

2 Cell configuration:  
R53, R52 and R76 are placed  
R73 and R65 are not placed  
JP10 is in position B

3 Cell configuration:  
R65 and R73 are placed  
R52, R53 and B3 are not placed  
JP10 is in position B

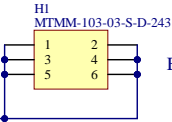
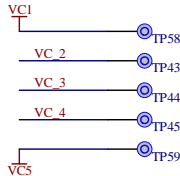
4 Cell configuration:  
R65 is placed  
R52, R53, R73, R76 is not placed  
JP10 is in position A

JP2-4 can also be used so that the connection can have current flow measured

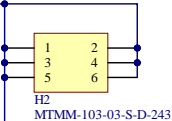
All ports are power connections with bidirectional current flow. VC\_1 and VC\_5 will experience high currents, the others will not.

VC1-5 provide direct connections to the cells

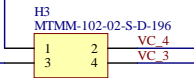
U\_MOD  
MOD.SchDoc



BATTERY + TERMINAL



BATTERY - TERMINAL



BATTERY CENTERTAPS



750 Naples Street  
San Francisco, California 94112

Title: Battery Module Development Board Cells - Battery Connections			
Part Number: 705-02190		Revision: A0	
File: Battery_Module_Dev_Contacts.SchDoc		Sheet: 9 of 17	
Date: 29/01/2020	Size: B	Drawn By: DJW	

Doc. Rev: 01  
(C) 2001-2018 Pumpkin, Inc.

	1	2	3	4	5	6																																		
A	<div>ASSY Configuration Codes (Binary OR)</div> <table><tr><th>Bit</th><th>Value</th><th>0 case</th><th>1 case</th></tr><tr><td>0</td><td>1</td><td>Not 2 cell operation;</td><td>2 cell operation, place JP10 in position B and DNP R65 and R73;</td></tr><tr><td>1</td><td>2</td><td>Not 3 cell operation;</td><td>3 cell operation, place JP10 in position B, DNP B3, R52, R53 and R76;</td></tr><tr><td>2</td><td>4</td><td>Not 4 cell operation;</td><td>4 cell operation, Place JP10 in position A, DNP R52, R53, R73 and R76;</td></tr></table>				Bit	Value	0 case	1 case	0	1	Not 2 cell operation;	2 cell operation, place JP10 in position B and DNP R65 and R73;	1	2	Not 3 cell operation;	3 cell operation, place JP10 in position B, DNP B3, R52, R53 and R76;	2	4	Not 4 cell operation;	4 cell operation, Place JP10 in position A, DNP R52, R53, R73 and R76;	<div>Test Point List</div> <table><tr><th>Number</th><th>Net</th><th>Function</th></tr><tr><td>TP43</td><td>VC2</td><td>3rd center-tap</td></tr><tr><td>TP44</td><td>VC3</td><td>2nd center-tap, positive side of second lowest cell</td></tr><tr><td>TP45</td><td>VC4</td><td>1st center-tap, positive side of lowest cell</td></tr><tr><td>TP58</td><td>VC1</td><td>negative side of bottom cell</td></tr><tr><td>TP59</td><td>VC5</td><td>positive side of highest cell</td></tr></table>		Number	Net	Function	TP43	VC2	3rd center-tap	TP44	VC3	2nd center-tap, positive side of second lowest cell	TP45	VC4	1st center-tap, positive side of lowest cell	TP58	VC1	negative side of bottom cell	TP59	VC5	positive side of highest cell
Bit	Value	0 case	1 case																																					
0	1	Not 2 cell operation;	2 cell operation, place JP10 in position B and DNP R65 and R73;																																					
1	2	Not 3 cell operation;	3 cell operation, place JP10 in position B, DNP B3, R52, R53 and R76;																																					
2	4	Not 4 cell operation;	4 cell operation, Place JP10 in position A, DNP R52, R53, R73 and R76;																																					
Number	Net	Function																																						
TP43	VC2	3rd center-tap																																						
TP44	VC3	2nd center-tap, positive side of second lowest cell																																						
TP45	VC4	1st center-tap, positive side of lowest cell																																						
TP58	VC1	negative side of bottom cell																																						
TP59	VC5	positive side of highest cell																																						
B	<div>ECO List</div> <table><tr><th>MOD Level</th><th>Number</th><th>Action Summary</th></tr><tr><td></td><td></td><td></td></tr></table>					MOD Level	Number	Action Summary																																
MOD Level	Number	Action Summary																																						
C	<div>Changes from REVA0 / BM2-F1</div> <div>No previous Rev</div>																																							
D	<div><div><div><div><div><div></div><div>PUMPKIN</div><div>INCORPORATED</div></div><div>750 Naples Street San Francisco, California 94112</div></div></div><div><div><div>Title:<div>Battery Module Development Board Cells - Modification Information</div></div><div><div>Part Number:<div>705-02190</div></div><div>Revision:<div>A0</div></div></div><div><div>File:<div>MOD.SchDoc</div></div><div>Sheet:<div>17 of 17</div></div></div><div><div>Date:<div>29/01/2020</div></div><div>Size:<div>B</div></div><div>Drawn By:<div>DJW</div></div></div></div></div><div>Doc. Rev: 01 (C) 2001-2017 Pumpkin, Inc.</div></div></div>																																							
	1	2	3	4	5	6																																		