

Project Status Letter

PSL Number 10-ALL-GG

Covering period from 3/26/16 to 4/1/16

Prepared by: ECE 492 Design Team

Tasks that have been completed in the previous week:

Team - Two ATP final draft revisions submitted (not accepted)

TSV - I2C communication AMS board demoed, PackMan board debugged, list of errata compiled, control panel circuit board ordered

GLV - Power/safety/VCI breakout board ordered, CAD drawings for Power/safety/VCI system box completed, safety panel CAD drawings completed, parts for Power/Safety/VCI breakout board ordered

VSCADA - Startup script for on-board computer written

MCM - calibration data collected for RPM sensor, final static characterization data collected

Tasks ongoing

Team - Acceptable ATP final draft to be submitted as soon as possible

GLV - KiCAD Layouts for TSI Isolator Board Layout and JGB³ (John Gehrig Board + Breakout Board) Board Layout, Cockpit Panel and TSI low voltage CAD drawings

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, compiling list of parts for Pack, control panel board built after order received

MCM - Compiling analysis report for static characterization, calculating calibration factor for RPM, discussion of fully integrated car characteristics with MechEs, collecting data for dynamic characterization

Tasks due to be complete next week.

Team - Acceptable ATP final draft to be submitted as soon as possible

TSV - PackMan LCD created

GLV - JGB³ and TSI Isolator board layouts + BOMs, safety panel fully wired, built. Cockpit panel parts ordered and CAD drawing approved

MCM - complete static characterization analysis report section, data collection for dynamic characterization

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

Overdue tasks

Team - ATP accepted, (still revising testing procedure and signoffs, continued revisions until acceptable)

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

MCM - Calibration results for RPM, analysis results completed for static characterization

TSV - control panel board built

GLV - JGB³ and TSI isolator board, layouts and BOM's are not yet completed (close to finished, behind schedule)

Cost Summary

Budget Category	New This Period	Total Spent to Date	Budget Remaining	Total Budget
TSV	\$13.83	\$227.45	\$622.55	\$850
GLV	\$81.97	\$313.97	\$586.03	\$900
VSCADA	\$24.94	\$258.44	\$141.56	\$400
Cabling	\$101.37	\$101.37	\$198.63	\$300
MCM (Motor Char. + Model)	\$0	\$0	\$250	\$250
Shipping	\$3	\$82.80	\$217.20	\$300
Totals	\$0	\$758.92	\$2,241.08	\$3000

Receiving Reports

- Deutsch Connectors (6 items) (Appendix I)

Purchase Requests

- USB WiFi Module with Antenna for Raspberry Pi (Appendix II)
- LoveRPi Heatsink for Raspberry Pi (Appendix III)
- Digikey (18 items) (Appendix IV)

Appendix I:

		ECE Department Material Request				
	Course:	ECE 492		Req Number:		011
	Professor:	Nadovich/Yu				
	Requested By:	Joseph Cericola on behalf of Timothy Andrews		Vendor:	Deutsch Connectors	
	Requested Date:	29-Mar-16		Web Site	www.deutschconnector.com	
	Ship By:	Ground		Phone	877-364-8036	
#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	2	DT04-2P-L012-Assy	2-Way Receptacle Assembly, Flange Mount, Gray	\$10.03	\$20.06	1-Apr-16
2	1	DT04-4P-L012-Assy	4-Way Receptacle Assembly, Flange Mount, Gray	\$9.66	\$9.66	1-Apr-16
3	1	DT04-6P-CL09-Assy	6-Way Receptacle Assembly, Flange Mount, Gasketed, Black	\$22.07	\$22.07	1-Apr-16
4	2	DT04-08PA-L012-Assy	8-Way Receptacle Assembly, Flange	\$13.38	\$26.76	1-Apr-16

			Mount, Gray			
5	2	DT3P-L012-GKT	Neoprene Gasket for 2-Way and 3-Way Flange Mount Recaptacle	\$0.96	\$1.92	1-Apr-16
6	8	DT4P-L012-GKT	Neoprene Gasket for 4-Way Flange Mount Recaptacle	\$1.10	\$8.80	1-Apr-16
7	2	DT8P-L012-GKT	Neoprene Gasket for 8-Way Flange Mount Recaptacle	\$1.92	\$3.84	1-Apr-16
				Shipping Fees		
				Grand Total:	\$93.11	
		Instructor Approval:				
		Department Approval:				
		(Over \$500)				

