

	<h1 style="margin: 0;">AKD4250-A</h1> <h2 style="margin: 0;">Evaluation Board Rev.2 for AK4250</h2>
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<b>General Description</b>
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AKD4250-A is an evaluation board for quickly evaluating the AK4250VU, 1ch video amplifier with low pass filter (LPF).

■ **Ordering Guide**

AKD4250-A --- Evaluation Board for AK4250

<b>Function</b>
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- **Easy to evaluate AK4250VU**

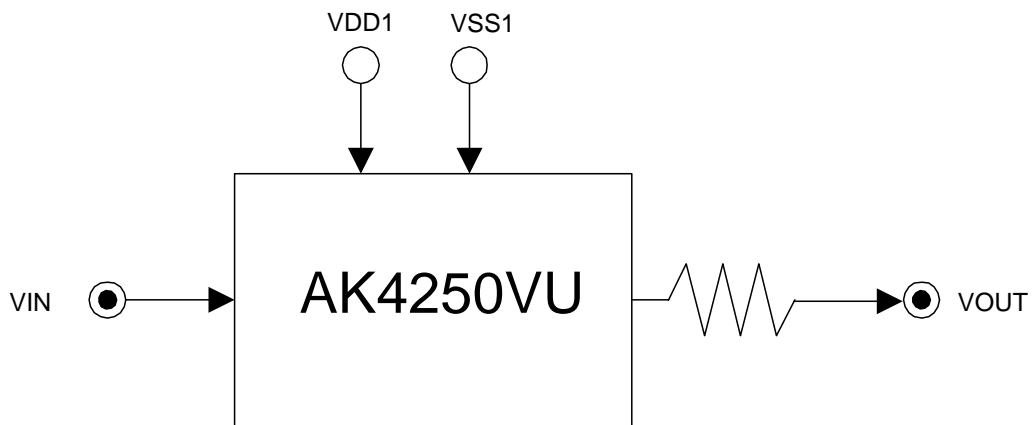


Figure 1. AKD4250-A Block diagram

\* Circuit diagram and PCB layout are attached at the end of this manual.

## ■ Operation sequence

- 1) Set up the power supply lines.

[VDD1]	(Red)	= 2.5V~3.6V
[VSS1]	(Black)	= 0V

- 2) Set up the jumper pins. (Refer the next section.)

They should be set a default state.

- 3) Turn on the power supply.

AK4250VU includes a power-on-reset function. Therefore any reset is not required upon power-up externally.

## ■ Jumper pins set up

Jumper pins should be set the default state.

- 1) JP1(DVDD) : DVDD and AVDD

OPEN : Separated.

SHORT: Connected. <Default>

- 2) JP2(PDN) : Selection for the PDN pin of AK4250

OPEN: PDN pin is open.

DVDD: PDN pin is connected to DVDD. <Default>

■ Analog Input/Output Circuits

(1) Input Circuit

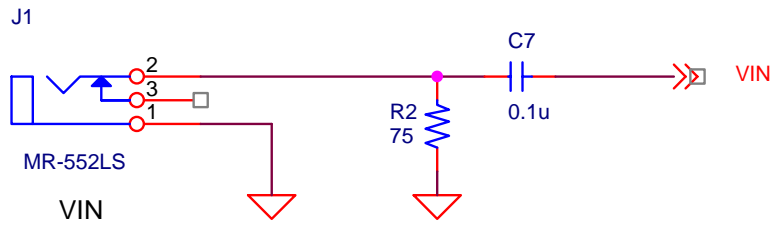


Figure 2. VIN input circuit

(2) Output Circuit

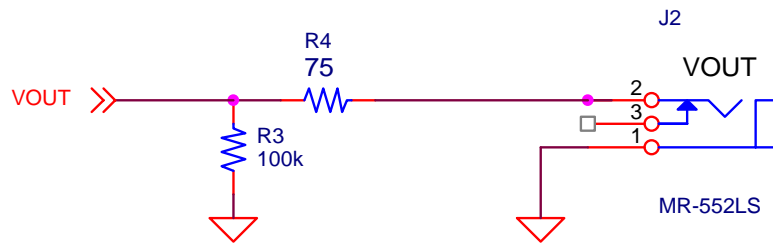


Figure 3. VOUT output circuit

**MEASUREMENT RESULTS**

**1. VIDEO PLOT DATA**

[Measurement condition]

