

	<h1 style="margin: 0;">AKD4252-A</h1> <h2 style="margin: 0;">Evaluation Board Rev.0 for AK4252</h2>
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General Description

AKD4252-A is an evaluation board for quickly evaluating the AK4252VU (Output Gain +12dB), 1ch video amplifier with low pass filter (LPF).

■ **Ordering Guide**

AKD4252-A --- Evaluation Board for AK4252VU

Function

- **Easy to evaluate AK4252VU**

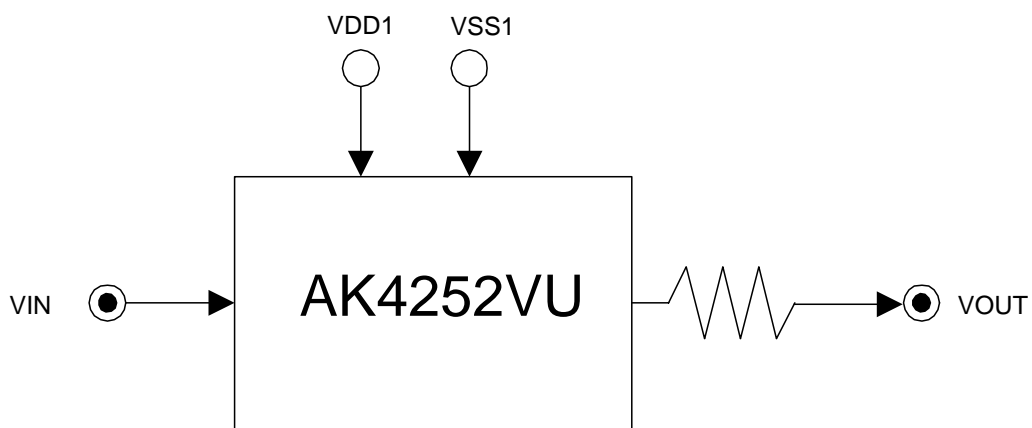


Figure 1. AKD4252-A Block diagram

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

■ Operation sequence

1) Set up the power supply lines.

[VDD1] (Red) = 2.7V~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.

AK4252VU 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 AK4252

OPEN: PDN pin is open.

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

■ Analog Input/Output Circuits

(1) Input Circuit

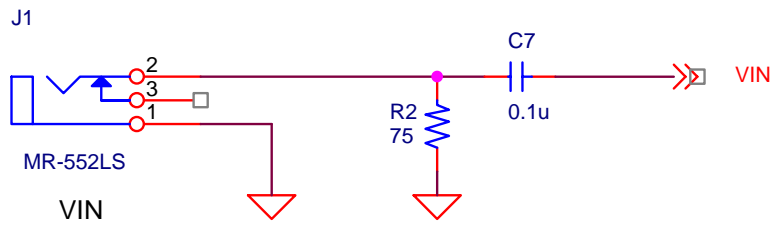


Figure 2. VIN input circuit

(2) Output Circuit

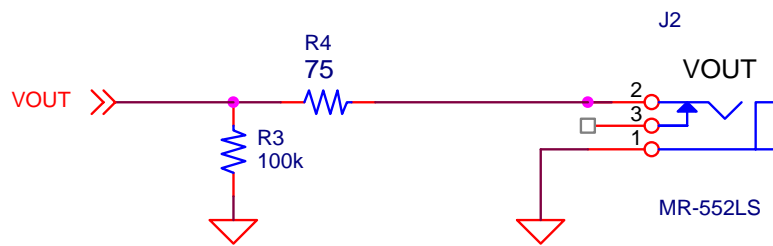


Figure 3. VOUT output circuit

MEASUREMENT RESULTS

1. VIDEO PLOT DATA

[Measurement condition]

- Measurement unit: Tektronix VM700T Video Measurement set
- Power Supply: VDD=3.0V
- Temperature: Room

