



Evaluation Board for AK8126

AKD8126

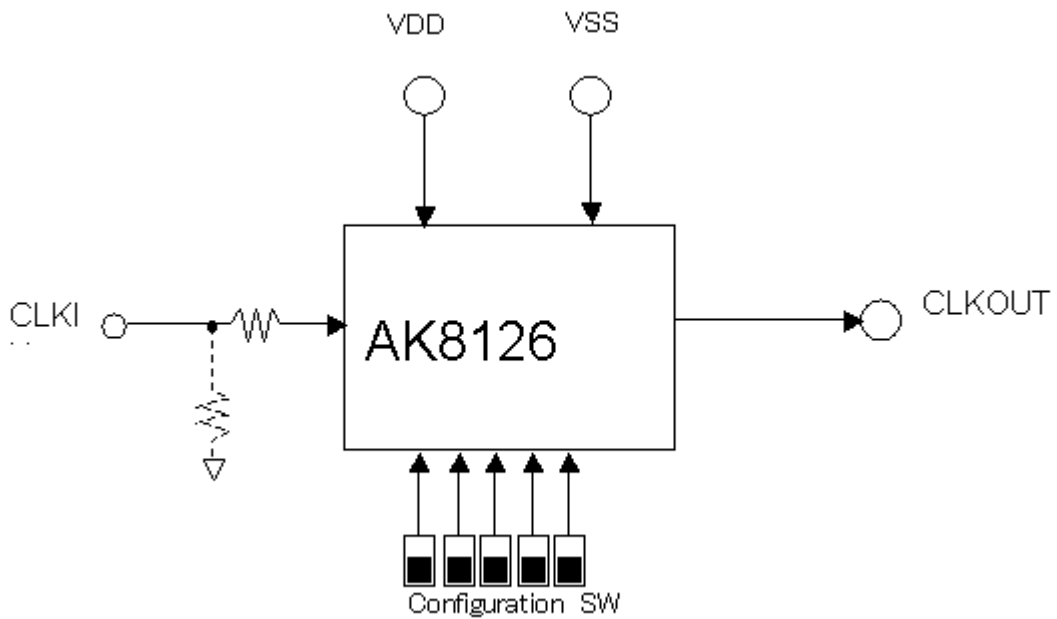
Description

The AKD8126 is an evaluation board for spread spectrum clock generator, AK8126. Therefore, it is possible to evaluate spectrum characteristics and other performances.

