

CM6635

Demo Board User Manual

Version : 1.20

Department : AE

Revision History

<i>Version:</i>	v0.90 formal release	2018/11/09
<i>Modifications</i>	<i>1</i> v1.00 added LED behavior and Pin header description	2018/11/13
	<i>2</i> v1.20 updated figures and description	2018/12/17
	<i>3</i>	
	<i>4</i>	
<i>Note</i>		

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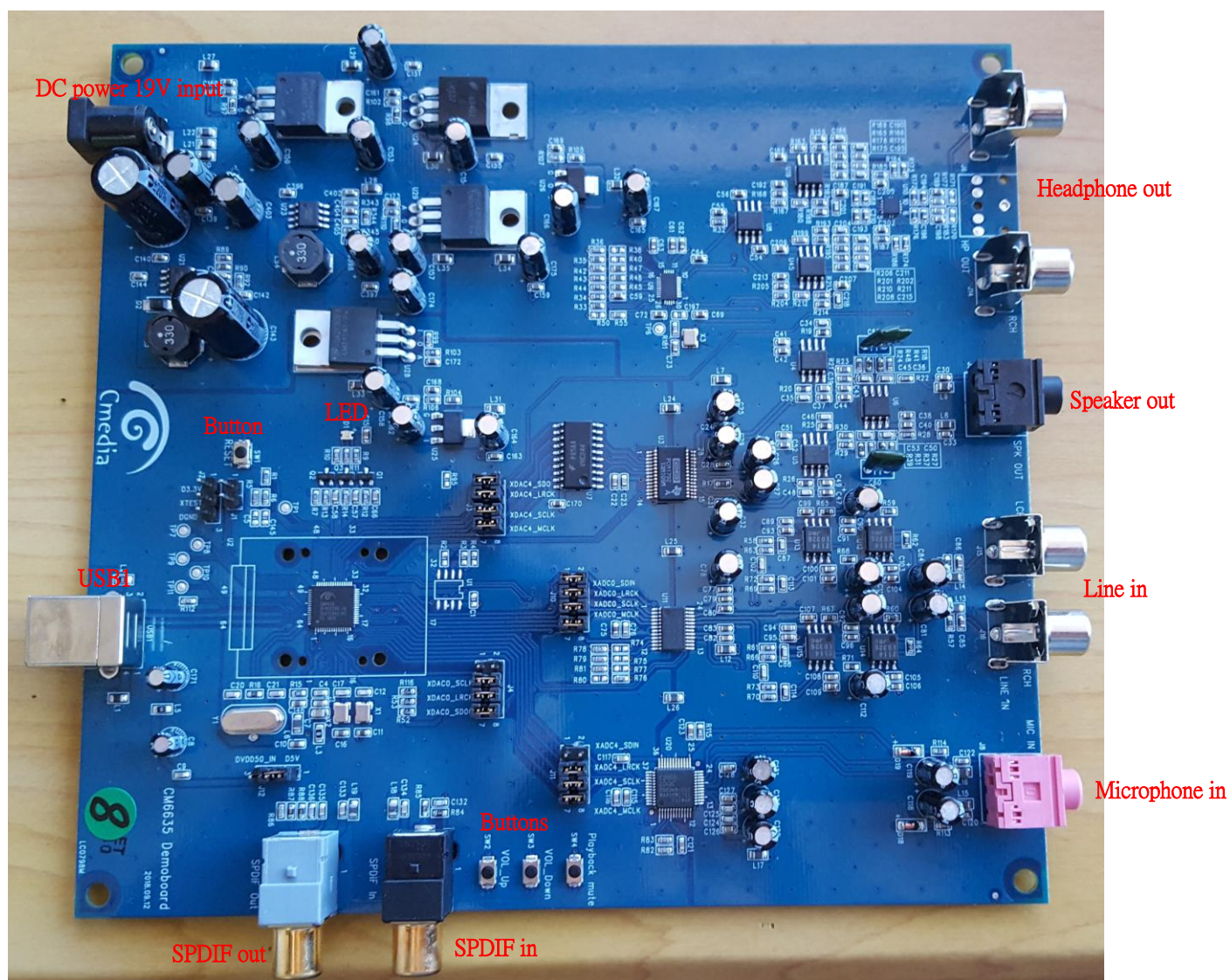
For detailed product information, please contact sales@cmedia.com.tw

