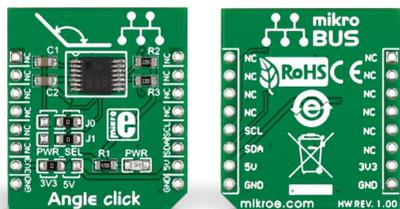# Angle click

1. Introduction

Angle click carries an **A1332** contactless magnetic angle position sensor. The sensing circuitry relies on the Hall Effect to detect the vector of a nearby magnetic field in a 360º two-dimensional plane parallel to the surface of the chip. The device also includes EEPROM for storing calibration parameters. Angle click communicates with the target MCU through the mikroBUS™ I2C interface (SCL, SDA). Designed to use either a 3.3V or a 5V power supply.

2. Soldering the headers

Before using your click board™, make sure to solder 1x8 male headers to both left and right side of the board. Two 1x8 male headers are included with the board in the package.
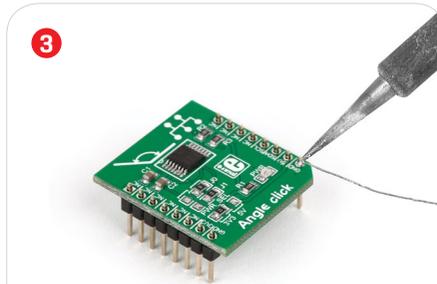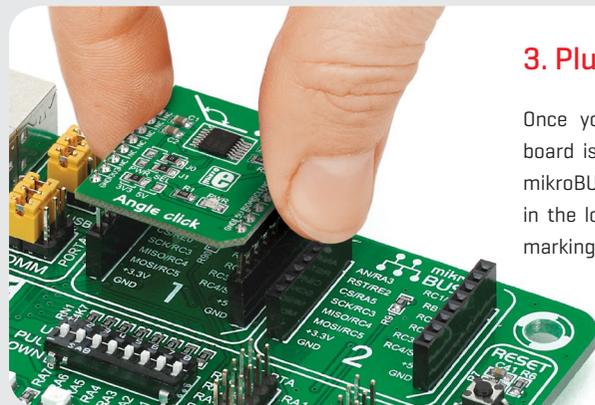
❶
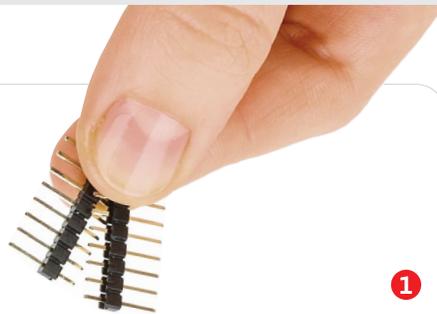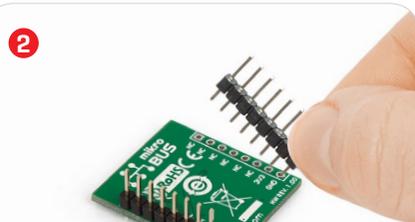
❷ Turn the board upside down so that the bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.

❸ Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.

3. Plugging the board in

Once you have soldered the headers your board is ready to be placed into the desired mikroBUS™ socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS™ socket. If all the pins are aligned correctly, push the board all the way into the socket.
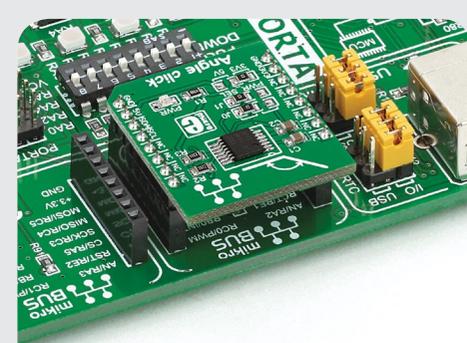
4. Essential features

