AKD4252-A
Evaluation Board Rev.0 for AK4252

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**

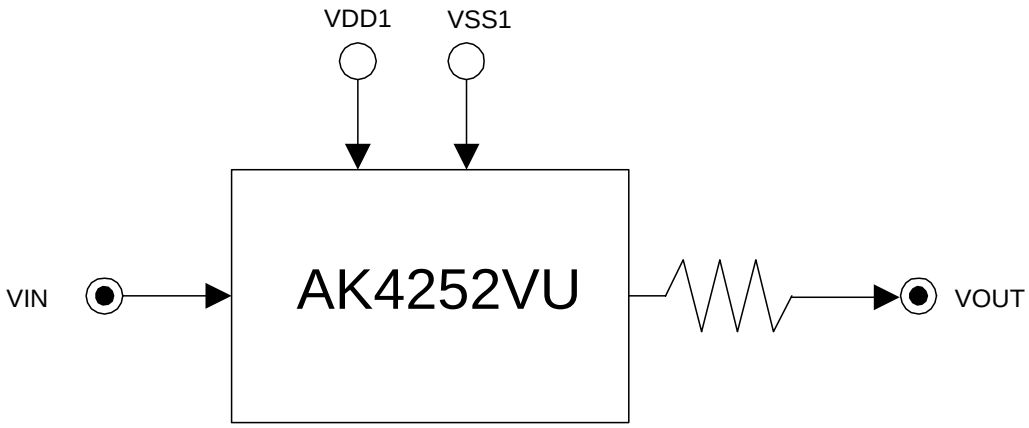


Figure 1. AKD4252-A Block diagram
* Circuit diagram and PCB layout are attached at the end of this manual.

