

## 製品概要

## LC05511XA: Battery Protection IC, OTP Function, Sense Resistor type, 1-Cell Lithium-Ion Battery

技術情報は、データシートをご参照ください。

LC05511XA is a protection IC for 1 cell lithium-ion or lithium-polymer battery with built-in OTP. It provides highly accurate adjustable over-charge, over-discharge, over-current protection with adjustable detection delay by OTP. Current is detected by high precision external chip resistor. Which realizes accurate current detection over temperature.

## 特長

- Highly accurate detection voltage/current
- Built in OTP function
- Small package
- Over charge detection voltage 4.1 V to 4.55 V (2.5 mV steps)
- Over discharge detection voltage 2.0 V to 3.3 V (50 mV step)
- Over charge release hysteresis 0 V, 0.1 V, 0.15 V, 0.2 V
- Over discharge release hysteresis 0 V to 0.075 V (25 mV step)
- Over discharge release hysteresis 0 V, 0.2 V, 0.3 V, 0.4 V
- Discharge Over current detection voltage 13 mV to 30 mV (0.3 mV step)
- Discharge Over current detection voltage 23 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

## アプリケーション

- 1-cell Lithium-ion Batteries Protection

## 最終製品

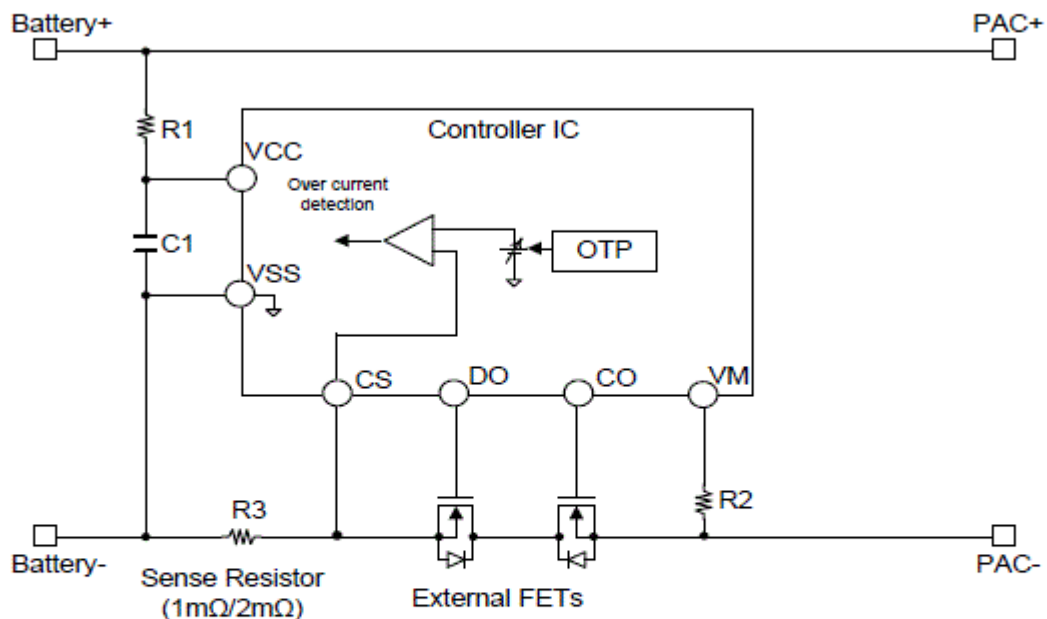
- Smart phone
- Tablet
- Wearable device

## 電氣的仕様

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)	$R_{ss}(on)$ typ @ $V_{gs}=4.5V$ (mΩ)	Auto Wake Up Enable (Yes/No)	0 V Battery Charge Enable (Yes/No)	Package Type
LC05511Z04XATBG	0.2667	Pb-free Halide free	Active	4530	2350	-	7.5	-	-12.5	-	25	-	Yes	Yes	WLCS P-6
LC05512Z01XATBG	0.2667	Pb-free Halide free	Active	4475	2300	-	15	-	-13	-	30	-	No	No	WLCS P-6

# 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	680	1	1.2	kΩ	Battery+ is filtered to VCC by R1 and C1
R2	100	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](http://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。

8/9/2020 作成