



SUNPLUS

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凌陽科技股份有限公司法人說明會

2023 Q2

2023/8/16

莊濟安

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Make difference

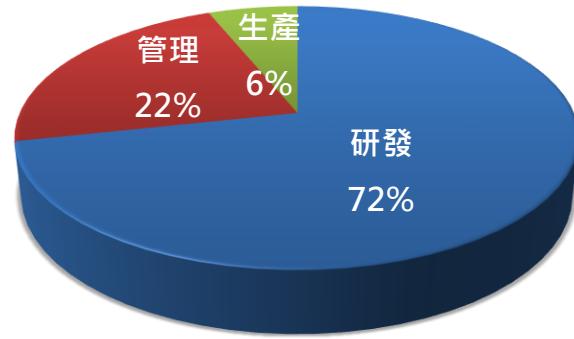
集團企業

| | 專業 | 持股比 | 股票代號 |
|---|--|------|-----------|
|  SUNPLUS | 凌陽科技股份有限公司 (592m shares) 數位影音娛樂多媒體系統單晶片設計與矽智財設計 | 100% | TWSE#2401 |
|  | 凌通科技股份有限公司 (109m shares) 語音、LCD、數位影像處理與MCU晶片設計 | 48% | TWSE#4952 |
|  | 凌陽創新科技股份有限公司 (59m shares) 網路攝影機、影像信號處理控制與人機介面控制晶片設計 | 57% | TWSE#5236 |
|  | 景相科技股份有限公司 (24m shares) 車用微控制器與USB儲存ASIC | 97% | |
|  | 宏陽科技股份有限公司 (64m shares) 光儲存與馬達驅動晶片設計 | 100% | |

* Based on 2023/06/30 Consolidated-holding by Sunplus

人力結構

集團人力

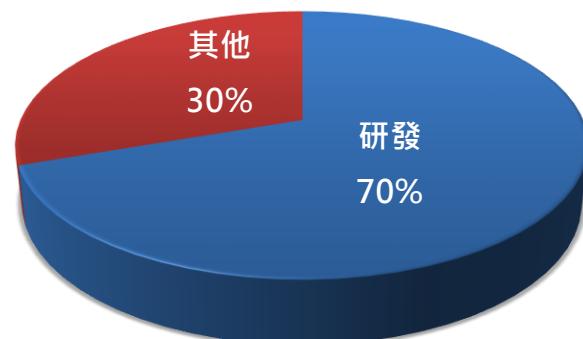


集團員工人數 / 研發人員

1,094 / 789

40%碩士以上

凌陽科技人力



凌陽科技員工人數 / 研發人員

346 / 241

63%碩士以上

* Data by 2023/06/30

第二季 合併綜合損益表

| (新台幣佰萬元) | 2023 2Q | | 2023 1Q | | 2022 2Q | | 季同比 | 年同比 | 備註 |
|----------|---------------|------|---------------|------|---------------|------|--------|--------|-----------------|
| 營業收入淨額 | 1,418 | 100% | 1,194 | 100% | 1,985 | 100% | 19% | (29%) | |
| 營業成本 | 750 | 53% | 628 | 53% | 951 | 48% | 19% | (21%) | |
| 營業毛利 | 669 | 47% | 565 | 47% | 1,034 | 52% | 18% | (35%) | YoY：降價、提列存貨跌價損失 |
| 研究發展費用 | 535 | 38% | 481 | 40% | 546 | 28% | 11% | (2%) | QoQ：光罩支出 |
| 銷售管理費用 | 175 | 12% | 173 | 14% | 226 | 11% | 1% | (22%) | YoY：人事費用下降 |
| 營業淨利 | (42) | (3%) | (89) | (7%) | 262 | 13% | (53%) | (116%) | |
| 營業外收入及支出 | 65 | 5% | 53 | 4% | (66) | (3%) | 22% | (199%) | |
| 本期淨利 | (2) | (0%) | (49) | (4%) | 119 | 6% | (96%) | (102%) | |
| 其他綜合損益 | (65) | (5%) | 63 | 5% | (68) | (3%) | (205%) | (4%) | RMB匯率影響 |
| 本期綜合損益總額 | (67) | (5%) | 14 | 1% | 50 | 3% | (592%) | (234%) | |
| 淨利歸屬於： | | | | | | | | | |
| 本公司業主 | (83) | (6%) | (92) | (8%) | (44) | (2%) | (10%) | 88% | |
| 非控制權益 | 81 | 6% | 43 | 4% | 163 | 8% | 88% | (50%) | |
| 每股盈餘（元） | <u>(0.14)</u> | | <u>(0.16)</u> | | <u>(0.08)</u> | | | | |

** EPS based on outstanding 591,994,919 shares on 2023/06/30

上半年 合併綜合損益表

| (新台幣百萬元) | 2023 1H | | 2022 1H | | 年同比 | 備註 |
|----------|---------|------|---------|------|--------|-------------|
| 營業收入淨額 | 2,612 | 100% | 4,099 | 100% | (36%) | |
| 營業成本 | 1,378 | 53% | 1,911 | 47% | (28%) | |
| 營業毛利 | 1,234 | 47% | 2,188 | 53% | (44%) | 降價、提列存貨跌價損失 |
| 研究發展費用 | 1,016 | 39% | 1,170 | 29% | (13%) | 人事費用下降 |
| 銷售管理費用 | 348 | 13% | 487 | 12% | (29%) | 權利金、人事費用下降 |
| 營業淨利 | (130) | (5%) | 531 | 13% | (125%) | |
| 營業外收入及支出 | 118 | 5% | 297 | 7% | (60%) | |
| 本期淨利 | (51) | (2%) | 668 | 16% | (108%) | RMB貶值影響 |
| 其他綜合損益 | (3) | (0%) | 47 | 1% | (106%) | |
| 本期綜合損益總額 | (54) | (2%) | 716 | 17% | (107%) | |
| 淨利歸屬於： | | | | | | |
| 本公司業主 | (175) | (7%) | 327 | 8% | (154%) | |
| 非控制權益 | 124 | 5% | 342 | 8% | (64%) | |
| 每股盈餘 (元) | (0.30) | | 0.56 | | | |

