

Product Overview

LC05112CMT: Battery Protection Controller with Integrated MOSFET, 1-Cell Lithium-Ion

For complete documentation, see the data sheet.

The LC05112CMT 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. A battery protection system can be made by only LC05112CMT and few external parts.

Features

- Integrated power MOSSFET
- Low R_{son} 11mΩ
- PKG fuse trimming
- Reducing the dispersion of over-current detection
- Shut down Low current <0.1μA

Benefits

- Easy design
- Low power dissipation
- Short TAT, High accuracy
- High safety
- Long battery life

Applications

- Battery protection units

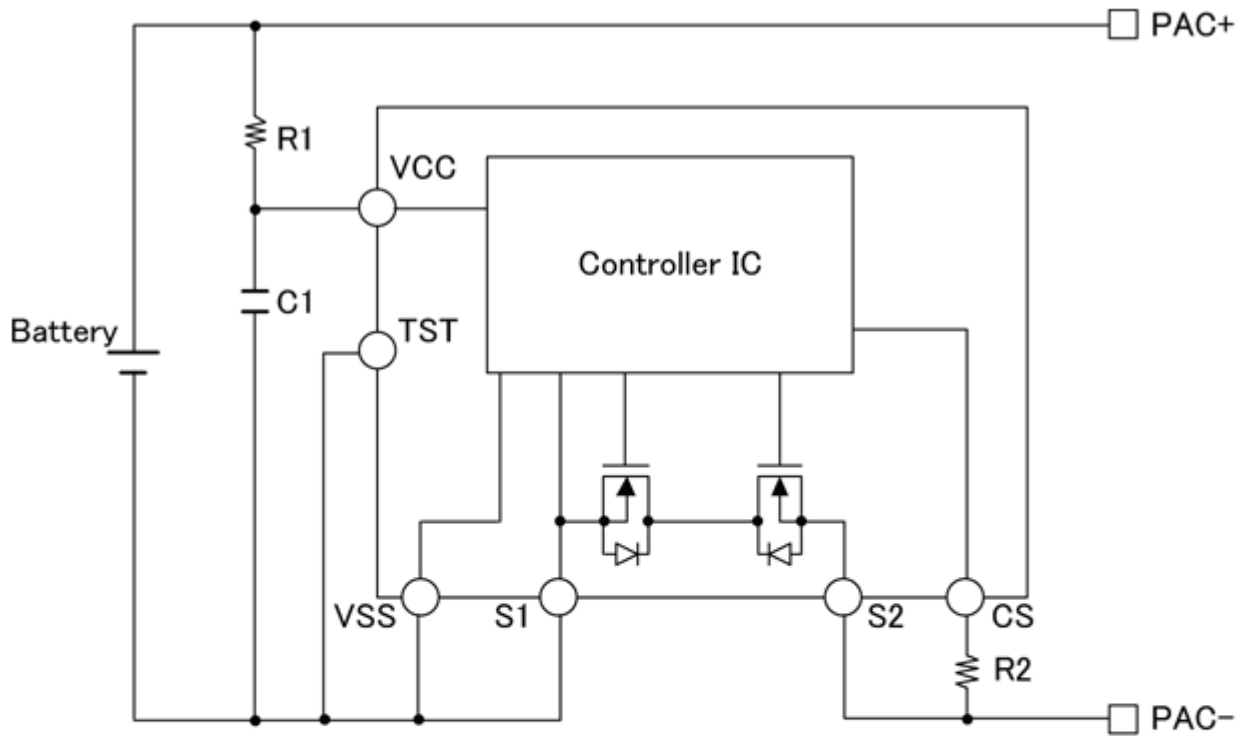
End Products

- Smart phones
- Tablet PCs
- Wearable devices

Part Electrical Specifications

Product	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
LC05112C01MTTG	Pb-free Halide free	Active	4285	2200	6.3	-	4	-	21	-	11.2	No	No	WDFN-6 Dual Flag

Application Diagram



Components	Recommended value	MAX	unit
R1	680	1k	Ω
R2	1k	2k	Ω
C1	2.2μ	4.7μ	F

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

* TST pin would be better to be connected to VSS pin, though it is connected to VSS with internal resistor (100kΩ typ).

For more information please contact your local sales support at www.onsemi.com.

Created on: 9/21/2019