## AKD4201-C

## AK4201 Evaluation Board Rev. 0

## GENERAL DESCRIPTION

AKD4201-C is an evaluation board for the stereo headphone / lineout amplifier AK4201 that has a built-in charge-pump circuit and eliminates the need for large DC-blocking capacitors. It applies to single-end analog input, headphone / lineout output, and it is available to evaluate the AK4201 easily.

## ■ Ordering guide

AKD4201-C --- AK4201 Evaluation Board

## FUNCTION

## - Stereo mini jack for Line In

- Stereo mini jack for Headphone
- RCA jack for Line Out


Figure 1. AKD4201-C Block Diagram

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


## Board Outline Chart

## ■ Outline Chart



Figure 2. AKD4201-C Outline Chart

## ■ Comment

(1) J2 (LIN / RIN): Mimi-Jack

It is a jack of analog input signals LIN / RIN. These signals are input to LIN pin / RIN pin.
(2) J3 (LOUT / ROUT): Mimi-Jack

It is a jack of analog output signals LOUT / ROUT. These signals are output from LOUT pin / ROUT pin.
(3) TM1 (5V / 3.3V): Terminal

It is a power supply terminal of $5 \mathrm{~V} / 3.3 \mathrm{~V}$. It should be connected to power supply $5 \mathrm{~V} / 3.3 \mathrm{~V}$.
For further details, refer to P3. "Set up the power supply lines".
(4) TM2 (GND): Terminal

It is a ground terminal. It should be connected to GND.
For further details, refer to P3. "Set up the power supply lines".
(5) SW1 (PDN): Toggle Switch

It is a power down switch of AK4201. This should be set to H , after all power supply pins are supplied.

## Evaluation Board Manual

## Operation sequence

1) Set up the power supply lines.

1-1) The power of AVDD and PVDD is supplied from power supply jacks. <Default>

| Name <br> Of jack | Color <br> Of jack | Typ. <br> Voltage | Using | Note | Default <br> Setting |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $5 \mathrm{~V} / 3.3 \mathrm{~V}$ | Red | $+5 \mathrm{~V} / 3.3 \mathrm{~V}$ | AVDD of AK4201 <br> PVDD of AK4201 | $+5 \mathrm{~V} /+3.3 \mathrm{~V}$ <br> are supplied from jack | Connect to <br> $+5 \mathrm{~V} /+3.3 \mathrm{~V}$ |
| GND | Black | 0 V | Ground | Should be connected | 0 V |

Table 1. Set up of power supply lines
(The power of AVDD and PVDD is supplied from power supply jacks.)
Note 1 . Each supply line should be distributed from the power supply unit.
AVDD and PVDD must be connected to the same power supply.
3) The function of the toggle SW. (See the followings.)
4) Power on.

SW1 (AK4201-PDN) should be kept "L", until all power supply pins are supplied.
SW1 (AK4201-PDN) should be set to "H", after all power supply pins are supplied.

## ■ The function of the toggle SW

Upper is " H ", and lower is " L ".
[SW1] (AK4201-PDN): Power down reset of AK4201. Keep "H" during normal operation.
SW1 (AK4201-PDN) should be kept "L", until all power supply pins are supplied.
SW1 (AK4201-PDN) should be set to "H", after all power supply pins are supplied.

## Revision History

| Date <br> (yy/mm/dd) | Manual <br> Revision | Board <br> Revision | Reason | Page | Contents |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $08 / 11 / 12$ | KM097400 | 0 | First Edition |  |  |

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