HL5281
USB Type-C Analog Audio Switch with Protection Function

Overview

HL5281 is a high performance USB Type-C port multimedia switch which supports analog audio headsets.

HL5281 allows the sharing of a common USB Type-C port to pass USB2.0 signal, analog audio, sideband use wires and analog microphone signal.

HL5281 also supports high voltage on SBU port and USB port on USB Type-C receptacle side.

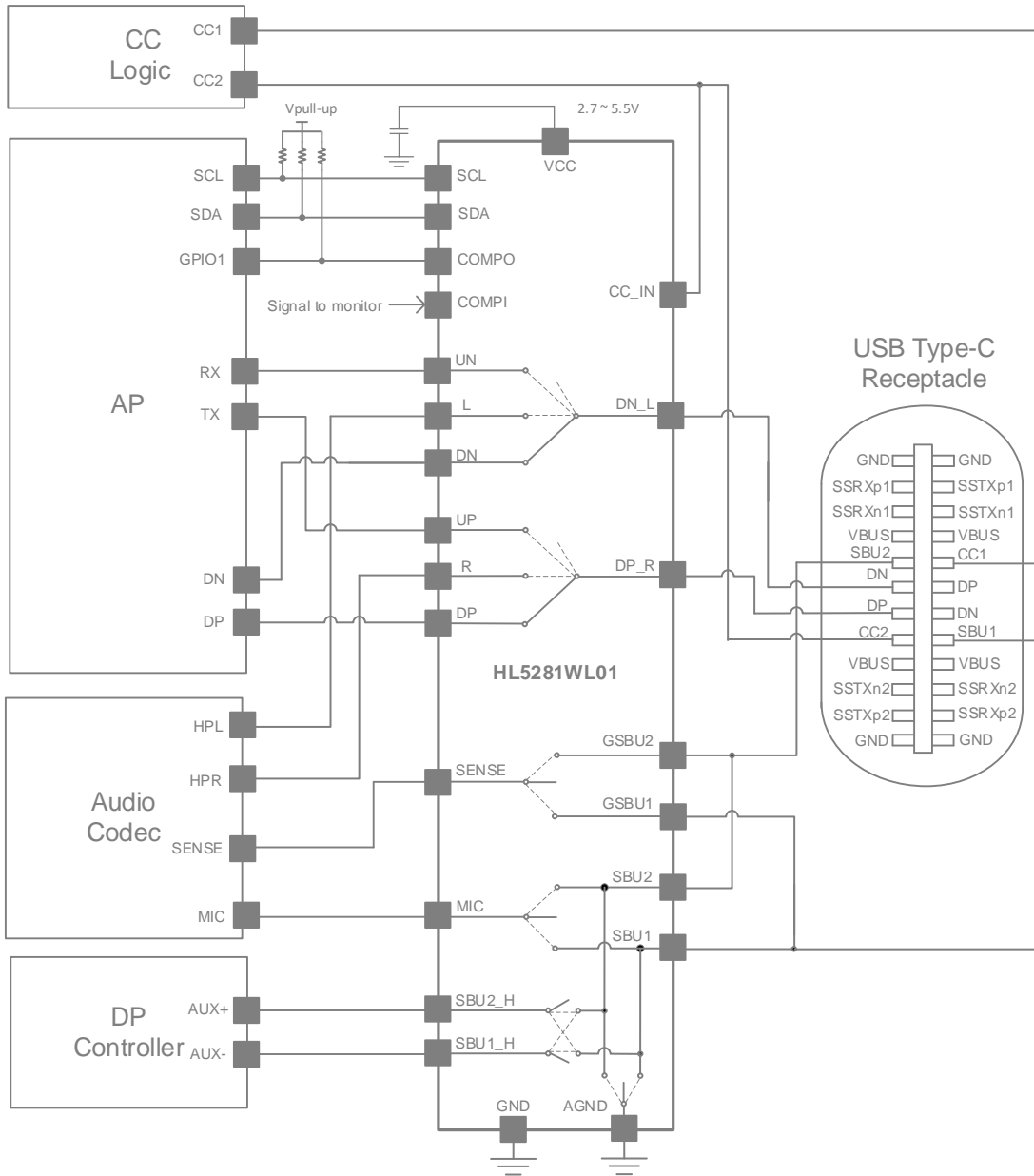HL5281 is available in a 25-pin WLCSP package.

Features

- Power supply: VCC, 2.7V to 5.5V
- USB high speed (480Mbps) switch
  - ✓ -3dB bandwidth: 900MHz
  - ✓ 3.5Ω R_{ON} typical
- Audio
  - ✓ Negative rail capability: -3V to +3V
  - ✓ THD + N = -107dB, 1 V_{RMS}, f = 20Hz to 20kHz, 32Ω load
  - ✓ 0.8Ω R_{ON} typical
- High voltage protection
  - ✓ 22V DC tolerance on connector side pins
  - ✓ Adjustable Over Voltage Protection: 4.4V ~ 5V.
- OMTP and CTIA pinout support
- Support audio sense path
- 25-bump WLCSP package (2.09mm x 2.09mm)

Applications

- Smart phone
- Tablet
- Notebook PC
- Media player

Simplified Application Diagram

Ordering Information

Part Number	Packing Method	Package
HL5281	Tape & Reel	WLCSP-25

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