



enables your IPC innovation

USB ARRAY MICROPHONE MODULE

產品規格書

PRODUCTION SPECIFICATION

Model No. : MOA902



Customer 客戶名稱	
Date Submitted 送樣日期	

Approved

確認回簽

Fangtec Corporation



Revision History

Date	Rev.	Contents
2023/5/4	V1.0	First release



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1. Preface

MOA902 provides advanced array microphone noise reduction in voice capture applications such as notebooks, desktop computers and other applications that will benefit from improved voice clarity. It is a USB Audio Class (UAC) compliant array microphone module.

Featuring a novel approach to removing mechanical, stationary and non-stationary noise, MOA902 preserves voice naturalness for greater speech intelligibility even when the speaker is farther away or not optimally aligned with the microphones-providing unmatched freedom of movement for end-users.



2. Features

- Advanced noise reduction, up to 25db of noise reduction
- Record clear voice at distance up to 3 meters while attenuating noise
- Energy efficient
- USB Audio Class (UAC) compliant array microphone module

3. Applications

- Notebook PCs
- LCD PCs
- Tablet PCs
- Panel PCs

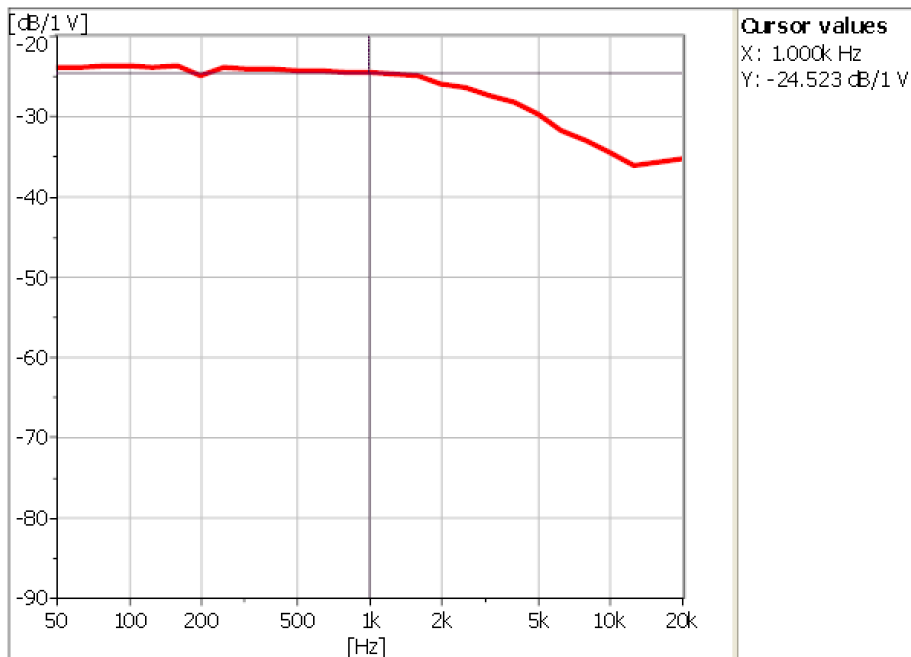
4. Module Dimension

Module Specification	
Size (LWH/mm)	75.0 x 17.0 x 7.45 ± 0.3 mm (including PCB thickness)
PCB Thickness (mm)	1.2 mm
Output Interface	USB 2.0
Storage Temperature	-35° ~ 75°
Operating Temperature	-35° ~ 75°

