Project Status Letter

PSL Number `12-ALL-GG`

Covering period from 4/9/16 to 4/15/16

Prepared by: `ECE 492 Design Team`

Tasks that have been completed in the previous week:

`TSV - CAN communication with SCADA demoed, Control panel board completed, whole accumulator has been put together (2 components still need to be fabricated)`

`GLV - layout for full rack (cockpit panel, safety panel, GLV systems panel) revised, TSI/HV isolator board out for fabrication, safety loop mockup demoed, parts for GLV system box purchased`

`VSCADA - Onboard computer interfaces + onboard touchscreen exist, I/O subsystem models completed in config file, demoed SCADA interfacing with safety loop and PackMan, implemented subsystem models which use CAN`

`MCM - experimental data collected for dynamic characterization of motor (acceleration and deceleration), water cooling system implemented for motor setup`

Tasks ongoing

`GLV - TSI/LV construction and cabling, setting up JGB to interface with TSI (and DAQ), cabling for panels`

`VSCADA - designing system to log all data, system able to send CAN messages from website, Data received from CANbus can be graphed, Dashboard UI fully implemented`

`TSV - writing software for PackMan board, state of charge algorithm report`

`MCM - efficiency/cooling data collection, dynamic characterization data analysis, writing dynamic characterization report draft`

Tasks due to be complete next week.

TSV - state of charge algorithm report completed

GLV - Cockpit panel fully wired and built, TSI/LV box fully integrated and built, JGB software delivered, GLV system box built

MCM - data collection for efficiency/cooling, dynamic characterization report draft, efficiency/cooling report draft

VSCADA - designing system to log all data, system able to send CAN messages from website, Dashboard UI fully implemented

Overdue tasks

VSCADA - System logs all received data, System able to send CAN messages from website

MCM - dynamic characterization analysis report completed, efficiency/cooling data collected

GLV - JGB^3 (not getting built), wiring for all panels

Cost Summary

Budget Category	New This Period	Total Spent to Date	Budget Remaining	Total Budget
TSV	$11.66	$785.77	$64.23	$850
GLV	$94.03	$524.30	$375.70	$900
VSCADA	$0	$280.17	$119.83	$400
Cabling	$0	$101.37	$198.63	$300
MCM (Motor Char. + Model)	$0	$0	$250	$250
Shipping	$86.96	$169.76	$130.24	$300
Totals	**$192.65**	**$1,861.00**	**$1,138.63**	**$3000**

Receiving Reports

- Digi-Key (26 items) (Appendix I)
- DFRobot LCD Display (Appendix II)

Purchase Requests

- Digi-Key (7 items) (Appendix III)
- Amazon (3 items) (Appendix IV)
- Digi-Key Fuse and holder (Appendix V)

Appendix I:

ECE Department Material Request

Course:	ECE 492	**Req Number:**	**016**
Professor:	Nadovich/Yu		

Requested By:	Joseph Cericola	**Vendor:**	Digi-Key
Requested Date:	6-Apr-16	**Web Site**	www.digikey.com
Ship By:	Ground	**Phone**	1-800-344-4539

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	2	AE10623-ND	Assmann USB 2.0 MaleA-MaleA Cable, 1m	$2.36000	$4.72	12-Apr-16
2	1	502PB-ND	Judco SPST Switch, 14V, 2A	$1.34000	$1.34	12-Apr-16
3	2	67-1183-ND	Lumex Panel Mount LED Red	$1.20000	$2.40	12-Apr-16
4	2	67-1185-ND	Lumex Panel Mount LED Yellow	$1.32000	$2.64	12-Apr-16
5	2	67-1184-ND	Lumex Panel Mount LED Green	$1.32000	$2.64	12-Apr-16

6	20	CKN9207-ND	C&K Pushbutton Plunger	$0.45400	$9.08	12-Apr-16
7	20	CKN9363CT-ND	C&K SPST Pushbutton	$2.27100	$45.42	12-Apr-16
8	4	1195-3481-ND	Harting USB 2.0 FemaleA-FemaleA Panel Mount Receptacle	$21.65000	$86.60	12-Apr-16
9	4	1195-2189-ND	Harting USB Receptacle Cap	$8.14000	$32.56	12-Apr-16
10	10	754-1883-ND	Kingbright LED Red, 5mm	$0.54600	$5.46	12-Apr-16
11	10	67-1332-ND	Lumex Panel Mount 5mm LED Holder	$0.20900	$2.09	12-Apr-16
12	6	WM2902-ND	Molex 4-Pos Connector Housing	$0.27000	$1.62	12-Apr-16
13	6	WM1342-ND	Molex 4-Pos Connector Header	$2.99000	$17.94	12-Apr-16
14	10	ED10502-ND	On Shore 16-Pos Connector Socket	$0.33600	$3.36	12-Apr-16
15	10	A111927-ND	TE Connectivity 10-Pos Connector Receptacle, Panel Mount	$0.27000	$2.70	12-Apr-16
16	10	A30594-ND	TE Connectivity 10-Pos Connector Plug, Free Hanging	$0.25400	$2.54	12-Apr-16
17	10	A30590-ND	TE Connectivity 2-Pos Connector Receptacle, Free Hanging	$0.17800	$1.78	12-Apr-16
18	10	A30654-ND	TE Connectivity 2-Pos Connector Plug, Free Hanging	$0.11600	$1.16	12-Apr-16

