

Project Status Letter PSL

Number: PSL_04

Covering period: 02/25-03/03

Prepared by: J. Mahati Hari and Rachel Szteinberg

Task summary from previous week/Proposed Changes:

TEAM	CURRENT WBS TASKS COMPLETED	FURTHER INVESTIGATION	PROPOSED CHANGES
VSCADA	<ul style="list-style-type: none"> - VSC.4.2. [Maintainability plan delivered] - VSC.3.5 [CANBus Link Demonstrated] 	N/A	[+] Drive mode demo added
Cell App	<ul style="list-style-type: none"> - CELL.7.2. [Maintainability plan delivered] 	? Implemented Data Handler ? raw data view	[+] management met with team, made sufficient changes
DYNO	N/A	? connection from power supply ? Motor characterization test conducted ? over- heating temperature changes to software	N/A
TSV	<ul style="list-style-type: none"> - TSV.1.1 [Calibrated All AMS boards documents delivered] - TSV.2.1 [Populated and debugged first PacMAN Board] - TSV.4.2 [Tested packs] - TSV.6.1 [Integrate accumulator with dyno] - TSV.6.2. [Dummy load test data plan approved] - TSV.6.3. [Integrated packs in series without AMS or PACKMan boards] - TSV.5.1[Powered dynamometer with accumulator] - TSV.5.2 [Collected relevant data] - TSV.7.1 [PDR delivered] 	N/A	N/A
TSI	N/A	N/A	N/A
Cooling	N/A	? COOL.1.3. Electrical Schematic approved	[+] reservoir block diagram inclusion

Systems Engineering	<ul style="list-style-type: none"> - M.1.3 [Maintainability plan delivered and accepted] - VSC.3.5 [CANBus Link Demonstrated] 	N/A	N/A
GLV	N/A	N/A	[+] GLV box interior layout approved [+] GLV box panel approved
Interconnect	N/A	N/A	N/A
Communications	Not referenced with WBS	<ul style="list-style-type: none"> - Website maintained/updated -Photos taken/edited - Footage taken - SCADA Layout Mock-ups edited - Initial research for proposal completed 	Not referenced with WBS
Car Physics Investigation	N/A	N/A	n/a
MGMT	<ul style="list-style-type: none"> - M.7.1. [Organized/Maintained the website] - M.11. [Purchasing report created] 	N/A	[+] PSL

Plan for next week:

TEAM	TASKS TO BE COMPLETED
VSCADA	<ul style="list-style-type: none"> - VSC.3.1. [Interfaced with subsystems] - VSC.2.6 [Drive mode demo delivered]
Cell App	<ul style="list-style-type: none"> - CELL.7.3. [CDR delivered]
DYNO	<ul style="list-style-type: none"> ? RPM CANBus data fixed ? run specific tests
TSV	<ul style="list-style-type: none"> - GLV.5.2. [ATP delivered] - GLV.6.2. [CDR delivered]
TSI	<ul style="list-style-type: none"> - TSI.1.1 [schematic design approved] - TSI.6.2. [CDR Delivered] - TSI.3.1 [IMD integrated with microcontroller] - TSI.4.1 [Mounting plate design approved by machine shop] - TSI.5.5 [Mounted current sensor bars]
Cooling	<ul style="list-style-type: none"> - COOL.4.1 [CANBus Interface Demonstrated] - COOL.3.1 [LCD display delivered]
Systems Engineering	<ul style="list-style-type: none"> ? CANBus cooling/TSI/Huff box Integrated ? Reworked CANBus protocol ? Work with SCADA for update rates/packet info
GLV	<ul style="list-style-type: none"> - GLV.4.2 [GLV_BoB delivered] - GLV.6.2 [CDR delivered]
Interconnect	<ul style="list-style-type: none"> - IC.2.1 [Built all GLV safety loop cables]
Communications	Not referenced
Car Physics Investigation	N/A
MGMT	<ul style="list-style-type: none"> - M.2. [CDR delivered] - M.5.1.1 [ATP plan delivered] - Deliver PSL

