

0.4Ω Dual SPDT Analog Switch With Negative Swing Audio Capability

FEATURES

- Ultra-Low $R_{ON} < 0.4\Omega$ at $V_{CC} = 3.0V$
- V_{CC} : 1.65V to 5.5V
- Low Crosstalk
- Full -2.0V – V_{CC} Signal Handling Capability
- High Off-Channel Isolation
- Low Standby Current: $< 50nA$
- Low Distortion
- Break-Before-Make (BBM) Switching
- High Continuous Current Capability: $\pm 300mA$ Through Each Switch
- ESD of Human Body Model: $> \pm 4KV$
- Packages: QFN10-1.8x1.4

APPLICATIONS

- Cell Phone Audio Block
- Portable Media Players

GENERAL DESCRIPTIONS

The ASW5228 is a Dual Independent low on-resistance Single Pole Double Throw (SPDT) switch. It can operate from a single 1.65V to 5.5V power supply. It is a bi-directional switch that can switch a negative voltage swing audio signal without requiring a coupling capacitor. With a single power supply, the audio signal can swing over the range from -2.0V to V_{CC} .

The ASW5228 also features guaranteed Break-Before-Make (BBM) switching, assuring the switches never short the driver.

FUNCTION TABLE

IN1, IN2	NO1, NO2	NC1, NC2
0	OFF	ON
1	ON	OFF

BLOCK DIAGRAM

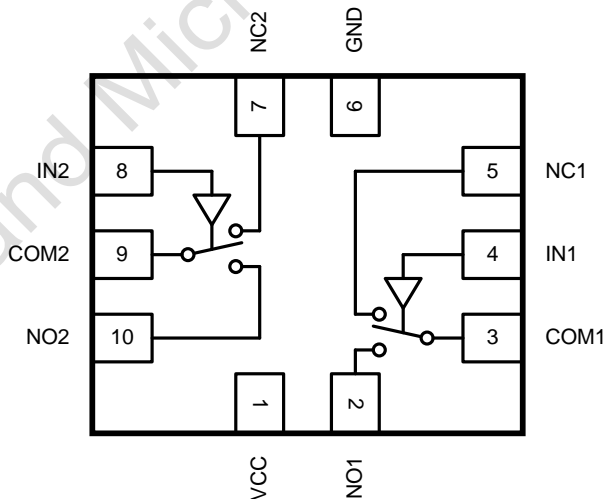


Figure 1, Block Diagram

PIN DIAGRAM

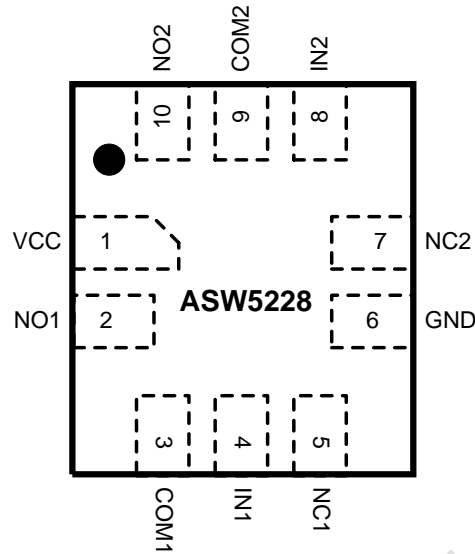


Figure 2, Pin Diagram (Top View)

PIN DESCRIPTIONS

PIN No.	PIN NAME	TYPE	DESCRIPTIONS
1	VCC	POWER	Power Supply Voltage
2	NO1	I/O	1-Side Data Path
3	COM1	I/O	1-Side Common Path
4	IN1	I	1-Side Input Control
5	NC1	I/O	1-Side Data Path
6	GND	GROUND	Ground
7	NC2	I/O	2-Side Data Path
8	IN2	I	2-Side Input Control
9	COM2	I/O	2-Side Common Path
10	NO2	I/O	2-Side Data Path