Solid State System (3S)

鑫創科技：3259

2023
Investor Conference

2023/12/19

Agenda

- Company Introduction
- Business Overview
- Q&A

Safe Harbor Statement

Except for historical information contained herein, the matters set forth in this presentation are forward looking statements that are subject to risks and uncertainties that could cause actual results to differ materially, including the impact of competitive products and pricing, timely design acceptance by our customers, timely introduction of new technologies, ability to ramp new products into volume, industry wide shifts in supply and demand for semiconductor products, industry overcapacity, availability of manufacturing capacity, financial stability in end markets, and other risks.

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3S Company Profile

- **Company Name :** Solid State System Co., Ltd.
- **Establish :** Nov. 1998
- **Chairman :** Jeffrey Lin
- **IPO Date :** Dec. 2007 (TPEX: 3259)
- **Headquarters :** Tai Yuen Hi-Tech Industrial Park, Hsinchu, Taiwan
- **Other Offices :** Shenzhen China
- **Employees :** 120

Solid State System

NAND Flash Controller IC

USB 3.2 Gen I Ctr. IC

SSD Solution

3S Advantages for NAND Flash Controller

- 25-year experience and record in delivering NAND flash controller turn-key solution from SLC, MLC, TLC to 3D NAND TLC, QLC.
- NAND flash knowhow in-depth. The only one NAND controller maker who had developed NAND interface SONOS cell flash memory.
- Broad expertise from device to system solution.

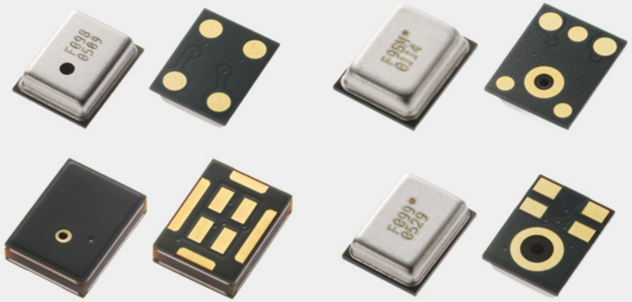
USB AUDIO IC

Product Type with USB AUDIO IC

3S Advantages for USB Audio Controller

- 14-year experience and record in delivering USB Audio Controller.
- Audio knowhow in-depth with Application Software Support.
- Dedicated FAE at Shenzhen Office for Quick Customer Support.

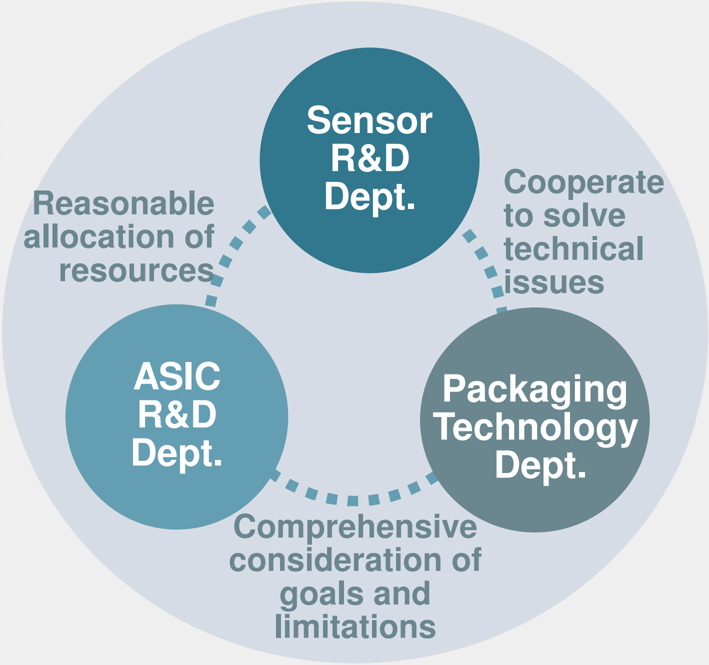
MEMS Mic Product Features



- **R&D Strength:** A complete MEMS Mic R&D team including Sensor, ASIC and Package technology. With 30+ years experience, masters the key know-how and knowledge in MEMS structure, mix mode circuits and acoustic characteristics.
- **Patent Protection :** Patents cover from chip, packaging to testing of MEMS microphone technology.
- **Own Chips:** Self designed and taped out of MEMS sensor & pre-amp ASIC.
- **100% Testing:** In-house developed testers with high accuracy trimming process to make sure product consistency.
- **Application-oriented:** Developing different application’s MEMS sensors and ASIC base on chip portfolio to meet various requirements.
- **Supporting:** FAE team provides professional on-site support from design stage to production stage worldwide.