Ordering guide

- AKD8126

Block Diagram



AK8126 Evaluation Board

Functions

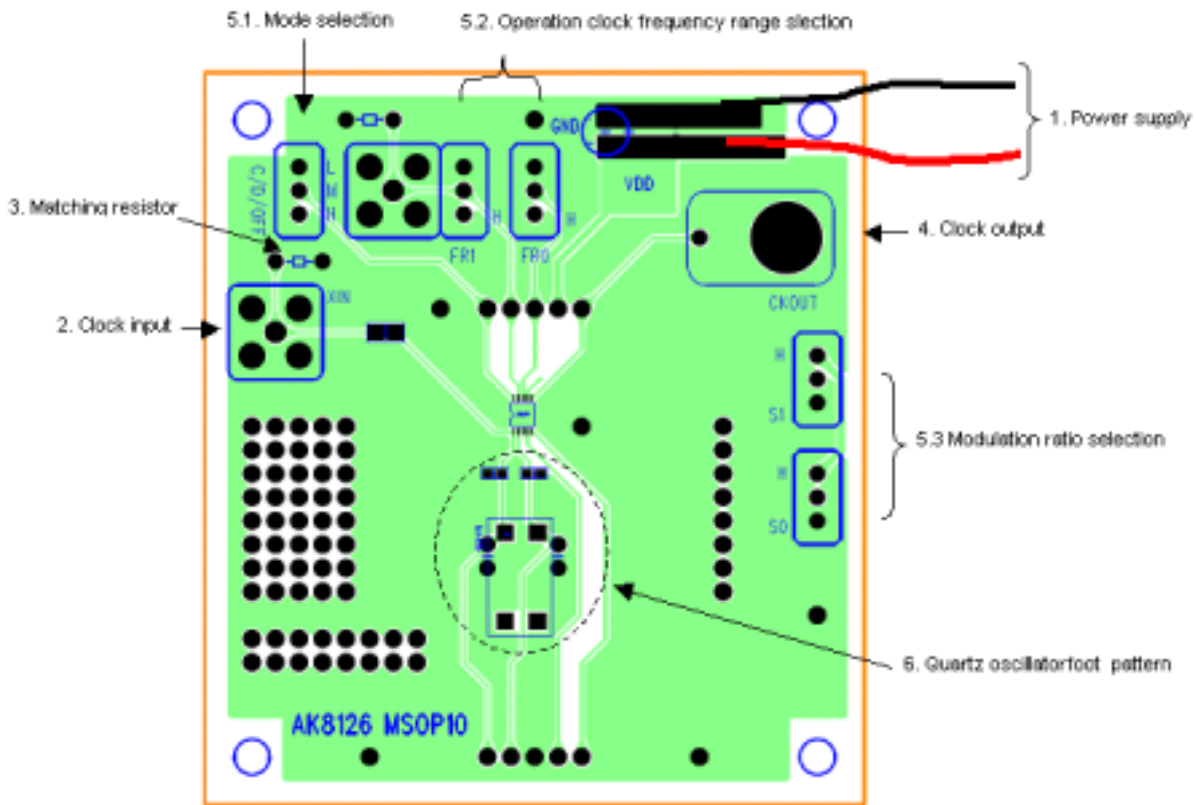


Figure 1. AKD8126 top view

1. Power Supply

Please connect the lead line to VDD (3.3V; Red) and VSS (GND; Black).

2. Clock input

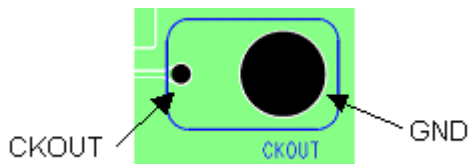
It is possible to input clock from SMA-A connector.

3. Matching resistor

Matching resistor is mountable here if impedance matching is necessary.

4. Clock output

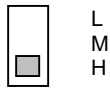
Clock output from AK1526 leads to this connector. Spectrum Analyzer or Oscilloscope is available to measure clock performances by connecting here.



5. DIPSW

5.1. Mode selection (C / D / OFF)

Modulation mode is selected by setting this switch.



L
M
H

Table 5.1. Modulation mode setting

C / D / OFF	Mode
L	Down spread
M	Spread off
H	Center spread

5.2. Operation clock frequency range selection (FR1 / FR0)

Operation frequency range is selected by setting this switch.



FR1 FR0

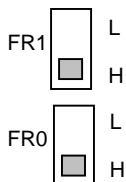
Table 5.2. Operation clock frequency setting

FR1	FR0	Input frequency range	Output frequency range
L	L	16-32MHz	16-32MHz(1x)
L	H	32-64MHz	32-64MHz(1x)
H	L	64-128MHz	64-128MHz(1x)
H	H	16-32MHz	64-128MHz(4x)

Note: AK8126 outputs a input frequency x 4, when FR1/FR0="HH" is selected.

5.3. Modulation ratio selection

Modulation ratio is selected by setting this switch.



FR1 L
H

FR0 L
H

Table 5.3. Modulation ratio setting

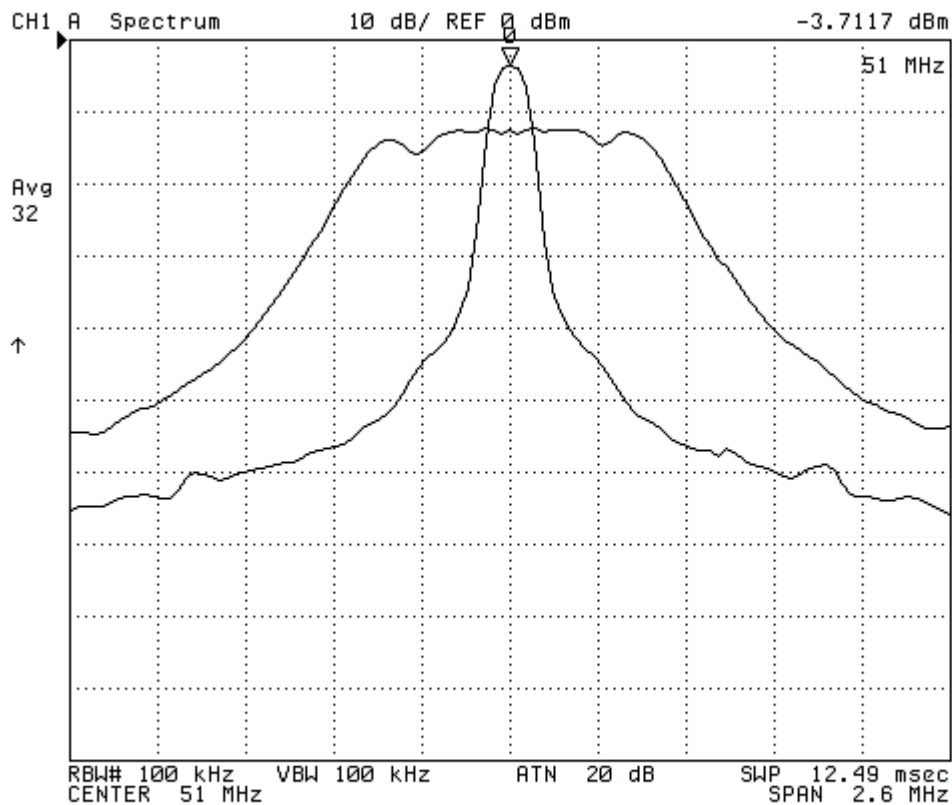
S1	S0	Center spread C / D / OFF = "H"	Down spread C / D / OFF = "L"
L	L	±0.5%	-1.0%
L	H	±0.25%	-0.5%
H	L	±1.0%	-2.0%
H	H	±1.5%	-3.0%

6. Quartz oscillator foot pattern

EPSON TOYOCOM (MA-406) or 49 lead type quartz oscillator is mountable.

