



WHY CHOOSE US? ([HTTP://JSUMO.COM/WHY-CHOOSE-US/](http://jsumo.com/why-choose-us/)) | SHIPMENT AND INFORMATION ([HTTP://JSUMO.COM/SHIPMENT-AND-INFORMATION/](http://jsumo.com/shipment-and-information/)) | CART ([HTTP://JSUMO.COM/CART](http://jsumo.com/cart)) | CHECKOUT ([HTTP://JS](http://js))

JSUMO
ULTIMATE PARTS AND
ROBOT SUMO BLOG
(<http://jsumo.com/>)



For robot geeks! | CONTACT US (<http://jsumo.com/contact>)



JSumo (<http://jsumo.com>) » Products (<http://jsumo.com/shop/>) » Electronics (<http://jsumo.com/product-category/electronics/>) » Boards (<http://jsumo.com/product-category/electronics/boards/>) » Controllers (<http://jsumo.com/product-category/electronics/boards/controllers/>) » Genesis Arduino Robot Controller Board (With Arduino Nano) (<http://jsumo.com/shop/voltran5-mini-5v-smtps-regulator/>) » (<http://jsumo.com/shop/male-male-flat-dupont-cable>)

Genesis Arduino Robot Controller Board (With Arduino Nano)

PREMIUM ROBOT PARTS

What is New?
(<http://jsumo.com/new-products-from-jsumo/>)

Discounts! (<http://jsumo.com/sale-products-big-discounts-here/>)

Batteries & Chargers
(<http://jsumo.com/product-category/batteries-chargers/>)

Electronics
(<http://jsumo.com/product-category/electronics/>)

Kits (<http://jsumo.com/product-category/kits/>)

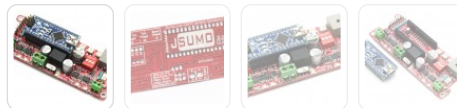
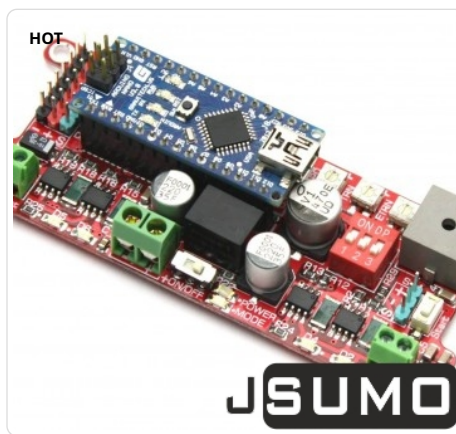
Magnets (<http://jsumo.com/product-category/magnets/>)

Mechanical
(<http://jsumo.com/product-category/mechanical/>)

Sensors (<http://jsumo.com/product-category/sensors/>)

Motors (<http://jsumo.com/product-category/motors/>)

Wheels (<http://jsumo.com/product-category/wheels/>)



Genesis Arduino Robot Controller Board (With Arduino Nano)

\$39.95–\$44.95

Genesis is the most powerful **all in one board** we've ever built for all types of robots. Just check out the features and you will find us right.



(<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/jsumo-info.png>)

Nano Included?

Clear

Who uses that product? 24 Happy customers

\$44.95

18 in stock

1



Add to cart

SKU: GENESIS

Categories: Boards (<http://jsumo.com/product-category/electronics/boards/>), Controllers (<http://jsumo.com/product-category/electronics/boards/controllers/>), Electronics (<http://jsumo.com/product-category/electronics/>), Motor Drivers (<http://jsumo.com/product-category/electronics/boards/motor-drivers/>)

Tag: mini sumo robot (<http://jsumo.com/product-tag/mini-sumo-robot/>)



(<http://jsumo.com/spring-photo-competition/>)

FREE SHIPPING
On Orders Over 199\$



Worldwide Shipping from JSUMO!



International Shipment Price: 9,95\$

(<http://jsumo.com/shipment-and-information/>)



Description

Additional Information

Reviews (2)

How Will We Ship to You?

