

# ZEN DAC 3 Tech Lowdown



ZEN DAC

# Supports Higher Quality Files

## Hi-Res Heaven

ZEN DAC 3 supports all PCM formats up to 768kHz, DSD natively supports up to **DSD 512**, and even offers full **MQA decoding**.

**DSD** 8X  
4X  
2X  
Direct Stream Digital 1X

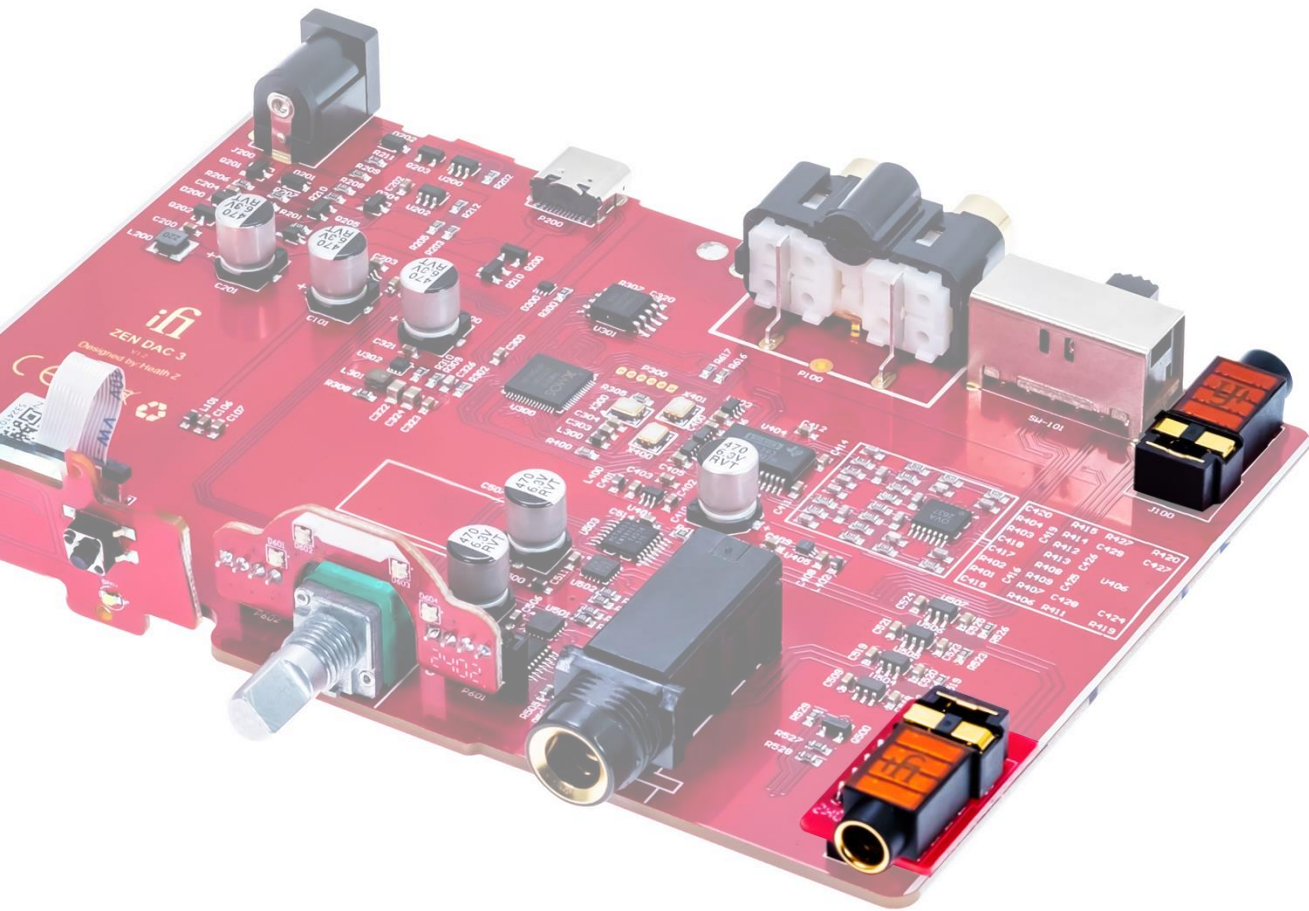
**PCM** 768  
705  
384  
Pulse Code Modulation 352

## Your Way or the Hi-Way

Offering **both** fixed and variable output gain options, ZEN DAC 3 can seamlessly connect to headphones, an amplifier or active speakers.



# Beautifully Balanced



ZEN DAC 3 features **two** 4.4mm balanced outputs, one for headphones and one for other amplifiers, effectively **minimising distortion and crosstalk**.

# PowerMatch and XBass+

ZEN DAC 3 adopts **XBass+**, the newest iteration of iFi's signature analogue EQ.

**XBass+** Add back the loss bass frequencies from open headphones

**Power Match** is a gain boost for hungrier headphones



# Power Up, Protect On!



DC offset output voltage has been improved in the ZEN DAC 3.

This means less audible clicks while switching functions.

ZEN DAC 3 also benefits from input **overvoltage protection** via the all-new **USB-C** port.

