


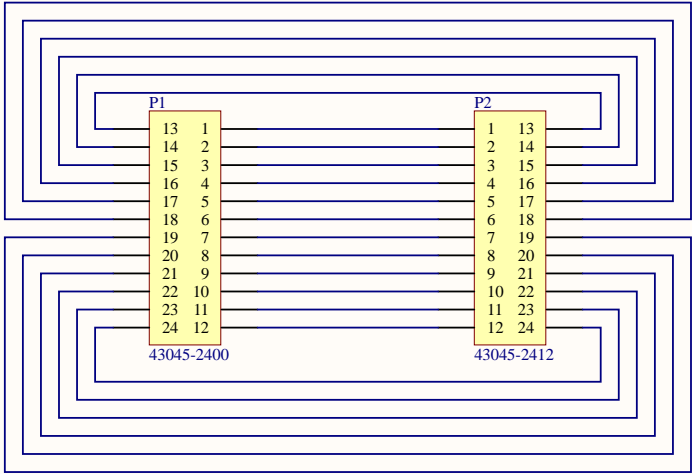
Breakout Board

Rev 1

Title <i>Breakout Board</i>			<i>Badgerloop</i> <i>133 Engineering Research</i> <i>Building</i> <i>Madison, WI 53715</i>	
Size: <i>A4</i>	Number: <i>1</i>	Revision: <i>1</i>		
Date: <i>2/15/2020</i>	Time: <i>12:14:16 PM</i> Sheet <i>1</i> of			
File: <i>C:\Users\Windows PC\Desktop\Badgerloop\git_repos\hardware\breakout_board\breakout_board.SchDoc</i>				

Badgerloop
133 Engineering Research
Building
Madison, WI 53715

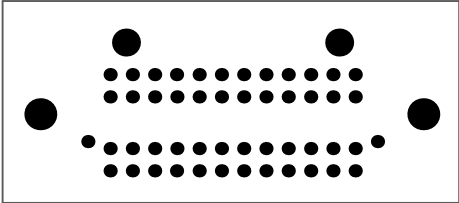
Breakout Board Connectors



MH1
4-40 Mount Hole

MH2
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: 12:14:16 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				



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

SCALE:
1:1

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	
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**

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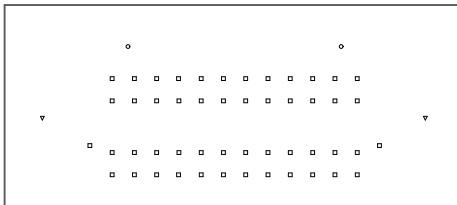
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1:1

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
1	Top Overlay				
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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	
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10	Bottom Solder	Solder Resist	0.40mil	3.5	
11	Bottom Overlay				

**BADGER
LOOP**

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ERB Room 133
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