Progress of WBS Items:

Subsystem	Total Number of WBS Items	PSL 1*	PSL 2	PSL 3	PSL 4
TSI	30	1	0	1	2
VSCADA	21	2	0	1	2
TSV	28	1	4	2	9
Cooling	20	2	3	3	0
GLV	29	1	2	1	0
Cell App	24	1	2	1	1
DYNO	21	1	0	2	0
Interconnect	12	0	1	1	0
Physics Investigation	14	0	0	0	0
Management	38	0	3	4	2
Overall	237	9	15	16	16

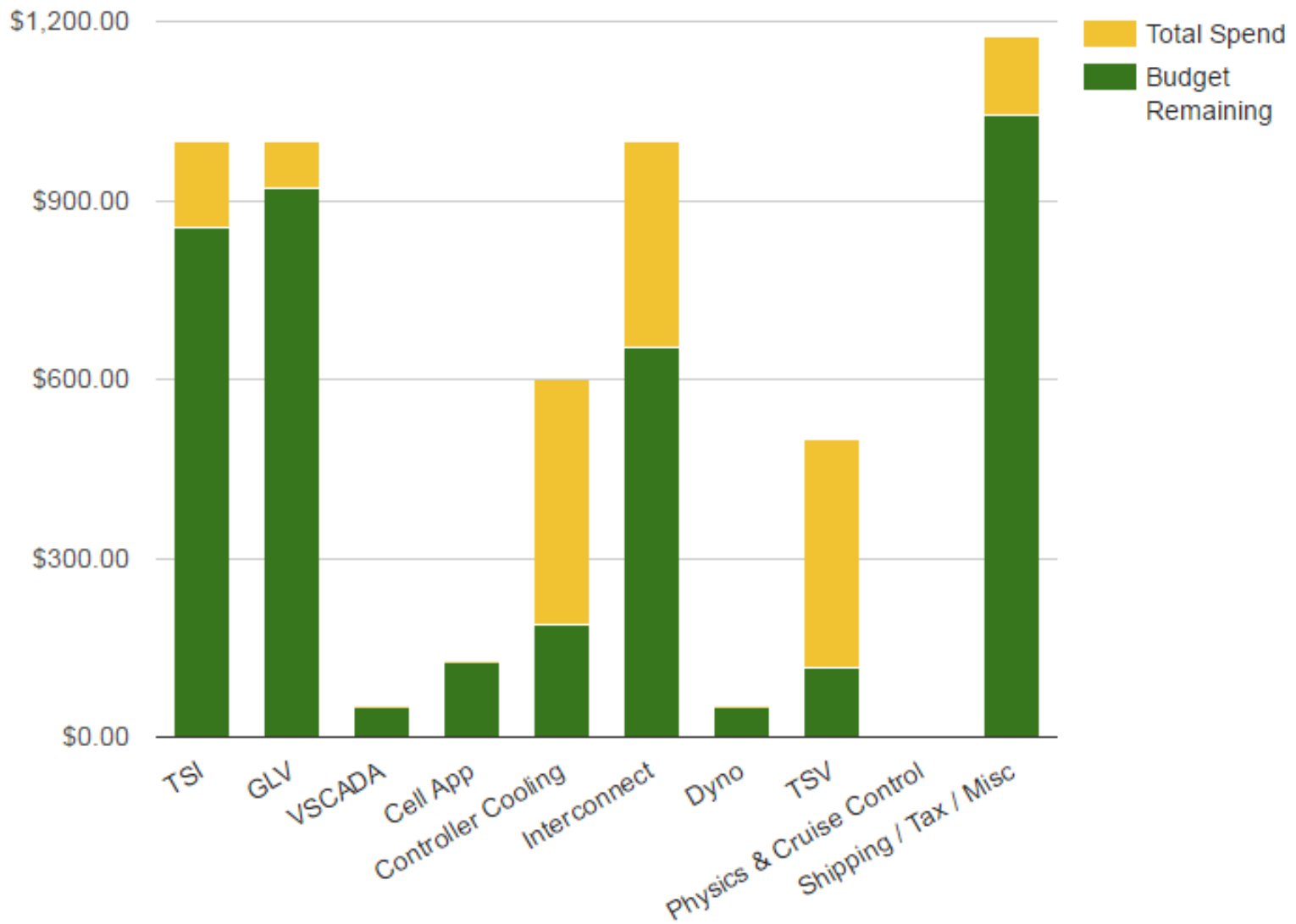
Please see attached PDF of PPT to see graphical representation. This is based off of the current WBS, which is under iterative revision.

