

Nuvoton Technology Corporation

2Q'25 Investor Conference

Aug 5, 2025



Agenda



Nuvoton Financial Results



Nuvoton 2Q'25 Business Update



Automotive Market and Solutions



Q&A

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Nuvoton Financial Results



Statement of Comprehensive Income - Consolidated

Unit: NT\$ M	2Q'25		1Q'25		QoQ	
	Amount	%	Amount	%	Amount	%
Net Revenue	7,816	100	8,364	100	(548)	-
Gross Profit	2,728	34.9	3,451	41.3	(723)	(6.4)
Operating Income	(302)	(4)	273	3	(575)	(7)
Non-Operating Income	(343)	(4)	59	1	(402)	(5)
Income before Income Tax	(645)	(8)	333	4	(978)	(12)
Net Income (Loss)	(675)	(8)	217	2	(892)	(10)
EPS (NTD)	(1.61)		0.52		(2.13)	

Balance Sheet - Consolidated

Unit: NT\$ M	June 30 '25		March 31 '25		QoQ	
	Amount	%	Amount	%	Amount	%
Cash & Cash Equivalents	9,685	29	10,436	28	(751)	1
Accounts Receivable	4,353	13	4,983	14	(630)	(1)
Other Receivable	565	2	438	1	127	1
Inventories	6,537	19	7,281	20	(744)	(1)
Long-Term Investments	2,636	7	3,054	8	(418)	(1)
Property, Plant, Equipment and R.O.U	7,766	24	8,441	23	(675)	1
Others	2,021	6	1,930	6	91	-
Total Assets	33,563	100	36,563	100	(3,000)	-
Current Liabilities	11,037	33	11,889	33	(852)	-
Non-Current Liabilities	8,462	25	8,775	24	(313)	1
Total Liabilities	19,499	58	20,664	57	(1,165)	1
Total Equity	14,064	42	15,899	43	(1,835)	(1)
Debt/Equity Ratio	1.4		1.3			

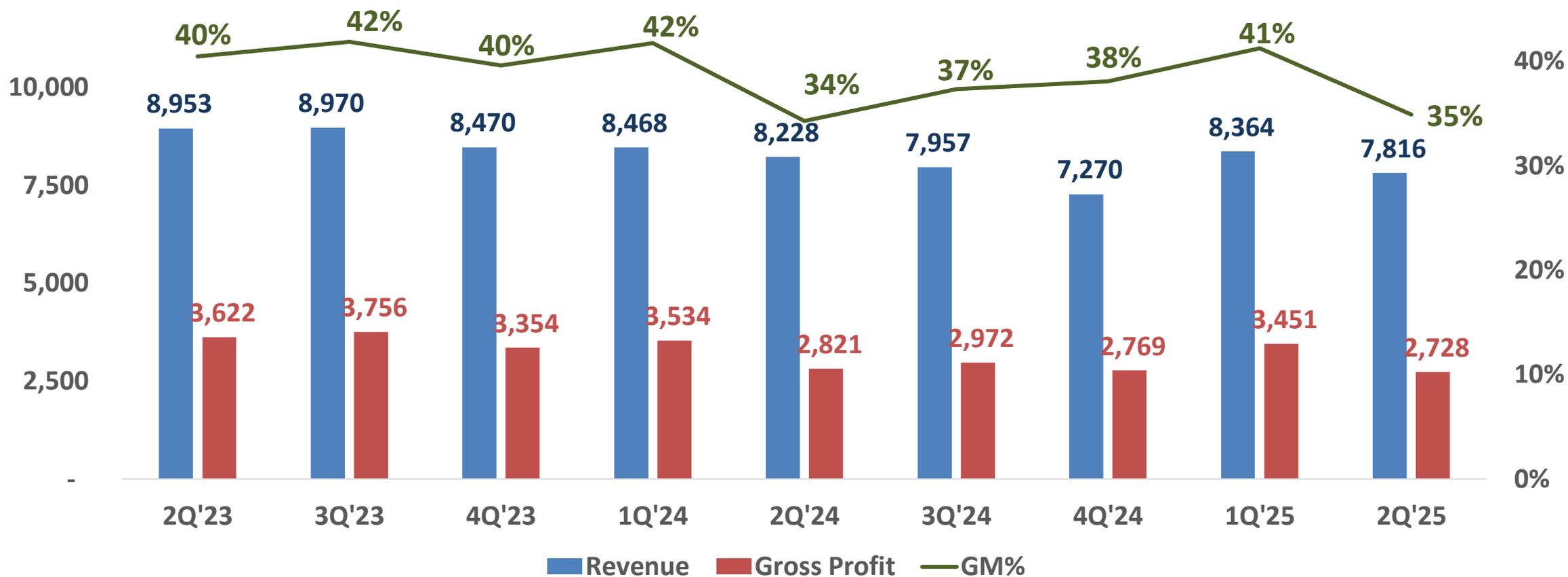
Statement of Cash Flows - Consolidated

	2Q'25	1Q'25	4Q'24
Unit: NT\$ M	Amount	Amount	Amount
Cash Flows from Operating Activities	202	(898)	(358)
Cash Flows from Investing Activities	(254)	(437)	(229)
Cash Flows from Financing Activities	217	5,679	1,060
Cash & Cash Equivalents	9,685	10,436	5,704