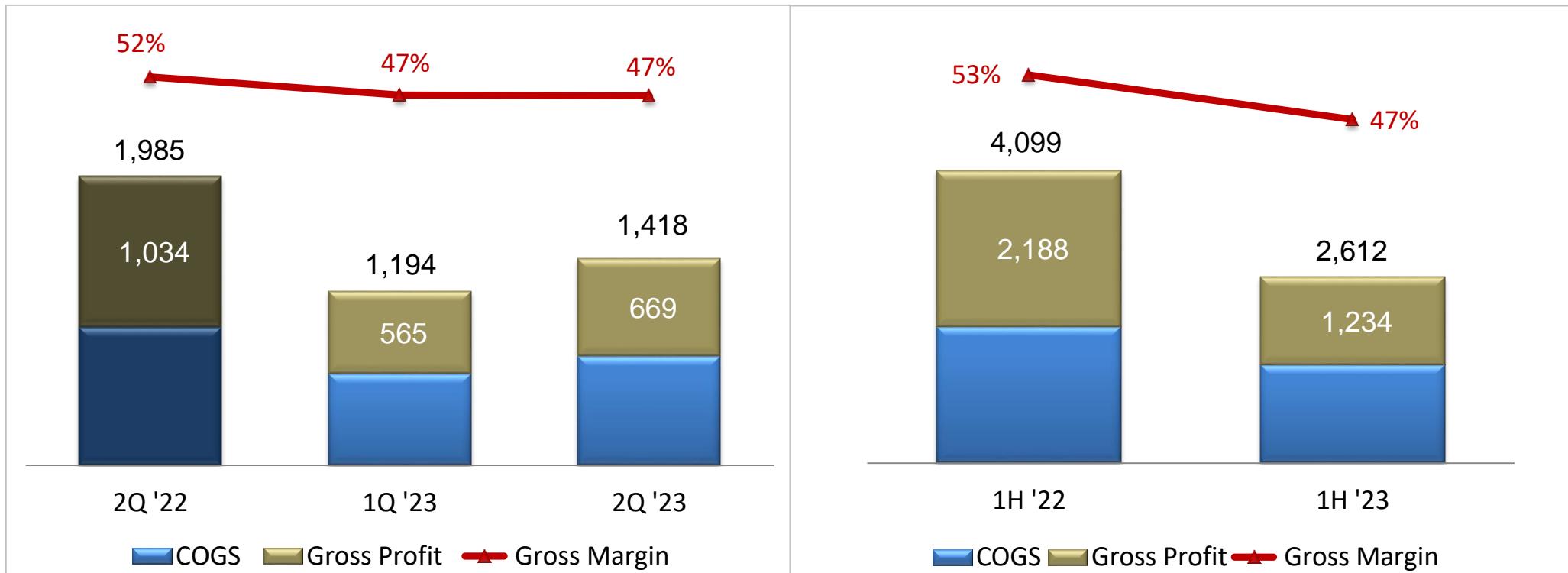
合併營收與毛利

NT\$ million

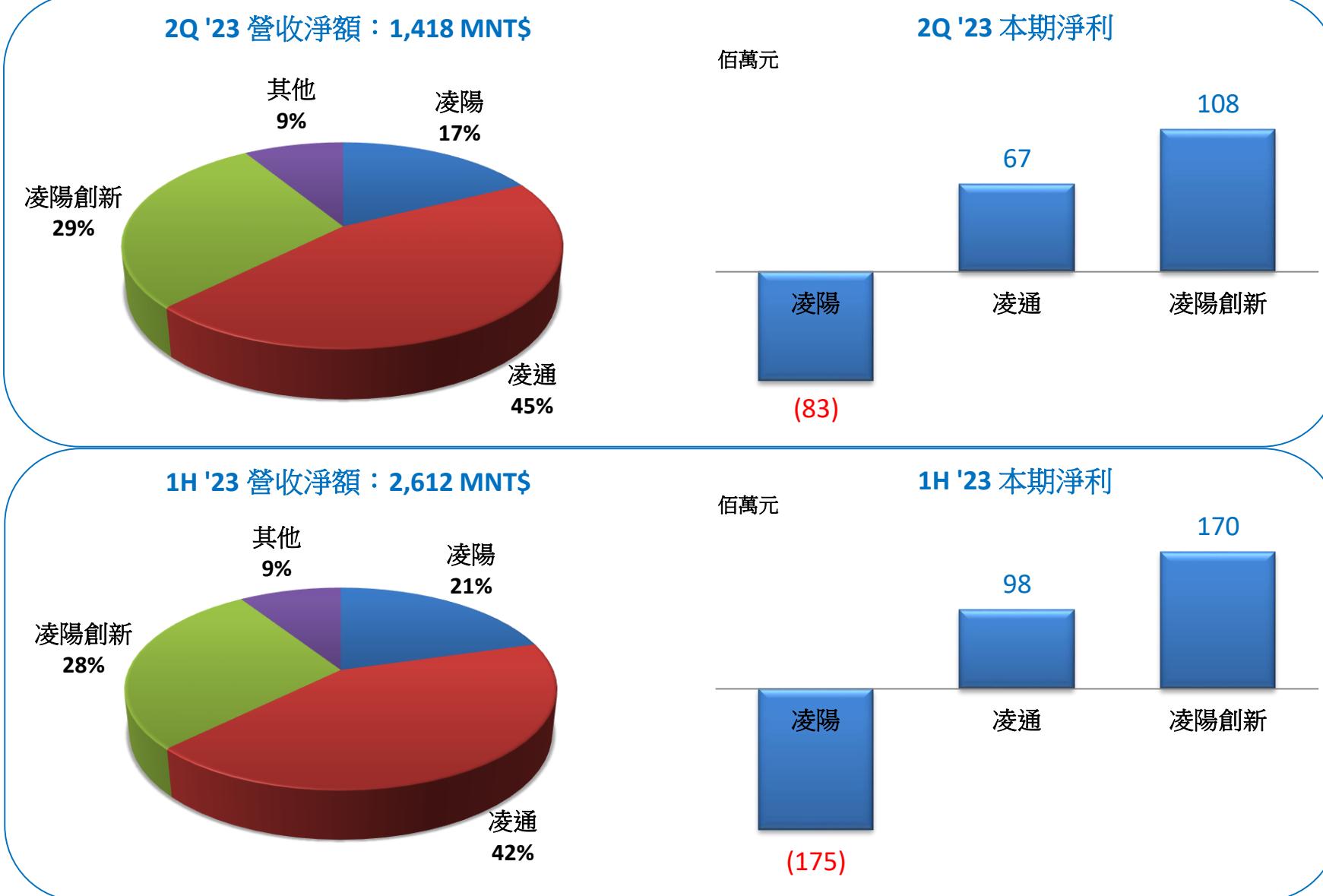
毛利年同比: -35%

毛利年同比: -44%

毛利季同比: +18%



子公司貢獻



合併資產負債表

| (新台幣佰萬元) | 2023 2Q | 2023 1Q | 2022 2Q | 季同比 | 年同比 | 備註 |
|----------------------|-------------|-------------|------------|----------|-----------|----------------|
| 資產總計 | 14,943 | 14,720 | 16,637 | 2% | (10%) | YoY：現金減少 |
| 現金及約當現金 | 3,895 | 4,116 | 4,577 | (5%) | (15%) | 營運淨現金流出、發放股利 |
| 透過損益按公允價值衡量之金融資產-流動 | 1,763 | 1,050 | 1,778 | 68% | (1%) | 2023 2Q購買貨幣型基金 |
| 存貨淨額 | 1,774 | 2,009 | 1,973 | (12%) | (10%) | |
| 採用權益法之投資 | 937 | 911 | 931 | 3% | 1% | |
| 透過損益按公允價值衡量之金融資產-非流動 | 1,516 | 1,573 | 1,727 | (4%) | (12%) | YoY：處份投資 |
| 負債合計 | 4,052 | 3,138 | 5,032 | 29% | (19%) | |
| 短期借款 | 274 | 194 | 138 | 41% | 99% | |
| 應付票據及帳款 | 275 | 218 | 652 | 26% | (58%) | |
| 其他流動負債 | 1,623 | 845 | 2,937 | 92% | (45%) | 2Q：發放股利 |
| 權益合計 | 10,891 | 11,582 | 11,605 | (6%) | (6%) | |
| 股東權益報酬率 % | (0.47%) | (0.42%) | 11.52% | | | |
| 每股淨值 (元) | 14.85 | 15.69 | 15.68 | | | |

現金流量表

| (新台幣佰萬元) | 2023 2Q | 2023 1Q | 2022 2Q | 季同比 | 年同比 | 備註 |
|--------------------|----------------|----------------|----------------|--------------|---------------|--------------|
| 營業活動之現金流入(出) | 420 | (154) | 236 | (373%) | 78% | 2Q去化庫存，1Q年獎 |
| 投資活動之現金流入(出) | (719) | (438) | (71) | 64% | 908% | 2023購買貨幣型基金 |
| 融資活動之現金流入(出) | 75 | 281 | 67 | (73%) | 11% | 2023 1Q：銀行借款 |
| 現金淨增加(減少)數 | (221) | (312) | 241 | (29%) | (192%) | |
| 期末現金及約當現金餘額 | 3,895 | 4,116 | 4,577 | (5%) | (15%) | |

| (新台幣佰萬元) | 2023 1H | 2022 1H | 年同比 | 備註 |
|--------------------|----------------|----------------|--------------|----------------------------|
| 營業活動之現金流入(出) | 266 | (217) | (222%) | 2023去化庫存 |
| 投資活動之現金流入(出) | (1,156) | (58) | 1882% | 2023購買貨幣型基金、 2022處分芯鼎股權 |
| 融資活動之現金流入(出) | 355 | (5) | (7856%) | 2023銀行借款 |
| 現金淨增加(減少)數 | (533) | (259) | 106% | |
| 期末現金及約當現金餘額 | 3,895 | 4,577 | (15%) | |

