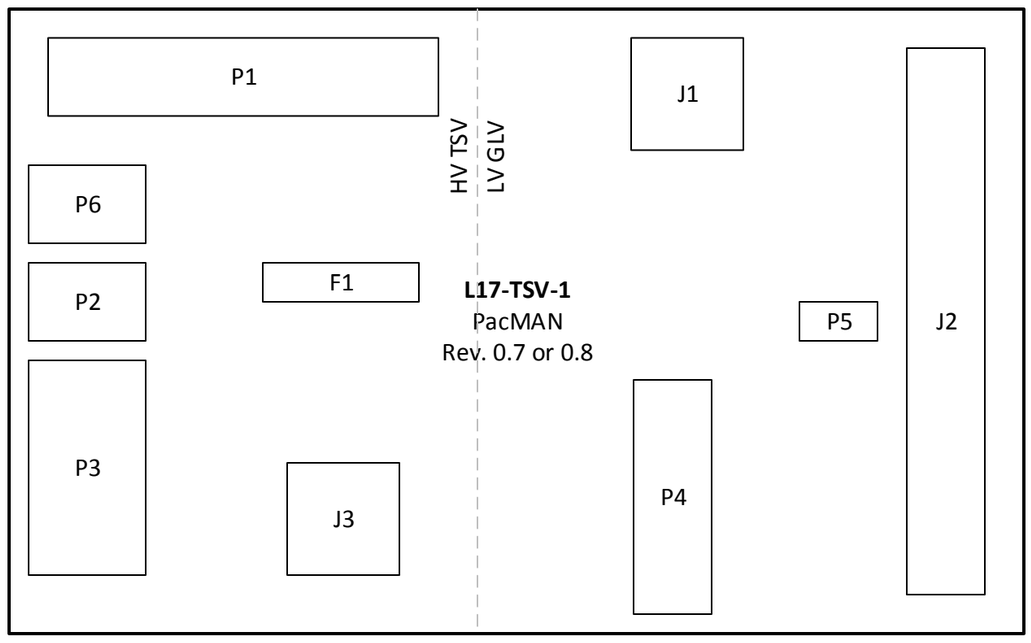
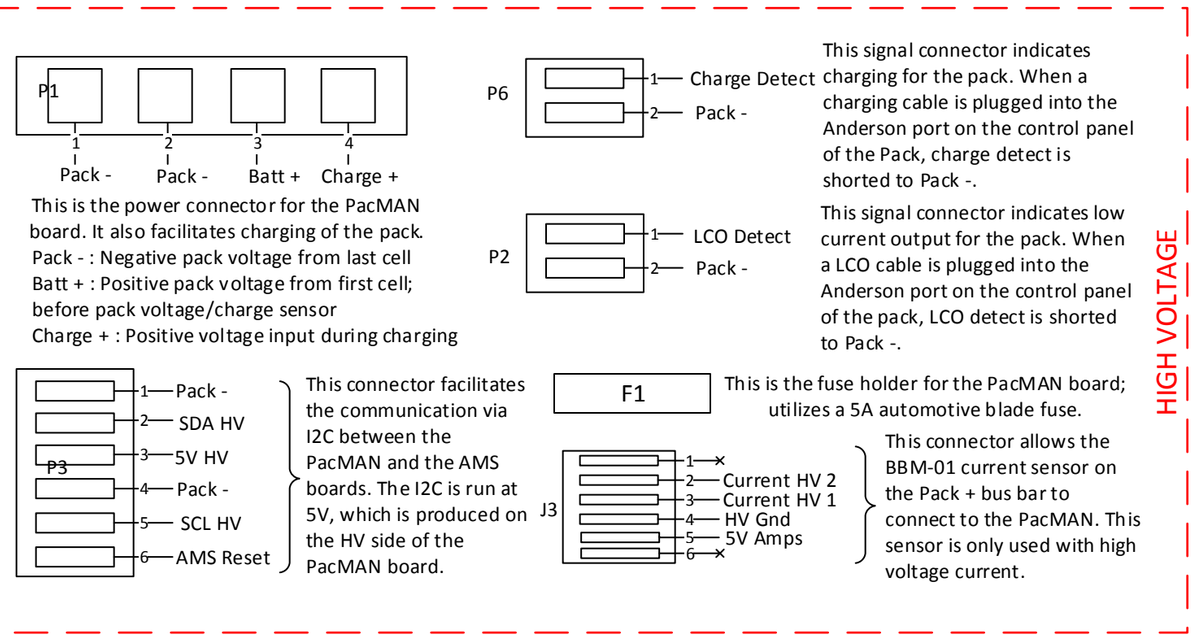
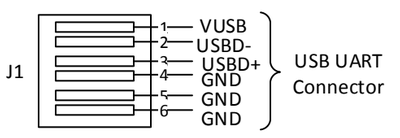
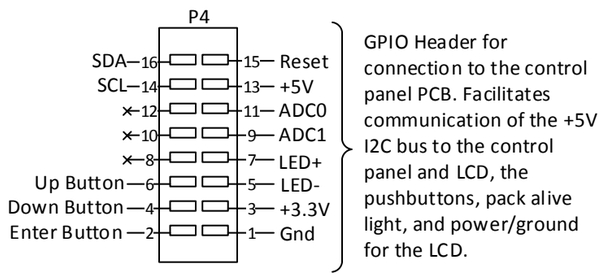
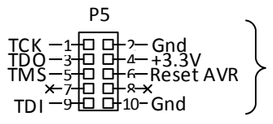
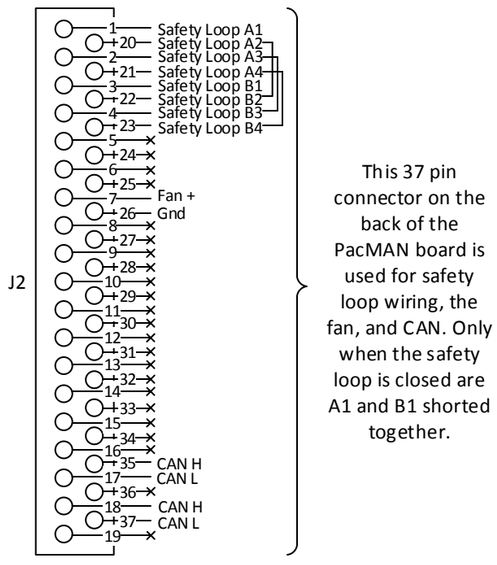

