Project Status Letter

PSL Number 11-ALL-GG

Covering period from 4/2/16 to 4/8/16

Prepared by: ECE 492 Design Team

Tasks that have been completed in the previous week:

Team - ATP has been accepted

TSV - Pack interconnect between accumulator scheme developed, ITT cannon connector memo written

GLV - all hardware drawings (exclusive of TSI high voltage) drafted AutoCAD (not yet signed), all parts (exclusive of TSI high voltage) ordered

VSCADA - Data received from CANbus can be graphed, "user-friendly" UI created in JavaScript

MCM - conversation with MechEs about characteristics of fully integrated car, static characterization report written, RPM calibration factor calculated

Tasks ongoing

GLV - Finalization of drawings for outstanding boards (TSI/HV isolator board)

VSCADA - designing system to log all data, system able to send CAN messages from website, onboard computer interfaces + onboard touchscreen dashboard completed, Data received from CANbus can be graphed, Dashboard UI fully implemented

TSV - writing software for PackMan board, control panel board built after order received

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

Tasks due to be complete next week.

TSV - PackMan LCD created, CAN communication with SCADA demoed

GLV - Cockpit panel fully wired and built, CAD drawings for TSI/HV approved

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

VSCADA - designing system to log all data, system able to send CAN messages from website, onboard computer interfaces + onboard touchscreen dashboard completed, Dashboard UI fully implemented

Overdue tasks

VSCADA - System logs all received data, System able to send CAN messages from website, onboard computer interfaces + touchscreen dashboard exist

MCM - dynamic characterization analysis report completed

TSV - control panel board built (still waiting on order to be received), PackMan LCD created (partially complete)

GLV - JGB³ and TSI isolator board

Cost Summary

Budget Category	New This Period	Total Spent to Date	Budget Remaining	Total Budget
TSV	\$505.16	\$774.11	\$75.89	\$850
GLV	\$116.30	\$430.27	\$469.73	\$900
VSCADA	\$12.71	\$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	\$721.13	\$1,755.68	\$1,244.32	\$3000

Receiving Reports

• Digi-Key (18 items) (Appendix I)

Purchase Requests

- Amazon (5 items) (Appendix II)
- Mouser Electronics (6 items) (Appendix III)
- Newark (8 items) (Appendix IV)
- Digi-Key (26 items) (Appendix V)

Appendix I:

		ECE Depa				
	Course:	ECE 492		Req Number:	012	
	Professor:	Nadovich/Yu				
	Requested By:	Joseph Cericola		Vendor:	Digi-Key	
	Requested Date:	29-Mar-16		Web Site	www.digik ey.com	
	Ship By:	Ground		Phone	1-800-344- 4539	
#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rc vd
1	1	1053-1202-ND	Orion 5VDC 40mm-Square Fan	\$9.9800	\$9.98	4- Ap r-1 6
2	1	1053-1390-ND	Orion 40mm-Square Fan Filter	\$1.3500	\$1.35	4- Ap r-1 6
3	10	952-1512-ND	Harwin 25mm 3M Hex Standoff	\$0.6080	\$6.08	4- Ap r-1 6
4	10	36-9191-4-ND	Keystone Electronics M3 Machine Screw	\$0.2180	\$2.18	4- Ap r-1 6
5	1	67-1183-ND	Lumex Panel Mount LED Red	\$1.2000	\$1.20	4- Ap

						r-1
						6 4-
6	10	F4200-ND	Littlefuse 15A Blade Fuse	\$0.2600	\$2.60	4- Ap r-1 6
7	10	F4197-ND	Littlefuse 5A Blade Fuse	\$0.2600	\$2.60	4- Ap r-1 6
8	5	BK-6010-ND	MPD Blade Fuse PCB Block	\$0.5400	\$2.70	4- Ap r-1 6
9	1	Z2254-ND	Omron 10A 24V G5LE SPST Relay	\$1.3000	\$1.30	4- Ap r-1 6
1 0	1	Z3115-ND	Omron 10A 5V G5LE SPST Relay	\$1.4100	\$1.41	4- Ap r-1 6
1 1	2	296-34970-1- ND	Texas Instruments High Side Switch	\$0.5400	\$1.08	4- Ap r-1 6
1 2	1	AE10924-ND	Assmann 9-Pos D-Sub Receptacle	\$0.7800	\$0.78	4- Ap r-1 6
1 3	50	ED2609-ND	On Shore Technology 2-Pos 5.08mm PCB Terminal Block	\$0.2908	\$14.54	4- Ap r-1 6
1 4	10	ED2610-ND	On Shore Technology 3-Pos 5.08mm PCB Terminal Block	\$0.5100	\$5.10	4- Ap r-1 6
1 5	4	811-2109-5-N D	Murata DC/DC Converter 5V 1.2A	\$22.000 0	\$88.00	4- Ap r-1 6

