

Lucky Charge Battery Pack V2.0

Board size: 18 x 49mm

PCB Thickness: ~1mm +/- 15%

Minimum trace/space: 6 mil/ 5mil

Silkscreen color: White

Solder Mask: Green

Finish: Immersion gold

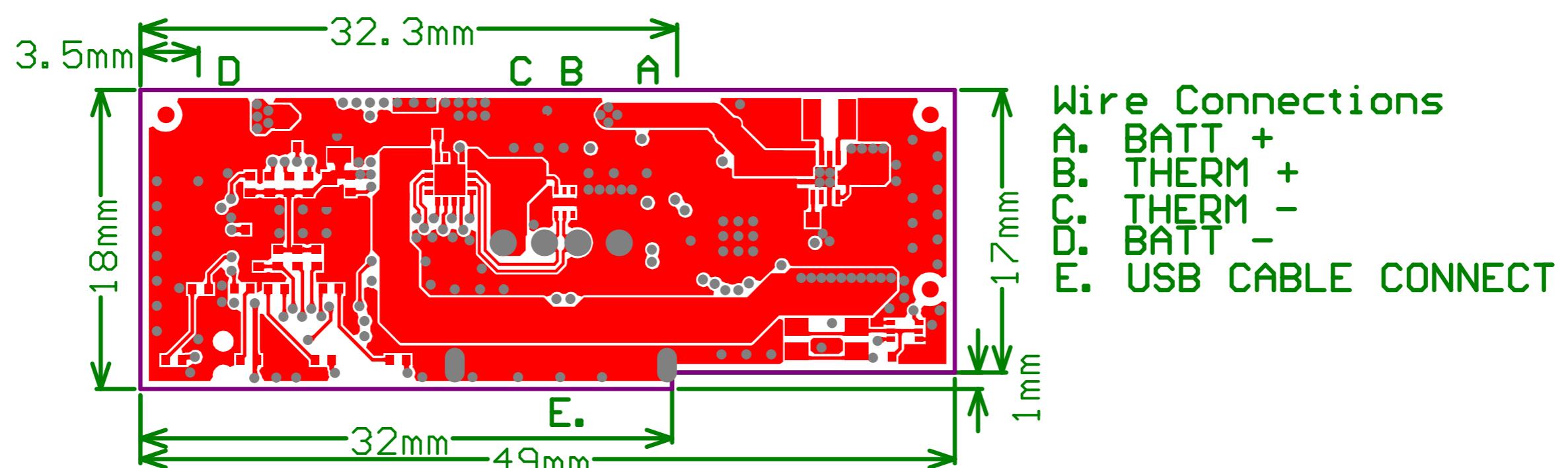
Copper thickness outer layers: 2oz preferred. 1 oz min

Copper thickness inner layers: 0.5oz min

Stack may be adjusted as needed to achieve impedance and 1mm thickness

Multi-Layer

Top Side



Dimensions
PCB Outline

Layer Stack Instructions:

-90 Ohm Diff impedance Top side to ground plane. Trace/Space: 7mil/7mil

-90 Ohm Diff impedance Bottom Side to Signal Layer 1. Trace/Space: 7mil/7mil

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Side	Copper	2.80mil		
4	Dielectric 1	FR-4	6.00mil	4.2	
5	Ground Plane	Copper	2.80mil		
6	Dielectric 2	FR-4	16.00mil	4.2	
7	Signal Layer 1	Copper	2.80mil		
8	Dielectric 3	FR-4	6.00mil	4.2	
9	Bottom Side	Copper	2.80mil		
10	Bottom Solder	Solder Resist	0.40mil	3.5	
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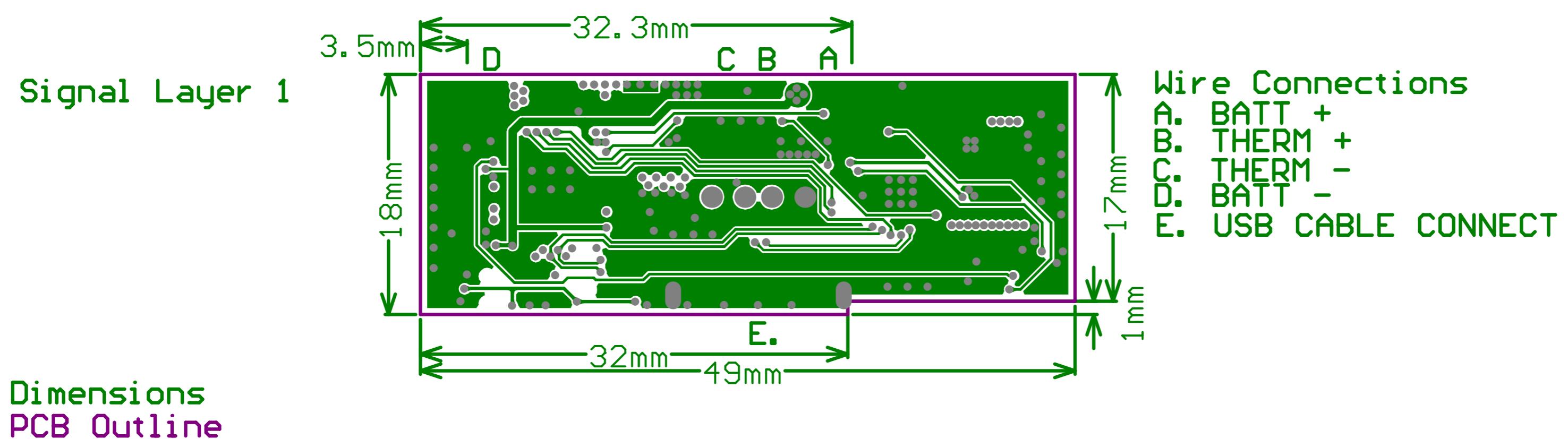
Finish: Immersion gold

Copper thickness outer layers: 2oz preferred. 1 oz min

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Layer Stack Instructions:

-90 Ohm Diff impedance Top side to ground plane. Trace/Space: 7mil/7mil

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1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
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7	Signal Layer 1	Copper	2.80mil		
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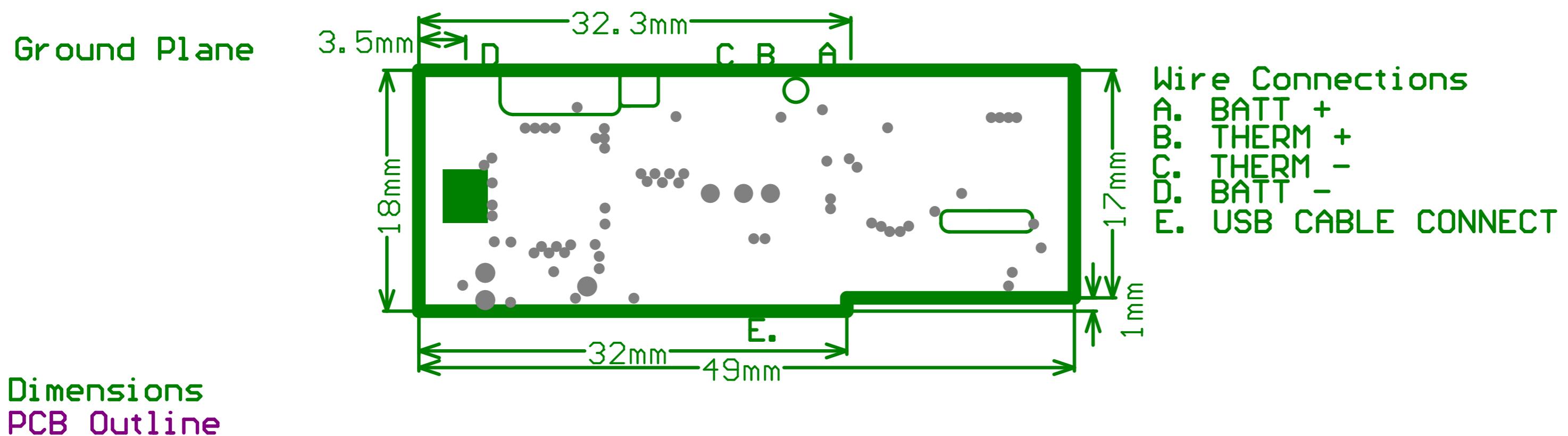
Solder Mask: Green

Finish: Immersion gold

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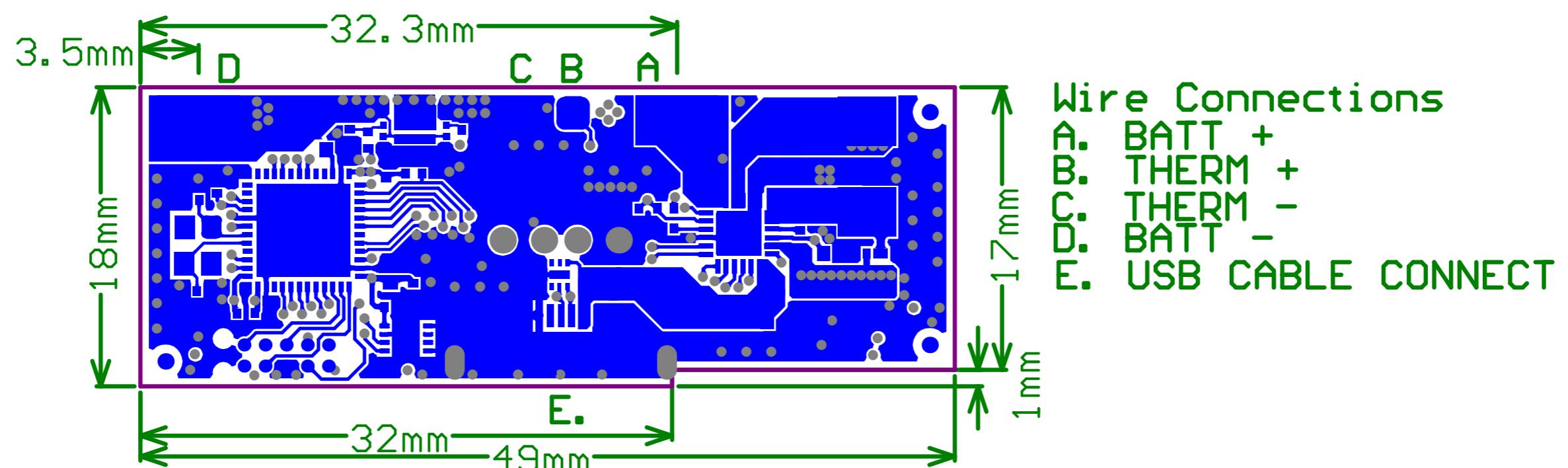
Copper thickness inner layers: 0.5oz min

Stack may be adjusted as needed to achieve impedance and 1mm thickness

Multi-Layer

sbis motto

Dimensions
PCB Outline



Layer Stack Instructions:

-90 Ohm Diff impedance Top side to ground plane. Trace/Space: 7mil/7mil

-90 Ohm Diff impedance Bottom Side to Signal Layer 1. Trace/Space: 7mil/7mil

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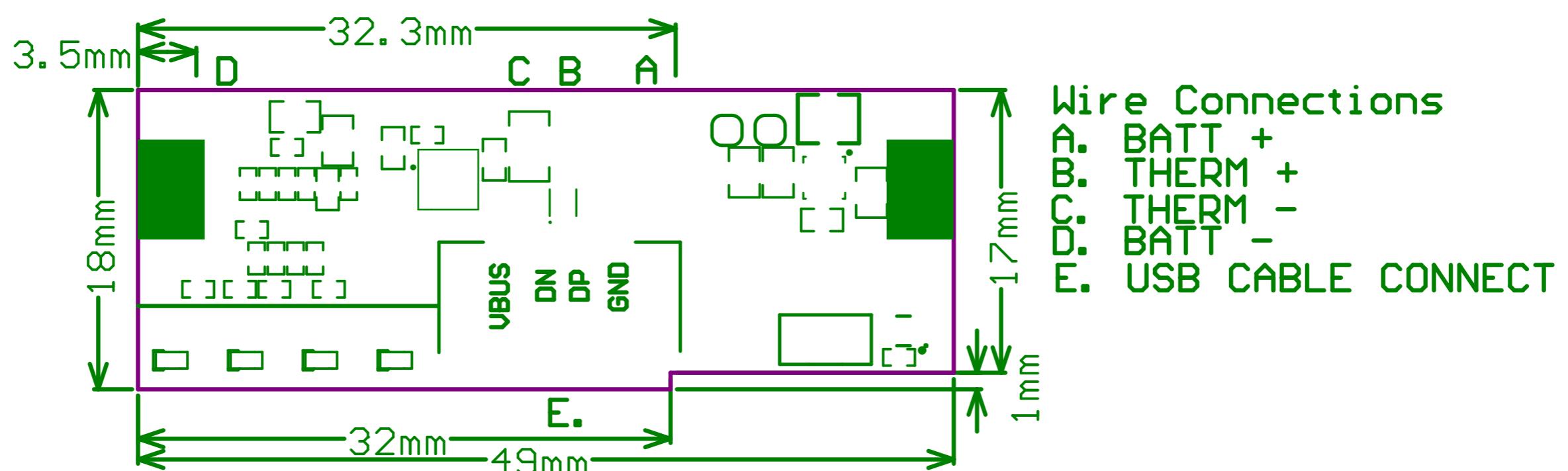
Finish: Immersion gold

