

Microchip 嵌入式解決方案研討會 2023



A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



SMART | CONNECTED | SECURE

Microchip Taiwan

2023 May

Corporate Overview

Leading Total Systems Solutions Provider:

- High-performance standard and specialized Microcontroller, Digital Signal Controller and Microprocessor solutions
- Power, Mixed-Signal, Analog, Interface and Security solutions
- Clock and Timing solutions
- Wireless and Wired Connectivity solutions
- FPGA solutions
- Non-volatile EEPROM and Flash Memory solutions
- Flash IP solutions



**\$6.8 Billion Revenue
in FY2022**



**Headquartered near
Phoenix in Chandler, AZ**



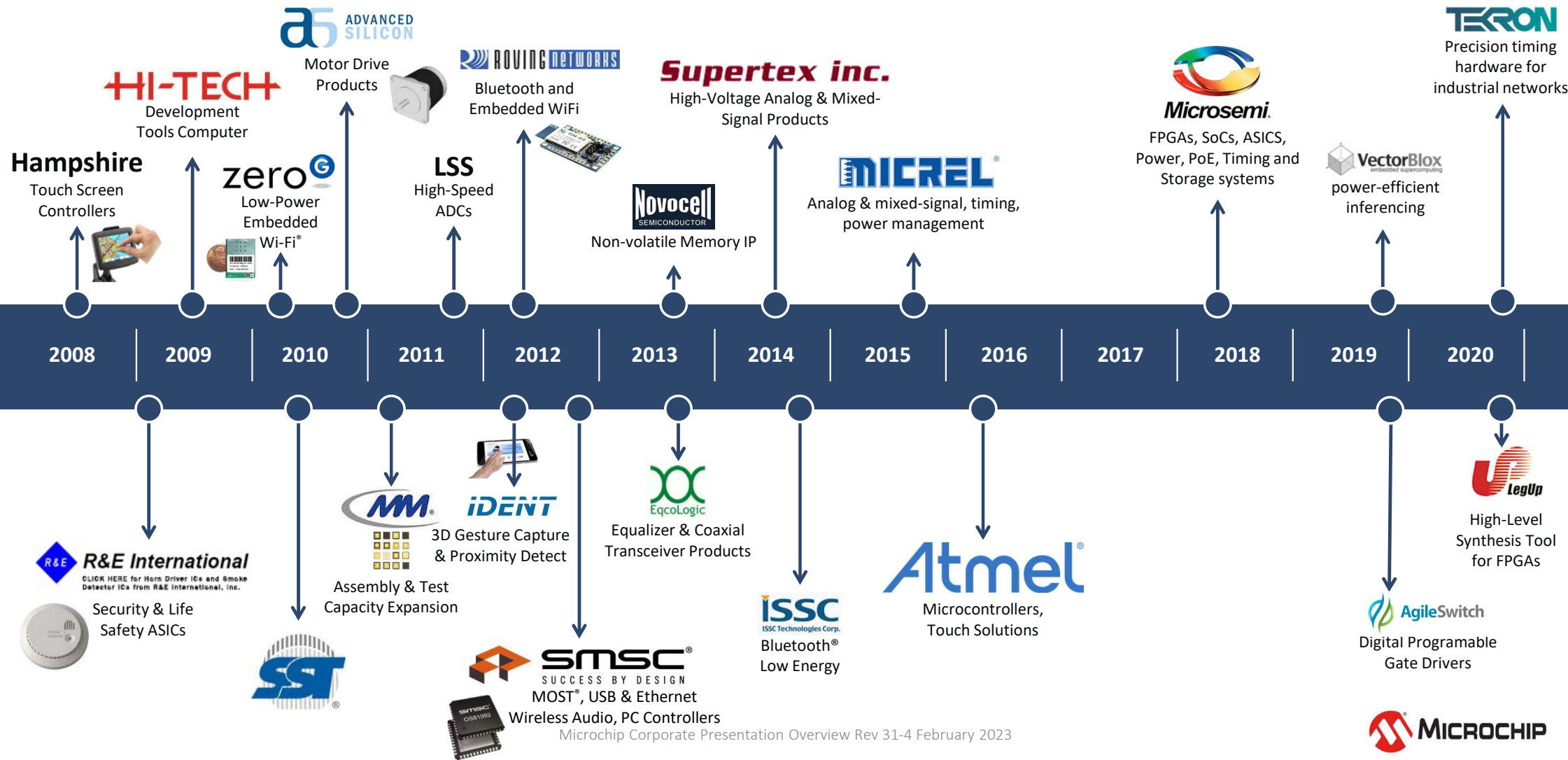
**~21,000
Employees**

Our Vision

***Be The Very Best Embedded Control
Solutions Company Ever***



Expanding Microchip Solutions Through Acquisitions

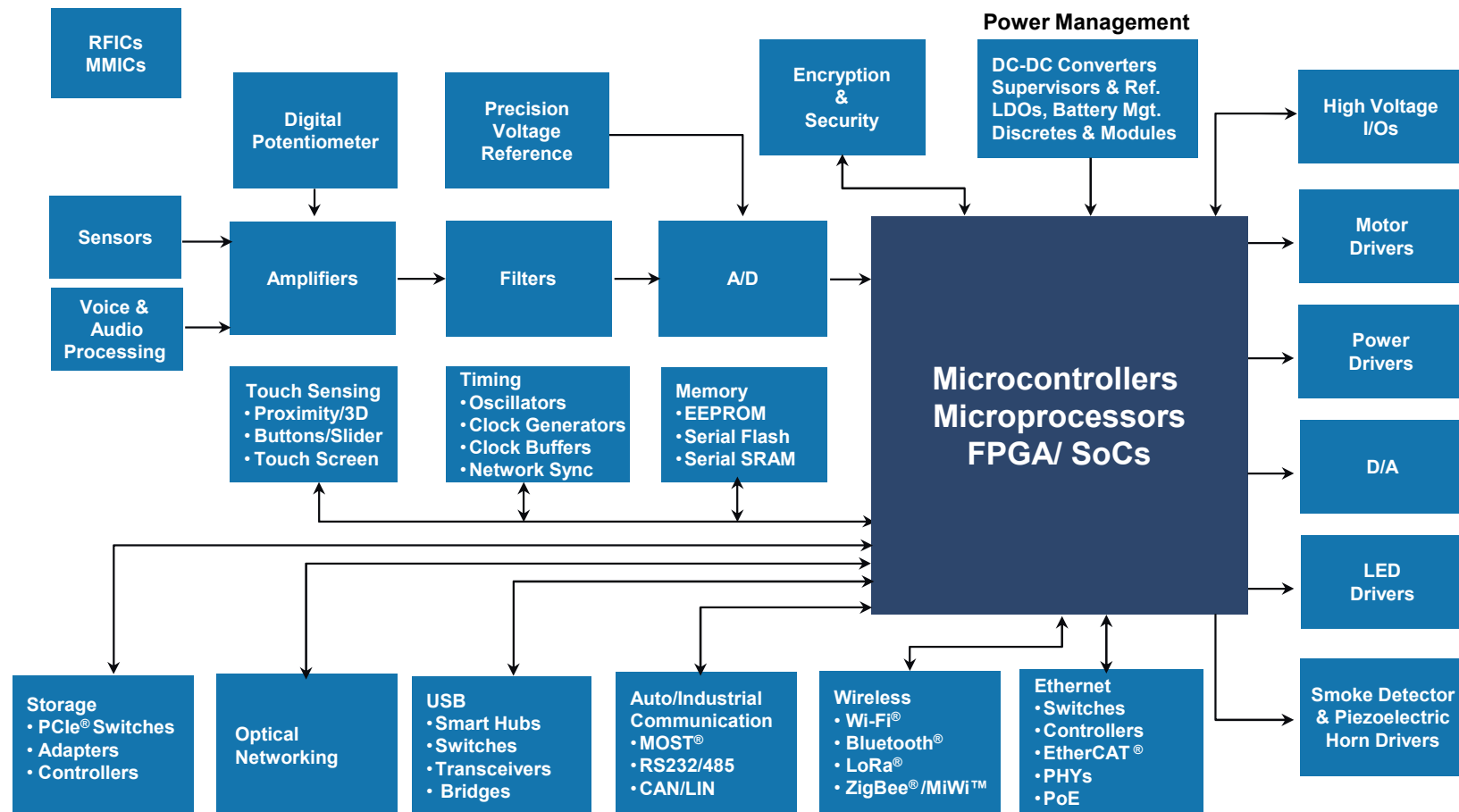


