



CM6212_TDM_Demo Board User Manual_v1.00

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Revision Notes

Revision	Date	Description
v1.00	2024/09/20	First formal release

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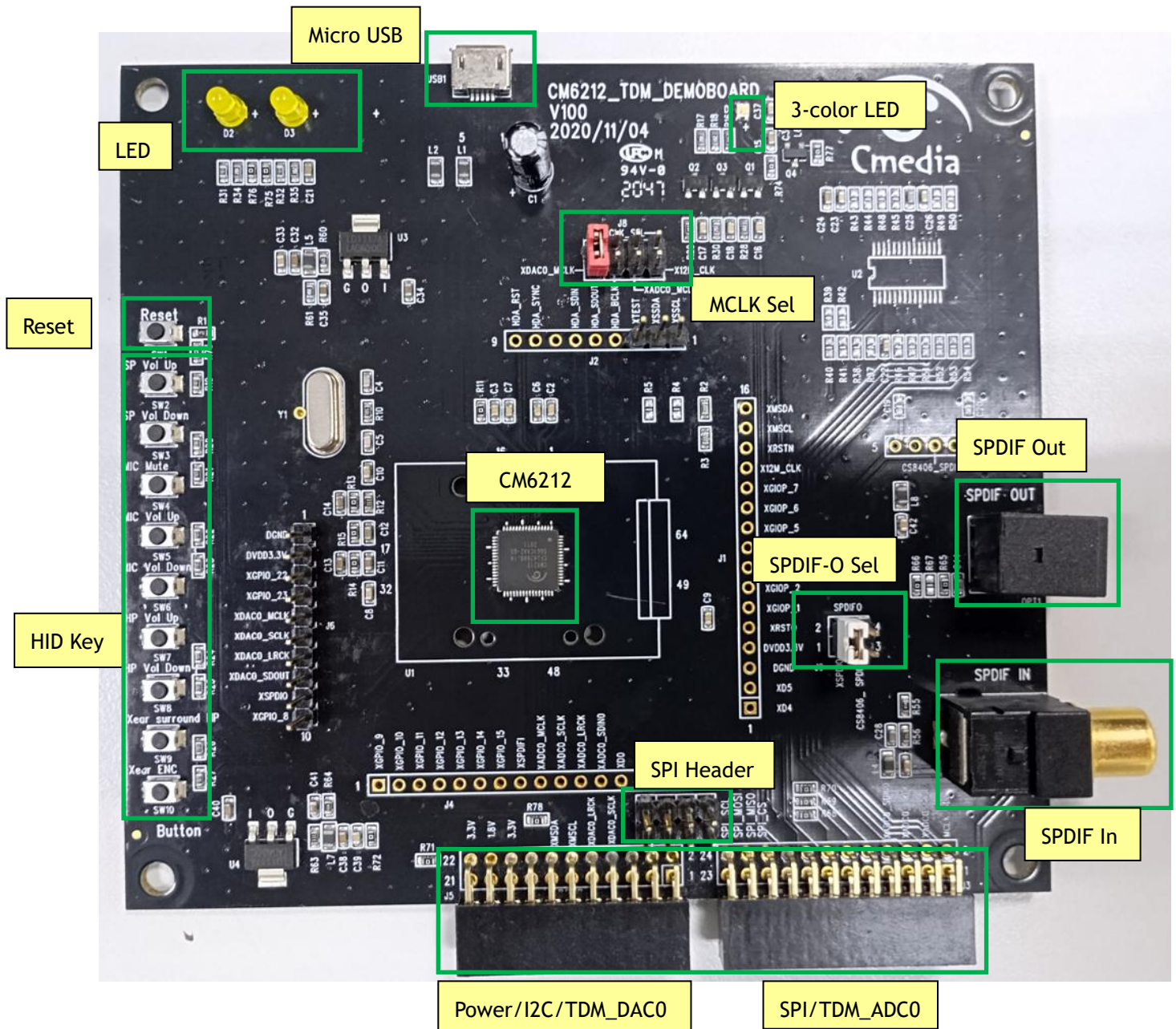
SECTION 1 OVERVIEW