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Top Overlay



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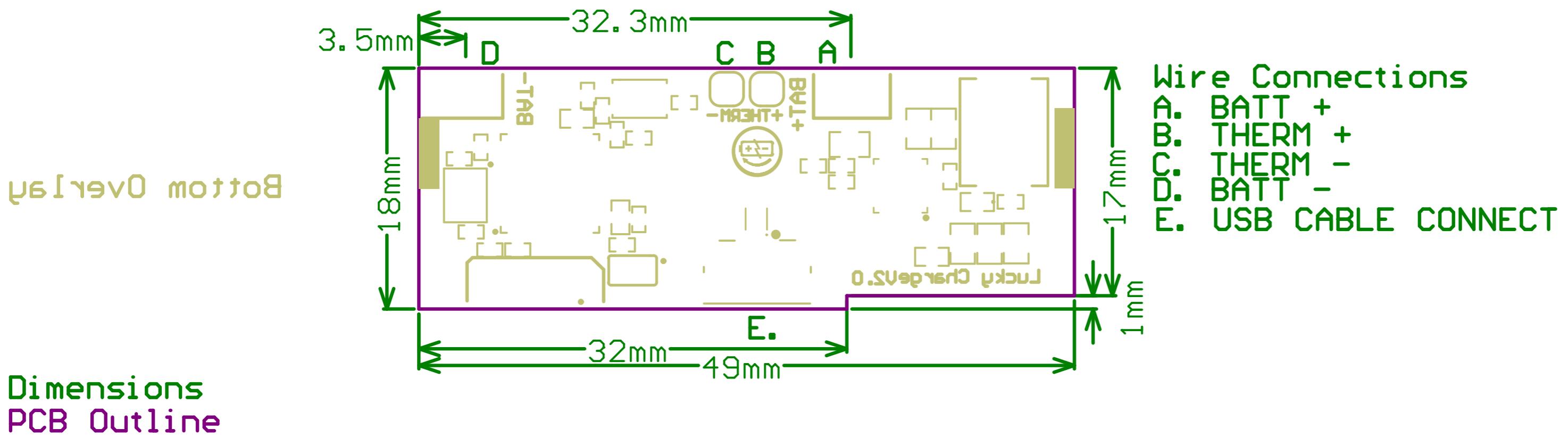
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Finish: Immersion gold

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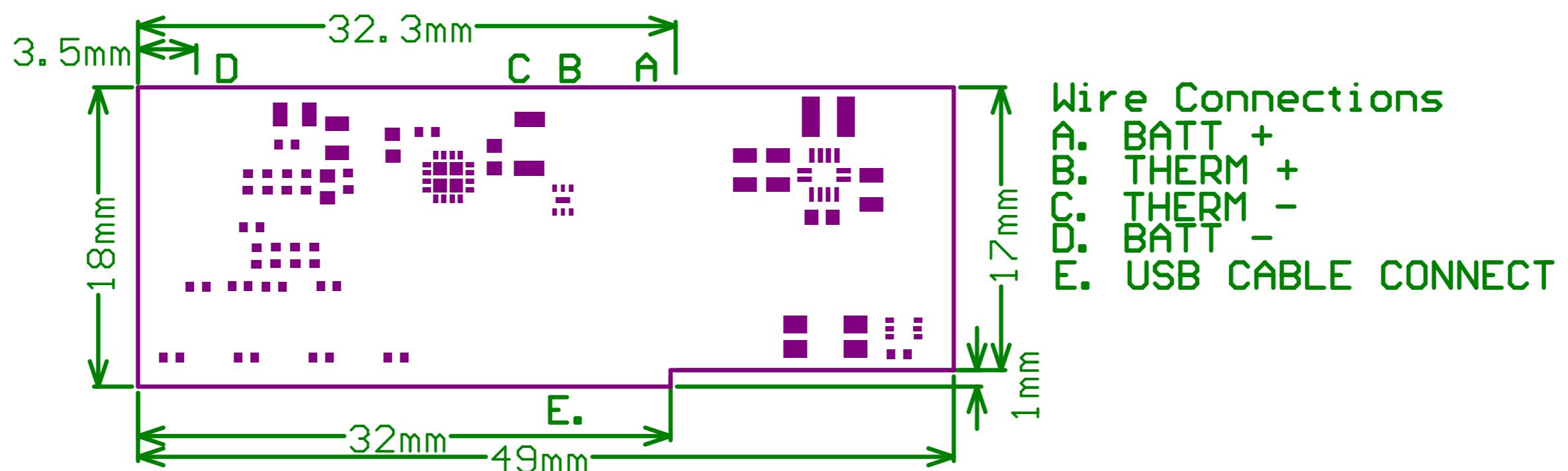
Finish: Immersion gold

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Top Paste



Layer Stack Instructions:

-90 Ohm Diff impedance Top side to ground plane. Trace/Space: 7mil/7mil

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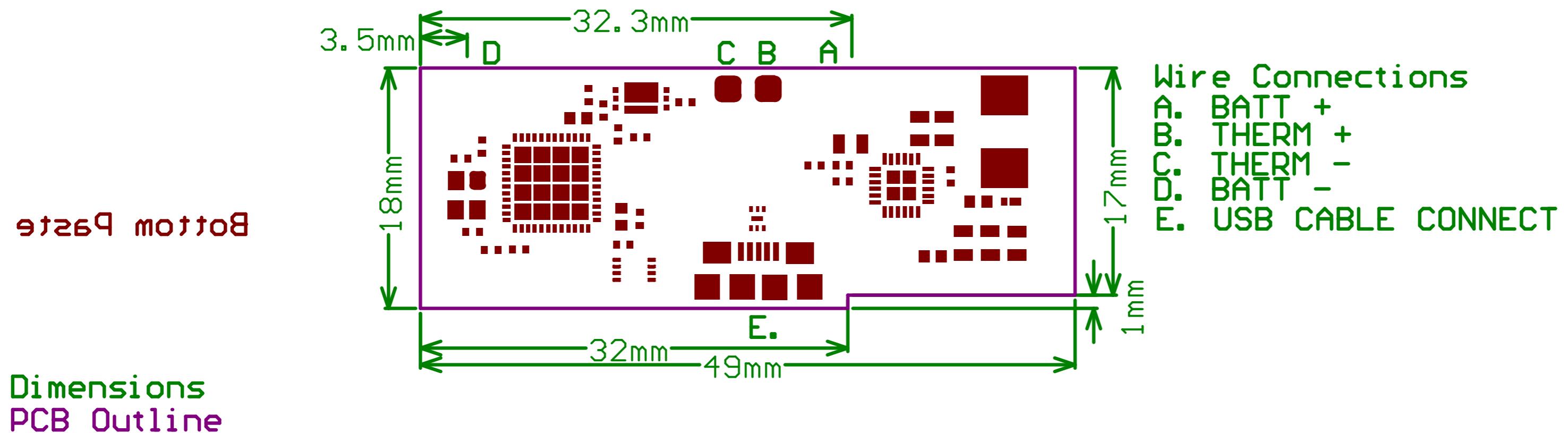
Solder Mask: Green

