

ICL7650SCBA-1Z

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Data Sheet

INTERSIL ICL7650SCBA-1Z Operational Amplifier, 1 Amplifier, 2MHz, $2.5V\!/\!\mu s, 4.5V$ to 16V, SOIC, 8Pins New

Manufacturers	Renesas Technology Corp	E. E.
Package/Case	SOIC-8	
Product Type	Amplifier ICs	EEE
RoHS	Green	
Lifecycle		Images are for reference only
Please submit RFQ	for ICL7650SCBA-1Z or <u>Email to us: sales@ovaga.com</u> W	Ve will contact you in 12 hours. RFQ

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 Drifts 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



ICL7650SCPDZ

Renesas Technology Corp PDIP-14



ICL7621DCPAZ Renesas Technology Corp PDIP-8



ICL7611DCPAZ Renesas Technology Corp PDIP-8



Renesas Technology Corp PDIP-8

ICL7621DCBAZ

ICL7650SCPA-1Z



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