

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

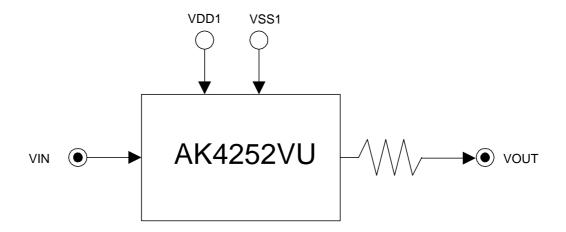


Figure 1. AKD4252-A Block diagram * Circuit diagram and PCB layout are attached at the end of this manual.

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■ Operation sequence

1) Set up the power supply lines.

[VDD1] (Red) = $2.7V\sim3.6V$ [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

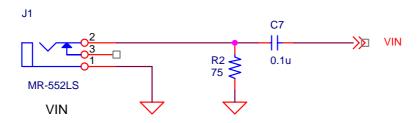


Figure 2. VIN input circuit

(2) Output Circuit

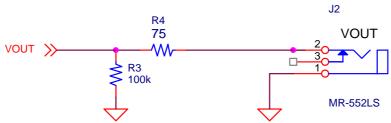


Figure 3. VOUT output circuit

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

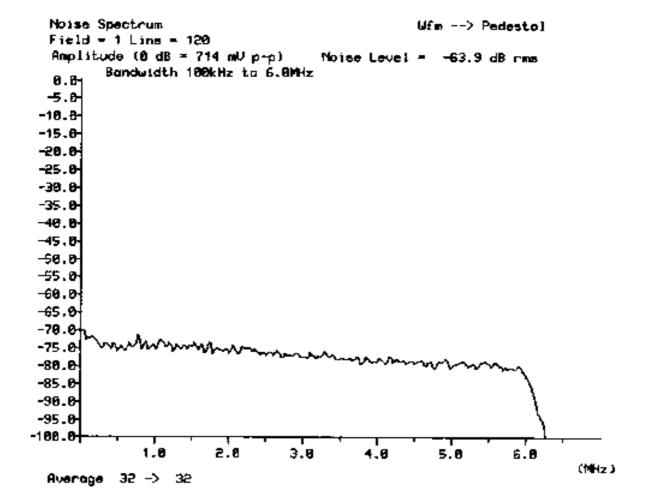


Figure 4. S/N (Noise Spectrum)