Finish: Immersion gold

Copper thickness outer layers: 2oz preferred. 1 oz min

Copper thickness inner layers: 0.5oz min

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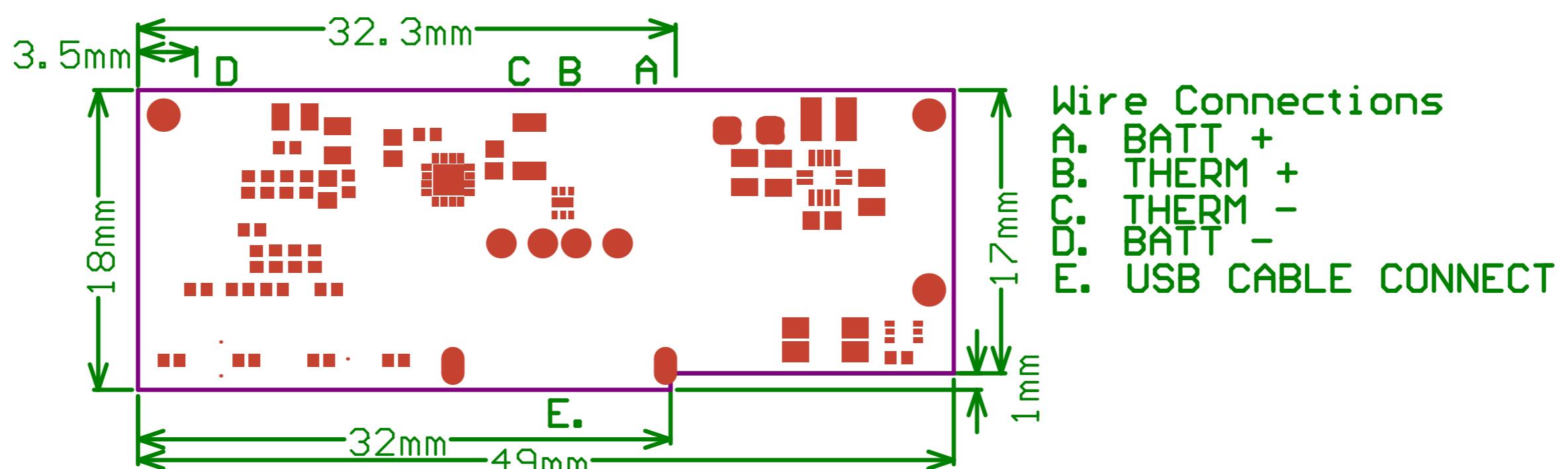
Finish: Immersion gold

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Top Solder



Dimensions PCB Outline

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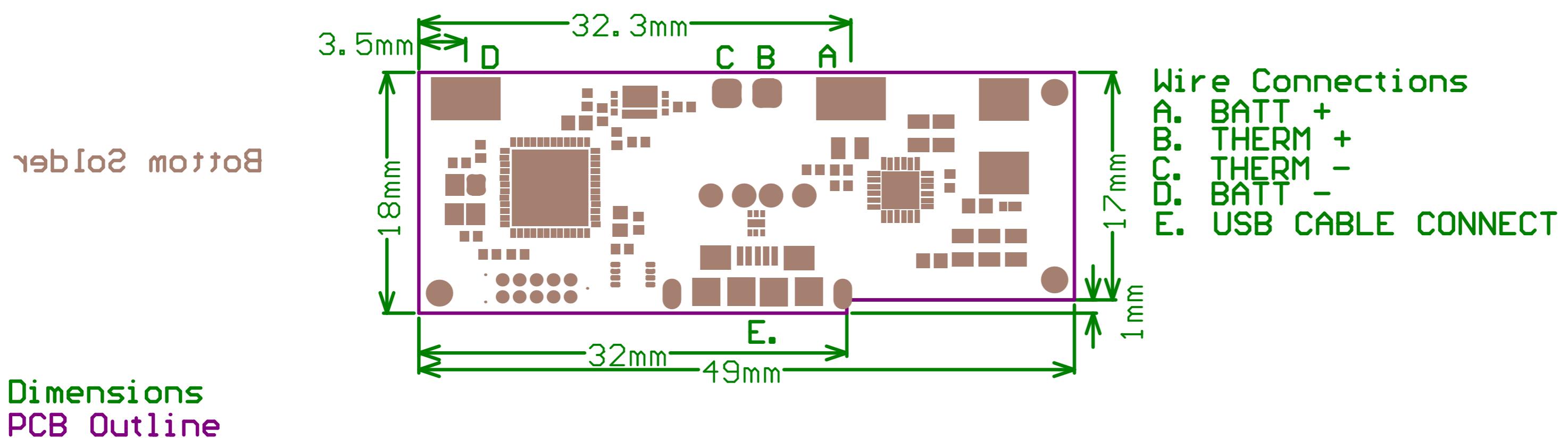
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Finish: Immersion gold

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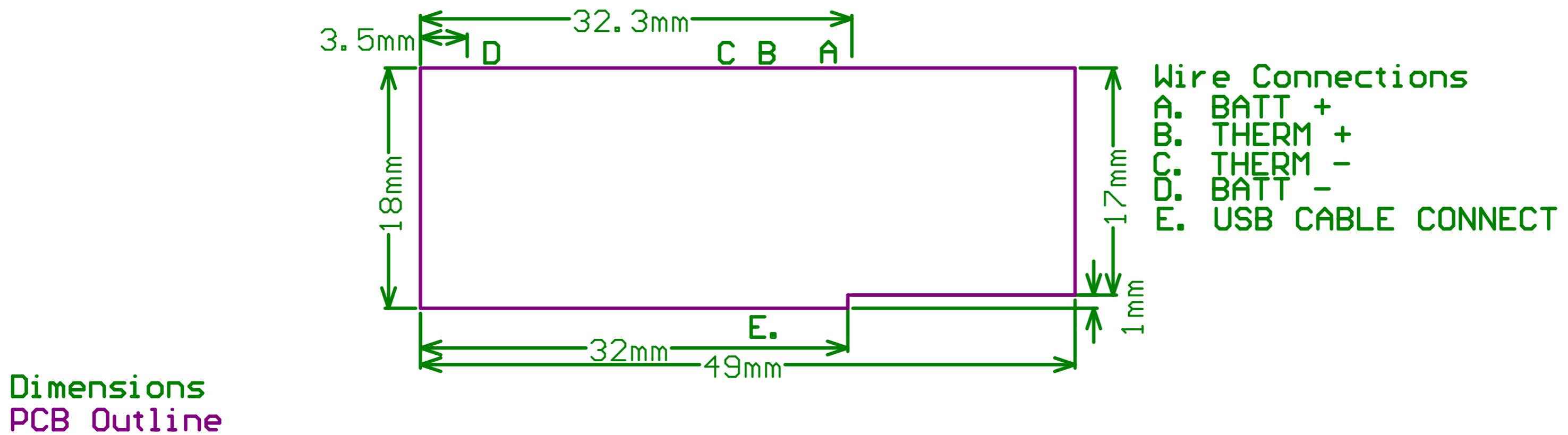
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Finish: Immersion gold