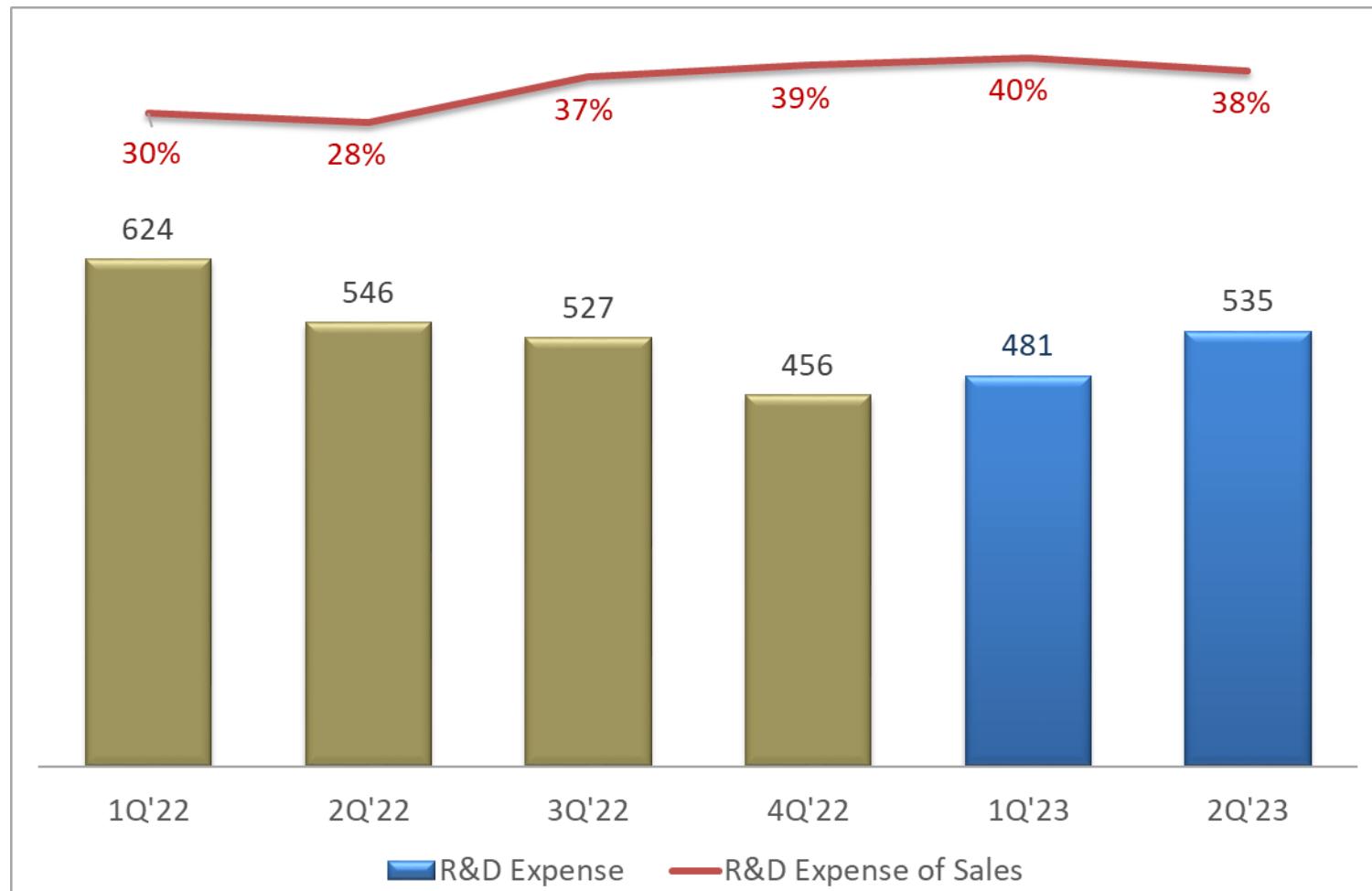
營業外收入及支出

| (新台幣佰萬元) | <u>2023 2Q</u> | <u>2023 1Q</u> | <u>2022 2Q</u> | <u>季同比</u> | <u>年同比</u> | <u>備註</u> |
|--------------------|----------------|----------------|----------------|------------|---------------|------------|
| 其他收入 | 21 | 11 | 30 | 102% | (29%) | 2022 研發補助款 |
| 外幣兌換淨利益(損失) | 15 | (7) | 21 | (318%) | (25%) | |
| 透過損益按公允價值衡量之金融資產利益 | 25 | 74 | (202) | (66%) | (112%) | 股權價值波動 |
| 採用權益法認列之關聯企業損益份額 | (6) | (25) | 7 | (75%) | (189%) | 權益法公司的損益 |
| <u>營業外收入及支出合計</u> | <u>65</u> | <u>53</u> | <u>(66)</u> | <u>22%</u> | <u>(199%)</u> | |

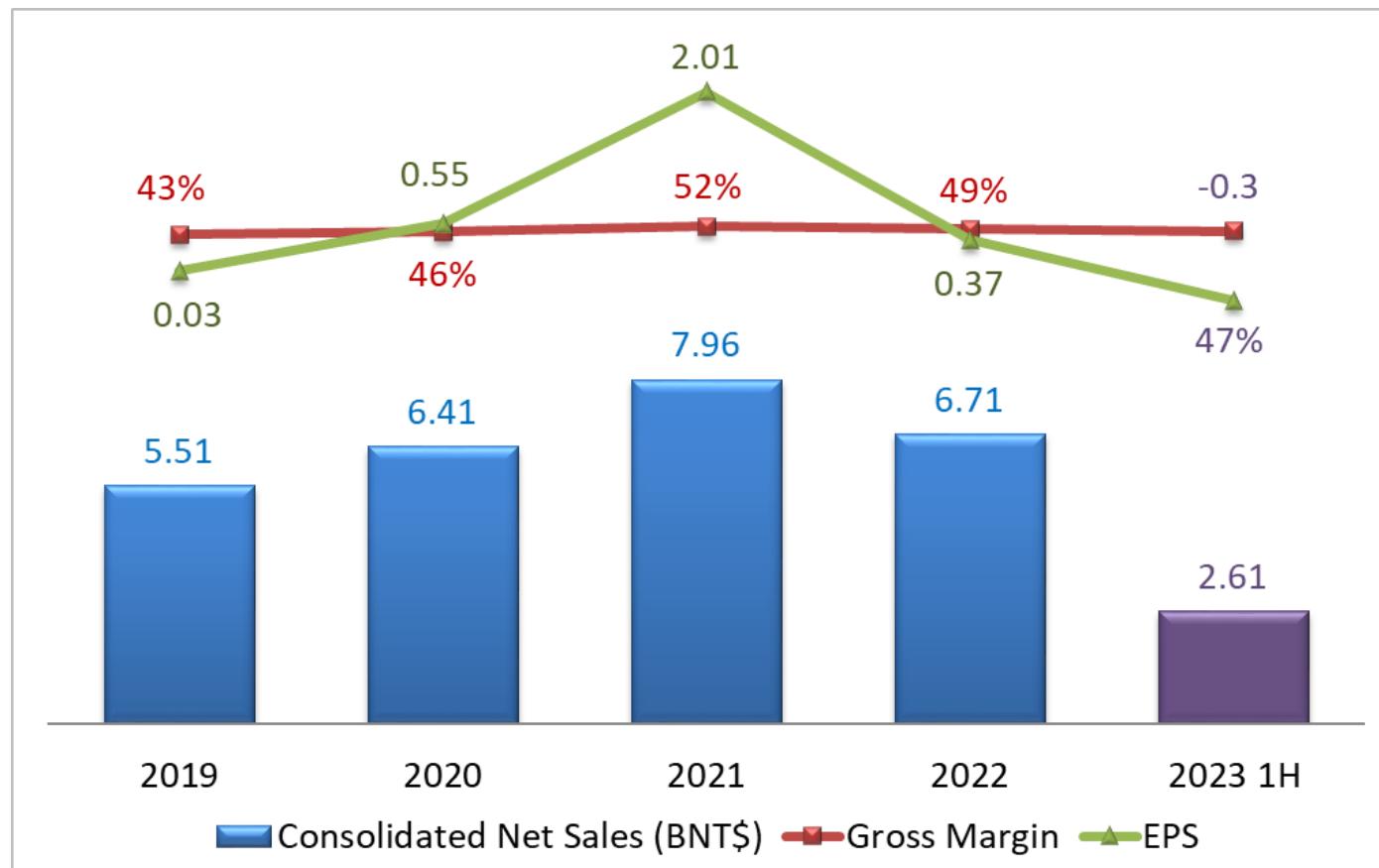
| (新台幣佰萬元) | <u>2023 1H</u> | <u>2022 1H</u> | <u>年同比</u> | <u>備註</u> |
|--------------------|----------------|----------------|--------------|---------------|
| 其他收入 | 32 | 70 | (54%) | 2022 研發補助款 |
| 外幣兌換淨利益(損失) | 8 | 48 | (83%) | |
| 透過損益按公允價值衡量之金融資產利益 | 99 | (360) | (127%) | 股權價值上升，持有股票上市 |
| 採用權益法認列之關聯企業損益份額 | (32) | 8 | (485%) | 權益法公司的損益 |
| 處分權益法之投資利益 | 0 | 449 | (100%) | 2022處分芯鼎持股 |
| <u>營業外收入及支出合計</u> | <u>118</u> | <u>297</u> | <u>(60%)</u> | |

研發費用與佔營收比 (合併)

