

Product Technical Brief

S1M0081X

April 2007

S1M0081X

Switch Integrated Stereo Class-D Amplifier

Overview

The S1M0081X is an High Efficiency Stereo Class-D Amplifier in 28-ELP package.(4mm X 4 mm)

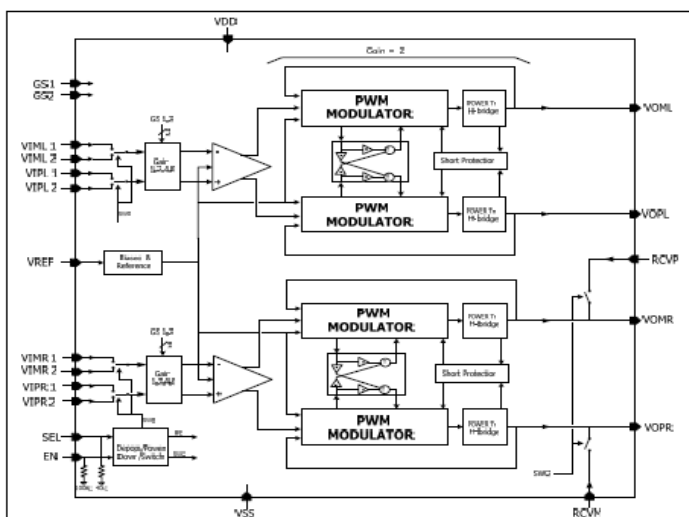
S1M0081X integrates input and output selection switches internally, it can output various audio signals efficiently to the speaker. (ex. Audio1,2 and Voice)

By integrating input and output selection switches, S1M0081X can contribute to the saving BoM cost and area size.

S1M0081X has a good EMI property using Spread Spectrum Modulation.

- Applications
 - Mobile Phones
 - Portable Applications
 - : PMP, Navigator, PDA, Note PC etc.

Functional Block Diagram



Features Summary

- 2.5W into 4 Ω @ 5V
 - 1.3 W into 8 Ω @ 5 V
 - 700 mW into 8 Ω @ 3.6 V
- High Efficiency
 - 91 % Efficiency , @ 3.6V, 0.7W into 8 Ω
 - 86 % Efficiency , @ 3.6V, 1.2W into 4 Ω
- Power Supply Range : 2.8 V to 5.5 V
- Low power consumption
- Low shut down current
- 4 ea Analog switch included
- Selectable gain of 6, 12, 18, and 24 dB
- Internal pull-down resistors in EN/SEL pins
- Fast start-up time (1ms @ Cvref =100nF)
- High Quality sound
 - THD + N < 0.01 % , 1 KHz
- Start-up procedure for preventing Pop-Up Noise
- Space saving package
 - 4mm X 4mm 28 ELP package with 0.4mm pitch
- Internal short protection circuit
 - Load short, Power short
 - Latched operation by EN pin

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