



HDRM Hardware Check 100%

TEAM STELLARHOLD

VALENTIN GAMEZ, NATHAN OLSON, MAIA WARREN

Manufactured Model

CAD vs. Fabricated

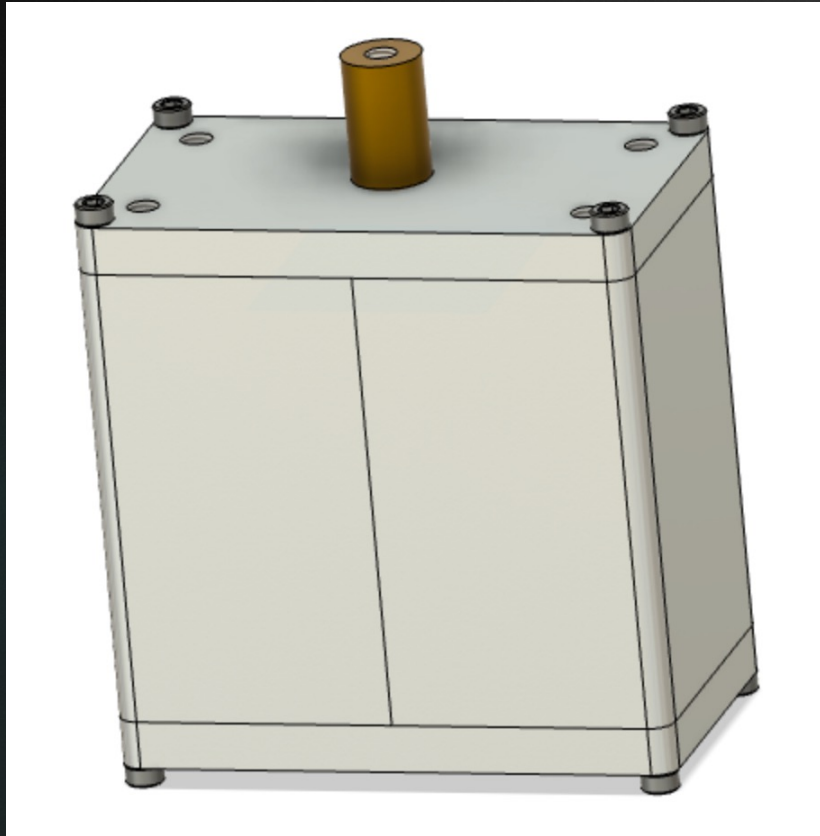


Figure 1: DFMA CAD



Figure 2: Fabricated Design

Design Efforts

Updated Electrical Schematics

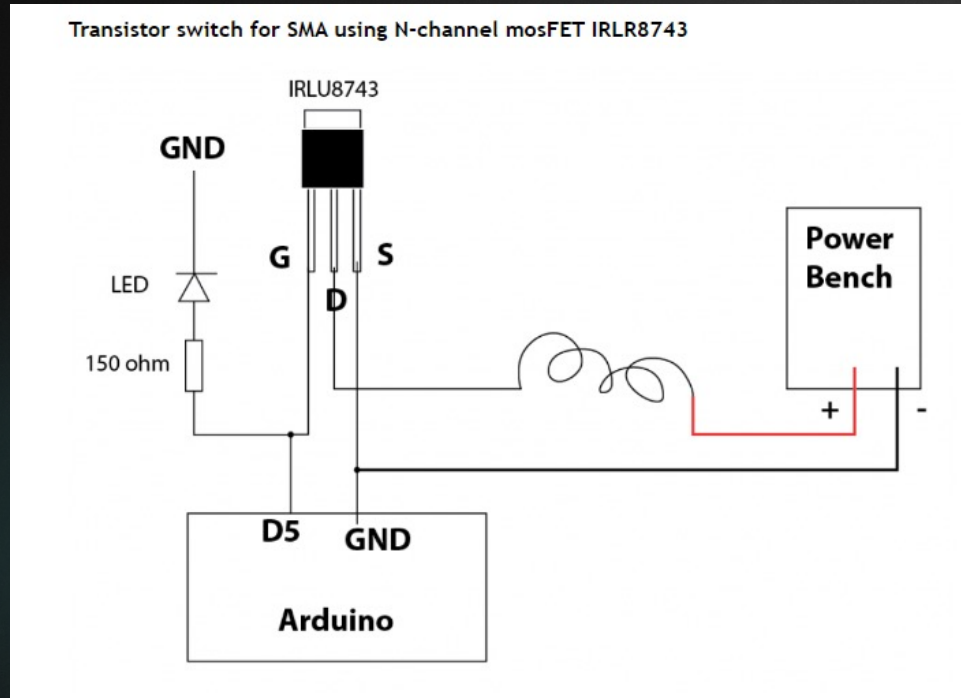


Figure 5: KobaKant's Schematics

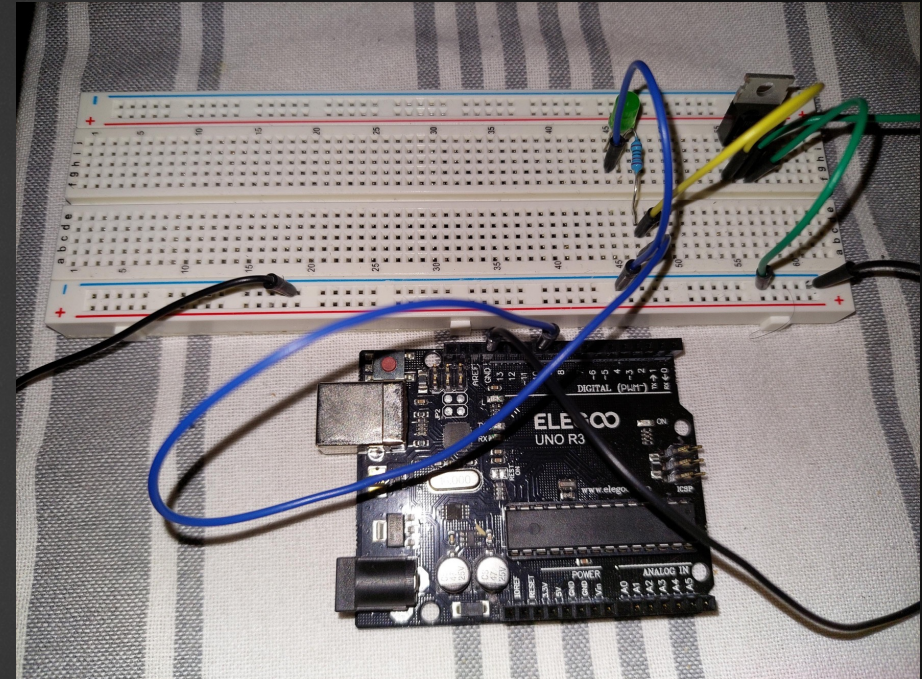


Figure 6: GA HDRM Team's Final Circuit

Purchasing Plan-1 (Updated)

- **Green** = Ordered and Received
- **Yellow** = Ordered but Not Received
- **Red** = Not Yet Ordered
- Possible updates to come (mylar, PID, etc.)

Part Description :	Cost: (\$)	Quantity :	Part Status:	Make/ Buy:	Primary Vender:	Manufacturer:	
Acrylic Sheets	21.83	2	09/06/22	Buy	Amazon	Acrylic Mega Store	
Nitinol Spring (2.4 mm)	19.58	1	02/23/22	Buy	Amazon	Kellogg's Research Lab	
Aluminum Block	40.39	2	09/06/22	Buy	Amazon	VERNUOS	
Generic Springs	14.18	1	09/06/22	Buy	Amazon	Ninoge	
Ball-Nose Plunger	8.38	2	04/05/22	Buy	McMaster-Carr	McMaster-Carr	
Arduino	49.12	1	09/06/22	Buy	Amazon	Arduino	
Aluminum Rod	30.43	1	10/05/22	Buy	McMaster-Carr	McMaster-Carr	
U-Channel	29.55	2	10/05/22	Buy	McMaster-Carr	McMaster-Carr	
