

Device Information

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Technical Documentation

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- Datasheets
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- Product Selection Guide
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Purchasing

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ICL7663S























[Printer Friendly Version](#)

CMOS Programmable Micropower Positive Voltage Regulator

 Datasheet & Related Docs	 Description	 Key Features	 Parametric Data	 Application Diagrams	 Related Devices
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Ordering Information

 **RoHS/Pb-Free/Green Device**

Part No.	Status	Temp.	Package	MSL	Price US \$	Buy	Sample
ICL7663SACBA	Active	Comm	8 Ld SOIC				
ICL7663SACBA-T	Active	Comm	8 Ld SOIC T+R				
ICL7663SACBAZA 	Active	Comm	8 Ld SOIC				
ICL7663SACBAZA-T 	Active	Comm	8 Ld SOIC T+R				
ICL7663SACPA	Active	Comm	8 Ld PDIP	N/A			
ICL7663SAIBA	Active	Ind	8 Ld SOIC	1			
ICL7663SAIBAZA 	Active	Ind	8 Ld SOIC				
ICL7663SCBA	Active	Comm	8 Ld SOIC	1			
ICL7663SCBA-T	Active	Comm	8 Ld SOIC T+R				
ICL7663SCBAZA 	Active	Comm	8 Ld SOIC				
ICL7663SCBAZA-T 	Active	Comm	8 Ld SOIC T+R	1			
ICL7663SCPA	Active	Comm	8 Ld PDIP	N/A			
ICL7663SCPAZ 	Active	Comm	8 Ld PDIP	N/A			
ICL7663SAIPA	InActive	Ind	8 Ld PDIP	N/A			
ICL7663SIBA	InActive	Ind	8 Ld SOIC	1			
ICL7663SIBA-T	InActive	Ind	8 Ld SOIC T+R	1			
ICL7663SIPA	InActive	Ind	8 Ld PDIP				

The price listed is the manufacturer's suggested retail price for quantities between 100 and 999 units. However, prices in today's market are fluid and may change without notice.

MSL = Moisture Sensitivity Level - per IPC/JEDEC J-STD-020

SMD = Standard Microcircuit Drawing

Description

The ICL7663S Super Programmable Micropower Voltage Regulator is a low power, high efficiency positive voltage regulator which accepts 1.6V to 16V inputs and provides adjustable outputs from 1.3V to 16V at currents up to 40mA.

It is a direct replacement for the industry standard ICL7663B offering wider operating voltage and temperature ranges, improved output accuracy (ICL7663SA), better temperature coefficient, guaranteed maximum supply current, and guaranteed line and load regulation. All improvements are highlighted in the electrical characteristics section. Critical parameters are guaranteed over the entire commercial and industrial temperature ranges. The ICL7663S/SA programmable output voltage is set by two external resistors. The 1% reference accuracy of the ICL7663SA eliminates the need for trimming the output voltage in most applications.

The ICL7663S is well suited for battery powered supplies, featuring 4 μ A quiescent current, low V_{IN} to V_{OUT} differential, output current sensing and logic input level shutdown control. In addition, the ICL7663S has a negative temperature coefficient output suitable for generating a temperature compensated display drive voltage for LCD displays.

Key Features

- Guaranteed 10 μ A Maximum Quiescent Current Over All Temperature Ranges
- Wider Operating Voltage Range - 1.6V to 16V
- Guaranteed Line and Load Regulation Over Entire Operating Temperature Range Optional
- 1% Output Voltage Accuracy (ICL7663SA)
- Output Voltage Programmable from 1.3V to 16V
- Improved Temperature Coefficient of Output Voltage
- 40mA Minimum Output Current with Current Limiting
- Output Voltages with Programmable Negative Temperature Coefficients
- Output Shutdown via Current-Limit Sensing or External Logic Level
- Low Input-to-Output Voltage Differential

Related Documentation

DS Datasheet(s):

- [CMOS Programmable Micropower Positive Voltage Regulator](#)

TH Technical Homepage:

- [Linear Regulation Solutions](#)

Other:

- [8 Lead Narrow Body Small Outline Plastic Package \(JEDEC MS-012-AA Issue C\)](#)
- [Mil-Std-1835 MACY1-X8 \(A1\) 8 Lead Metal Can Package](#)

PT Parametric Data

V_{IN} (min) (V)	1.6
V_{IN} (max) (V)	16
V_{OUT} (min) (V)	1.3
V_{OUT} (max) (V)	16
I_{OUT} (max) (mA)	40
I_S BIAS (min) (mA)	12

Application Block Diagrams

- [Digital Still Camera](#)
- [Keyboard Video Mouse \(KVM\)](#)
- [Medical Telemetry](#)
- [Portable Ultrasound](#)
- [Smart Sensor](#)

Applications

- Low-Power Portable Instrumentation
- Pagers
- Handheld Instruments
- LCD Display Modules
- Remote Data Loggers
- Battery-Powered Systems

Related Devices

PT [Parametric Table](#)

[ISL6412](#) Triple Output, Low-Noise LDO Regulator with Integrated Reset Circuit

[ISL6416](#) Triple Output, Low-Noise LDO Regulator with Integrated Reset Circuit