Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

# High Performance, Dual-Axis Digital Output Accelerometer

Data Sheet **ADXL288**

## FEATURES

- **±120 *g* full-scale range**
  - **12-bit resolution at 62.5 m*g*/LSB**
  - **512 kHz data interpolation rate**
- **Sensor frequency response down to dc**
- **On-demand electromechanical self-test**
- **Fully differential circuitry for high resistance to EMI/RFI**
- **Independent x- and y-axis sense structures for robust FMEA performance**
- **Independent x- and y-axis arming thresholds**
- **Low noise: 1 LSB rms typical**
- **Qualified for automotive applications**
- **Temperature range: −40°C to +105°C**
- **3.3 V and 5 V operation**

## APPLICATIONS

- **Impact sensing**
- **Shock detection**

## GENERAL DESCRIPTION

The ADXL288 is a dual-axis accelerometer with signal-conditioned outputs available via a 16-bit SPI interface. Identical, independent X and Y sense structures are implemented to create a high performance, high integrity acceleration sensing system.

The X and Y acceleration channels have a nominal full-scale range of ±120 *g* and a bandwidth of 408 Hz. The acceleration data is provided as a 12-bit, twos complement word with a resolution of 62.5 mg/LSB.

The ADXL288 is available in a 16-lead, narrow-body SOIC package with an exposed pad. The ADXL288 can operate at 3.3 V and 5 V and is specified for operation from −40°C to +105°C.

## FUNCTIONAL BLOCK DIAGRAM

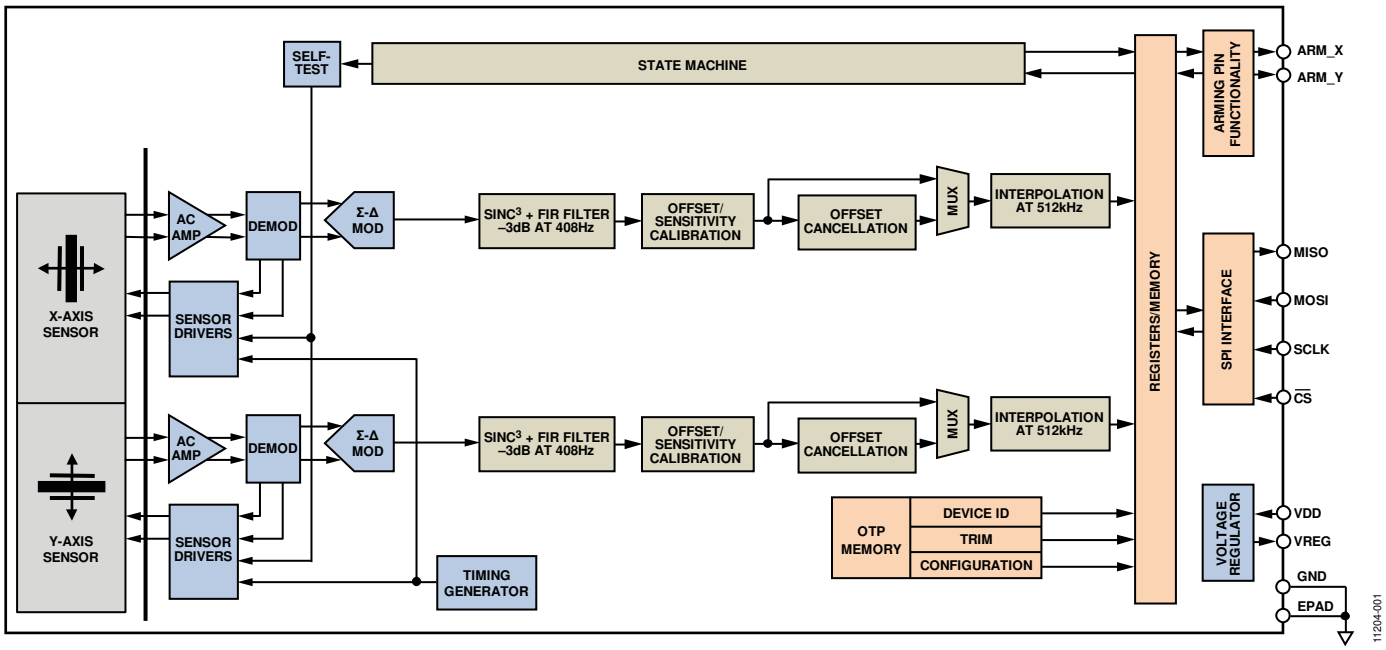


*Figure 1.*

*For more information about the ADXL288, please contact the Analog Devices, Inc., Customer Interaction Center at http://www.analog.com/en/content/technical_support_page/fca.html to connect with a technical support specialist.*

**Rev. Sp0** **Document Feedback**



**One Technology Way, P.O. Box 9106, Norwood, MA 02062-9106, U.S.A.**
**Tel: 781.329.4700** 
**Technical Support** **www.analog.com**

# NOTES


D11204F-0-1/13(Sp0)