

**PI Cruiser - Bill of Materials**

<b>Item</b>	<b>#</b>
<b>Electronics</b>	
Power Board	1
Breakout Board	1
5" HDMI display screen with stand offs, adapter, and stylus	1
Wireless keyboard with mouse	1
Ultrasonic sensor	1
Line sensor	1
5 mm ultra bright LEDs with male ends	3
LED Holders	2
330 ohm resistor	3
1K resistor	1
2K resistor	1
10K resistor	1
Breadboard with adhesive back	1
<b>Power</b>	
Servo motors AR-3606HB	2
8.4V NiMH 3300 mAh 5C battery - 110 mm wire	1
Battery charger	1
J130 wheel	2
USB to Micro USB angled power only cable	1
<b>Structural</b>	
Chassis	1
Bottom plate	1
Caster wheels	2
LCD Screen Mounting Brackets	2
LCD Screen Rotating Mounts	2
M4 x 8 Thumbscrew	2
LCD Mount Plate	1
Camera Mount	1
Ultrasonic Sensor - LED mount	1
<b>Wires</b>	
Ribbon Cable - 40 conductor with 2x20 IDC female headers	1
Male-Female jumper wires	10
Male-Male jumper wires	10
Male-Female wires - Ultrasonic sensor (Trigger)	3
Male-Female wires - Line sensor	2
Female-Female - Ultrasonic sensor	1
Female-Female - Line sensor	3
Female-Female - from motors to GPIO direct	3
<b>Fasteners</b>	
M3 x 10 mm Phillips Pan Head Machine Screw	12
M3 x 8 mm Phillips Pan Head Machine Screw	36
M2 x 5 mm Phillips Pan Head Machine Screw	8
M1.6 x 6 mm Phillips Pan Head Machine Screw	4
M3 Finish Hex Nuts	20

M2 Finish Hex Nuts	4
M1.6 Finish Hex Nuts	4
M2 x 22 mm female-female brass standoffs	3
M2 x 5 mm female-female standoff	1
<b>Tool</b>	
Screw driver	1

<b>Comments</b>
Customized screen with 40 pins
HC-SR04
3CH CTRT5000 Infrared Line Track
Red, Green, Blue - wire length 150 mm
Medium size - 400 points
Tamiya & Molex connectors
18 gauge, 150 mm long
Injection molded
Injection molded
Aluminum extrusion anodized
Aluminum extrusion anodized
Laser cut
Laser cut
Laser cut
50 mm long - 2 red, 2 black, 3 yellow
50 mm long - 2 red, 2 black, 3 yellow
100 mm red, black, green
250 mm - red and black
75 mm - blue
200 mm - green, blue, white
300 mm - yellow and brown
For camera & LCD
For ultrasonic

For camera
For ultrasonic
For LCD
For LCD
Phillips