

# Evaluation Board for the ±300°/sec, Single Chip Rate Gyro

# **EVAL-ADXRS610**

### **GENERAL DESCRIPTION**

The EVAL-ADXRS610 is a simple evaluation board that allows quick evaluation of the performance of the ADXRS610  $\pm 300^{\circ}$ /sec yaw rate gyro. No additional external components are required for operation. The EVAL-ADXRS610 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-ADXRS610 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 ADXRS610 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 $_{\rm CC}$  and V $_{\rm DD}$ ) are not connected on the EVAL-ADXRS610 and that users may connect these as appropriate to their application.

The parts layout of the EVAL-ADXRS610 is shown in Figure 2 and the parts list for the EVAL-ADXRS610 is shown in Table 1. As delivered, the EVAL-ADXRS610 is set to 10 Hz bandwidth ( $C_{\text{OUT}} = 100 \text{ nF}$ ). 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-ADXRS610 is not reverse polarity protected. Reversing the power supply or applying inappropriate voltages to any pin (outside the Absolute Maximum Ratings listed in the ADXRS610 data sheet) may damage the EVAL-ADXRS610.

## **SCHEMATICS AND PARTS LIST/LAYOUT**

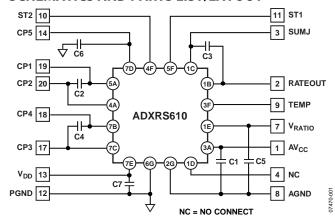


Figure 1. EVAL-ADXRS610 Schematic

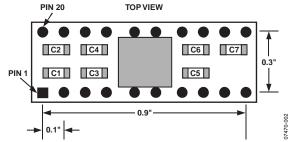


Figure 2. EVAL-ADXRS610 Parts Layout

#### Table 1. EVAL-ADXRS610 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-ADXRS610**

### **ORDERING GUIDE**

Model	Package Description
EVAL-ADXRS610Z <sup>1</sup>	Evaluation Board

<sup>&</sup>lt;sup>1</sup> 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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