■ **Example of spectrum measurement**

51MHz, Center spread: $\pm 1.0\%$



SELECT LETTER

SPACE

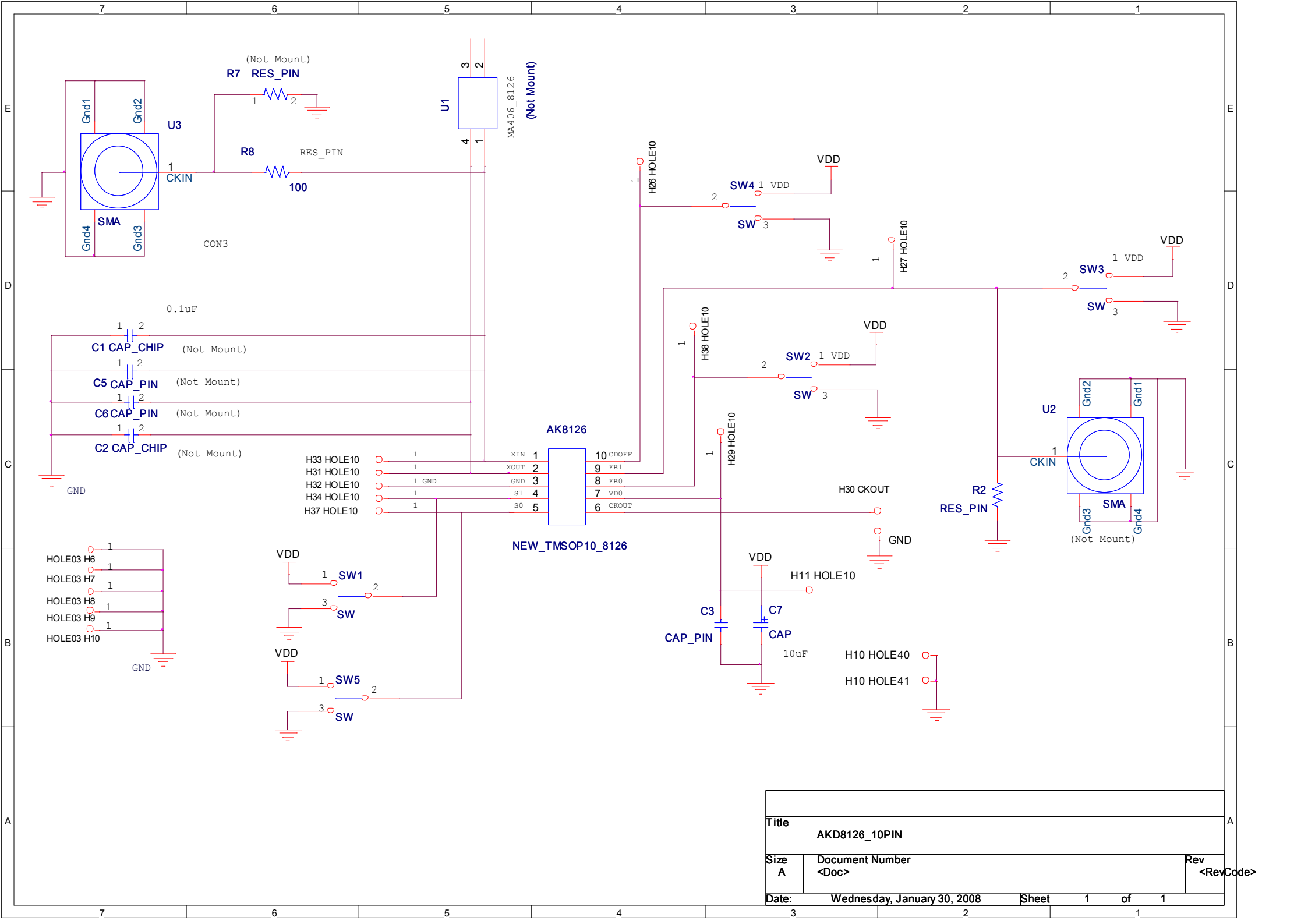
BACK SPACE

ERASE TITLE

DONE

STOR DEV [DISK]

CANCEL



Title		
AKD8126_10PIN		
Size	Document Number	Rev
A	<Doc>	<RevCode>
Date:	Wednesday, January 30, 2008	Sheet 1 of 1