# **Atomic SPK Base**

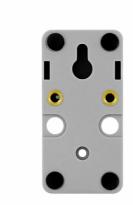
#### SKU:A098













# Description

**Atomic SPK Base** is an audio player compatible with the ATOM series controllers. It features the NS4168 amplifier chip with an I2S digital audio interface, automatic sample rate detection, adaptive functionality, and effective prevention of audio signal distortion. It includes a microSD card slot for easy storage and retrieval of audio files. The device provides a 3.5mm headphone jack and an external speaker interface, allowing users to play audio through external headphones or speakers.

#### **Features**

- o NS4168 amplifier chip
- o I2S serial digital audio input interface
- o Supports a wide range of sample rates: 8kHz~96kHz
- o Automatic sample rate detection and adaptive functionality
- o microSD card slot
- Headphone jack
- o Speaker interface

## Includes

- o 1 x Atomic SPK Base
- $\circ~1~x~1W@8\Omega$  speaker

# **Applications**

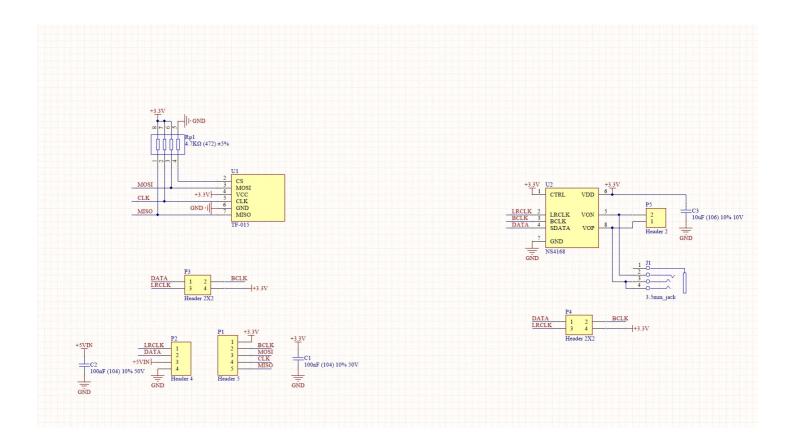
- o Audio player
- o Wireless speaker
- Wi-Fi speaker

# | Specifications

Specification	Parameter
Amplifier Chip	NS4168
Amplifier Output Power	1W (VDD=3.3V)
Headphone Jack	3.5mm
Speaker Interface	1.25mm-2P
Speaker Power	1W@8Ω
Product Size	24 x 48 x 18mm
Package Size	136 x 92 x 8mm
Product Weight	10.6g
Gross Weight	29g

# Schematics

2/5 | Update Time: 2025-09-03



# PinMap

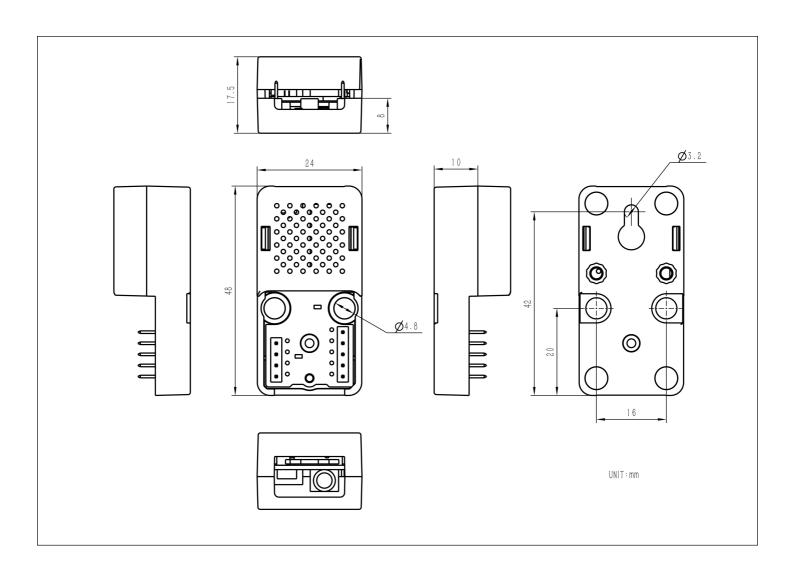
microSD Card

Micro SD	SCK	MISO	MOSI
ATOM LITE	G23	G33	G19
ATOMS3 LITE	G7	G8	G6

NS4168

NS4168	BLCK	LRCLK	DATA
ATOM LITE	G22	G21	G25
ATOMS3 LITE	G5	G39	G38

## Model Size



### Datasheets

o NS4168

### Softwares

#### Arduino

- Atomic SPK Base Play RawPCM Example
- o Atomic SPK Base Play MP3 From microSD Card Example

#### UiFlow1

Atomic SPK Base UiFlow1 Docs

### **|** EasyLoader

Easyloader	Download Link	Remarks
Atomic SPK Base Easyloader	download	/

# Video

ATOM\_SPK\_VIDEO.mp4

5/5 | Update Time: 2025-09-03