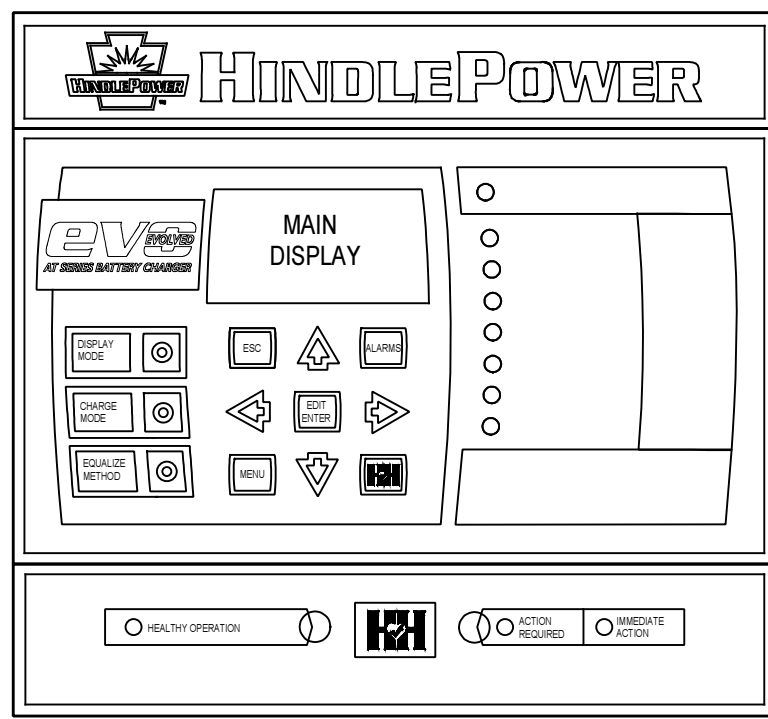
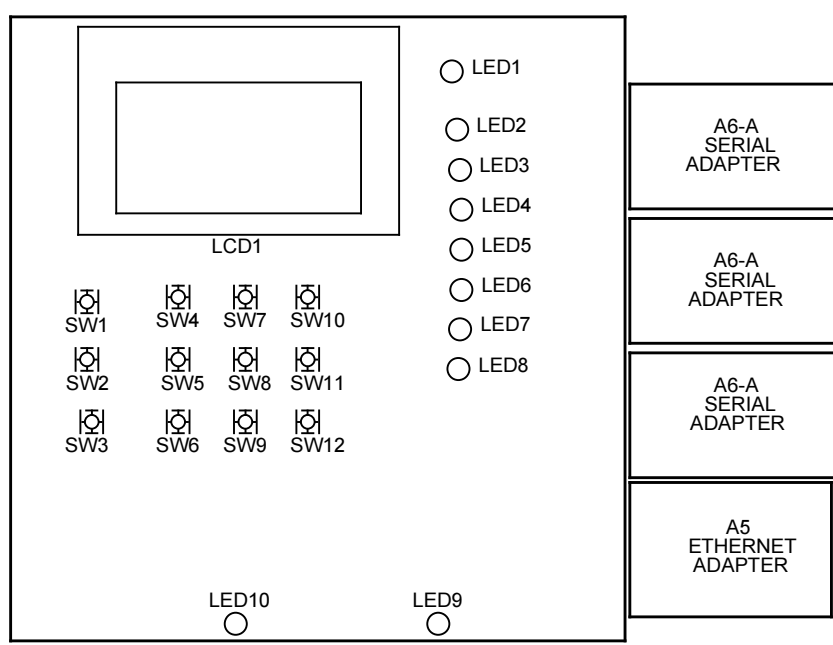


