



USB Type-C Analog Audio Switch with Protection Function

Features

- ◆ Power Management
 - Primary Power Supply VBAT, 2.5 V to 5.5 V
 - Second Power Supply VBUS, 4.0 V to 20 V
- ◆ USB High Speed(480Mbps) Switch:
 - -3dB Bandwidth: 800MHz
 - 3Ω R_{ON} Typical
- ◆ Audio Switch
 - Negative Rail Capability: -3V to +3V
 - THD+N = -107 dB; 1 V_{RMS}, f = 20Hz~20 kHz ,32Ω Load;
 - 0.8Ω R_{ON} Typical
- ◆ High Voltage Protection
 - 20V DC Protection on CC Port and SBU port
 - 20V DC Protection on DP/R and DN/L Port
- ◆ Over Voltage Protection
 - 5.8V (Typ) on CC Port
 - 4.5V (Typ) on SBU Port
 - 4.5V (Typ) on DP/R and DN/L Port
- ◆ OMTP and CTIA Pinout Support
- ◆ Support Audio Sense Path
- ◆ Support Dead Battery
- ◆ Support Audio Channel Slow Turn On
- ◆ Support MIC Switch Auto-off Function
- ◆ 25-Bump WLCSP Package (2.0mm x 2.0mm)

Applications

- Smart Phone
- MP3 Player
- Tablet PC
- Media Player

Order Information

Part Number	Package	Packing Method
HL5276	WLCSP-25	Tape and Reel

For other options, contact a Halo Micro sales representative.



Typical Application Diagram

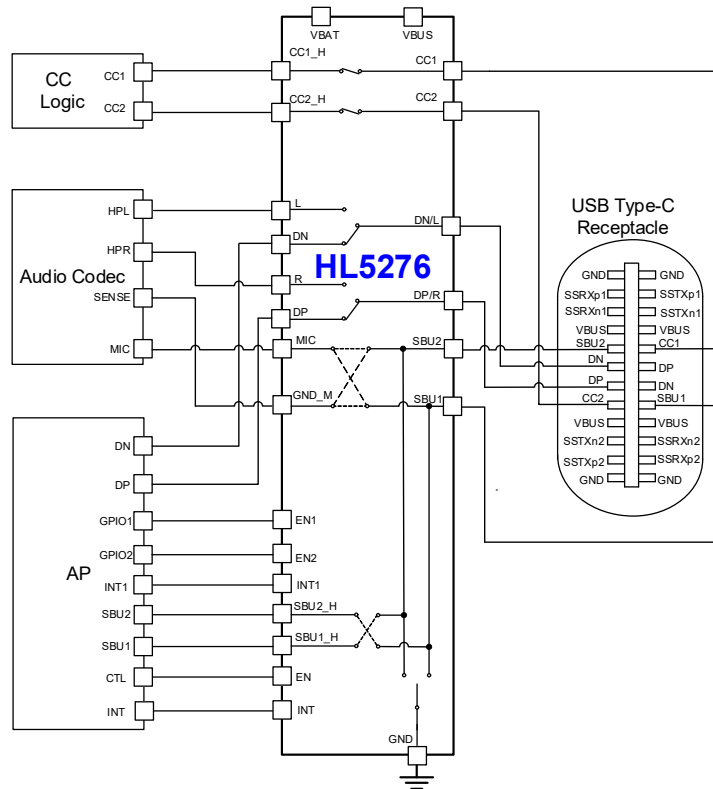


Figure 1 HL5276 Typical Application Diagram



Description

HL5276 is a high performance USB Type-C port multimedia switch which supports analog audio headsets. HL5276 allows the sharing of a common USB Type-C port to pass USB2.0 signal, analog audio, sideband use wires and analog microphone signal.

HL5276 also supports high voltage on CC port, SBU port and USB port on USB Type-C receptacle side. In addition, HL5276 supports USB Type-C dead battery application and dual power supply with VBAT rail and VBUS rail.

HL5276 is available in a 25-pin WLCSP package.