19	10	A27284CT-ND	TE Connectivity 10-12AWG Crimp Connector Ring	$0.34800	$3.48	12-Apr-16
20	10	920074-07-ND	3M Connector Tap	$0.55100	$5.51	12-Apr-16
21	5	WM1340-ND	Molex 2-Pos Connector Header	$2.61000	$13.05	12-Apr-16
22	250	A100459CT-ND	TE Connectivity 16AWG Socket	$0.03956	$9.89	12-Apr-16
23	250	A110999CT-ND	TE Connectivity 16AWG Pin	$0.03956	$9.89	12-Apr-16
24	25	A30638-ND	TE Connectivity 22-26AWG Socket	$0.05080	$1.27	12-Apr-16
25	25	A30646-ND	TE Connectivity 22-26AWG Pin	$0.05640	$1.41	12-Apr-16
26	1	SC2106-ND	Switchcraft Panel Mount HDMI Receptacle	$19.74000	$19.74	12-Apr-16
				Shipping Fees		
				Grand Total:	$290.29	
		Instructor Approval:				
		Department Approval:				
		(Over $500)				

Appendix II:

ECE Department Material Request

Course:	ECE 492	**Req Number:** 017
Professor:	Nadovich/Yu	

Requested By:	Joseph Cericola on behalf of Jaejoon Yang	**Vendor:** DFRobot
Requested Date:	11-Apr-16	**Web Site** www.dfrobot.com
Ship By:	Ground	**Phone** 86-21-616 20183

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	2	DFR0154	DFRobot LCD Display	$23.00	$46.00	14-Apr-16
2					$0.00	
3					$0.00	
4					$0.00	
5					$0.00	
6					$0.00	
7					$0.00	
8					$0.00	

9					$0.00	
1 0					$0.00	
				Shipping Fees		
				Grand Total:	$46.00	
		Instructor Approval:				
		Department Approval:				
		(Over $500)				

Appendix III:

ECE Department Material Request

Course:	**ECE 492**	**Req Number:** 018
Professor:	**Nadovich/Yu**	

Requested By:	**Joseph Cericola**	**Vendor:** **Digi-Key**
Requested Date:	**13-Apr-16**	**Web Site** **www.digikey.com**
Ship By:	**Ground**	**Phone** **1-800-344-4539**

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	4	A30258-ND	TE Connectivity AMP 2-Pos Micro MATE-N-LOK Connector Receptacle	$0.3100	$1.24	
2	2	A30264-ND	TE Connectivity AMP 8-Pos Micro MATE-N-LOK Connector Receptacle	$0.6500	$1.30	
3	25	A107960CT-ND	TE Connectivity AMP Micro MATE-N-LOK 18-22AWG Socket	$0.1964	$4.91	

#	Qty	Part Number	Description	Unit Price	Ext Price	
4	1	ATATMEL-ICE-BASIC-ND	Atmel-ICE Programmer Basic Kit	$53.5800	$53.58	
5	500	WM2562-ND	Molex 24-30AWG Socket	$0.0876	$43.80	
6	4	Q361-ND	Qualtek USB 2.0 MaleA-MaleB Cable, 3ft	$2.1500	$8.60	
7	10	ED10523-ND	On Shore 16-Pos Connector Header	$0.3750	$3.75	
8					$0.00	
9					$0.00	
10					$0.00	
				Shipping Fees		
				Grand Total:	$117.18	
		Instructor Approval:				
		Department Approval:				
		(Over $500)				

ECE Department Material Request

Course:	ECE 492	**Req Number:**	**019**
Professor:	**Nadovich/Yu**		

Requested By:	Joseph Cericola	**Vendor:**	**Amazon**
Requested Date:	**14-Apr-16**	**Web Site**	www.amazon.com
Ship By:	**Ground**	**Phone**	1-734-414-0900

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	4	B00B5HS7TI	YCS Basics Black 6 Inch USB 2.0 High Speed Printer / Scanner Right Angle Cable	$5.29	$21.16	
2	1	B00S2KC1ZC	Meind 24v 20a 480w Switching Power Supply for Led Strip Light Input Ac100v-240v Dc 24v Output	$44.99	$44.99	
3	1	B013PKYAV6	bayite DC 6.5-100V 0-20A LCD Display Digital Current	$16.98	$16.98	

			Voltage Power Energy Meter Multimeter Ammeter Voltmeter			
4					$0.00	
5					$0.00	
6					$0.00	
7					$0.00	
8					$0.00	
9					$0.00	
10					$0.00	
				Shipping Fees		
				Grand Total:	$83.13	
		Instructor Approval:	_____			
		Department Approval:	_____			
		(Over $500)				

Appendix V:

ECE Department Material Request

Course: ECE 492	**Req Number:** 020
Professor: Nadovich/Yu	

Requested By:	**Vendor:** Digi-Key
Requested Date:	**Web Site** www.digikey.com
Ship By: Ground	**Phone** 1-800-344-4539

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1		283-2713-ND	Eaton Bussmann Panel Mount Fuse Holder, 250V, 16A, 5mmx20mm size fuses		$0.00	
2	10	507-1256-ND	Bel Fuse 10A Glass Slow-Blow Fuse, 5mmx20mm	$0.208	$2.08	
3					$0.00	
4					$0.00	
5					$0.00	
6					$0.00	

7				$0.00	
8				$0.00	
9				$0.00	
10				$0.00	
			Shipping Fees		
			Grand Total:	$2.08	
	Instructor Approval:				
	Department Approval:				
	(Over $500)				