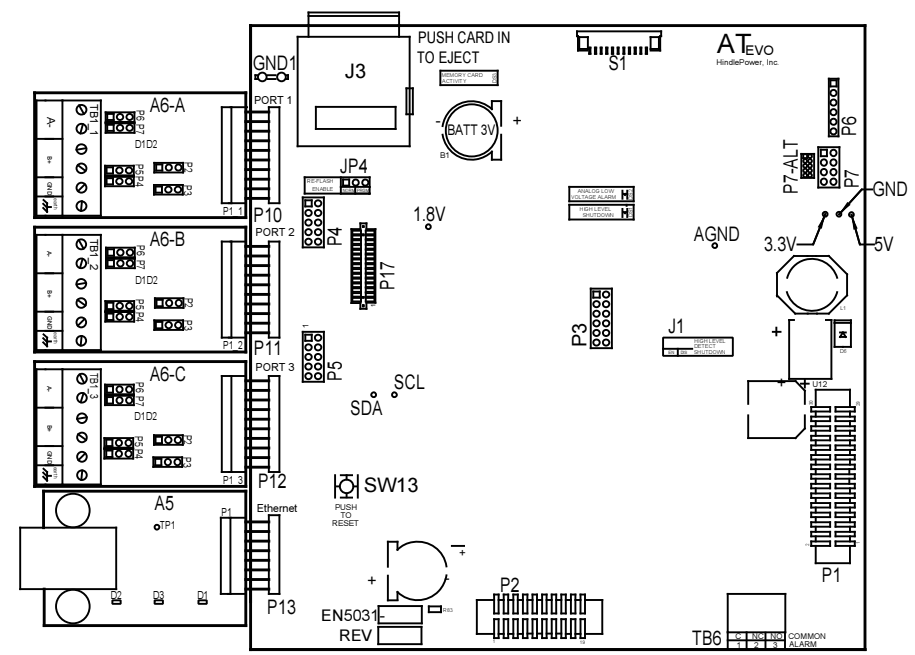
| REVISION HISTORY TABLE |      |                 |            |          |
|------------------------|------|-----------------|------------|----------|
| ECN No.                | REV. | DESCRIPTION     | DATE       | APPROVED |
| 25915                  | 0    | INITIAL RELEASE | 04/07/2017 | BB       |



**INSTRUMENT PANEL  
(PART No. FK0151-01)**



**MAIN CONTROL PC BOARD (A1)  
FRONT VIEW - FACING CHARGER DOOR WHEN INSTALLED**



**MAIN CONTROL PC BOARD (A1)  
BACK VIEW - FACING CHARGER COMPONENTS WHEN INSTALLED**

NOTE: UNLESS OTHERWISE SPECIFIED, ALL ALARM TERMINAL BLOCKS (TB3/TB4/TB8) ARE SOLDERLESS COMPRESSION TERMINALS, ACCEPTING #22-14 AWG WIRE. ALL ALARM CONTACTS ARE ENERGIZED WHEN IN THE NON-ALARM STATE (FAIL SAFE). ALL ALARM CONTACTS WILL CHANGE STATE WHEN CHARGER IS POWERED DOWN. CONTACT RATING IS 0.5A @ 125VAC/VDC RESISTIVE.

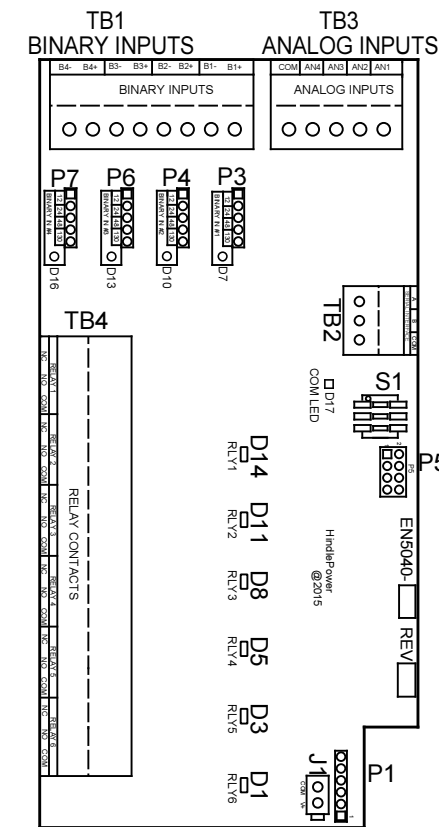
| SERIAL ADAPTER (A6)  | ETHERNET ADAPTER (A5)   |
|--|---|
| <b>CONNECTORS:</b><br>P1 - MAIN CONTROL BOARD<br><br><b>JUMPERS AND CONFIGURATION SWITCHES:</b><br>P2 - RECEIVER ENABLE CONTROL SELECTION<br>P3 - MEDIA CONTROL SELECTION (RS-234 OR RS-485)<br>P4 - RS-485 TERMINATION RESISTOR ENABLE (RECEIVE)<br>P5 - RS-485 TERMINATION RESISTOR ENABLE (TRANSMIT)<br>P6 - RS-485 INTERFACE 2 WIRE / WIRE SELECTION (A)<br>P7 - RS-485 INTERFACE 2 WIRE / WIRE SELECTION (B)<br><br><b>TERMINAL BLOCKS:</b><br>TB1 - USER CONNECTIONS TO SERIAL INTERFACE<br><br><b>INDICATOR LIGHTS (LEDS)</b><br>TXD - SERIAL DATA BEING SENT<br>RXD - SERIAL DATA BEING RECEIVED | <b>CONNECTORS:</b><br>P1 - MAIN CONTROL BOARD<br><br><b>INDICATOR LIGHTS (LEDS):</b><br>D1 - ORANGE - ETHERNET SPEED INDICATION 10 / 100 MBPS<br>D2 - YELLOW - ETHERNET ACTIVITY (FLASHING)<br>D3 - RED - ETHERNET LINK<br><br><b>TEST POINTS:</b><br>TP1 - CLOCK OUT |