All Series MEMS Microphone Provider – 3S

A Complete MEMS Mic R&D Team



Sensor R&D Dept.

ASIC R&D Dept.

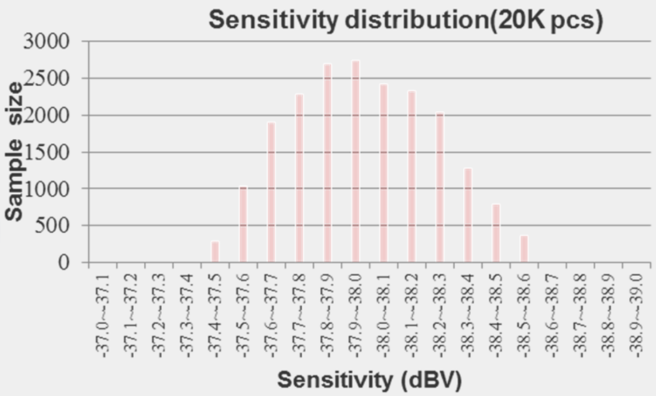
Packaging Technology Dept.

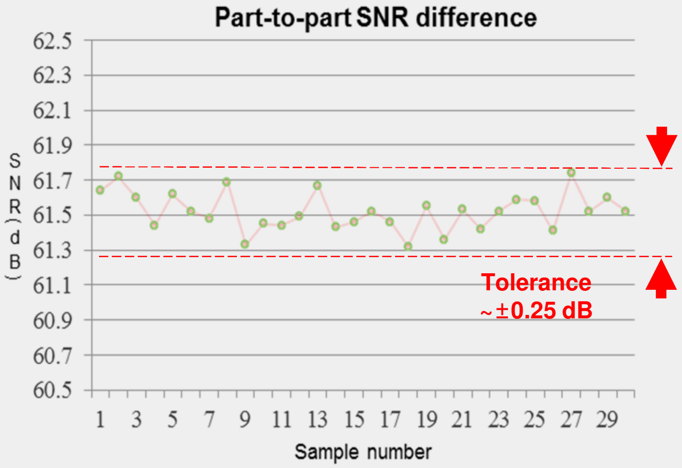
Reasonable allocation of resources

Cooperate to solve technical issues

Comprehensive consideration of goals and limitations

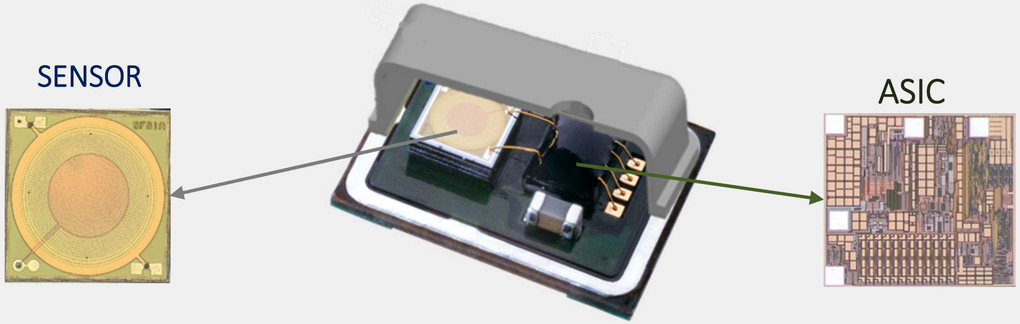
High Product Consistency





Tolerance ~±0.25 dB

All Series MEMS Microphone Provider – 3S



Sensor Types

- Decay Low Frequency Response
- Flat Low Frequency Response
- High SNR
- High Resistant Sudden Pressure
- Anti-light Interference
- Low SNR

ASIC Types

- Analog Single-Ended Interface
- Analog Differential Interface
- Digital PDM Interface
- Analog Single-Ended Interface Capacitor Filter

