



Attracting Tomorrow



TDK Corporate Charts

TDK-Micronas GmbH

Wolfsburg, Germany
October, 11-13, 2022

At a glance

TDK Corporation is a leading electronics company. Our focus is on information and communication technology, automotive, industrial and consumer electronics markets. TDK's comprehensive portfolio features passive components such as ceramic, aluminum electrolytic and film capacitors, inductive devices, high-frequency components, and piezoelectric material products and circuit protection devices. Our product spectrum also includes sensors and sensor systems such as

temperature and pressure, magnetic and MEMS sensors. In addition, TDK provides power supplies and energy devices, magnetic heads, and more. The portfolio is marketed under the product brands TDK, EPCOS, InvenSense, Micronas, Tronics and TDK-Lambda. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, North and South Americas.

Key info (fiscal year 2022, ending March 31)

Business	<ul style="list-style-type: none"> ● Passive components ● Sensor application products ● Magnetic application products ● Energy application products ● Others
Headquarters	Tokyo, Japan
Sales	JPY 1,902.1 billion
Sites	More than 250 factories, R&D & sales offices in more than 30 countries and regions
Employees	116,808

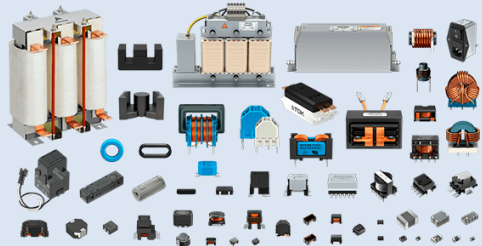
Major milestones

1935	TDK (<i>Tokyo Denki Kagaku Kogyo</i> = <i>Tokyo Electric & Chemical Industries</i>) established in Japan to manufacture and commercialize ferrites
1986	SAE Magnetics acquired
2005	Amperex Technology Limited (ATL) acquired
2005	Lambda Power Group acquired
2007	Recording Media business sold
2008	EPCOS AG acquired
2016	Micronas Semiconductor Holding AG acquired
2017	InvenSense, Inc. acquired
2018	Chirp Microsystems, Inc. acquired
2019	TDK Ventures founded

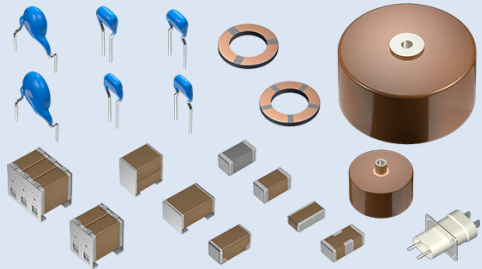
TDK Corporation

Product categories

Passive Components



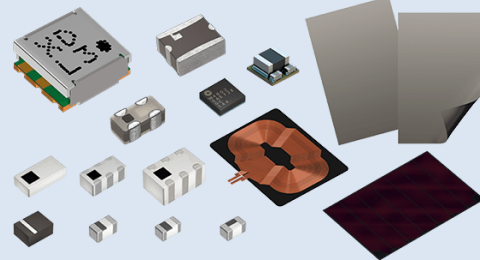
Magnetics



Ceramic Capacitors



Piezo and Protection Devices



Communication Devices



Aluminum and Film Capacitors

Sensor Application Products

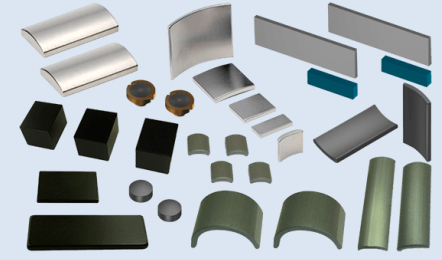


Sensors/MEMS

Magnetic Application Products

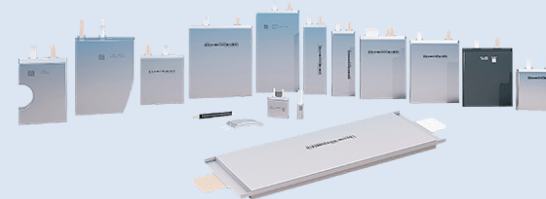


HDD Heads & Components



Magnet Products

Energy Application Products



Energy Devices



Power Supplies

Others



Flash Memory Applied Devices



EMC & RF Engineering



Micro-actuator Solutions
& Others

The history of TDK

Our venture spirit

Attracting Tomorrow



1930: Dr. Yogoro Kato and Dr. Takeshi Takei invented “Ferrite,” a magnetic ceramic compound containing oxides of iron and other materials.



Dr. Yogoro Kato (left)
Dr. Takeshi Takei (right)

1935: Dr. Kato’s statement that “*innovative work is the source of true industry*,” inspired **Kenzo Saito** to found TDK Corporation.



Kenzo Saito
First president of TDK

1937: “Ferrite core” was produced and applied for the first time worldwide in a number of Japanese wireless communication units and radios.



Ferrite core

The spirit of creating entirely new products of value from the fundamental level of a material has defined TDK from the beginning and is still a trait that sets the company apart.

It is also reflected in the **Corporate Motto** formulated in June 1967.

Corporate Motto & Corporate Principles

Corporate Motto

創造に
文化産業に
貢献する
社是

Contribute to culture
and industry
through creativity

Corporate Principles

夢
勇氣
信賴
社訓

Vision

Courage

Trust

Vision

Always take a new step forward
with a vision in mind.
Creation and construction
are not born without vision.

Courage

Always perform with courage.
Performing power is born
by confronting contradiction
and overcoming it.

Trust

Always try to build trust.
Trust is born from a spirit
of honesty and service.

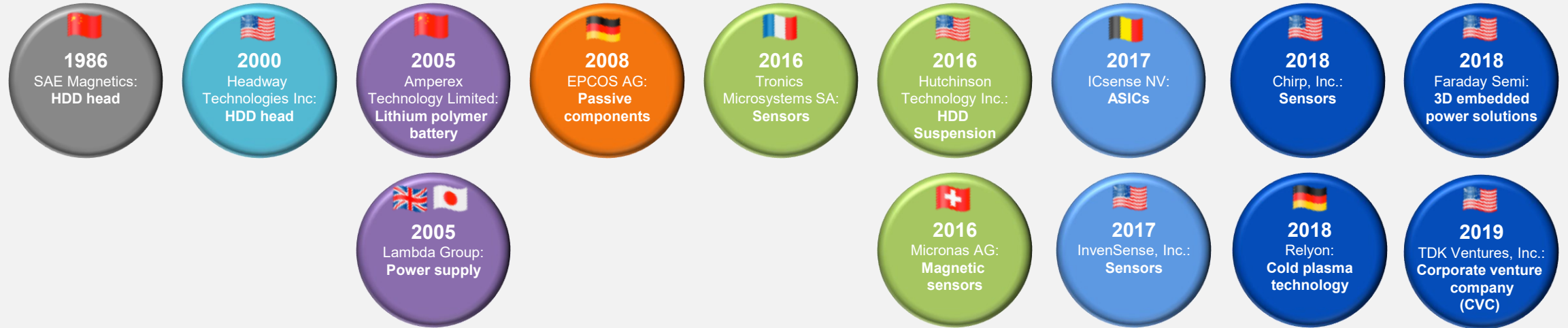
The history of TDK

Our innovations and diversification

Attracting Tomorrow



DIVERSIFICATION



INNOVATIONS

1935

TDK's starting point was the first ever commercialization of ferrite



The world's first ferrite core

1968

Magnetic tape technology revolutionized music life



The first Synchro Cassette Tape, made in Japan

1980

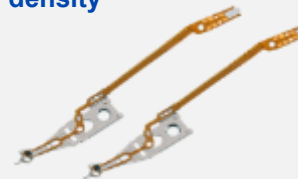
Fine multilayering technology promoted the miniaturization of electronic equipment



The structure of a multilayer chip inductor

1987

Magnetic head technology achieved awesome recording density



The internal structure of an HDD and magnetic heads

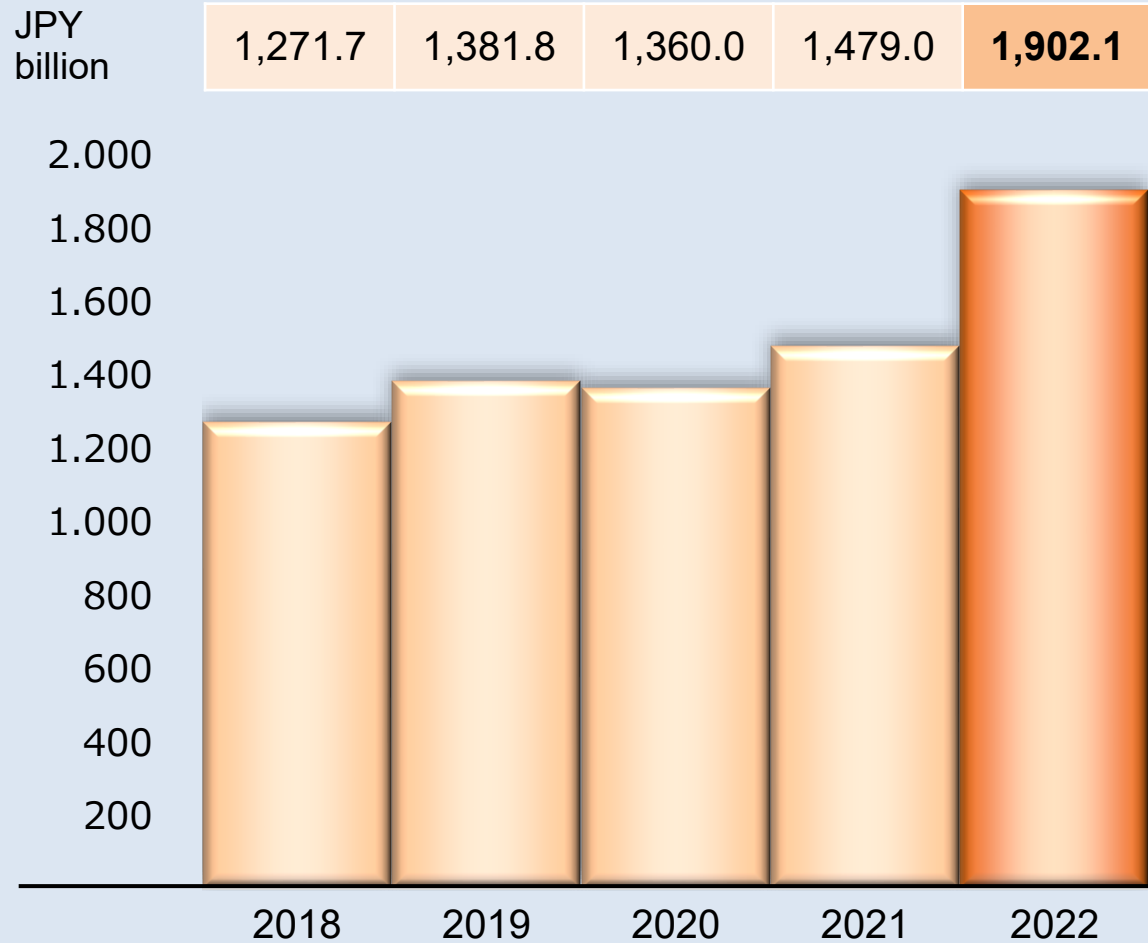
TDK key figures (fiscal years 2021 & 2022, ending March 31)

