

# voltage\_divider\_routed

Design Report

Rev 1 | 2026-06-12 | jlpcb

kicad-tools 0.13.0

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## Board Summary

Property	Value
Layers	2 copper (F.Cu, B.Cu)
Footprints	4 (2 SMD, 2 THT, 0 other)
Nets	3
Traces	15 segments
Vias	0
Board Size	30.0 x 25.0 mm

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## Design Overview

### Theory of Operation

Voltage Divider Test

Simple 2-resistor voltage divider

5V -> 2.5V (10k/10k)

## Power Architecture

Power Rails: GND, PWR\_FLAG

## ERC Status

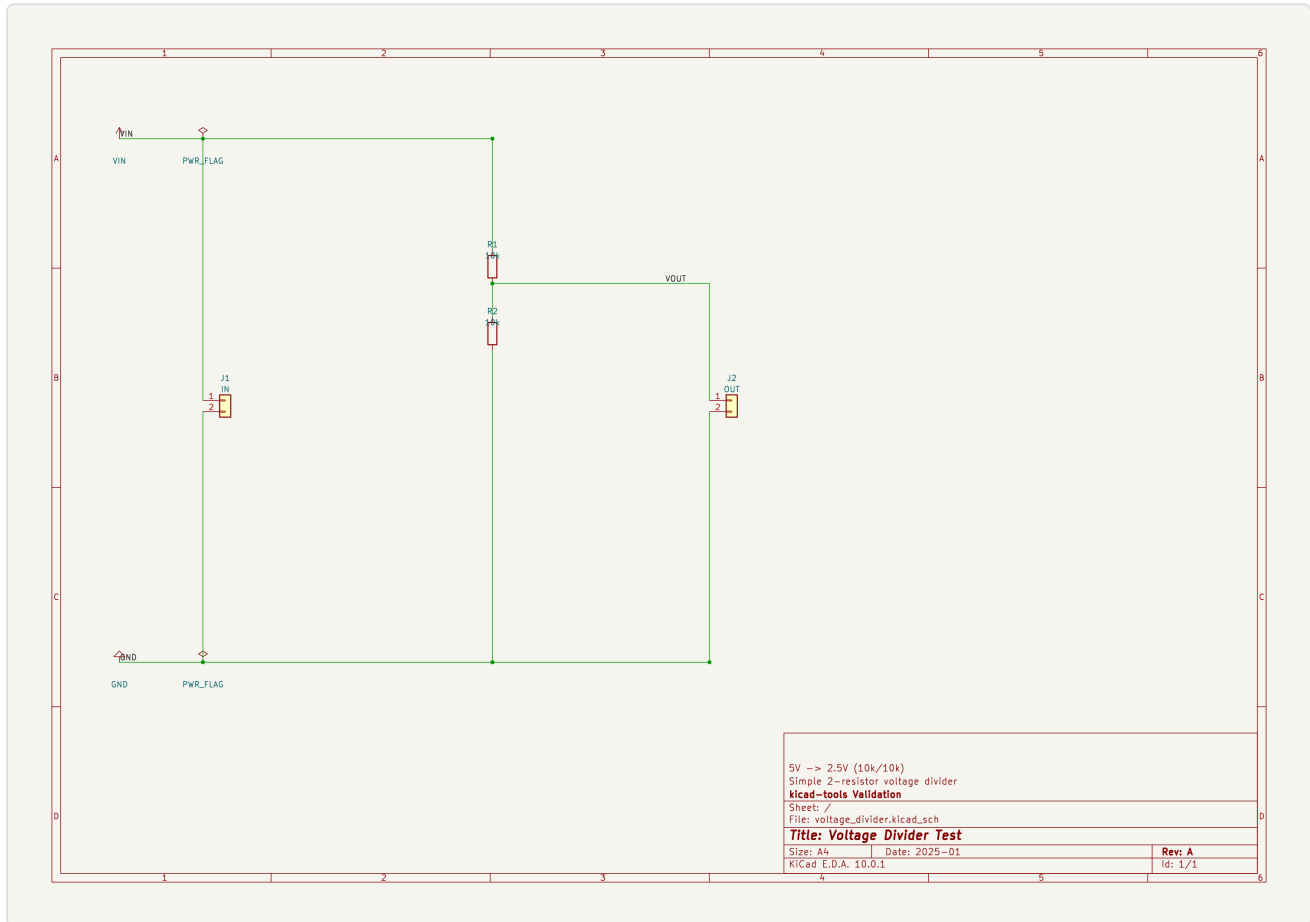
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Metric	Count
Errors	0
Warnings	0

