

## PRESS RELEASE

TRX079 November 24th, 2011

**300mA Small High-speed Dual LDO Regulator, Built-in Inrush Current Protection  
XC6421 Series**

TOREX SEMICONDUCTOR LTD. (Tokyo Japan: President, Tomoyuki Fujisaka) has developed a dual high-speed LDO regulator having an inrush current protection function and an output current of 300mA.

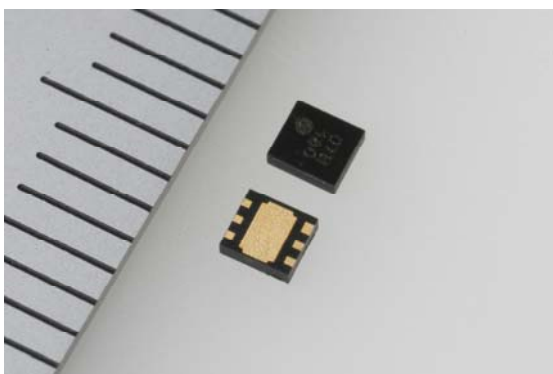
The XC6421 series of small dual high-speed regulators has an inrush current protection function and an output current of 300mA per channel. Two regulators with high accuracy ( $\pm 1\%$ ), high ripple rejection (75dB at 1kHz), and low dropout (70mV at 100mA) are housed in a small USP-6C package (1.8 x 2.0 x h0.6mm). These regulators are ideal for applications that require high-density mounting such as cell phones, hand-held video game consoles, portable media players, and digital cameras.

The input voltage range is 1.6V to 5.5V. The output voltage of each regulator can be set in steps of 0.05V within the range 1.2V to 3.6V. The supply current is  $90 \mu\text{A}$  (TYP.) per regulator. Each regulator has an EN pin function, which enables the regulator output of each circuit to be turned off independently. In this standby state, the  $C_L$  discharge function discharges the charge on the capacitor and rapidly returns the  $V_{\text{OUT}}$  output to the  $V_{\text{SS}}$  level.

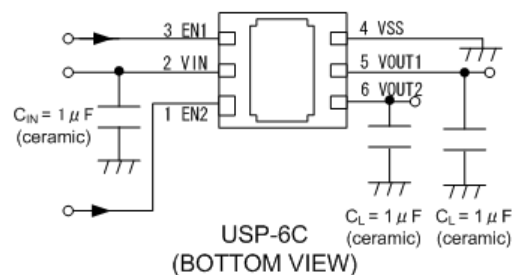
Protective functions include an over-current protection circuit (450mA), short-circuit protection (125mA), inrush current protection function, and thermal shutdown. The protection circuits activate when the output current reaches the limit current or the junction temperature reaches the limit temperature. A ceramic capacitor can be used for the capacitor. This is an environment-friendly product that complies with the RoHS Directive and is halogen and antimony free.

**【XC6421 Series Features】**

- Two LDOs with a maximum output current of 300mA per regulator
- Small USP-6C package (1.8 x 2.0 x h0.6mm) with heatsink
- Input voltage range is 1.6V to 5.5V. Output voltage range is 1.2V to 3.6V.
- Supply current is  $90 \mu\text{A}$  per output channel.
- Includes an over-current protection circuit (450mA), short-circuit protection (125mA), inrush current protection (150mA), and thermal shutdown (150°C).



▲XC6421 Series USP-6C (1.8 x 2.0 x h0.6mm)



▲Typical Application Circuit

Torex Semiconductor Ltd. is a leading provider of CMOS power management ICs targeted toward battery powered and energy efficient applications. Torex specializes in CMOS analog technology, with LDO voltage regulators, voltage detectors and DC/DC converters making up our core product offering.

<http://www.torex.co.jp/english/>

**For further information, please contact:**

Singapore: TOREX SEMICONDUCTOR (S) PTE LTD

Tel: +65-6745-1352

E-mail: [tsp@torex.com.sg](mailto:tsp@torex.com.sg)

USA: TOREX USA Corp.

Tel: +1-949-261-2022

E-mail: [info@torex-usa.com](mailto:info@torex-usa.com)

Europe: TOREX SEMICONDUCTOR EUROPE LIMITED

Tel: +44-1530-510190

E-mail: [sales@torexsemi.co.uk](mailto:sales@torexsemi.co.uk)

2011/11/24