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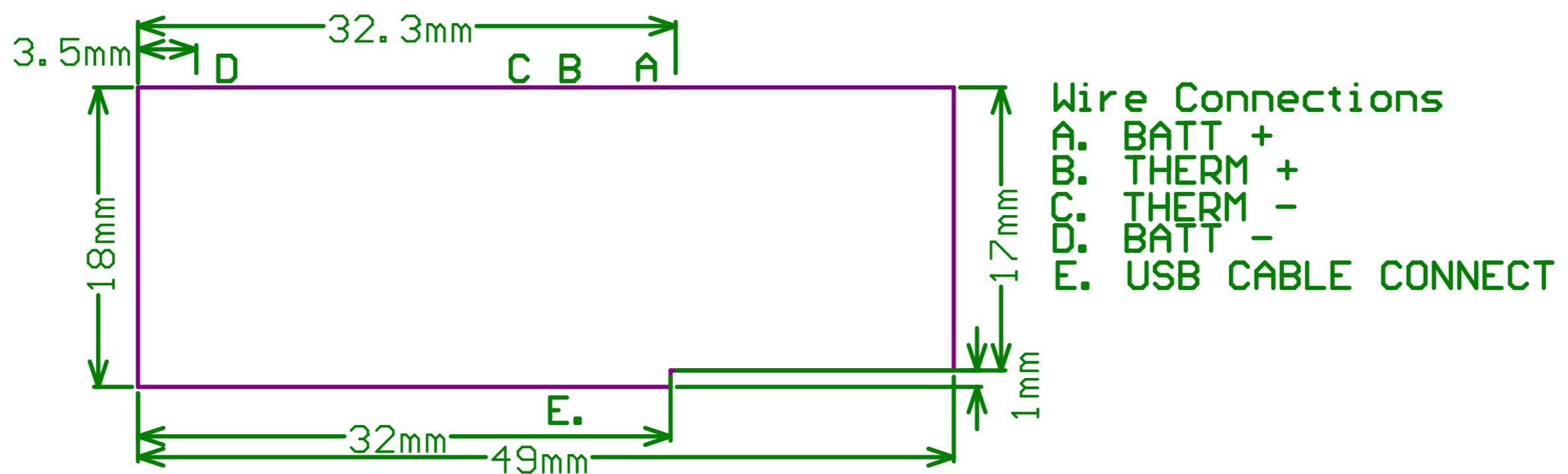
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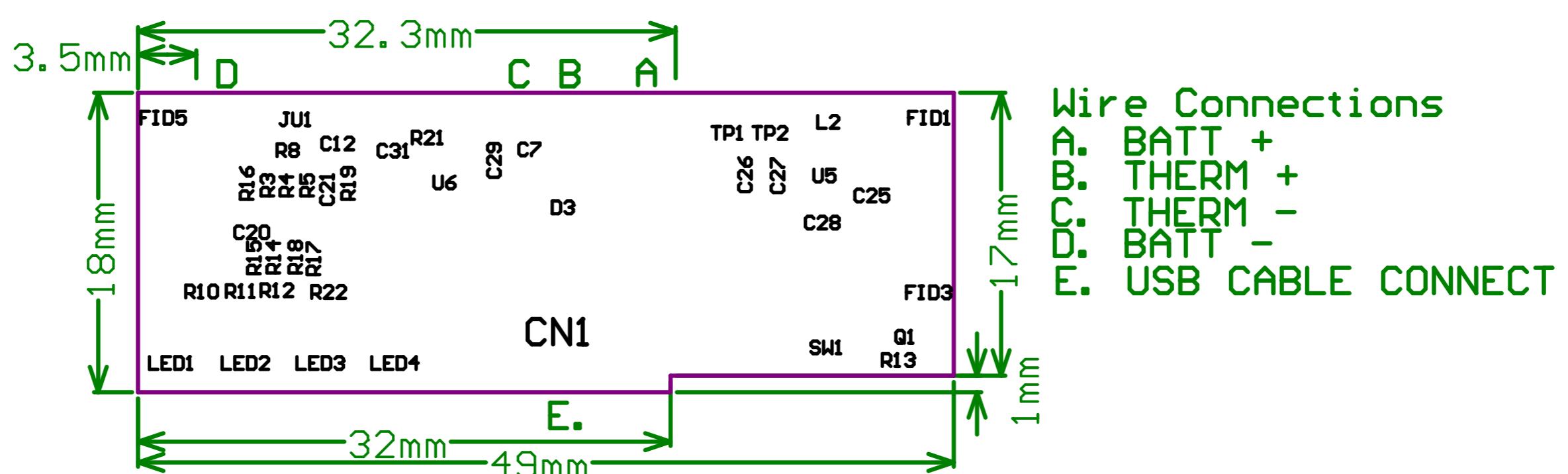
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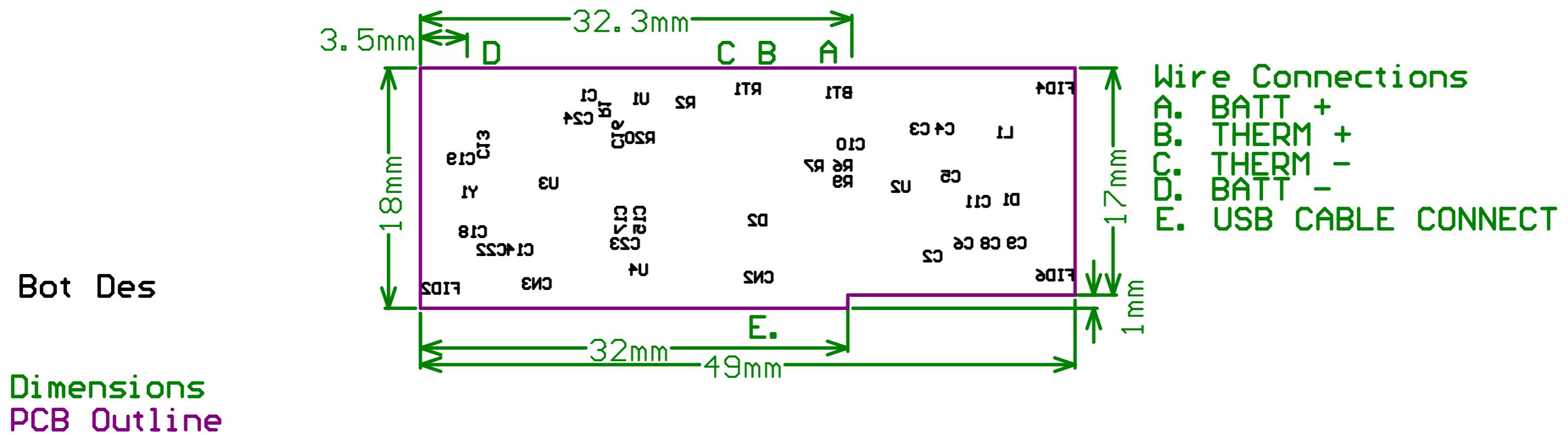
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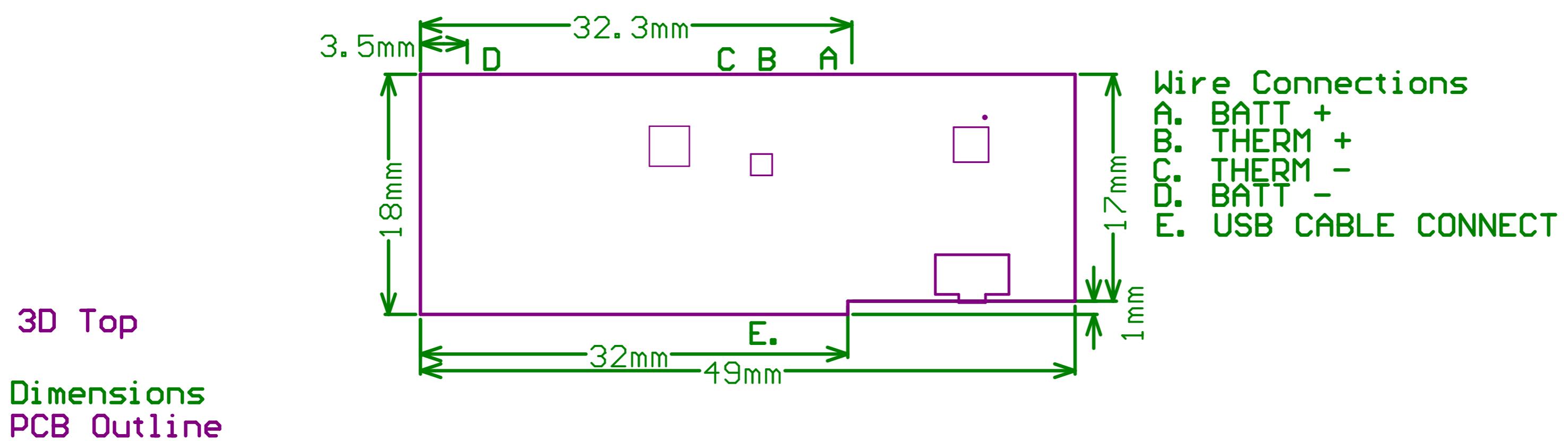