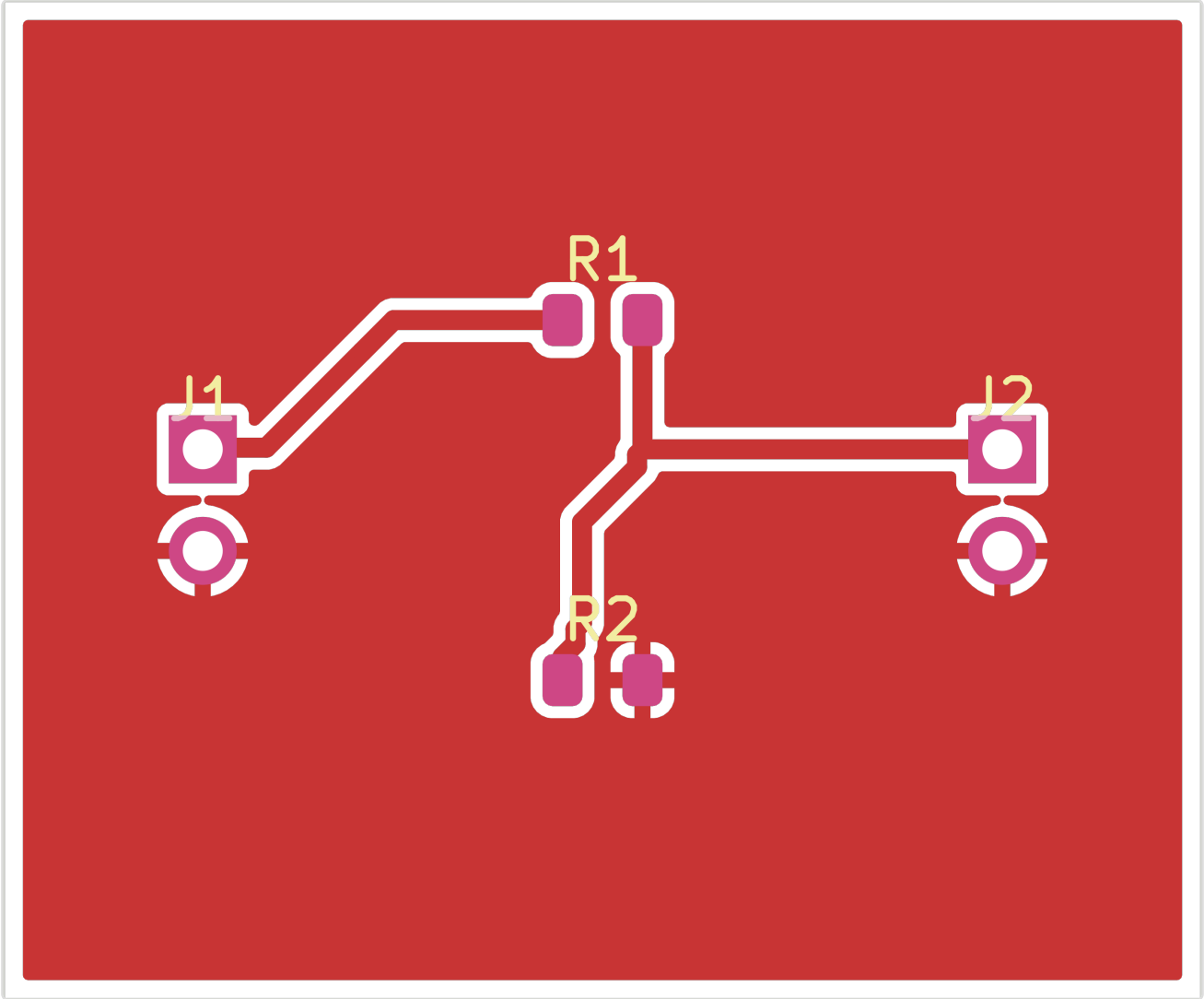
**Status:** SKIPPED -- ERC skipped by user request

