

ifi



ZEN<sub>air</sub> 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<sup>+</sup>**



# Connections



  
**Output 6.3mm**  
Single-Ended



  
**RCA Output**  
Single-Ended

  
**USB Input**  
PC or Smart Device

  
**Power**  
DC 5V Input

# Superior Design And Components



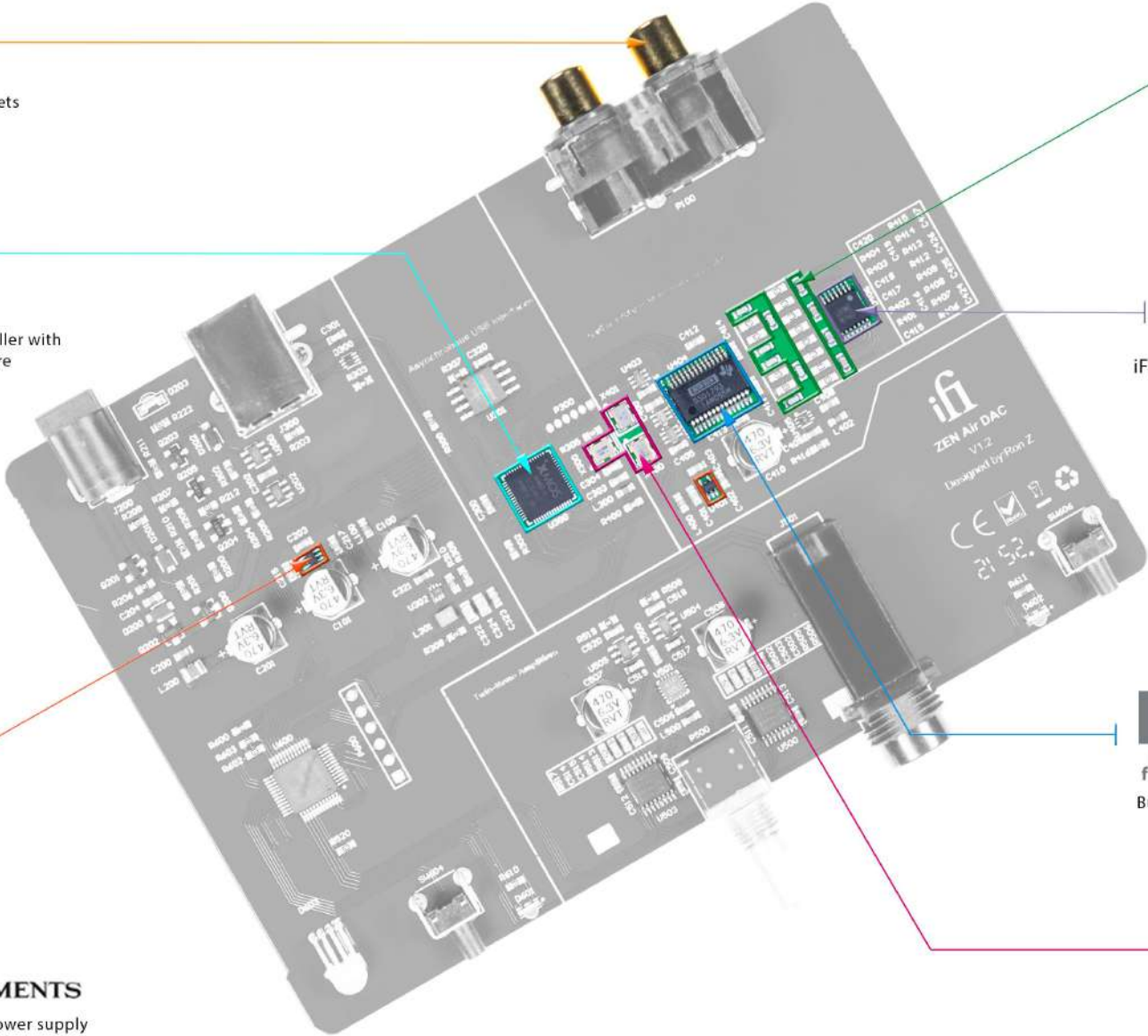
Gold-plated RCA sockets



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               | $> 113\text{dBA} (3.3\text{V})$                         |

