

## Product Overview

### LC05132C01NMT: Battery Protection Controller with Integrated MOSFET, 1-Cell Lithium-Ion

For complete documentation, see the data sheet.

The LC05132C01NMT is a protection IC for 1-cell lithium-ion secondary batteries with integrated power MOS FET. Also it integrates highly accurate detection circuits and detection delay circuits to prevent batteries from over-charging, over-discharging, over-current discharging and over-current charging. In addition, main system can execute the power-on reset of itself by turning off the charge FET and discharge FET of LC05132C01NMT for a certain time period, with a reset signal. A battery protection system can be made by only LC05132C01NMT and few external parts.

#### Features

- Integrated power MOSFET
- Low R<sub>son</sub> 11mΩ
- PKG fuse trimming
- Reducing the dispersion of over-current detection
- Reset function Reset release time : 1s (typ) [Ta=25°C]

#### Benefits

- Easy design
- Low power dissipation
- Sort TAT for preparing samples
- Highly accurate detection
- More safe operation for embedded battery

#### Applications

- 1-cell Lithium-ion Secondary Batteries Protection

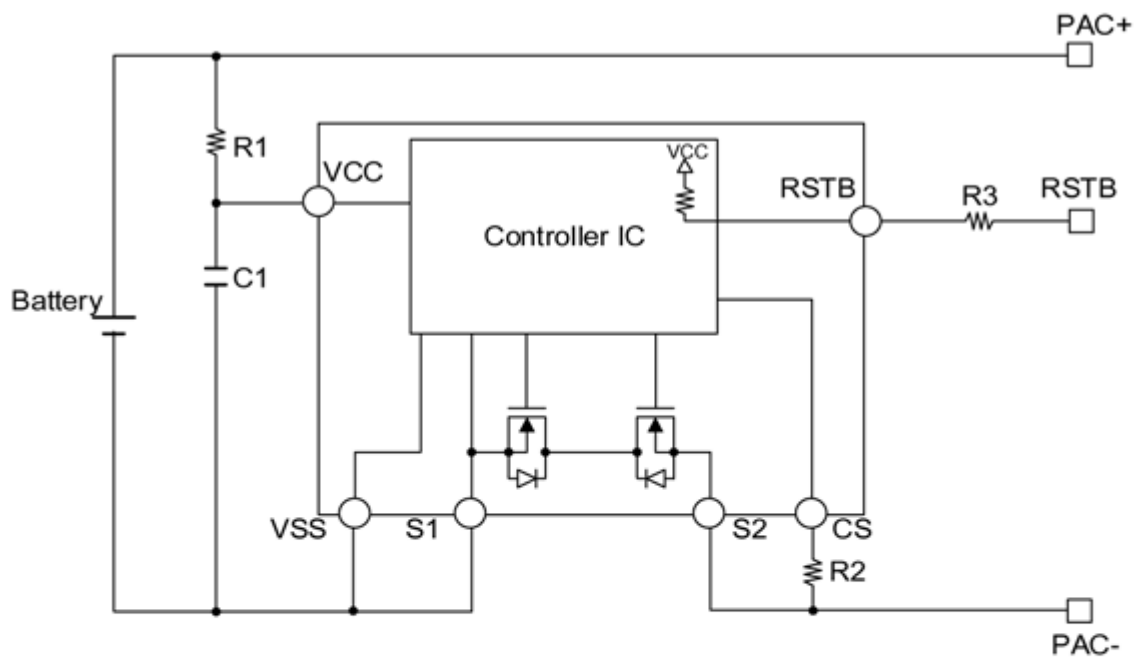
#### End Products

- Smart phone
- Tablet
- Wearable device

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	V <sub>ov</sub> Typ. (mV)	V <sub>div</sub> Typ. (mV)	I <sub>oc</sub> Typ. (A)	V <sub>oc</sub> Typ. (mV)	I <sub>sch</sub> Typ. (A)	V <sub>och</sub> Typ. (mV)	I <sub>oc2</sub> Typ. (A)	V <sub>oc2</sub> Typ. (mV)	R <sub>ss(on)</sub> typ @ V <sub>gs</sub> =4.5V (mΩ)	Auto Wake Up Enable (Yes/No)	0 V Battery Charge Enable (Yes/No)	Package Type
LC05132C01NMTTGTG	0.8	Pb-free Halide free	Active	4475	2200	6.3	-	5.2	-	17.5	-	11.2	No	No	WDFN -6 Dual Flag

## Application Diagram



Components	Recommended value	MAX	unit
R1	680	1k	$\Omega$
R2	1k	2k	$\Omega$
R3	1k	2k	$\Omega$
C1	1.0 $\mu$	-	F

\* We don't guarantee the characteristics of the circuit shown above.

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

Created on: 4/4/2020