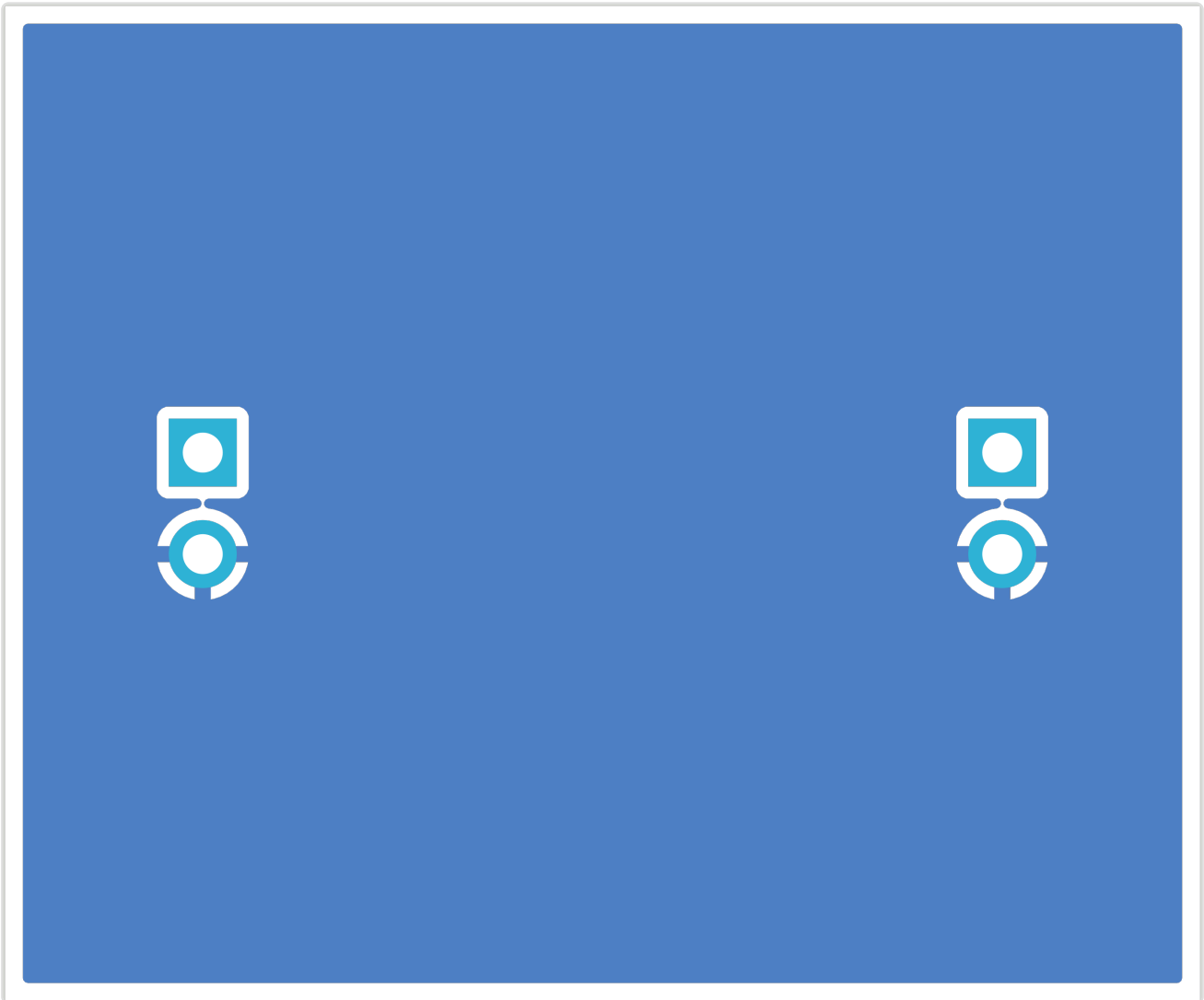
# Schematic Overview

## Schematic: voltage\_divider



## PCB Layout

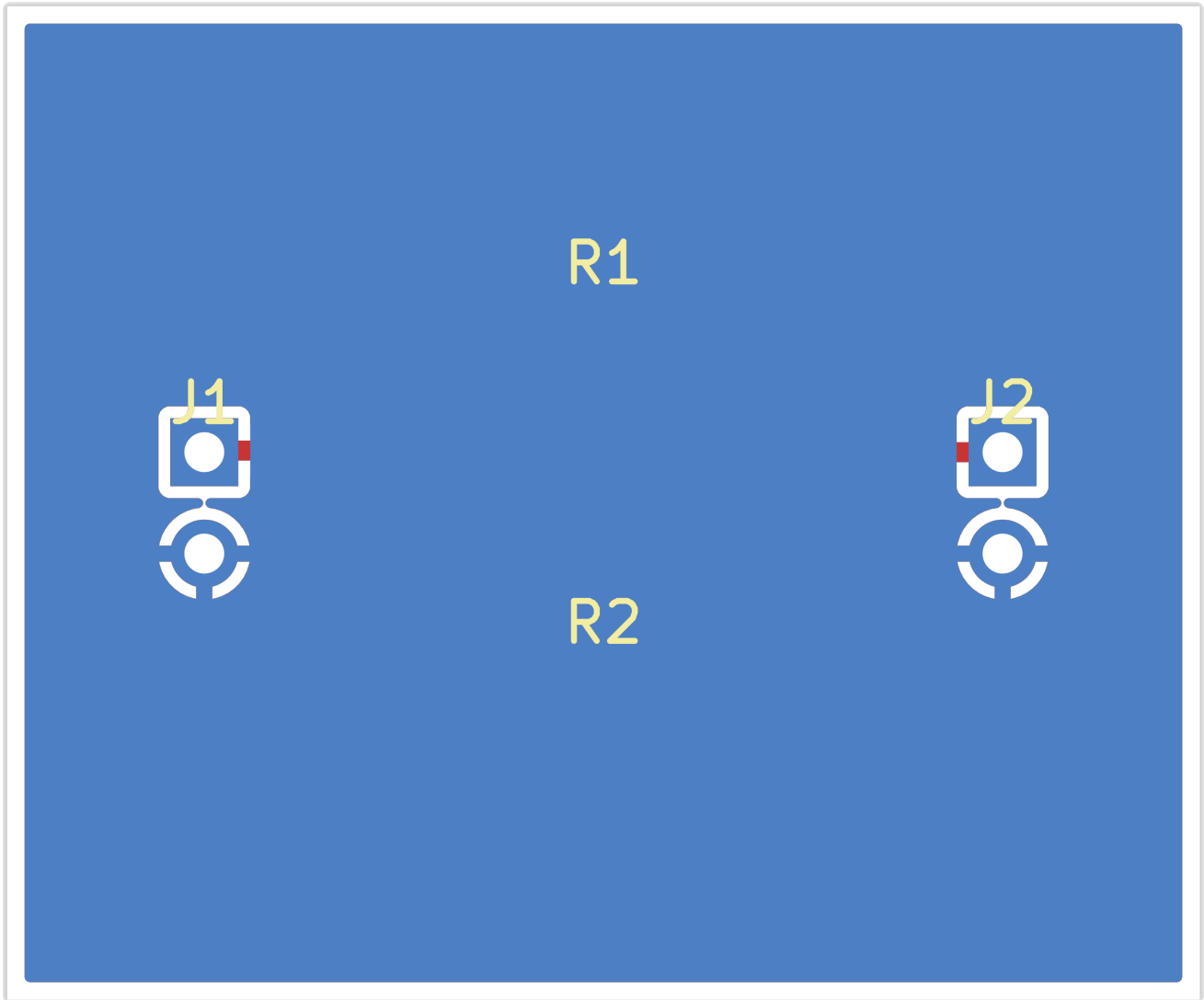




## Copper



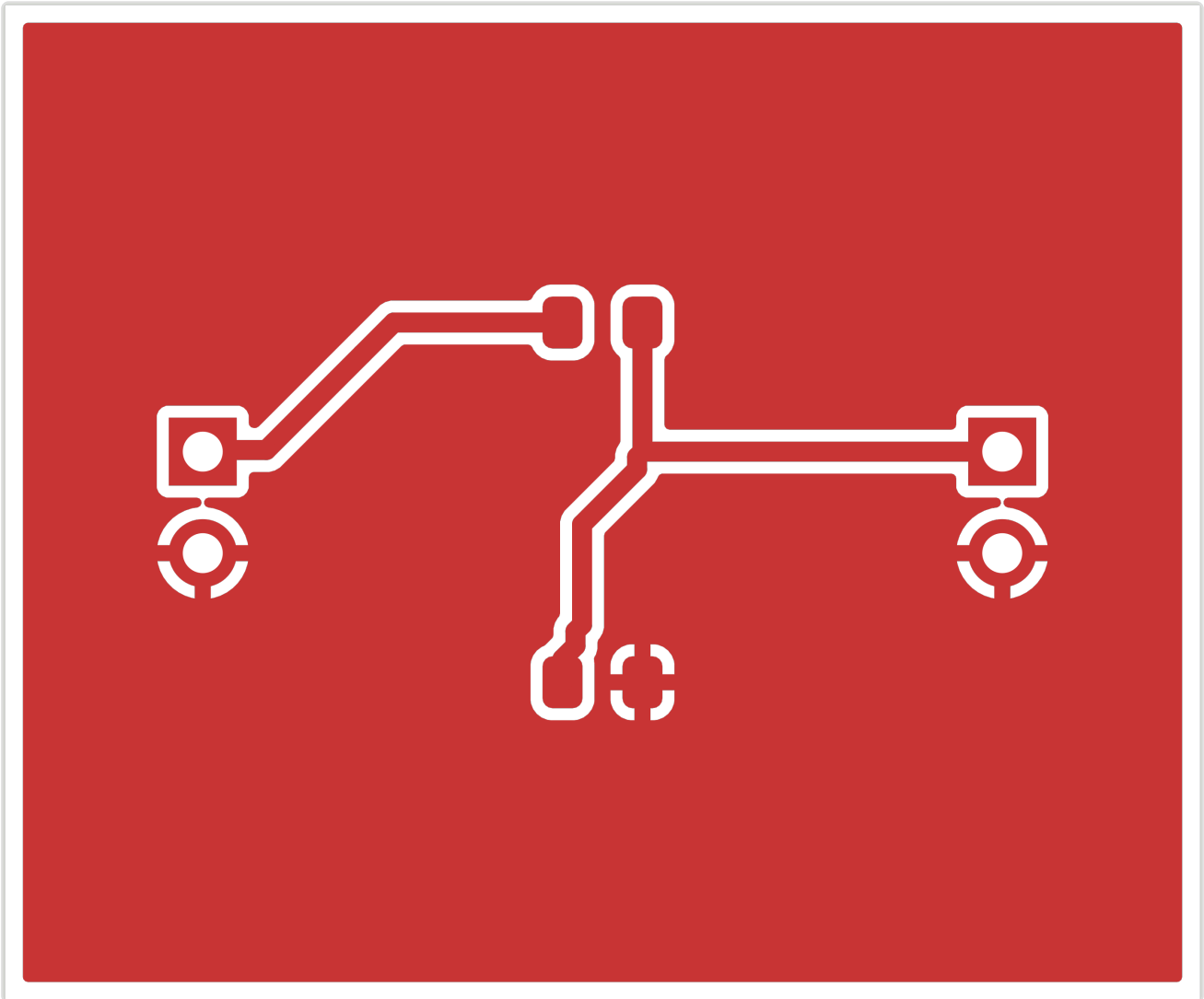
## Assembly



## Copper Layers

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F.Cu



## B.Cu



## Bill of Materials

Value	Package	Qty	References
IN	PinHeader_1x02_P2.54 mm_Vertical	1	J1
OUT	PinHeader_1x02_P2.54 mm_Vertical	1	J2
10k	R_0805_2012Metric	2	R1, R2

## DRC Status

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Metric	Count
Errors	0
Warnings	0
Blocking	0

**Status:** PASS

## Manufacturing Readiness

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**Verdict:** READY

### Action Items

- **[OPTIONAL]** Verify zone fill in KiCad for 1 zone-connected nets

## Routing Status

Metric	Value
Signal Net Completion	100.0% (2/2)
Overall Completion	100.0%
Complete Nets	3 / 3
Zone-Connected Nets	1
Incomplete Nets	0
Unconnected Pads	0

## Zone-Connected Nets

- GND

## Cost Estimate

Metric	Per Board (estimated)
PCB Fabrication	~0.55 USD
Components (estimated)	~0.21 USD
Assembly (estimated)	~1.93 USD
<b>Total (estimated)</b>	<b>~2.69 USD</b>
Batch Quantity	5
Batch Total (estimated)	~13.44 USD