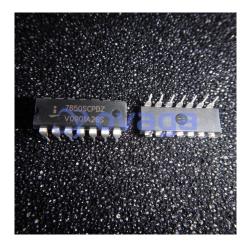


# ICL7650SCPDZ

Data Sheet

INTERSIL ICL7650SCPDZ Operational Amplifier, Single, 1 Amplifier, 2MHz, 2.5V/ $\mu s,$  4.5V to 16V, DIP, 14Pins

Manufacturers	Renesas Technology Corp
Package/Case	PDIP-14
Product Type	Amplifier ICs
RoHS	Green
Lifecycle	



Images are for reference only

Please submit RFQ for ICL7650SCPDZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

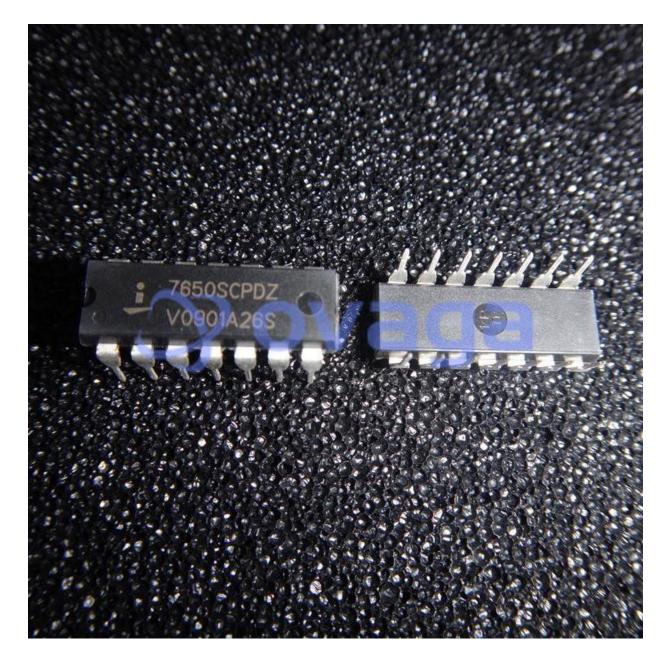
<u>RFQ</u>

### **General Description**

The ICL7650S Super Chopper-Stabilized Amplifier offers exceptionally low input offset voltage and is extremely stable with respect to time and temperature. It is a direct replacement for the industry-standard ICL7650 offering improved input offset voltage, lower input offset voltage temperature coefficient, reduced input bias current, and wider common mode voltage range. All improvements are highlighted in bold italics in the Electrical Characteristics section. Critical parameters are guaranteed over the entire commercial temperature range. Intersil's unique CMOS chopper-stabilized amplifier circuitry is user-transparent, virtually eliminating the traditional chopper amplifier problems of intermodulation effects, chopping spikes, and overrange lockup. The chopper amplifier achieves its low offset by comparing the inverting and non-inverting input voltages in a nulling amplifier, nulled by alternate clock phases. Two external capacitors are required to store the correcting potentials on the two amplifier nulling inputs; these are the only external components necessary. The clock oscillator and all the other control circuitry is entirely self-contained. However the 14 lead version includes a provision for the use of an external clock, if required for a particular application. In addition, the ICL7650S is internally compensated for unity-gain operation.

## Features

Guaranteed Max Input Offset Voltage for All Temperature Ranges	
Low Long-Term and Temperature Driffs of Input Offset Voltage	
Guaranteed Max Input Bias Current 10pA	
Extremely Wide Common Mode Voltage Range +3.5V to -5V	
Reduced Supply Current 2mA	
Guaranteed Minimum Output Source/Sink Current	
Extremely High Gain 150dB	
Extremely High CMRR and PSRR 140dB	
High Slew Rate 2.5V/µs	
Wide Bandwidth 2MHz	
Unity-Gain Compensated	
Clamp Circuit to Avoid Overload Recovery Problems and Allow Comparator Use	
Extremely Low Chopping Spikes at Input and Output	
Improved, Direct Replacement for Industry-Standard ICL7650 and other Second-Source Parts	
Pb-Free Plus Anneal Available (RoHS Compliant)	



#### **Related Products**



## Renesas Technology Corp

ICL7650SCPA-1Z

PDIP-8



# ICL7621DCPAZ

Renesas Technology Corp PDIP-8



## ICL7611DCPAZ Renesas Technology Corp PDIP-8



## ICL7650SCBA-1Z

Renesas Technology Corp SOIC-8

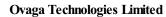
#### ICL7621DCBAZ



Renesas Technology Corp SOIC-8

#### ICL7611DCBAZ

Renesas Technology Corp SOIC-8





#### ICL7650SCBA-1ZT

Renesas Technology Corp SOIC-8



ICL7621DCBAZ-T

Renesas Technology Corp SOIC-8