



#### PIANO HI-FI DAC (VERSION 1.1)

Our PIANO Hi-Fi DAC Shield has been designed for those seeking audio perfection. Every detail has been thought of!

First we start with 4 LDOs, one & two for the analog (avcc), the third for the digital (dvcc) and the fourth for the headphone amplifier.

Then we used film capacitors and thin film resistors in the audio path. All brand names (Vishay, SRcap, Stackpole...). Finally, our PCB has very good partitioning for digital and analog section.

If you understand all of the above, great! That means that you are an audiophile. If not, don't worry... Just listen to the PIANO music!

PIANO houses a headphone amplifier based on the TI6133A2 chipset and 3.5 mm phone jack.





## **Key Features**

- Dedicated 384 kHz/32bit high-quality DAC PCM5122 for best sound quality
- 138mW Direct Path™ Stereo Headphone Amplifier TPA6133A2
- Available with different output connectors: 2 x RCA, 3.5mm phone jack
- DAC SNR is 112dB
- DAC THD+N @ 1dBFS are -93dB
- Full Scale Output of DAC is 2.1Vrms
- Dynamic Range of DAC is 112dB
- Stereo Headphone Output Power is 138mW
- Stereo Headphone Half Power THD + N @ 1 kHz (%) (kHz) -> 0.008
- Stereo Headphone SNR is 93dB
- Stereo Headphone PSRR is 109dB
- Sampling Frequency ranges from 8 kHz to 384 kHz
- Ultra-low-noise voltage regulators for optimal audio performance
- Integrated EEPROM for automatic configuration (with write-protection)
- Operating Temperature Range is -25C to 85C
- The Piano board size: LWH = 68.7mm\* 65mm\*22.2 mm



## **Technical Specifications**

### DAC

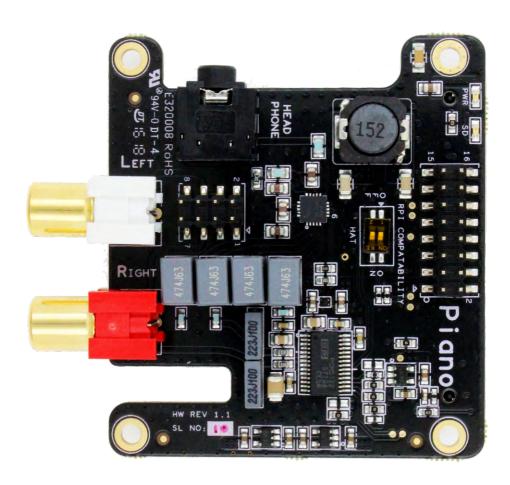
- CHIPSET: PCM5122
- CONNECTOR: GOLD PLATED RCA
- SNR: 112dB
- SAMPLING FREQUENCY: 8kHz to 384kHz @ 32 BIT RATE
- FEATURES: DYNAMIC RANGE CONTROL / EQ / FILTERING

### **HEADPHONE**

- CHIPSET: TPA6133A2
- CONNECTOR: 3.5mm PHONE JACK
- STEREO OUTPUT POWER: 138mV
- SNR: 93dB
- PSRR: 109dB

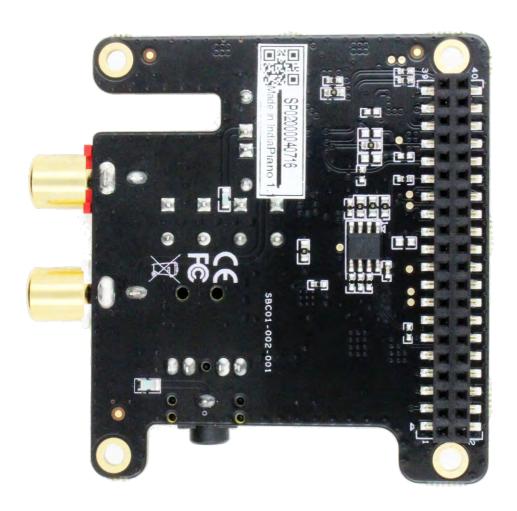


# Top View





## **Bottom View**





#### PARTS LABEL OF PIANO 1.1 SHIELD