Microchip Corporate Presentation Overview Rev 31-4 February 2023



Providing System Solutions

Portfolio of Hardware, Software and Services



Our Purpose

Empowering innovation which enhances the human experience by delivering smart, connected and secure technology solutions



Worldwide Technical Support Centers



The only non-commissioned sales team in the semiconductor industry

Global Development Centers



Manufacturing Locations



6 High-Volume Factories; 14 Specialty Factories

Worldwide 8-bit Microcontroller Market Share

No.	1991 Rank	1996 Rank	2001 Rank	2005 Rank	2006-2009 Rank	2010 Rank	2014-2017 Rank	2021 Rank
1	Motorola	Motorola	Motorola	Motorola	Microchip	Renesas	Microchip	Microchip
2	Intel	NEC	Hitachi	Renesas	NEC	Microchip	NXP	NXP
3	Philips	Philips	NEC	Microchip	STMicro	Atmel	Renesas	Renesas
4	Mitsubishi	Hitachi	Microchip	NEC	Freescale	STMicro	STMicro	STMicro
5	NEC	Mitsubishi	STMicro	STMicro	Atmel	Samsung	CEC Huada	Others
6	Hitachi	Toshiba	Philips	Atmel	Renesas	Freescale	Cypress	
7	Toshiba	Matsushita	Toshiba	Toshiba	NXP	NXP	Si Labs	
8	Siemens	SGS-Thomson	Atmel	Philips	Cypress	Cypress	Datang	
9	TI	Intel	Matsushita	Fujitsu	Sony	Panasonic	SH Fudan	
10	Matsushita	Microchip	Sanyo	Infineon	Fujitsu	Fujitsu	Holtek	
11	National	Siemens	Samsung	Sanyo	Panasonic	Detang	Unigroup	
12	SGS-Thomson	Fujitsu	Mitsubishi	Samsung	Toshiba	NEC (1Q)	Panasonic	
13	Ricoh	TI	Infineon	Matsushita	Samsung	Sony	Nationz	
14	MHS	Sony	Sony	Sony	Datang	Toshiba	ABOV	
15	IIT	Zilog	TI	Sunplus	SI Labs	SI Labs	Ixys	
16	Sharp	Sharp	Fujitsu	Micronas	Holtek	JSC	Toshiba	
17	Fujitsu	Temec	Sunplus	Novatek	Infineon	Holtek	Sony	
18	Oki	Sanyo	Zilong	Intel	Elan	Infineon	On Semi	
19	Zilog	National	Novatek	Holtek	Winbond	Sonix	Sonix	
20	Sony	Oki	Micronas	Winbond	Denso	Elan	HZ Silan	
23	Microchip							