Product Description

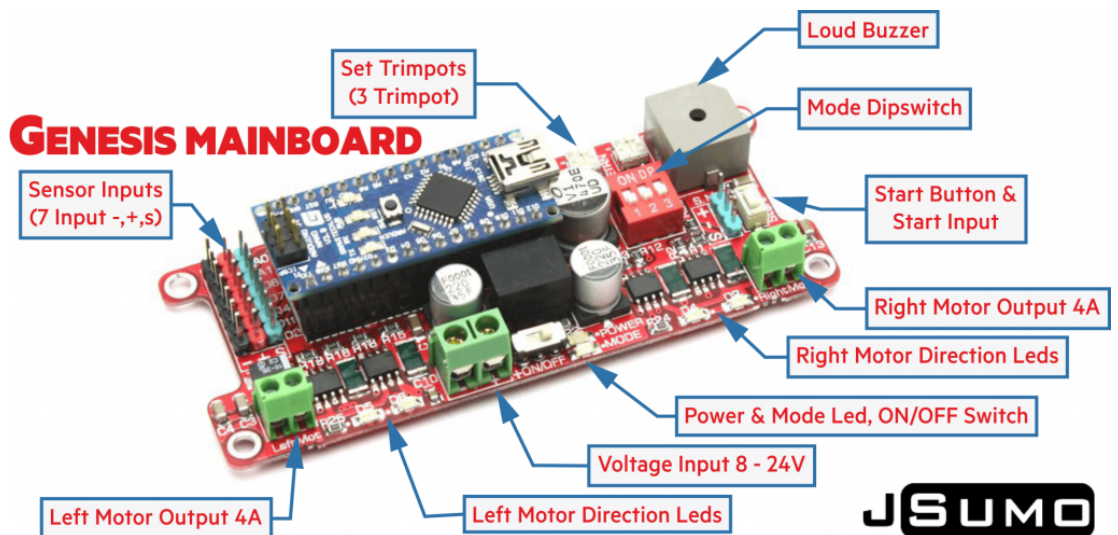
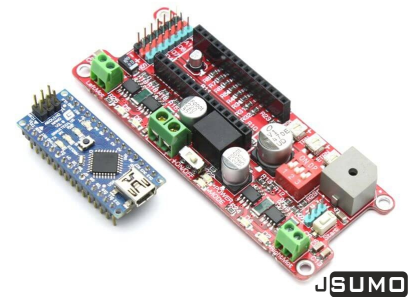
Our flagship board Genesis, includes Arduino Nano, powerful 4A motor drivers, 0,5 Ampere 5V regulator and complementary circuits for your robot project.

Technical Specs:

- Vin: 8V – 24V (Max 28V)
- Current at Idle: 5ma (All Board)
- Motor Currents: Continuous 4 Ampere x2, Bursts 6 Ampere x2.
- 5V Regulator Output Current: Maximum 1 Ampere
- Built-in temperature, current and overvoltage shutdown circuits at motor controller ICs.
- Built-in short circuit protection at power lines.
- Just 98mm x 38mm x 18mm sized.
- 4 Mount holes have 3,2 mm diameter, suitable for M3 sized screws.
- Board weight is 33 grams.

Main Purposes of Genesis

- Mini sumo robots (As usual)
- Line Following Robots
- Small – Middle size robots
- Arduino Uno based robots (Arduino Uno & Nano models use same microcontroller)



(<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/genisis-arduino-robot-connections-1024x492.png>)

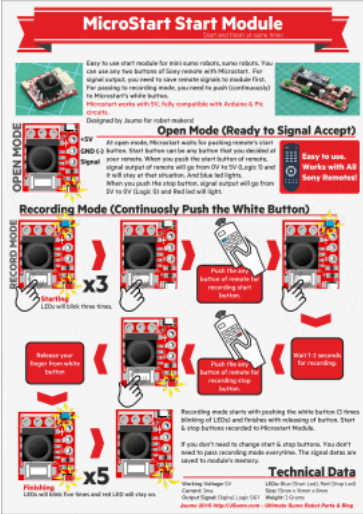
If you want to use Arduino Nano at your robot project (Minisumo, line follower etc...). This board must be your first choice.
Small size and high power in your hand.

With high-quality components and strong infrastructure; **Genesis** will be your favorite board.