- Measurement unit: Tektronix VM700T Video Measurement set
- Power Supply: VDD=3V
- Temperature: Room

**1-1. S/N**

- Measurement Frequency: 100kHz ~ 6MHz

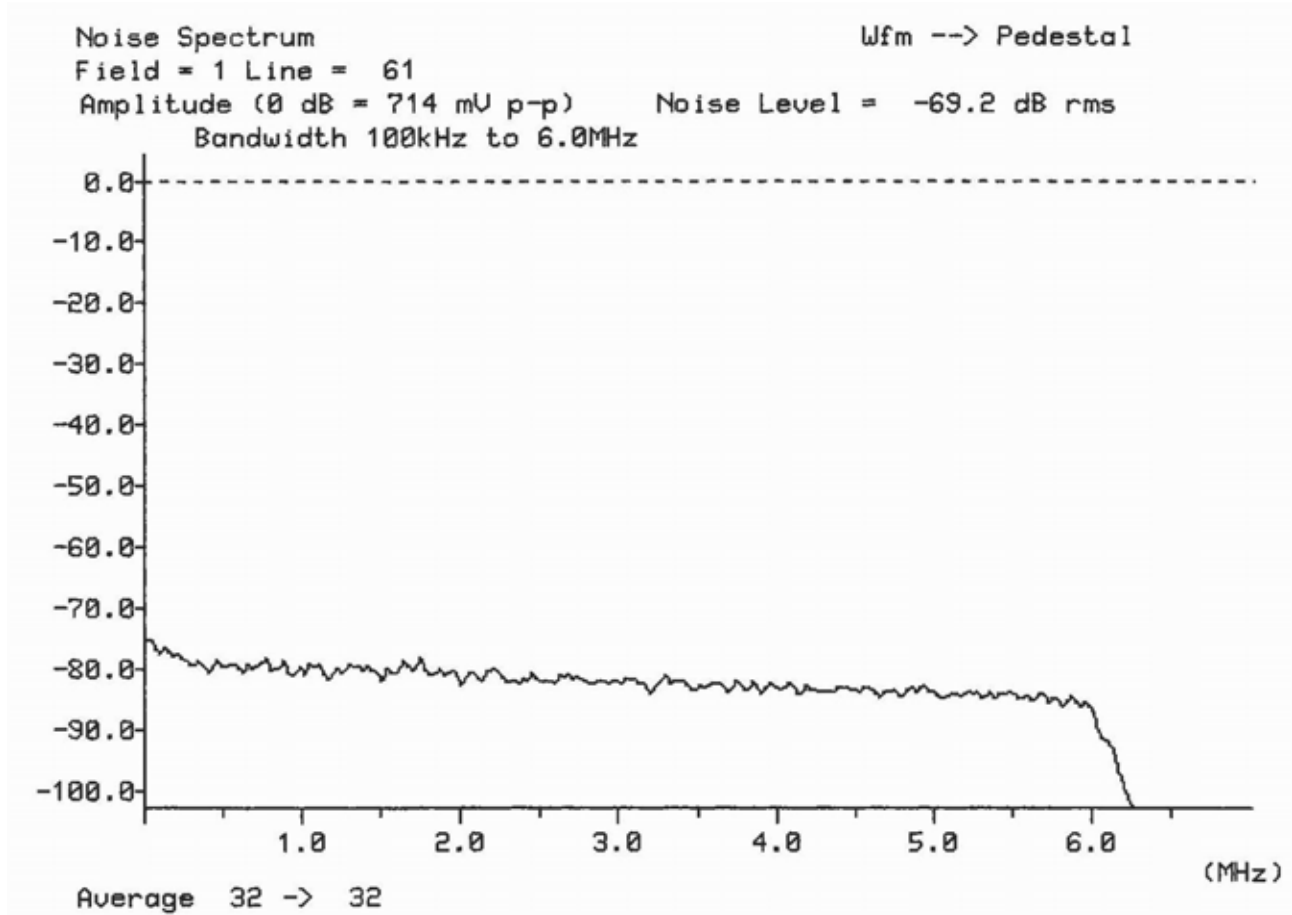


Figure 4. S/N (Noise Spectrum)