NT\$ million



財務概況



Automotive

Inside and Around the Cockpit



Cockpit Electronics

IVI
Display Audio
Cluster
HUD

Automated Driving

AVM
DMS/IMS
ADAS
E-Mirror
APA

In-cabin Acoustics

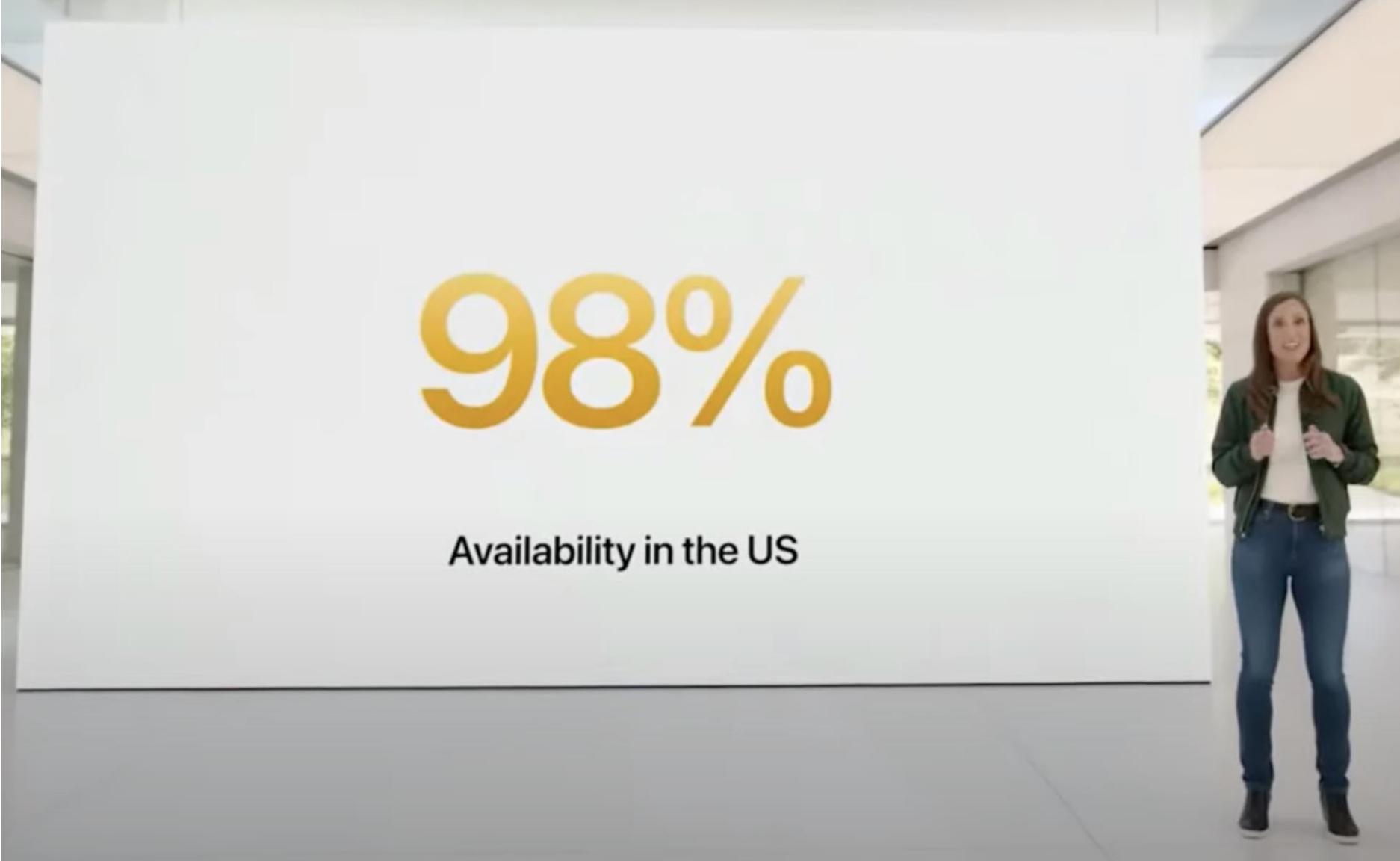
Spatial Sound
Auto-EQ
EC/NR
ITU-T Lab

Cockpit Electronics

Display Audio

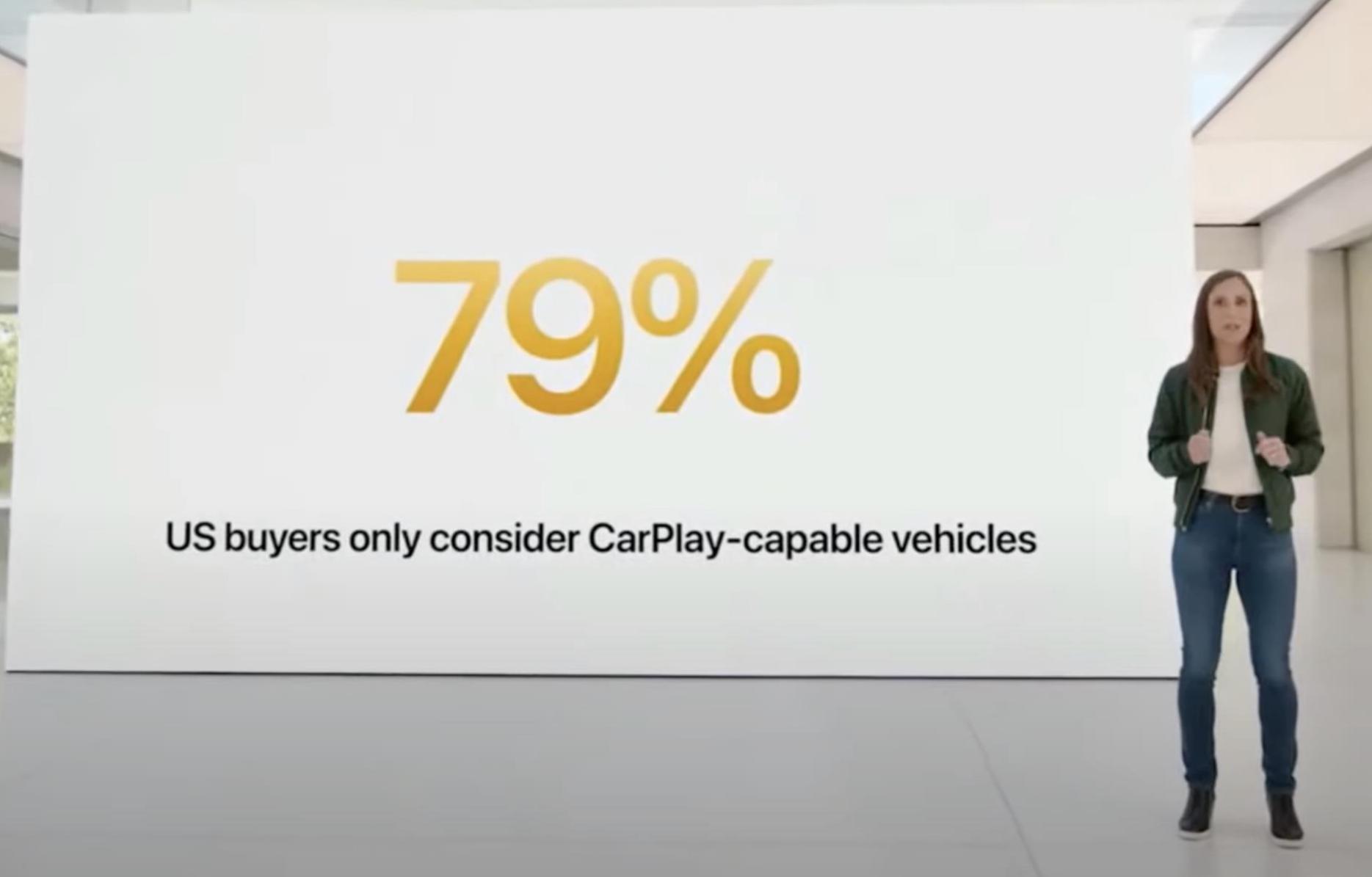
Connects Vehicle to Person (Personal Device)





98%

Availability in the US



79%

US buyers only consider CarPlay-capable vehicles

New CarPlay Features with iOS 16



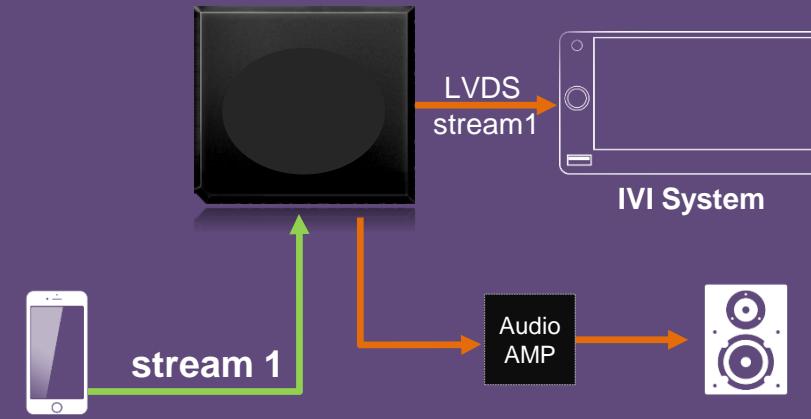
- Larger Screen
- Multiple Display
- Instrument Cluster
- More App Types
- New GUI Widgets