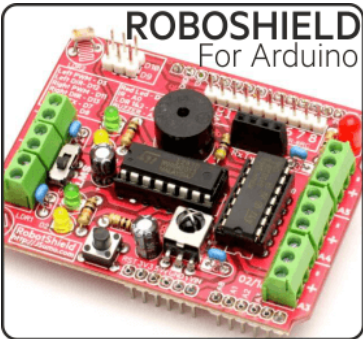
Here how we connected Arduino Nano's pins to mainboard. It will help you while you are programming. (By the way, we have ready made program)

GENESIS ARDUINO NANO PIN TABLE

Arduino Pins	Purpose	Arduino Pins	Purpose
D0	Empty	D11	Empty
D1	Empty	D12	Mode Led
D2	Empty	D13	Arduino Nano Built-in Led, Buzzer
D3	Button Input, Start Module Input	A0	Empty
D4	Empty	A1	Empty
D5	Left PWM Channel 1	A2	Mode Switch 3 Input
D6	Left PWM Channel 2	A3	Mode Switch 2 Input
D7	Empty	A4	Mode Switch 1 Input
D8	Empty	A5	Edge Turn A5 Set Trimpot
D9	Right PWM Channel 1	A6	Turn A6 Set Trimpot
D10	Right PWM Channel 2	A7	Speed A7 Set Trimpot



(http://jsumo.com/shop/start-module/)



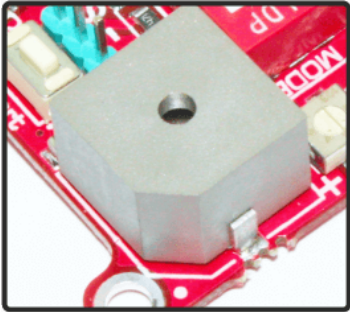
(http://jsumo.com/shop/roboshield-arduino-robot-shield-assembled/)



(http://jsumo.com/product-category/wheels/)

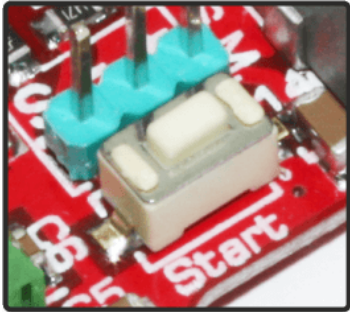
RECENT COMMENTS

- Ramón Hernández G. on Kronos Dc Motor (6V 400 RPM) (http://jsumo.com/shop/kronos-dc-motor-6v-400-rpm-mini-sumo-robot-motor/#comment-2787)
- Ramón Hernández G. on Genesis Arduino Robot Controller Board (With Arduino Nano) (http://jsumo.com/shop/genesis-arduino-robot-controller-board/#comment-2786)
- Ramón Hernández G. on ProFast 12V



Loud Buzzer

We didn't used moderate buzzer at Genesis. We choosed highest quality buzzer for clear & loud sound.



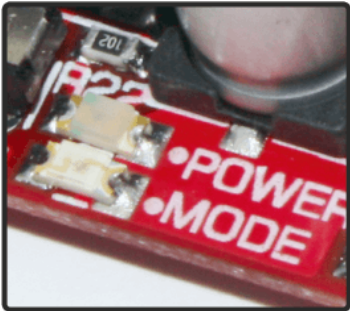
Start Module Button & Input

At the board, it has one start button which is parallel connected to start module input pin. The board is fully compatible with start modules.



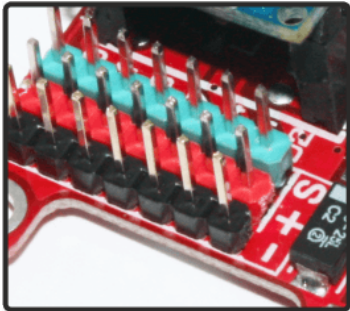
Dipswitch

Genesis Board contains 2×3 pin dipswitch for total 8 starting tactics (for mini sumo robots) Except mini sumo, the dipswitch can be used for any purpose.



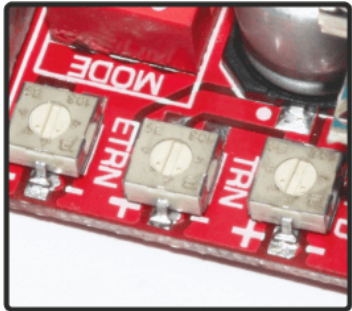
Leds

Genesis contains 4 motor direction leds (2 Right, 2 Left), 1 Power led and 1 Mode Led. With indicator leds you know the



Sensor Inputs

Each sensor input has 3 pins (-,+s) and clearly written name. You can plug female cables directly. Signal pins



3 Trimpots for Fine Tuning

We added 3 Bourns SMD trimpots for fine tuning, on-board programming with your robot.