1-2. Vector

- Input signal: 75% color

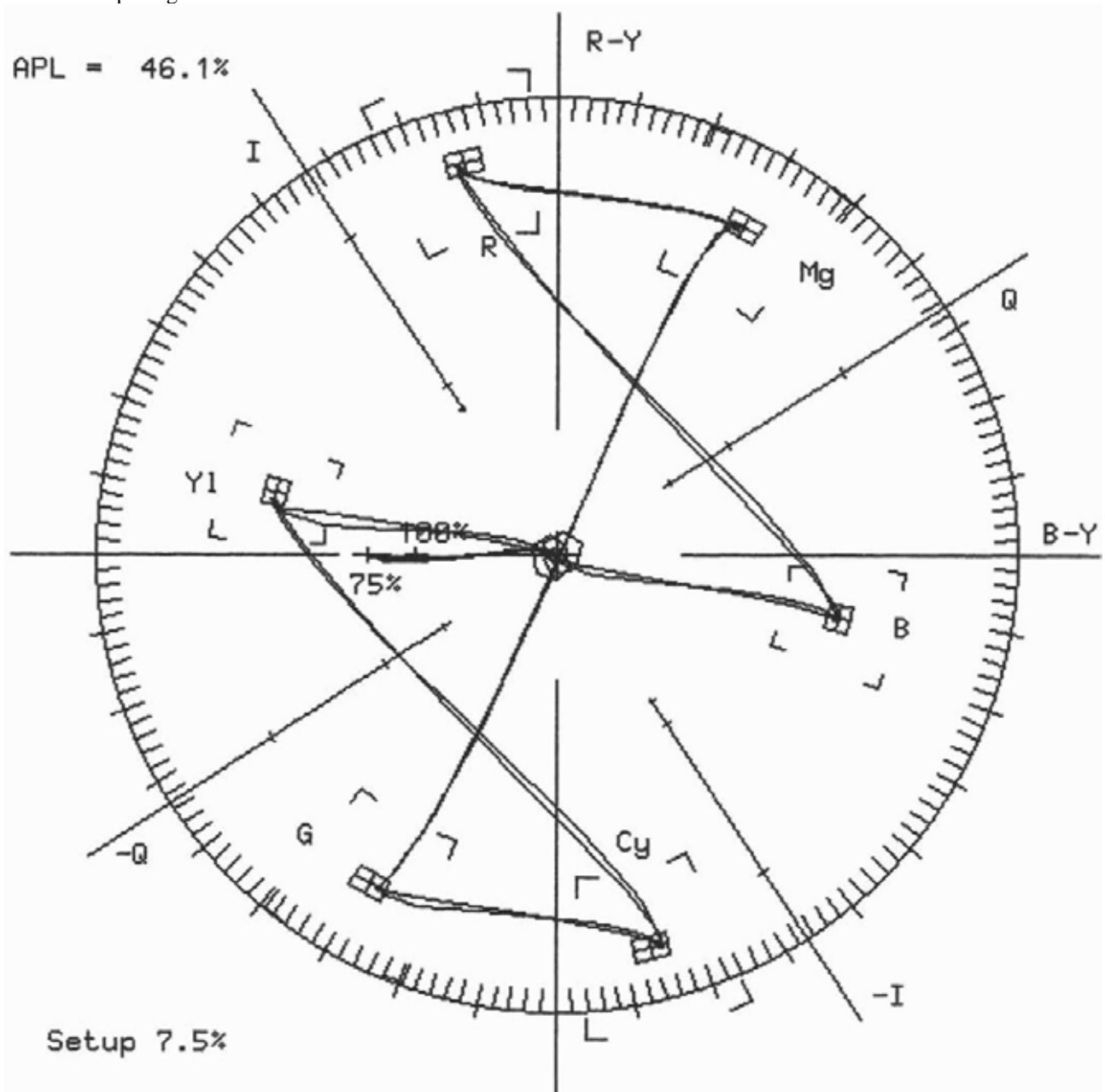