Cost Summary:

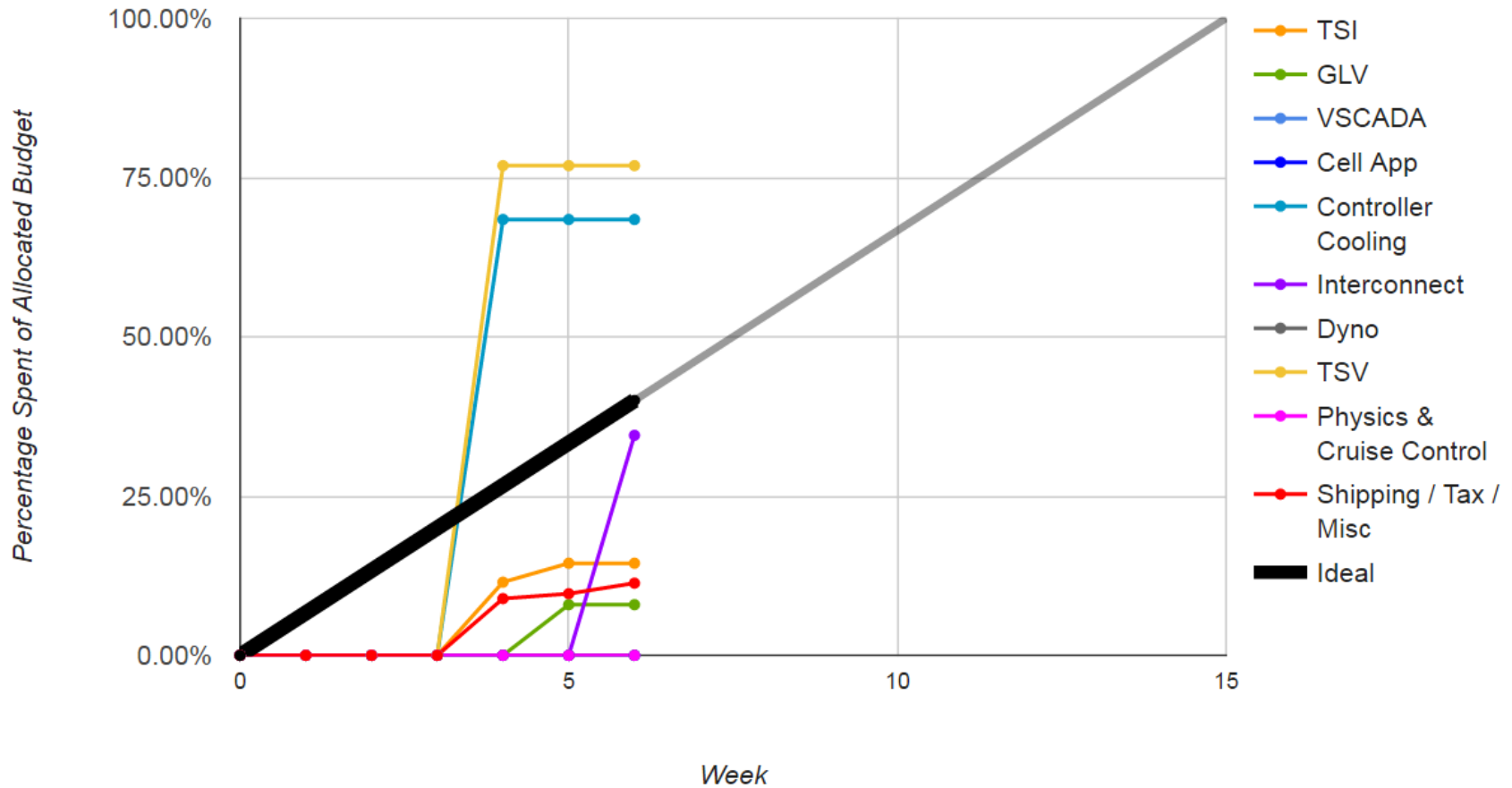
Subsystem	Spent this period	Spent to date	Budget Allocated	Budget Remaining
TSI	\$0.00	\$144.61	\$1,000	\$855.39
GLV	\$0.00	\$79.55	\$1,000	\$920.45
VSCADA	\$0.00	\$0	\$50	\$50.00
Cell App	\$0.00	\$0	\$125	\$125.00
Controller Cooling System	\$0.00	\$410.47	\$600	\$189.53
Interconnect / Cabling / ICD	\$345.33	\$345.33	\$1,000	\$654.67
Dyno	\$0.00	\$0	\$50	\$50.00
TSV	\$0.00	\$384.31	\$500	\$115.69
Physics & Cruise Control	\$0.00	\$0	\$0	\$0.00
Shipping / Tax / Misc	\$19.49	\$133.18	\$1,175	\$1,041.82
Total	\$364.82	\$1,497.45	\$5,500	\$4,002.55