■ 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

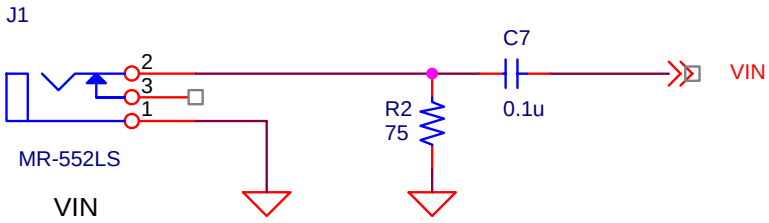


Figure 2. VIN input circuit

(2) Output Circuit

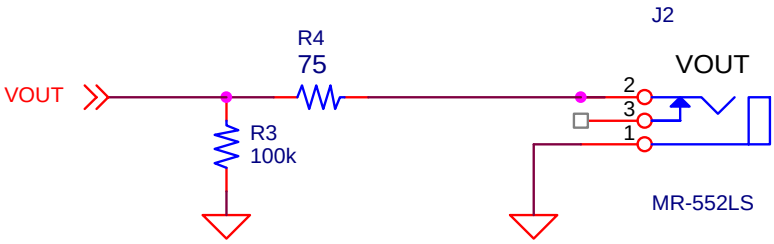


Figure 3. VOUT output circuit

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: 100kH ~ 6MHz

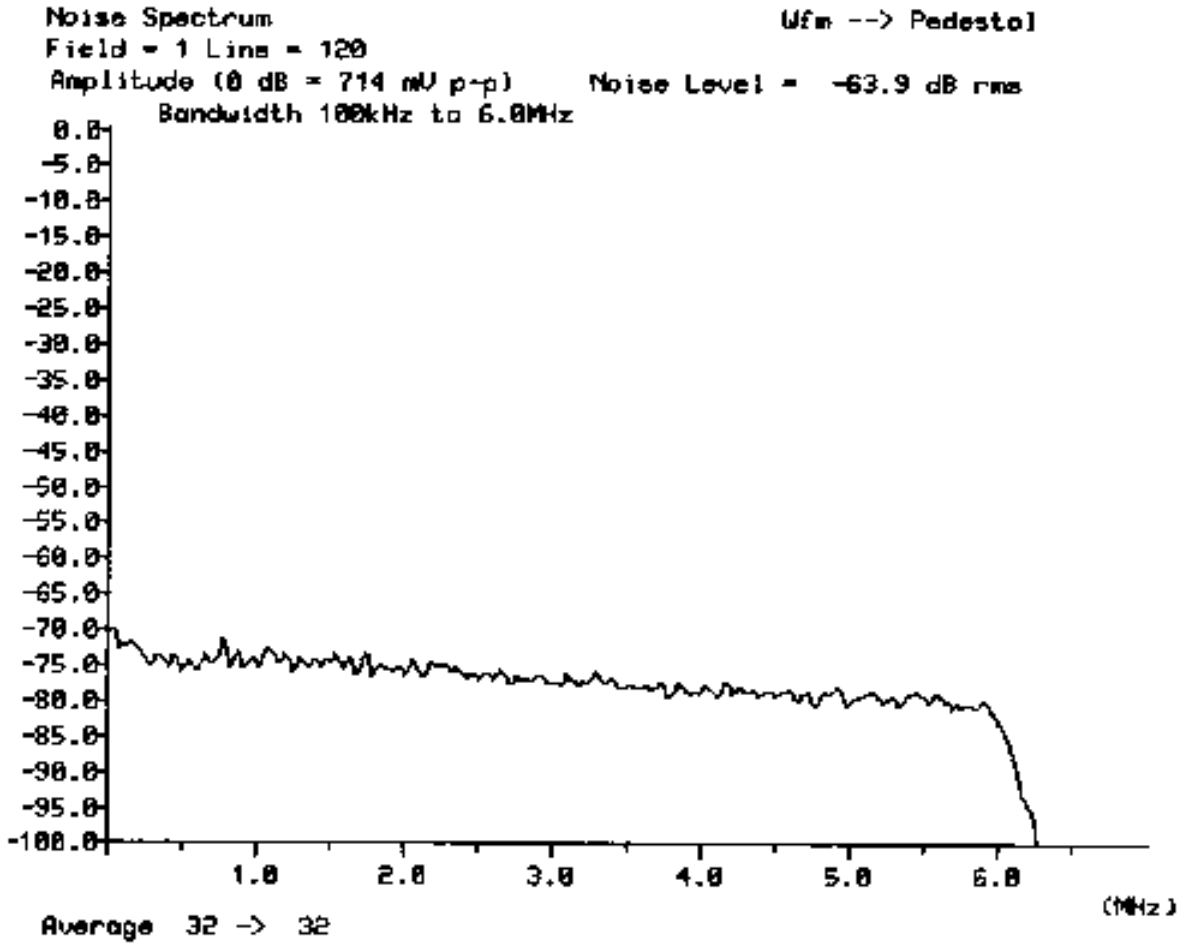


Figure 4. S/N (Noise Spectrum)