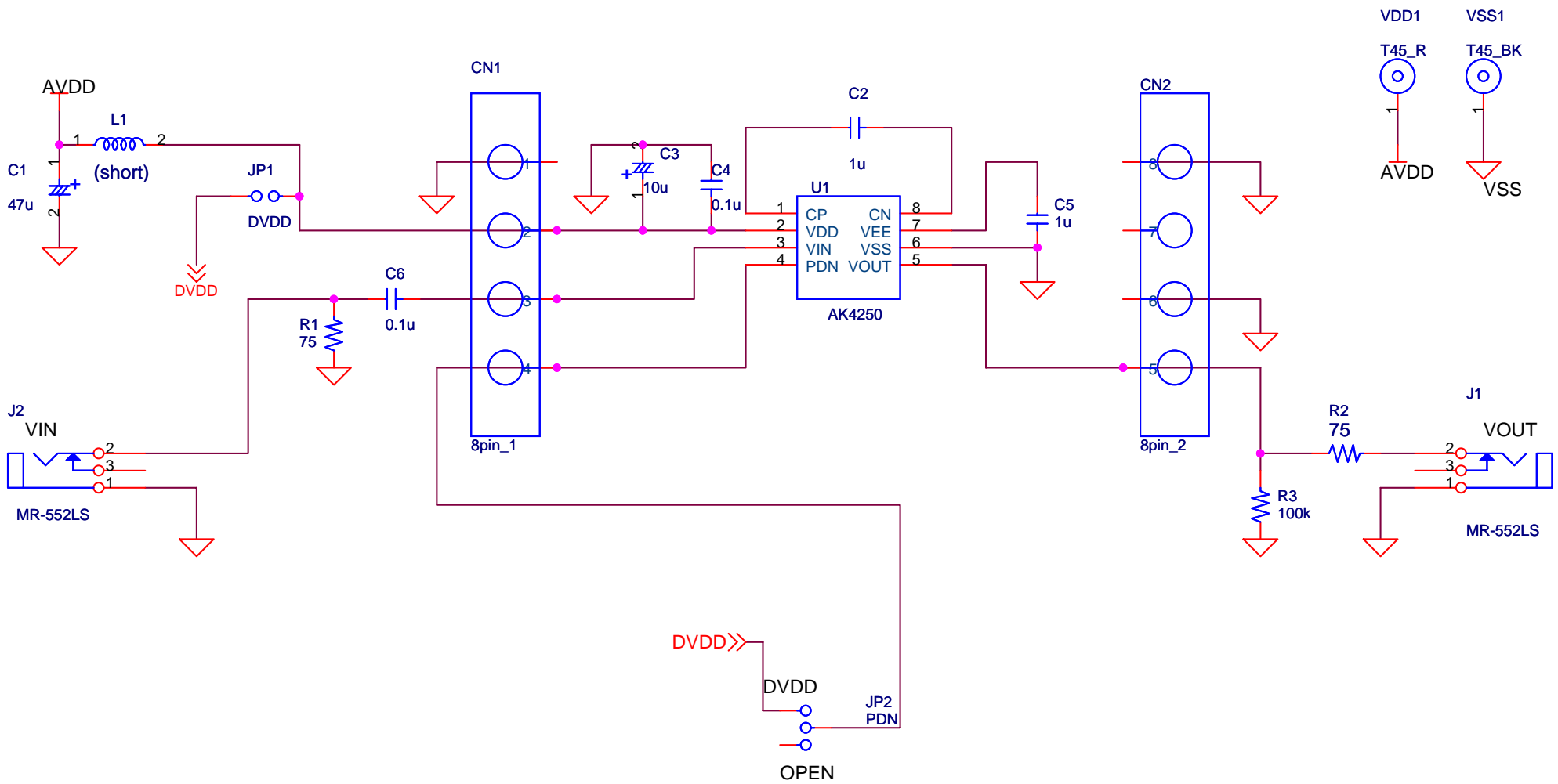