Note: Of the shipping/tax/misc budget, \$50 has been used towards printing posters of the system diagram and work breakdown structure, \$10 this period for the printing of the rev 0.5 system diagram.

Budget Spending



Percentage Spent of Subsystem Budget Allocations

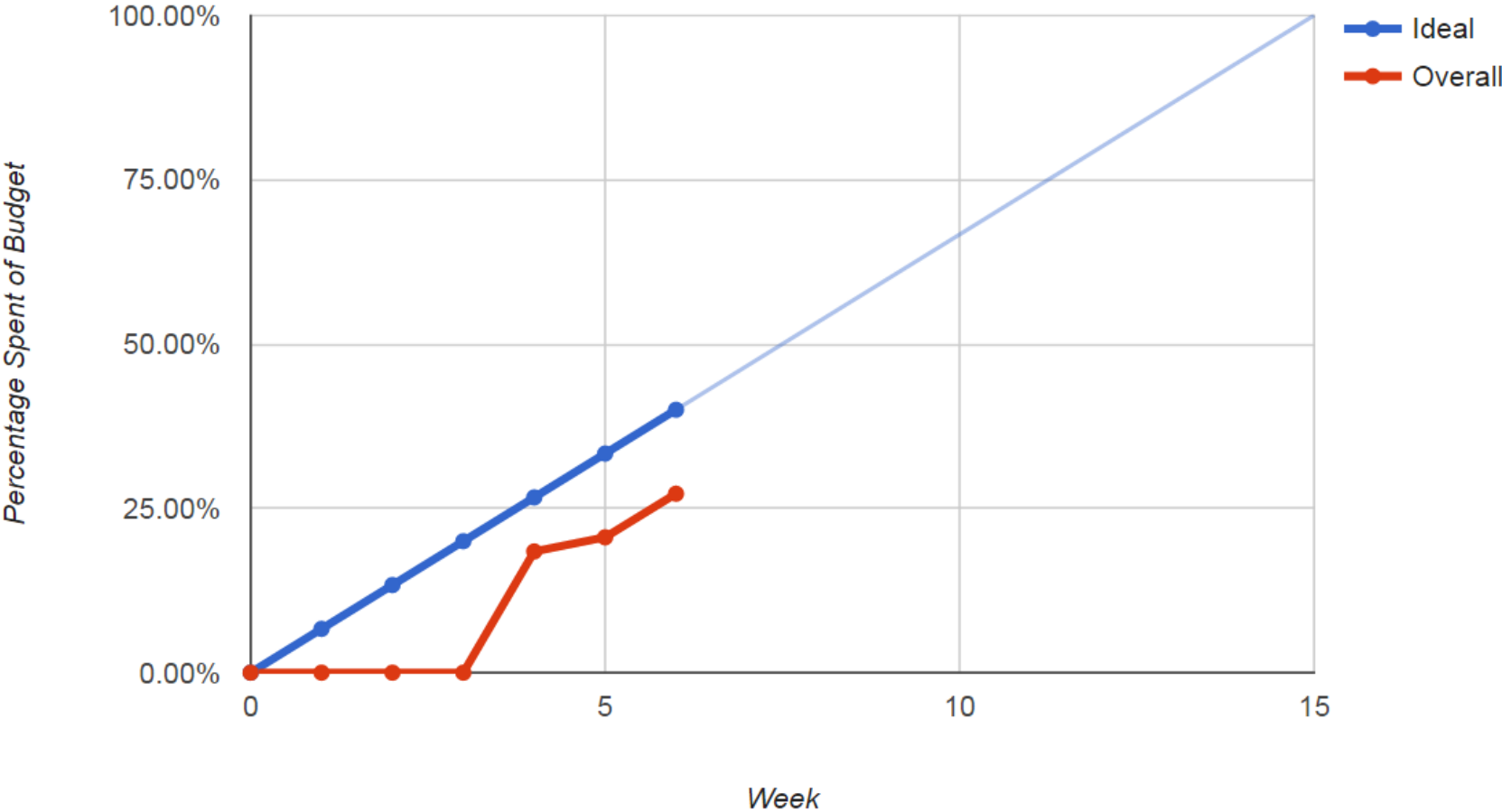


Ideally Spent per Subsystem: 40%

Percentage Spent per Subsystem:

TSI – 14.46%	GLV – 7.96%	VSCADA – 0%
Cell App – 0%	Interconnect – 34.53%	Controller Cooling – 68.41%
Dyno – 0%	TSV – 76.86%	Physics & Cruise Control – 0%
Shipping / Tax / Misc – 11.33%		

Percentage Spent of Total Budget



Ideally Spent Overall: 40%
Percentage Spent Overall: 27.23%

Receiving Report:

Request #7 – GLV – Digikey – Panel LEDs (Appendix I)

Request #8 – TSI – Digikey – Microchip (Appendix I)

Request #9 – Cabling – Mouser – Connectors (Appendix III)

****Note:** Requests 7 and 8 were both sent in the same order but were approved separately

The following items were received this period and can be found in the appendices listed above:

Req #	Team	Vendor	Vendor PN	Qty	Item Description	Ordered Date	Received Date
7	GLV	Digikey	350-4050-ND	5	Red LED Panel Indicator 24V	21-Feb-17	27-Feb-17
7	GLV	Digikey	350-4053-ND	5	Green LED Panel Indicator 24V	21-Feb-17	27-Feb-17
8	TSI	Digikey	AT90CAN128-15AZCT-ND	1	IC MCU 8BIT 128KB FLASH 64TQFP	21-Feb-17	27-Feb-17
8	TSI	Digikey	PA0096-ND	1	Breakout board to convert TQFP to DIP	21-Feb-17	27-Feb-17
8	TSI	Digikey	MCP2551-I/P-ND	1	IC TRANSCEIVER CAN HI-SPD 8-DIP	21-Feb-17	27-Feb-17
9	Cabling	Mouser	571-DT06-3S	15	Connectors 3WAY PLUG GRAY	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-1011-235-0405	17	Connectors 180 DEG STRAIGHT BACKSHELL 4 connect	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-1011-231-0305	11	Connectors 180 DEG STRAIGHT BACKSHELL 3 connect	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-1011-239-0605	15	Connectors 180 DEG STRAIGHT BACKSHELL 6 connect	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-1011-245-0805	10	Connectors 180 DEG STRAIGHT BACKSHELL 8 connect	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-1011-247-1205	6	Connectors 180 DEG STRAIGHT BACKSHELL 12 connect	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-DT06-8SA	10	Connectors see p/n DT06-08SA	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-DT06-12SA	5	Connectors SZ 16 DT 12 WAY PLUG	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-W8-S	10	Connectors WEDGE LOCK FOR 8WAY PLUG	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-W12S	10	Connectors WEDGELOCK, DT, 12 WAY PLUG	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-DT06-2S	10	Connectors DT Plug 2 Way	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-DT04-2P	10	Connectors DT 2 WAY RECP	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-DT06-4S	10	Connectors PLUG DT 4 WAY	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-DT04-4P	10	Connectors DT 4 WAY RECP	1-Mar -17	3-Mar-17
9	Cabling	Mouser	571-W2-P	10	Connectors WEDGE LOCK FOR 2P REC HOUSING	1-Mar -17	3-Mar-17

Purchase Requests:

Request #9 – Cabling – Mouser – Connectors (Appendix II)

The following items were ordered this period and can be found in the appendices listed above:

Req #	Vendor	Vendor PN	Qty	Item Description	Ordered Date
9	Mouser	571-DT06-3S	15	Connectors 3WAY PLUG GRAY	1-Mar -17
9	Mouser	571-1011-235-0405	17	Connectors 180 DEG STRAIGHT BACKSHELL 4 connect	1-Mar -17
9	Mouser	571-1011-231-0305	11	Connectors 180 DEG STRAIGHT BACKSHELL 3 connect	1-Mar -17
9	Mouser	571-1011-239-0605	15	Connectors 180 DEG STRAIGHT BACKSHELL 6 connect	1-Mar -17
9	Mouser	571-1011-245-0805	10	Connectors 180 DEG STRAIGHT BACKSHELL 8 connect	1-Mar -17
9	Mouser	571-1011-247-1205	6	Connectors 180 DEG STRAIGHT BACKSHELL 12 connect	1-Mar -17
9	Mouser	571-DT06-8SA	10	Connectors see DT06-08SA	1-Mar -17
9	Mouser	571-DT06-12SA	5	Connectors SZ 16 DT 12 WAY PLUG	1-Mar -17
9	Mouser	571-W8-S	10	Connectors WEDGE LOCK FOR 8WAY PLUG	1-Mar -17
9	Mouser	571-W12S	10	Connectors WEDGELOCK, DT, 12 WAY PLUG	1-Mar -17
9	Mouser	571-DT06-2S	10	Connectors DT Plug 2 Way	1-Mar -17
9	Mouser	571-DT04-2P	10	Connectors DT 2 WAY RECP	1-Mar -17
9	Mouser	571-DT06-4S	10	Connectors PLUG DT 4 WAY	1-Mar -17
9	Mouser	571-DT04-4P	10	Connectors DT 4 WAY RECP	1-Mar -17
9	Mouser	571-W2-P	10	Connectors WEDGE LOCK FOR 2P REC HOUSING	1-Mar -17

Outstanding Orders:

None at this time. All orders that have been sent out have been received.