191%

Based on dollar shipment volume 1991-2021, Source: Gartner and Microchip

Microchip Corporate Presentation Overview Rev 31-4 February 2023



Worldwide 16-bit Microcontroller Market Share

No.	2004 Rank	2006 Rank	2008 Rank	2010 Rank	2012 Rank	2014 - 2016 Rank	2017-2019 Rank	2021 Rank
1	Renesas	Renesas	Renesas	Renesas	Renesas	Renesas	Renesas	Renesas
2	Infineon	Infineon	Infineon	Infineon	Infineon	Infineon	TI	Infineon
3	Freescale	Freescale	Samsung	TI	TI	Freescale/NXP	Infineon	TI
4	TI	Fujitsu	TI	Samsung	Freescale	TI	NXP	NXP
5	NEC	TI	Freescale	Freescale	Fujitsu	Microchip	Microchip	Microchip
6	Matsushita	Intel	Fujitsu	Fujitsu	Samsung	Spansion	Others	Others
7	Toshiba	Toshiba	Toshiba	Toshiba	Microchip	Samsung		
8	Fujitsu	NEC	Intel	Microchip	Toshiba	Toshiba		
9	Intel	Sunplus	NEC	Intel	Intel	INSIDE		
10	STMicro	Sony	Sony	Sony	INSIDE	EM Micro		
11	Oki	NXP	Panasonic	JSC Sitronics	Sony	NXP		
12	Sony	Micronas	NXP	Sunplus I	CEC Huada	Sunplus		
13	Micronas	Winbond	Winbond	Winbond	JSC	Sony		
14	Sunplus	Matsushita	Microchip	NXP	EM Micro	Ixys		
15	Winbond	Microchip	Micronas	Micronas	SH Fudan	Maxim		
16	Microchip	Samsung	Sunplus I	Sunplus MM	Sunplus	Datang		
17	Samsung	Oki	Sunplus MM	Seiko Epson	Datang	CEC Huada		
18	Philips	National	Sharp	Panasonic	Winbond	SSM		
19	Magnachip	Sharp	Rohm	Rohm	Ixys	Seiko Epsen		
20	Sharp	STMicro	Seiko		Seiko Epson	RTI Group		

Based on dollar shipment volume 1991-2021, Source: Gartner and Microchip

Microchip Corporate Presentation Overview Rev 31-4 February 2023



Worldwide 32-bit Microcontroller Market Share

No.	2010 Rank	2011 Rank	2012 Rank	2013 Rank	2014 Rank	2016-2017 Rank	2019 Rank	2020-2021 Rank
1	Renesas	Renesas	Renesas	Renesas	Renesas	Renesas	Renesas	ST-Micro
2	Freescale	Freescale	Freescale	Freescale	Freescale	NXP	NXP	NXP
3	TI	TI	ST-Micro	ST-Micro	ST-Micro	ST-Micro	ST-Micro	Renesas
4	ST-Micro	ST-Micro	TI	TI	TI	TI	Microchip	Infineon
5	Denso	NXP	Atmel	Atmel	Atmel	Infineon	Infineon	Microchip
6	Fujitsu	Denso	Denso	Infineon	NXP	Microchip	TI	TI
7	NXP	Atmel	Infineon	Denso	Infineon	Cypress	Cypress	Others
8	Atmel	Fujitsu	NXP	NXP	Denso	Others	Others	
9	Toshiba	Infineon	Toshiba	Melfas	Microchip			
10	Infineon	Toshiba	Fujitsu	Toshiba	Toshiba			
11	Panasonic	Panasonic	Panasonic	Microchip	Spansion			
12	Em Micro	EM Micro	Microchip	CEC-Huada	Cypress			
13	Rohm	Rohm	Melfas	Fujitsu	Samsung			
14	JSC	JSC	Samsung	Spansion	Melfas			
15	Shenzhen St	Microchip	Rohm	Cypress	Winbond			
16	Huahong	Shenzhen St	Energy Micro	Panasonic	Panasonic			
17	Seiko Epson	Huahong	CEC Huada	SH Huahong	Nationz Tech			
18	Winbond	Winbond	Nationz	SH Fudon	CEC Huada			
19	Microchip	Seiko Epson	SH Fudan	Winbond	Energy Micro			
20	Samsung	Samsung	Cypress	Datang	Rohm			

Based on dollar shipment volume 1991-2021, Source: Gartner and Microchip

Microchip Corporate Presentation Overview Rev 31-4 February 2023



Worldwide Microcontroller Market Share

No.	Company	2020	2021	Change	2021 Marketshare
1	NXP	2,980	3,795	27%	18.8%
2	Microchip	2,872	3,584	25%	17.8%
3	Renesas	2,748	3,420	24%	17.0%
4	ST	2,506	3,374	35%	16.7%
5	Infineon	1,953	2,378	22%	11.8%