1-1. S/N

- Measurement Frequency: 100kHz ~ 6MHz

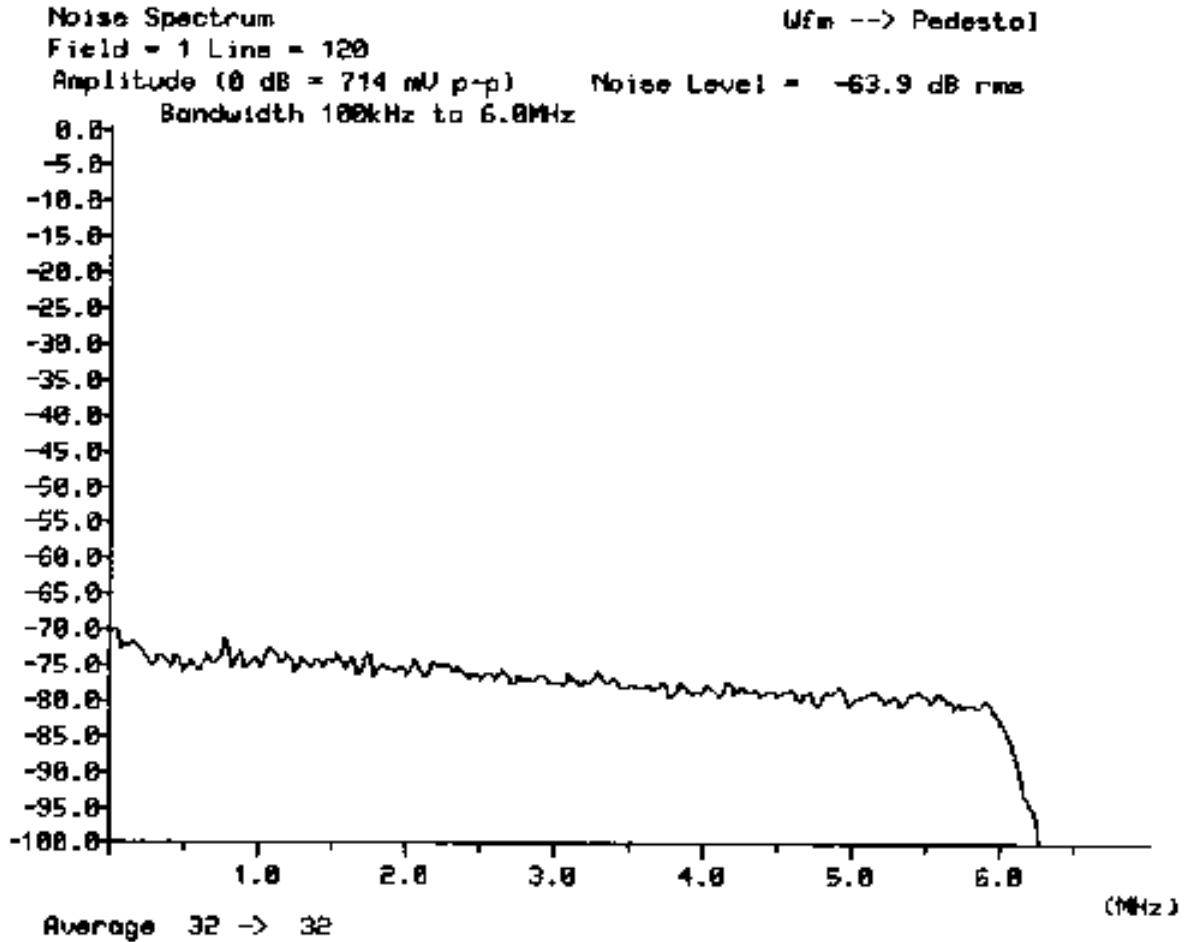


Figure 4. S/N (Noise Spectrum)