3000RPM Fast Gearmotor
(<http://jsumo.com/shop/profast-12v-3000rpm-fast-gearmotor/#comment-2785>)

► Ramón Hernández G. on SLT20P Brass – Silicone Wheel Set (33mm x 20mm – Pair)
(<http://jsumo.com/shop/slt20p-brass-silicon-wheel-set-33mm-x-20mm-pair/#comment-2784>)

► Ramón Hernández G. on ROBUG Arduino Based Hexapod Robot Kit (Black)
(<http://jsumo.com/shop/robug-arduino-based-hexapod-robot-kit/#comment-2783>)

robot's behaviour easily.

connected to Arduino Nano with small value series resistors for safety.

What is More? Why you should prefer Genesis?

SMPS Regulator + Capacitors

At the Genesis's heart, we use 570 kHz high-speed switching mode regulator. With combined multilayer ceramic capacitors, electrolytic capacitors and tantalum capacitor, Board's voltage output is pure 5V for adding sensors. **Voltage Regulator also has short circuit protection.**

High Current Mosfet Drivers

Genesis uses 4 Mosfet driver for giving high current to motors. Thanks to modern MOSFET bridge design; power sent to motors have nearly zero loss. Each motor driver connected with 2 PWM channel. So in total Arduino Nano's 4 PWM channel is used for controlling 2 dc motors up to 4 Ampere each.

On-Board Programming

We inspired from Japan sumo robots while creating that board. That robots use multiple trimpots for saving important variables for working program. Also Genesis include 3 trimpots for same purpose. That trimpots directly connected to Arduino Nano's analog pins (A5, A6, A7). And for Mini sumo robot they serve as Idle Speed, Starting Turn Time, and Edge sensor seen Turn time changers. SPD: Idle Speed while not opponent seen, TRN: Starting Turn Time, Angle Trimpot, ETRN: Edge Turning Time, Angle.

Genesis Arduino Robot Controller



ROBOT SHOP ▾

PHOTO CONTEST – FOTO CONCURSO (APRIL) ([HTTP://JSUMO.COM/SPRING-PHOTO-COMPETITION/](http://jsumo.com/spring-photo-competition/))

NEW!

LEARN ▾

MY ACCOUNT ▾

CONTACT ([HTTP://JSUMO.COM/CONTACT/](http://jsumo.com/contact/))

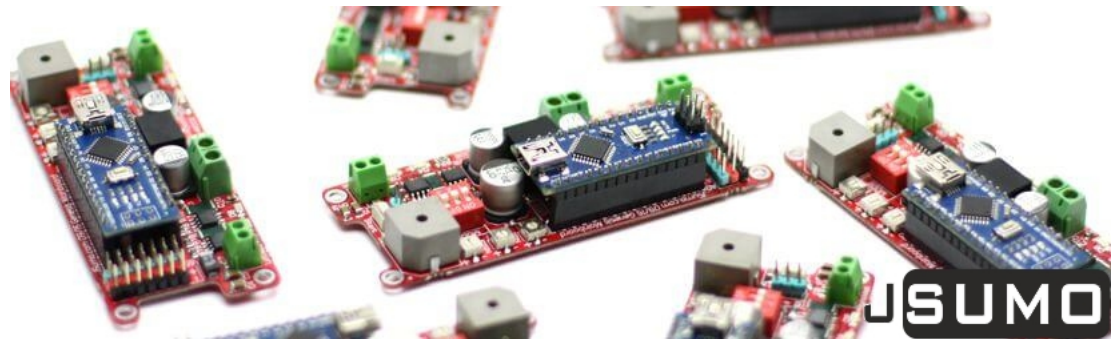
Based On Arduino Nano

MICROSTART: **CHEAP START MODULE** ([HTTP://JSUMO.COM/SHOP/START-MODULE/](http://jsumo.com/shop/start-module/))

NEW GOODIES!

WHAT'S NEW? ([HTTP://JSUMO.COM/NEW-PRODUCTS-FROM-JSUMO/](http://jsumo.com/new-products-from-jsumo/))

At the heart of Genesis, it uses Arduino Nano for micro controlling unit. Which is miniature version of Arduino Uno. You can easily upload, debug programs by open source Arduino community. Learning Arduino is very easy. If you plan to use that board for minisumo we have well written, commented Arduino program for you also.



Downloads

- Datasheet of Genesis Board

(<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/Genesis-Datasheet2.pdf>) (PDF)

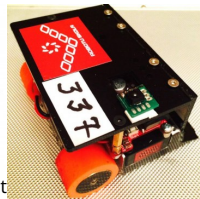
- Board Outline & Mounting Hole Drawing (<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/board-outline.rar>) (DXF)
- Arduino Sketch for Minisumo (<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/Genesis-Minisumo-code2.rar>) (3 Opponent, 3 Edge Sensors, Well written with comments)
- Tutorial for Minisumo Program (<http://jsumo.com/minisumo-tutorial-genesis-arduino-mainboard/>) (JSumo Post)

Every Genesis shipped with Mini USB B cable, so you can program fastly when you take package.

