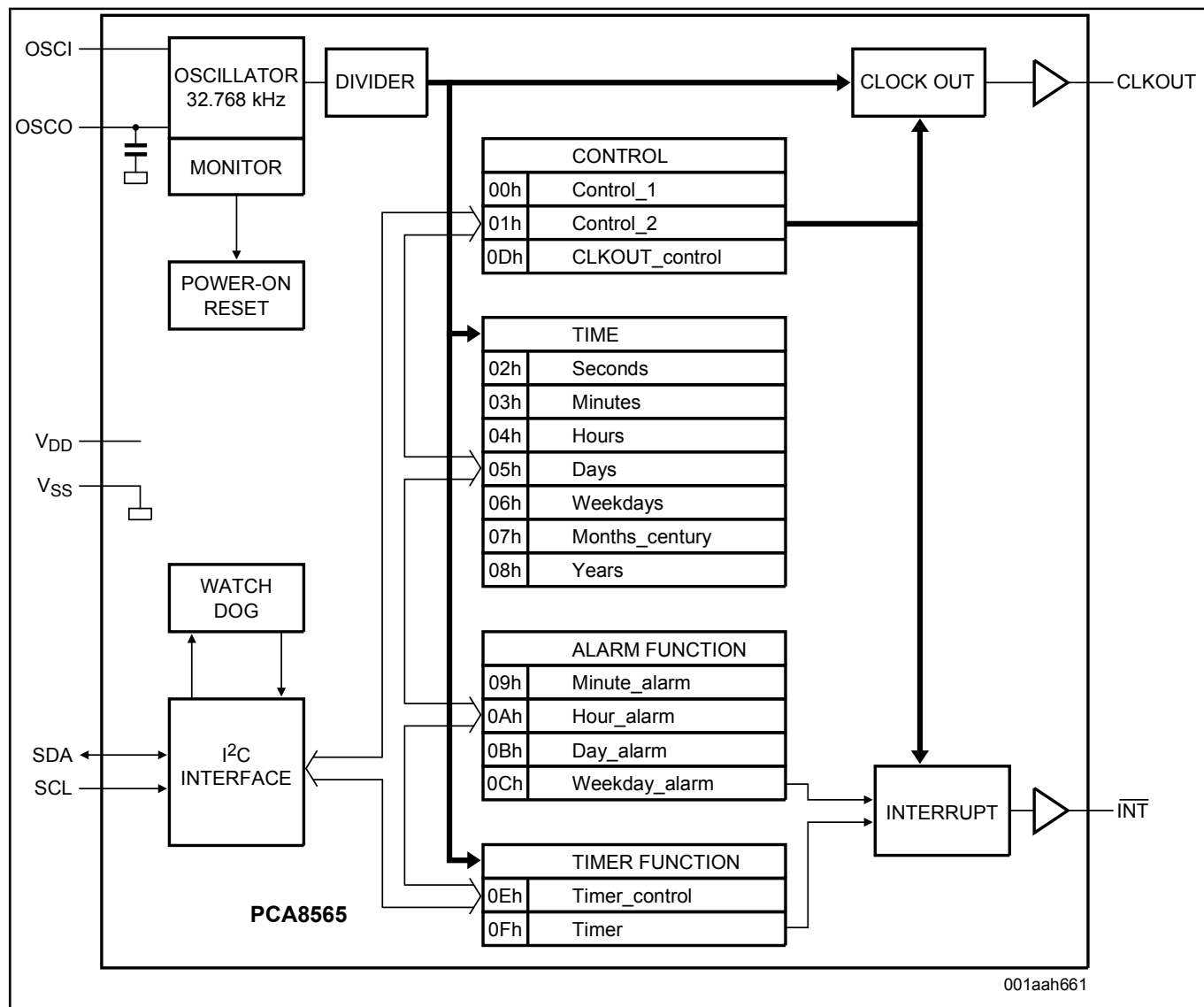# PCA8565 Demo Board

OM13519UL

Last Updated: Dec 23, 2025

The OM13519UL is the demo board for PCA8565. The PCA8565 is a CMOS[1] real time clock and calendar optimized for low-power consumption. A programmable clock output, interrupt output and voltage-low detector are also provided. All address and data are transferred serially via a two-line bi-directional I²C-bus. Maximum bus speed is 400 kbit/s. The built-in word address register is incremented automatically after each written or read data byte.

PCA8565 Demo Board Block Diagram

OSCI	
OSCILLATOR 32.768 kHz	DIVIDER
OSCO	
MONITOR	
POWER-ON RESET	

CLOCK OUT → CLKOUT

CONTROL

00h	Control_1
01h	Control_2
0Dh	CLKOUT_control

TIME

02h	Seconds
03h	Minutes
04h	Hours
05h	Days
06h	Weekdays
07h	Months_century
08h	Years

V$_{DD}$

V$_{SS}$

WATCH DOG

ALARM FUNCTION

09h	Minute_alarm
0Ah	Hour_alarm
0Bh	Day_alarm
0Ch	Weekday_alarm

SDA

SCL

I^{2}C INTERFACE

INTERRUPT → $\overline{\text{INT}}$

TIMER FUNCTION

0Eh	Timer_control
0Fh	Timer

PCA8565

001aah661

View additional information for PCA8565 Demo Board.