

Evaluation Board for the $\pm 250^{\circ}$ /sec, Single Chip Rate Gyro

EVAL-ADXRS612

GENERAL DESCRIPTION

The EVAL-ADXRS612 is a simple evaluation board that allows quick evaluation of the performance of the ADXRS612 $\pm 250^{\circ}$ /sec yaw rate gyro. No additional external components are required for operation. The EVAL-ADXRS612 has a 20-lead, dual in-line (0.3-inch width \times 0.1-inch pin spacing) interface that allows easy prototyping of products without BGA soldering.

CIRCUIT DESCRIPTION

The schematic of the EVAL-ADXRS612 is shown in Figure 1. The numbers that appear in squares correspond to the pins on the evaluation board. It is identical to the suggested application shown in the ADXRS612 data sheet.

The analog and power grounds (AGND and PGND), which have separate ground planes, are joined at one point. The user may cut this trace if separate ground schemes are desired.

Note that the analog supply voltage and charge pump supply voltage (AV_{CC} and V_{DD}) are not connected on the EVAL-ADXRS612 and that users may connect these as appropriate to their application.

The parts layout of the EVAL-ADXRS612 is shown in Figure 2 and the parts list for the EVAL-ADXRS612 is shown in Table 1. As delivered, the EVAL-ADXRS612 is set to 10 Hz bandwidth ($C_{OUT} = 100$ nF). The user may add an external capacitor to further reduce the bandwidth and improve the noise floor.

SPECIAL NOTES ON HANDLING

Note that the EVAL-ADXRS612 is not reverse polarity protected. Reversing the power supply or applying inappropriate voltages to any pin (outside the Absolute Maximum Ratings listed in the ADXRS612 data sheet) may damage the EVAL-ADXRS612.

SCHEMATICS AND PARTS LIST/LAYOUT

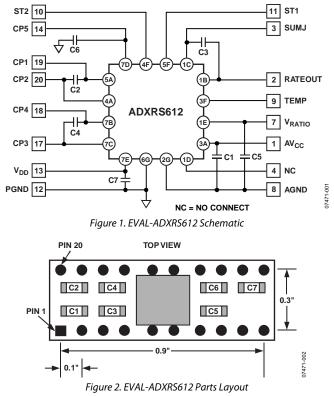


Table 1. EVAL-ADXRS612 Parts List

Component	Value (nF)	
C1	100	
C2	22	
C3	100	
C4	22	
C5	100	
C6	100	
C7	100	

Rev. 0

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EVAL-ADXRS612

ORDERING GUIDE

Model

Package Description
Evaluation Board

EVAL-ADXRS612Z¹

 1 Z = RoHS Compliant Part.

ESD CAUTION



ESD (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

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