Product diversity

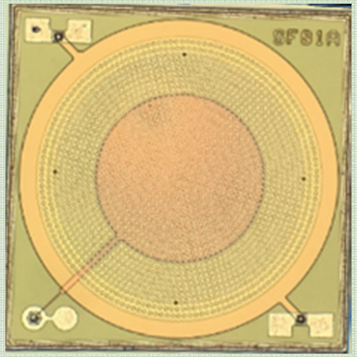
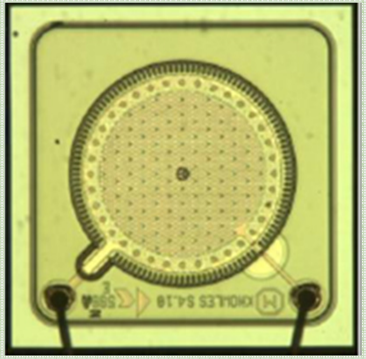
Features meet applications

MEMS-High specification product progress

Series	Product	
Analog MEMS Microphone	SPM 4737 Bottom Port SNR 70dB (2023/Q1 MP)	
Differential Interface	SPA 3325 Bottom Port SNR 65dB (2022/Q4 MP)	
Digital MEMS Microphone	SPG 4020 Top Port SNR 67dB (2024/Q1 Sample)	SPH 3526 Bottom Port SNR 67dB (2024/Q1 Sample)

3S Patent Introduction

- Own IP, Own IC, Own Patents
- 3S MEMS patent differs from Knowles

3S' patented MEMS structure	**Knowles' patented MEMS structure**
US08093119B2 	US06535460B2 

Wafer

Package

More than **100 items** MEMS microphone own patents over the United States, China and Taiwan

Other

(ex. Test, Trimming…)