1-2. Vector

- Input signal: 75% Color Bar

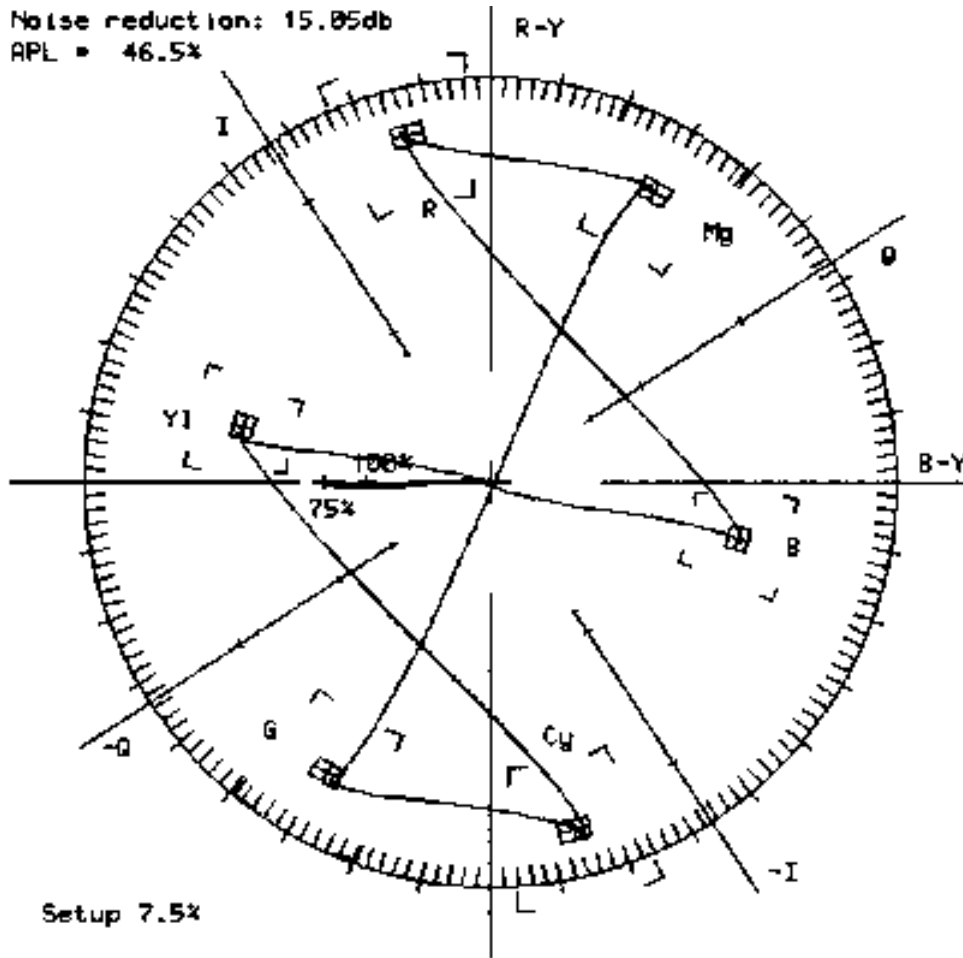


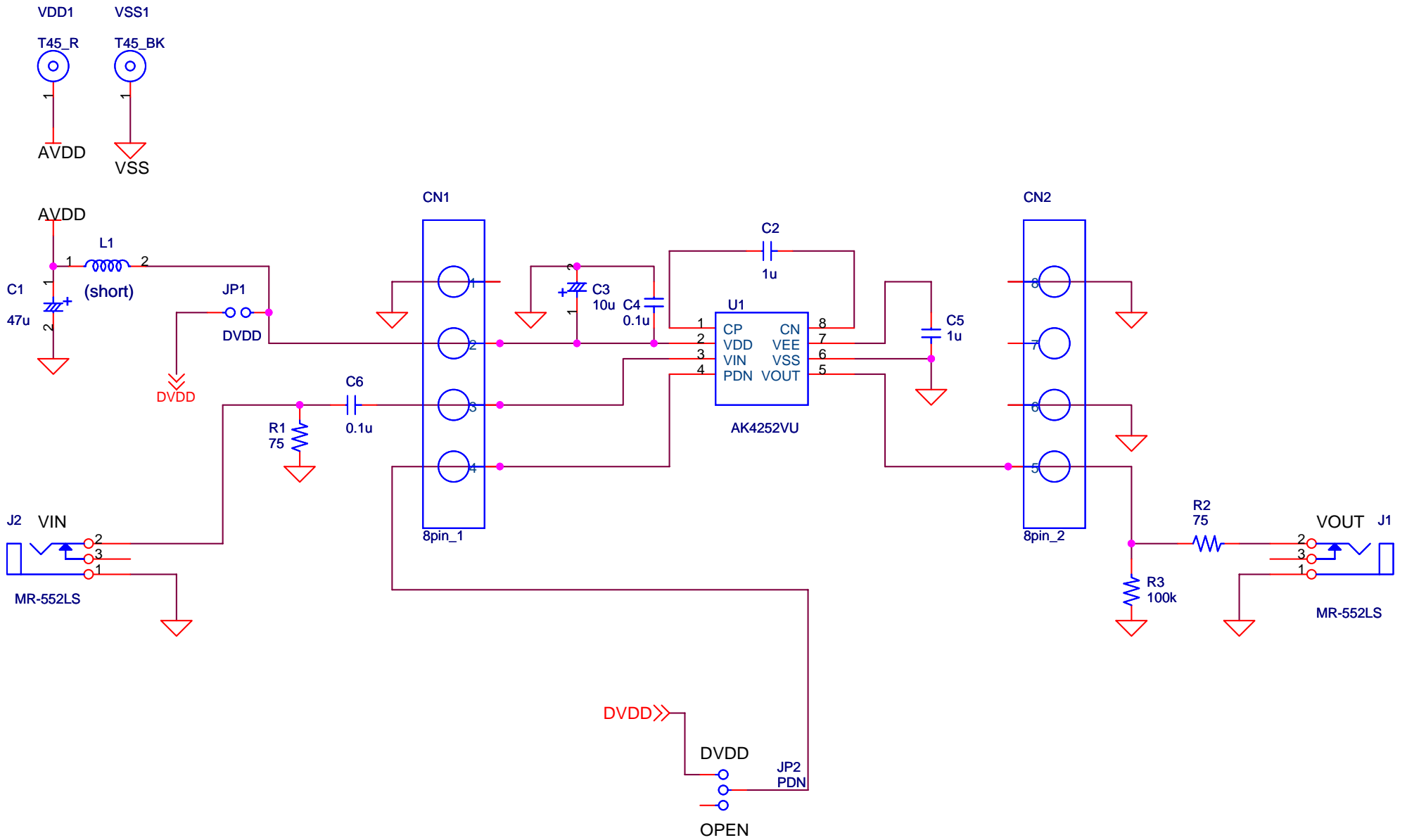
Figure 5. 75% Color Vector