iCockpit Solution



CarPlay Multi-Stream

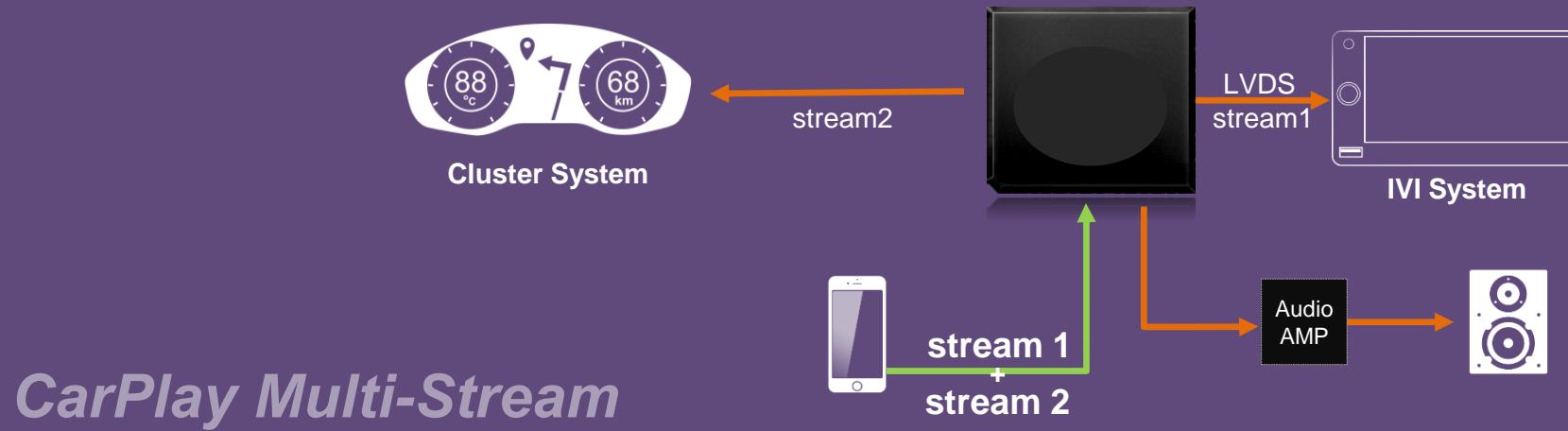
Classic CarPlay



■ Stream 1: CarPlay Functions

- Navigation, Music, Telephony, and Siri, etc.

CarPlay Multi-Stream



■ Stream 2: Alternative Functions

- Navigation, Sound Effect Spectrum, or Album Info
- To Cluster or HUD

iCockpit: IVI+Cluster



iCockpit : IVI+AVM

Was: IVI & AVM Box



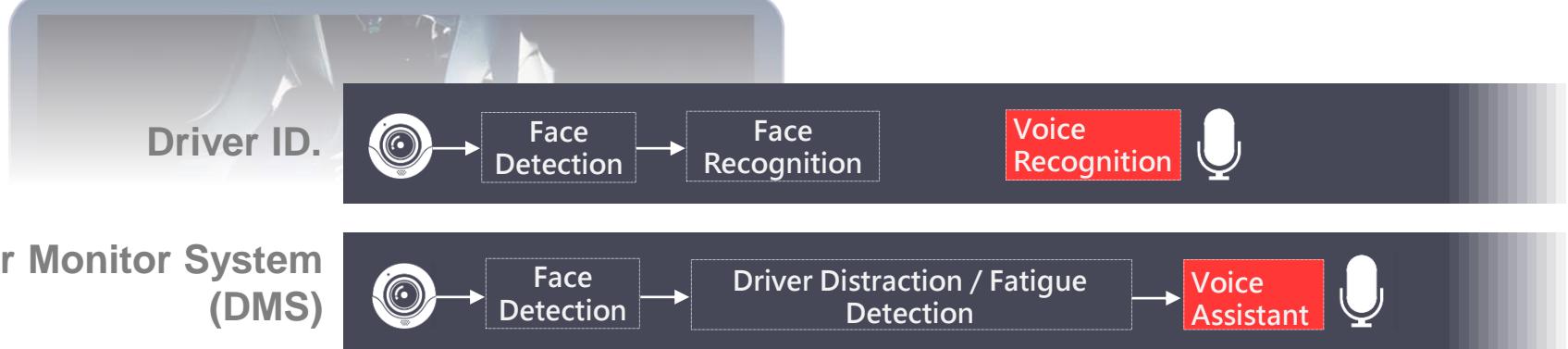
Now: IVI with AVM Built-in



All in One

Cost Saving

iCockpit : IVI+ADAS



Automated Driving

ADAS Applications

AVM



AR HUD



APA



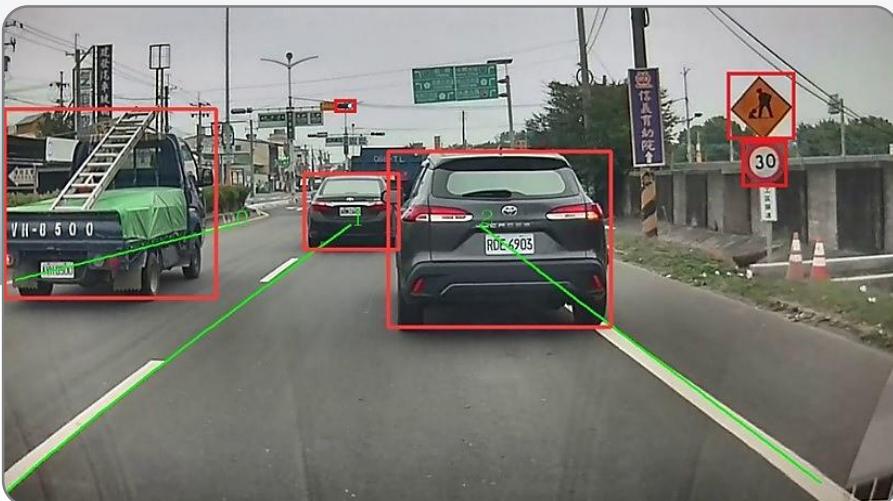
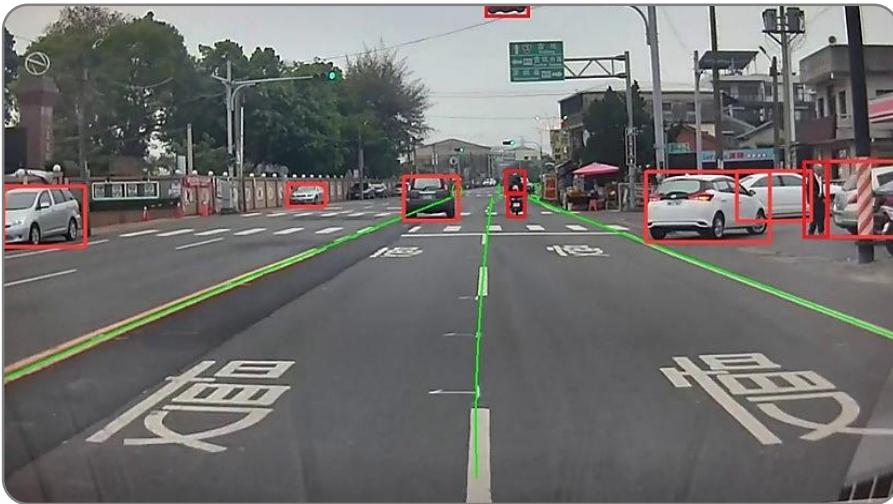
E-Mirror/CMS/DMS



