



Table 18. Static characteristics: Power consumption in deep power-down mode

$T_{amb} = -40\text{ }^{\circ}\text{C}$ to $+105\text{ }^{\circ}\text{C}$, unless otherwise specified, $2.7\text{ V} \leq V_{DD} \leq 3.6\text{ V}$.

| Symbol | Parameter | Conditions | Min | Typ ^{[1][2]} | Max | Unit |
|-----------|------------------------|--|-----|-----------------------|-----|------|
| I_{BAT} | battery supply current | deep power-down mode; RTC oscillator running with external crystal | | | | |
| | | $V_{DD} = V_{DDA} = V_{REFP} = 3.3\text{ V}$, $V_{BAT} = 3.0\text{ V}$ | - | 0 | - | nA |
| | | $V_{DD} = V_{DDA} = V_{REFP} = 0\text{ V}$ or tied to ground, $V_{BAT} = 3.0\text{ V}$ | - | 340 ^[3] | - | nA |

[1] Typical ratings are not guaranteed. Typical values listed are at room temperature (25 °C).

[2] Characterized through bench measurements using typical samples.

[3] If $V_{BAT} > V_{DD}$, the external reset pin must be floating to prevent high V_{BAT} leakage.

How can I left RESET pin floating !?!?

Test Conditions:

- No power supply ($V_{DD} = V_{DDA} = V_{REFP} = 0\text{ V}$)
- Battery fully charged
- Battery type: Rechargeable - Panasonic VL-1220 - 7mA/h

Start Test:

30 April 2020 - hour 17:00

$V_{BAT} = 3,334\text{ V}$

End Test

04 May 2020 - hour 07:30

$V_{BAT} = 2,981\text{ V}$

Days calculated in these conditions: 13

With datasheet conditions @ 340nA consumption, days would be more than 800.

I tried to disconnect R33, leaving RESET pin floating, but without differences.