Pureaudio™

USB-PA / ARRAY-PA
C1-1028100-3

Andrea PureAudio Array Microphone Development Kit for Raspberry Pi3

Featuring Andrea's patented Array microphone beam forming, noise reduction and full duplex acoustic echo cancelation. Including voice trigger phrase and a limited descrete vocabulary for home automation and robotics applications.

USB-PA External Soundcard

- Stereo microphone input and stereo speaker output
- Compatible with most computing devices that support a USB audio class driver

Parameter	Value
USB Compliance	
USB HID Device Class Spec.	1.1 Compliant
USB Audio Device Class Spec.	1.0 Compliant
USB Spec.	2.0 Full-Speed Compatible and USB-IF Certification
Operation	
Power	USB
Microphone Input	2 Channel Stereo
Audio Output	2 Channel Stereo
Sampling Rate	8K, 11025, 16K, 22050 32K, 44.1K and 48KHz
Power Supply	
Supply Voltage	4.5 - 5.5 VDC
Total Power Consumption	120 mA
Microphone Input	
A/D Conversion Resolution	16 bit
THD + N	-84 dB
Supply Bias Resistor	2.2K Ohm @ 3.3VDC
Frequency Response	20-20,000 Hz
Input Range	0 - 1.25 Vrms
Dynamic Range	95 dB
Record Gain Range	-6 to 33 dB
Stereo Speaker Output	
D/A Conversion Resolution	16 bit
THD + N	-91 dB
Frequency Response	20-20,000 Hz
Output Load	32 Ohm
Output Voltage	1.27 Vrms

Array-2S SuperBeam Stereo Array Microphone

- Uni-directional stereo microphone
- Compatible with USB-PA

Parameter	Value
Connections	
Microphone Plug 3.5mm	Pink (PMS 701C)
Electrical Characteristics	
Mic Supply Voltage	1.4-5.0 VDC
Supply Bias Resistor	2.2K-3.9K Ohm
Operating Current (Each Channel)	0.5 mA
Output Impedance at 1 KHz	200 Ohm
Max Input Sound Level at 1 KHz, 3%THD	115 dB
Output Signal Level at THD <3% @ 1 KHz	24-120 mVrms
Sensitivity at 1 kHz (0 dB = 1 V/Pa Vdc = 1.6V)	-40 to -37 dBV
Frequency Response at 3dB Variation	20-15,000 Hz
Noise	20 uVrms
Operating Temperature	0-70° C
Acoustic Characteristics	
Recommended Operating Distance	12-48 Inches Uni Microphones

ANDREA

Andrea Electronics Corporation
620 Johnson Ave, Suite 1B, Bohemia, New York 11716
www.AndreaElectronics.com
Phone/Fax: (800) 707-5779