



ZHEJIANG UNIÜ-NE Technology CO., LTD

浙江宇力微新能源科技有限公司



## LMV321/358/324 Data Sheet

V 1.1

版权归浙江宇力微新能源科技有限公司

## Low-Voltage Rail-to-Rail Output Operational

### General Description

The LMV324 and LMV358 are low-voltage (2.7 V to 5.0 V) versions of the dual and quad operational amplifiers, LM324 and LM358, that operate from 5 V to 30 V. The LMV321 is the single-amplifier version.

The LMV321, LMV324, and LMV358 are the most cost-effective solutions for applications where low-voltage operation, space saving, and low price are needed. They offer specifications that meet or exceed those of the familiar LM358 and LM324 devices. These devices have rail-to-rail output-swing capability, and the input common-mode voltage range includes ground. They all exhibit excellent speed-to-power ratios, achieving 1MHz of bandwidth at 1V/us slew rate with low supply current.

The LMV321 is available in the ultra-small DCK package, which is approximately one-half the size of the DBV package. This package saves space on printed circuit boards and enables the design of small portable electronic devices. It also allows the designer to place the device closer to the signal source to reduce noise pickup and increase signal integrity.

The LMV321 is available in SOT23-5 package.

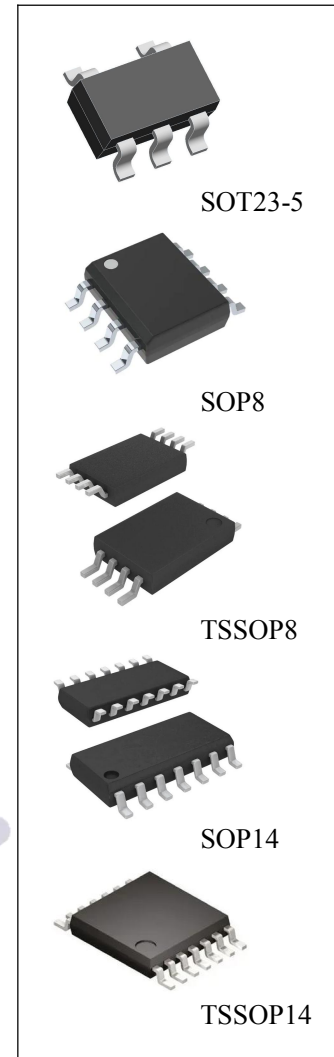
The LMV358 is available in SOP8 and TSSOP8 package.

The LMV324 is available in SOP14 and TSSOP14 package.

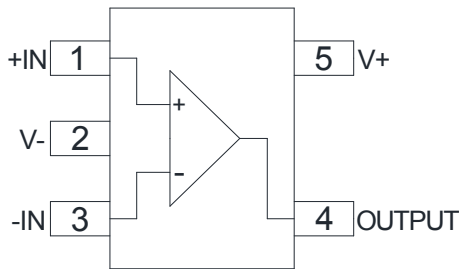
### Features

- 2.7V and 5V Performance
- No Crossover Distortion
- Low Supply Current:
  - LMV321 . . . 130  $\mu$ A Typ
  - LMV358 . . . 210  $\mu$ A Typ
  - LMV324 . . . 410  $\mu$ A Typ
- Rail-to-Rail Output Swing
- Package Options Include Plastic

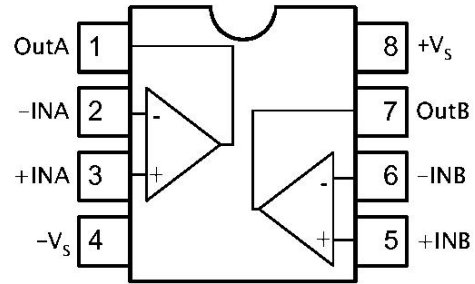
Small-Outline (D), Small-Outline Transistor(SOT23 DBV, SC-70 DCK), and Thin Shrink Small-Outline (PW) Packages description.



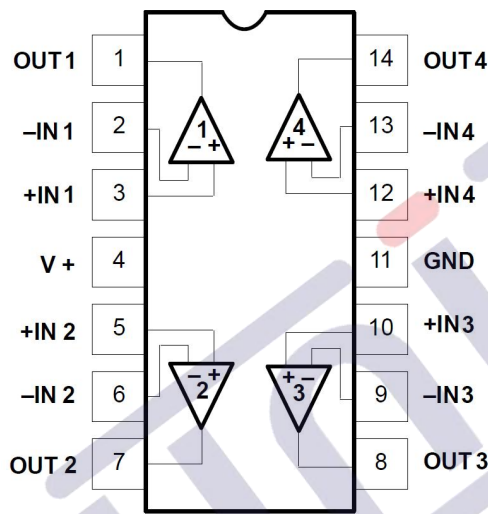
**Block Diagram and Pin Configuration**



LMV321(SOT23-5)



LMV358(SOP8/TSSOP8)



LMV324(SOP14/TSSOP14)

**Symbol(each qmplifier)**

**AVAILABLE OPTIONS**

T <sub>A</sub>	Package Type	Packaged Devices		
		Single	Dual	Quadruple
-40°C to 85°C	SOT23-5	LMV321	---	---
	SOP8 TSSOP8	---	LMV358	---
	SOP14 TSSOP14	---	---	LMV324

The D package is available taped and reeled. Add the suffix R to the device type (e.g..LMV324). The DCK, DBV, and PW packages are only available left-end taped and reeled.

## 1.版本记录

DATE	REV.	DESCRIPTION
2018/04/19	1.0	First Release
2021/12/11	1.1	Layout adjustment

## 2.免责声明

浙江宇力微新能源科技有限公司保留对本文档的更改和解释权力，不另行通知！客户在下单前应获取我司最新版本资料，并验证相关信息是否最新和完整。量产方案需使用方自行验证并自担所有批量风险责任。未经我司授权，该文件不得私自复制和修改。产品不断提升，以追求高品质、稳定性强、可靠性高、环保、节能、高效为目标，我司将竭诚为客户提供性价比高的系统开发方案、技术支持等更优秀的服务。

版权所有 浙江宇力微新能源科技有限公司/绍兴宇力半导体有限公司

## 3.联系我们

浙江宇力微新能源科技有限公司

总部地址：绍兴市越城区斗门街道袍渎路25号中节能科创园45幢4/5楼电话：

0575-85087896（研发部）

传真：0575-88125157

E-mail: htw@uni-semic.com

无锡地址：无锡市锡山区先锋中路6号中国电子（无锡）数字芯城1#综合楼503室

电话：0510-85297939

E-mail: zh@uni-semic.com

深圳地址：深圳市宝安区西乡街道南昌社区宝源路泳辉国际商务大厦410

电话：0755-84510976

E-mail: htw@uni-semic.com