

ifi



ZEN DAC

Tech Lowdown

# Hi-res DAC (Digital to Analogue Converter) and Headphone Amp

Based on the award-winning ZEN Series, the ZEN Air range makes high-performance audio more affordable than ever before.

The **ZEN Air DAC** elevates the sound quality of digital sources to a higher plane.

It can be used as:

- A headphone amp
- A pure DAC with an amp and speakers



# Get the Best out of your Headphones

- Connect the **ZEN Air DAC** via USB to:
- PCs
- Macs
- Smartphones
- Tablets
- Games consoles and more

Its compact size and powerful amp means it's a must for your home, office or gaming set-up.



# Hi-Res DAC

- Hi-res PCM up to 32-bit/384kHz
- Full native DSD256
- MQA (Renderer)



# Audio Format LEDs (kHz)



PCM 44.1/48/88.2/96kHz



PCM 176.4/192/352.8/384kHz



DSD 64/128



DSD 256



MQA renderer

# High-performance circuitry

The **ZEN Air DAC's** high-performance circuitry delivers smooth, detailed and dynamic sound.



# PowerMatch

PowerMatch adjusts the gain of the **ZEN Air DAC** so it functions at the right level for your headphones.

OFF – best for IEMs (In-Ear-Monitors)

ON – best for on/over ear headphones



# Unique Sonic Tailoring

With our XBass+ technology, you can tailor the **ZEN Air DAC** to suit your headphones and your personal sonic taste.

## **Analogue bass boost.**

It extends the bass response to suit different headphones.



**XBass+**



# Connections



**Output 6.3mm**  
Single-Ended



**RCA Output**  
Single-Ended

**USB Input**  
PC or Smart Device

**Power**  
DC 5V Input

# Superior Design And Components



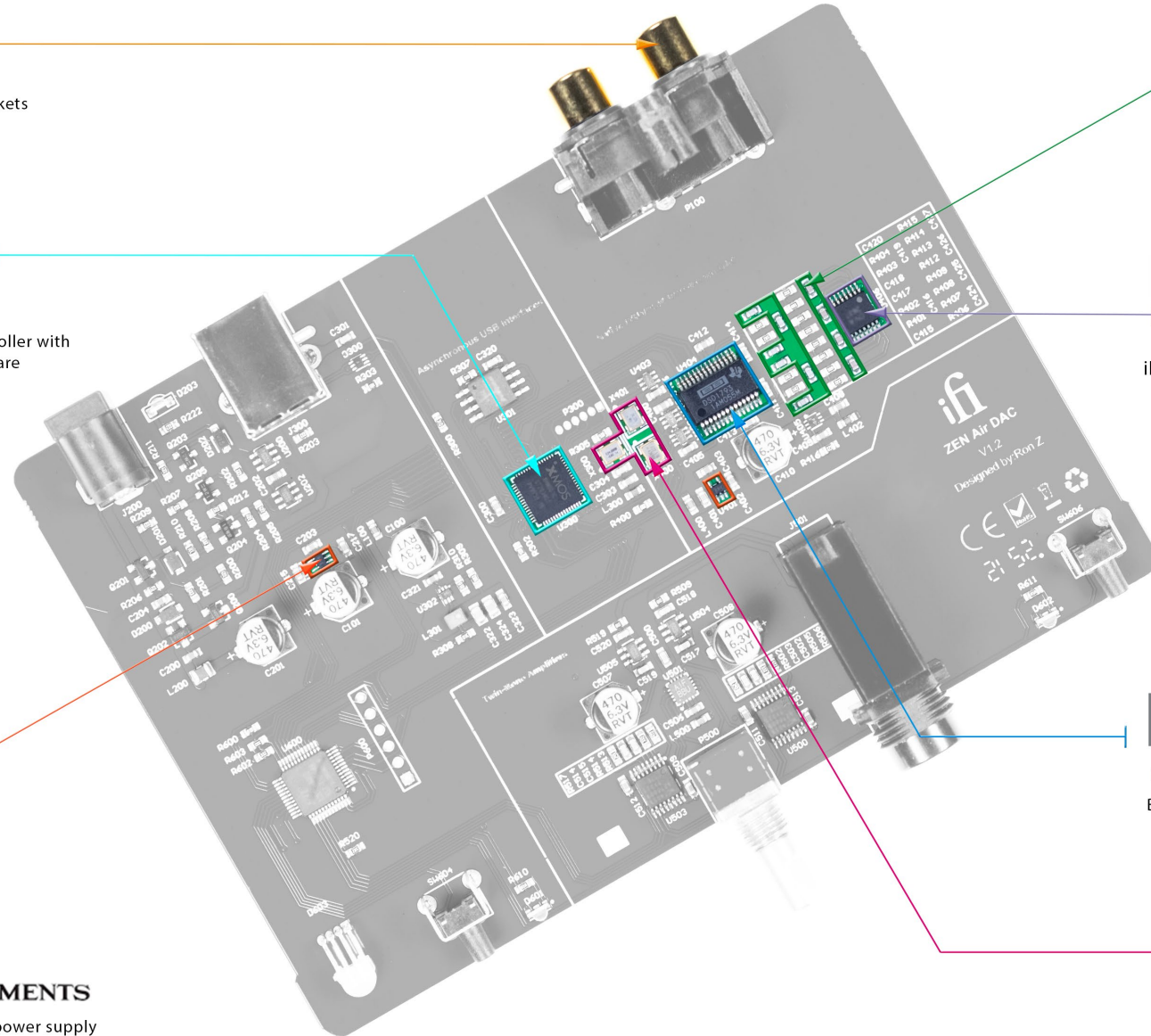
Gold-plated RCA sockets



XMOS 16-Core controller with iFi Optimised Firmware



Precision low-noise power supply



**TDK**  
COG capacitors



iFi operational amplifier,  
high-performance,  
low-noise OV2637



**Burr-Brown Products  
from Texas Instruments**  
Burr-Brown Native DSD DAC



low jitter clock

# Specifications

Input voltage	DC 5V/2.5A
Input	USB3.0 B Socket (USB2.0 compatible)
Formats	44.1/48/88.2/96/176.4/192/352.8/384kHz PCM
	2.8/3.1/5.6/6.2/11.2/12.4MHz DSD
	353/384KHz DXD
	MQA
DAC:	Bit-Perfect DSD & DXD DAC by Burr Brown

Power consumption:	No Signal ~0.5W / Max Signal ~2.5W
Dimensions	158 x 117 x 35 mm
	6.2" x 4.6" x 1.4"
Net weight	315 g
	0.969 lbs

# Specifications

Line Section	
Output	1V / 3.3V max.
Output Impedance	$\leq 50\Omega$
SNR	$< -113\text{dB(A)} @ 0\text{dBFS}$
DNR	$> 113\text{dB(A)} @ -60\text{dBFS}$
THD+N	$< 0.04\% @ 0\text{dBFS}$

Headphone Section	
Output	1V / 3.3V max. (variable)
Output Power	$> 280\text{mW} @ 32\Omega ; > 36\text{mW} @ 300\Omega$
Output Impedance	$< 1\Omega$
THD+N	$< 0.04\% (100\text{mW} @ 16\Omega)$
SNR	$> 113\text{dBA} (3.3\text{V})$

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audio