JPY billion	2021	2022	2023 projection ¹⁾
Net sales	1,479.0	1,902.1	2,200.0
Operating income	111.5	166.7	185.0
Operating income margin (%)	7.5	8.8	8.4
Net income	79.3	183.6	145.0
Employees	129,284	116,808	--

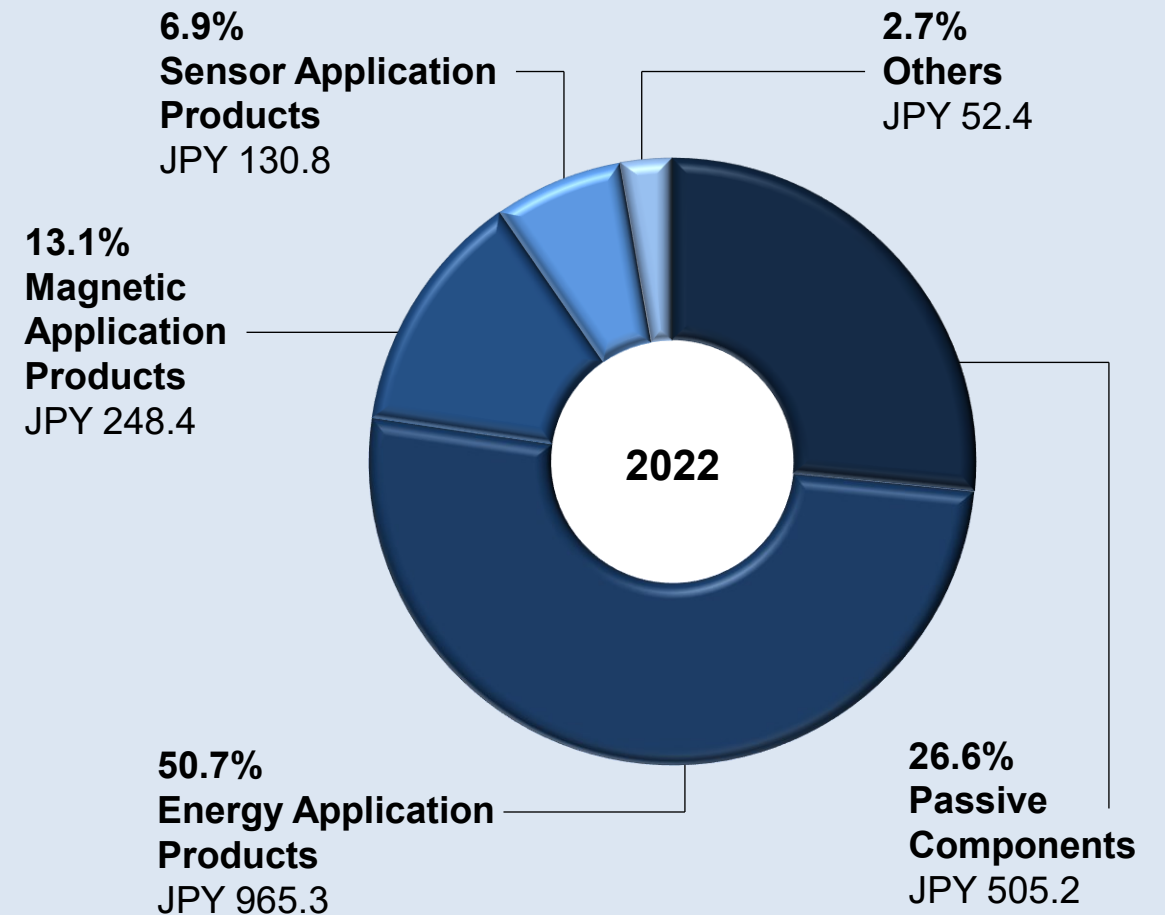
¹⁾ Announced on May 11, 2022 (TDK will voluntary adopt International Financial Reporting Standards (IFRS) from the fiscal year ending March 2023.)

TDK sales development (fiscal years 2018 – 2022, ending March 31)

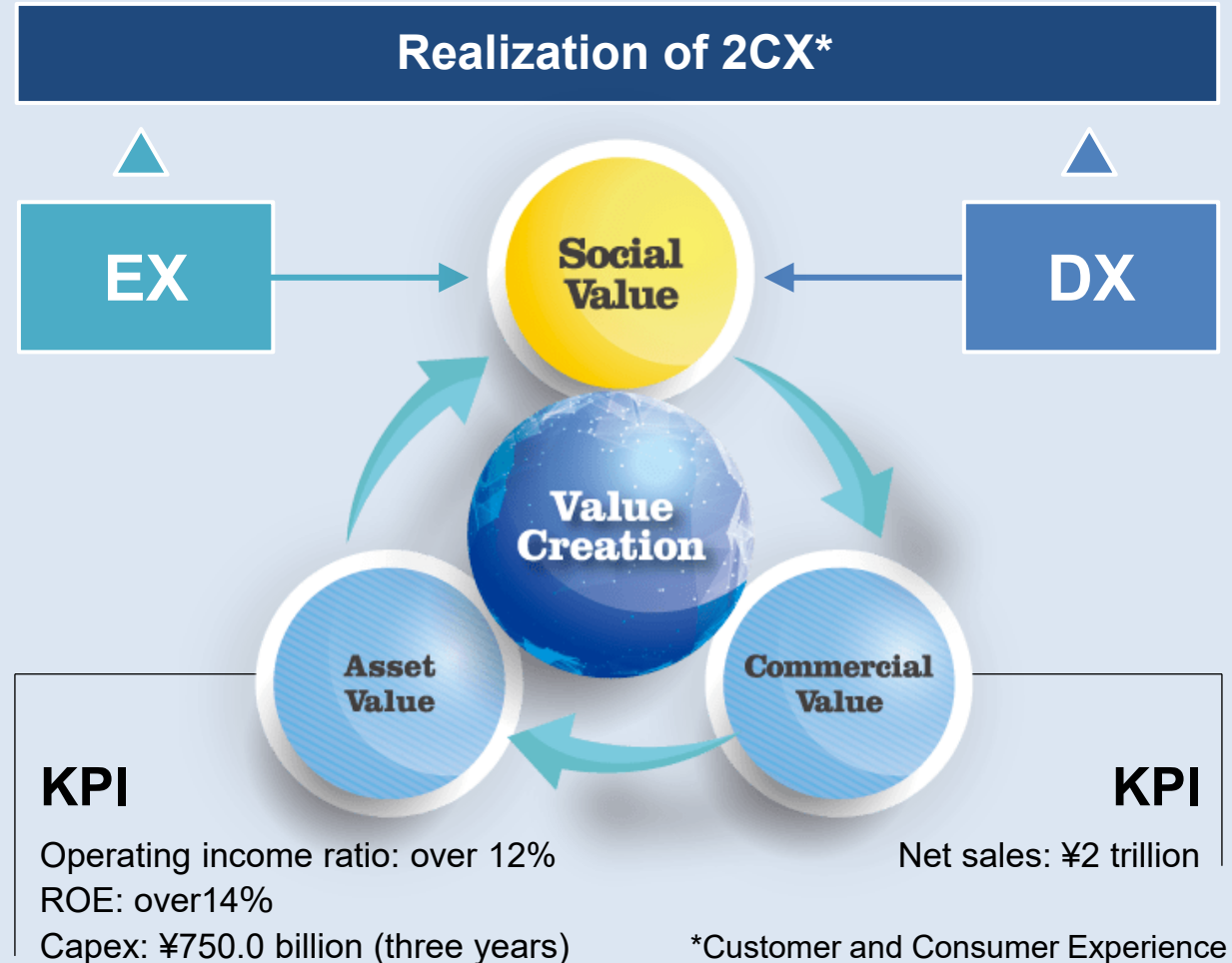
Consolidated sales



Sales by product groups (JPY billion)



Medium-term plan (ending March 31, 2024)



(Yen billions)	FY March 2021 Result	FY March 2024 Target	CAGR**
Net sales	1,479.0	2,000.0	11%

Segment	CAGR**
Passive Components	7%
Sensor Application Products	25%
Magnetic Application Products	12%
Energy Application Products	11%

