

# Auto Pet Feeder Team 7



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Xinye Xu



Jing Chen



Jacob Alward



Ruishuang Zhong



Timothy Sentz



Jingduo Fan



# EE-595

## Auto Pet Feeder

- Purpose of Product: An automated meal dispenser to provide nourishment for your pets while away from home.
- Feature1: Programmable
- Feature2: Self Cleaning
- Feature3: Monitors food levels
- Market: North America

# EE-595

## Key Requirements

- Cost
  - \$99.99 (Sales Cost) Component Cost \$50.00, Assembly & Test Costs: \$30.00
- Environment: Indoors, Stationary
  - Operating Temperature (0 C to 50 C or 32 F to 122 F)
  - Operating Humidity Range (30 to 60 %)
- Power Inputs
  - Residential AC Power (120 V @ 60 Hz @ Max 20 Amps)
- Major Functions
  - Dispense Food Amount Determined By User @ 5% accuracy by weight
  - Dispense Water Amount Determined By User @ 5% accuracy by weight
  - Automatic Food Disposal After Eating Period (food is removed)
  - Program (Inputs are 5% accurate)

# Block Diagram

## Block Ownership

- A. Power Supply: Jing Chen
- B. Feed Circuit: Xinye Xu
- C. Food Removal Cleaning System : Ruishuang Zhong
- D. Sensor system : Jingduo Fan
- E. User Interface system : Jacob
- F. Microcontroller :Tim