# Key Features

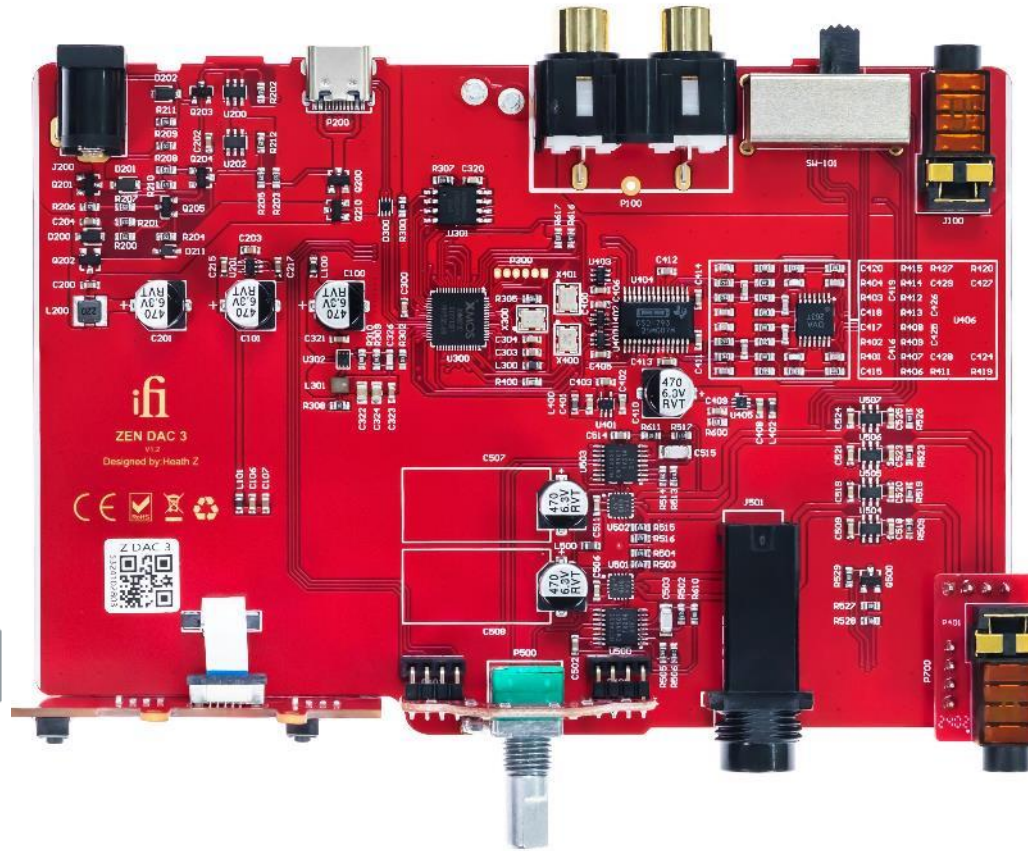
Ultra-res audio: PCM 768kHz, DSD 512 and Full MQA Decoding