Revenue and GM Trend - Consolidated

Revenue/Gross Profit (NT\$ M)

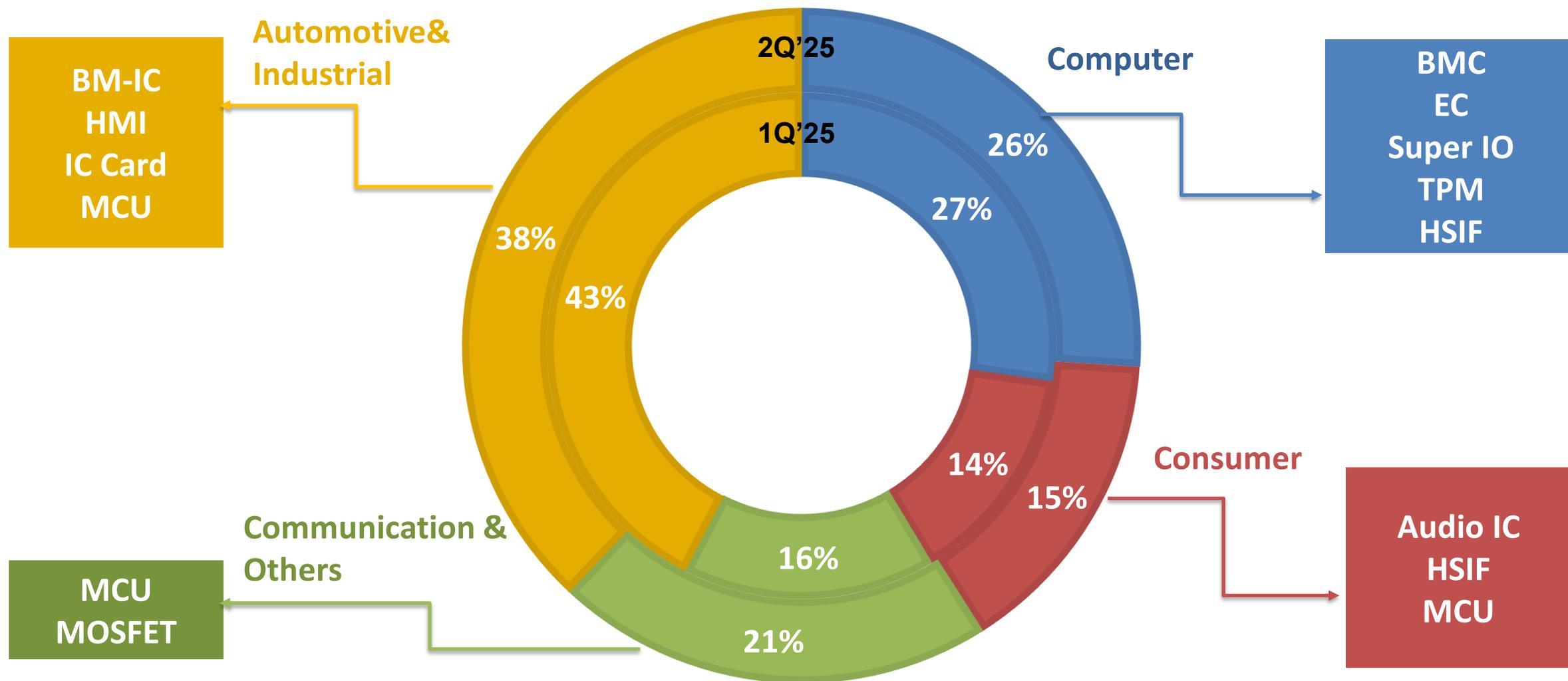
Gross Margin



Nuvoton 2Q'25 Business Update



2Q'25 Revenue by 4C Applications



Note: Foundry revenue was not included in the numbers .