| MAIN CONTROL PC BOARD (A1)   |   |  |  |
|--|---|--|--|
| <b>INDICATOR LIGHTS (LEDs):</b><br>LED1 - GREEN - AC ON<br>LED2 - RED - HIGH DC VOLTAGE ALARM<br>LED3 - RED - LOW DC VOLTAGE ALARM<br>LED4 - RED - DC OUTPUT FAILURE ALARM<br>LED5 - RED - AC INPUT FAILURE ALARM<br>LED6 - RED - POSITIVE (+) GROUND ALARM<br>LED7 - RED - NEGATIVE (-) GROUND ALARM<br>LED8 - RED - COMMON ALARM<br>LED9 - RED - ACTION REQUIRED ALARM<br>LED10 - GREEN - HEALTHY OPERATION<br>DS1 - RED - HIGH LEVEL SHUTDOWN (HLD)<br>DS2 - RED - ANALOG LOW VOLTAGE ALARM (LLD)<br>DS3 - RED - MEMORY CARD ACTIVITY | <b>JUMPERS:</b><br>J1 - ANALOG HIGH VOLTAGE SHUTDOWN JUMPER<br>J3 - SD CARD PORT<br>JP4 - RE-FLASH (FIELD PROGRAMMING) JUMPER<br><br><b>TERMINAL BLOCKS:</b><br>TB6 - COMMON ALARM RELAY CONTACTS<br><br><b>TEST POINTS:</b><br>1.8V - 1.8 VOLTS<br>3.3V - 3.3 VOLTS<br>5V - 5.0 VOLTS<br>GND - GROUND<br>AGND - ANALOG GROUND<br>SDA - MAIN BOARD 12C DATA<br>SCL - MAIN BOARD 12C CLOCK | <b>SWITCHES:</b><br>S1 - DISPLAY BUTTON<br>S2 - CHARGE MODE BUTTON<br>S3 - EQUALIZE METHOD BUTTON<br>S4 - ESCAPE (ESC) BUTTON<br>S5 - LEFT ARROW BUTTON<br>S6 - MENU BUTTON<br>S7 - UP ARROW BUTTON<br>S8 - EDIT / ENTER BUTTON<br>S9 - DOWN ARROW BUTTON<br>S10 - ALARM BUTTON<br>S11 - RIGHT ARROW BUTTON<br>S12 - HINDLE HEALTH (HHS) BUTTON<br>S13 - SYSTEM RESET BUTTON (BACK OF BOARD) | <b>CONNECTORS:</b><br>P1 - POWER BOARD RIBBON<br>P2 - 3 PHASE RECTIFIER RIBBON<br>P3 - USB EXPANSION PORT<br>P4 - SPI & I2C EXPANSION PORT #1<br>P5 - SPI & I2C EXPANSION PORT #2<br>P6 - DISPLAY SPI PORT<br>P7 - DISPLAY JTAG PORTS<br>P10 - SERIAL INTERFACE PORT #1<br>P11 - SERIAL INTERFACE PORT #2<br>P12 - SERIAL INTERFACE PORT #3<br>P13 - ETHERNET INTERFACE PORT<br>P17 - GENERAL EXPANSION PORT |

|   |                              |  |                 |
|---|------------------------------|--|-----------------|
|   |                              |  |                 |
| DRAWN BY<br><b>KJB</b>  | DATE<br><b>04/07/17</b>      | <b>TITLE</b><br>ATEVO SERIES BATTERY CHARGER<br>INSTRUMENT PANEL / PC BOARD DETAIL |                 |
| ELECTRONIC APPROVAL SIGNATURES<br>MAINTAINED BY MFG ECN LOG         |                              | DRAWING No<br><b>JE5253-19</b>   | REV<br><b>0</b> |
| UNLESS OTHERWISE NOTED DIMENSIONS<br>ARE IN INCHES. TOLERANCES ARE: |                              | <b>B</b>   | <b>B</b>        |
| SCALE<br><b>NTS</b>   | SALES No<br><b>JE5253-19</b> | SHEET<br><b>1</b>  | OF<br><b>2</b>  |