1.1 Introduction

The CM6212 is a USB 2.0 high-speed audio processor that supports USB Audio Device Class 1.0 and 2.0. The CM6212 provides standard HDA, I2S TDM and S/PDIF digital audio interface. The maximum outputs are 12 channels with 8 channels TDM, 2 channels I2S and 2 channels S/PDIF and the maximum inputs are 12 channels with 8 channels TDM, 2 channels I2S and 2 channels S/PDIF. Moreover, the CM6212 supports I2C, SPI and GPIOs to communicate with external device.

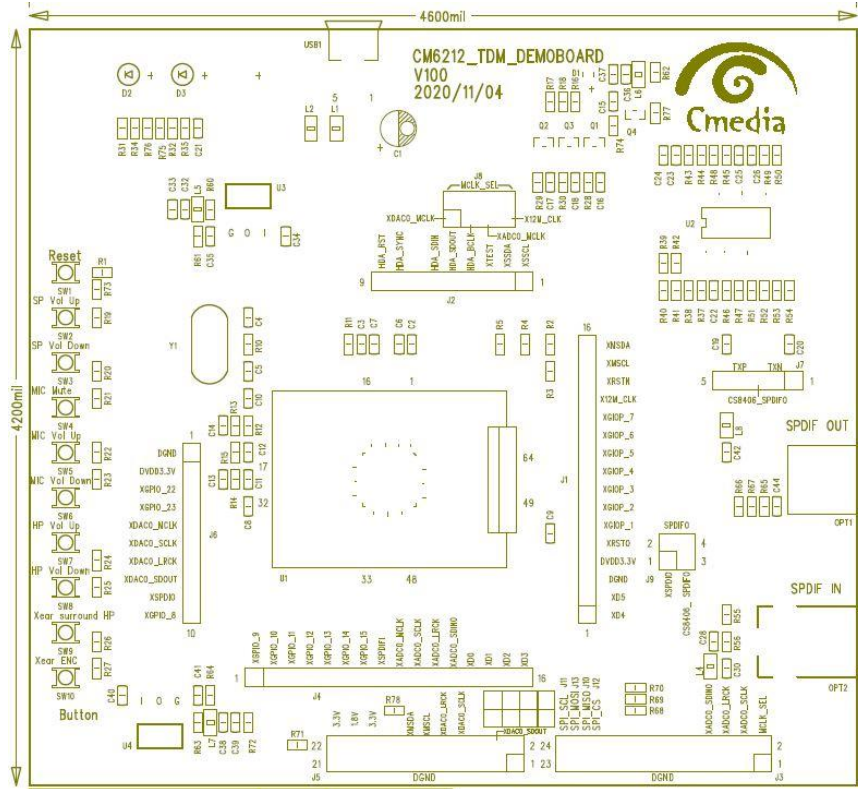
1.2 Overview of the Demo Board

The CM6212 USB Audio controller evaluation board has several hardware features. With each feature's description in figure, the feature's location can be clearly identified.