Nuvoton 2Q'25 Business Update (1)

Automotive & Industrial

- ❖ Mass production of 4th-generation Gerda™ automotive HMI display IC series, featuring image processing technology, security, and display safety functions, applicable to E-mirrors, AR-HUDs, and cluster meters to enhance driving safety and user experience
- ❖ Mass production of a low power and high efficiency 48V motor driver IC with built-in MCU for fan application
- ❖ Nuvoton's TOF sensor, KW33000A1TZ, obtained functional safety certification (ASIL-B) to support future in-cabin sensing applications

Nuvoton 2Q'25 Business Update (2)

- ❖ Launched the “NuML Toolkit,” a high-efficiency AI deployment tool optimized for the NuMicro® M55M1 MCU platform to accelerate embedded AI implementation, already widely adopted in applications such as smart desk lamps, posture recognition, sound recognition, and image detection

Computer

- ❖ NPCM8mnx BMC chip achieved OCP S.A.F.E. certification and has been adopted by leading platform integrators

Communication

- ❖ Actively expanding non-smartphone applications of CSP MOSFET into smart glasses market, including engagements with U.S. leading customers

Nuvoton 2Q'25 Business Update (3)

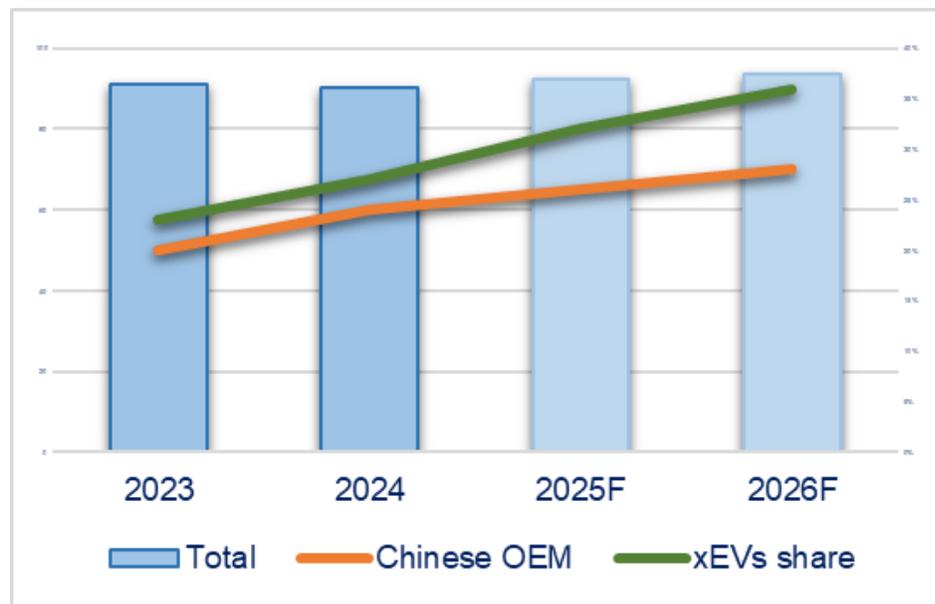
Consumer

- ❖ Introduced excellent SNR, filter-free 18W class-D audio amplifier, tailored for Bluetooth Speakers, Wireless Doorbells, Outdoor Surveillance Systems, and Handheld Game Consoles
- ❖ Nuvoton's AI MCU M55M1 enabled a smart desk lamp application that supports human detection and automatic light control based on the user's position and distance, which was selected as a finalist in the MOEA's 2025 "Best AI Awards"