3D AVM



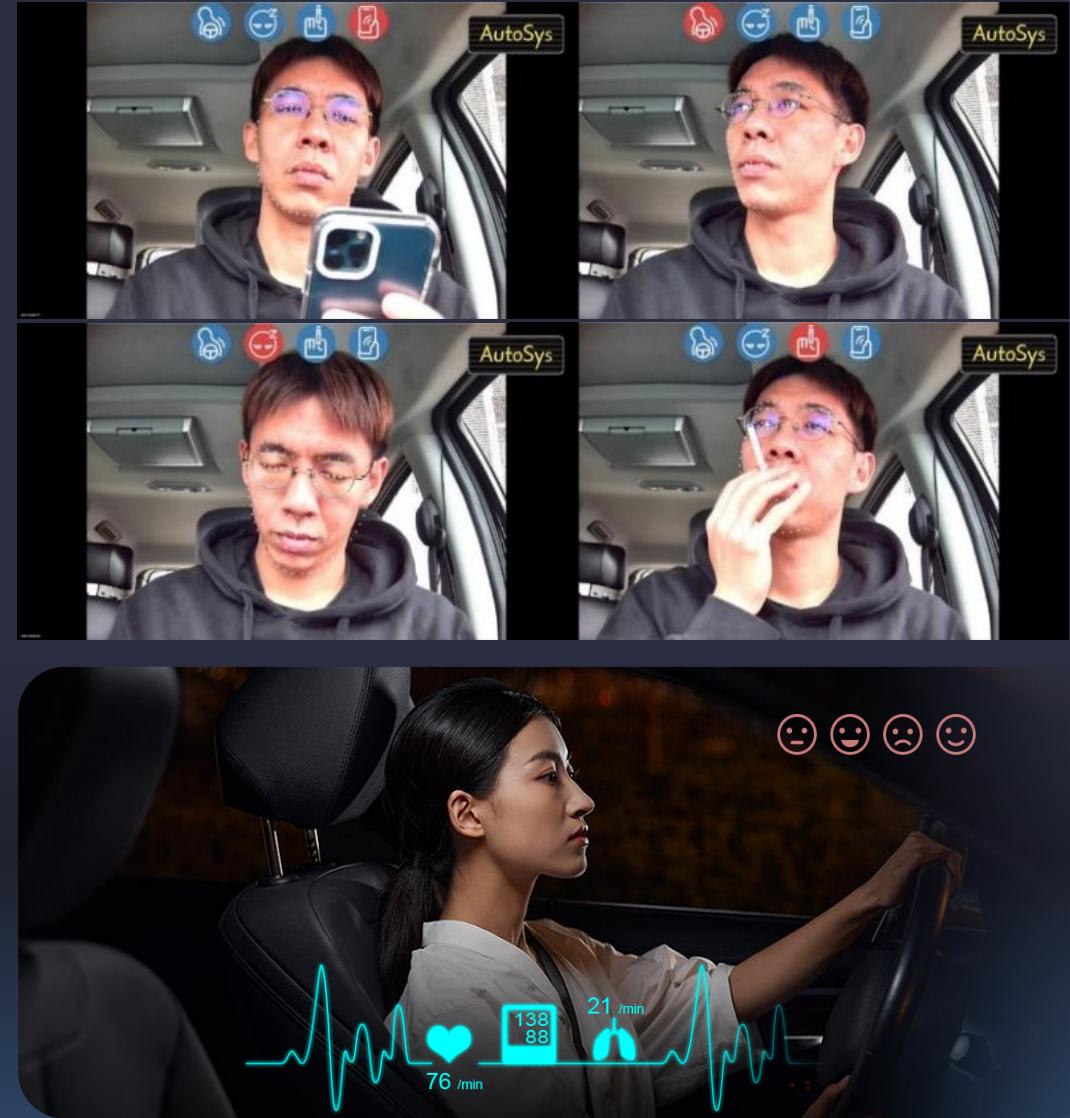
Smart Vision Sensors



■ FHD camera inputs Detection:

- Motorcycles
- Cars
- Traffic lights
- Traffic signs
- Traffic lanes
- Pedestrians

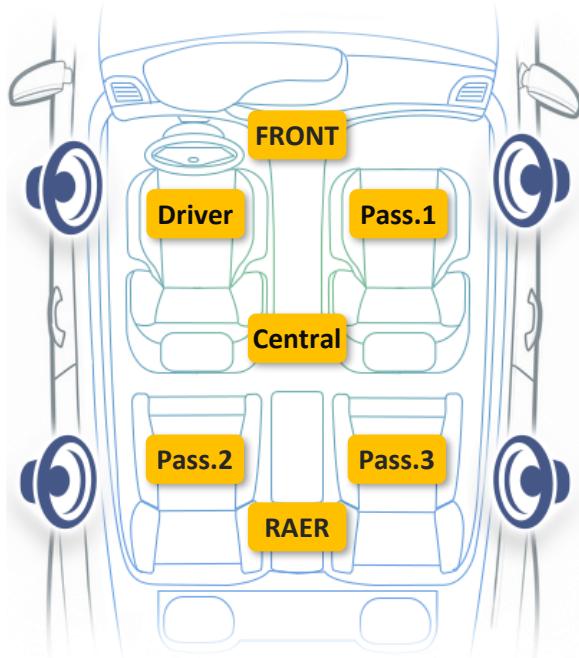
Driver Monitoring System – Vision-based



Immersive Sound

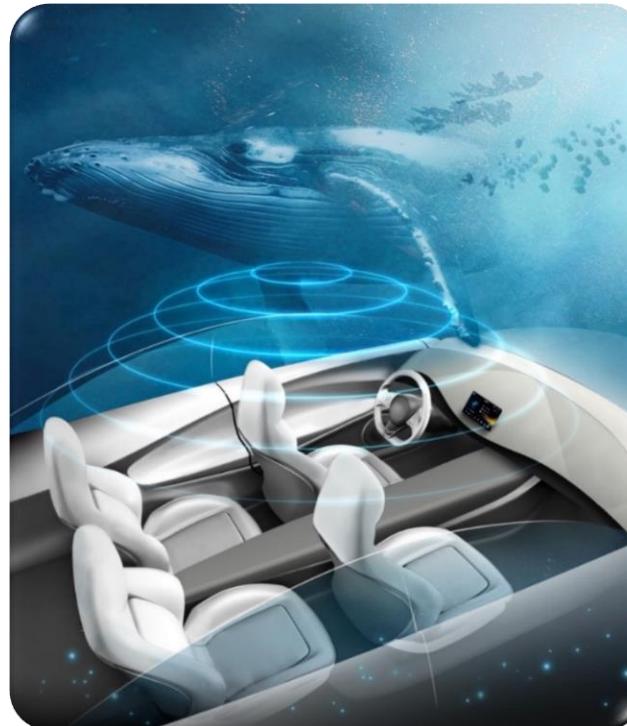
Joy – In-cabin Acoustics

Sound Field with IMS



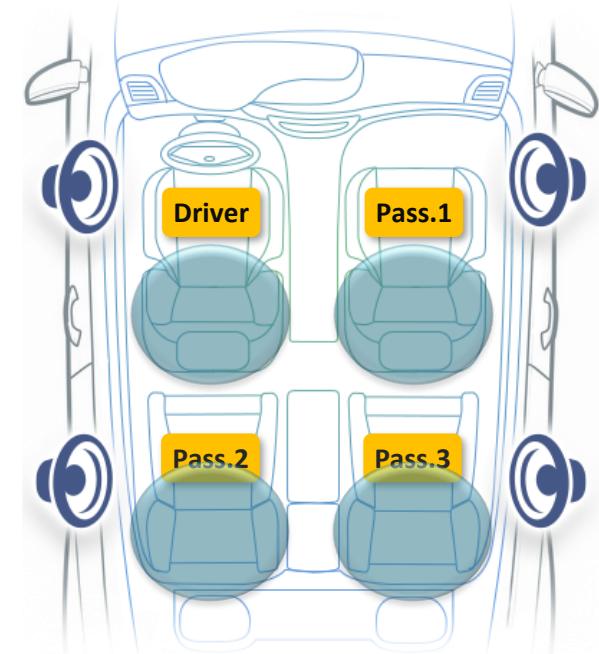
The IMS sees the occupants and feeds the info to IVI for optimal sound field settings.

Immersive Sound



Bringing the 3D surround technology, such as Dolby Atmos™ , or Sunplus Spatial Sound to the cabin.

Sound Bubble (w/ ANC)

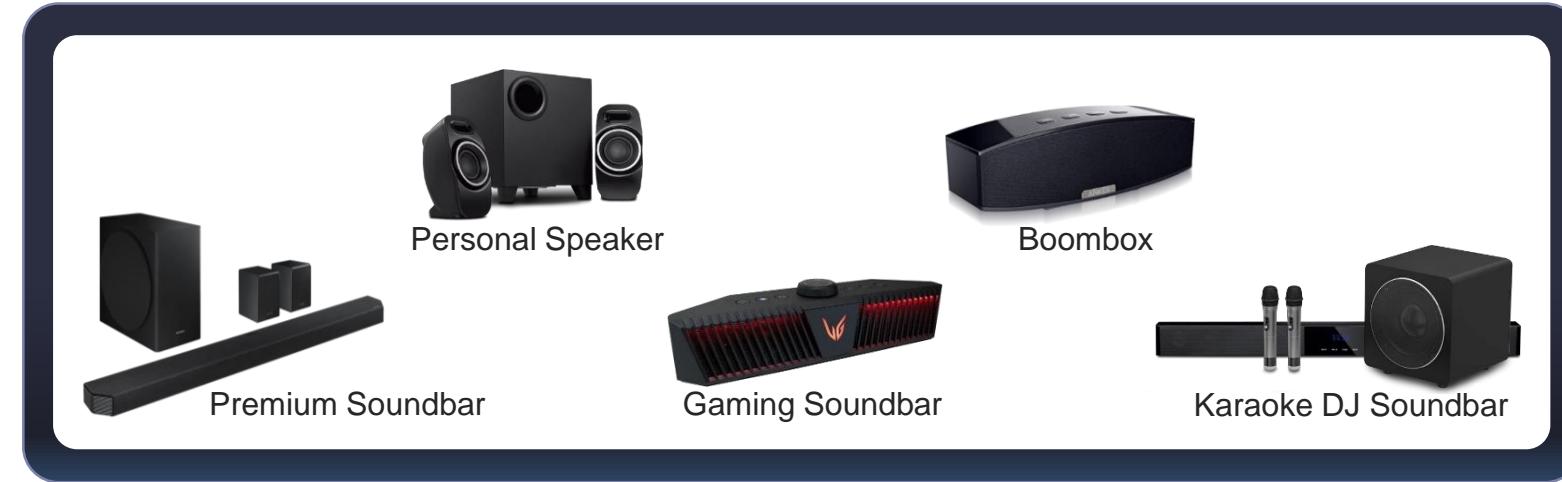


Giving every occupants a quiet zone, or independent listening zone.