Revision History

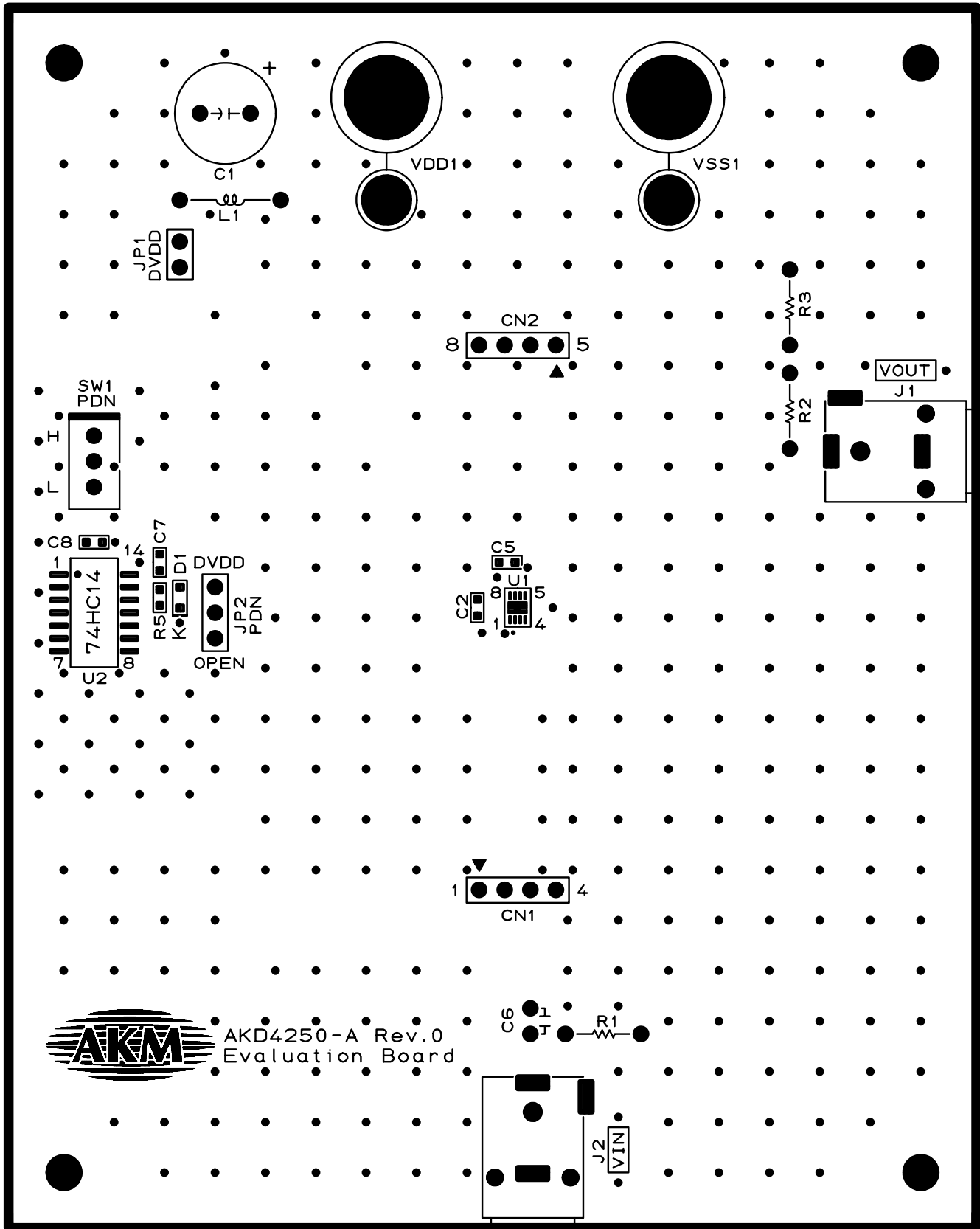
Date (yy/mm/dd)	Manual Revision	Board Revision	Reason	Contents
06/09/14	KM085300	0	First Edition	