**Compound Average Growth Rate

TDK Corporation

Global presence around the globe

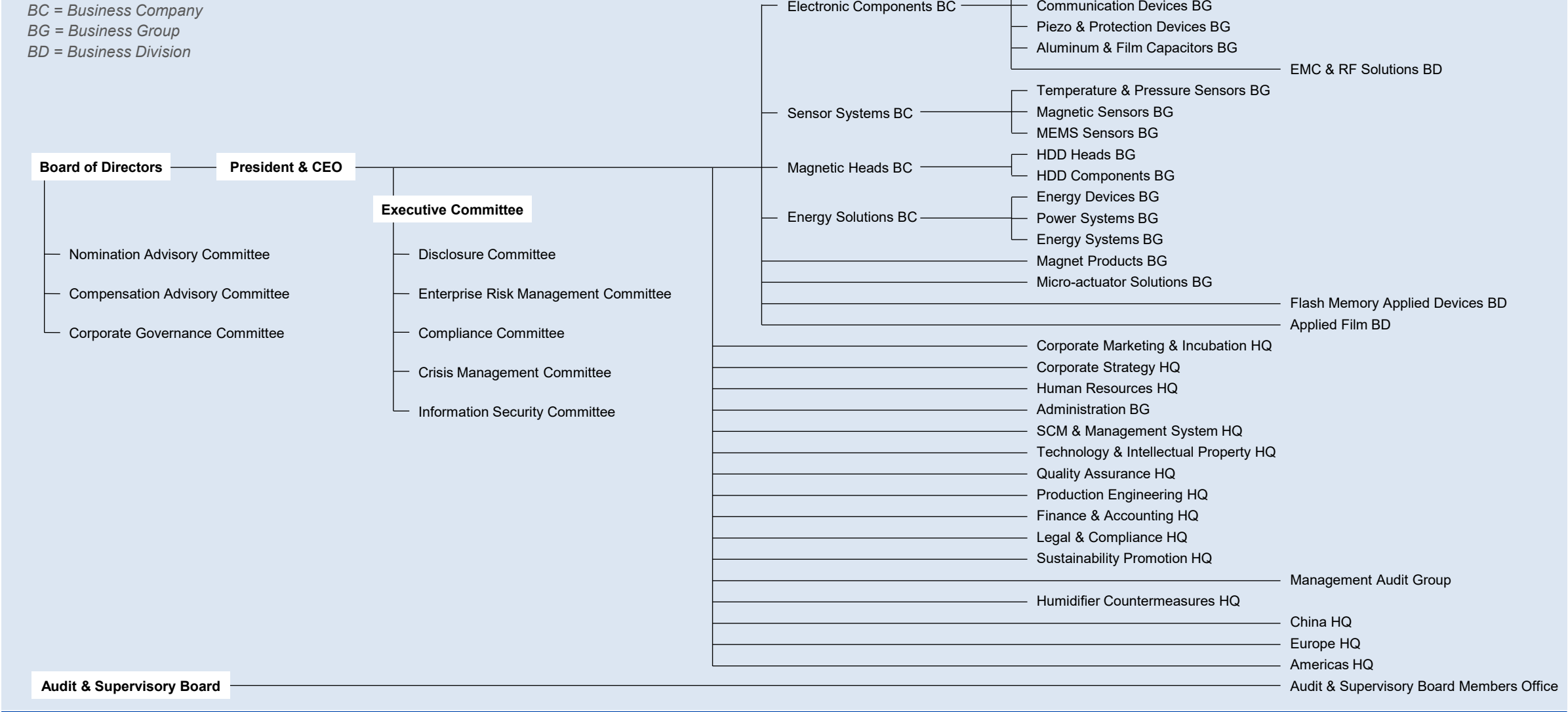
More than 250 factories, R&D & sales offices in more than 30 countries



TDK Corporation

Management (as of April 1, 2022)

Directors					
S. Ishiguro (Representative Director)		T. Yamanishi (Representative Director)			
M. Sumita	S. Osaka	S. Sato	K. Ishimura ¹	K. Nakayama ¹	M. Iwai ¹
Audit & Supervisory Board Members					
T. Momozuka	S. Sueki	J. Ishii ²		Douglas K. Freeman ²	M. Chiba ²
Corporate Officers					
N. Saito (President & CEO)		T. Yamanishi (Executive VP)		M. Pocsatko (Senior VP)	
A. Keller (Senior VP)		S. Sato (Senior VP)			
J. Thiele		A. Ong		D. Matsuoka (Chief Quality & Safety Officer)	
F. Sashida		Ji Bin Geng		W. Lohwasser	
T. Ikushima		S. Hashiyama		R. Thapliya	
L. Trockel		T. Tsutsui		I. Fukuchi	



TDK corporate governance (as of April 1, 2022)