Source: IC Insights, company reports

Microchip Corporate Presentation Overview Rev 31-4 February 2023



Analog Market Share

No.	Company	2020	2021	Change	2021 Marketshare
1	Texas Instruments	10,886	14,050	29%	19.0%
2	Analog Devices	7,722	9,355	21%	12.7%
3	Skyworks Solutions	3,970	5,910	49%	8.0%
4	Infineon	3,820	4,800	26%	6.5%
5	ST	3,259	3,906	20%	5.3%
6	Qorvo	3,182	3,875	22%	5.2%
7	NXP	2,466	3,457	40%	4.7%
8	ON Semi	1,606	2,115	32%	2.9%
9	Microchip	1,470	1,839	25%	2.5%
10	Renesas	890	1,110	25%	1.5%
-	Others	17,684	23,497	33%	31.8%
Total		56,955	73,914	30%	100%

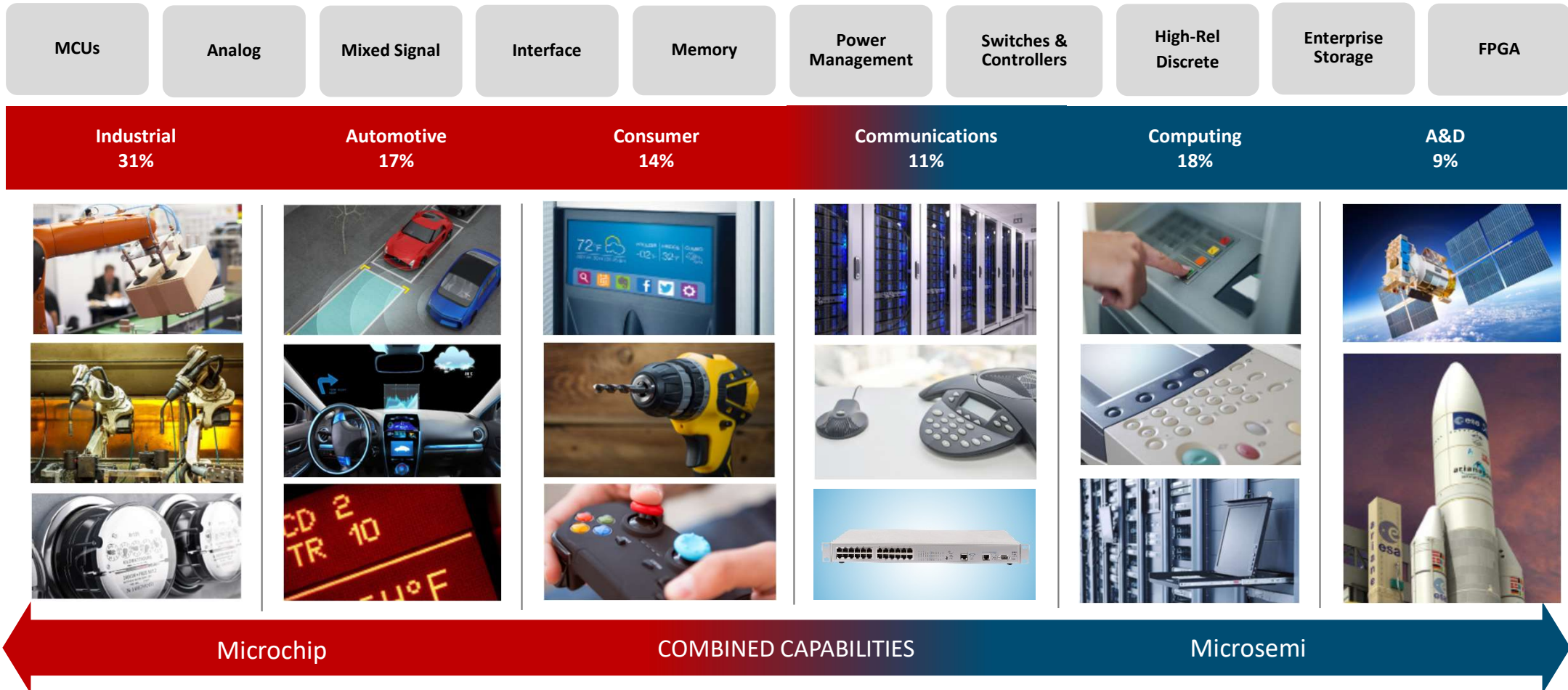
Source: IC Insights, company reports

Figures include sales from acquired companies in 2020 and 2021

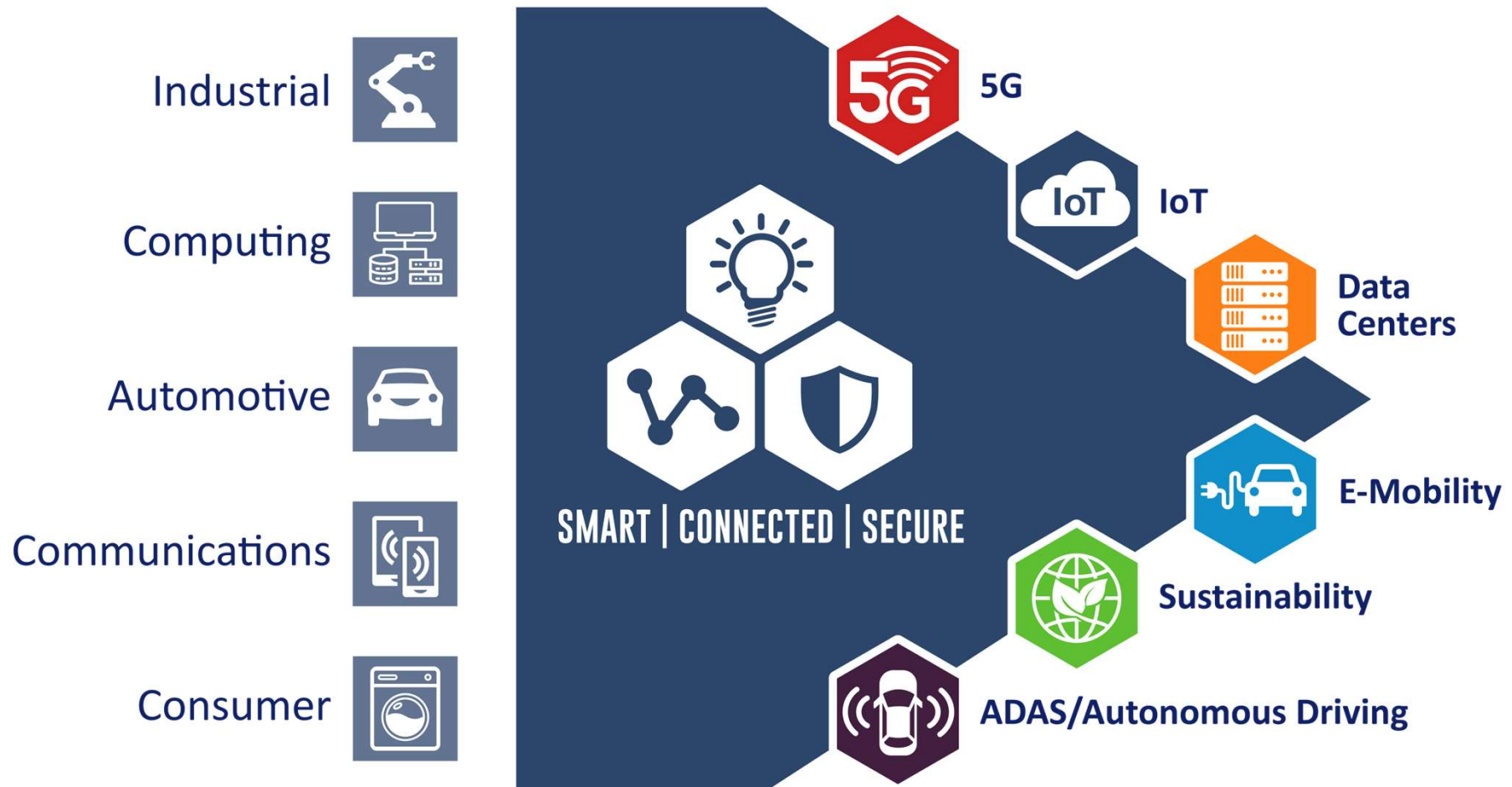
Microchip Corporate Presentation Overview Rev 31-4 February 2023



Combined Portfolio: End Markets



Market Megatrends



Clash of Two Worlds

- **Sustainability (energy saving)** and **Performance (energy-hungry)**
- Microchip's technologies can help alleviate these clashes.

