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# ST-NXP Wireless

## IMPORTANT NOTICE

Dear customer,

As from August 2<sup>nd</sup> 2008, the wireless operations of STMicroelectronics have moved to a new company, ST-NXP Wireless.

As a result, the following changes are applicable to the attached document.

- **Company name - STMicroelectronics NV** is replaced with **ST-NXP Wireless**.
- **Copyright** - the copyright notice at the bottom of the last page “© STMicroelectronics 200x - All rights reserved”, shall now read: “© ST-NXP Wireless 200x - All rights reserved”.
- **Web site** - <http://www.st.com> is replaced with <http://www.stnwireless.com>
- **Contact information** - the list of sales offices is found at <http://www.stnwireless.com> under Contacts.

If you have any questions related to the document, please contact our nearest sales office. Thank you for your cooperation and understanding.

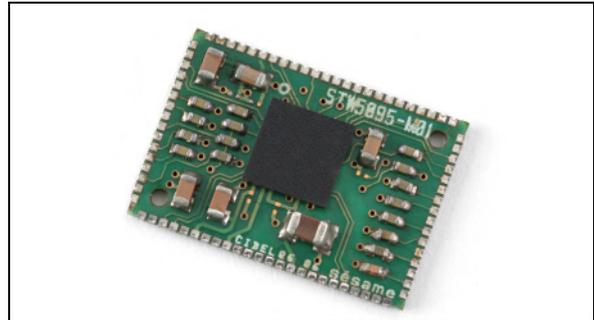
ST-NXP Wireless

## STw5095 PCB module

Data Brief

### Features

- 20-bit audio resolution, 8 kHz to 96 kHz independent rate ADC and DAC
- Asynchronous sampling ADC and DAC. Do not require oversampled clock and information on the audio data sampling frequency (fs). Jitter tolerant fs
- Wide master clock range: from 4 MHz to 32 MHz
- I<sup>2</sup>C/SPI compatible control I/F
- Stereo headphones drivers, hand-free loudspeaker driver, line out drivers
- Mixable analog line inputs
- Voice filters: 8/16 kHz with voice channel filters
- Automatic gain control for microphone and line-in inputs
- Two programmable master/slave serial audio data interfaces (I<sup>2</sup>S, SPI, PCM compatible and other formats)
- Frequency programmable clock outputs
- Multibit  $\Sigma\Delta$  modulators with data weighted averaging ADC and DAC
- DSP functions for bass-treble-volume control, mute, mono/stereo selection, voice channel filters, de-emphasis filter and dynamic compression.
- 93 dB dynamic range ADC, 0.001 % THD with full scale output @ 2.7 V
- 95 dB dynamic range DAC, 0.02 % THD performance @ 2.7 V over 16  $\Omega$  load



### Applications

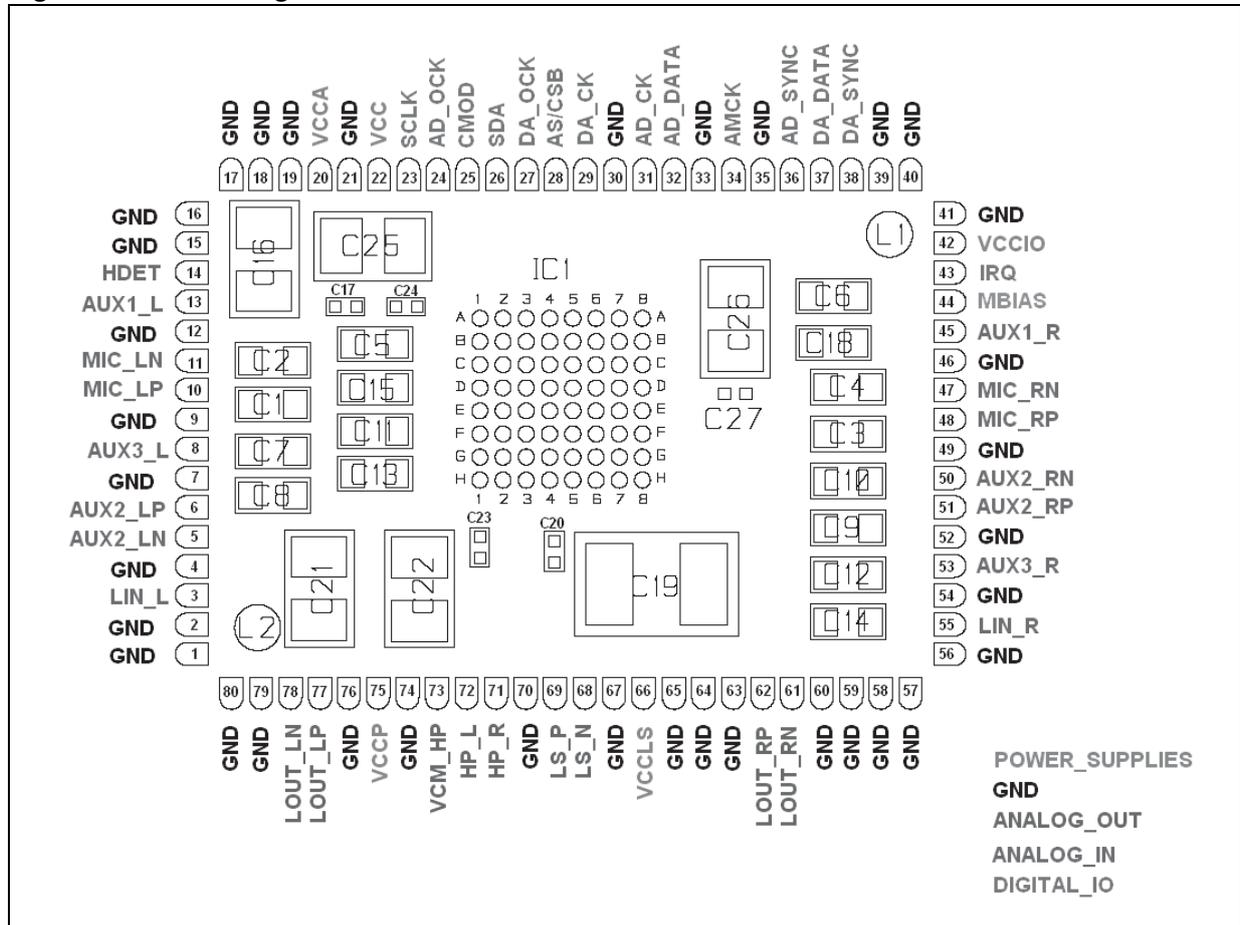
- Digital cellular telephones with mp3 player, stereo recorder, fm radio stereo listening and recording functions, live music recording.
- Portable digital players and recorders.

### Description

The PCB module is a simple hardware implementation of STw5095 on a small size PCB (16.5 mm x 11.4 mm) with its list of material (LOM). The STw5095/M01 enables a direct integration of the Codec function in a development system. This board can easily be soldered as a TQFP component on a customer's PCB.

# 1 Pin configuration

Figure 1. Pin configuration



## 2 Ordering information

Table 1. Order codes

Part number	Description
STw5095/M01	STw5085 PCB module

## 3 Revision history

Table 2. Document revision history

Date	Revision	Changes
17-Sep-2007	1	Initial release.

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