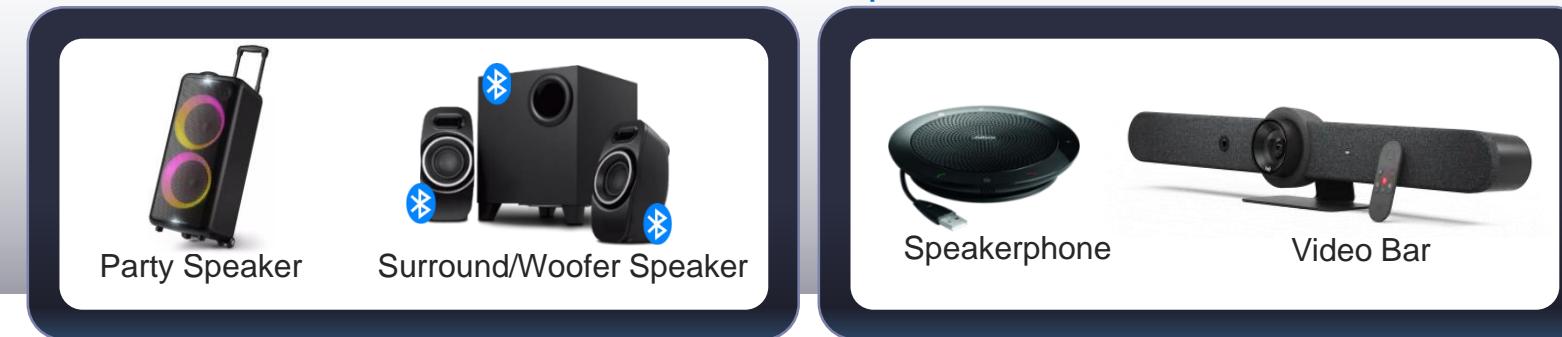
Audio

Audio Solutions

Speaker Out



Wireless Connection



Speech In

Best Cost-Performance Soundbar Solution

3D Sound Effects

- Dolby ATMOS v1.8
- DTS: X, IMAX enhanced
- MPEG-H
- Sunplus Spatial Sound

AI Sound Classifier

- Advanced AI algorithms accurately classify media content

Room Correction

- Optimize the acoustics of Main Bar, Subwoofer for room



Sound Tuning Tool

- Powerful GUI tuning tool supports arbitrary sound adjustment

3rd-party Algorithm

- Capable of compatible to customer legacy sound algorithm

Bluetooth v5.3

- LE Audio, LC3/LC3plus Codecs
- Multi-stream, Broadcast

Audio Streaming

- + External DTS Play-Fi Module
- + WiFi Module (Airplay-2, Alexa, etc.)

Soundbar

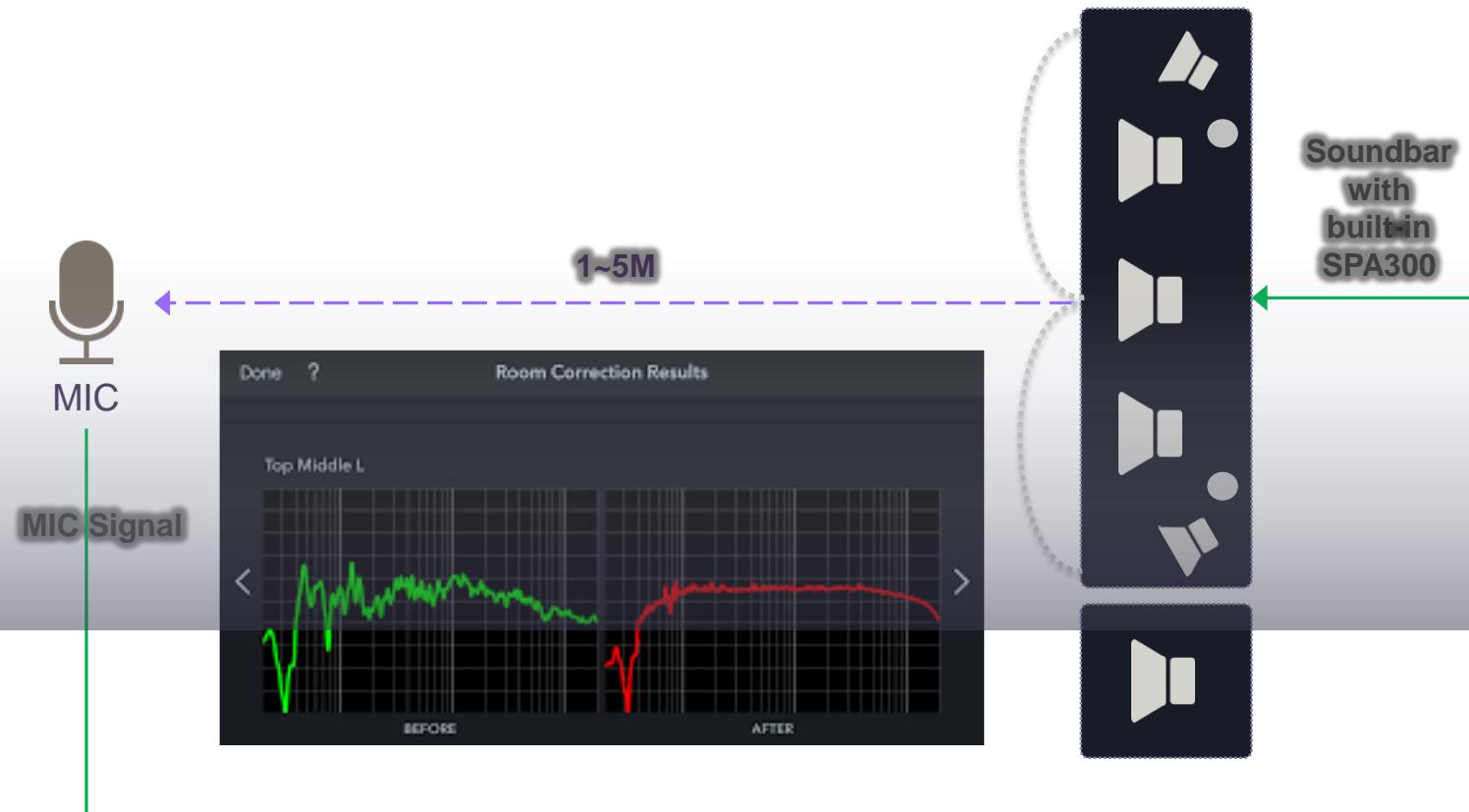
Bridging the gap of Flat-panel HDTV & Home Theater



Dolby Atmos

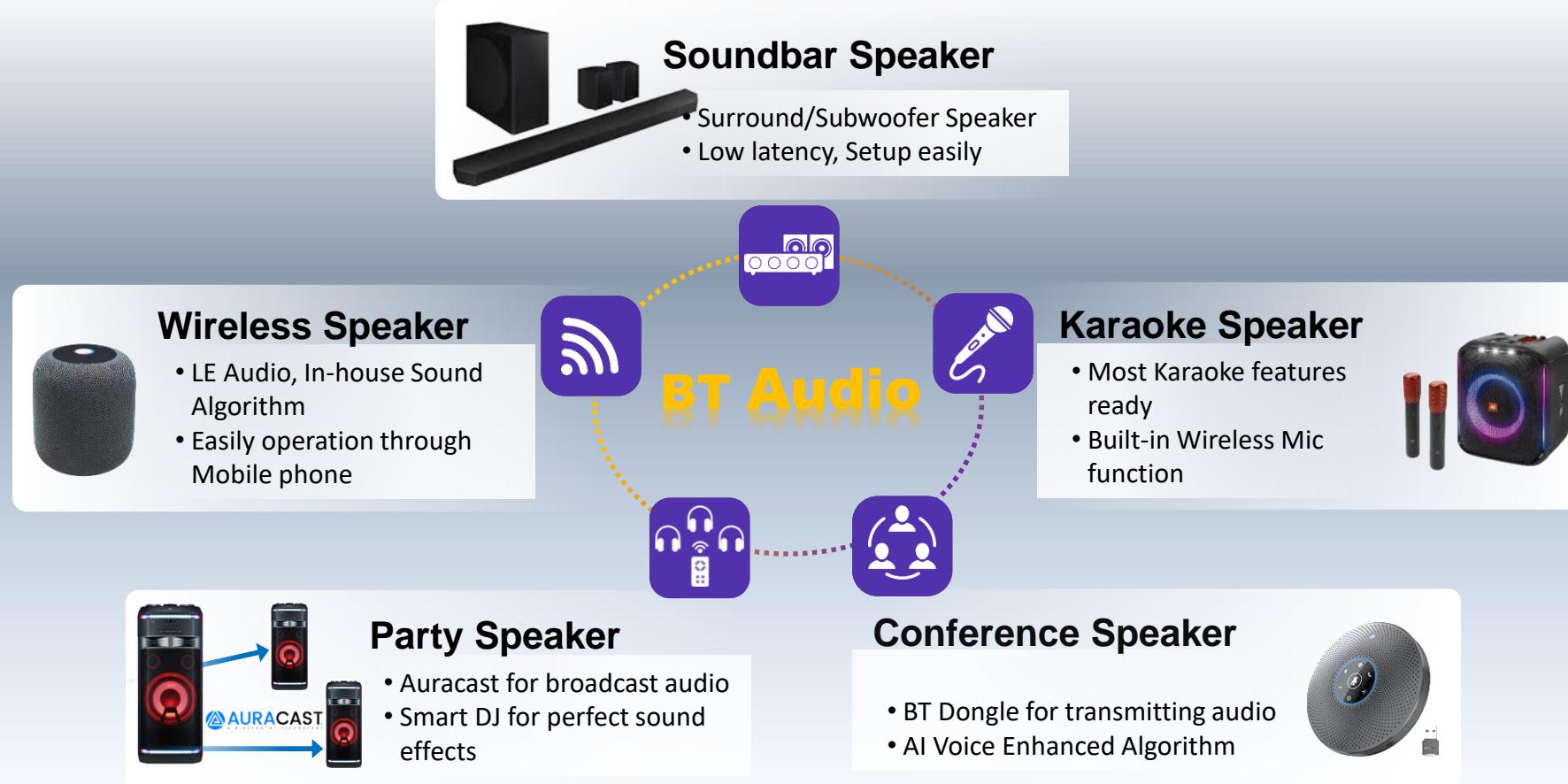
Room Correction

- A real-time DSP technology which automatically compensates and optimizes your room listening environment



