U 960S

Version：1.2_20231129_EN

2 input channel，2 output channel difference audio analyzer

U960S is an audio analyzer designed for mass production electroacoustic test of production line.With its excellent electrical characteristics and excellent price advantages,,it is extremely suitable for low voltage PCBA testing of consumer electroacoustics,Such as Bluetooth headset PCBA and typec headset PCBA.

U 960S with PM 0083 signal conditioner can also realize flexible acoustic test.

General specifications

Overall parameters	
Analog input channel	2
Analog output channel	2
Bus	USB
Dimension(mm)	96*33*140
Connection type	BNC
Working temperature	-20℃~50℃

General features

- 2 analog input channel，2 analog input channel
- Differential signal
- Positioning small voltage signal electroacoustic test

AI channel parameters	
ADC precision	24 Bit
ADC type	Δ-Σ
Sampling rate range	12.8k,48k,96k,102.4k
FIFO Buffer size	1024
Data transmission mode	DMA
Input voltage range	+/- 3Vrms
Gain error	+/- 0.03dB
Input impedance	Positive input to negative input：4Mohm Between positive input and ground：2Mohm
Flatness	20Hz~20kHz，＜+/- 1dB 10Hz~60KHz，＜+/- 3dB

AI Idle noise (uVrms)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Maximum value	8	10	10
Annotation：[1]Short circuit source impedance is less than 50 Ω，Working temperature 23±5℃			

AI SNR (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Minimum value	104	103	103

Annotation：[1]Differential input， AC coupling， Input signal 1kHz Sine wave， 0dBFS(3Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight

AI dynamic range (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	105	103	103
Annotation：[1]Differential input,AC coupling,Input signal 1kHz Sine wave， -1dBFS(2.67Vrms) [2]Bandwidth 22.4K、45K、51K [3]Linear weight			

AI THD+N (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-93	-93	-93
Annotation：[1]Differential input,AC coupling,Input signal 1kHz Sine wave， -1dBFS(2.67Vrms) [2]Bandwidth 22.4K、45K、51K [3]Linear weight			

AI THD (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-98	-98	-98
Annotation：[1]Differential input,AC coupling,Input signal 1kHz Sine wave， -1dBFS(2.67Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight			

AI Cross talk (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-105	-104	-104
Annotation：[1]Differential input,AC coupling,Input signal 1kHz Sine wave， -1dBFS(2.67Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight			

AO Analog acquisition channel parameter

AO Analog acquisition channel	
DAC precision	32 Bit
Sampling rate range	12.8k,48k,96k,102.4k
Output voltage range	+/- 3Vrms
Gain error	+/- 0.03dB
Output impedance	Positive input to negative input：1ohm
Flatness	20Hz~20kHz，＜+/- 0.1dB 10Hz~60KHz，＜+/- 1.5dB

AO Idle noise (uVrms)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	10	12	13
Annotation：[1]Acquisition device impedance is greater than 1Mohm， Working temperature:23±5℃			

AO SNR (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	107	105	104
Annotation：[1]Differential output,AC coupling,output signal 1kHz Sine wave，0dBFS(3Vrms) [2]Bandwidth 22.4K、45K、51K [3]Linear weight			

AO Dynamic range (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	105	105	103
Annotation：[1]Differential output,AC coupling,output signal 1kHz Sine wave，0dBFS(3Vrms) [2]Bandwidth 22.4K、45K、51K [3]Linear weight			

AO THD+N (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-91	-91	-91
Annotation：[1]Differential output,AC coupling,output signal 1kHz Sine wave，-1dBFS(2.67Vrms) [2]Bandwidth 22.4K、45K、51K [3]Linear weight			

AO THD (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-93	-93	-93
Annotation：[1]Differential output,AC coupling,output signal 1kHz Sine wave，-1dBFS(2.67Vrms) [2]Bandwidth 22.4K、45K、51K [3]Linear weight			

AO Cross talk (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	107	105	104
Annotation：[1]Differential output,AC coupling,output signal 1kHz Sine wave，-1dBFS(2.67Vrms) [2]Bandwidth 22.4K、45K、51K [3]Linear weight			

Product specifications are subject to change without prior notice

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