


## Charge Pump INV/STPUP/STPDN -1.5V to -10V/18.6V 45mA 8-Pin SOIC N T/R

<b>Manufacturer:</b>	<a href="#">Renesas Technology Corp</a>
<b>Package/Case:</b>	SOP8
<b>Product Type:</b>	Power Management ICs
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

The MAX1044 and ICL7660 are monolithic, CMOS switched-capacitor voltage converters that invert, double, divide, or multiply a positive input voltage. They are pin compatible with the industry-standard ICL7660 and LTC1044. Operation is guaranteed from 1.5V to 10V with no external diode over the full temperature range. They deliver 10mA with a 0.5V output drop. The MAX1044 has a BOOST pin that raises the oscillator frequency above the audio band and reduces external capacitor size requirements. The MAX1044/ICL7660 combine low quiescent current and high efficiency. Oscillator control circuitry and four power MOSFET switches are included on-chip. Applications include generating a -5V supply from a +5V logic supply to power analog circuitry. For applications requiring more power, the MAX660 delivers up to 100mA with a voltage drop of less than 0.65V.

### Key Features

- Simple Conversion of +5V Logic Supply to  $\pm 5V$  Supplies
- Simple Voltage Multiplication (>IN)
- Typical Open Circuit Voltage Conversion Efficiency 99.9%
- Typical Power Efficiency 98%
- Wide Operating Voltage Range
- ICL7660 1.5V to 10.0V
- ICL7660A 1.5V to 12.0V
- ICL7660A 100% Tested at 3V
- Easy to Use - Requires Only 2 External Non-Critical Passive Components
- No External Diode Over Full Temp. and Voltage Range
- Pb-Free Plus Anneal Available (RoHS Compliant)

### Application

- Data Acquisition
- EIA/TIA-232E and EIA/TIA-562 Power Supplies
- Handheld Instruments (PDAs, Palmtops)
- Op-Amp Power Supplies
- Panel Meters
- Personal Communications Equipment
- Portable Telephones

### Recommended For You

**ICL7660SCPAZ**

Renesas Technology Corp

DIP-8

**ICL7660AIBA**

Renesas Technology Corp

SOP8

**ICL7660SIBAZ**

Renesas Technology Corp

SOP8

**ICL7660SIBAZT**

Renesas Technology Corp

SOP8

**ICL7660CBAZ**

Renesas Technology Corp

SOP8

**ICL7660AIBAZA-T**

Renesas Technology Corp

SOP8

**ICL7660CPA**

Renesas Technology Corp

DIP-8

**ICL7660SCBAZ-T**

Renesas Technology Corp

SOP8

**ICL7660SCPA**

Renesas Technology Corp

DIP8

**ICL7660CBA**

Renesas Technology Corp

SOP-8

**ICL7660SCBA**

Renesas Technology Corp

SOP8

**ICL7660ACBA**

Renesas Technology Corp

SOP-8

**ICL7660ACBAZA-T**

Renesas Technology Corp

SOP8

**ICL7660ACPAZ**

Renesas Technology Corp

DIP8

**ICL7660ACBAZA**

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