

Accelerometer Triple $\pm 10.24g/\pm 20.48g/\pm 40.96g$ 2.5V 73.6mV/g to 86.4mV/g/36.8mV/g to 43.2mV/g/18.4mV/g to 21.6mV/g 14-Pin CLLCC Tray

Manufacturers	Analog Devices, Inc
Package/Case	LCC-14
Product Type	Motion & Position Sensors
RoHS	
Lifecycle	

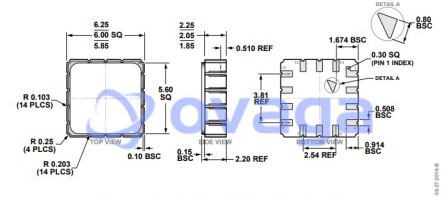


Figure 77. 14-Terminal Ceramic Leadless Chip Carrier (LCC) (E-14-1)
Dimensions shown in millimeters

Images are for reference only

Please submit RFQ for ADXL357BEZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The analog output ADXL356 and the digital output ADXL357 are low noise density, low 0 g offset drift, low power, 3-axis accelerometers with selectable measurement ranges. The ADXL356B supports the ± 10 g and ± 20 g ranges, the ADXL356C supports the ± 10 g and ± 40 g ranges, and the ADXL357 supports the ± 10.24 g, ± 20.48 g, and ± 40.96 g ranges.

The ADXL356/ADXL357 offer industry leading noise, minimal offset drift over temperature, and long-term stability, enabling precision applications with minimal calibration.

Low drift, low noise, and low power ADXL357 enables accurate tilt measurement in an environment with high vibration, such as airborne IMUs. The low noise of the ADXL356 over higher frequencies is ideal for wireless condition monitoring.

The ADXL357 multifunction pin names may be referenced by their relevant function only for either the SPI or I2C interface.

Applications

Inertial measurement units (IMUs)/altitude and heading reference systems (AHRSs)

Platform stabilization systems

Structural health monitoring

Seismic imaging

Tilt sensing

Robotics

Condition monitoring

Features

Hermetic package offers excellent long-term stability

0 g offset vs. temperature (all axes): 0.75 mg/°C maximum

Ultralow noise density (all axes): 80 $\mu\text{g}/\sqrt{\text{Hz}}$

Low power, VSUPPLY (LDO enabled)

Measurement mode: 200 μA

Standby mode: 21 μA

Digital output features

Digital serial peripheral interface (SPI)/I2C interfaces

20-bit analog-to-digital converter (ADC)

Data interpolation routine for synchronous sampling

Programmable high- and low-pass digital filters

Integrated temperature sensor

Voltage range options

VSUPPLY with internal regulators: 2.25 V to 3.6 V

VIP8ANA, VIP8DIG with internal low dropout regulator (LDO) bypassed:
1.8 V typical $\pm 10\%$

Operating temperature range: -40°C to $+125^\circ\text{C}$

14-terminal, 6 mm \times 6 mm \times 2.1 mm, LCC package, 0.26 grams

Application

Inertial measurement units (IMUs)/altitude and heading reference systems (AHRSs)

Platform stabilization systems

Structural health monitoring

Seismic imaging

Tilt sensing

Robotics

Condition monitoring

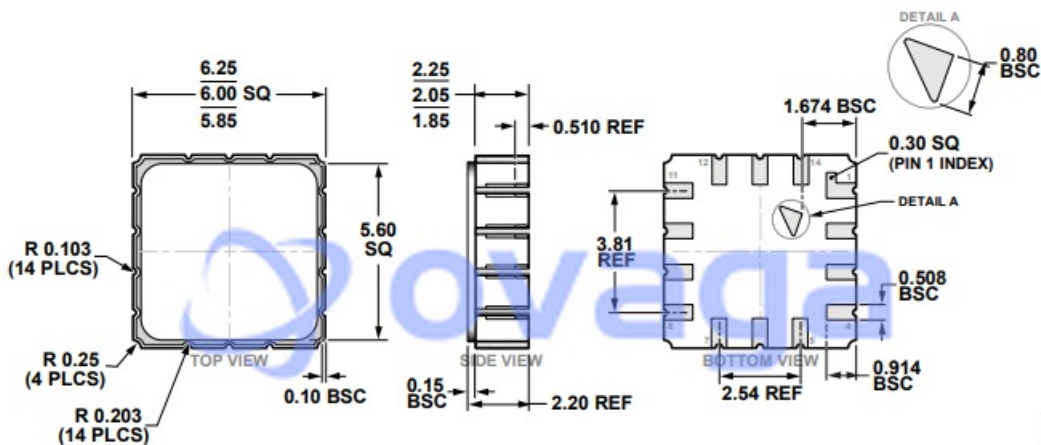


Figure 77. 14-Terminal Ceramic Leadless Chip Carrier [LCC]

(E-14-1)

Dimensions shown in millimeters

05-27-2016-B

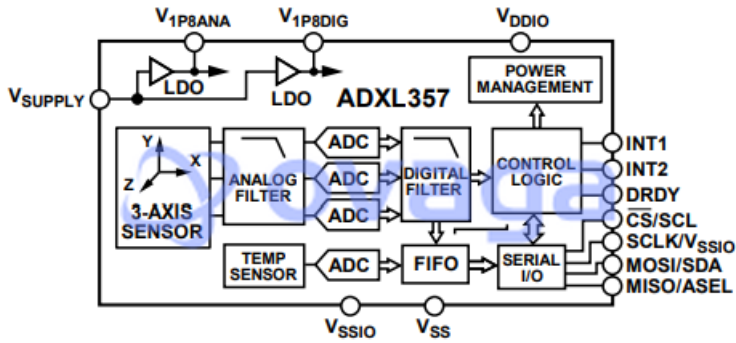
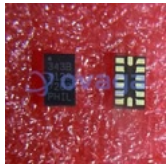


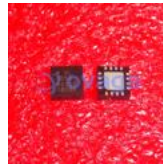
Figure 2. ADXL357

Related Products



[ADXL343BCCZ](#)

Analog Devices, Inc
LGA-14



[ADXL335BCPZ-RL7](#)

Analog Devices, Inc
LFCSP16



[ADXL103CE](#)

Analog Devices, Inc
CLCC-8



[ADIS16488BMLZ](#)

Analog Devices, Inc
MSM24



[ADXRS642BBGZ](#)

Analog Devices, Inc
CBGA-32



[ADXL346ACCZ-RL7](#)

Analog Devices, Inc
LGA16



[ADXL345BCCZ-RL7](#)

Analog Devices, Inc
LGA-14



[ADXL325BCPZ-RL7](#)

Analog Devices, Inc
16-LFCSP