Automotive Market and Solutions

Automotive Market Trends

➤ Vehicle Production; Million units



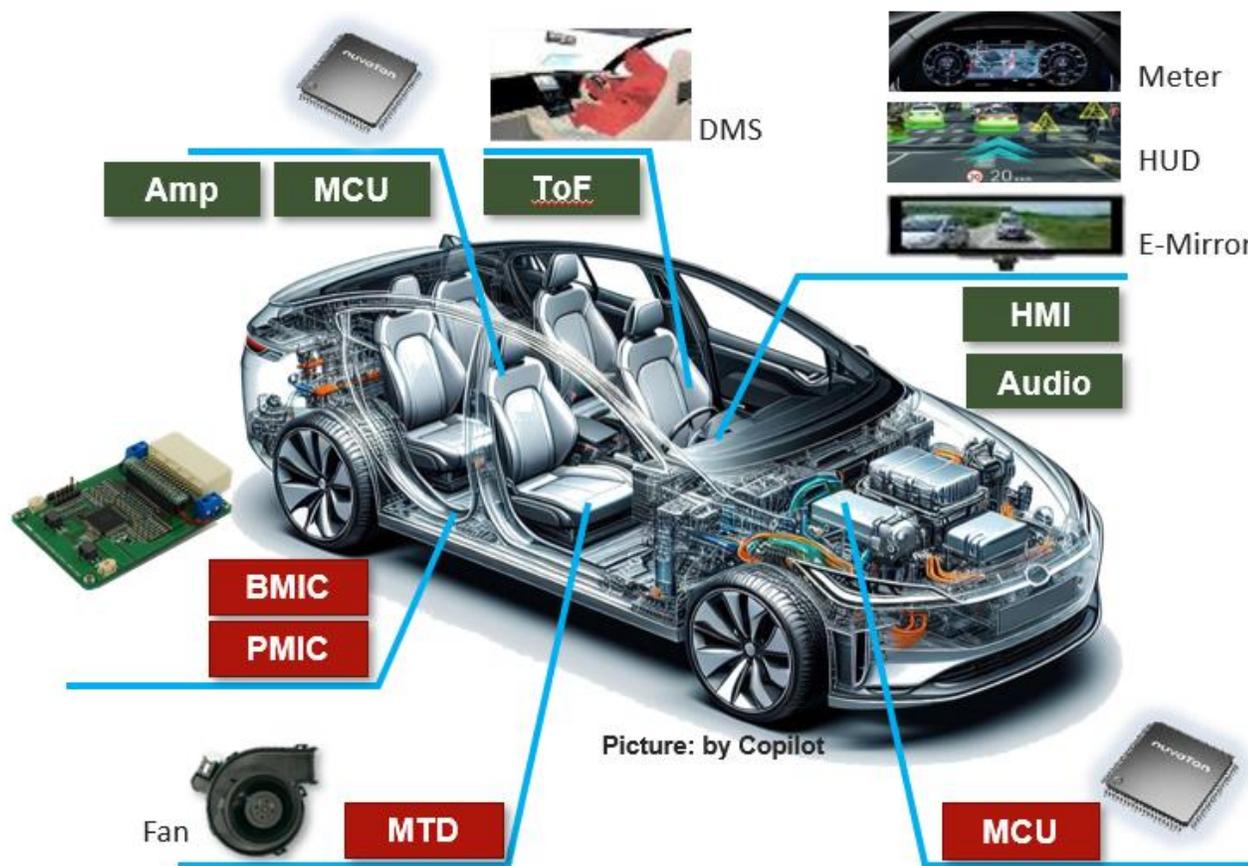
- Data Source: MarkLines – June 2025
- xEVs: BEV (Battery Electric Vehicle), PHEV (Plug-in Hybrid), FHEV (Full Hybrid)
- 2024 Production by region: China: 30Mu, Western Europe: 10Mu, USA: 10Mu, Japan: 8Mu, India: 6Mu

➤ Global Automotive Market

- ✓ Vehicle sales are expected to continue growing
 - However, some OEMs and supply chains are still adjusting inventory in the short term.
- ✓ EV penetration will keep increasing, though the growth rate is less optimistic than before
 - Subsidy policies have been adjusted.
- ✓ Competition in the China market remains intense
 - China has expanded that competition globally
 - Impacting the pace of product iteration, pricing, market share, etc.
 - These developments have affected the entire supply chain, including Nuvoton and our customers.
 - Global OEMs have also started to respond.
 - Some countries are introducing protectionist measures → aimed at supporting local suppliers.

Innovative Automotive Solutions by Nuvoton

Our efforts are centered on two strategic domains: in-cabin systems and powertrain solutions.



In-Cabin System

Powertrain

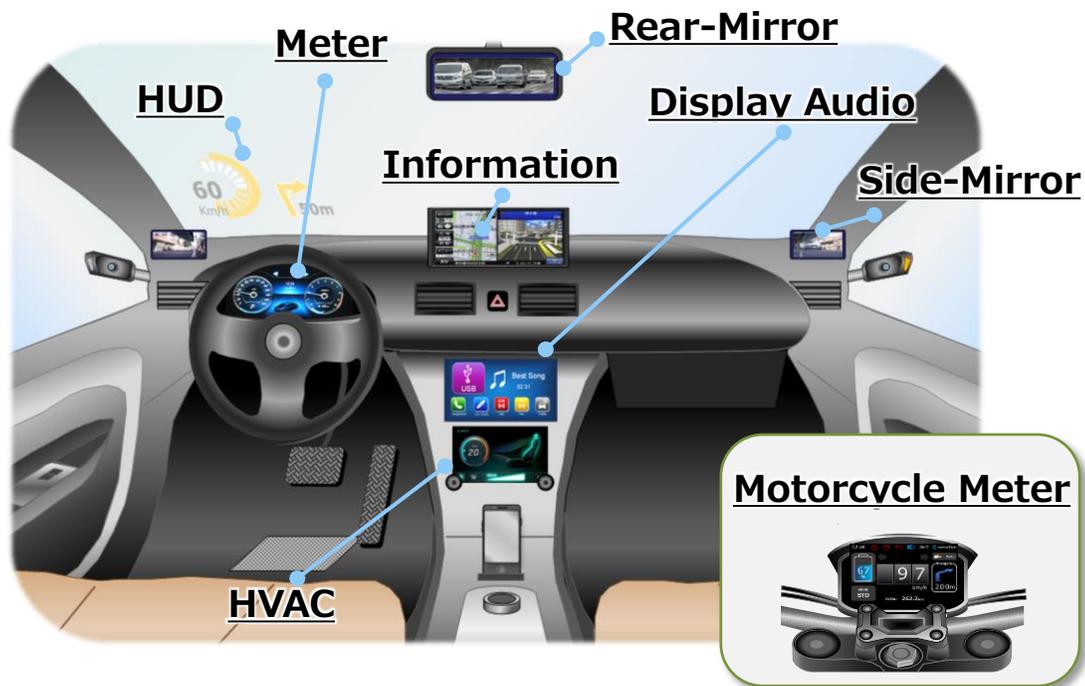
Note:

- HMI: Human Machine Interface
- HUD: Head-Up Display
- ToF: Time-of-Flight
- DMS: Driver Monitoring System
- MCU: Microcontroller Unit
- Amp: Amplifier
- BMIC: Battery Monitoring IC
- PMIC: Pack Monitoring IC
- MTD: Motor Driver

Gerda™ (HMI) Series Overview

Gerda™ is an automotive HMI display IC developed by Nuvoton. It enables HMI solutions that enhance vehicle safety, security and comfort, while maintaining system-level cost efficiency.

Gerda's applications in cabin



HAVC: Heating, Ventilation, and Air Conditioning

The features and value Gerda provide

Safety

- ✓ Fast Boot : Displayed within 0.5s
- ✓ Improved visibility of images: Super resolution / Contrast correction

Security

- ✓ Security : Program tampering prevention
- ✓ Failure diagnosis : Anomaly detection of telltale display

Comfort able

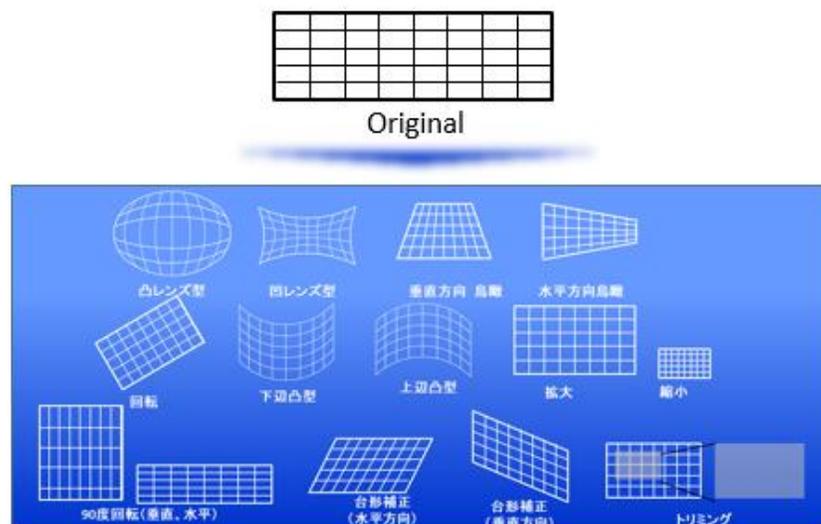
- ✓ High quality graphics : 2.5D Graphics Engine
- ✓ Audio enhanced : Music playback

Enabling Features for HUD Systems

By keeping critical information within the driver's natural line of sight, the HUD helps create a safer and more comfortable driving environment.

Low-Latency Processing & Advanced Distortion Correction

- ✓ Low-latency processing of less than 1 frame for real-time display.
- ✓ Free-form distortion correction engine to support flexible and curved display designs



Dual-Projection HUD

- ✓ Enables simultaneous display of driving information at both near and far focal distances, enhancing readability and driver awareness.



Nuvoton Automotive HMI Product overview

The Gerda™ lineup

Integrates image processing, security, and safety features to meet the diverse needs of HMI applications.

- ✓ **Gerda-4M:** Equipped with advanced image processing engines and supports Full-HD resolution for high-performance displays.
- ✓ **Gerda-4L:** Features an image compression engine that enables high-quality image rendering without external DRAM.
- ✓ **Gerda-4C:** Delivers 2.5D graphics capabilities, functional safety, and robust security features—all with a focus on cost efficiency.