Target Market

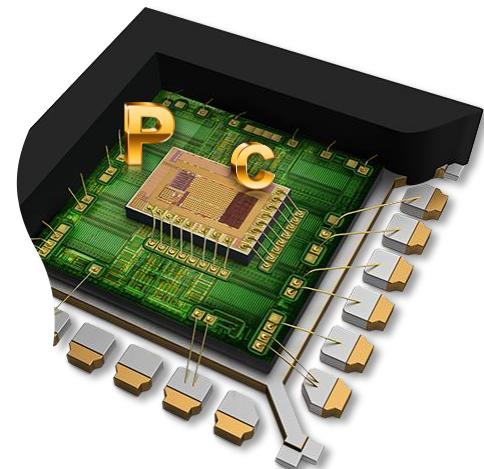
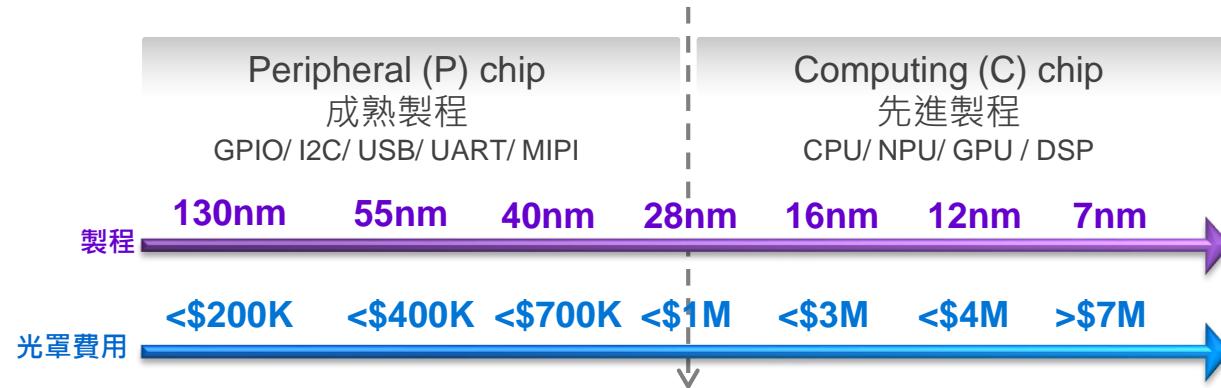
Innovative Bluetooth Audio ecosystem is creating



Plus 1

Plus1：共享智能運算Chiplet架構

通用高效算力結合專用周邊的 AI on Chip 解決方案



C1 – IOT LINUX CHIP

全球市場開枝散葉



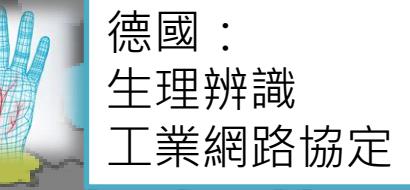
英國、挪威：
車隊物流追蹤系統



法國：
影印付費機



比利時：
充電樁



德國：
生理辨識
工業網路協定



俄羅斯：
教育用機器人



南韓：
工業控制器



中東：
農業管理
昆蟲辨識

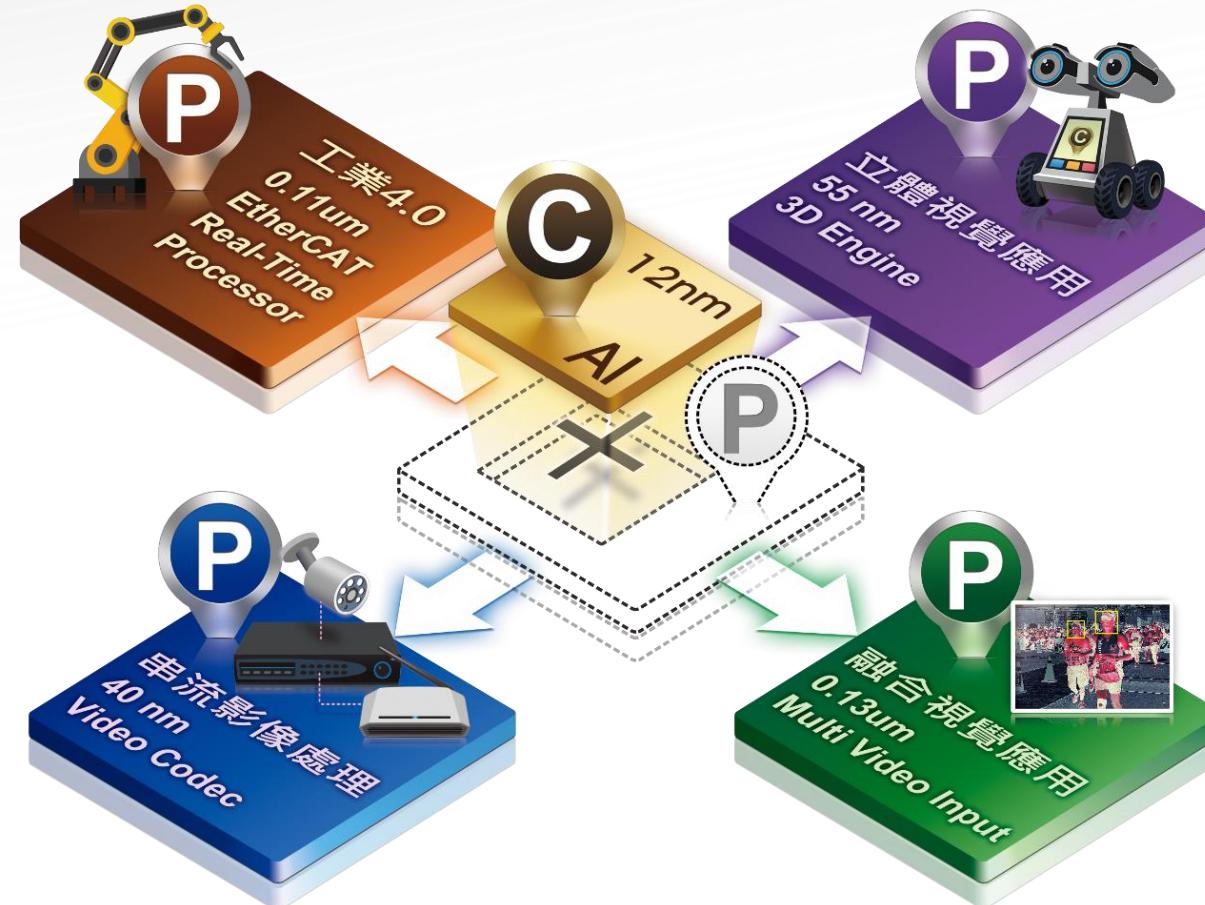


印度：
工業網路閘道器



台灣：
醫療終端設備

+ AI on Chip EVERY



C3V Application : Robot Market

Smart Robot everywhere in the world

■ Applications

- Robot vacuums 掃地機
- Automatic lawn mower 割草機
- Industrial AMR 無人搬運車



凌陽科技 IP 及 IC設計服務

為單晶片設計提供最佳化IP解決方案

IP 及 IC設計服務



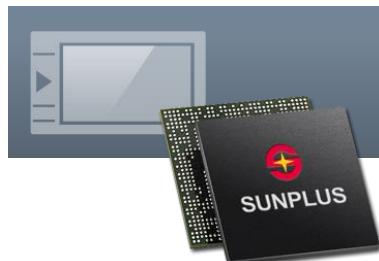
Media I/F (Audio/Video)

MIPI RX IP · HDMI Tx IP · LVDS IP · AUDIO ADC
AUDIO DAC · VIDEO DAC...



Data/Com I/F (Networking/Datacom)

10/100 ETHERNET PHY · USB 2.0 · USB 3.0
DDR 3/2 PHY · SerDes...



SoC Companion

SAR ADC · Pipeline ADC · PLL · SPREAD
SPECTRUM PLL...



SUNPLUS



Make difference