

# LM7322MM/NOPB

# Op Amp Dual High Output Current Amplifier R-R I/O $\pm 16$ V/32V 8-Pin VSSOP T/R

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: VSSOP-8

**Product Type:** Amplifier ICs

RoHS: RoHS Compliant/Lead free

**Lifecycle:** Active



Images are for reference only



## **General Description**

The LM732xx devices are rail-to-rail input and output amplifiers with wide operating voltages and high-output currents. The LM732xx family is efficient, achieving  $18\text{-V/}\mu s$  slew rate and 20-MHz unity gain bandwidth while requiring only 1 mA of supply current per op amp. The LM732xx device performance is fully specified for operation at 2.7 V,  $\pm 5 \text{ V}$  and  $\pm 15 \text{ V}$ .

The LM732xx devices are designed to drive unlimited capacitive loads without oscillations. All LM7321x and LM7322x parts are tested at -40°C, 125°C, and 25°C, with modern automatic test equipment. High performance from -40°C to 125°C, detailed specifications, and extensive testing makes them suitable for industrial, automotive, and communications applications.

Greater than rail-to-rail input common-mode voltage range with 50 dB of common-mode rejection across this wide voltage range, allows both high-side and low-side sensing. Most device parameters are insensitive to power supply voltage, and this makes the parts easier to use where supply voltage may vary, such as automotive electrical systems and battery powered equipment. These amplifiers have true rail-to-rail output and can supply a respectable amount of current (15 mA) with minimal head-room from either rail (300 mV) at low distortion (0.05% THD+Noise).

There are several package options for each part. Standard SOIC versions of both parts make upgrading existing designs easy. LM7322x are offered in a space-saving 8-Pin VSSOP package. The LM7321x are offered in small SOT-23 package, which makes it easy to place this part close to sensors for better circuit performance.

### **Key Features**

 $(V_S = \pm 15, T_A = 25^{\circ}C, Typical Values Unless Specified.)$ 

Wide Supply Voltage Range 2.5 V to 32 V

Output Current +65 mA/-100 mA

Gain Bandwidth Product 20 MHz

Slew Rate 18 V/µs

Capacitive Load Tolerance Unlimited

Input Common-Mode Voltage 0.3-V Beyond Rails

Input Voltage Noise 15 nV/√Hz

Input Current Noise 1.3 pA/√Hz

Supply Current/Channel 1.1 mA

Distortion THD+Noise -86 dB

Temperature Range -40°C to 125°C

Tested at –40°C, 25°C and 125°C at 2.7 V,  $\pm 5$  V,  $\pm 15$  V.

LM732xx are Automotive Grade Products that are AEC-Q100 Grade 1 Qualified.

#### **Recommended For You**

LM311MX LMV7219M5 LM348D

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

SOP8 SOT23-5 SOP-14

LM224N LM239J LMV331M5

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

DIP14 CDIP14 SOT23-5

LM393ADR LM293DR LM293D

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

SOP8 SOP8 SOP8

LMV824MIX LMV358M LMV321M5

Texas Instruments, Inc Texas Instruments, Inc Texas Instruments, Inc

TSSOP SOP8 SOT23-5

LM741H

Texas Instruments, Inc

CAN8

LM193AH

Texas Instruments, Inc

CAN8

LM111H/NOPB

Texas Instruments, Inc

CAN8