

Protection Circuit Module Specifications For 3.7V Li-ion/Li-Po Battery Pack

Model: PCB-S1A3-I2C IC (BQ27541) Single Cell Li-Ion Battery Fuel Gauge

No.	Test item (Test at normal temperature 25±2°C and relative humidity≤90%)		Criterion
1	Communication Interface		HDQ or I2C
2	Capacity	Designing battery capacity (PCM)	
3	Voltage	Charging voltage	DC: 4.2V CC/CV
4	Current	Normal operating-mode current: Gas Gauge in NORMAL mode, ILOAD > Sleep Current	150 uA
		SLEEP operating-mode current: Gas Gauge in SLEEP mode, ILOAD < Sleep Current	80 uA
		FULL SLEEP operating-mode current: Gas Gauge in FULL SLEEP mode, ILOAD < Sleep Current	25 uA
		Maximal continuous charging current	3A
		Maximal continuous discharging current	3A
5	Over charge Protection	Over charge detection voltage	4.25±0.025V
		Over charge detection delay time	0.5S—2S
		Over charge release voltage	4.05±0.05V
6	Over discharge protection	Over discharge detection voltage	2.5±0.07V
		Over discharge detection delay time	10—30mS
		Over discharge release voltage	3.0±0.1V
7	Over current protection (discharge)	Over current detection voltage	0.2±0.015V
		Over current detection current	5±1A
		Detection delay time	5ms—20ms
		Release condition	Cut load
8	Short protection	Detection condition	Exterior short circuit
		Detection delay time	100-600us
		Release condition	Cut load
9	Resistance	Protection circuitry	≤50mΩ
10	Temperature	Operating Temperature Range	-40~+85°C
		Storage Temperature Range	-40~+125°C

B+: battery+

L56*W5*T3mm

B-: battery-

SDA: Serial Data interface

SCL: Serial Clock interface

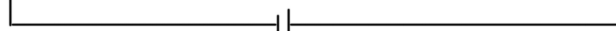
P+: charge+/discharge+

P-: charge-/discharge-

NTC: 10K

P+ = Charge+ / Discharge+

P- = Charge- / Discharge- Size: L56*W5*T2.5mm



Battery