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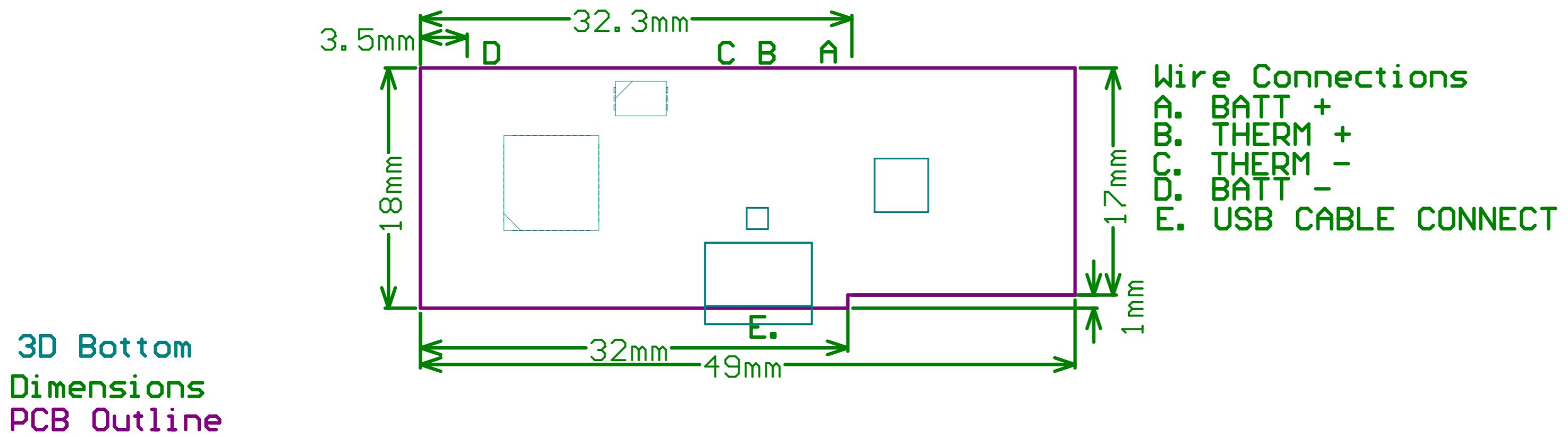
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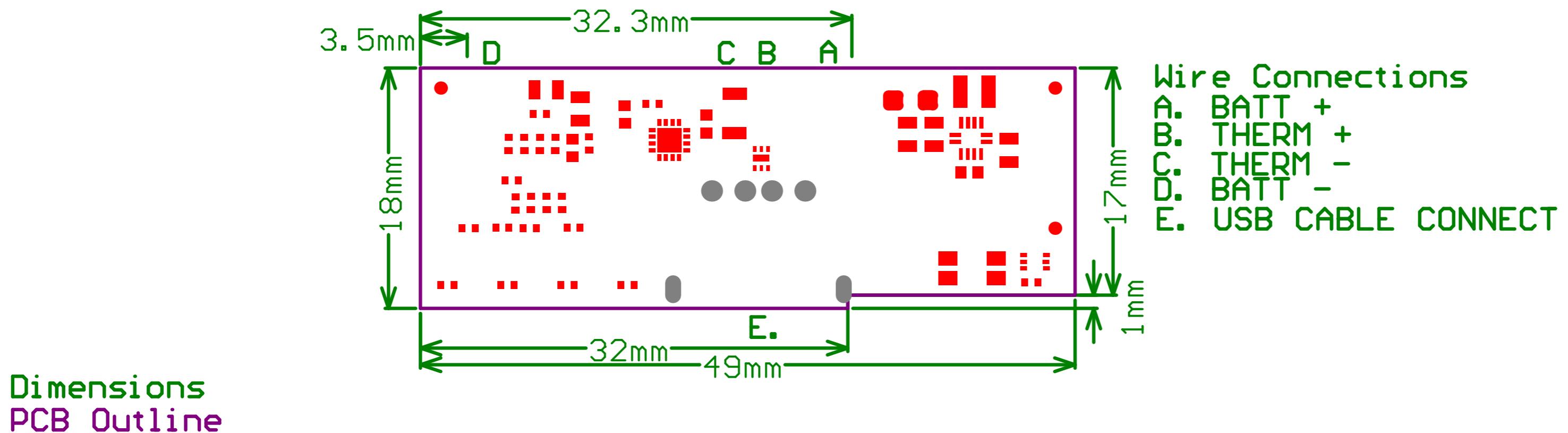
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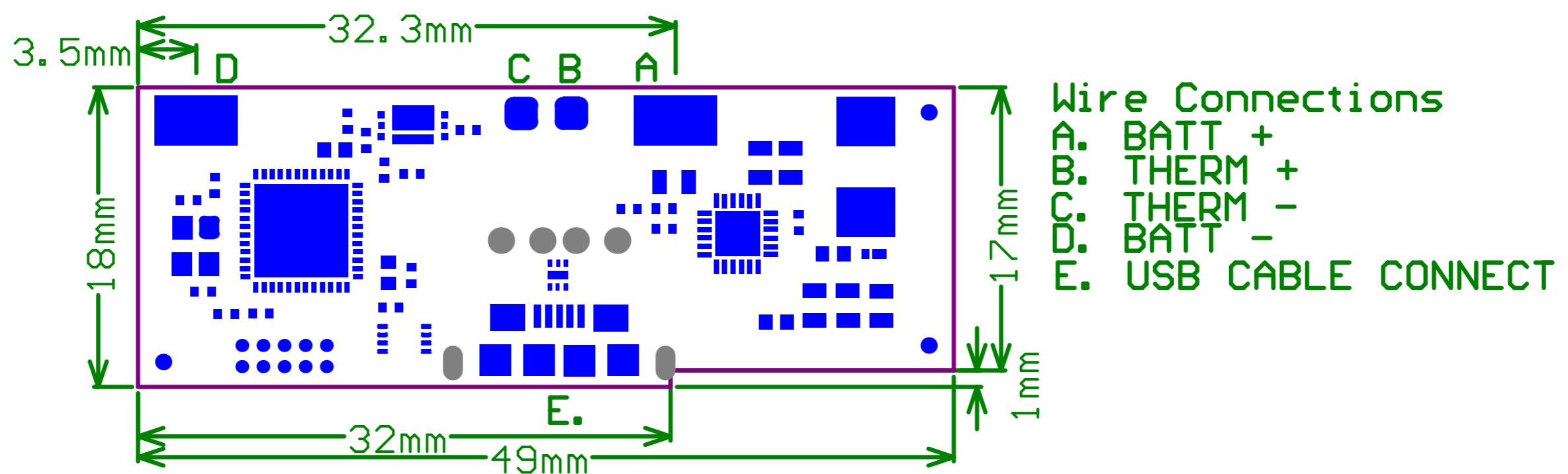
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8	Dielectric 3	FR-4	6.00mil	4.2	
9	Bottom Side	Copper	2.80mil		
10	Bottom Solder	Solder Resist	0.40mil	3.5	
11	Bottom Overlay				