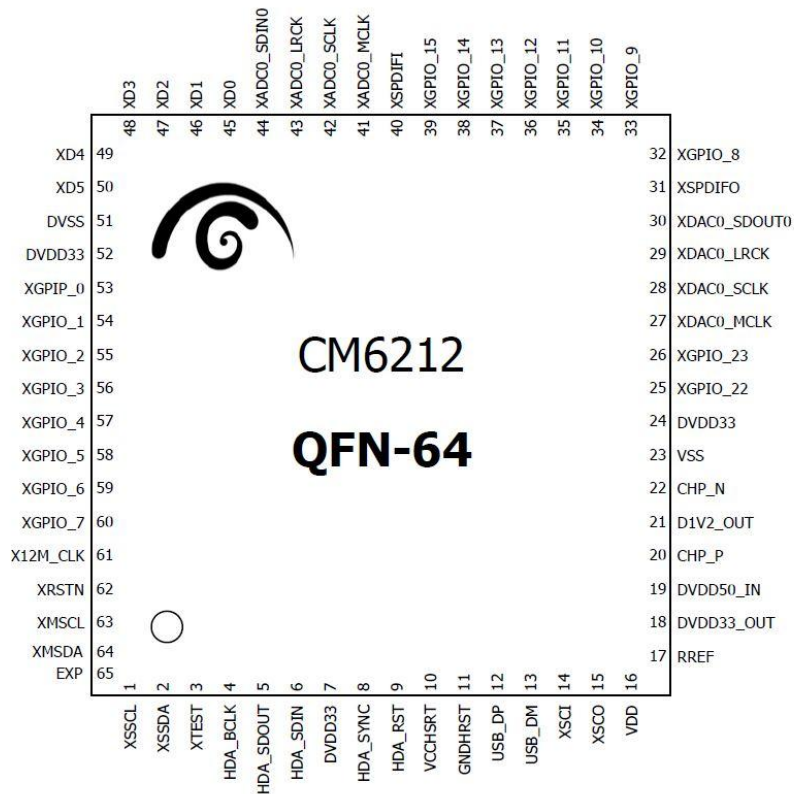


Component placement

Top



Pin Out Diagram



SECTION 2 GETTING STARTED

2.1 USB Audio Device

Connect to the host by plugging the Micro USB cable.

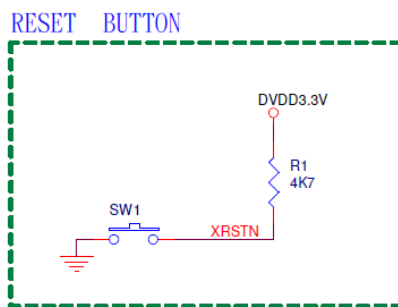


Micro USB connector

Chip Reset

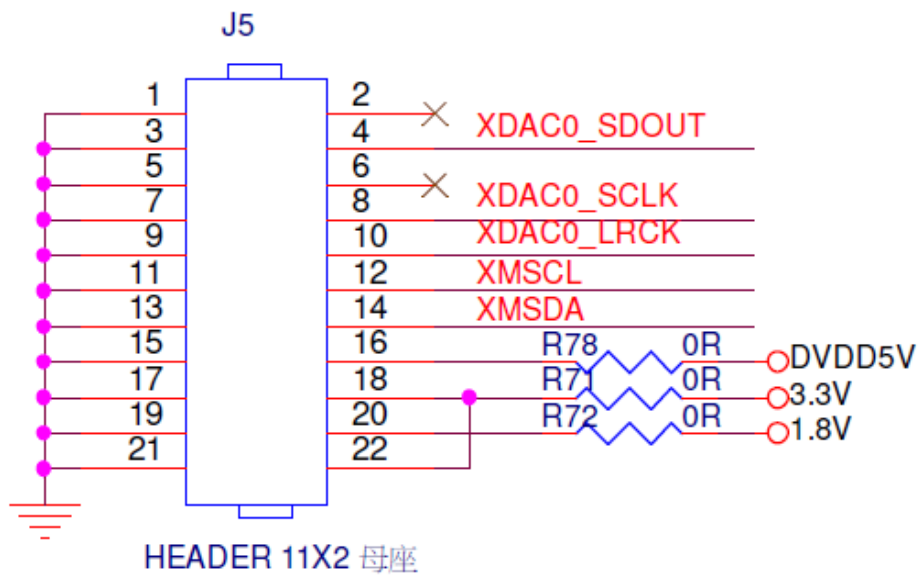
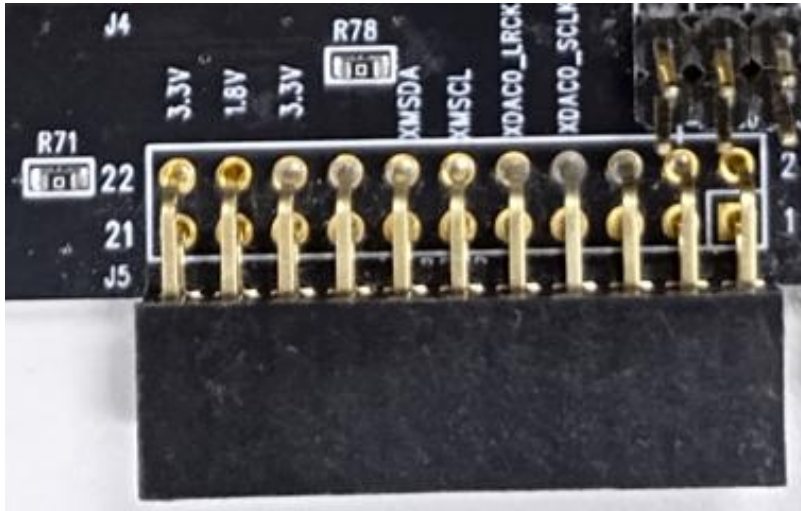