1-2. Vector

• Input signal: 75% Color Bar

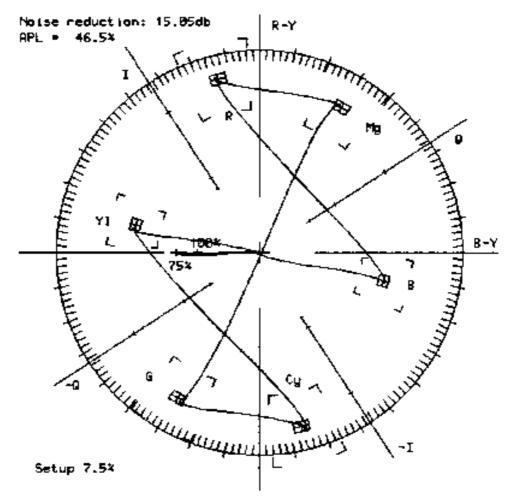


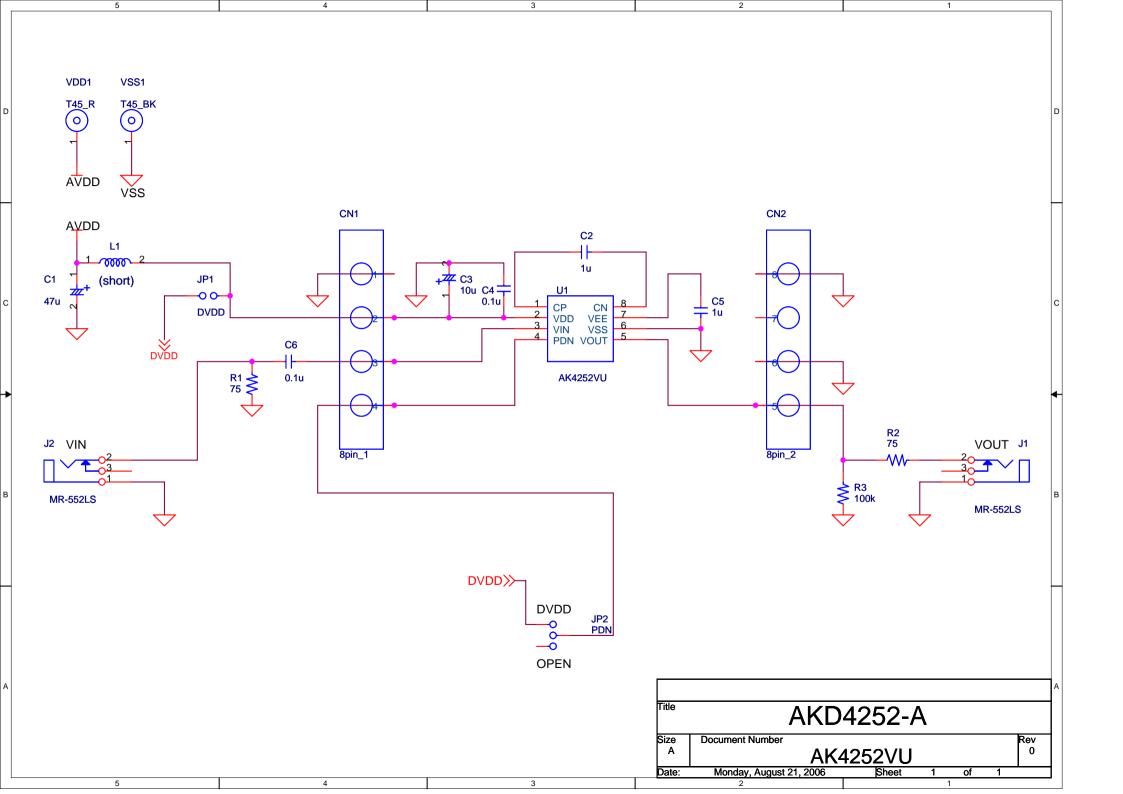
Figure 5. 75% Color Vector

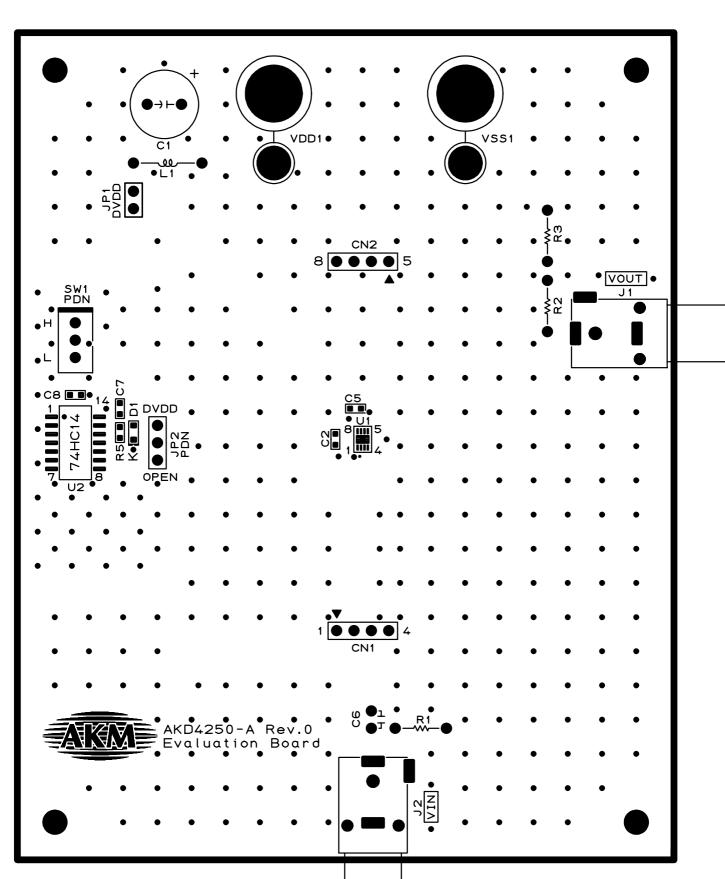
Revision History

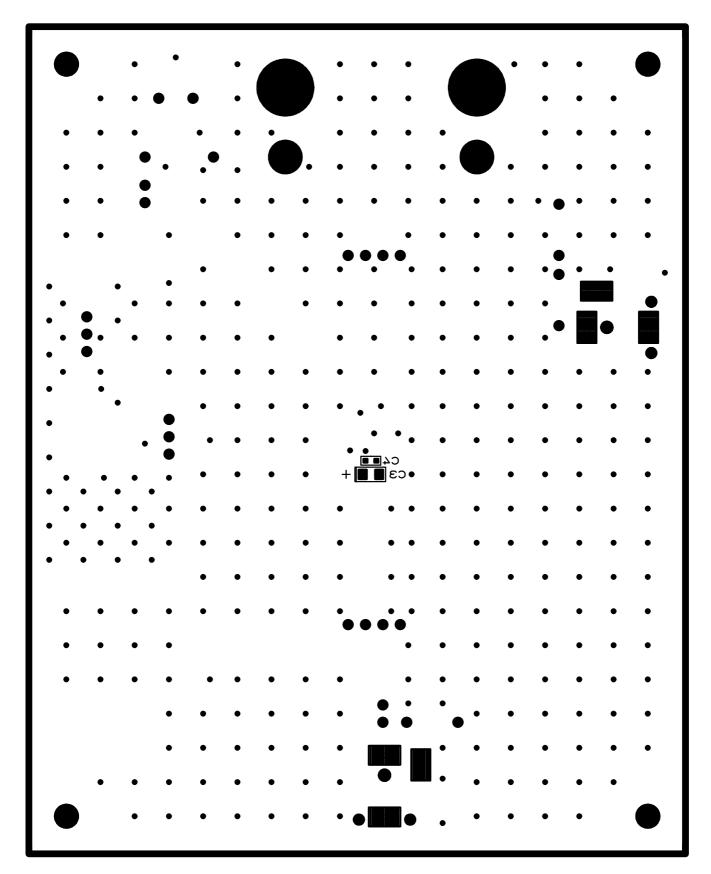
Date	Manual	Board	Reason	Contents
(yy/mm/dd)	Revision	Revision		
06/09/14	KM085300	0	First Edition	

