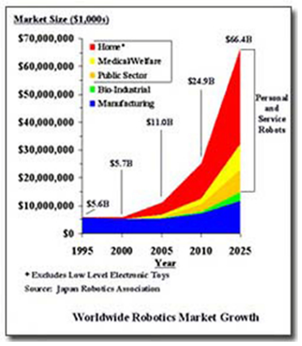
IPRO 353

Microcontroller Business Development

Our Market

Current projections of the robot industry predict that the demand for robots will triple by the year 2010, and grow to nearly 10 times by 2025. The biggest of this growth is in the personal robotic industry



Graph 1 - World wide Market Growth

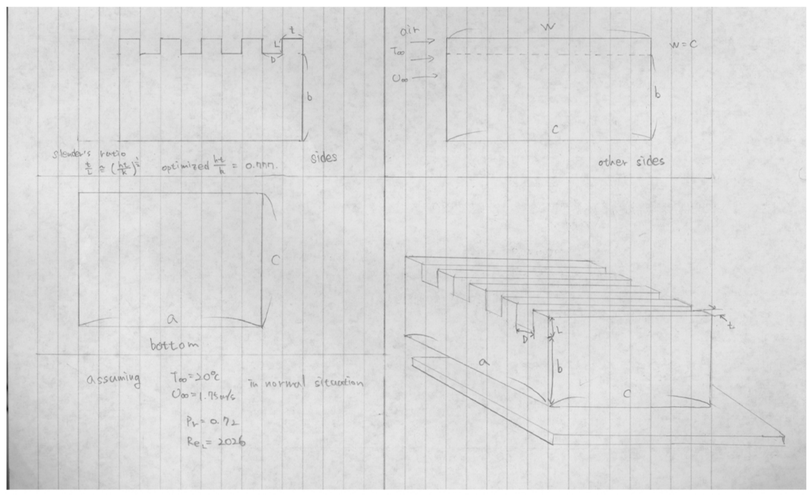
Picture -1
Robot Competitions

Our Robot

The Goal of this IPRO was to create a business around a robot. We decided on a market and decided on the educational and hobbiest market. We then had to find a way into the market. Our idea was to make it affordable, and enhance some areas that other manufacturers overlooked.

Schematic

It is done using ORCAD. It is used to graphically show the connections between the parts.



Casing

-> Focused on Maximizing heat emission.
-> Fins provide wider area for heat emission.

The IPRO 353 Team

Website Development

Chungyun Kim
Electrical Eng.

Commercial Team

Nick Chillemi
Aerospace Eng.

Angel Guma
Electrical Eng.

Technical Team

Jaewoo Kim
Mechanical Eng.

Andrew Meyers
Computer Eng.

Purvi Patel
Computer Sci.

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Features

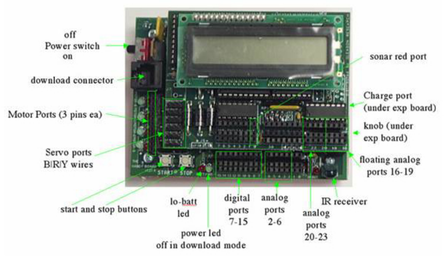
-> More memory
-> GCC Compiler
-> Motorola HC11 Microprocessor
-> Casing
-> Testing Facility

Business Model

-> Design Microcontroller
-> Send Parts and design to the manufacturer.
-> Use Feedback from ECE 100 class to develop our product.

The Competition

The Handy Board



-> Established in Robot community
-> Used in many universities
-> Breaks often
-> Unreliable Power-Supply
-> Expensive ($ 200 to $ 300)

LEGO

-> Well established company
-> Simple programming
-> Geared toward high school students.
-> Easy to build with the Lego bricks.
-> Expensive ($200 for the starter kit.)

Market Strategy

-> Use IIT ECE 100 class to promote Product through Beta-testing.
-> Use IIT First Robotics club to Promote Product.
-> Sell in IIT Book Store.
-> Sell and promote Online.

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