Figure 5. 75% Color Vector

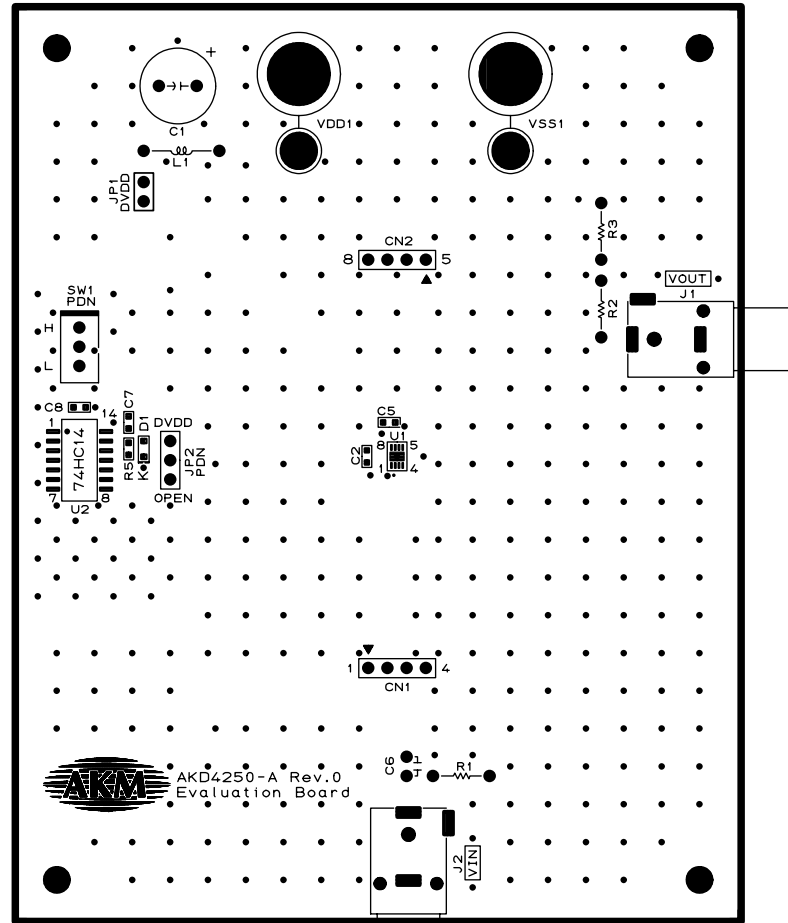
Revision History				
Date (yy/mm/dd)	Manual Revision	Board Revision	Reason	Contents
06/07/11	KM083302	1	First Edition	
06/08/01	KM083303	2	Device Rev. changed	AK4250:(Rev.B→Rev.D)
			Measurement data changed	Measurement data changed. (Video Plot Data : S/N and Vector)

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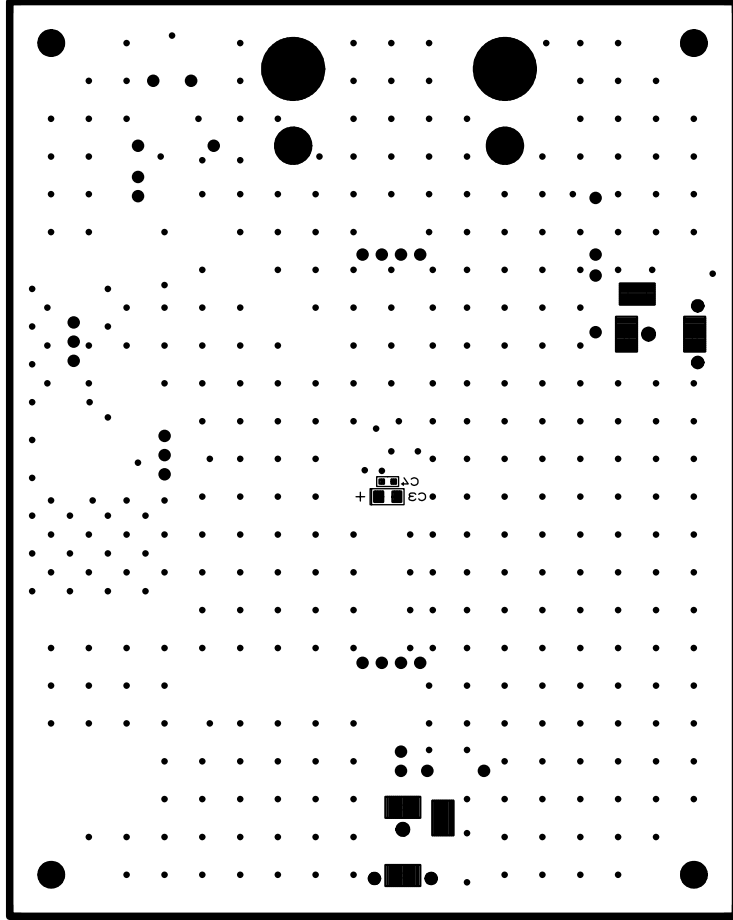