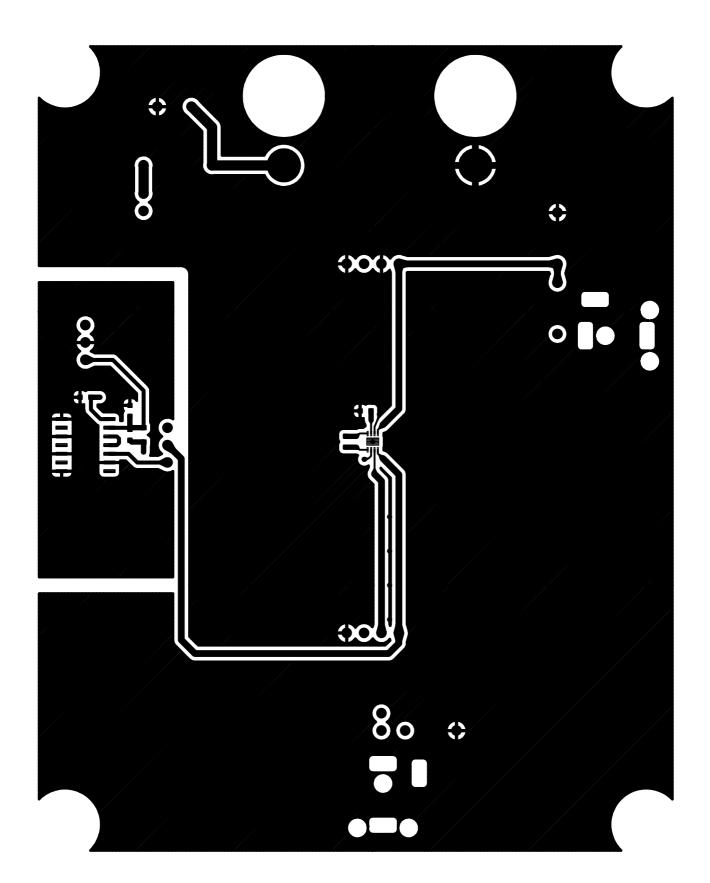
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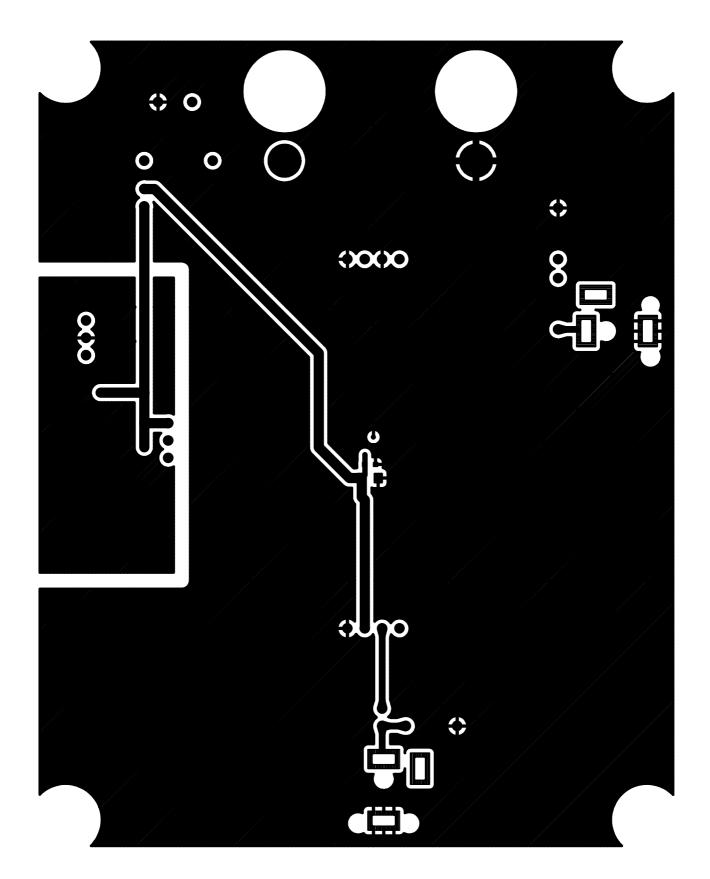








AKD4250-A L1



AKD4250-A L2