

# Arduino Klonu A-Star 328PB Micro 5V 16MHz

## **Documentation and other information**



Pololu A-Star 328PB User's Guide (Printable PDF)

User's manual for the Pololu A-Star 328PB.

## File downloads

<u>ATmega328PB datasheet</u> (4MB pdf)

<u>Atmel Application Note AT15007: Differences between ATmega328/P and ATmega328PB (283k pdf)</u>

Application note describing differences between ATmega328 variants and the ATmega328PB.

Pinout diagram of the A-Star 328PB Micro (579k pdf)
Schematic diagram of the A-Star 328PB Micro (132k pdf)
Dimension diagram of the A-Star 328PB Micro (199k pdf)
3D model of the A-Star 328PB Micro (5MB step)
Drill guide for the A-Star 328PB Micro (50k dxf)

This DXF drawing shows the locations of all of the board's holes.

## **Recommended links**

**Arduino Software** 

Arduino integrated development environment (IDE) software

## **ATmega328PB documentation**

Microchip's product page for the ATmega328PB AVR microcontroller, with links to its most up-to-date datasheet, application notes, and other resources.

#### A-Star repository on GitHub

This repository contains Arduino add-on files, Windows drivers, and bootloaders for the A-Star 328PB, A-Star 32U4, and the rest of our 32U4 family of boards.

#### **AVR Libc Home Page**

The web site for AVR Libc, which is the standard library of functions that you can use with C and C++ on the AVR.

#### Pololu A-Star and Orangutan Forum Section

The A-Star and Orangutan discussion section of the Pololu Robotics Forum.

#### **AVRDUDE**

AVRDUDE is a cross-platform command-line utility for programming the flash memory on AVR microcontrollers.

#### **AVR Freaks**

AVR community with forums, projects, and AVR news.

#### **Atmel Studio 7**

Free integrated development environment (IDE) for AVRs.

#### **WinAVR**

A free, open-source suite of development tools for the AVR family of microcontrollers, including the GNU GCC compiler for C/C++.

#### LPS Arduino library

This is a library for the <u>Arduino</u> that interfaces with our <u>LPS25H</u> and <u>LPS331AP</u> <u>pressure/altitude sensor carriers</u> as well as the pressure sensor on the <u>AltIMU-10 v3</u> (it also works with the original <u>AltIMU-10</u>). It makes it simple to read the raw pressure data from the sensor, and it provides functions to help calculate altitude based on the measured pressure.

#### Arduino library for addressable RGB LED strips from Pololu

This library allows you to control an arbitrary number of <u>SK6812/WS281x-Based</u> <u>Addressable RGB LEDs</u> from an Arduino.

#### LSM303 Arduino library

This is a library for the <u>Arduino</u> that interfaces with our <u>LSM303D</u>, <u>LSM303DLHC</u>, and <u>LSM303DLM 3D</u> compass and accelerometer carriers as well as the compass and accelerometer ICs on the <u>MinIMU-9 v3</u> and <u>AltIMU-10 v3</u> (it also works with older versions of those boards, some of which used the LSM303DLH and LSM303DLHC). It makes it simple to configure the device and read the raw accelerometer and magnetometer data, and it has a function for computing the tilt-compensated heading for those looking to use the LSM303 as a tilt-compensated compass.

#### **L3G Arduino library**

This is a library for the <u>Arduino</u> that interfaces with our <u>L3GD20H</u> and <u>L3GD20 3-axis</u> <u>gyro carriers</u> as well as the gyros on the <u>MinIMU-9 v3</u> and <u>AltIMU-10 v3</u> (it also works with older versions of those boards, some of which used the L3G4200D and the L3GD20). It makes it simple to configure the device and read the raw gyro data.

### Arduino Library for the Pololu QTR Reflectance Sensors

This guide explains how to use the QTRSensors library to read Pololu QTR reflectance sensors and QTR sensor arrays with Arduinos and Arduino-compatible devices like the Pololu Orangutan robot controllers.