3S Field of Product Application

3S Product Application

- **Mobile Phone**

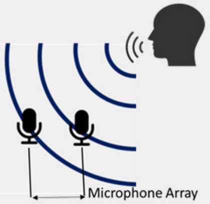
- **Notebook**

- **Hearing Aids**

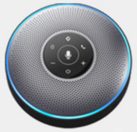
- **Automotive**

- **Headset**

  - **Talking**
  - **ANC**
  - **ENC**
- **Mic Array**



  - **Audio Conference**



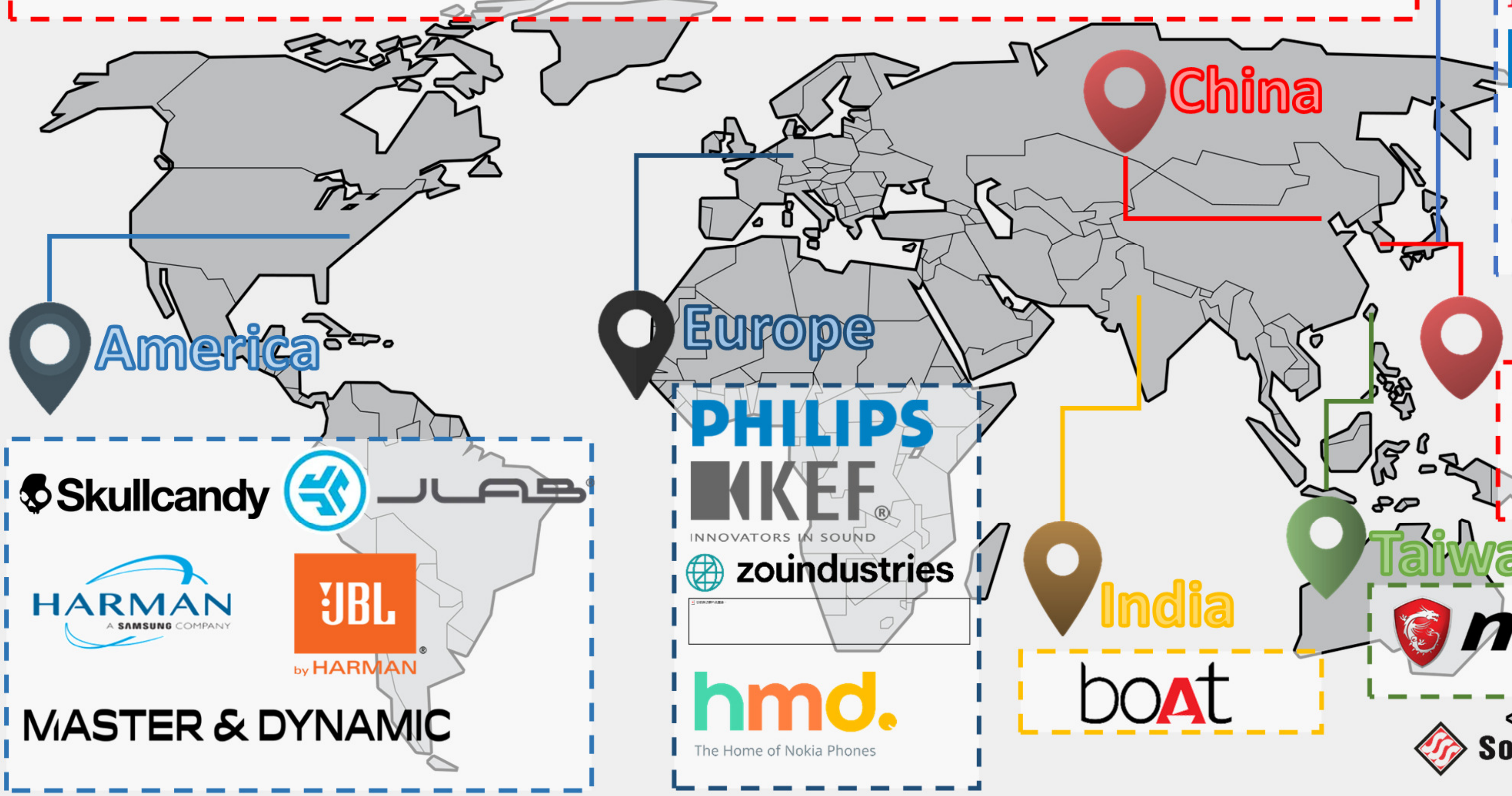
  - **Smart Speaker**

  - **Smart TV**

  - **Smart Home**

  - **AI Detection**

Main Customer



China

- SKYWORTH
- KTC
- ANKER
- STAR-NET 星网锐捷
- ABB
- muyuan牧原
- EZVIZ萤石
- DNAKE 狄耐克
- 阿尔法蛋 ALPHA EGG
- 广汽集团 GAC GROUP
- 长安汽车
- GEELY
- DFSK
- CHERY
- 长城汽车
- 上汽大通 MAXUS
- 东风柳汽
- SHACMAN

Japan

- HONDA
- SUBARU
- Clarion
- DAIHATSU
- Panasonic
- audio-technica

America

- Skullcandy
- JLAB
- HARMAN A SAMSUNG COMPANY
- JBL by HARMAN
- MASTER & DYNAMIC

Europe

- PHILIPS
- KEF INNOVATORS IN SOUND
- zoundustries
- hmd. The Home of Nokia Phones