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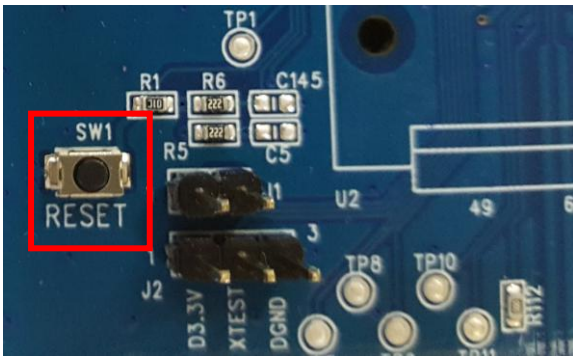
1. Overview

CM6635 is a high-speed USB 2.0 audio processor that can support the USB audio device class 2.0 and high-definition audio PCM/DSD format (up to 768KHz/32bit sample rate) processing capability. The user manual provided explains how to set up and use the CM6635 demo board.

2. Demo Board Contents



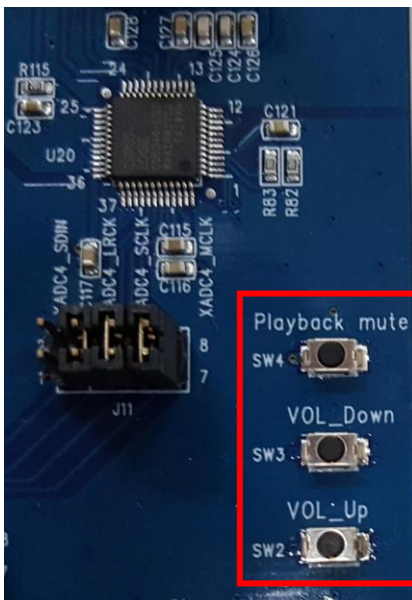
- J9 — DC Jack port, it is encouraged to use the DC 19V 2A adaptor.
- Buttons SW1: hardware reset key that can reset the CM6635 audio controller directly