Promoting worldwide representation

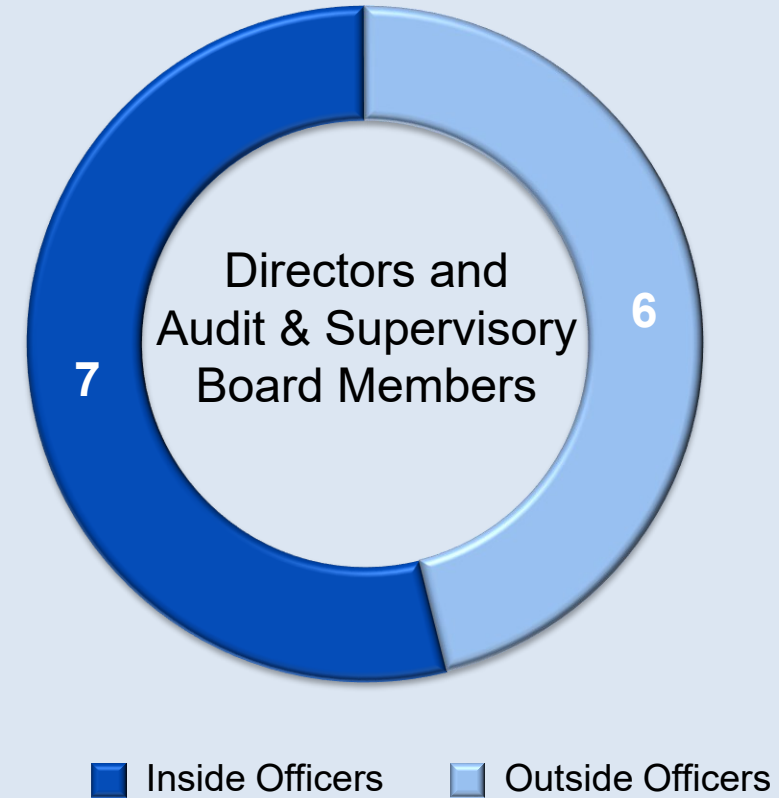


Ratio of Non-Japanese Corporate Officers

2004: **5%**

2022: **47%**

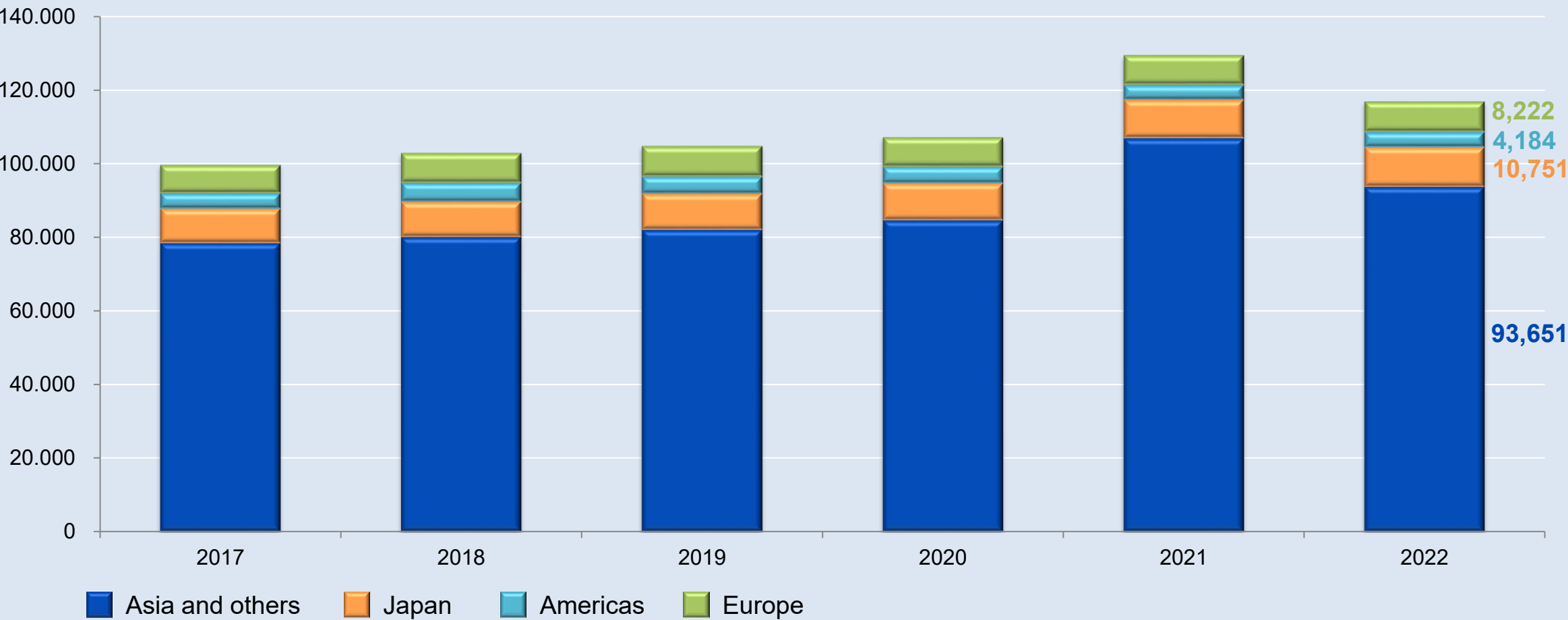
Actively inviting outside officers



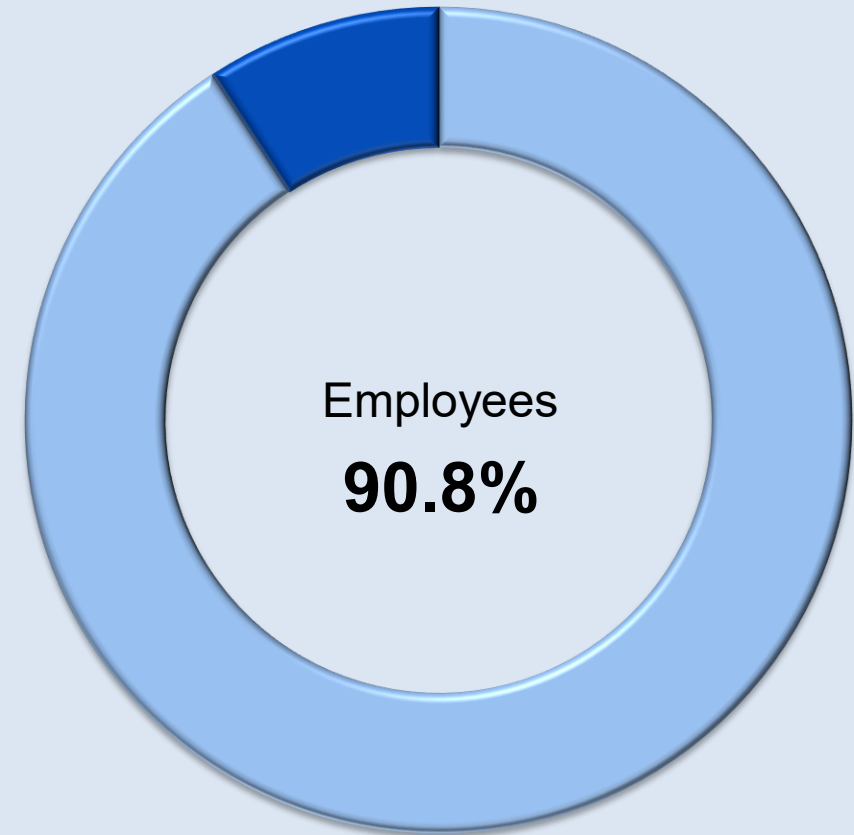
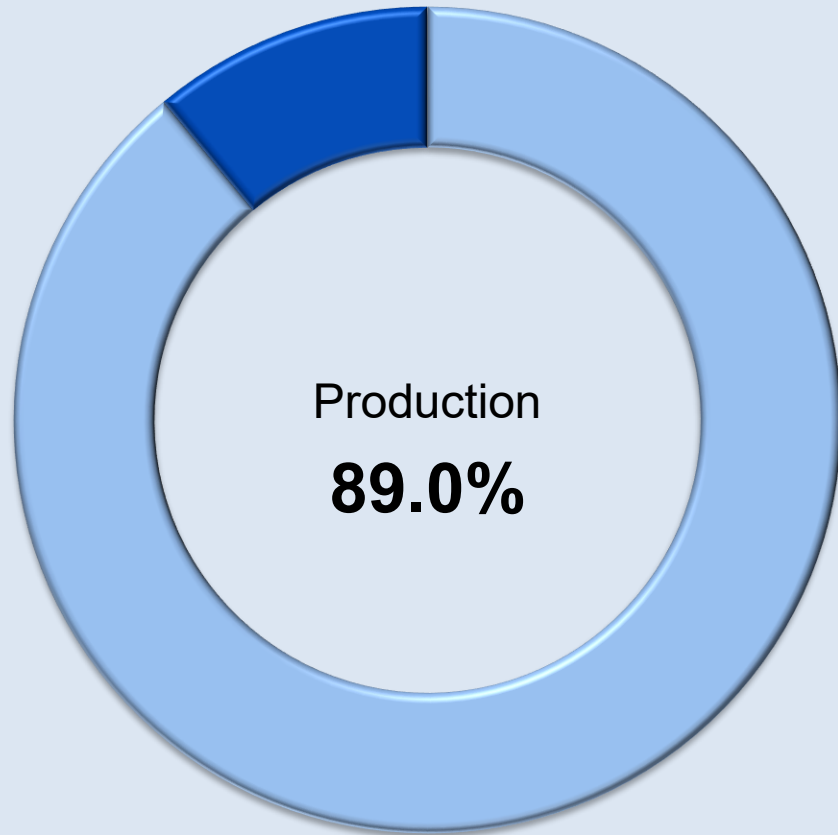
Human resources worldwide representation

(fiscal years 2017 – 2022, ending March 31)

Consolidated number of employees



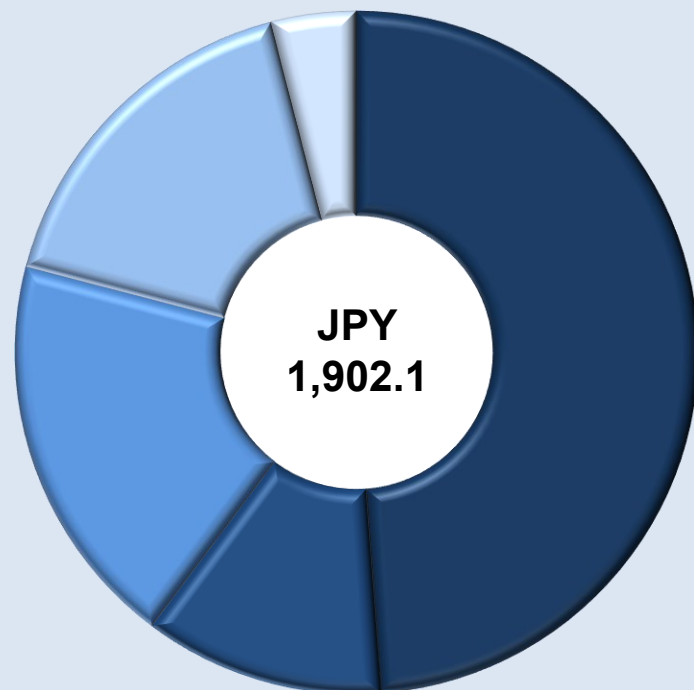
Production and employees outside of Japan (as of March 31, 2022)



Well positioned in industries and regions

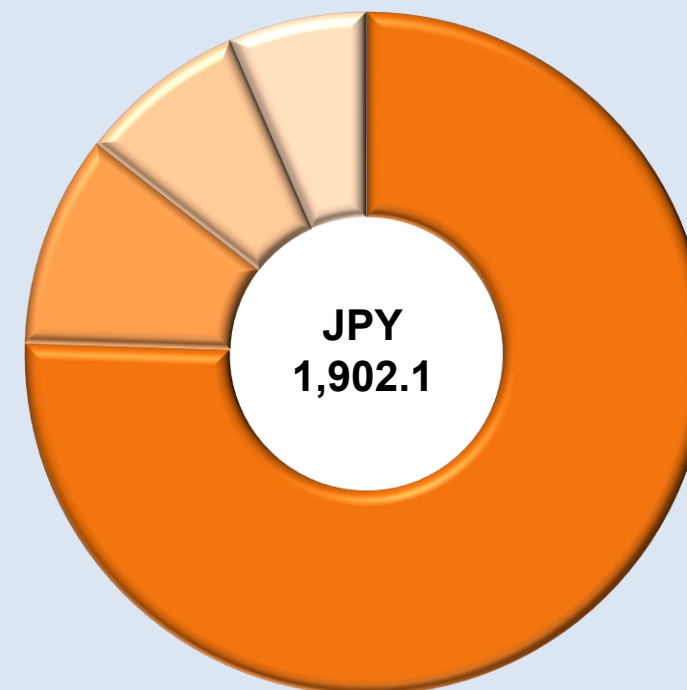
(as of March 31, 2022)

Sales by industries (JPY billion)



ICT	48.8%	JPY 928.7
ICT (HDD heads & suspensions)	11.2%	JPY 213.8
Industrial	17.5%	JPY 333.6
Automotive	17.4%	JPY 330.4
Others	5.0%	JPY 95.6

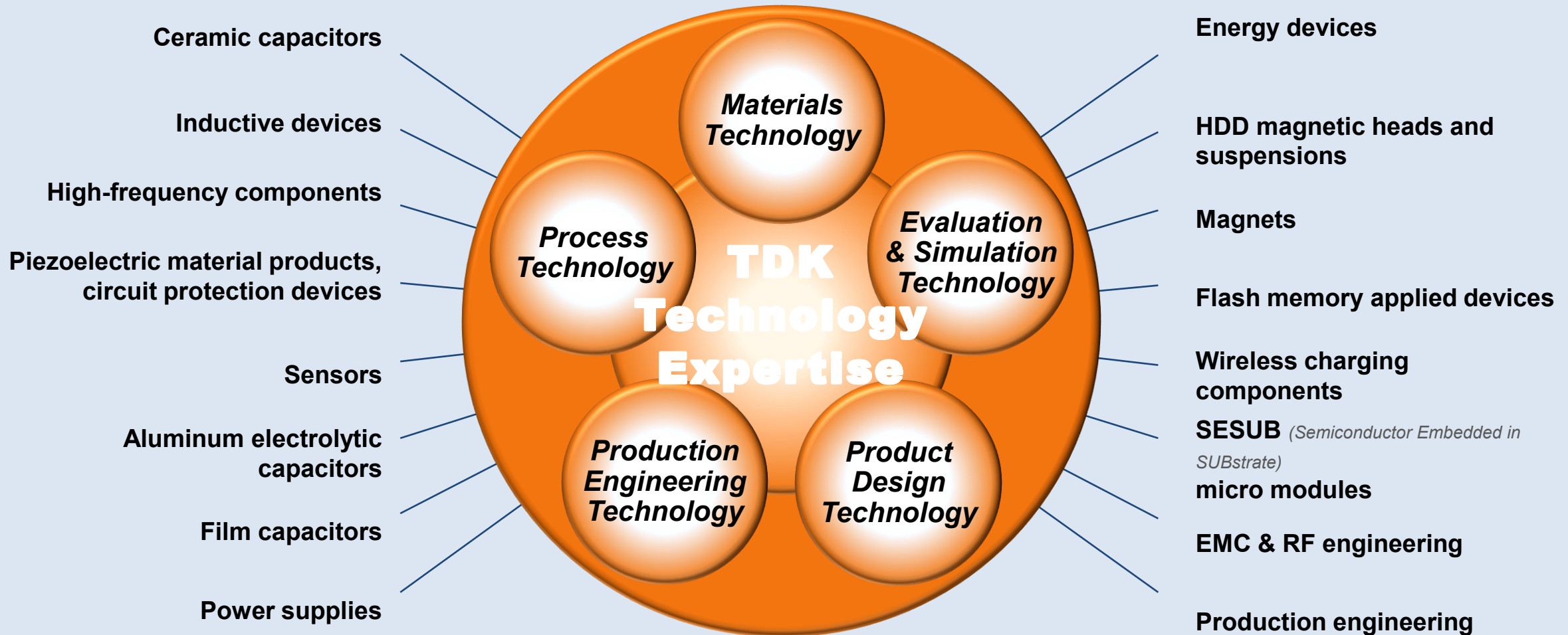
Sales by regions (JPY billion)



Asia	76.1%	JPY 1,447.6
Europe	9.3%	JPY 175.6
Japan	7.8%	JPY 149.0
Americas	6.8%	JPY 129.9

Excellence in competence

Our material and technological expertise and our creativity enable us to sustain our activities in a wide range of demanding product fields and services.