REVISION HISTORY TABLE

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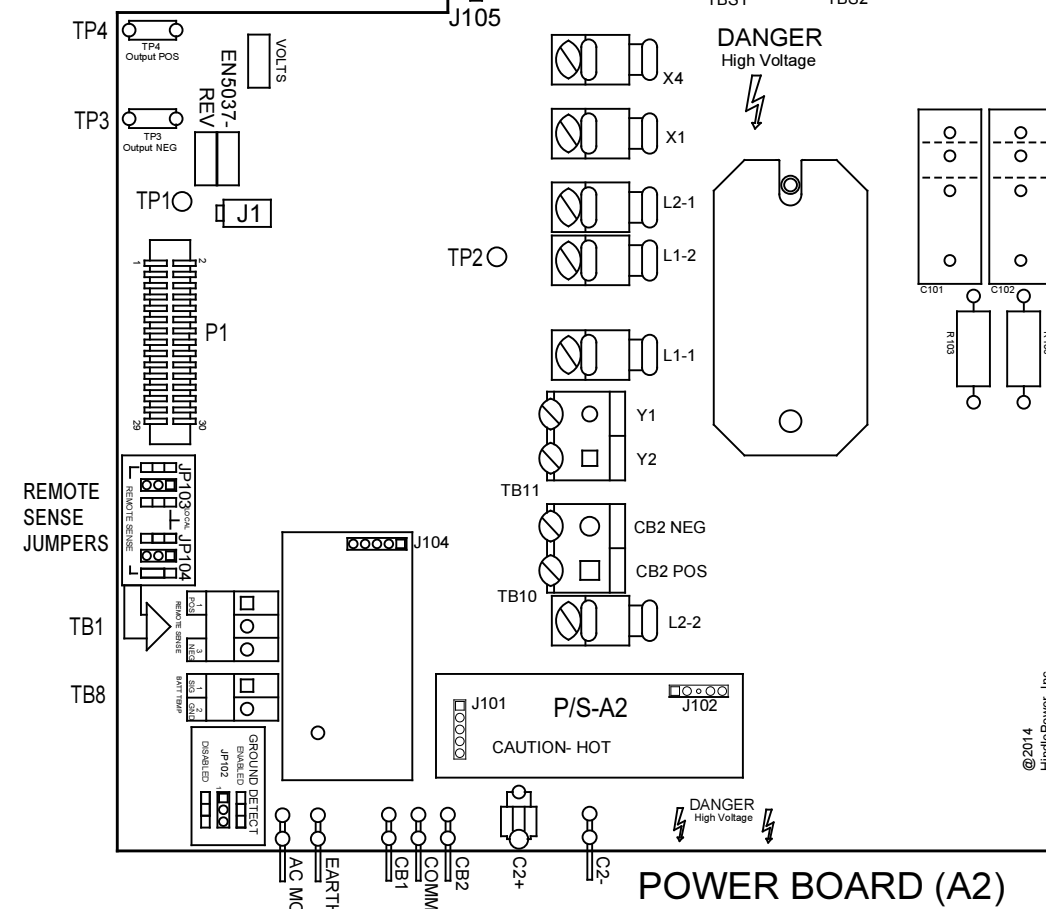
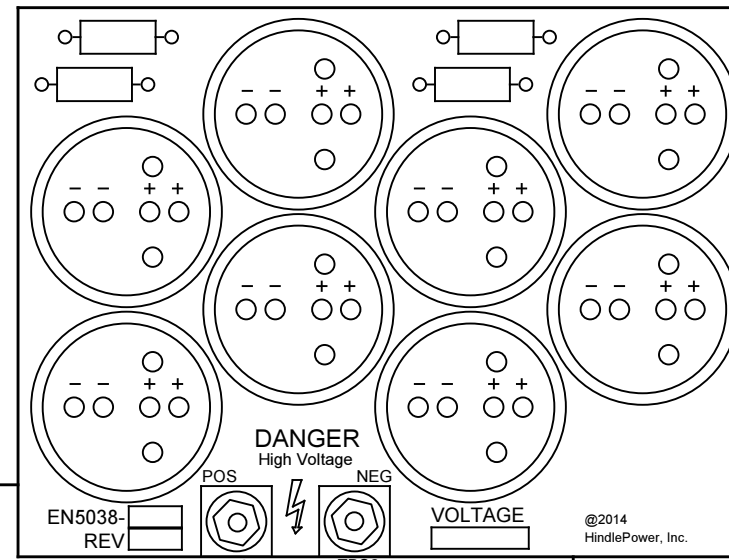


AUXILIARY I/O BOARD (A4)

