



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# R680

## Banshi Robotic Arm

### Model R680 Capabilities:

Programmable in C  
via open source  
WinAVR and  
RobotLoader  
software

Controllable from  
keyboard

Controllable via  
included RACS  
software

Memory playback of  
arm motion using  
RACS

Expandable via the  
I<sup>2</sup>C interface

Wireless control  
options available



### Overview:

The Banshi Robotic Arm is an affordable robot for the hobbyist. It is ideally suited to learn the basics of electronics, mechanics and programming. The Banshi is controlled by a powerful ATMEGA64 microcontroller that is programmable via open source tools in C.

The robot comes with many example programs already written. Easily download them to the robot using the supplied USB interface and the RobotLoader software. Or write your own custom programs using the free open-source WinAVR software.

Control the robot using the included keyboard or RACS software. Using the software you can record the movements of the Banshi and play them back.

The I/Os (in and outputs), together with the flexible I<sup>2</sup>C bus system, allow the addition of extra modules thus enabling the robot to react to its environment.

### Features:

- Comes unassembled as a kit
- 6 DOF
- ATMEGA64 Processor
- Various available I/Os
- I<sup>2</sup>C Bus
- Easy downloads with RobotLoader Software
- Easy control with keyboard or RACS Software
- Plastic arm and metal chassis



R680

# Banshi Robotic Arm

## Specifications:

Processor	ATMEGA64 8-bit microcontroller
Speed	16 MIPS
Memory	64KB Flash ROM, 4KB SRAM, 2KB EEPROM
Language	C
Expansion System	I <sup>2</sup> C Bus
Communication	USB Cable to PC, Wireless Options Available
Lifting capacity	80 g
Arm Length	260 mm
Height (fully extended)	340 mm
Base Diameter	150 mm
Power Supply	9-14 V
Weight	1.3 lbs

Specifications subject to change without notice. Go to [globalspecialties.com](http://globalspecialties.com) for the latest update.

**Banshi Robotic Arm comes with the following items:**

Unassembled as a kit

Software CD with WinAVR, RobotLoader, and RACS.

Complete 72-page manual

Keyboard controller

USB connector cable

USB programmer interface

12V DC power supply

Assembly tools