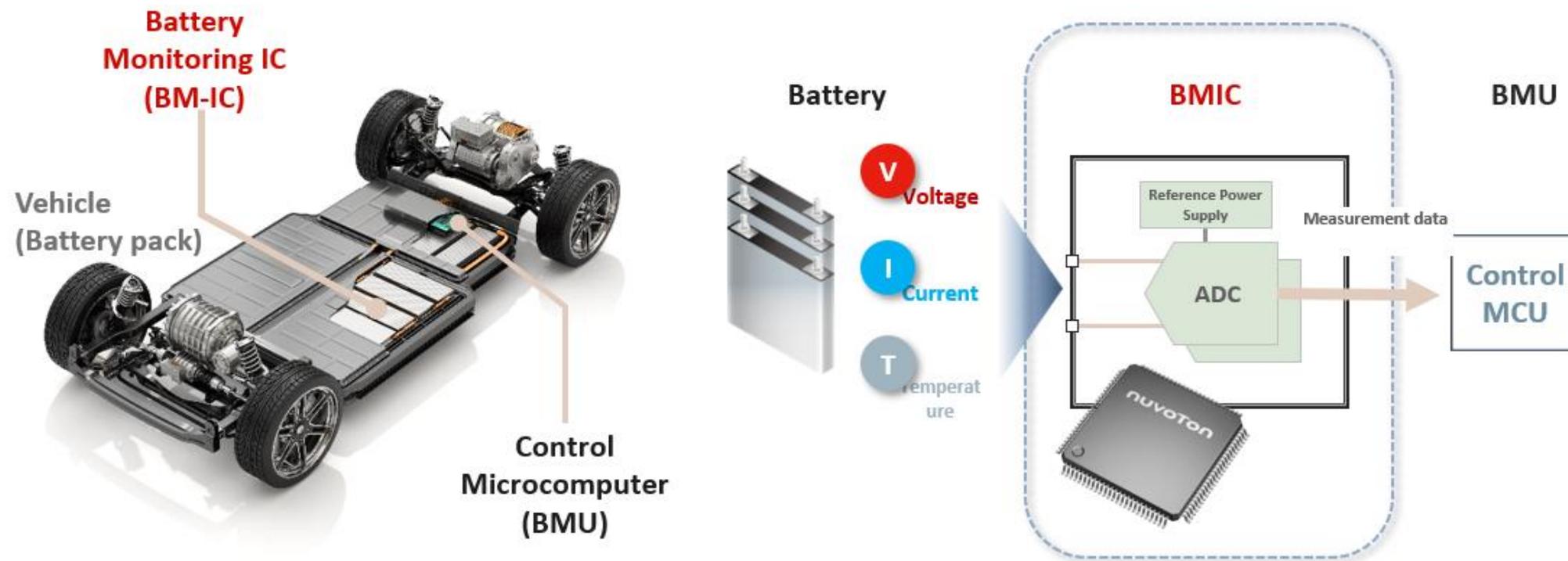
The Gerda-4 series support the functional safety level ASIL-B.

Application	HVAC/2W Meter	4W Meter	HUD	E-Mirror
Resolution				
Full-HD (1920x720)			Gerda-4M 216pin : Built-in RAM(8MB or 10MB) 	
WXGA (1280x720)	Gerda-4L  216/256pin : Built-in RAM(6MB)			
WVGA (800x480)	Gerda-4C  100/128/144pin : Built-in RAM(3.5MB)			

Automotive Battery Management System (BMS)

The BMS continuously monitors battery voltage, current, and temperature to prevent hazardous conditions such as overcharging and over-discharging.