PTFE Balls	12.28	1	10/05/22	Buy	McMaster-Carr	McMaster-Carr	
Polyethylene Rod	5.01	1	10/05/22	Buy	McMaster-Carr	McMaster-Carr	
Socket Head Screw	19.81	1	10/05/22	Buy	McMaster-Carr	McMaster-Carr	

Purchasing Plan-2

- **Green** = Ordered and Received
- **Yellow** = Ordered but Not Received
- **Red** = Not Yet Ordered
- Possible updates to come (mylar, PID, etc.)

PTFE Film	24.45	1	10/05/22	Buy	McMaster-Carr	McMaster-Carr	
Drill Bit	6.84	1	10/05/22	Buy	McMaster-Carr	McMaster-Carr	
Compression Spring (Long)	7.24	1	10/05/22	Buy	McMaster-Carr	McMaster-Carr	
Compression Spring (Short)	29.28	1	10/05/22	Buy	McMaster-Carr	McMaster-Carr	
Flat Head Screw	9.27	1	10/05/22	Buy	McMaster-Carr	McMaster-Carr	
Load Cell	10.42	2	10/05/22	Buy	Amazon	ALAMSCN	
SMA Spring	20.93	2	10/05/22	Buy	Amazon	NexMetal	
Standoff "Kit"	21.83	1	10/31/2022	Buy	Amazon	VIGRUE	
MOSFET Transistor	10.50	1	10/18/2022	Buy	Amazon	Bridgold	
M1 Bit/Tap	8.50	2	10/18/2022	Buy	Amazon	Drill America Store	
Power Supply	62.91	1	10/10/2022	Buy	Amazon	Kungber	
CNC Part	20.02	1	11/4/2022	Buy	Machine Shop	Machine Shop	
Testing Total:	\$100						Total Budget:
Part Total:						\$593.25	\$2,000

Demonstration



Gantt Chart