India

- boAt

Korea

- SAMSUNG
- KOCOM

Taiwan

- msi
- LUXGEN

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Consolidated Balance Sheet

NT$K

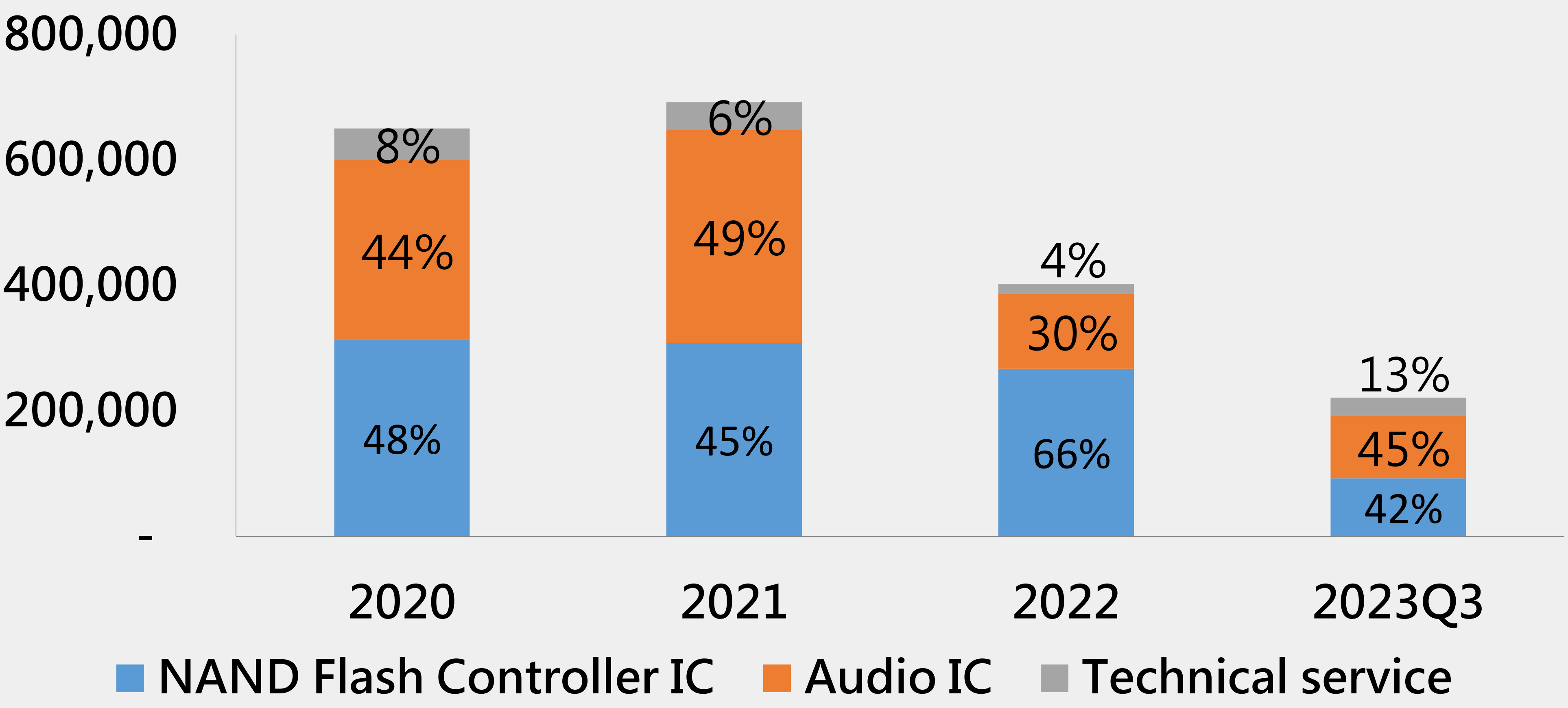
	2020	2021	2022	2023Q3
Current Assets	**359,630**	**596,135**	**518,842**	**394,163**
Cash and Cash Equivalents	94,242	171,771	65,952	43,901
Accounts Receivable	63,054	80,417	54,234	34,884
Inventory	191,348	334,848	390,453	299,047
Other Current Assets	10,986	9,099	8,203	16,331
Non-current Assets	**197,178**	**168,219**	**110,948**	**78,882**
Total Assets	**556,808**	**764,354**	**629,790**	**473,045**
Total Liabilities	**184,673**	**113,548**	**132,131**	**119,877**
Common stock	**646,877**	**746,877**	**746,877**	**497,659**
Total Stockholders' Equity	**372,135**	**650,806**	**497,659**	**353,168**
Book value per share	**5.75**	**8.71**	**6.66**	**7.10**

Consolidated Statements of Comprehensive Income

NT$K

	2020	2021	2022	2023Q3
Sales	650,504	692,352	402,605	221,159
Gross Profit	146,116	229,488	116,429	33,463
Gross margin(%)	22	33	29	15
Selling Expenses	77,008	65,500	67,713	46,046
G&A Expenses	39,198	31,670	35,932	32,167
R&D Expenses	170,205	135,756	133,920	100,502
Operating Income	(140,295)	(3,438)	(121,136)	(89,037)
Non-operating Income& Exp.	66,592	4,759	(5,558)	761
Income Before Tax	(73,703)	1,321	(126,694)	(144,491)
Net Income	(78,355)	1,158	(156,550)	(144,491)
EPS(NT$)	(0.21)	0.02	(2.10)	(2.90)

Revenue by Product



Solid State System

Future Prospect

- Continue developing NAND Flash Controller and value-add application solutions.

- Expanding MEMS Mic market share and enter high performance oriented main stream market.

- Continue developing Audio IC products to secure existing market and customers, and expanding applications.

Thank You

www.3system.com.tw

Solid State System