Android Controlled robot using 8051 Microcontroller

ajay_bhargav, Wed Mar 20 2013, 11:16 am

Android controlled robot using 8051 and bluetooth

Our robot expert Gaurav Khadasane has come up with another innovative way to control a robot. He is controlling his robot from an android phone (with a Android GUI application) over bluetooth. Project uses our favourite 8051 microcontroller and HC-05 bluetooth module.

In this project 8051 and bluetooth module are communicating over uart @9600bps. Bluetooth module HC-05 is controlled via simple AT commands. This module comes in SMD package and works on 3.3v power supply. The BT module is a SPP supported profile so it can be connected easily to any controller or embedded device. In this profile the data sent and receive to module directly comes on the RX pin of microcontroller. It becomes really easy to make your device bluetooth compatible.

L293D H-Bridge motor driver are used to control two DC motors. A readymade compact size chassis is used to avoid the chassis assembly comlexities   The chassis contains 2 decks the lower is used for BO motors fitting the upper is used as a battery stack. On top plate the controller board is mounted by screw fitting.

Finally the Android application, You can get Bluecontrol app from Google Play

Here is a working video of the project

If you have any doubts or comments Please use forum... Enjoy bulding robots

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