Lucky Charge Battery Pack V2.0

Board size: 18 x 49mm

PCB Thickness: ~1mm +/- 15%

Minimum trace/space: 6 mil/ 5mil

Silkscreen color: White

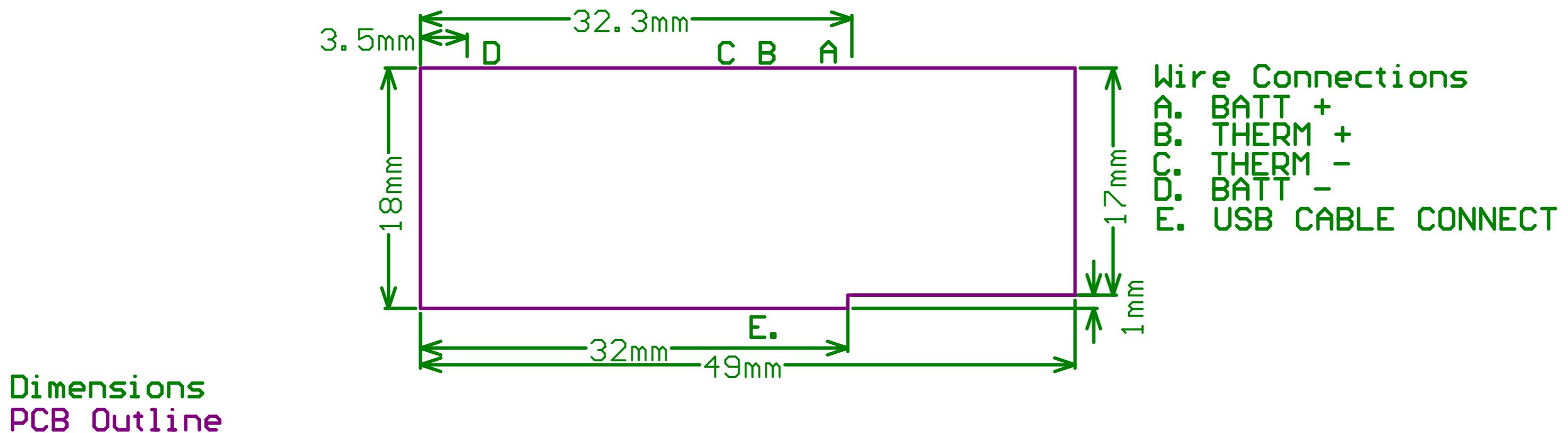
Solder Mask: Green

Finish: Immersion gold

Copper thickness outer layers: 2oz preferred. 1 oz min

Copper thickness inner layers: 0.5oz min

Stack may be adjusted as needed to achieve impedance and 1mm thickness



Layer Stack Instructions:

-90 Ohm Diff impedance Top side to ground plane. Trace/Space: 7mil/7mil

-90 Ohm Diff impedance Bottom Side to Signal Layer 1. Trace/Space: 7mil/7mil

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Side	Copper	2.80mil		
4	Dielectric 1	FR-4	6.00mil	4.2	
5	Ground Plane	Copper	2.80mil		
6	Dielectric 2	FR-4	16.00mil	4.2	
7	Signal Layer 1	Copper	2.80mil		
8	Dielectric 3	FR-4	6.00mil	4.2	
9	Bottom Side	Copper	2.80mil		
10	Bottom Solder	Solder Resist	0.40mil	3.5	
11	Bottom Overlay				