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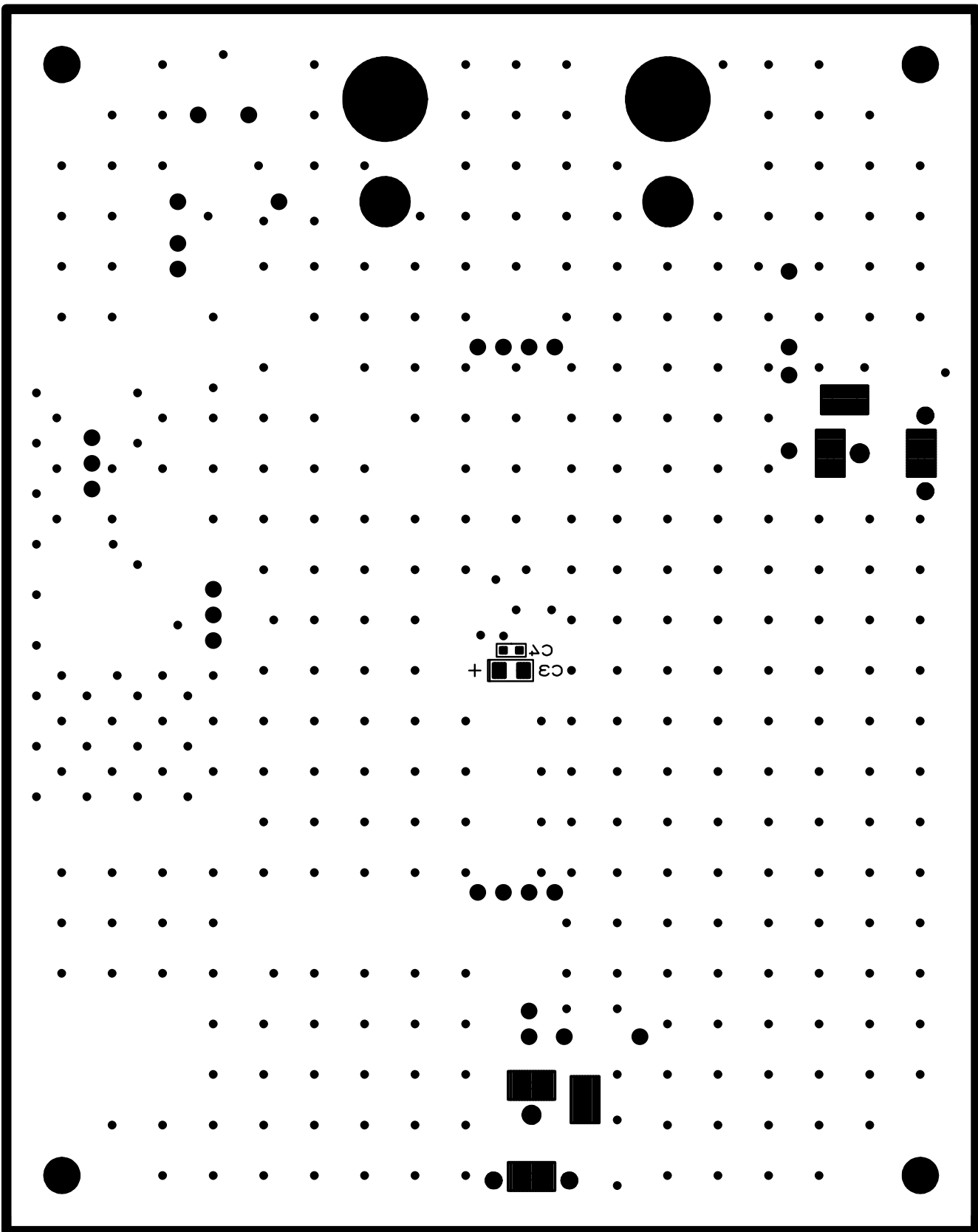