Appendix II:

	Course:	ECE 492		Req Number:	009
	Professor:	Nadovich/Yu			
	Requested By:	Joseph Cericola on behalf of Domenick Falco		Vendor:	Adafruit
	Requested Date:	29-Mar-16		Web Site	www.adafruit.com
	Ship By:	Ground		Phone	

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	1	1030	USB WiFi Module with Antenna for Raspberry Pi	\$19.95	\$19.95	
				Shipping Fees		
				Grand Total:	\$19.95	
		Instructor Approval:				
		Department Approval:				
		(Over \$500)				

Appendix III:

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
ECE Department Material Request						
		Course: ECE 492		Req Number:	010	
		Professor: Nadovich/Yu				
		Requested By: Joseph Cericola on behalf of Domenick Falco		Vendor:	Amazon	
		Requested Date: 29-Mar-16		Web Site	www.amazon.com	
		Ship By: Ground		Phone	1-734-414-0900	
#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	1	B018BGRDVS	LoveRPi Heatsink Set for	\$4.99	\$4.99	

			Raspberry Pi 2/3 Model B CPU and LAN			
				Shipping Fees		
				Grand Total:	\$4.99	
		Instructor Approval:				
		Department Approval:				
		(Over \$500)				

Appendix IV:

		ECE Department Material Request				
	Course:	ECE 492		Req Number:	012	
	Professor:	Nadovich/Yu				
	Requested By:	Joseph Cericola		Vendor:	Digi-Key	
	Requested Date:	29-Mar-16		Web Site	www.digikey.com	
	Ship By:	Ground		Phone	1-800-344-4539	
#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	1	1053-1202-ND	Orion 5VDC 40mm-Square Fan	\$9.9800	\$9.98	
2	1	1053-1390-ND	Orion 40mm-Square Fan Filter	\$1.3500	\$1.35	
3	10	952-1512-ND	Harwin 25mm 3M Hex Standoff	\$0.6080	\$6.08	

4	10	36-9191-4-ND	Keystone Electronics M3 Machine Screw	\$0.2180	\$2.18	
5	1	67-1183-ND	Lumex Panel Mount LED Red	\$1.2000	\$1.20	
6	10	F4200-ND	Littlefuse 15A Blade Fuse	\$0.2600	\$2.60	
7	10	F4197-ND	Littlefuse 5A Blade Fuse	\$0.2600	\$2.60	
8	5	BK-6010-ND	MPD Blade Fuse PCB Block	\$0.5400	\$2.70	
9	1	Z2254-ND	Omron 10A 24V G5LE SPST Relay	\$1.3000	\$1.30	
10	1	Z3115-ND	Omron 10A 5V G5LE SPST Relay	\$1.4100	\$1.41	
11	2	296-34970-1-ND	Texas Instruments High Side Switch	\$0.5400	\$1.08	
12	1	AE10924-ND	Assmann 9- Pos D-Sub Receptacle	\$0.7800	\$0.78	
13	50	ED2609-ND	On Shore Technology 2-Pos 5.08mm PCB Terminal Block	\$0.2908	\$14.54	
14	10	ED2610-ND	On Shore Technology 3-Pos 5.08mm PCB Terminal Block	\$0.5100	\$5.10	
15	4	811-2109-5-ND	Murata DC/DC Converter 5V 1.2A	\$22.0000	\$88.00	
16	1	102-2348-ND	CUI DC/DC Converter 5V 4A	\$19.9100	\$19.91	
17	1	102-2421-ND	CUI DC/DC Converter 12V 2.5A	\$22.1800	\$22.18	

18	10	SMAZ30-TPMSCT-ND	Micro Commercial 30V Zener Diode	\$0.3450	\$3.45	
				Shipping Fees		
				Grand Total:	\$186.44	
		Instructor Approval:				
		Department Approval:				
		(Over \$500)				