We dominate all core technologies relevant for the electronics industry

Materials Technology

The culmination of over 85 years of experience and know-how



Production Engineering Technology

Outstanding facilities developed and manufactured in-house



Process Technology

realizes control on the nanometer level



Product Design Technology

combines expertise with innovation to create new ideas

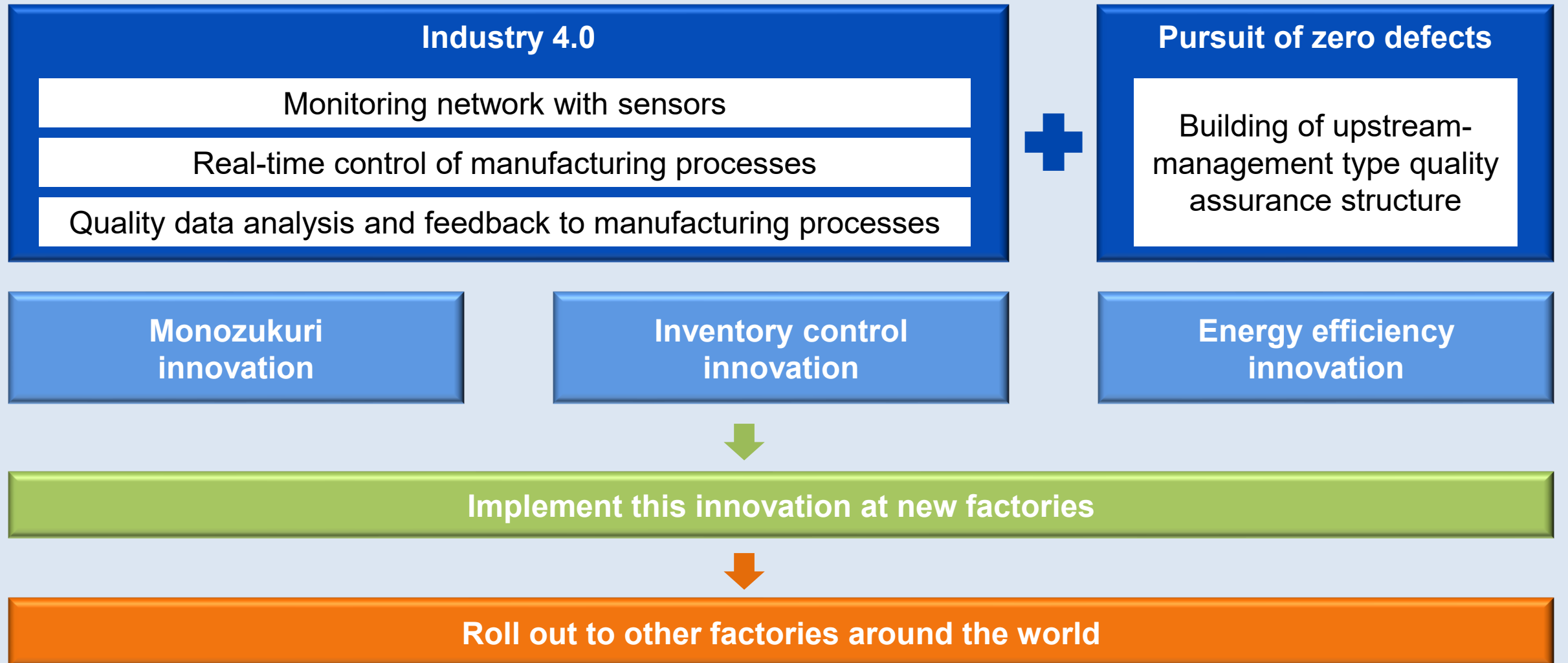


Evaluation & Simulation Technology

is applied to accurately measure and analyze ultra-fine structure and noises by electronic devices



Monozukuri innovation in automotive and ECBC



A truly broad range of products ^(1/3) *

*Major products and related products

Inductive Devices	Ceramic Capacitors	Aluminum Electrolytic Capacitors and Film Capacitors	High-Frequency Components
<ul style="list-style-type: none"> ● Signal use inductors (wire wound, multilayer) ● Power use inductors (wire wound, multilayer, thin film) ● Signal EMC¹ filters (wire wound, multilayer) ● Power EMC filters & reactors ● Transformers ● Ferrites ● Antennas (modules, wire wound) 	<ul style="list-style-type: none"> ● Multilayer ceramic chip capacitors (MLCCs): <ul style="list-style-type: none"> ○ Automotive grade ○ Commercial grade ○ 3-terminal feed-through type ○ With dipped radial leads ● Disc type HV ceramic capacitors with leads ● Feed-through type HV ceramic capacitors ● Ultra-HV ceramic capacitors with metal fitting type terminal ● Ring varistors 	<ul style="list-style-type: none"> ● Aluminum electrolytic capacitors with the following terminals: <ul style="list-style-type: none"> ○ Screw terminals ○ Snap-in/solder pins ○ Axial-lead/soldering star ○ Single-ended ● Film capacitors <ul style="list-style-type: none"> ○ DC & ○ AC capacitors ○ Power chip capacitors (PCC) ○ Power electronic capacitors ○ Power factor correction (PFC) capacitors & key components (LV & MV)² ○ Power quality solutions (PQS) 	<ul style="list-style-type: none"> ● Multilayer & thin-film high-frequency components ● Noise suppression sheets ● Magnetic sheets ● Isolators & circulators ● Wireless charging components ● Micro Point-Of-Load DC-DC converter ● RF inductors (multilayer) ● Photovoltaics (PV device products) ● Micro modules (SESUB products) <div data-bbox="2066 1249 2461 1320"> <p>¹ Electromagnetic Compatibility ² High/Mid/Low Voltage</p> </div>

A truly broad range of products (2/3)

Piezoelectric Material Products, Circuit Protection Devices	Sensors	Power Supplies	HDD Magnetic Heads and Suspensions
<ul style="list-style-type: none"> ● Piezo actuators ● Piezo commodities ● PTC¹ thermistors ● Inrush current limiters ● Disk varistors ● Multilayer varistors ● Multilayer NTC² thermistors ● Surge arresters ● Switching spark gaps ● Camera module actuators ● CeraLink[®] capacitors ● Toner sensors ● Electric surface potential sensors ● Multilayer HF packages ● Die-sized SAW³ packages 	<ul style="list-style-type: none"> ● NTC² sensors: <ul style="list-style-type: none"> ○ Elements ○ Systems ● Pressure sensors: <ul style="list-style-type: none"> ○ Dies ○ Transmitters ● TMR⁴ angle sensors ● Hall sensors ● Embedded controllers ● High grade inertial sensors ● MEMS⁵ solutions <ul style="list-style-type: none"> ○ Motion ○ Pressure ○ Microphone ○ Fingerprint ○ Time-of-Flight (ToF) 	<ul style="list-style-type: none"> ● AC-DC power supplies ● DC-DC converters ● Programmable power supplies ● High Voltage power supplies ● Bidirectional converters ● Programmable electronic loads ● Accessories ● Power line EMC filters ● On-board chargers for xEV ● DC-DC converters for xEV 	<ul style="list-style-type: none"> ● Hard Disk Drive (HDD) magnetic heads ● HDD suspensions ● Camera module parts

¹ Positive Temperature Coefficient
² Negative Temperature Coefficient
³ Surface Acoustic Wave
⁴ Tunnel Magneto Resistance
⁵ Micro-Electro-Mechanical Systems

A truly broad range of products & services (3/3)

