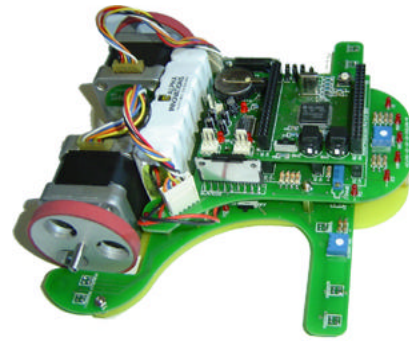


ROBO-RACER Specifications



Robo-Racer-MkII

Description:

Robo-Racer consists of robot electronic hardware, mechanical parts, mounting accessories, and software development tools.

Features :

A Robo-Racer is a self-contained, fully autonomous (non remote-controlled) mobile robot that is able to race in a given course (a track made of retro-reflective tape on a 0.8 mm thick matt black vinyl laminated 260 mm wide flexible magnet sheets) to clock the fastest single lap time. The robot must have intelligence, reliable sensing method, effective motor control and good precision mechanical design and assembly.

Robo-Racer Board (MCB)	<p>MCB provides 256K program and 256K data memory storage, computation capability using the H8/3064F micro-controller.</p> <p>There is a serial RS232 communication port for connecting to the PC/PDA serial communication port.</p> <p>The Robo - Racer program can be download into a 256K Program RAM (with battery back-up)</p>
Infra-red bottom-base Sensor Boards (ISBT)	<p>ISBT consists of close proximity infra-red sensors which are appropriately located to "look down" to capture the retro-reflective tape information.</p>
Input/Output Interface Board (IOB)	<p>Motor Driver Circuit provides sequence logic control and power to drive the two stepping motors.</p> <p>IR Sensor Top-Sensing Circuit interfaces up to 7 I/O channels for IR Sensors on the ISBT.</p> <p>There are 10 LED indicators used to show the status of the program modes and IR sensors.</p> <p>A small buzzer can be used to provide audio feedback.</p>
Battery Pack	<p>16 AAA 850mAH rechargeable NiMH Battery cells, packed in series provide the energy source for the electronic circuits, sensors and the motors.</p>
Motors	<p>2 Sanyo Denki stepper motors (model-103H548-0440) directly coupled to wheels for motion control.</p>
Wheels	<p>High traction wheel with 7-mm wide tire</p>

Manufactured by:



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