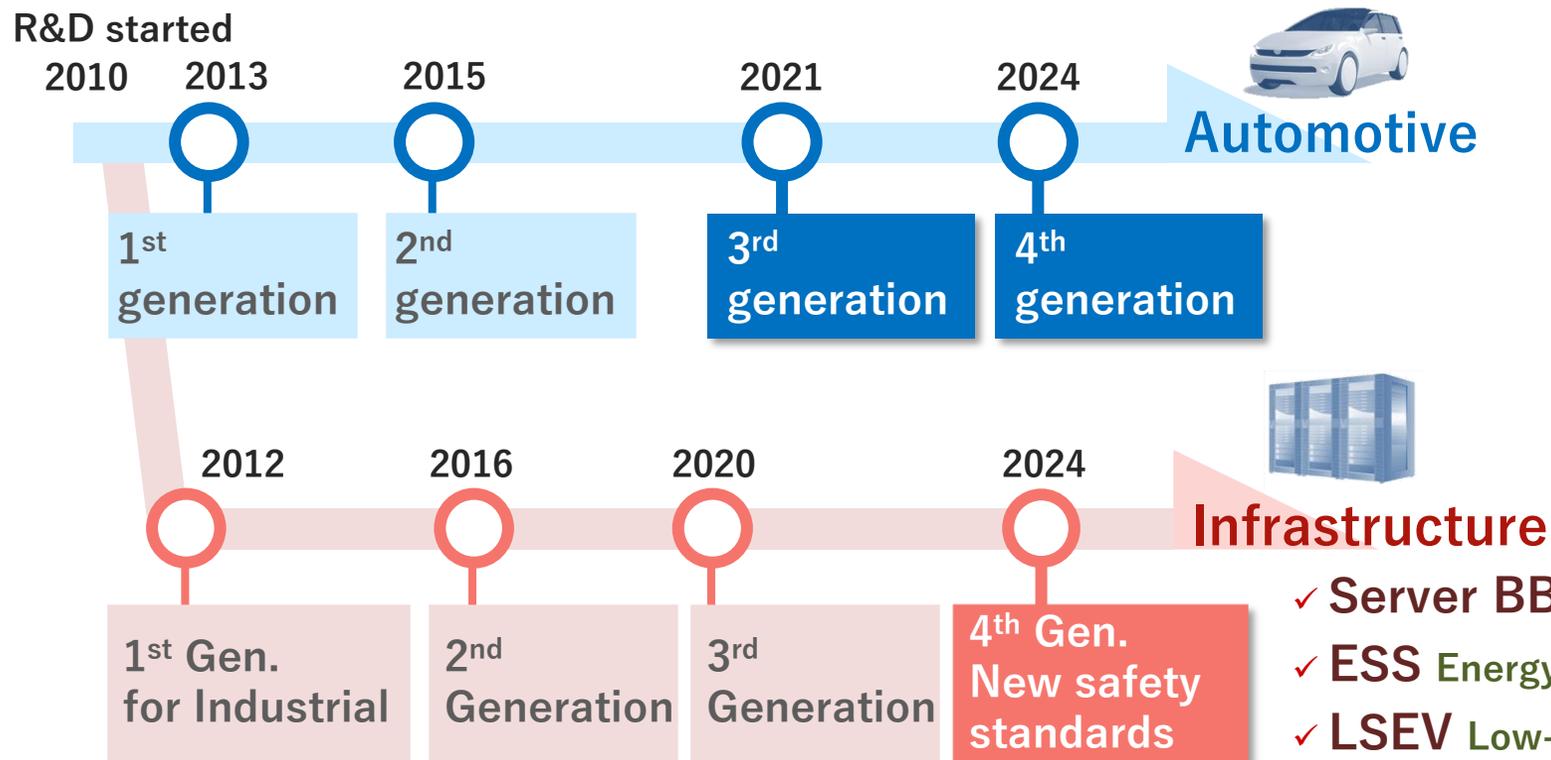
It primarily consists of a battery monitoring IC (BM-IC), a control microcontroller (BMU), and dedicated software.



Nuvoton's Progress and Roadmap in BM-IC

Nuvoton BM-IC history & roadmap

From the early stages of the EV market, Nuvoton has been at the forefront of developing advanced solutions that prioritize safety and energy efficiency.



Success stories

Trusted by over 10 major global OEMs, Nuvoton powers HEV, BEV, and PHEV vehicles operating worldwide.



- ✓ **Server BBU** Backup Battery Unit
- ✓ **ESS** Energy Storage System
- ✓ **LSEV** Low-Speed Electric Vehicle

Nuvoton BM-IC Features and Product Lineup

Nuvoton technologies & features

1 Simplifying BMS

- ✓ One IC manages up to 25 in-series battery cells
(Industry's highest level)

2 Safety and reliability

- ✓ Redundant measurement system
- ✓ Improving communication robustness

3 Safety monitoring while the car is parked

- ✓ Stand-alone functional block detecting battery abnormalities and alarming

4 Estimation of SOC and SOH

- ✓ Synchronized current and voltage measurement within 10us (10^{-6} second; *Industry's fastest level*)
- ✓ High-accuracy estimation of SOH

BM-IC lineup

Battery monitoring IC

- KA84950UA(25ch)
- KA84930UA(20ch)



