



**College of Engineering**  
**UNIVERSITY OF GEORGIA**

Final Project - Hardware Update

Taylor Reese

Sensors and Transducers



### Proposed Bill of Materials

<u>Major Purchase Items</u>	<u>Possible Vendors</u>
Food Probe (RTD)	Amazon, DigiKey
Smoker Temperature Sensor (RTD)	Amazon, DigiKey
Arduino Uno	Amazon
1" Circular Fan	Amazon

### Final Bill of Materials

<u>Item</u>	<u>Quantity</u>	<u>Vendor</u>	<u>Price (\$)</u>
Arduino Mega	1	Arduino	54.82
Food Probe (Type K Thermocouple)	1	Automation Direct	36.00
Smoker Temperature Sensor (Type K Thermocouple)	1	Mouser Electronics	32.94
Centrifugal Fan	1	Mouser Electronics	21.59
MAX38156	2	Amazon	18.34
Perfboard	1	Amazon	11.99
DFRobot LCD screen	1	Amazon	14.58



Breadboard Wires	1	Amazon	9.99
Dupont Wires	1	Amazon	6.98
Power Supply	1	Amazon	7.55
Adafruit Motor/Stepper/Servo Shield	1	Amazon	23.85
			<b>Total = \$256.97</b>

**“Indisputable Photographic Evidence”**



*Image 1: Arduino MEGA*



*Image 2: Food Temperature Probe*



*Image 3: Smoker Temperature Probe*

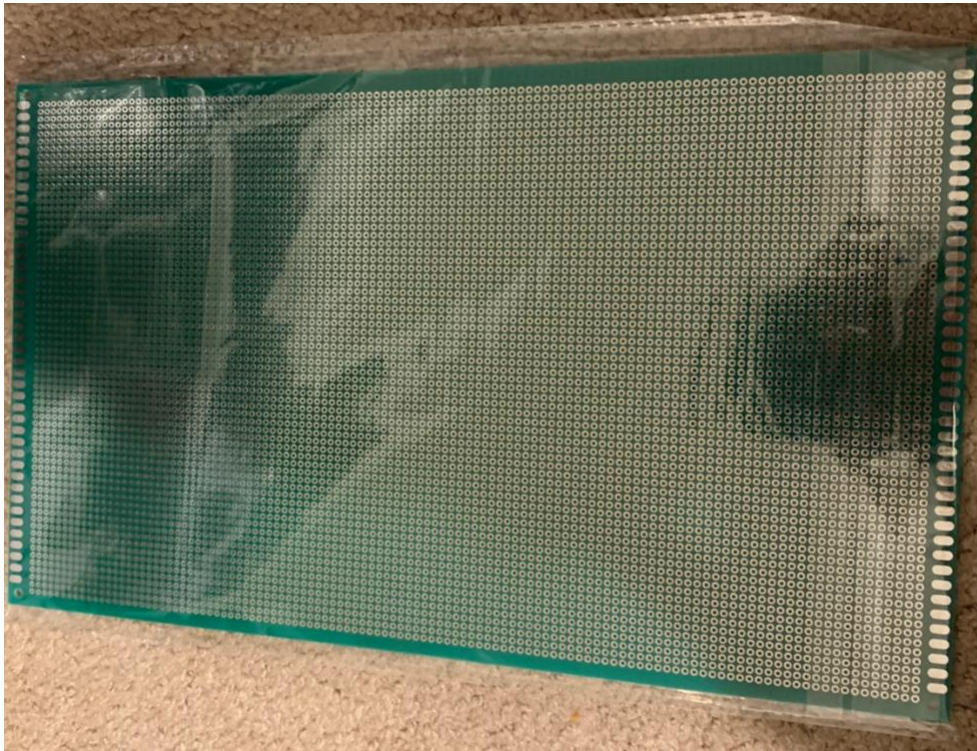


*Image 4: Centrifugal Fan*



*Image 5: MAX38156 Breakout Board*





*Image 6: Perfboard*



*Image 7: DFRobot LCD Screen*



*Image 8: Breadboard and Dupont Wires*



*Image 9: 12V DC Power Supply*



Image 10: Adafruit MotorSheild