

# ±75°/s Single Chip Rate Gyro Evaluation Board

## ADXRS401EB

#### **GENERAL DESCRIPTION**

The ADXRS401EB is a simple evaluation board that allows the user to quickly evaluate the performance of the ADXRS401ABG yaw rate gyro. No additional external components are required for operation. The ADXRS401EB has a 20-lead dual in-line (0.3-inch width by 0.1-inch pin spacing) interface that allows the user to easily prototype products without having to deal with BGA soldering. The 0.4 square inch outline of the ADXRS401EB is still among the smallest gyros available today.

### **CIRCUIT DESCRIPTION**

The schematic of the ADXRS401EB is shown in Figure 1. It is identical to the suggested application shown in the ADXRS401ABG data sheet.

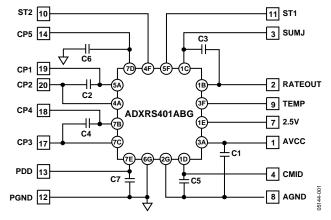
The analog and power grounds (AGND and PGND) have separate ground planes and are joined at one point. The user may cut this trace if separate ground schemes are desired.

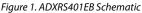
Note that the analog supply voltage and charge pump supply voltage (AVCC and PDD) are not connected on the ADXRS401EB and that users may connect these as appropriate to their application.

The parts layout of the ADXRS401EB is shown in Figure 2 and the parts list for the ADXRS401EB is shown in Table 1. As delivered, the ADXRS401EB is set to 20 Hz bandwidth ( $C_{OUT} = 47$  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 ADXRS401EB is not reverse polarity protected. Reversing the power supply or applying inappropriate voltages to any pin (outside the Absolute Maximum Ratings in the ADXRS401 data sheet) may damage the ADXRS401EB.





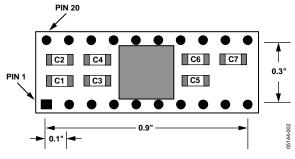


Figure 2. ADXRS401EB Parts Layout

#### Table 1. ADXRS401EB Parts List

Component	Value (nF)	
C1	100	
C2	47	
C3	22	
C4	22	
C5	100	
C6	47	
C7	100	

#### **ORDERING GUIDE**

Model	Package Description
ADXRS401EB	Evaluation Board

#### Rev. 0

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