Pack monitoring IC

- KA84917UA



Communication IC

- KA84922UA



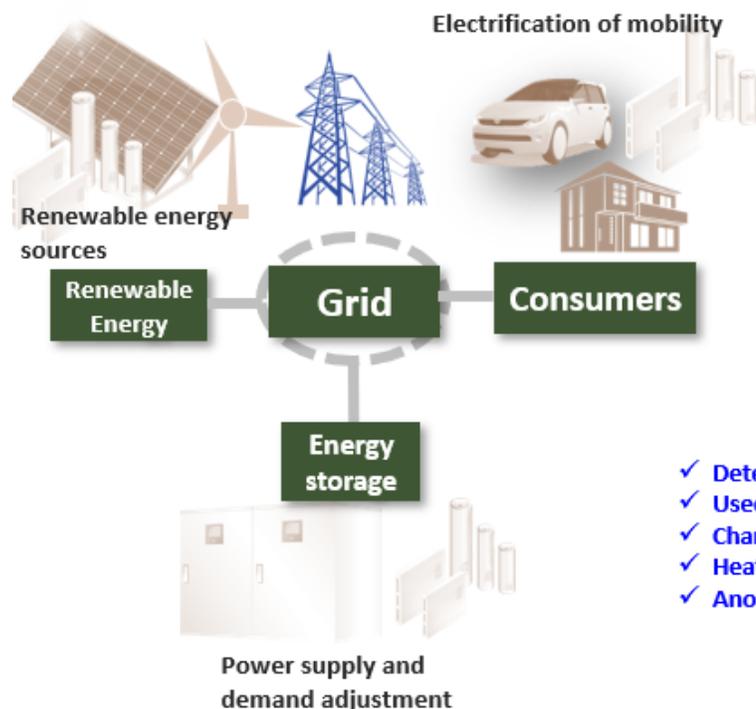
Note:

- ✓ SOC: State of Charge
- ✓ SOH: State of Health

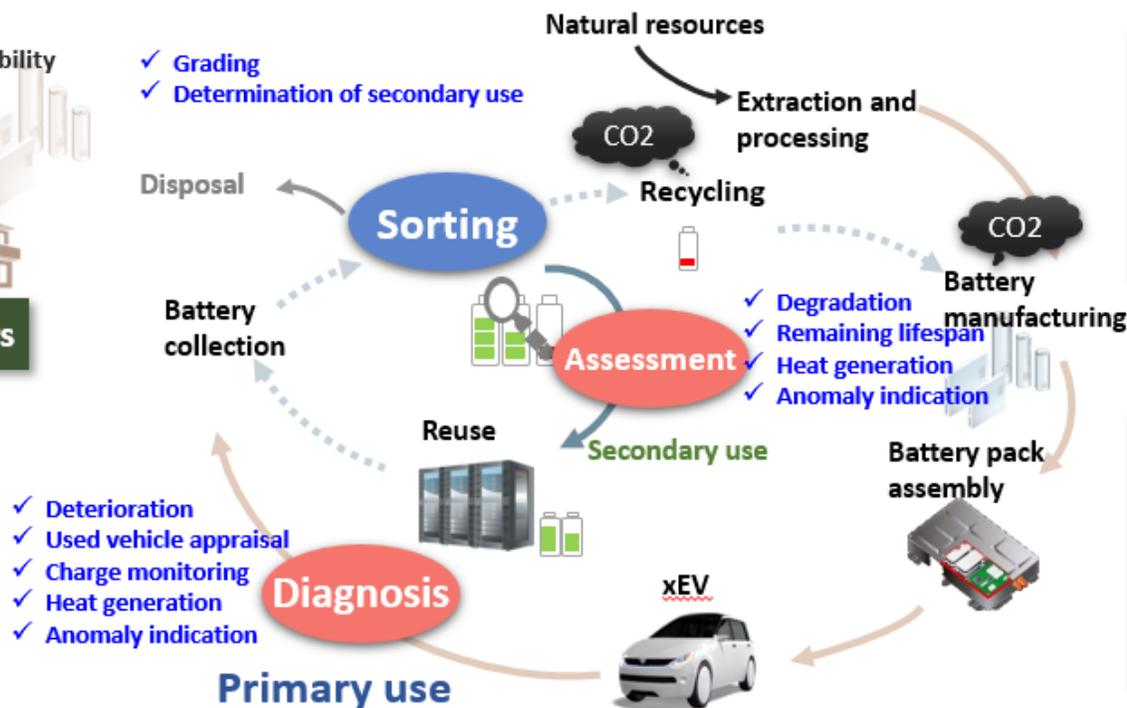
Future Development: Enabling a Circular Economy

The safe and efficient circular use of batteries—central to the energy value chain—is essential for realizing a sustainable future. Semiconductor manufacturers also play a critical role in this effort by enabling accurate battery measurement, diagnostics, and data integration.

The Role of Batteries in the New Energy Value Chain



Establishment of a circular economy for storage batteries



Role of semiconductor

Acquire essential battery state estimation parameters to enable accurate and efficient battery data integration.

Facilitate the activation of the new energy value chain and the development of a sustainable battery ecosystem.

Questions & Answers