1-2. Vector

- Input signal: 75% Color Bar

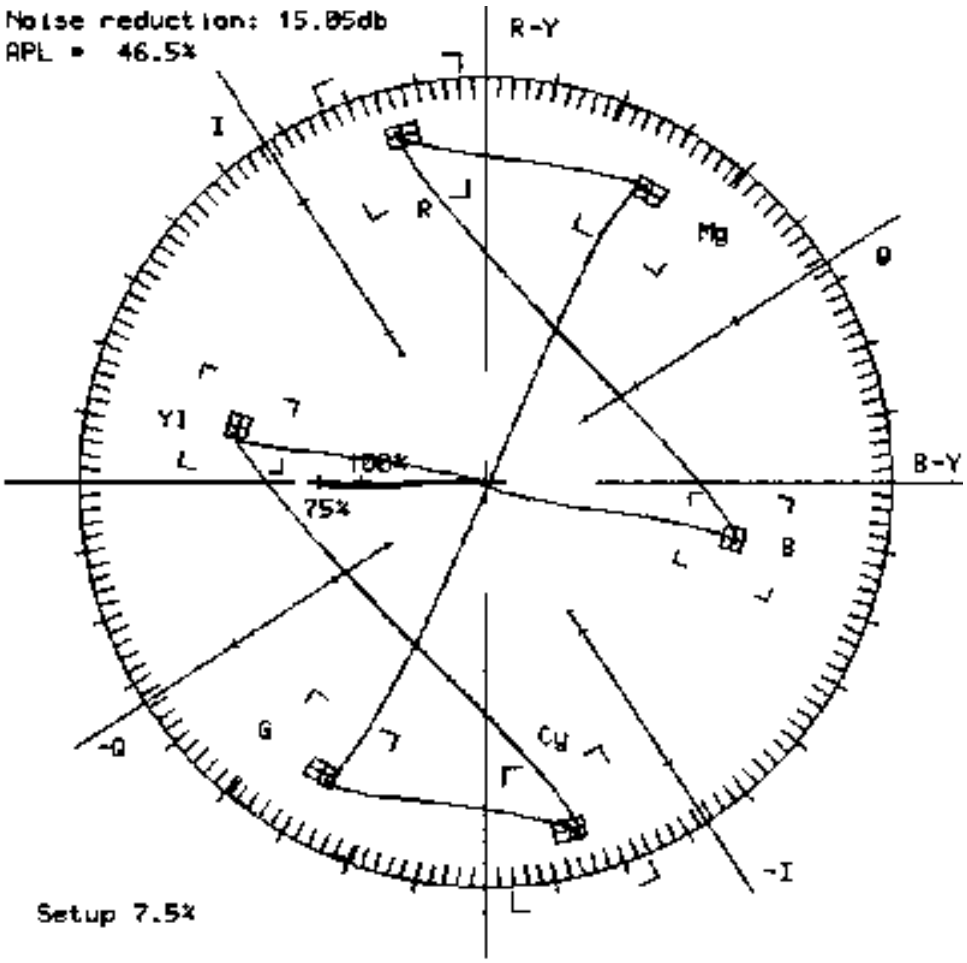
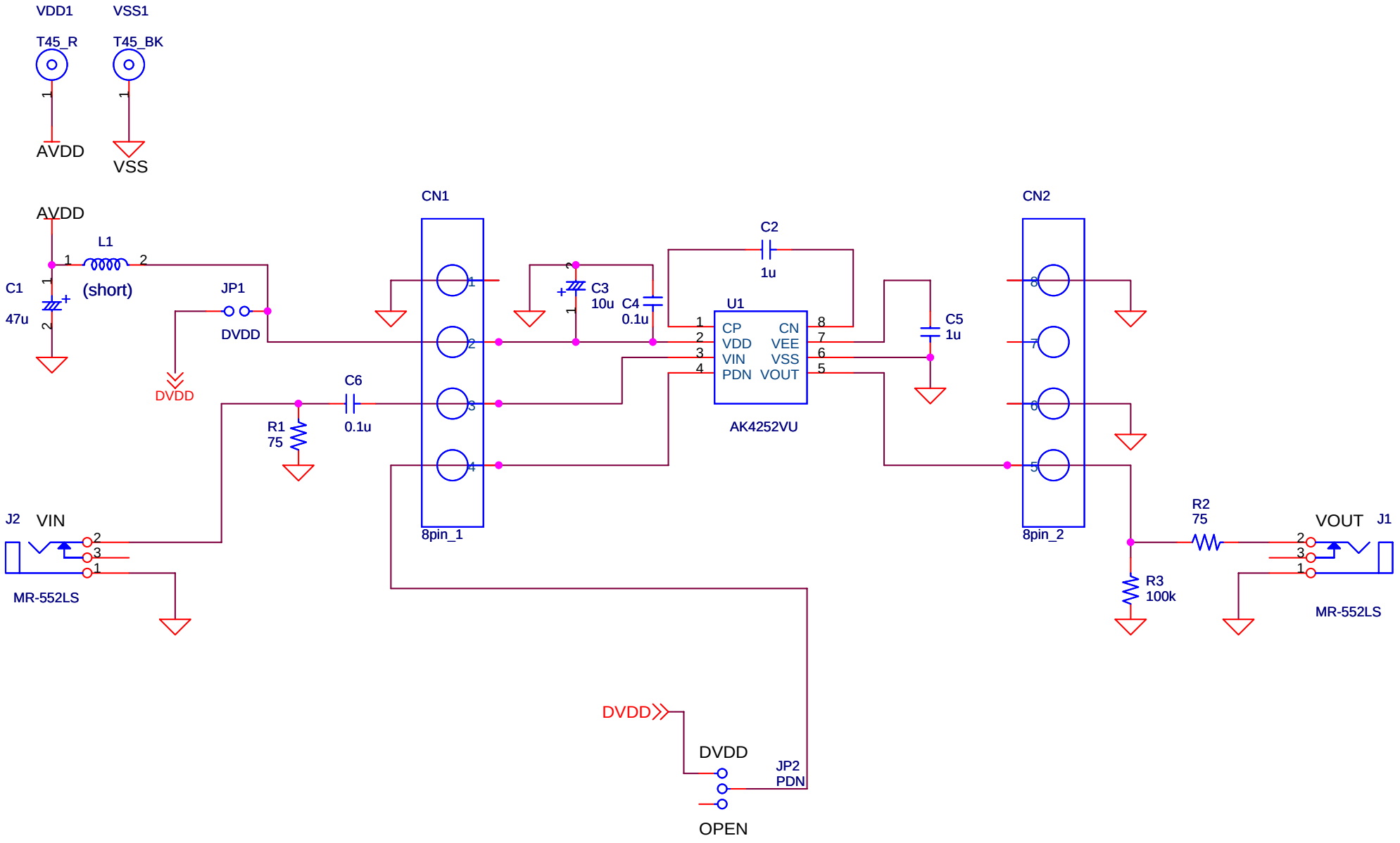