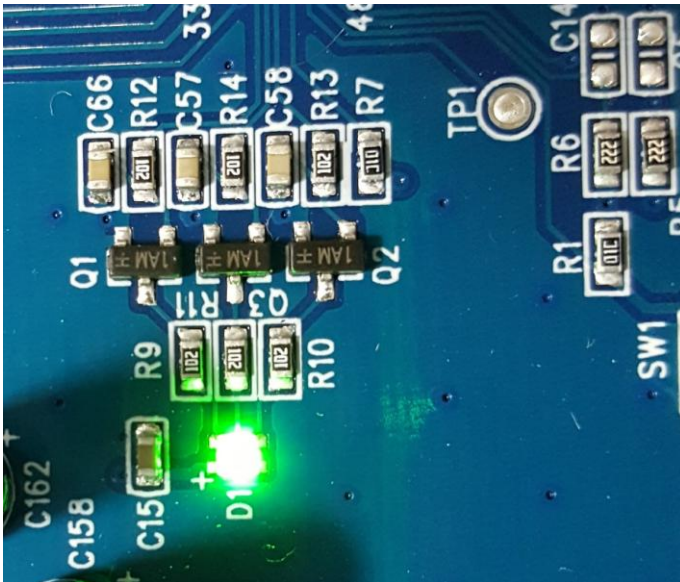
SW2: volume up

SW3: volume down

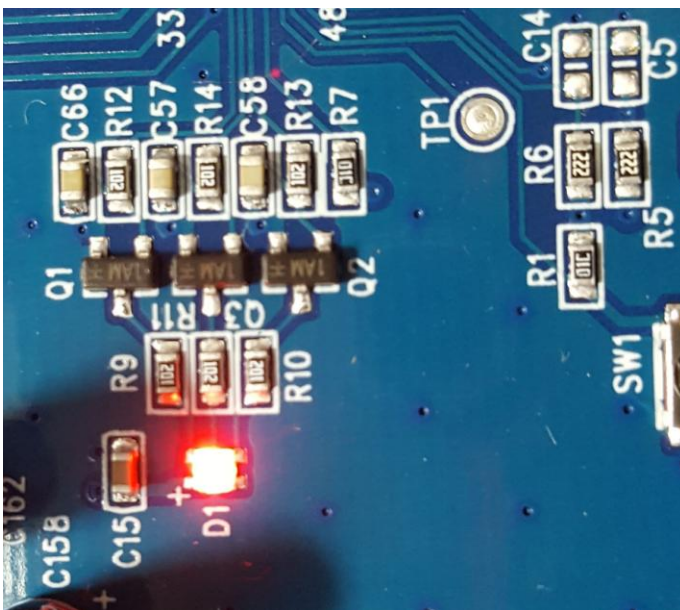
SW4: playback and mute, you can select to mute voice when play audio.



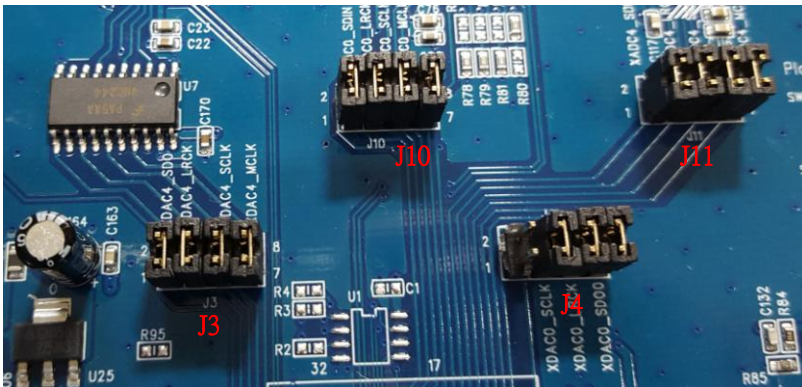
- LED When the system initialized successfully, LED indicator light is solid green as below figure.
When playback, the D1 indicator light flashes green.



The D1 indicator light is solid red when playback and press SW4 mute button as below figure.



- USB1 USB port
- OPT1 SPDIF output port
- OPT2 SPDIF input port
- J13/J14 Headphone out
- J5 Speaker out
- J15/J16 Line in
- J8 Microphone in
- Pin headers



J3 header connects two DAC I2S interface of CM6635 (U2) and PCM1792 (U3)

J4 header connects two DAC I2S interface of CM6635 (U2) and ES9038Q2M (U9).

J10 header connects two ADC I2S interface of CM6635 (U2) and CS5381 (U11).

J11 header connects two ADC I2S interface of CM6635 (U2) and CS5346 (U20).

3. Demo Board Setup Procedure

- Users need to setup USB 2.0 driver of C-media or use a computer with USB2.0 driver in system. Such as windows 10 platform PC, notebook or Mac notebook that don't need to setup the USB 2.0 driver of C-media.
- Insert both DC 19V adaptor and USB cable that connects to PC or notebook.
- You can find new device from computer and therefore you can select new device to play or recording.
- Play PCM or DSD format audio, the demo board will detect whether it is a PCM or DSD format audio then the system will select PCM or DSD path via firmware.
- Headphone out supports RCA jack or 3.5mm phone jack, the default is the RCA jack.