製品概要

LC05551XA: Battery Protection IC, OTP Function, 1-Cell Lithium-Ion Battery

技術情報は、データシートをご参照ください。

The LC05551XA is a protection IC for 1-cell lithium-ion secondary batteries with OTP function.Also it integrates highly accurate detection circuits and detection delay circuits to prevent batteriesfrom over-charging, over-discharging, over-current discharging and over-current charging.In addition, it is able to select Trip points after assembly of the external FET, Sense Resistor and the controller IC.By using the OTP function, all detection voltage setting can be set on the PCB.

特長

- Highly accurate detection voltage/current
- Built in OTP functuin
- Small package
- Over charge detection voltage 4.1 V to 4.55 V (2.5 mV steps)
- Over charge release hysteresis 0 V, 0.1 V, 0.15 V, 0.2 V
- Over discharge detection voltage 2.1 V to 3.3 V (50 mV step)
- Over discharge release hysteresis 0 V to 0.075 V (25 mV step)
- Over discharge release hysteresis2 0 V, 0.2 V, 0.3 V, 0.4 V
- Discharge Over current detection voltage1 3 mV to 30 mV (0.3 mV step)
- Discharge Over current detection voltage2 3 mV to 30 mV (0.6 mV step)

For more features, see the data sheet

利点

- Prevention of fire, over heating
  Follow UL standard of 8A limit.
- Short term for providing samples
- Reduce the space of PCB

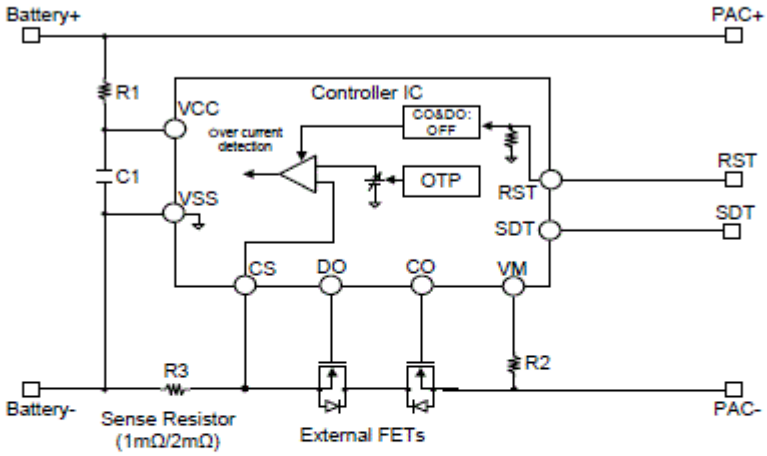
最終製品

電気的仕様

製品	Pricing ($/Unit)	Compliance	Status	V_{ov} Typ. (mV)	V_{uv} Typ. (mV)	I_{oc} Typ. (A)	V_{oc} Typ. (mV)	I_{och} Typ. (A)	V_{och} Typ. (mV)	I_{oc2} Typ. (A)	V_{oc2} Typ. (mV)	Rss(on) typ @ V_{gs}=4.5 V (mΩ)	Auto Wake Up Enable (Yes/No)	0 V Battery Charge Enable (Yes/No)	Package Type
LC05551Z01XATBG	0.2933	Pb-free Halide free non AEC-Q and PPAP	Active	4475	2500	-	7.5	-	-10	-	25	-	Yes	Yes	WLCSP-8

アプリケーション・ダイアグラム

Example of application circuit



Components	MIN	Recommended value	MAX	unit	Description
R1	0.68	1	1.2	kΩ	Battery+ is filtered to VCC by R1 and C1
R2	0.1	1	2	kΩ	Protection from reverse connection of charger
C1	0.01	0.1	1.0	μF	Battery+ is filtered to VCC by R1 and C1
R3	1		20	mΩ	Sense resistor for over-current detection

詳細は、弊社 www.onsemi.jp の営業または販売代理店にお問い合わせください。
9/24/2020 作成