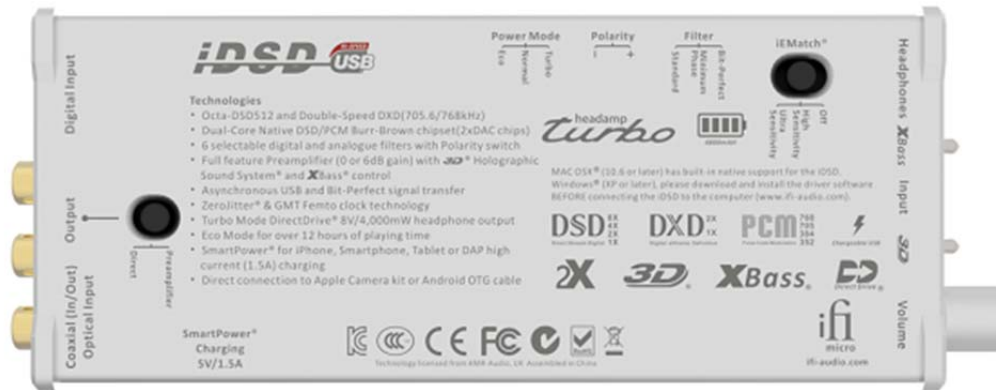




For immediate distribution:

# Micro iDSD: Tech Specs



Southport, UK - 28<sup>th</sup> June 2014

## Inputs/Outputs

Item	Description	Remarks
<b>Inputs (rear)</b>	USB 2.0 type A "OTG" Socket (with iPurifier technology built-in)	Compatible with computers (Apple/Win/Linux), iPhone, iPod Touch, iPad and Android Devices, camera kit or USB-OTG cable required
	Intelligent SPDIF® RCA	3 Way combo SPDIF port (Coaxial In/Out; Optical In) ; Up to 192kHz PCM
	SPDIF Optical	
<b>Outputs (rear)</b>	Audio RCA L+R	
	Intelligent SPDIF® RCA	Up to 192khz PCM
<b>Output (right side)</b>	SmartPower® Socket	Fast charge all portable devices. Compliant with USB Battery Charging Standard 1.2 - 5V @ 1.5A



## Controls

Item	Description	Remarks
<b>Controls (front)</b>		
• HP Output	Audio 6.3mm Headphone Jack	
• Volume with Power On/Off switch	Precision analogue volume control	< 2dB Tracking error
• 3.5mm Input		Auto disable the digital section when this is in use
• X-Bass®	On/Off	
• 3D Holographic Sound®	On/Off	Auto-switching for 3D Speaker® and 3D Headphones® (two separate and distinct circuits)
<b>Controls (left side)</b>		
• Power Mode	Turbo, Normal, Eco	Computer controlled power and gain scaling
• Polarity	Normal/Inverted	
• Filter	3 positions, 6 filters	(see filter section below)
<b>Controls (bottom)</b>		
• Line Direct/Preamplifier	Preamplifier function Enable/Disable, 0/9dB gain selectable	Fixed 2V or variable with up to 5V available
• iEMatch®	Perfect-mating for iEMs	Normal/High-Sensitivity/Ultra-Sensitivity

## DAC section

Item	Description	Remarks
<b>DAC</b>	Dual-Core DSD, DXD & PCM DAC by Burr Brown	2-DAC Chip; 4-Channel; 8-Signals, custom interleaving for maximum SNR
	Bit-Perfect DSD processing, Bit-Perfect PCM processing	
<b>Clock</b>	Ultra-low jitter GMT® computer controlled Femtoseconds clock	RMS jitter 12KHz - 1MHz < 280 Femtoseconds
<b>Audio Formats</b>	DSD 512/256/128/64 24.6/22.6/12.4/11.2/6.2/5.6/ 3.1/2.8	All native decoding, no internal hardware conversion.
	DXD 2x/1x 768/705.6/384/352.8kHz	
	PCM 768/705.6/384/352.8/ 192/176.4/96/88.2/48/44.1kHz	



<b>Filters</b>		
• PCM	Bit-Perfect Processing/ Minimum Phase/Standard	Digital filters selectable
• DSD	Extreme/Extended/Standard Range	Analogue filters selectable
• DXD	Bit-Perfect Processing	Fixed analogue filter
<b>Specifications DAC Section</b>		
• Dynamic Range (Line):	> 117dB(angel)	
• THD & N (0dBFS Line):	< 0.003%	
• Output Voltage (Line):	> 2V	
• Output Impedance(Zout):	< 240Ω	
• Jitter (correlated):	Below AP2 test set limit	

## Headphone Power Output

Item	Description	Remarks
<b>HP Amp Power</b>		
• Turbo mode	8.0V/4,000mW@ 16Ohm	> 1000 mW @ 64 Ohm
• Normal mode	4.0V/1,000mW@16Ohm	> 500 mW @ 32 Ohm
• Eco mode	2.0V/250mW@ 16Ohm	> 250 mW @ 16 Ohm
<b>Specifications Headamp Section</b>		
• Dynamic Range (HP):	> 115dB(angel) (Eco Mode, 2V Out)	
• THD &N (HP 500mW/16R):	< 0.008%	
• Output Voltage (HP):	>8V (Turbo Mode)	
• Output Impedance(Zout):	<1Ω (iEMatch not engaged)	
• Maximum Output Power:	4,000mW @ 16 Ohm Load#	# when using sinewave testing the iDSD micro may engage protection circuitry
• Continuous Output Power:	1,000mW @ 64 Ohm Load	