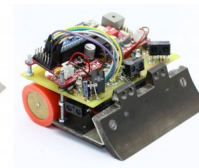
Here Are Some Amazing Minisumo Robots Use Genesis Mainboard



(<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/minisumo-genesis-1.jpg>)



(<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/minisumo-genesis-2.jpg>)



(<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/minisumo-genesis-3.jpg>)



(<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/minisumo-genesis-4.jpg>)



(<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/minisumo-genesis-5.jpg>)



(<http://jsumo.m5industry.netdna-cdn.com/wp-content/uploads/2015/12/minisumo-genesis-6.jpg>)

Frequently Asked Questions


Why we choosed Arduino Nano not Micro or Similar Model?

Do you have guarantee & support?

Ordering & Shipment

We ship all over the world.

You can order 1+ quantities by using the 'Add To Cart' button on the right. Once you've added the parts, you can checkout and pay via **credit card** or **bank transfer**. You can also select to ship via airmail or DHL Express to your destination country.

 Add to Cart (<http://jsumo.com/checkout/?add-to-cart=4951>)

If you need technical support, remember that we are here to help! Please contact us (<http://jsumo.com/contact>). We usually respond to email enquiries in a couple of hours.

For urgent, time-critical deliveries please select a **DHL Express service** when completing your order at checkout.

Users who found this page were searching for:

- yhsm-inucbr_001
- arduino nano robot

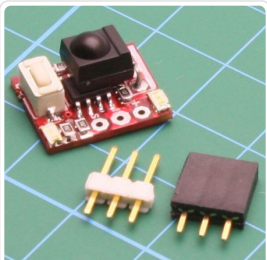
YOU MAY ALSO LIKE...



(<http://jsumo.com/shop/slt20-aluminum-silicon-wheel-set-33mmx20mm-pair/>)

SLT20 Aluminum – Silicone Wheel Set (33mmx20mm – Pair)

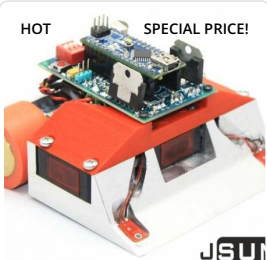
(<http://jsumo.com/shop/slt20-aluminum-silicon-wheel-set-33mmx20mm-pair/>)
\$16.00



(<http://jsumo.com/shop/start-module/>)

MicroStart Sumo & Minisumo Robot Start Module

(<http://jsumo.com/shop/start-module/>)
\$5.95



(<http://jsumo.com/shop/predator-mini-sumo-robot-kit-full-kit-not-assembled/>)

Predator Mini Sumo Robot Kit (Full Kit – Not Assembled)

(<http://jsumo.com/shop/predator-mini-sumo-robot-kit-full-kit-not-assembled/>)
~~\$350.00~~ **\$310.00**



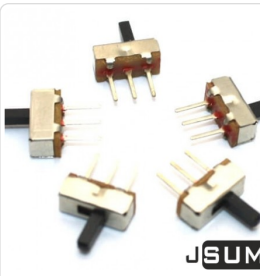
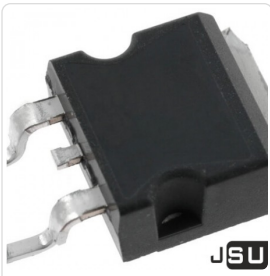
(<http://jsumo.com/shop/mini-sumo-robot-kit/>)

M1 Arduino Mini Sumo Robot Kit (Unassembled)

(<http://jsumo.com/shop/mini-sumo-robot-kit/>)
~~\$290.00~~ **\$245.00**

Add to cart (/shop/genesis-arduino-robot-controller-board/?add-to-cart=1914) Add to cart (/shop/genesis-arduino-robot-controller-board/?add-to-cart=1914) Add to cart (/shop/genesis-arduino-robot-controller-board/?add-to-cart=1914)

