

Press Release

Start-up IC for DC/DC-Converter starts from 0.3V Input Voltage

S-882Z is the part number of a new charge pump IC introduced by Seiko Instruments which already distinguishes it selves by physical setup from traditional integrated circuits. It is completely built in SOI (Silicon On Insulator) technology, guarantying its functionality from lowest input voltages.

With the capability to generate output voltages of 1.8 V to 2.4 V, sufficient to operate DC/DC-Converter, from input voltages as low as 0.3 V to 0.35 V, when powered from a fuel cell or a solar cell, this circuit closes the gap for voltage conversion from very low input voltages.

The pumped-up charge is stored on a start-up capacitor. When it exceeds the selected discharge start voltage, it will boost a step-up DC/DC-converter into operation. Once started, the DC/DC-converter will divert its own supply current from its stepped-up output voltage. In this state the start-up charge pump is dispensable and for input energy saving, it will switch itself off when its VM input monitors an output voltage exceeding the shutdown voltage. The latter is slightly (100 mV) above the discharge start voltage to ensure that the DC/DC converter is already in stable operation before the start-up charge pump will switch off. This will effect in noticeable load reduction to the source and power saving.

The S-882Z series IC's are available in SOT-23-5 packages and require only one external component, the start-up capacitor to perform their task.

DC/DC converters are also known as switching voltage converters or regulators. A range of matching switching voltage regulators is offered by Seiko Instruments with the product no. S-8353.

Datasheets: http://datasheet.sii-ic.com/en/charge_pump_ic/S882Z_E.pdf

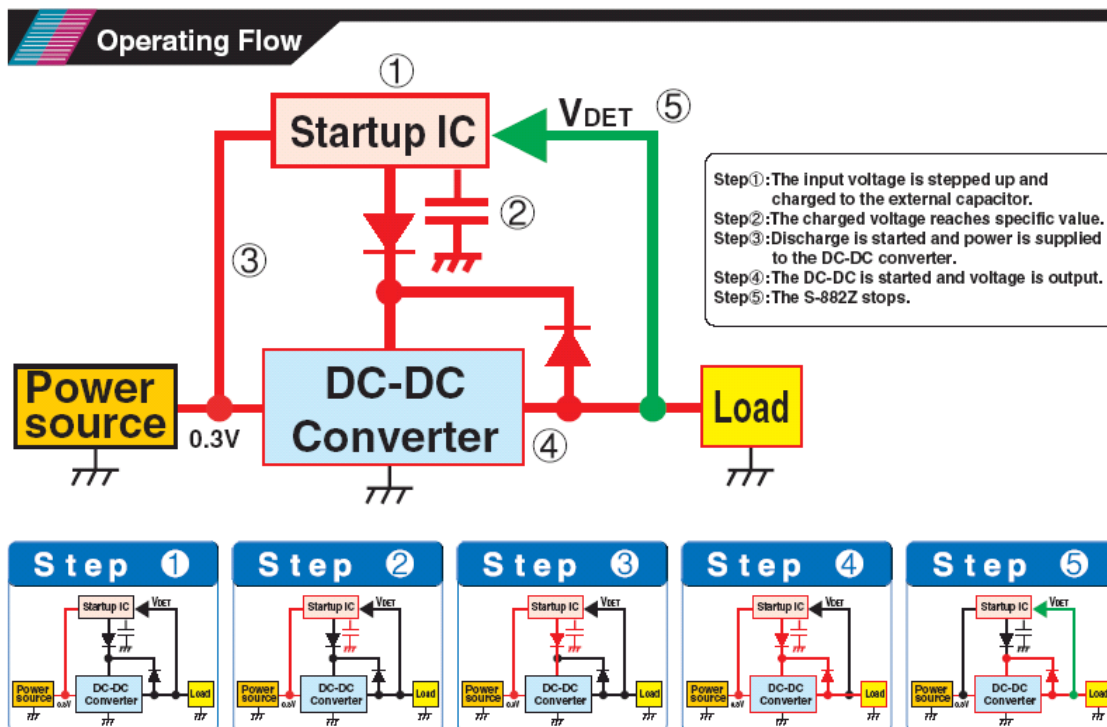
Samples: may be ordered from Seiko Instruments GmbH, Siemensstraße 9, D-63263 Neu-Isenburg.

Contact: D Tel: +49 (0)6102 297- 0; Fax: +49 (0)6102 297 320; eMail: info@seiko-instruments.de

DK Tel: +45-36 94 40 28; Fax: +45-36 94 40 10

F Tel: +33 1 41 31 71 30; Fax: +33 1 41 31 71 39

UK Tel: +44 1784 898154; Fax: +44 1784 895126



Contact:

Paul Krisam, Technical Sales Support Manager, Components Department

Seiko Instruments GmbH, Siemensstraße 9, 63263 Neu-Isenburg

Tel.: +49 6102 297 143, Fax.: +49 6102 297 50 143, Mobile: +49 172 6396 127

eMail : Paul.Krisam@seiko-instruments.de

Website : <http://www.seiko-instruments.de>