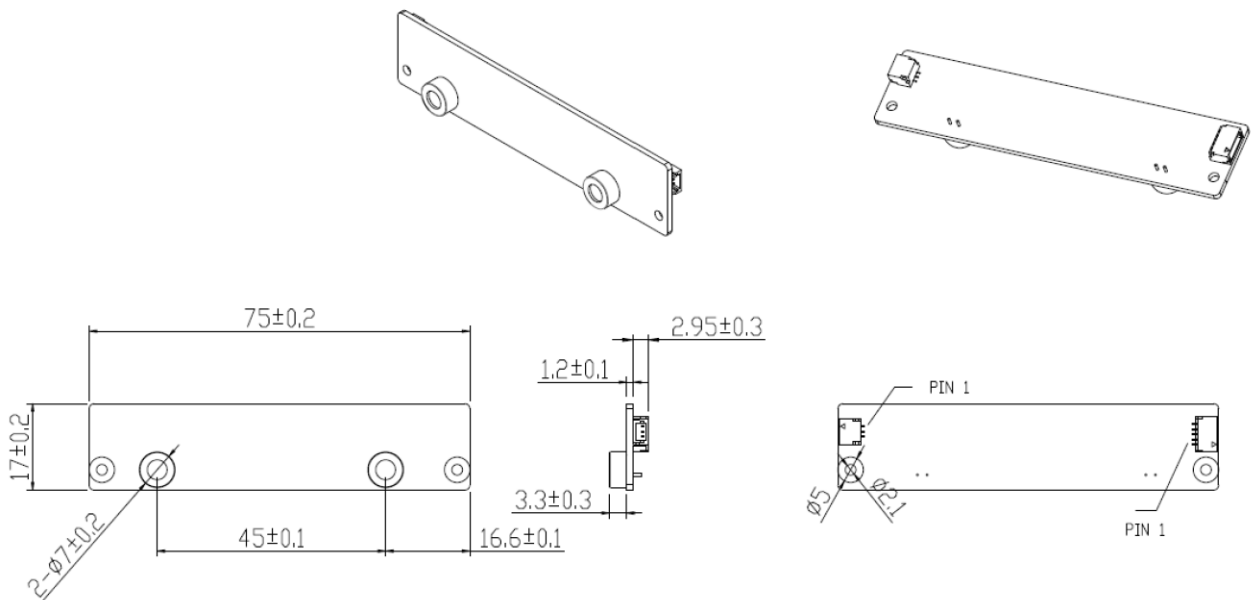
5. Microphone Specification

Parameter	SPEC.	Unit
Directional Characteristic	Omni-Directional	—
Sensitivity	-24±2	dB
Impedance	2.2(Max)	kΩ
S/N Ratio (A weighted network)	65(Typ.)	dB
Maximum Input Sound Pressure Level	105 THD≤3%	dB
Standard Operating Voltage	2.0	Vdc
Operating Voltage Range	1.7~5.0	Vdc
Decrease Voltage Characteristics(Vs=2.0 to 1.7V dc)	-3(Max)	dB
Current Consumption	300(Max)	μA
IP ratings (water proof)	IP65	/

Typical Frequency Response



6. Outline Specification





7.Pin Description

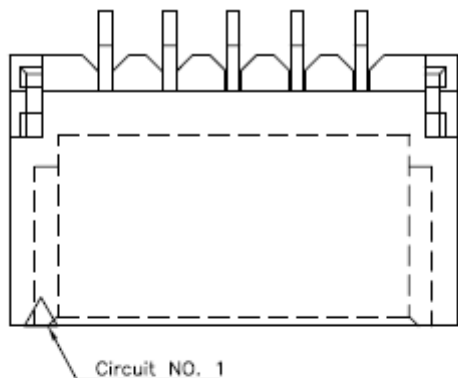
5pin connector

Pin Description			
Pin Number	Name	Pin Type	Function Description
1	VCC	Power	USB Power Supply +5.0V
2	D-	Data Pin	USB Data Transmission
3	D+	Data Pin	USB Data Transmission
4	GND	GND	System Ground
5	GND	GND	System Ground

3pin connector

Pin Description		
Pin Number	Name	Function Description
1	Mute	Mote Key / Low Active
2	LED	LED on/off Cortron
3	GND	System Ground

8. Connector Specification



CKT	Dim A	Dim B	Dim C
5	4.0	5.4	7.0
3	2.0	3.4	5.0