RELATED PRODUCTS



(http://jsumo.com/shop/irlz44-logic-level-smd-mosfet-transistor-n-ch-55v-47a/)	(http://jsumo.com/shop/blade-fuse-35-ampere-5-pcs-pack/)	(http://jsumo.com/shop/fuse-holder/)	(http://jsumo.com/shop/micro-slider-switch-spdt/)
IRLZ44 Logic Level SMD Mosfet Transistor – N Ch. 55V 47A	Blade Fuse 35 Ampere (5 Pcs Pack)	Fuse Holder	Micro Slider Switch SPDT (5 Pc Pack)
(http://jsumo.com/shop/irlz44-logic-level-smd-mosfet-transistor-n-ch-55v-47a/)	(http://jsumo.com/shop/blade-fuse-35-ampere-5-pcs-pack/)	(http://jsumo.com/shop/fuse-holder/)	(http://jsumo.com/shop/micro-slider-switch-spdt/)
\$3.65	\$2.05	\$2.95	\$2.75
Add to cart (/shop/genesis-arduino-robot-controller-board/?add-to-cart=3030)			
Add to cart (/shop/genesis-arduino-robot-controller-board/?add-to-cart=3030)			

JSumo Loves You!



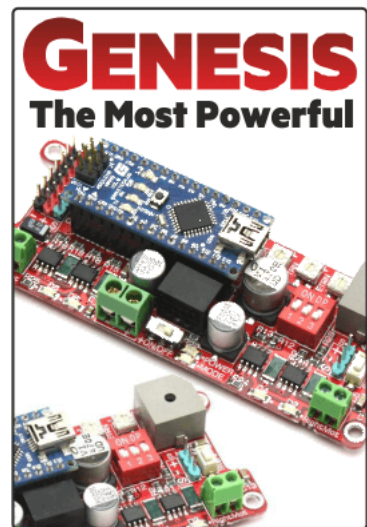
We create good parts for good projects. Founded in 2011, JSumo is a team and robotics hardware provider, supporting all robotics clubs, societies all over the world.

Our mission is adding at least to one brick to the wall when you are creating wonderful projects. We are with you with our society's projects (<http://jsumo.com/blog/>), shop page (<http://jsumo.com/shop/>) and forum (<http://jsumo.com/forum/>).

Are you our Hero?
JSumo
GROWING.
We are looking
for worldwide
Distributors.

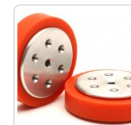
(<http://jsumo.com/contact/>)

(<http://jsumo.com/how-to-make-mini-sumo-robot-with-easyboard-code-included/>)



(<http://jsumo.com/shop/genesis-arduino-robot-controller-board/>)

Killer Products from JSumo



JSumo Wheel 38x11mm Pair (Soft Silicone)
(<http://jsumo.com/shop/thin-silicone-wheel-38x11mm-pair/>)
\$13.95



TCRT5000 Genuine Optocoupler
(<http://jsumo.com/shop/tcrt5000-genuine-optocoupler/>)
\$1.95



MP12 Micro Gear Motor 6V 1000RPM
(<http://jsumo.com/shop/mp12-micro-gear-motor-6v-1000rpm/>)
\$9.95



MP12 Micro Gear Motor 6V 650RPM
(<http://jsumo.com/shop/mp12-micro-gear-motor-6v-650rpm/>)
\$9.95



MP12 Micro Gear Motor 6V 500RPM
(<http://jsumo.com/shop/mp12-micro-gear-motor-6v-500rpm/>)

Contact Us

Address: JSumo, M5 Industry
Mechatronics Corporation, ITU, ARI
TechnoPark-3 Building- Istanbul, Turkey

Phone: (+90) 212 221 17 19

Email: sales[[@]]jsumo.com
(mailto:sales[[@]]jsumo.com)

Working Days/Hours: Mon - Sun / 9:00 AM - 8:00 PM (UTC +2)

What We Have For You?

Sensors (20)
(<http://jsumo.com/Product-Category/Sensors/>)

Mechanical (39)
(<http://jsumo.com/Product-Category/Mechanical/>)

Wheels (15)
(<http://jsumo.com/Product-Category/Wheels/>)

Electronics (60)
(<http://jsumo.com/Product-Category/Electronics/>)

Motors (21)
(<http://jsumo.com/Product-Category/Motors/>)

Batteries & Chargers (11)
(<http://jsumo.com/Product-Category/Batteries-Chargers/>)

Kits (15) (<http://jsumo.com/Product-Category/Kits/>)

Magnets (16)
(<http://jsumo.com/Product-Category/Magnets/>)

micro-gear- motor-6v- 500rpm/)	500rpm/) \$9.95
--------------------------------------	---------------------------

All prices are in USD currency. Thanks for your shopping.



Powered By Coffee © Copyright 2011 - 201