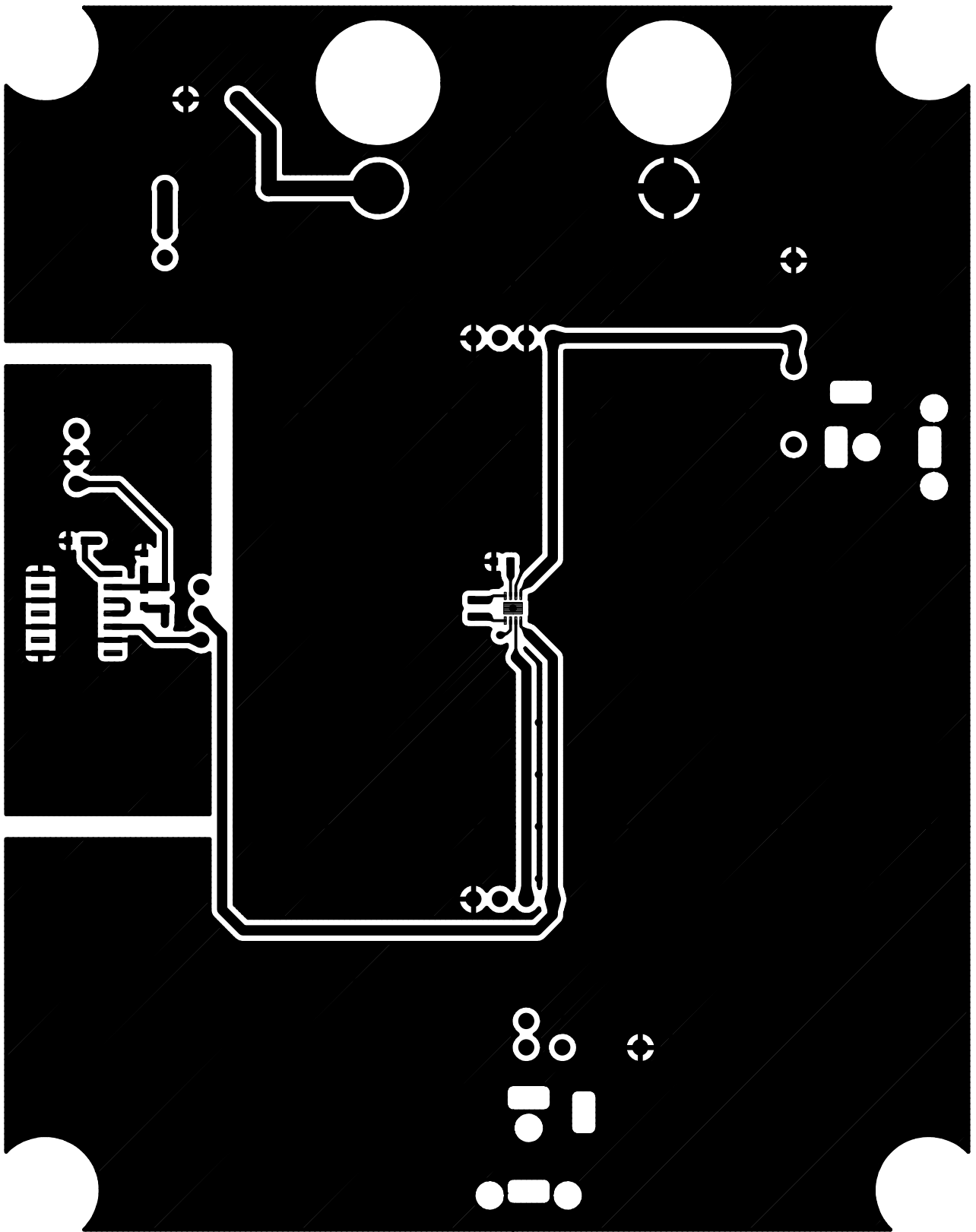
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