RBlinds Team 1

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Project Description: RBlinds

- **Project Description**
  - Automated Blinds, to make natural lighting easy

- **Differentiating Factors**
  - Variety of operating modes
    - Automatic Mode, based on environmental conditions
    - Time Mode, to function as an alarm clock
    - Remote Control Mode, to remotely manually operate the blinds
  - Temperature Indicator
  - Low Cost
Key Requirements

- Cost
  - Sales Price: $150, Component Cost: $40, Assembly & Test Costs: $40

- Environment
  - Indoor
  - Operating Temp Range: 0 to 40°C
  - Operating Humidity Range: 0 to 80% RH

- Power Input(s)
  - Residential AC Power: 102 to 132 VAC @ 6 Amps Max

- Major Functions
  - Environmental Sensors
    - Brightness, wind speed, temperature
  - Remote control
Advanced Block Diagram

A. Power Supply:  E Arnhold
B. Microcontroller:  M. Davis
C. Blind Control:  K. Remich
D. Sensor Circuits:  M. Nordman
E. Remote Control:  R. Olson
F. LED Driver:  M. Almuzel