Lucky Charge Battery Pack V2.0

Board size: 18 x 49mm

PCB Thickness: ~1mm +/- 15%

Minimum trace/space: 6 mil / 5mil

Silkscreen color: White

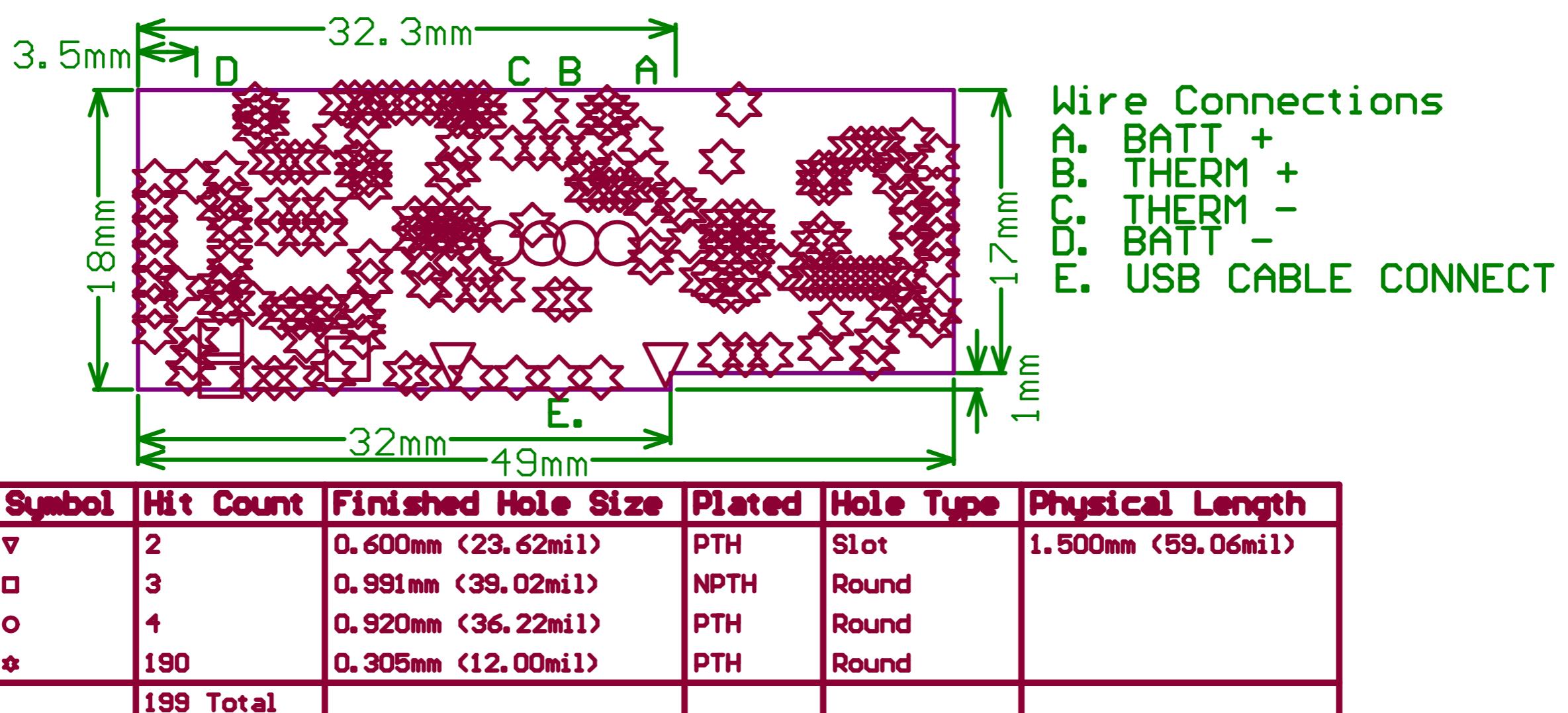
Solder Mask: Green

Finish: Immersion gold

Copper thickness outer layers: 2oz preferred. 1 oz min

Copper thickness inner layers: 0.5oz min

Stack may be adjusted as needed to achieve impedance and 1mm thickness



Dimensions
PCB Outline

Drill Drawing

Symbol	Hit Count	Finished Hole Size	Plated	Hole Type	Physical Length
▽	2	0.600mm (23.62mil)	PTH	Slot	1.500mm (59.06mil)
□	3	0.991mm (39.02mil)	NPTH	Round	
○	4	0.920mm (36.22mil)	PTH	Round	
✳	190	0.305mm (12.00mil)	PTH	Round	
199 Total					

Slot definitions : Rout Path Length = Calculated from tool start centre position to tool end centre position.
Physical Length = Rout Path Length + Tool Size = Slot length as defined in the PCB layout

Layer Stack Instructions:
-90 Ohm Diff impedance Top side to ground plane. Trace/Space: 7mil/7mil
-90 Ohm Diff impedance Bottom Side to Signal Layer 1. Trace/Space: 7mil/7mil

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Side	Copper	2.80mil		
4	Dielectric 1	FR-4	6.00mil	4.2	
5	Ground Plane	Copper	2.80mil		
6	Dielectric 2	FR-4	16.00mil	4.2	
7	Signal Layer 1	Copper	2.80mil		
8	Dielectric 3	FR-4	6.00mil	4.2	
9	Bottom Side	Copper	2.80mil		
10	Bottom Solder	Solder Resist	0.40mil	3.5	
11	Bottom Overlay				

Lucky Charge Battery Pack V2.0

Board size: 18 x 49mm

PCB Thickness: ~1mm +/- 15%

Minimum trace/space: 6 mil/ 5mil

Silkscreen color: White

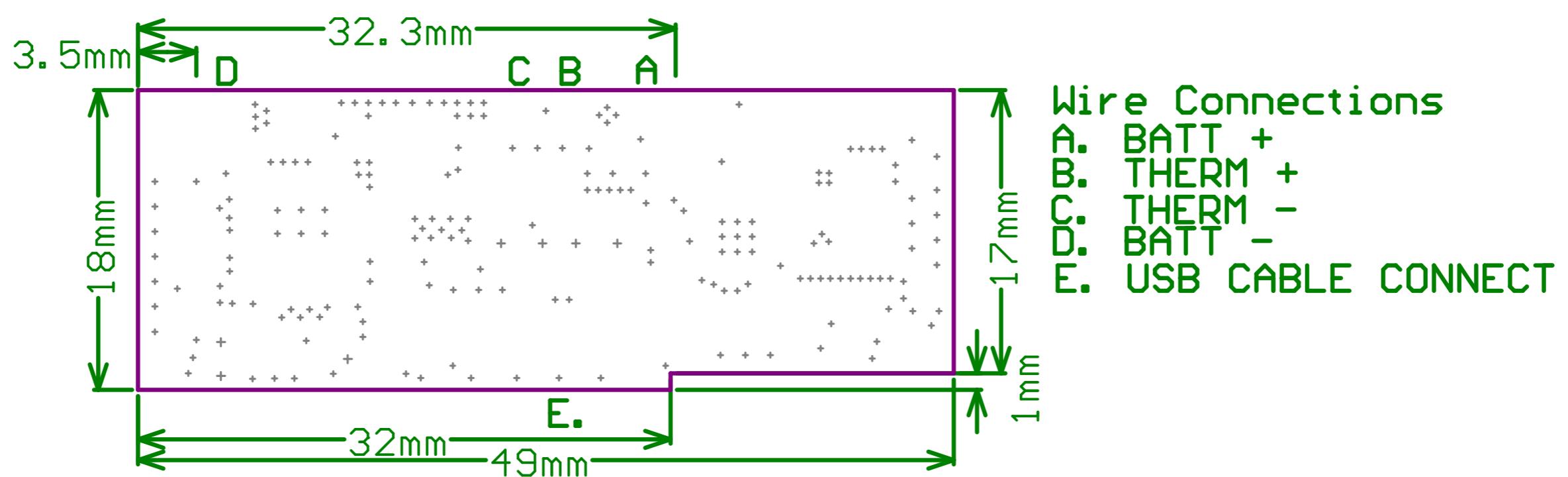
Solder Mask: Green

Finish: Immersion gold

Copper thickness outer layers: 2oz preferred. 1 oz min

Copper thickness inner layers: 0.5oz min

Stack may be adjusted as needed to achieve impedance and 1mm thickness



Layer Stack Instructions:

-90 Ohm Diff impedance Top side to ground plane. Trace/Space: 7mil/7mil

-90 Ohm Diff impedance Bottom Side to Signal Layer 1. Trace/Space: 7mil/7mil

Layer	Name	Material	Thickness	Constant	Board Layer Stack
1	Top Overlay				
2	Top Solder	Solder Resist	0.40mil	3.5	
3	Top Side	Copper	2.80mil		
4	Dielectric 1	FR-4	6.00mil	4.2	
5	Ground Plane	Copper	2.80mil		
6	Dielectric 2	FR-4	16.00mil	4.2	
7	Signal Layer 1	Copper	2.80mil		
8	Dielectric 3	FR-4	6.00mil	4.2	
9	Bottom Side	Copper	2.80mil		
10	Bottom Solder	Solder Resist	0.40mil	3.5	
11	Bottom Overlay				