Figure 5. 75% Color Vector

Revision History

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



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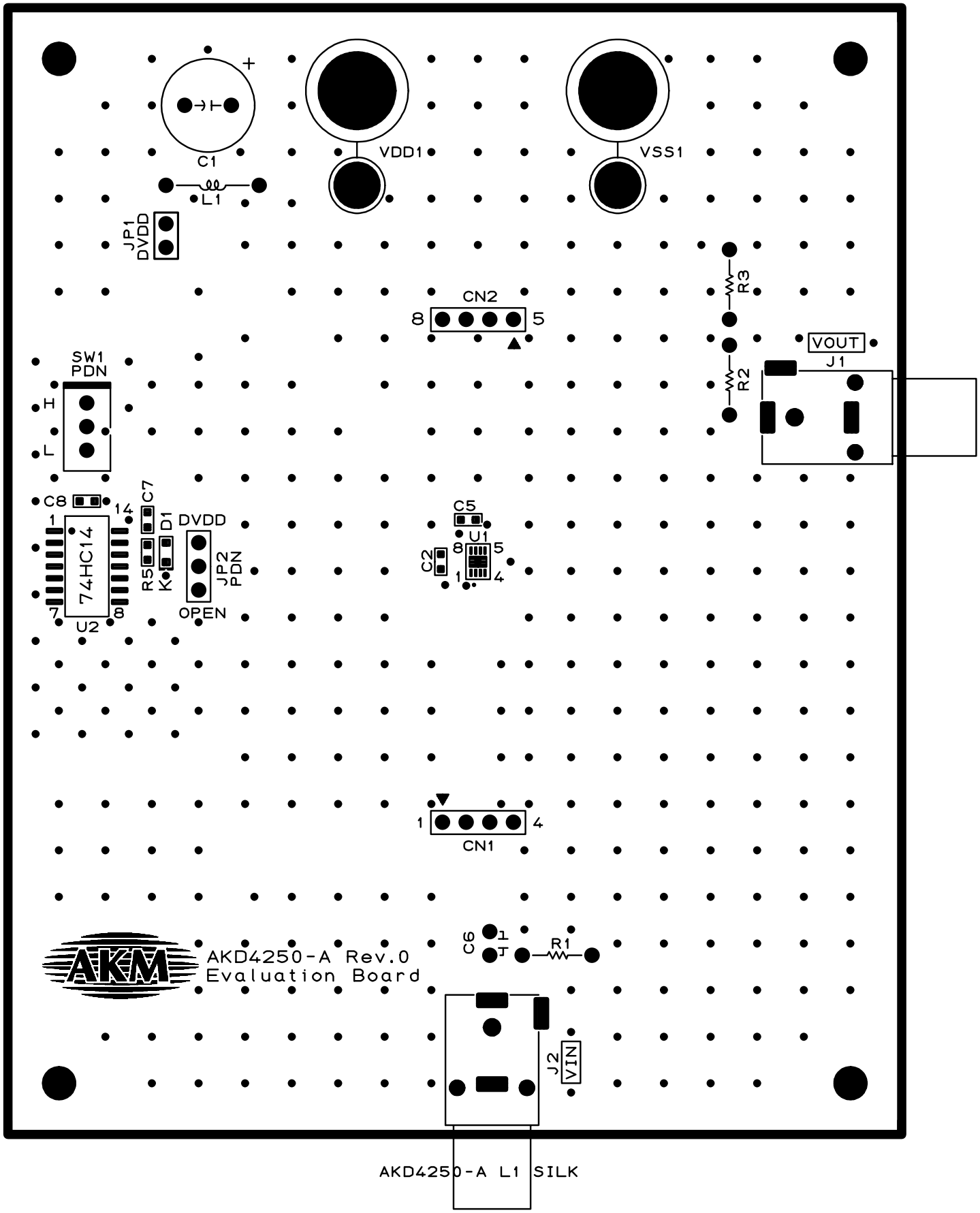
Size A	Document Number AK4252VU		Rev 0
Date: Monday, August 21, 2006	Sheet 1 of 1		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L1