1 6	1	102-2348-ND	CUI DC/DC Converter 5V 4A	\$19.910 0	\$19.91	4- Ap r-1 6
1 7	1	102-2421-ND	CUI DC/DC Converter 12V 2.5A	\$22.180 0	\$22.18	4- Ap r-1 6
1 8	10	SMAZ30-TPMS CT-ND	Micro Commercial 30V Zener Diode	\$0.3450	\$3.45	4- Ap r-1 6
				Shipping Fees		
				Grand Total:	\$186.44	
		Instructor Approval:				
		Department				
		Approval:				

Appendix II:

		_	ECE Department Material Request			
	Course:	ECE 492		Req Number:	013	
	Professor:	Nadovich/Yu				
	Requested By:	Joseph Cericola		Vendor:	Amazon	
	Requested Date:	4-Apr-16		Web Site	www.amaz on.com	
	Ship By:	Ground		Phone	1-734-414- 0900	
#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rc vd
1	2	B00HZ9A0FY	45 AMP Anderson Powerpole Connectors (10 Sets) (Shipped from: Debco Electronics Inc.)	\$8.97	\$17.94	
2	17	B00LQPUL84	ANDERSON POWER PRODUCTS - 110G9 - RETAINING PIN, POWERPOLE PAK RCPT SHELL (Shipped from: DataAlchemy)	\$0.49	\$8.33	
3	1	B00HZ26N2U	Aurum Ultra Series - High Speed HDMI	\$7.99	\$7.99	

	Cable With Ethernet 2 PACK (1 Ft) - Supports 3D & Audio Return Channel [Latest Version] - 1 Feet - 2 Pack			
		Shipping Fees		
		Grand Total:	\$34.26	
Instructor Approval:				

Appendix III:

		_	artment Ma Request	terial		
	Course:	ECE 492		Req Number:	014	
	Professor:	Nadovich/Yu		Numberr		
	Requested By:	Joseph Cericola		Vendor:	Mouser Electronics	
	Requested Date:	6-Apr-16		Web Site	www.mous er.com	
	Ship By:	Ground		Phone	(800) 346-6873	
#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rc vd
1	7	879-1460G1	Anderson Powerpole 2-4P Housing Plug With Latch	\$1.70	\$11.90	
2	5	879-1461G1	Anderson Powerpole 2-4P Housing Plug, No Latch	\$1.54	\$7.70	
3	1	653-A165S-T3 M-2	Omron 3-Pos Rotary Switch	\$28.80	\$28.80	
4	1	653-A16S-3N- 2	Omron 3-Pos Rotary Switch Socket	\$9.91	\$9.91	
5	2	601-737792-1	AIM-Cambridge Cat 5e RJ45-RJ45	\$1.34	\$2.68	

6	7	879-1827GA-B K	Ethernet Cable, Blue, 1ft Anderson PP15/45 Ground Housing, Green	\$0.50	\$3.50	
				Shipping Fees		
				Grand Total:	\$64.49	
		Instructor Approval:				
		Department Approval:				
		(Over \$500)				

Appendix IV:

		ECE Depart Re	ment Mat quest	terial		
	Course:	ECE 492		Req Number:	015	
	Professor:	Nadovich/Yu				
	Requested By:	Joseph Cericola on behalf of Geoffery Nudge		Vendor:	Newark	
	Requested Date:	6-Apr-16		Web Site	www.ne wark.co m	
	Ship By:	Ground		Phone	1 800 463 9275	
#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	5	05M6458	Anderson Powerpole 2-4P Housing Snap-In Receptacle	\$2.570	\$12.85	8-Ap r-16
2	8	22T8520	Anderson PPMX 2-Piece Housing Only, Black	\$0.895	\$7.16	8-Ap r-16
3	16	22T8518	Anderson PPMX Socket Contact	\$1.570	\$25.12	8-Ap r-16

