PecanPi®+ Specifications

XLR Output (including headphone driver):
Signal-to-Noise Ratio (SNR): 133dB (A-weighted)
Residual Noise: 1.174uV (A-weighted)
Dynamic Range (DNR): 129dB
Total Harmonic Distortion + Noise (THD+N) @ 0dBFS: -116dB or 0.00016%
Total Harmonic Distortion + Noise (THD+N) @ -6dBFS: -119dB or 0.00011%
Frequency Response: DC (0Hz) to 22kHz @ 48kHz sample rate
Frequency Response: DC (0Hz) to 44kHz @ 96kHz sample rate
Frequency Response: DC (0Hz) to 88kHz @ 192kHz sample rate
Output Voltage: 5.22Vrms (+16.6dBu)

RCA Output (including headphone driver):
Signal-to-Noise Ratio (SNR): 128dB (A-weighted)
Residual Noise: 1.308uV (A-weighted)
Dynamic Range (DNR): 124dB
Total Harmonic Distortion + Noise (THD+N) @ 0dBFS: -112dB or 0.00025%
Total Harmonic Distortion + Noise (THD+N) @ -6dBFS: -116dB or 0.00016%
Frequency Response: DC (0Hz) to 22kHz @ 48kHz sample rate
Frequency Response: DC (0Hz) to 44kHz @ 96kHz sample rate
Frequency Response: DC (0Hz) to 88kHz @ 192kHz sample rate
Output Voltage: 2.61Vrms (+10.6dBu)

Balanced Headphone Output:
Power into 32Ω: 1.7W peak
Power into 150Ω: 363mW peak
Power into 600Ω: 90mW peak
Output Impedance: < 60mΩ

Regular Headphone Output:
Power into 16Ω: 851mW peak
Power into 32Ω: 425mW peak
Power into 150Ω: 91mW peak
Power into 300Ω: 45.5mW peak
Output Impedance: < 550mΩ

Input Power:
Input Connector: Barrel Plug, 2.1mm I.D. x 5.5mm O.D. x 9.5mm
Input Voltage: 9VDC
Input Power: 20W Max

S/PDIF (coax) Input
See General section below.

General:
Sampling Rates: 44.1, 48, 88.2, 96, 176.4, 192, 352.8, and 384kHz (S/PDIF limited to 192k)
Bit Rates: 16, 24 and 32-bits (S/PDIF limited to 24-bits)
Formats: Supports all formats. DSD is converter to PCM before playback.

Implementation

DAC chip:
— Asahi Kasei Microdevices (AKM) flagship **AK4499EXEQ** combined with **AK4191EQ**
Clocking:
— Crystek **CCHD-575** oscillator — ultra-low clock jitter of 82fSec
S/PDIF Receiver
— Cirrus Logic **CS8416**
Output stage: True balanced, fully differential output stages
— Uses **OPA1612**s
— Low Noise Panasonic Resistors
— Proprietary filtering topology
Ultra-low noise linear power supplies:
— **LT3045** (0.8uV noise) for positive op-amp power supply
— **LT3090** (18uV noise) for negative op-amp power supply
— **LT3042** (0.8uV noise) for DAC Chips
Headphone driver:
— Dual parallel **OPA1622**s (regular headphones)
— Quad parallel OPA1622s (balanced headphones)