SW1 Reset button, low active

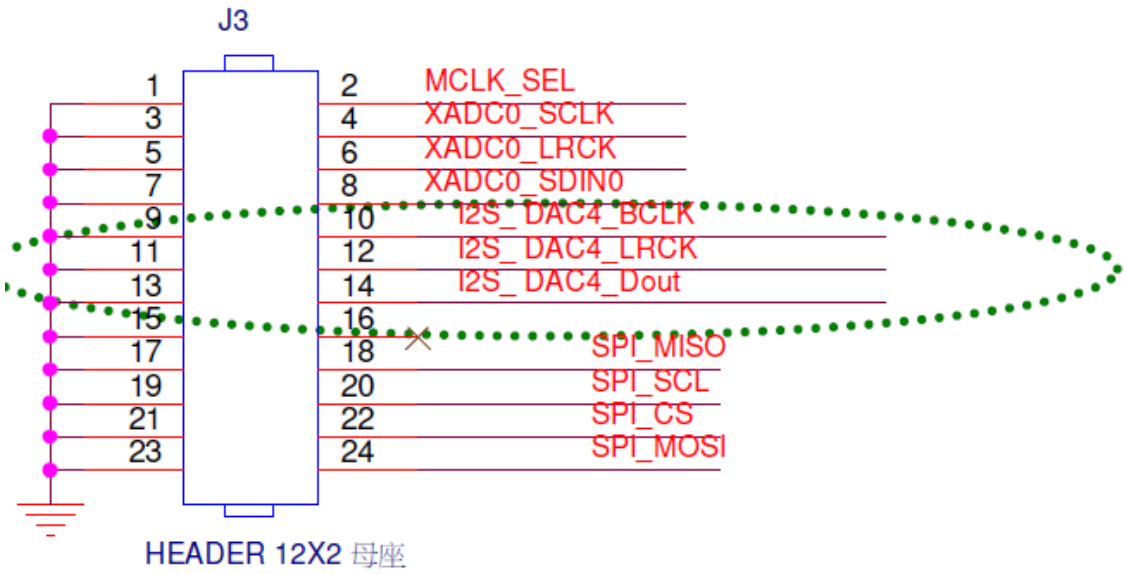
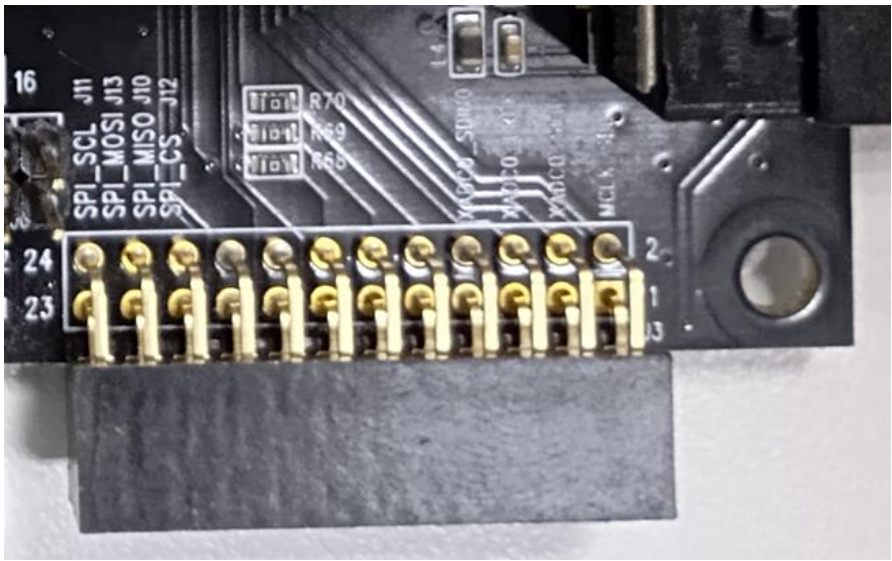