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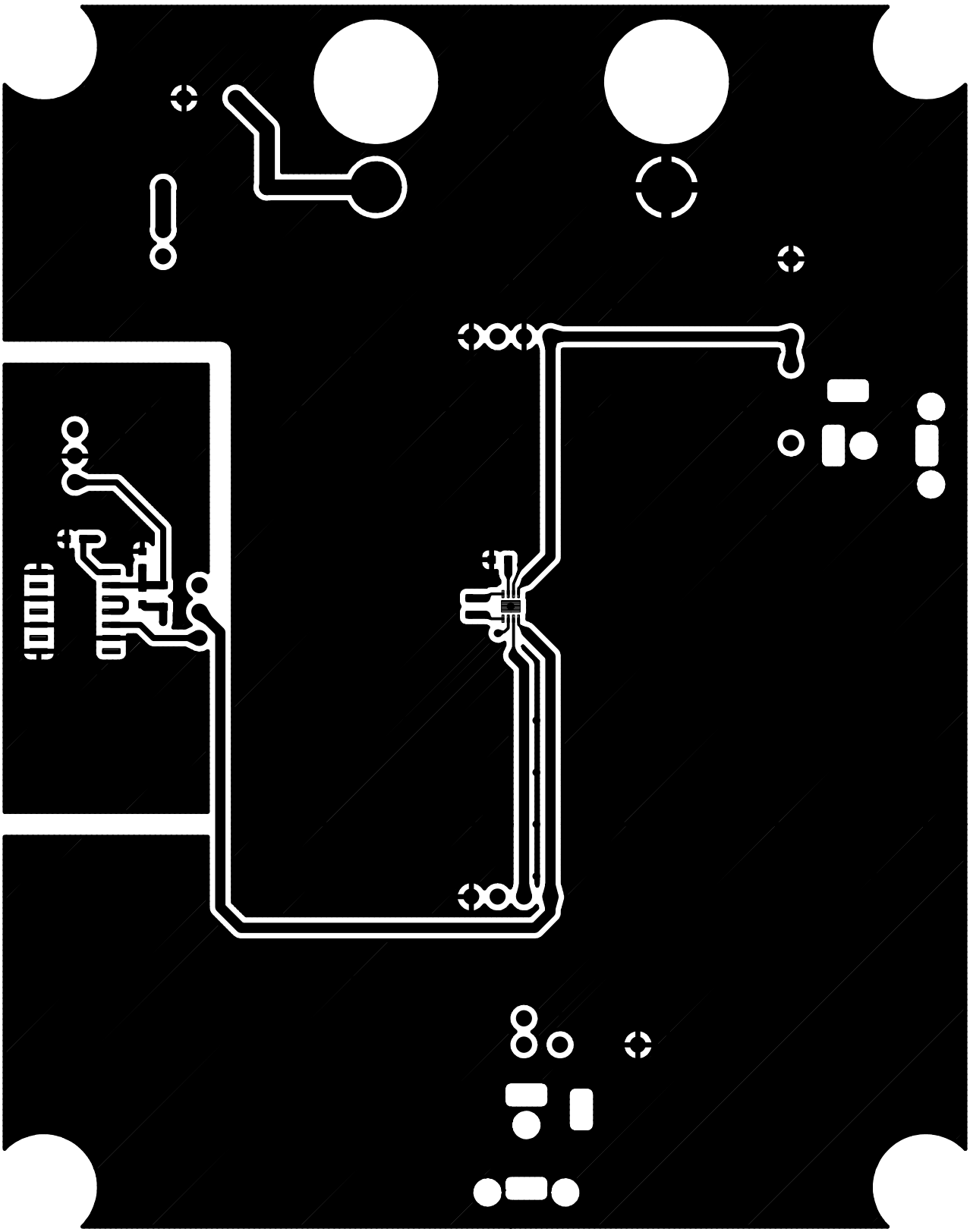
VSS1
JP1
DVDD
CN2
R3
R2
VOUT
J1
SW1
PDN
H
L
C8
C7
D1
DVDD
74HC14
U2
R5
K
JP2
PDN
OPEN
C5
U1
C2
CN1
C6
R1
AKM
AKD4250-A Rev.0
Evaluation Board
J2
VIN
AKD4250-A L1 SILK

AKD4250-A L2 SILK



AKD4250-A L1

AKD4250-A L2