P1
J1
HV TSV
LV GLV
P6
P2
F1
L17-TSV-1
PacMAN
Rev. 0.7 or 0.8
P5
J2
P3
J3
P4


P1
1 Pack -
2 Pack -
3 Batt +
4 Charge +
This is the power connector for the PacMAN board. It also facilitates charging of the pack.
Pack - : Negative pack voltage from last cell
Batt + : Positive pack voltage from first cell; before pack voltage/charge sensor
Charge + : Positive voltage input during charging
P6
1 Charge Detect
2 Pack -
This signal connector indicates charging for the pack. When a charging cable is plugged into the Anderson port on the control panel of the Pack, charge detect is shorted to Pack -.
P2
1 LCO Detect
2 Pack -
This signal connector indicates low current output for the pack. When a LCO cable is plugged into the Anderson port on the control panel of the pack, LCO detect is shorted to Pack -.
P3
1 Pack -
2 SDA HV
3 5V HV
4 Pack -
5 SCL HV
6 AMS Reset
This connector facilitates the communication via I2C between the PacMAN and the AMS boards. The I2C is run at 5V, which is produced on the HV side of the PacMAN board.
F1
This is the fuse holder for the PacMAN board; utilizes a 5A automotive blade fuse.
J3
1
2 Current HV 2
3 Current HV 1
4 HV Gnd
5 5V Amps
6
This connector allows the BBM-01 current sensor on the Pack + bus bar to connect to the PacMAN. This sensor is only used with high voltage current.
HIGH VOLTAGE


J1
1 VUSB
2 USBD-
3 USBD+
4 GND
5 GND
6 GND
USB UART Connector


P4
SDA 16
SCL 14
12
10
8
Up Button 6
Down Button 4
Enter Button 2
15 Reset
13 +5V
11 ADC0
9 ADC1
7 LED+
5 LED-
3 +3.3V
1 Gnd
GPIO Header for connection to the control panel PCB. Facilitates communication of the +5V I2C bus to the control panel and LCD, the pushbuttons, pack alive light, and power/ground for the LCD.


P5
TCK 1
TDO 3
TMS 5
7
TDI 9
2 Gnd
4 +3.3V
6 Reset AVR
8
10 Gnd
JTAG Programming and Debug Header


J2
1 Safety Loop A1
20 Safety Loop A2
2 Safety Loop A3
21 Safety Loop A4
3 Safety Loop B1
22 Safety Loop B2
4 Safety Loop B3
23 Safety Loop B4
5
24
6
25
7 Fan +
26 Gnd
8
27
9
28
10
29
11
30
12
31
13
32
14
33
15
34
16
35 CAN H
17 CAN L
36
18 CAN H
37 CAN L
19
This 37 pin connector on the back of the PacMAN board is used for safety loop wiring, the fan, and CAN. Only when the safety loop is closed are A1 and B1 shorted together.