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4	16	22T8519	Anderson PPMX Pin Contact	\$1.560	\$24.96	8-Ap r-16
5	3	44W4346	ITT Cannon Powerlock Line Source, Green	\$52.890	\$158.67	
6	2	04X2126	Veam Powerlock Panel Drain, Blue	\$79.840	\$159.68	
7	1	44W4363	ITT Cannon Powerlock Panel Source, Green	\$50.230	\$50.23	
8	1	44W4342	ITT Cannon Powerlock Line Drain, Gray	\$52.430	\$52.43	
				Shipping Fees		
				Grand Total:	\$491.10	
		Instructor Approval:				
		Department Approval:				
		(Over \$500)				

Appendix V:

		ECE Dep	ECE Department Material Request			
				Dog		
	Course:	ECE 492		Req Number:	016	
	Professor:	Nadovich/Yu				
	Requested By:	Joseph Cericola		Vendor:	Digi-Key	
	Requested Date:	6-Apr-16		Web Site	www.digik ey.com	
	Ship By:	Ground		Phone	1-800-344- 4539	
#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rc vd
1	2	AE10623-ND	Assmann USB 2.0 MaleA-MaleA Cable, 1m	\$2.3600 0	\$4.72	
2	1	502PB-ND	Judco SPST Switch, 14V, 2A	\$1.3400 0	\$1.34	
3	2	67-1183-ND	Lumex Panel Mount LED Red	\$1.2000 0	\$2.40	
4	2	67-1185-ND	Lumex Panel Mount LED Yellow	\$1.3200 0	\$2.64	
5	2	67-1184-ND	Lumex Panel Mount LED Green	\$1.3200 0	\$2.64	
6	20	CKN9207-ND	C&K Pushbutton Plunger	\$0.4540 0	\$9.08	

7	20	CKN9363CT-N D	C&K SPST Pushbutton	\$2.2710 0	\$45.42
8	4	1195-3481-ND	Harting USB 2.0 FemaleA-Female A Panel Mount Receptacle	\$21.650 00	\$86.60
9	4	1195-2189-ND	Harting USB Receptacle Cap	\$8.1400 0	\$32.56
1 0	10	754-1883-ND	Kingbright LED Red, 5mm	\$0.5460 0	\$5.46
1	10	67-1332-ND	Lumex Panel Mount 5mm LED Holder	\$0.2090 0	\$2.09
1 2	6	WM2902-ND	Molex 4-Pos Connector Housing	\$0.2700 0	\$1.62
1	6	WM1342-ND	Molex 4-Pos Connector Header	\$2.9900 0	\$17.94
1 4	10	ED10502-ND	On Shore 16-Pos Connector Socket	\$0.3360 0	\$3.36
1 5	10	A111927-ND	TE Connectivity 10-Pos Connector Receptacle, Panel Mount	\$0.2700 0	\$2.70
1 6	10	A30594-ND	TE Connectivity 10-Pos Connector Plug, Free Hanging	\$0.2540 0	\$2.54
1 7	10	A30590-ND	TE Connectivity 2-Pos Connector Receptacle, Free Hanging	\$0.1780 0	\$1.78
1 8	10	A30654-ND	TE Connectivity 2-Pos Connector Plug, Free Hanging	\$0.1160 0	\$1.16
1 9	10	A27284CT-ND	TE Connectivity 10-12AWG Crimp Connector Ring	\$0.3480 0	\$3.48

0	10	920074-07-ND	3M Connector Tap	\$0.5510 0	\$5.51
2	5	WM1340-ND	Molex 2-Pos Connector Header	\$2.6100 0	\$13.05
2	250	A100459CT-N D	TE Connectivity 16AWG Socket	\$0.0395 6	\$9.89
2	250	A110999CT-N D	TE Connectivity 16AWG Pin	\$0.0395 6	\$9.89
2 4	25	A30638-ND	TE Connectivity 22-26AWG Socket	\$0.0508 0	\$1.27
2 5	25	A30646-ND	TE Connectivity 22-26AWG Pin	\$0.0564 0	\$1.41
2 6	1	SC2106-ND	Switchcraft Panel Mount HDMI Receptacle	\$19.740 00	\$19.74
				Shipping Fees	
				Grand Total:	\$290.29
		Instructor Approval:			
		Department Approval:			
		(Over \$500)			