Angle click is intended for use with a rotating bipolar magnetic target. The advanced linearization, offset and gain adjustment options enable a wide variety of applications. Those include setting up a digital potentiometer, sensing motor rotation, or in automotive applications for power steering and throttle sensing. With a refresh rate of 32 micro seconds and a 12-bit resolution, the A1332 delivers precise angle measurements. Furthermore, you can configure the output dynamic range, output scaling and filtering to adjust it for specific use.
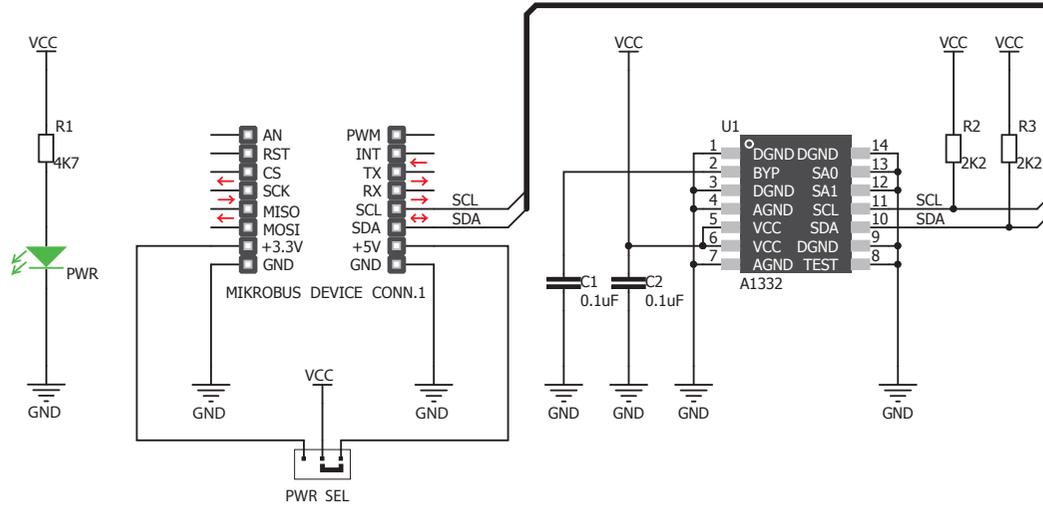
click
BOARDS™
www.mikroe.com

5. Schematic

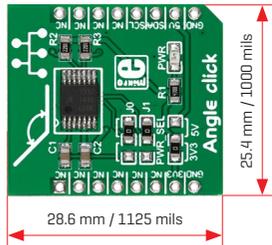## 8. Code examples

Once you have done all the necessary preparations, it's time to get your click board™ up and running. We have provided examples for mikroC™, mikroBasic™ and mikroPascal™ compilers on our **Libstock** website. Just download them and you are ready to start.

LIBSTOCK.com

9. Support

MikroElektronika offers **free tech support (www.mikroe.com/support)** until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!

MikroElektronika
DEVELOPMENT TOOLS ▮ COMPILERS ▮ BOOKS

6. Dimensions

	mm	mils
LENGTH	28.6	1125
WIDTH	25.4	1000
HEIGHT*	3.3	130

* without headers

7. SMD jumper
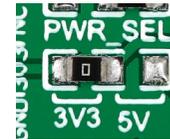
Angle click features an SMD jumper (zero ohm resistor) that let's you switch between a 3.3V or a 5V power supply.

10. Disclaimer

MikroElektronika assumes no responsibility or liability for any errors or inaccuracies that may appear in the present document. Specification and information contained in the present schematic are subject to change at any time without notice.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Magnetic Sensor Development Tools *category:*

Click to view products by MikroElektronika *manufacturer:*

Other Similar products are found below :

AS5134 AB MMC5633NJL-B MIKROE-1647 MIKROE-1646 EVAL-CN0332-PMDZ AS5510-SO_EK_AB AS5510-WL_EK_DB
ADA4571R-EBZ AS5170A-SO_EK_AB 4366 AS5013-QF_EK_AB AS5040 DB V2 AS5047D-TS_EK_AB AS5048A-EK-AB-STM1.1
AS5048-TS_EK_DB AS5050A-QF_EK_AB AS5132 AB AS5132 DB AS5132-PB AS5145B-EK-AB-STM1.0 AS5147P-TS_EK_AB
AS5162-EK-AB AS5172B-TS_EK_AB AS5247-MF_EK_AB AS5247-MF_EK_SB AS5247U-TQ_EK_AB AS5247U-TQ_EK_SB AS5262-
MF_EK_AB AS5306-TS_EK_AB AS5311-TS_EK_AB AS5510-SOIC8-AB AS5600-SO_EK_AB AS5600-SO_EK_ST AS5601-SO_EK_ST
 AS5601-SO_RD_ST AS5X47U-TS_EK_AB SD4Y-EK-XX USB I&P BOX EVAL-CN0323-SDPZ EVAL-CN0368-SDPZ DFR0033
S2GO3DSENSETLV493DTOBO1 S2GOCURSENSETLI4970TOBO1 TLE5012BE5000MS2GOTOBO1 TLE5014PROGKITTOBO1
EVB90316-DC EVB90316-GO EVB90333-DC EVB90393 EVB922xx