

## Low Power Quad Operational Amplifier

DATA BRIEF

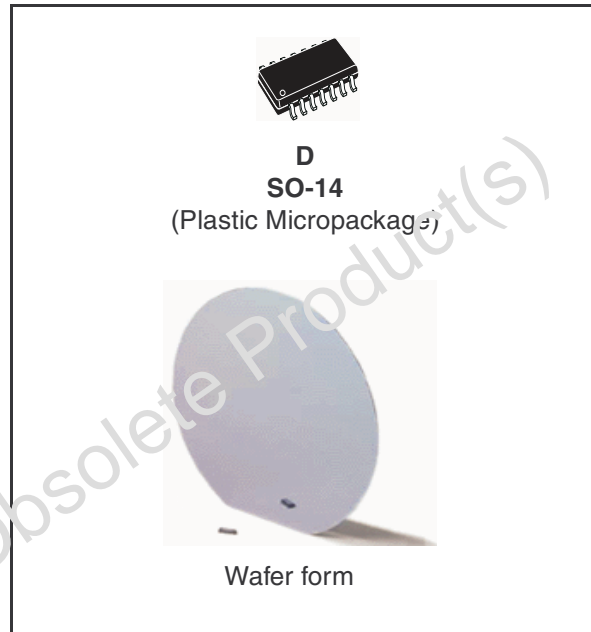
- Wide gain bandwidth: 1.3MHz
- Input common-mode voltage range includes ground
- Large voltage gain: 100dB
- Very low supply current/ampli: 375µA
- Low input bias current: 20nA
- Low input offset current:s 2nA
- Wide power supply range:  
Single supply: +3V to +30V  
Dual supplies: ±1.5V to ±15V
- Internal ESD protection: 250V HBM pin to pin mode, 150V MM

### Description

This circuit consists of four independent, high-gain, internally frequency-compensated amplifiers, which were designed specifically for automotive and industrial control system. It operates from a single power supply over a wide range of voltages. The low-power supply drain is independent of the magnitude of the power supply voltage.

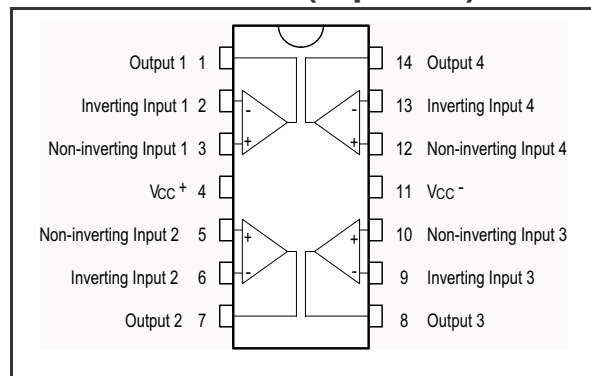
Application areas include transducer amplifiers, DC gain blocks and all the conventional op-amp circuits which now can be more easily implemented in single power supply systems. For example, these circuits can be directly supplied off the standard +5V used in logic systems and will easily provide the required interface electronics without requiring any additional power supply.

In the linear mode, the input common-mode voltage range includes ground and the output



voltage can also swing to ground, even though it is operated from only a single power supply voltage.

### Pin Connection (top view)



### Order Codes

Part Number	Temperature Range	Package	Packaging	Marking
JLM2902H	-40°C, +150°C	Wafer		
LM2902HD/HDT		SO-14	Tube or Tape & Reel	2902H
LM2902HYD/HYDT		SO-14 (automotive grade level)	Tube or Tape & Reel	2902HY

# 1 Revision History

Date	Revision	Changes
March 2005	1	First release of databrief.
July 2005	2	PPAP references inserted in the datasheet see <i>Table : Order Codes on page 1.</i>

Information furnished is believed to be accurate and reliable. However, STMicroelectronics assumes no responsibility for the consequences or use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of STMicroelectronics. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. STMicroelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of STMicroelectronics.

The ST logo is a registered trademark of STMicroelectronics.  
All other names are the property of their respective owners

© 2005 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan - Malaysia - Malta - Morocco - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

[www.st.com](http://www.st.com)