JUMPERS & CONFIGURATION SWITCHES FOR AUX I/O BOARD (A4)

- J1 - AUXILIARY POWER INPUT
  - P1 - POWER BOARD (PRIMARY POWER & COMM SOURCE)
  - P5 - PROGRAMMING HEADER
- USER TERMINALS ON RELAY BOARD (A4):
- D1 - RED - RELAY #6 IN ALARM STATE
  - D3 - RED - RELAY #5 IN ALARM STATE
  - D5 - RED - RELAY #4 IN ALARM STATE
  - D7 - YELLOW - BINARY INPUT #1 IS ABOVE THRESHOLD
  - D8 - RED - RELAY #3 IN ALARM STATE
  - D10 - YELLOW - BINARY INPUT #2 IS ABOVE THRESHOLD
  - D11 - RED - RELAY #2 IN ALARM STATE
  - D13 - YELLOW - BINARY INPUT #3 IS ABOVE THRESHOLD
  - D14 - RED - RELAY #1 IN ALARM STATE
  - D16 - YELLOW - BINARY INPUT #4 IS ABOVE THRESHOLD
  - D17 - GREEN - COMMUNICATION TO MAIN BOARD (FLASHING)
- USER TERMINALS ON RELAY BOARD (A4):
- TB1 - BINARY INPUTS
  - TB2 - SERIAL INTERFACE
  - TB3 - ANALOG INPUTS
  - TB4 - AUXILIARY I/O RELAY CONTACTS
- JUMPERS & CONFIGURATION SWITCHES
- P3, 4, 6, 7 - BINARY INPUT VOLTAGE CONFIGURATION JUMPERS
  - S1 - BOARD ADDRESS DIPSWITCH

FILTER BOARD (A7)



POWER BOARD (A2)

USER TERMINALS ON POWER BOARD (A2):

- TB1 - REMOTE VOLTAGE SENSE
  - TB8 - BATTERY TEMPERATURE COMPENSATION
  - TB10 - CB2 DC BREAKER
  - TB11 - 'Y' CONTROL WINDINGS
- JUMPERS ON POWER BOARD (A2):
- JP102 - GROUND DETECT CIRCUIT ENABLE / DISABLE
  - JP103 - REMOTE OR LOCAL SENSE SELECTOR (+)
  - JP104 - REMOTE OR LOCAL SENSE SELECTOR (-)

CONNECTORS ON POWER BOARD (A2):

- J1 - POWER OUT
- J101 - DC POWER SUPPLY
- J102 - DC POWER SUPPLY
- J105 - AUXILIARY I/O BOARD
- P1 - MAIN CONTROL BOARD RIBBON

DISCRETE TERMINALS:

- AC MOV - CHASSIS EARTH GROUND
- EARTH - CHASSIS EARTH GROUND (DOOR)
- CB1 - AC BREAKER AUX SWITCH CONTACT
- CB2 - DC BREAKER AUX SWITCH CONTACT
- COMM - BREAKER AUX SWITCH COMMON
- C2+ - ELIMINATOR FILTER CAPACITOR (+)
- C2- - ELIMINATOR FILTER CAPACITOR (-)
- X1 - TRANSFORMER SECONDARY WINDING
- X4 - TRANSFORMER SECONDARY WINDING
- L1-1 - FILTER INDUCTOR #1 (TERMINAL #1)
- L1-2 - FILTER INDUCTOR #1 (TERMINAL #2)
- L2-1 - FILTER INDUCTOR #2 (TERMINAL #1)
- L2-2 - FILTER INDUCTOR #2 (TERMINAL #2)
- TBS1 - FILTER CAPACITOR BOARD (+)
- TBS2 - FILTER CAPACITOR BOARD (-)

TEST POINTS ON POWER BOARD (A2):

- TP1 - PRE-FILTERED DC BUS (-)
- TP2 - PRE-FILTERED DC BUS (+)
- TP3 - DC BUS (-)
- TP4 - DC BUS (+)

|  |  |   |  |
|--|--|---|--|
|  |  |   |  |
| DRAWN BY: <b>KJB</b> 04/07/17                                    |  | TITLE: <b>ATEVO SERIES BATTERY CHARGER INSTRUMENT PANEL / PC BOARD DETAIL</b> |  |
| ELECTRONIC APPROVAL SIGNATURES MAINTAINED BY MFG ECN LOG         |  | DRAWING No: <b>JE5253-19</b> REV: <b>0</b> <b>B</b>                           |  |
| UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: |  | SCALE: <b>NTS</b> SALES No: <b>JE5253-19</b> SHEET: <b>2</b> OF <b>2</b>      |  |