Variable threshold Hall proximity Sensor with PNP/NPN

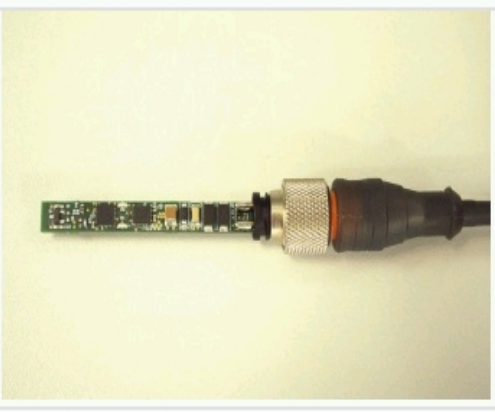
(ACTIVE) TIDA-00286

Description & Features | Technical Documents | Support & Community | Order Now

View the Important Notice for TI Designs covering authorized use, intellectual property matters and disclaimers.

Key Document

- Variable Threshold Hall Proximity Sensor With PNP or NPN (TIDA-00286)
  (PDF 4426 KB)
  13 Oct 2014 22 views
- View All Technical Documents (7)



TIDA-00286 Board Photo

Description

This TIDesign offers a rapid prototyping platform for magnetic-field proximity sensor with PNP or NPN output. Thanks to its modular design, different options can be tried from magnetic threshold configurations, default to normally open or default to normally closed as well as PNP or NPN output stage. TIDA-00286 comes by default with a integrated Hall-sensor, a switch and LED for status indications. All this fitting in a 6mm wide PCB compatible with the industry standard M12 connector.

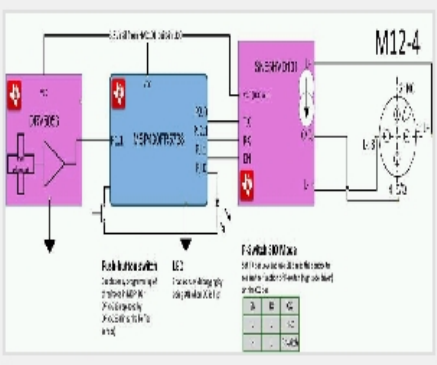
Fully assembled board (shown above) developed for testing and performance validation only, not available for sale.

Features

- Magnetic field proximity sensor
- Switched output (PNP/NPN)
- Configurable threshold (via on-board button)
- MSP430 based solution for easy IO-Link upgrade (see TIDA-00188)

Schematic/Block Diagram

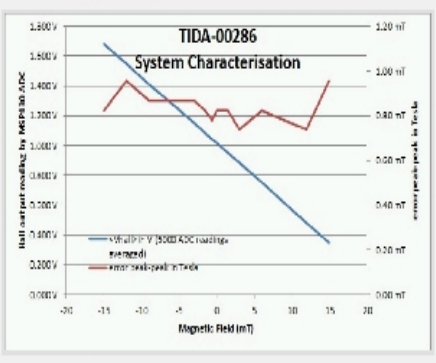
Quickly understand overall system functionality.



Download Schematic

Test Data

Get results faster with test and simulation data that's been verified.



Download Test Data

Design Files

Download ready-to-use system files to speed your design process. Get Viewer.

Download Design Files

Bill of Materials (BOM)

Find the complete list of components in this reference design.

Download BOM

TI Devices (3)

Order samples, get tools and find more information on the TI products in this reference design.

Part Number	Name	Product Family	Sample & Buy	Design Kits & Evaluation Modules
DRV5053	2.5 to 38 V Analog Bipolar Hall Effect Sensor	Hall Effect Sensors	Sample & Buy	Not Available
MSP430FR5738	MSP430FR573x MSP430FR572x Mixed Signal Microcontroller	Ultra-low Power	Sample & Buy	View Design Kits & Evaluation Modules
SN65HVD101	IO-LINK PHY for Device Nodes	Other Interface	Sample & Buy	View Design Kits & Evaluation Modules

CAD/CAE symbols

Part #	Package | Pins	CAD File (.bxl)	STEP Model (.stp)
MSP430FR5738	TSSOP (PW) | 28	Download	Download

Texas Instruments and Accelerated Designs Inc. have collaborated together to provide TI customers with schematic symbols and PCB layout footprints for TI products.

Step 1: Download and install the Ultra Librarian software ZIP: 62MB

Step 2: Download the Symbol and Footprint .bxl file.

- read more -

Technical Documents

User Guides (1)

Title	Abstract	Type	Size (KB)	Date	Views	TI Recommends
Variable Threshold Hall Proximity Sensor With PNP or NPN (TIDA-00286)		PDF	4426	13 Oct 2014	22	✓

Design Files (6)

Title	Abstract	Type	Size (KB)	Date	Views
TIDA-00286 Gerber		ZIP	169	16 Oct 2014	1 1
TIDA-00286 CAD Files		ZIP	474	16 Oct 2014	2
TIDA-00286 PCB		PDF	594	16 Oct 2014	1 1
TIDA-00286 Assembly Drawing		PDF	104	16 Oct 2014	1 1
TIDA-00286 BOM		PDF	88	16 Oct 2014	3
TIDA-00286 Schematic and Block Diagram		PDF	585	16 Oct 2014	13

Related Tools & Software

Software (1)

TIDA-00286 Firmware
(ZIP, 102 KB) 4 views, 16 Oct 2014

Support & Community

TI E2E™ community

TI E2E™ Community

As a member of my.TI you can join the TI E2E™ Community where you can ask questions, share ideas and collaborate with fellow engineers and TI experts

Contents are provided "AS IS" by the respective TI and Community contributors and do not constitute TI specifications. See Terms of use.

Engage in the Community

- Amplifiers
- Broadband RF/IF & Digital Radio
- Clocks & Timers
- Data Converters
- DLP® & MEMS
- Interface
- Logic
- Power Management
- Wireless Connectivity

Wikis

Visit the TI Wiki

Other Support

- TI E2E Community
- Contact Technical Support

Your History

Products You Recently Viewed

- PMP9185.2
- PMP9517
- TIDA-00128
- TIDM-THREEPHASE-BLDC-LC-INST
- PMP1182

TI is a global semiconductor design and manufacturing company. Innovate with 100,000+ analog ICs and embedded processors, along with software, tools and the industry's largest sales/support staff.

© Copyright 1995-2014 Texas Instruments Incorporated. All rights reserved.
Trademarks | Privacy policy | Terms of use | Terms of sale