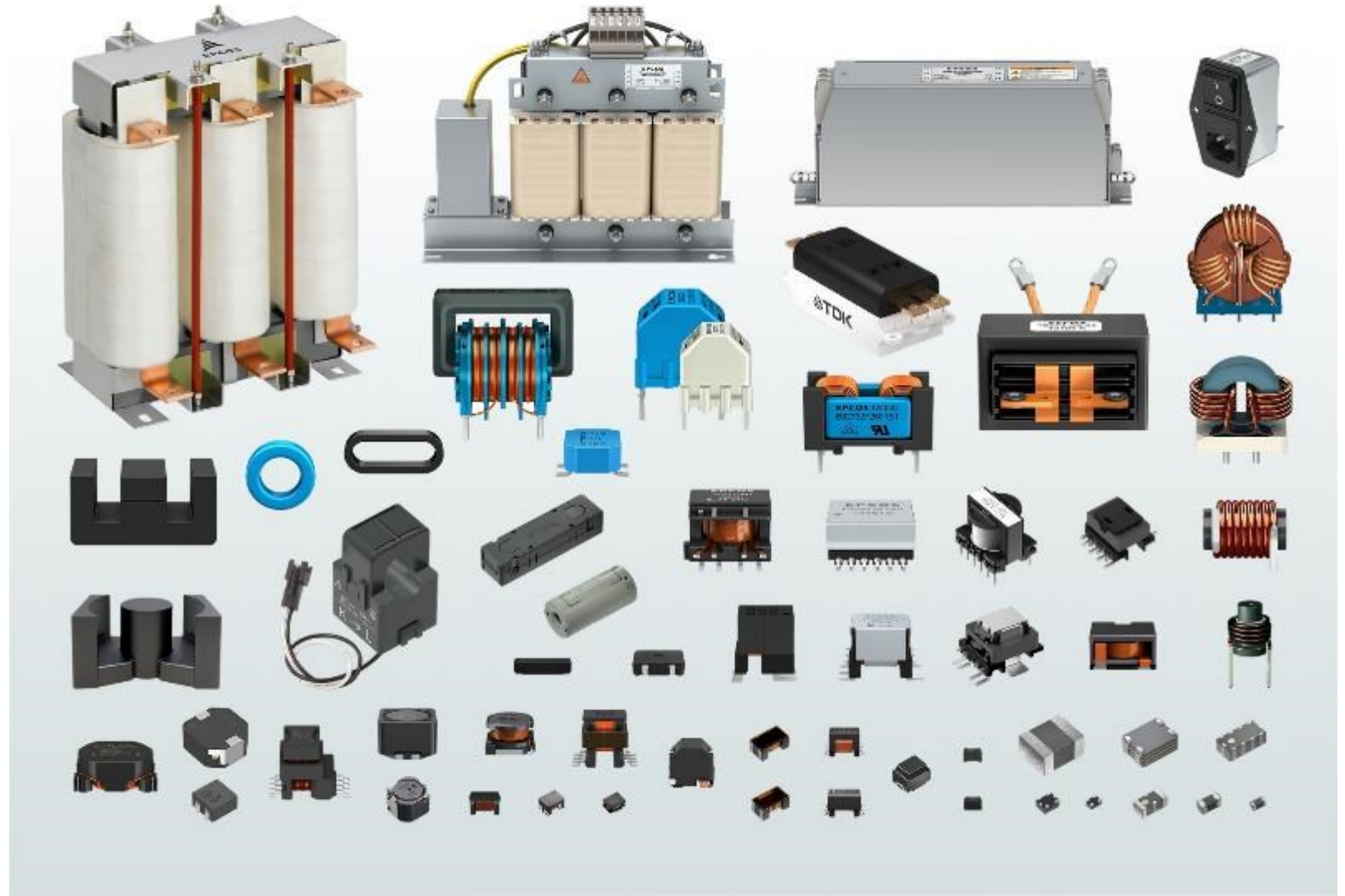
Magnets	Flash Memory Applied Devices	SESUB Micro Modules	Energy Devices
<ul style="list-style-type: none"> ● Ferrite magnets ● Neodymium magnets 	<ul style="list-style-type: none"> ● Flash memory controllers ● Compact flash & CFast cards for Industrial ● Solid state drives for Industrial ● SD & microSD cards for Industrial 	<ul style="list-style-type: none"> ● Bluetooth modules 	<ul style="list-style-type: none"> ● Lithium-ion batteries
Bio Sensors	Factory Automation Systems	EMC & RF Engineering	
<ul style="list-style-type: none"> ● Digital basal thermometers ● Silmee 	<ul style="list-style-type: none"> ● FOUP¹ load ports ● Flip chip bonding systems 	<ul style="list-style-type: none"> ● EMC² test systems ● Anechoic chambers ● Radio wave absorbers 	

¹ Front Opening Unified Pod
² Electromagnetic Compatibility

Comprehensive product portfolio

Inductive Devices

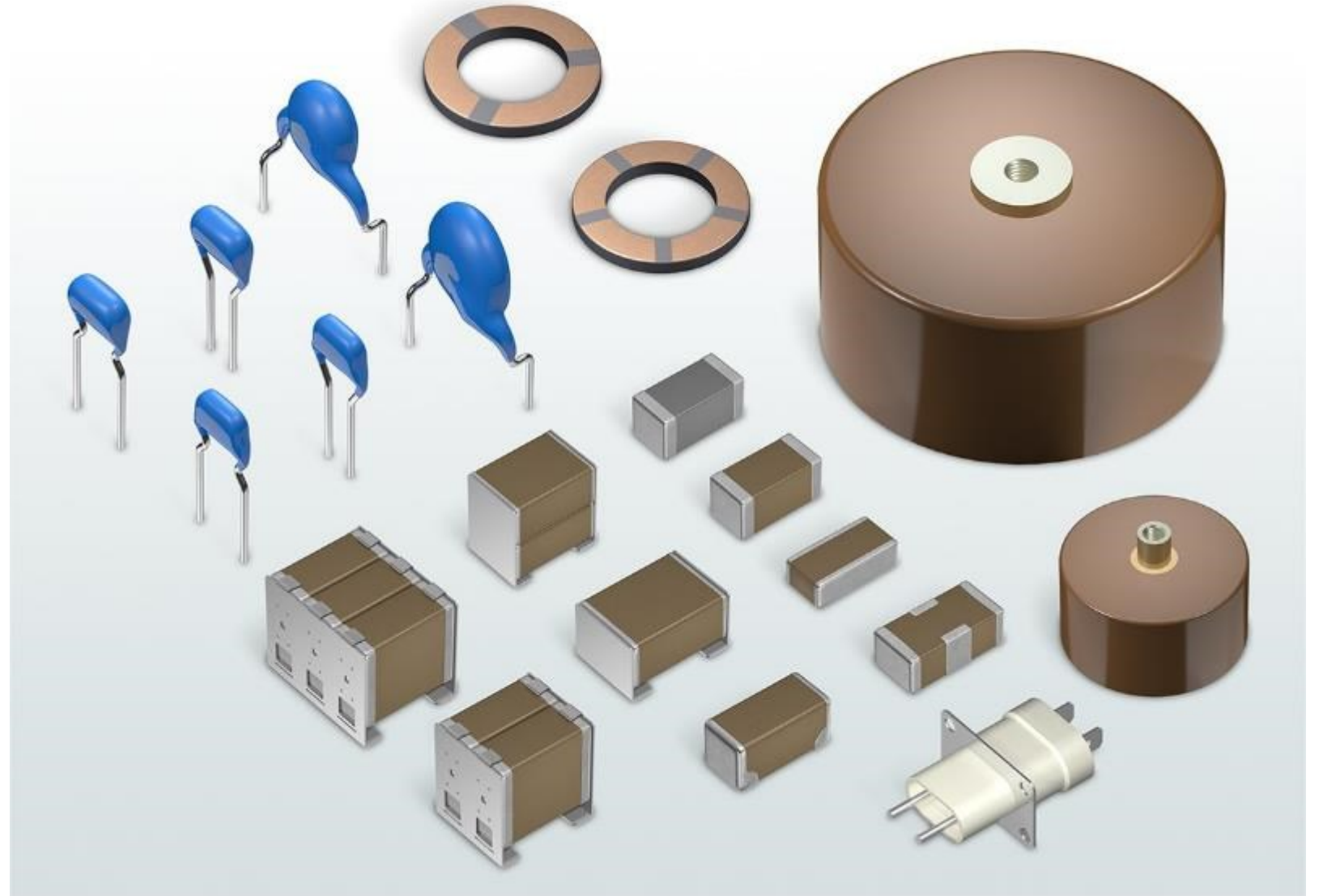
- **Signal use inductors**
 - Wire wound
 - Multilayer
- **Power use inductors**
 - Wire wound
 - Multilayer
 - Thin film
- **Signal EMC filters**
 - Wire wound
 - Multilayer
- **Power EMC filters and reactors**
- **Transformers and chokes**
- **Ferrites**



Comprehensive product portfolio

Ceramic Capacitors

- **Multilayer ceramic chip capacitors (MLCCs)**
 - Automotive grade
 - Commercial grade
 - 3-terminal feed-through type
 - With dipped radial leads
- **Disc type HV ceramic capacitors with leads**
- **Feed-through type HV ceramic capacitors**
- **Ultra-HV ceramic capacitors with metal fitting type terminal**
- **Ring varistors**



Comprehensive product portfolio

Aluminum Electrolytic & Film Capacitors

Aluminum electrolytic capacitors

- Screw terminals
- Snap-in / solder pins
- Axial-lead / soldering star
- Single-ended
- Hybrid polymer aluminum electrolytic capacitors
 - Axial-lead / soldering star
 - SMD