Energy hungry



Performance

- Enablement of rich experiences
- Manifestation via high-end features



Energy saving (or energy efficient)



Sustainability

- Responsibility for resources
- Energy label marketing
- Enabled by product innovation

What About Microchip's Sustainability Corporate Policy?

“ *As best practices for sustainability evolve and mature, so has Microchip.* ”

“Our vision to be the leading supplier of embedded control solutions includes a corporate commitment to acting in an ethical manner. Our focus on environmental and social responsibility, transparency and engagement guides our decision-making processes and helps keep us accountable as we continuously improve all aspects of our business.”



Ganesh Moorthy
President and
Chief Executive Officer

Thank You

Microchip 2023 May ESS Taipei

活動重點提示



A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



SMART | CONNECTED | SECURE

線上填問卷/粉絲團按讚、追蹤、分享

憑完成畫面可至櫃台兌換贈品



問券



粉絲團

2023 ESS 的講義電子檔將於會後寄送至報名信箱

問券贈品



粉絲團按讚禮物



存根聯 2023 ESS (No.)

公司名稱	
姓名	
電話	

抽獎聯 2023 ESS (No.)

公司名稱	
姓名	
電話	

問卷贈獎活動及粉絲團贈品

線上填問卷/粉絲團按讚、追蹤、分享

憑完成畫面可至櫃台兌換贈品



問券



粉絲團

問卷贈獎活動及粉絲團贈品

問券贈品



粉絲團按讚禮物



抽獎聯：請填寫資料後投入摸彩箱 ☺

中獎率極高、祝您重大獎

存根聯 2023 ESS (No.)	
公司名稱	
姓名	
電話	

抽獎聯 2023 ESS (No.)	
公司名稱	
姓名	
電話	

講義及發票的取得

- **2023 ESS** 的講義電子檔下載連結，將於會後寄送至您報名時的 **E-Mail** 信箱
- 您參加 **2023 ESS** 的電子發票，將由綠界科技寄至您報名時的 **E-Mail** 信箱



2023嵌入式解決方案研討會 台灣特價開發工具訂購單

No.	P/N	Description	售價 (含5%稅)	數量	備註 5/08 數量 售完為止
1	APP001 v3.0a	APP001設計為用於 40-Pin DIP包裝的 PIC16F/PIC18F系列實驗板。 APP001實驗板上有附簡易的 ICSP燒錄區，可以在調整ICSP接腳JUMPER後當成簡易的 PIC16F/18F MCU的燒錄器。	1,200		庫存: 5
2	APP001T v3.0a	APP001T 為 APP001 的活動腳座版本 (第一片為NT\$1,250) (第二片(含)以後為 NT\$1,500)	1,500		庫存: 10
3	APP1618-SD (PIC16F1, PIC18 & Seg. LCD)	PIC16F1937 & PIC18F47J53 USB/Micro SD/LCD多功能實驗板	1,000		庫存: 10
4	APP045 v4.2 ES.d	ATSAM21G18A, OLED & Arduino Shield EVM 可搭配RTC教材,練習使用	2,200		庫存: 10
5	APP041 v3.10	PIC24FJ256GB106	2,200		庫存: 10
6	APP041-3 v1.0	APP041 dsPIC33CK256MP506 CPU 附加板	350		庫存: 5
7	APP053 v1.00	2 軸運動平台	5,000		庫存: 5
8	TRB1004 ATICE to PIN	6 Pins轉RJ-11的轉接板	100		庫存: 20
9	APP033 ICSP to RJ11 Adapter	ISCP 轉 RJ11的轉接板。	100		庫存: 20
10	APP-POWER-RTC1	APP-POWERRTC1 SR-Buck Power Board 是一塊純電源功率子板，專用於練習Buck架構控制，板上不含主控制器，便於使用者搭配不同主板練習混合式電源或是全數位電源	650		庫存: 20
11	APP-SAM9X60 Hobby Kit (WiFi 版本)	使用 SAM9X60D1G SIP，降低設計的難度、搭配 Microchip MU 及 eRTC 課程，練習 MPU 萬丈高樓平地起的技能	1,200		6 月出貨 預留 80 片
12	APP-LCD 1.8	使用Arduino 介面的 128 x 160 TFT (ST7735 控制器) 擴充板。並具備溫度 Sensor、MCP79410 RTCC、KXTJ3 3 軸加速度計	500		每場限量 6 片
13	APP020-PLUS-CK	使用 dsPIC33CK256MP505，搭配曾百由老師的書籍，為 dsPIC33CK 系列的最佳學習工具	3,000		庫存: 20
14	APP-BT-CAN-2021-TW	使用 PIC24FJ64GU202 這一個 Microchip 全新的 16-Bit MCU 為主要控制器，搭配 MCP2518FD 以及 RN4678 Dual Mode 的藍牙模組來構成一個小巧,但是功能十足的開發工具	800		庫存: 30
15	APP-ESS19-2 M-Watch	使用 ATSAME51J20A 完成的創意作品，可以用來作為穿戴式裝置的設計參考，小巧的模組間，蘊藏有許多實用的外部周邊，包含帶有電阻觸控的 TFT LCD	800		庫存: 20

