


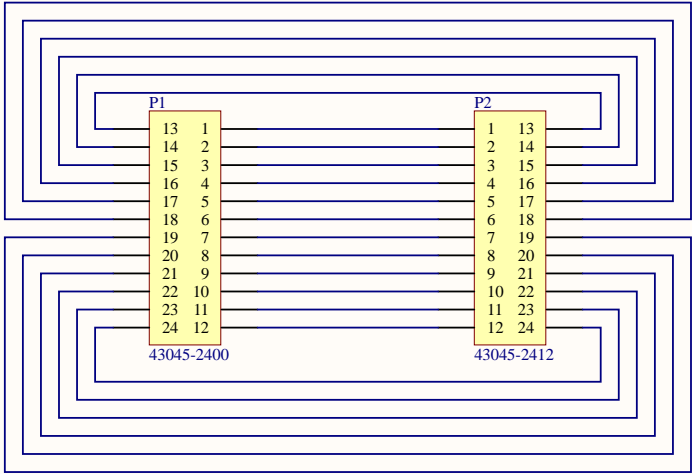
Breakout Board

Rev 1

Title <i>Breakout Board</i>			<div>Badgerloop 133 Engineering Research Building Madison, WI 53715</div> <div></div>
Size: A4	Number:1	Revision:1	
Date: 2/15/2020	Time: 12:07:33 PM Sheet 1 of		
File: C:\Users\Windows PC\Desktop\Badgerloop\git_repos\hardware\breakout_board\breakout_board.SchDoc			

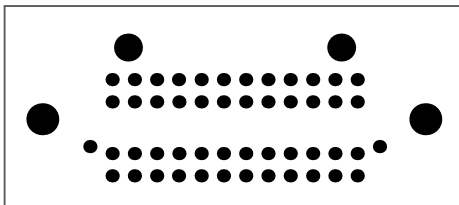
Badgerloop
133 Engineering Research
Building
Madison, WI 53715

Breakout Board Connectors



MH1 MH2
4-40 Mount Hole 4-40 Mount Hole

Title Connectors		Badgerloop Electrical 133 Engineering Research Building 1500 Engineering Drive Madison, WI 53706	
Engineer: Andrew Cook	Revision:1	BADGER LOOP	
Date: 2/15/2020	Time: 12:07:34 PM		
File: connectors.SchDoc		Sheet 2 of 1	



Top Layer

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Layer	Copper	1.40mil		
4	Dielectric 1	FR-4	12.60mil	4.8	
5	Internal Plane 1	Copper	1.40mil		
6	Dielectric2	FR-4	12.60mil	4.8	
7	Internal Plane 2	Copper	1.40mil		
8	Dielectric3	FR-4	12.60mil	4.8	
9	Bottom Layer	Copper	1.40mil		
10	Bottom Solder	Solder Resist	0.40mil	3.5	
11	Bottom Overlay				

**BADGER
LOOP**

Badgerloop
ERB Room 133
1400 Engineering Drive
Madison, WI 53706

ENGINEER:
Andrew Cook

PCB DESIGNER:
Andrew Cook

DATE:
2/15/2020

FILE NAME:
breakout_board.PcbDoc

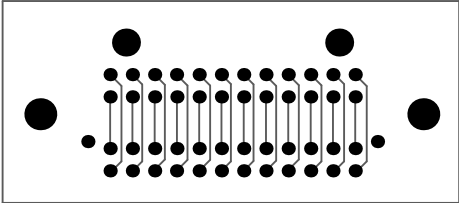
TITLE:
breakout_board.PcbDoc

PART NO.:
Battery Module Breakout Board

DWG NO:

REV:
A

SCALE:
1:1



Bottom Layer

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Layer	Copper	1.40mil		
4	Dielectric 1	FR-4	12.60mil	4.8	
5	Internal Plane 1	Copper	1.40mil		
6	Dielectric2	FR-4	12.60mil	4.8	
7	Internal Plane 2	Copper	1.40mil		
8	Dielectric3	FR-4	12.60mil	4.8	
9	Bottom Layer	Copper	1.40mil		
10	Bottom Solder	Solder Resist	0.40mil	3.5	
11	Bottom Overlay				

<div><div>BADGER LOOP</div><div>Badgerloop ERB Room 133 1400 Engineering Drive Madison, WI 53706</div></div>	ENGINEER: <div>Andrew Cook</div>	TITLE: <div>breakout_board.PcbDoc</div>	
	PCB DESIGNER: <div>Andrew Cook</div>		
	DATE: <div>2/15/2020</div>	PART NO.: <div>Battery Module Breakout Board</div>	REV: <div>A</div>
	FILE NAME: <div>breakout_board.PcbDoc</div>	DWG NO:	SCALE: <div>1:1</div>

1

2

4

A

A

B

B

C

C

D

D



Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Layer	Copper	1.40mil		
4	Dielectric 1	FR-4	12.60mil	4.8	
5	Internal Plane 1	Copper	1.40mil		
6	Dielectric2	FR-4	12.60mil	4.8	
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9	Bottom Layer	Copper	1.40mil		
10	Bottom Solder	Solder Resist	0.40mil	3.5	
11	Bottom Overlay				

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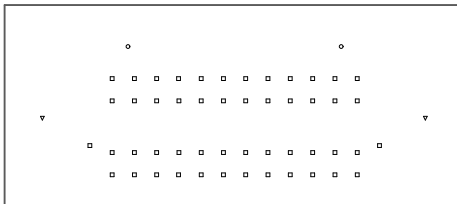
DWG NO:

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1:1

Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad	Pad Shape	Template
□	50	40.00mil (1.016mm)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c178h102
▽	2	116.00mil (2.946mm)	NPTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c430hn295
○	2	118.00mil (2.997mm)	PTH	Round	Top Layer - Bottom Layer	Pad	Rounded	c376h300
	54 Total							



Layer	Name	Material	Thickness	Constant	Board Layer Stack
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2	Top Solder	Solder Resist	0.40mil	3.5	
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4	Dielectric 1	FR-4	12.60mil	4.8	
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