Film capacitors for Industrial and for Automotive

- DC capacitors
- AC capacitors
- Power capacitor chips for low power

Film capacitors for Energy Solutions

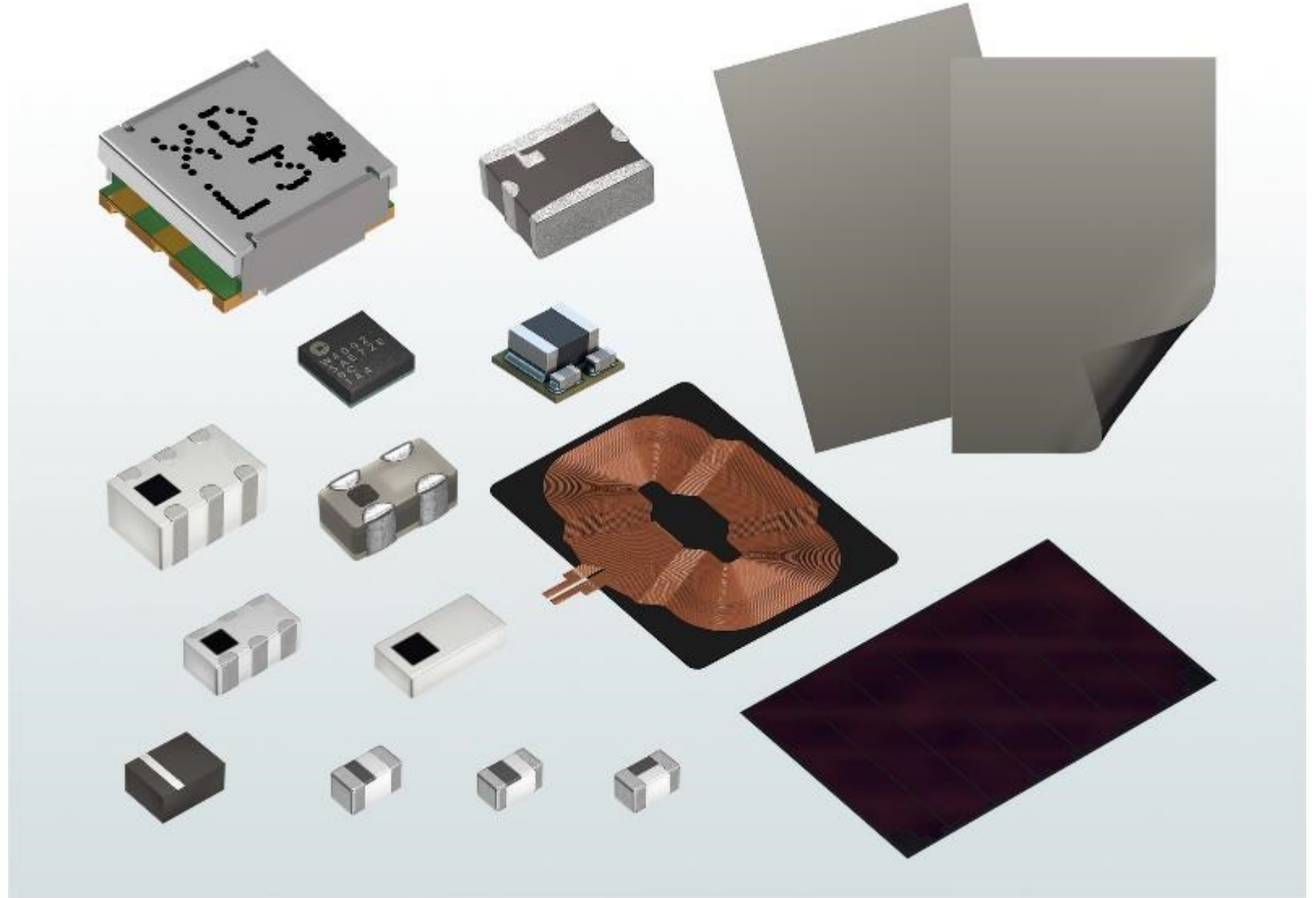
- Power electronic capacitors for high power
- Power electronic capacitors low power
- Capacitors and key components for power factor correction
- Power quality solutions



Comprehensive product portfolio

High-frequency Components

- Multilayer & Thin-film RF components
- Isolators & Circulators
- Noise suppressing / Magnetic sheet
- Wireless charging components
- DC-DC converters (μ POL)
- Multilayer RF inductors
- Photovoltaics (PV device products)
- Micro modules (SESUB products)



Piezoelectric Material Products. Circuit Protection Devices

- PowerHap™ and
- Other piezo actuators
- PTC thermistors
- Inrush current limiters
- Disk varistors
- Multilayer varistors
- Multilayer NTC thermistors
- Surge arresters
- Switching spark gaps
- High voltage contactors
- CeraLink® capacitors
- CeraCharge™
- Ultrasonic sensors
- Multilayer HF packages
- Die-sized SAW packages
- PiezoHapt™
- PiezoListen™
- Humidity sensors
- Ultrasonic nebulizer units
- CeraPlas™
- piezobrush®
- CeraPad™



Comprehensive product portfolio

Temperature and Pressure Sensors

- **NTC sensors**
 - Elements
 - Systems
- **Pressure sensors**
 - Dies
 - Transmitters
- **High performance inertial sensors**
- **Diagnostic chips**



Comprehensive product portfolio

Magnetic Sensors

- **Magnetic sensor ICs**

- Hall switches (Position, RPM)
- 1D hall sensor (Position, angle, current, torque)
- 3D hall sensor (Position, angle)
- TMR sensor (Position, angle, linear, current)

- **Sensor modules**

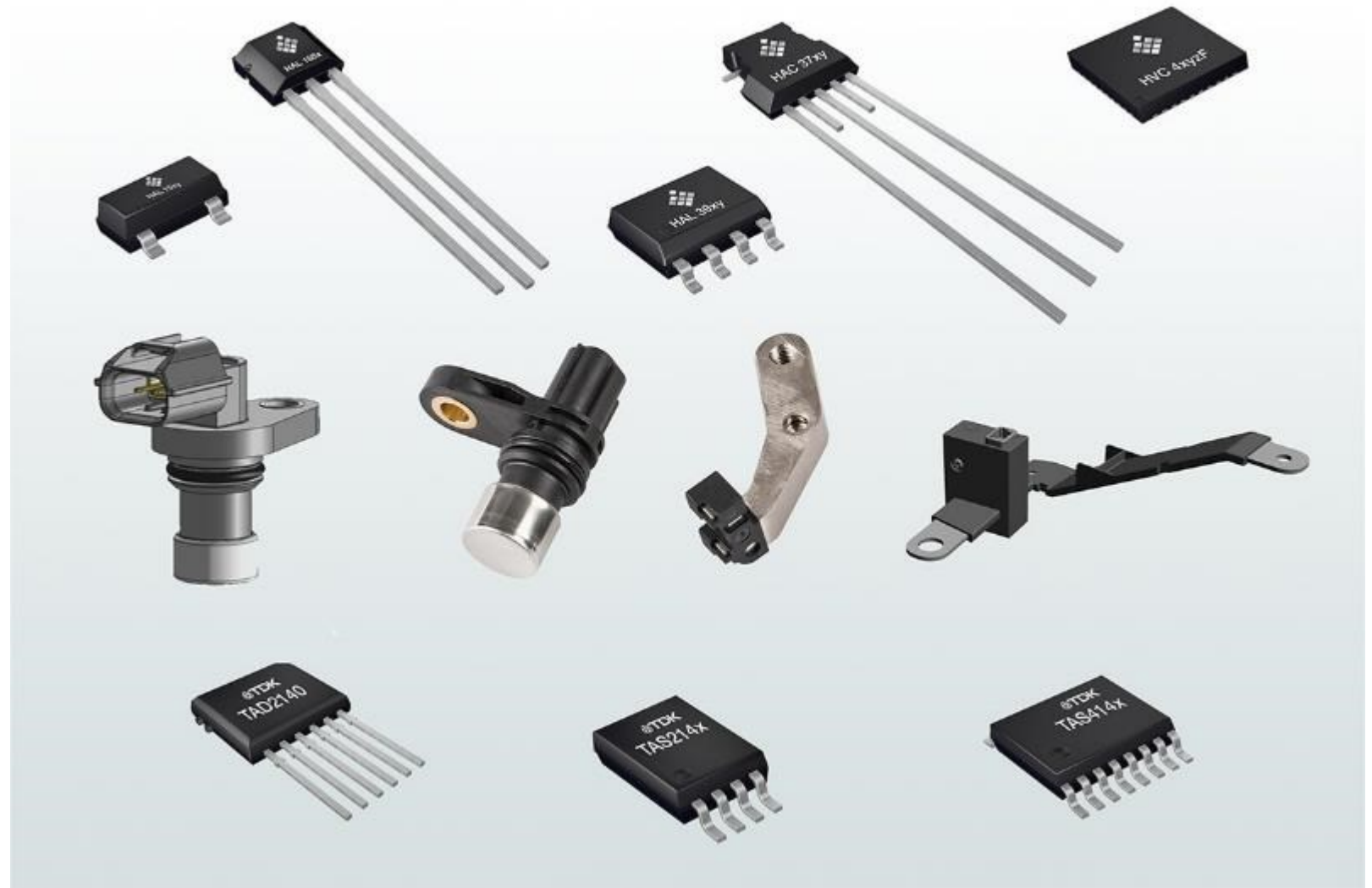
- Stroke sensor
- Current sensor
- Speed sensor

- **Embedded motor controllers ICs**

- Electric motor controllers (BDC, BLDC, stepper)

- **Custom ICs**

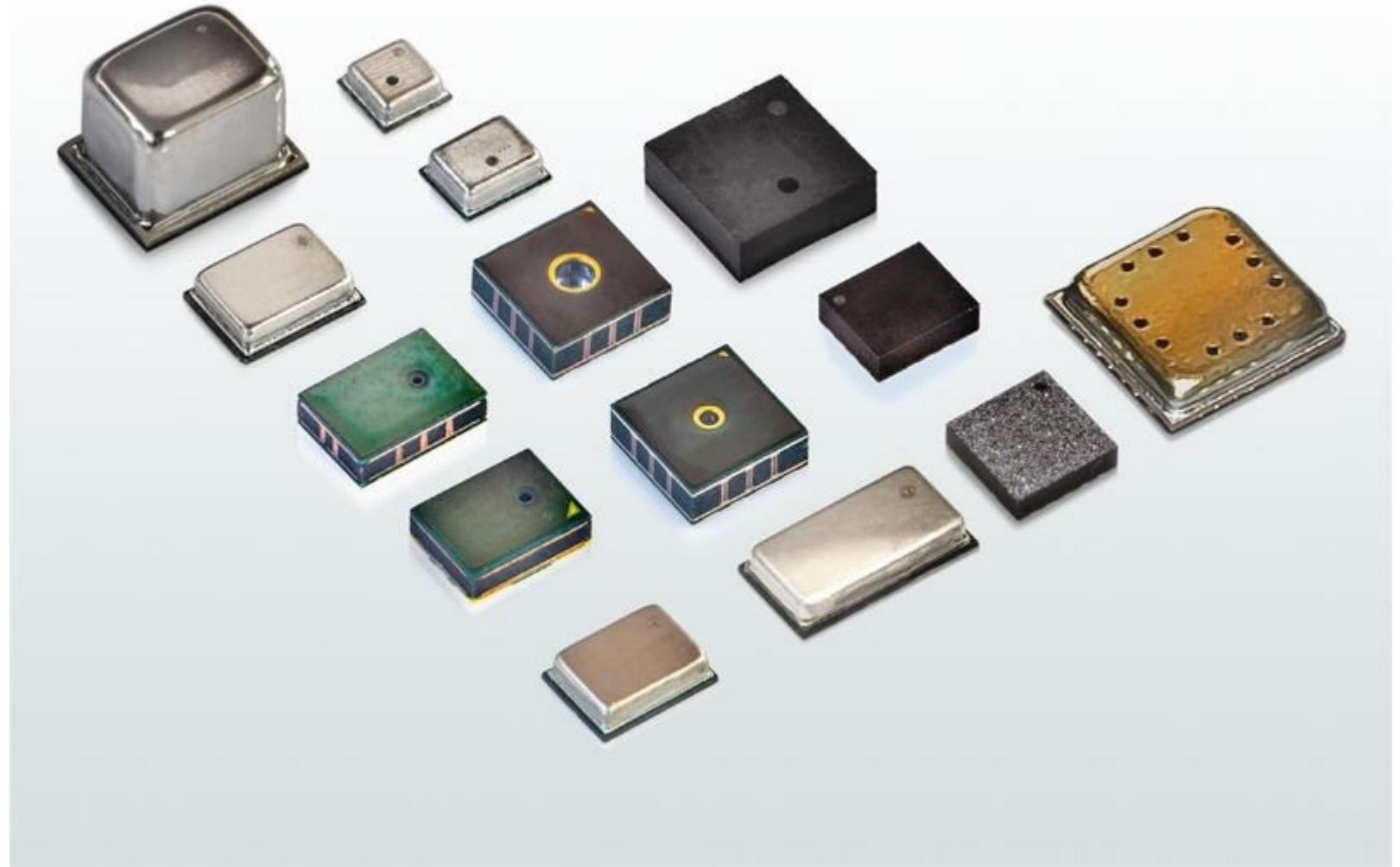
- Analog, mixed signal and high voltage ASICs