USB-C input for plug-and-play connectivity

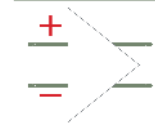


Fixed or variable output gain for optional preamp functionality



Improved DC offset and USB-C input overvoltage protection

Balanced



4.4mm balanced headphone and line outputs

**XBass+**

XBass+ and PowerMatch analogue processing modes

# ZEN DAC 3 vs. ZEN DAC V2 Looks





# Evolution of the ZEN DAC



ZEN DAC 3



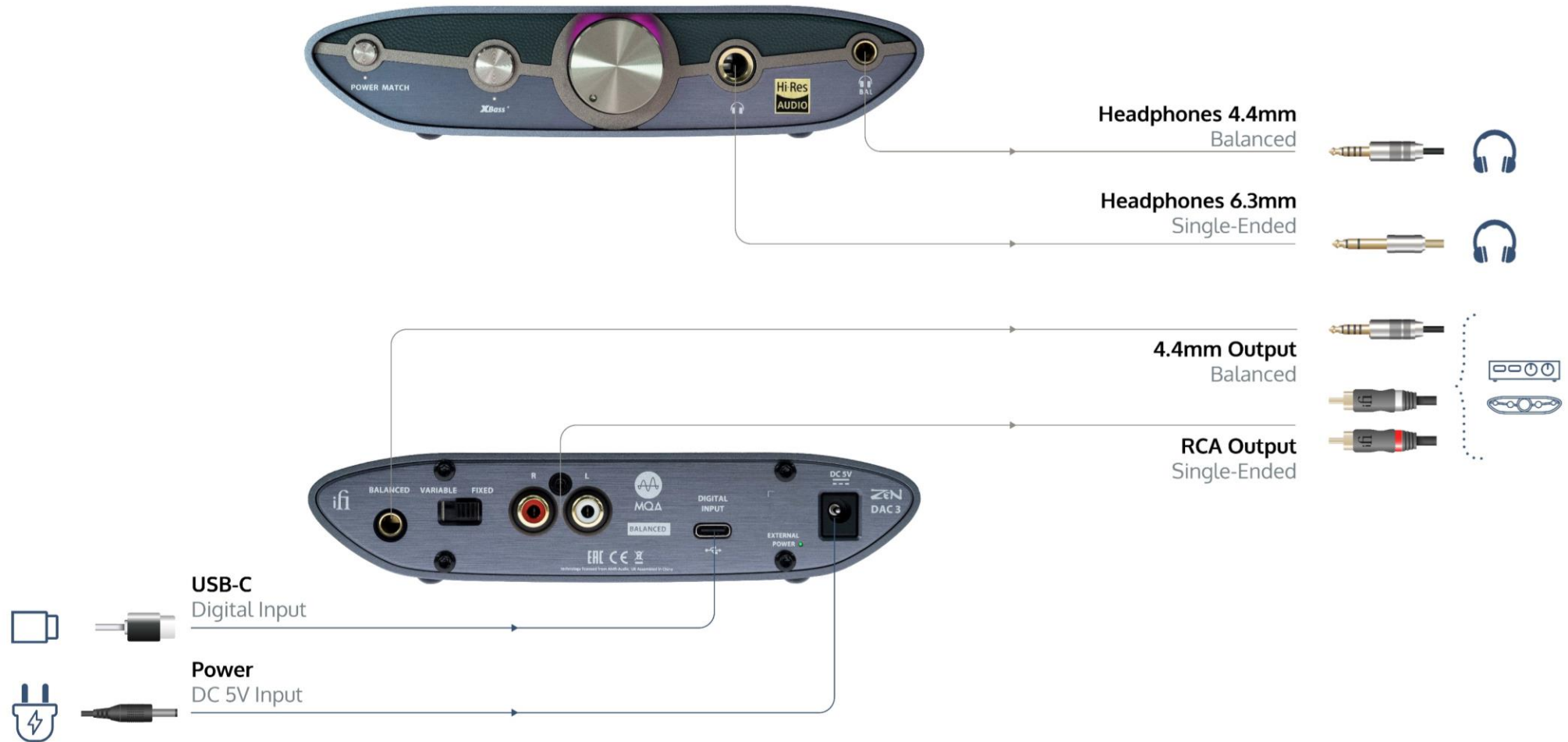
ZEN DAC V2



ZEN DAC

Retail Price	\$229	\$199	\$129
Hi-Res Support	PCM 768 kHz DSD 512 MQA Decoding	PCM 384 kHz DSD 256 MQA Decoding	PCM 384 kHz DSD 256 MQA Rendering
Headphone Outputs	4.4mm Balanced, 6.3mm SE		
Line Outputs	4.4mm Balanced, RCA SE		
Inputs	USB-C	USB-B 3.0	USB-B 3.0
USB Input Overvoltage Protection	Yes	No	No
Clocking	Upgraded GMT	Upgraded GMT	Standard Clock
Output DC offset	Improved	Standard	Standard
XMOS Chip	16-Core	16-Core	8-Core
Other Features	XBass+, PowerMatch, Fixed/Variable output	TrueBass, PowerMatch, Fixed/Variable output	TrueBass, PowerMatch, Fixed/Variable output
6.3mm HP (RMS)	>210mW @ 32Ω	>210mW @ 32Ω	>210mW @ 32Ω
4.4mm HP (RMS)	>390mW @ 64Ω	>390mW @ 64Ω;	>390mW @ 64Ω;
SNR (Headphone Section)	>109 dBA (6.2V Bal/3.3V SE)	>109 dBA (6.2V Bal/3.3V SE)	>109 dBA (6.2V Bal/3.3V SE)
THD+N (Headphone Section)	≤0.005% (2V @ 600Ω)	<0.005% (125mW @ 32Ω)	<0.005% (125mW @ 32Ω)

# Connection Guide



# Box Contents



# Specifications

<b>Input</b>		USB-C
<b>Formats</b>	PCM	768kHz
	DSD	512
	MQA	Full Decoder
<b>DAC</b>		Bit-Perfect DSD & DXD DAC by Burr Brown
<b>Headphone Output</b>		BAL 4.4mm/UnBAL 6.3mm
Output Power (RMS)	Balanced	390mW@64Ω; 7.2V@600Ω
	UnBAL	210mW@32Ω; 3.8V@600Ω
Output Impedance		<1Ω (BAL/UnBAL)
SNR		109dB(A) (BAL/UnBAL)
DNR		109dB(A) (BAL/UnBAL)
THD + N	Balanced	<0.006% (2.0V @ 600Ω)
	UnBAL	<0.006% (1.27V @ 32Ω)
<b>Line Output</b>		BAL 4.4mm/UnBAL RCA
Output Power	Balanced	2V-6.2V max. (variable); 4.2V fixed
	UnBAL	1V-3.3V max. (variable); 2.1V fixed
Output Impedance		<200Ω BAL; <100Ω UnBAL
<b>Frequency Response</b>		5Hz - 90kHz (+/-3dB)
<b>Power Consumption</b>		~2.5W Max Signal
<b>Dimensions</b>		158x115x35mm (6.2" x 4.6" x 1.4")
<b>Weight</b>		456g (1.0 lbs)
<b>Warranty period</b>		12 months