TEAM 5

Automatic Bird Feeder

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Bird Feeder

- Provides a smart way of feeding birds to avoid food waste
  - Solar Power
  - Load Sensitive
  - Speaker Deterrent for Squirrels
  - Market - USA
Cost
- Sales Price: $150.00, Component Cost: $88.00, Assembly & Test Cost: $10.00

Environment
- Outdoors
- Operating Temperature Range: (-20° to 40° Celsius)
- Operating Humidity Range: (0 to 100% non-condensing)

Power Inputs
- Battery Power: Lithium Polymer, Nominal 12VDC, Maximum 300mA

Major Functions
- Speaker – 10kHz, Accuracy: +/- 3dB
- Solar – 20W, 17% efficiency
Block A. Solar: Nixon
Block B. Microcontroller: Bryan
Block C. Sensors: Thong
Block D. Power Distribution: Kee
Block E. Motors/Deterrents: Allen

Solar Panel
Charge Controller
Battery and Power Distribution
Feeder Motor Driver
Deterrent Speaker Driver

Inside product case

Load Sensor
Food Level Sensor
Signal Conditioning

Inside product case