- 1.以上售價僅限於嵌入式解決方案研討會活動期間有效。
- 2.參加嵌入式解決方案研討會之學員始具備購買資格, 每人每項目限購2套。
- 3.請於活動會場完成下單, 活動結束後, 恕不受理。

特價工具訂購單

• APP-SAM9X60 Hobby Kit

- 使用 SAM9X60 、練就萬丈高樓平地起的技能
- 搭配 Microchip LNX... 系列的 eRTC/RTC
- 生產中，6 月份交貨

• APP-LCD 1.8

- Arduino 介面的 TFT LCD + 3 Axis Sensor + RTCC + 溫度 Sensor 擴充板
- 限量每場 6 套





Microchip Technology Presents

Special Offer to Taiwan
ESS/RTC/eRTC
Attendees



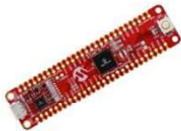
DISCOUNT COUPON

Buy now at microchip.com/purchase

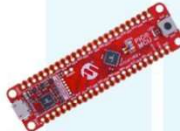
GET **15% OFF** List Price
on selected Microchip development tools



EV88G73A
DSPIC33CK64MC105
CURIOSITY NANO EVALUATION KIT



EV76S68A
SAM E51 CURIOSITY NANO
EVALUATION KIT



EV53Z50A
PIC16F18076 CURIOSITY NANO
EVALUATION KIT



EV50J96A
ATTINY3217 CURIOSITY NANO
EVALUATION KIT



EV14C17A
INTEGRATED GRAPHICS AND TOUCH (IGAT)
CURIOSITY EVALUATION KIT



DM240018
PIC24F LCD AND USB CURIOSITY PRO
DEVELOPMENT BOARD



EV80P12A
PIC32CM LE00 CURIOSITY PRO
EVALUATION KIT



ATSAMA5D27-SOM1-EK1
SAMA5D27-SOM1-EK1



EV40E67A
SAM9X60 CURIOSITY
DEVELOPMENT BOARD



DM320209
CURIOSITY PIC32MZ EF 2.0
DEVELOPMENT BOARD



ATWINC1500-XPRO



DM320210
SAM E54 CURIOSITY ULTRA
DEVELOPMENT BOARD



AC320004-3
LAN8720A PHY DAUGHTER BOARD



MA330046
DSPIC33CH512MP508
GENERAL PURPOSE PLUG-IN MODULE



DT100104
ATECC608B TRUST

- **DISCOUNT COUPON**
 - For 15 selected Items
 - Please Use E-Commerce Promotion Code to Buy



Microchip 開發工具補給站



只要在 **Microchip 2023 ESS** 現場，於 **Microchip** 官網購買
任何一項開發工具，即當場獲贈一張 **7-11 100 元** 商品卡
不僅如此，每超過美金 **\$100**，就再加贈一張 **7-11 100 元**
商品卡喔！錯過不再，請好好把握 😊

