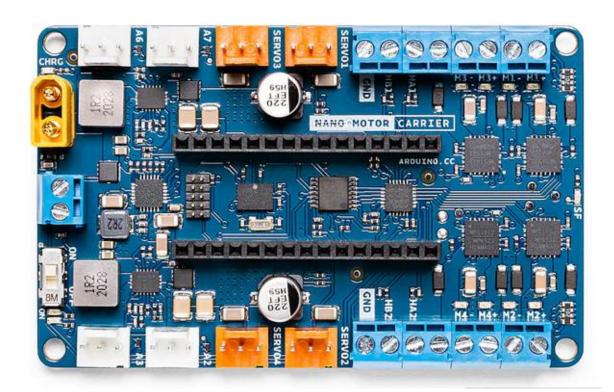


Arduino Nano Motor Carrier

Code: ABX00041 / Barcode: 7630049202245



Overview

Nano Motor Carrier is the perfect add-on for the Nano 33 IoT board as it works to extend and power up its functionality.

Designed to facilitate motor control, Nano Motor Carrier takes care of the electronics required to control motors, allowing students to focus on prototyping and building their projects. It can also be used to connect other actuators and sensors via a series of 3-pin male headers. The board features are: on board 9 axis accelerometer, gyroscope and magnetometer. It includes a battery charger for single cell Li-ion batteries and it contains 2 ports for quadrature encoder counting.

To use the carrier, simply connect it to a Nano 33 board and attach the motors you need for your project. Once connected, attach the USB cable to the Nano 33 IoT. Download Arduino Motor Carrier library from the library manager and you're all set up to start programming and controlling your motors using the motor drivers.

When working with motors, you need an external power source to feed the motor drivers and power the motors. You can do this by connecting a 1 cell Li-Ion battery to the battery connector or by using an external power source.

Tech specs

Microcontroller	ATSAMD11 (Arm Cortex-M0+ @48 Mhz)
Motor Drivers (x4)	MP6522
Max Input voltage (power terminals)	4V (1S Li-lon Battery)
Max output current per motor driver	500 mA
Motor driver output voltage	12V
Over Temperature shutdown protection (for DC motor drivers)	Yes
Battery charging	Yes
Max battery charging current	500mA (configurable)
Power terminals (connectors)	XT-30 and 2POS terminal block
Servo connector	4 terminals
Encoder inputs	2 ports
DC motor control	4 ports
3V digital/analog sensor input/output	4 ports
IMU	BNO055 9axis Acc/Gyr/Mag