

PRESS RELEASE

TRX035 April 30, 2008

**XC9128/XC9129 Series
0.8V Synchronous Step-Up DC-DC Converters**

TOREX SEMICONDUCTOR LTD. (Chuo-Ku, Tokyo : President, Tomoyuki Fujisaka) announces the release of the XC9128/XC9129 series of 0.8V synchronous step-up DC-DC converters.

The new XC9128/XC9129 Series of synchronous step-up DC-DC converters from Torex Semiconductor allow engineers to achieve efficient step-up circuits from input voltages as low as 0.8V. These two series are suitable for a variety of battery-powered portable and hand-held device applications, such as digital audio players, digital still cameras and video equipment.

The XC9128/XC9129 Series feature a 0.2Ω (TYP.) N-channel driver transistor and a synchronous 0.2Ω (TYP.) P-channel switching transistor built-in. The XC9128/XC9129 series from Torex deliver efficiency up to 93% over the entire load range, and can supply 500mA to a 3.3V load from a 1.8V battery supply. Additionally, the 1.2MHz fixed switching frequency helps minimise design footprint by enabling the use of extremely small inductors and capacitors.

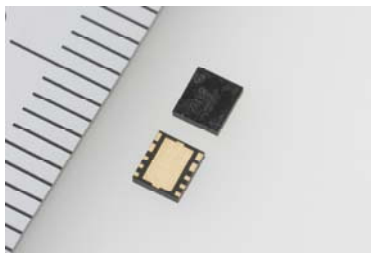
Output voltage can be freely set within a range of 1.8V ~ 5.3V using a reference voltage supply of 0.45V and an external resistor ladder. The input voltage range is 0.8V ~ 5.3V.

With the MODE pin, designers can select the PWM control or PFM/PWM automatic switching control. In the PWM/PFM automatic switching mode, the XC9128/XC9129 Series switch from PWM to PFM to reduce switching loss when load current is small. However, when load current is large, the control switches automatically to PWM so that high efficiency is achievable over a wide range of load conditions.

In addition, the XC9128 Series incorporates an AEN (Adaptor Enable) pin which allows the device to also be used to provide a fast power supply back-up solution when the IC is used together with added power sources such as AC adapters. The AEN pin monitors the external power source and can quickly sense if that power supply fails, providing immediate back-up. The XC9128 Series also features a Flag Output (FO) pin for monitoring the ICs operation.

The XC9128/29 Series also offer a variety of safety features including thermal shutdown and over current limit protection, and soft start that is set internally at 5ms typical. Specified over the -40°C to +85°C temperature range, the XC9128 Series are available in two compact packages: MSOP-10 & USP-10B whereas the XC9129 Series is available in SOP-8.

Output Current	: 150mA@V _{OUT} =3.3V, V _{IN} =0.9V : 500mA@V _{OUT} =3.3V, V _{IN} =1.8V
Input Voltage Range	: 0.8V~6.0V
Output Voltage Setting Range	: 1.8V~5.3V (Externally set) Set up freely with a reference voltage supply of 0.45V (±0.01V) & external components
Oscillation Frequency	: 1.2MHz (Fixed oscillation frequency accuracy ±15%)
Input Current	: 1.0A
Maximum Current Limit	: 1.2A (MIN.), 2.0A (MAX.)
Controls	: PWM, PWM/PFM control externally switching
Protection Circuits	: Thermal shutdown : Integral latch method (Over current limit)
Soft-Start Time	: 5ms (TYP.) internally set
Ceramic Capacitor Compatible	
Adaptor Enable Function	
Error Flagout Output	: Nch Open-drain output
Packages	: USP-10B, MSOP-10, SOP-8



▲USP-10B

[Company Outline]

Name : TOREX SEMICONDUCTOR LTD.
 Found : 1995
 Capital : 984.78 million JPY
 President : Tomoyuki Fujisaka
 Employees : 224 (as of April 1, 2008)
 Operations : Manufacturing of ICs and active discrete components.
 Sales of ICs and active discrete components.

<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
USA: TOREX USA Corp.	Tel: +1-949-261-2022	E-mail: info@torex-usa.com
Europe: TOREX SEMICONDUCTOR EUROPE LIMITED	Tel: +44-1530-510190	E-mail: sales@torexsemi.co.uk