2.2 Pin Header Description

J5: (3.3V,1.8V,5V)Power / I2C / TDM_DAC0



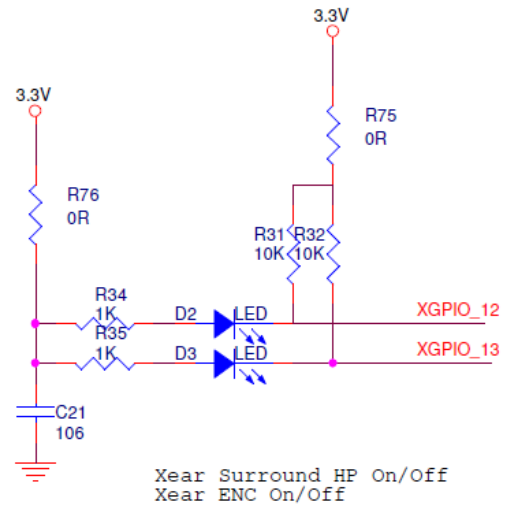
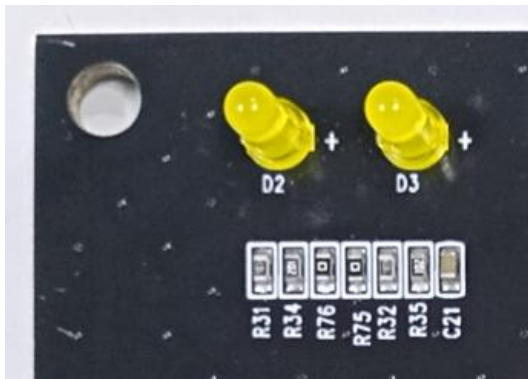
J3: SPI / I2S / TDM_ADC0 / MCLK-Out



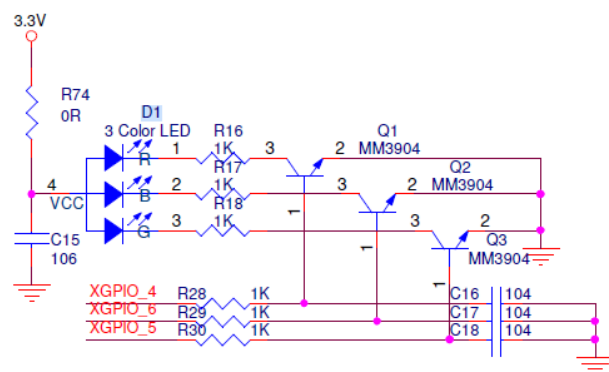
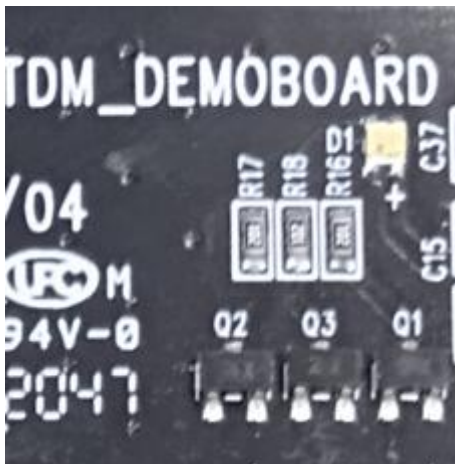
2.2.1 LEDs