APPENDIX I

ECE Department Material Request

Course: ECE 492
Professor: Nadovich/Schmult

Req Number: 7 / 8

Requested By: GLV (Kyle) & TSI (Jack)
Requested Date: 21-Feb-17
Ship By: Ground

Vendor: Digikey
Web Site: www.digikey.com
Phone: 218-681-6674

#	Vendor PN	Manufacturer PN	Description	Qty	Unit Price	Total Price	Rcvd
1	350-4050-ND	6823135141F	LED PANEL INDCATOR RED 24V	5	\$6.970	\$34.85	27-Feb-17
2	350-4053-ND	6823235142F	LED PANEL INDCATOR GREEN 24V	5	\$8.940	\$44.70	27-Feb-17
3	AT90CAN128-15AZCT-ND	AT90CAN128-15AZ	IC MCU 8BIT 128KB FLASH 64TQFP	1	\$12.89	\$12.89	27-Feb-17
4	PA0096-ND	PA0096	Breakout board to convert TQFP to DIP	1	\$15.79	\$15.79	27-Feb-17
5	MCP2551-I/P-ND	MCP2551-I/P	IC TRANSCEIVER CAN HI-SPD 8-DIP	1	\$1.05	\$1.05	27-Feb-17

Subtotal :	\$109.28
Shipping Fees :	\$8.99
Grand Total :	\$118.27

APPENDIX II

ECE Department Material Request

Course: ECE 492
Professor: Nadovich/Schmult

Req Number: 9

Requested By: Cabling (Jeremy)
Requested Date: 21-Feb-17
Ship By: Ground

Vendor: Mouser
Web Site: <http://www.mouser.com/>
Phone: 800-346-6873

#	Vendor PN	Manufacturer PN	Description	Qty	Unit Price	Total Price	Rcvd
1	571-DT06-3S	DT06-3S	Connectors 3WAY PLUG GRAY	15	\$1.220	\$18.30	3-Mar-17
2	571-1011-235-0405	1011-235-0405	Connectors 180 DEG STRAIGHT BACKSHELL 4 connect	17	\$2.240	\$38.08	3-Mar-17
3	571-1011-231-0305	1011-231-0305	Connectors 180 DEG STRAIGHT BACKSHELL 3 connect	11	\$3.500	\$38.50	3-Mar-17
4	571-1011-239-0605	1011-239-0605	Connectors 180 DEG STRAIGHT BACKSHELL 6 connect	15	\$2.480	\$37.20	3-Mar-17
5	571-1011-245-0805	1011-245-0805	Connectors 180 DEG STRAIGHT BACKSHELL 8 connect	10	\$3.880	\$38.80	3-Mar-17
6	571-1011-247-1205	1011-247-1205	Connectors 180 DEG STRAIGHT BACKSHELL 12 connect	6	\$3.360	\$20.16	3-Mar-17
7	571-DT06-8SA	DT06-8SA	Connectors see p/n DT06-08SA	10	\$7.440	\$74.40	3-Mar-17
8	571-DT06-12SA	DT06-12SA	Connectors SZ 16 DT 12 WAY PLUG	5	\$5.080	\$25.40	3-Mar-17
9	571-W8-S	W8-S	Connectors WEDGE LOCK FOR 8WAY PLUG	10	\$0.229	\$2.29	3-Mar-17
10	571-W12S	W12S	Connectors WEDGELOCK, DT, 12 WAY PLUG	10	\$0.306	\$3.06	3-Mar-17
11	571-DT06-2S	DT06-2S	Connectors DT Plug 2 Way	10	\$1.030	\$10.30	3-Mar-17
12	571-DT04-2P	DT04-2P	Connectors DT 2 WAY RECP	10	\$0.849	\$8.49	3-Mar-17
13	571-DT06-4S	DT06-4S	Connectors PLUG DT 4 WAY	10	\$1.490	\$14.90	3-Mar-17
14	571-DT04-4P	DT04-4P	Connectors DT 4 WAY RECP	10	\$1.440	\$14.40	3-Mar-17
15	571-W2-P	W2-P	Connectors WEDGE LOCK FOR 2P REC HOUSING	10	\$0.105	\$1.05	3-Mar-17

Subtotal :	\$345.33
Shipping Fees :	\$9.49
Grand Total :	\$354.82