Table 9. BCD coding

Value in decimal	Upper-digit (ten's place)				Digit (unit place)			
	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
00	0	0	0	0	0	0	0	0
01	0	0	0	1	0	0	0	1
02	0	0	1	0	0	0	1	0
:	:	:	:	:	:	:	:	:
09	1	0	0	1	1	0	0	1
10	0	0	0	0	0	0	0	0
:	:	:	:	:	:	:	:	:
98	1	0	0	1	1	0	0	0
99	1	0	0	1	1	0	0	1

8.2.2 OS: Oscillator stop

When the oscillator of the PCF85263A is stopped, the OS status bit is set. The oscillator can be stopped, for example, by connecting one of the oscillator pins OSCI or OSCO to ground. The oscillator is considered to be stopped during the time between power-on and stable crystal resonance. This time can be in the range of 200 ms to 2 s depending on crystal type, temperature, and supply voltage.

The status bit remains set until cleared by command (see Figure 9). If the bit cannot be cleared, then the oscillator is not running. This method can be used to monitor the oscillator and to determine if the supply voltage has reduced to the point where oscillation fails.

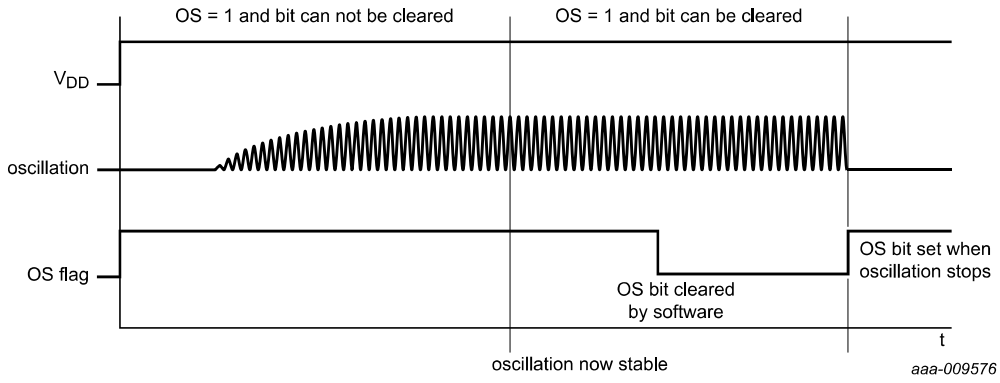

Fig 9. OS status bit

8.2.3 EMON: event monitor

The EMON can be used to monitor the status of all the flags in the Flags register, see Section 8.14 on page 57. When one or more of the flags is set, then the EMON bit returns a logic 1. The EMON bit cannot be cleared. EMON returns a logic 0 when all flags are cleared.

See Figure 22 on page 41 for a pictorial representation.