D2: Xear Surround HP On/Off

D3: ENC On/Off

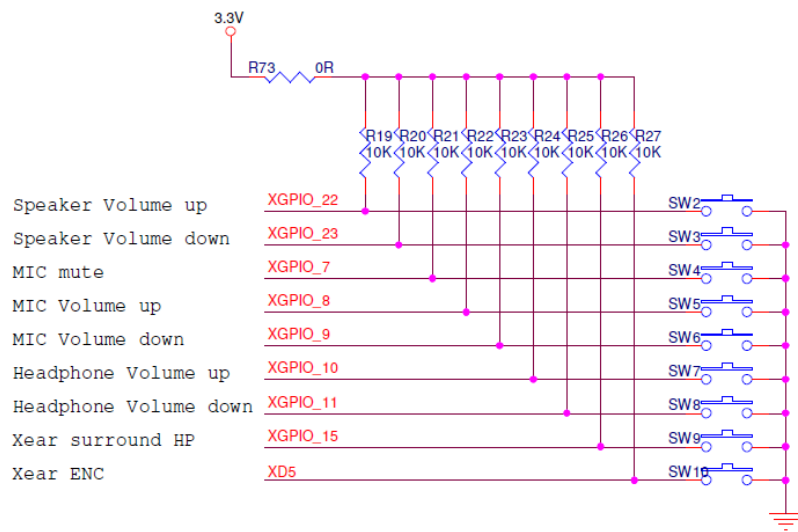


D1: 3- Colors LED



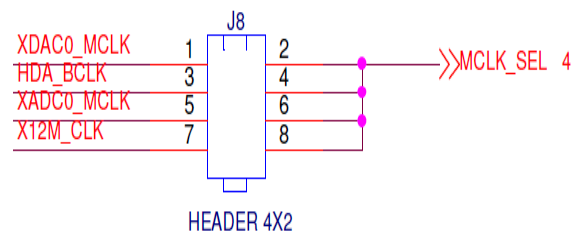
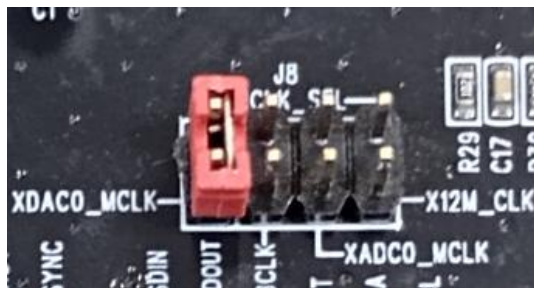
2.2.2 HID Buttons

SW2~SW10



2.2.3 Others

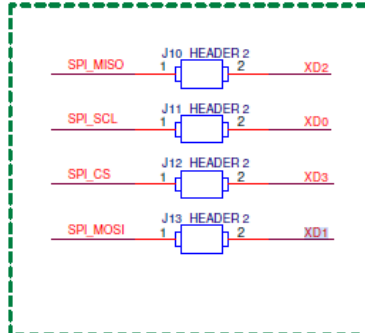
J8: MCLK source selection



J10~J13

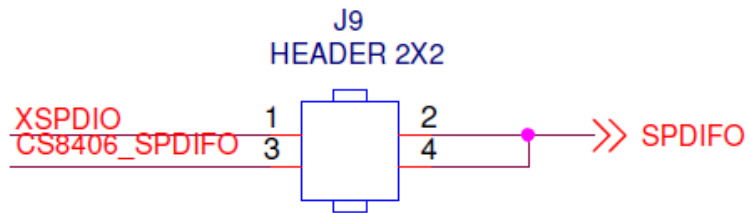
Installed: J3 SPI function available

SPI jumper



2.2.3 Others

J9: Optical SPDIF-Out source selection



J9 pin1,2 shorted: SPDIF-Out source from CM6212 (XSPDIO)

J9 pin3,4 shorted: SPDIF-Out source for CS8406