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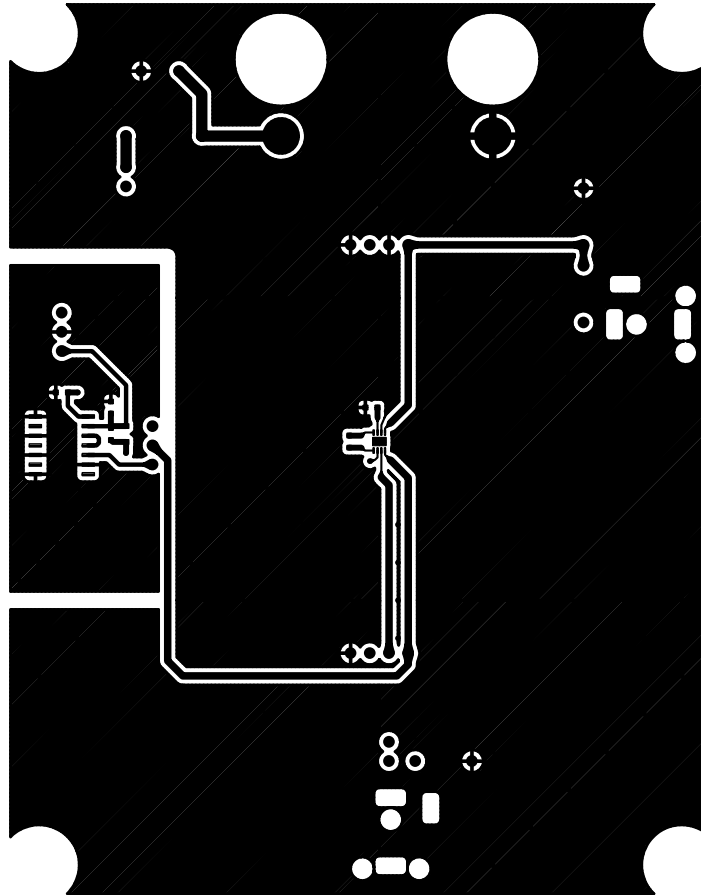


AKD4250-A L1 SILK

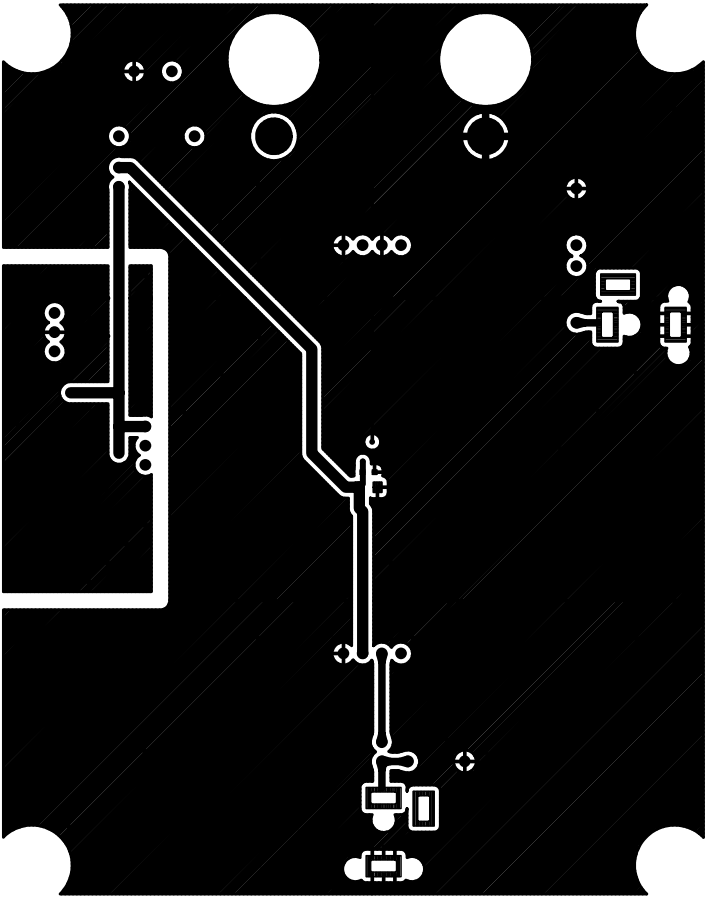




AKD520-A L3 2ILK



AKD4250-A L1



KD450-A LS