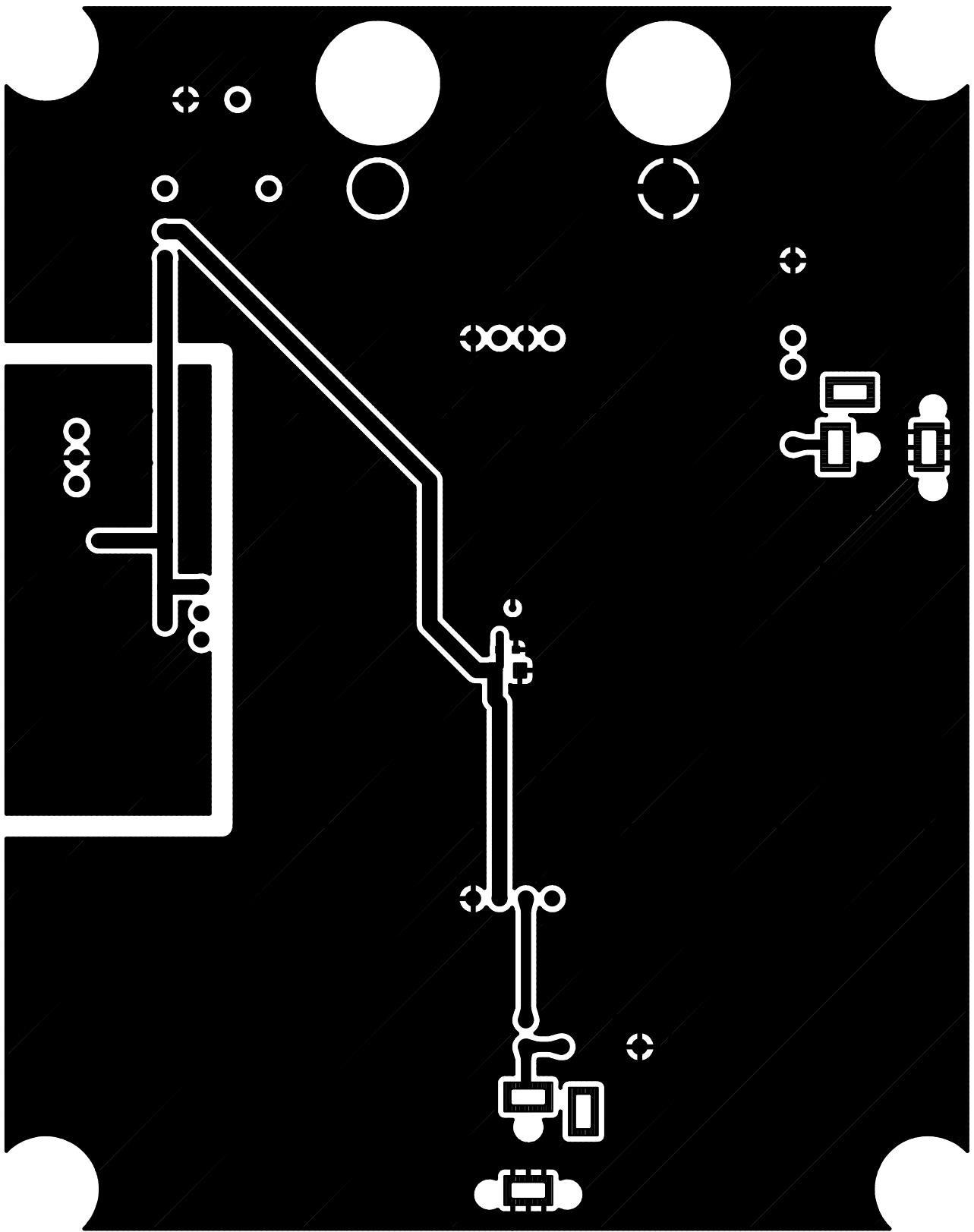
AKD4250-A Rev.0
Evaluation Board

AKD4250-A L1 SILK





AKD4250-A L1



AKD4S20-A LS