Comprehensive product portfolio

MEMS Sensors

- Capacitive accelerometers/gyroscopes
- MEMS¹ 9 & 6-axis combo & fusion IMU's
- MEMS analog & digital microphones
- MEMS barometric pressure sensors
- MEMS Ultrasonic Time-of-Flight (ToF) sensors
- MEMS CO₂ gas sensor



¹ Micro-Electro-Mechanical Systems

Comprehensive product portfolio

Magnets

- **Rare earth magnet**
 - Rare earth sintered magnet
 - Rare earth bonded magnet
- **Ferrite magnet**
 - Wet anisotropic ferrite magnet
 - Dry anisotropic ferrite magnet



Comprehensive product portfolio

Power Supplies

- AC-DC power supplies
- DC-DC converters
- Programmable power supplies
- High voltage power supplies
- Bidirectional converters
- Programmable electronic loads
- Accessories
- Power line EMC filters
- On-board chargers for xEV
- DC-DC converters for xEV



Comprehensive product portfolio

HDD Magnetic Heads and Suspensions

- Hard Disk Drive (HDD) magnetic heads
- HDD suspensions
- Camera module parts



Comprehensive product portfolio

Flash Memory Applied Devices

- Flash memory controllers
- Compact flash cards for industrial
- CFast cards for industrial
- Solid state drives for industrial
- SD & microSD cards for industrial



Comprehensive product portfolio

SESUB Micro Modules

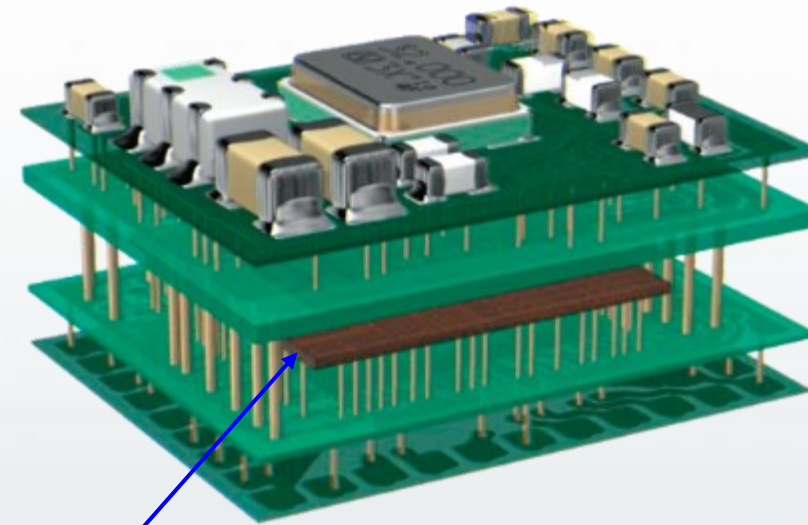
- i.e.) Bluetooth modules

SESUB Features

- Miniaturizing
- Reliable connection
- Better heat dissipation
- Low loss & noise emission

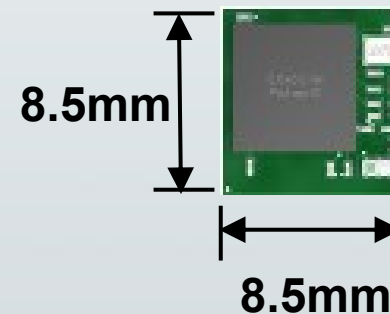
Major Applications

- Wearable device,
Accessory for smartphone
- Healthcare, sports, fitness device
- Home & entertainment device
- Automotive



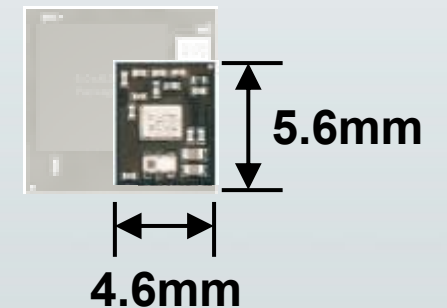
IC die embedded

Conventional



-65%

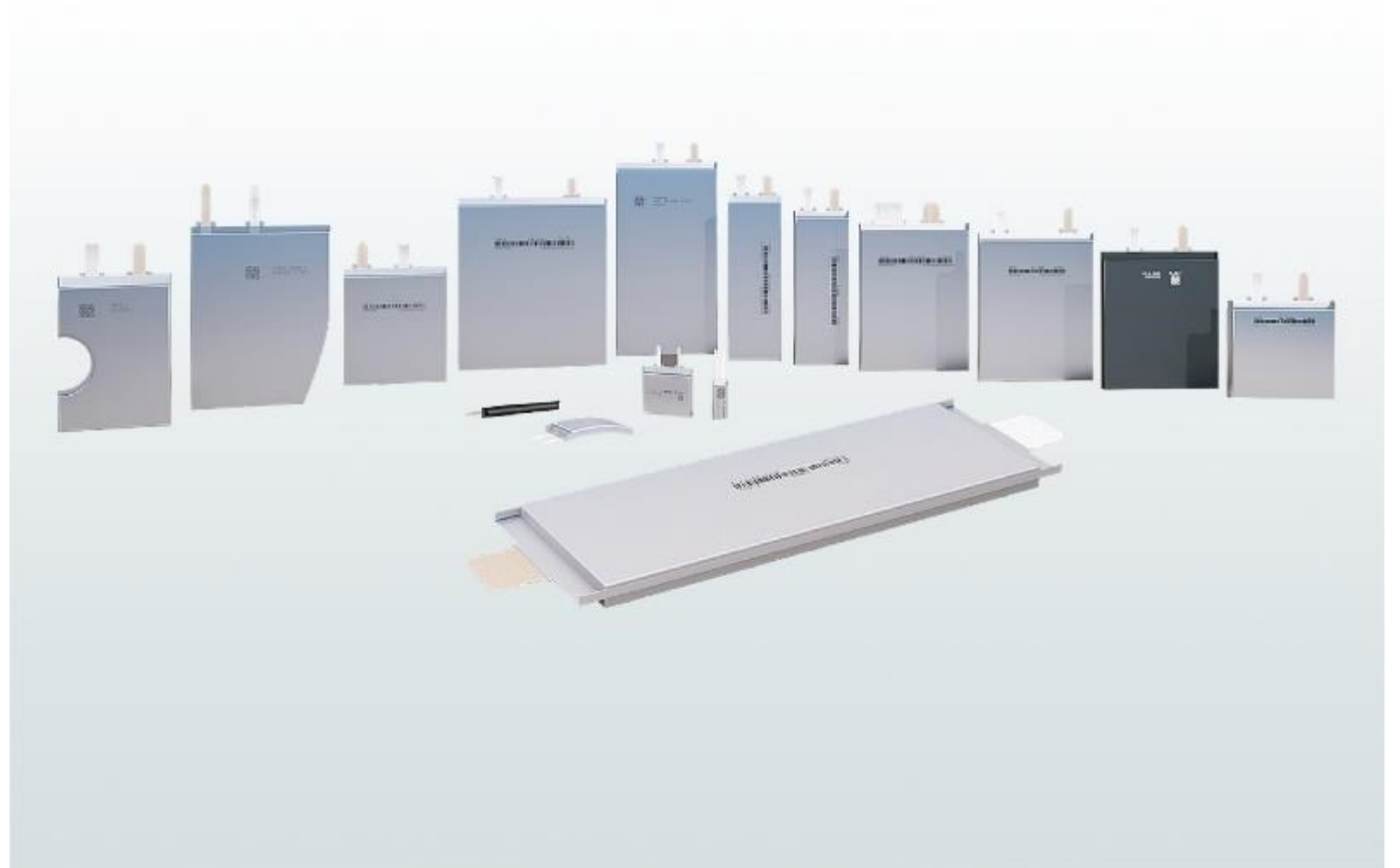
SESUB-Bluetooth module



Comprehensive product portfolio

Energy Devices

- Lithium-ion batteries



Comprehensive product portfolio

Bio Sensors

- Silmee (wearable biosensor/gateway with environmental sensor)
- Digital basal thermometers



Comprehensive product portfolio

Factory Automation Systems

- FOUP¹ load ports
- Flip chip bonding systems



¹ Front Opening Unified Pod

Comprehensive product portfolio

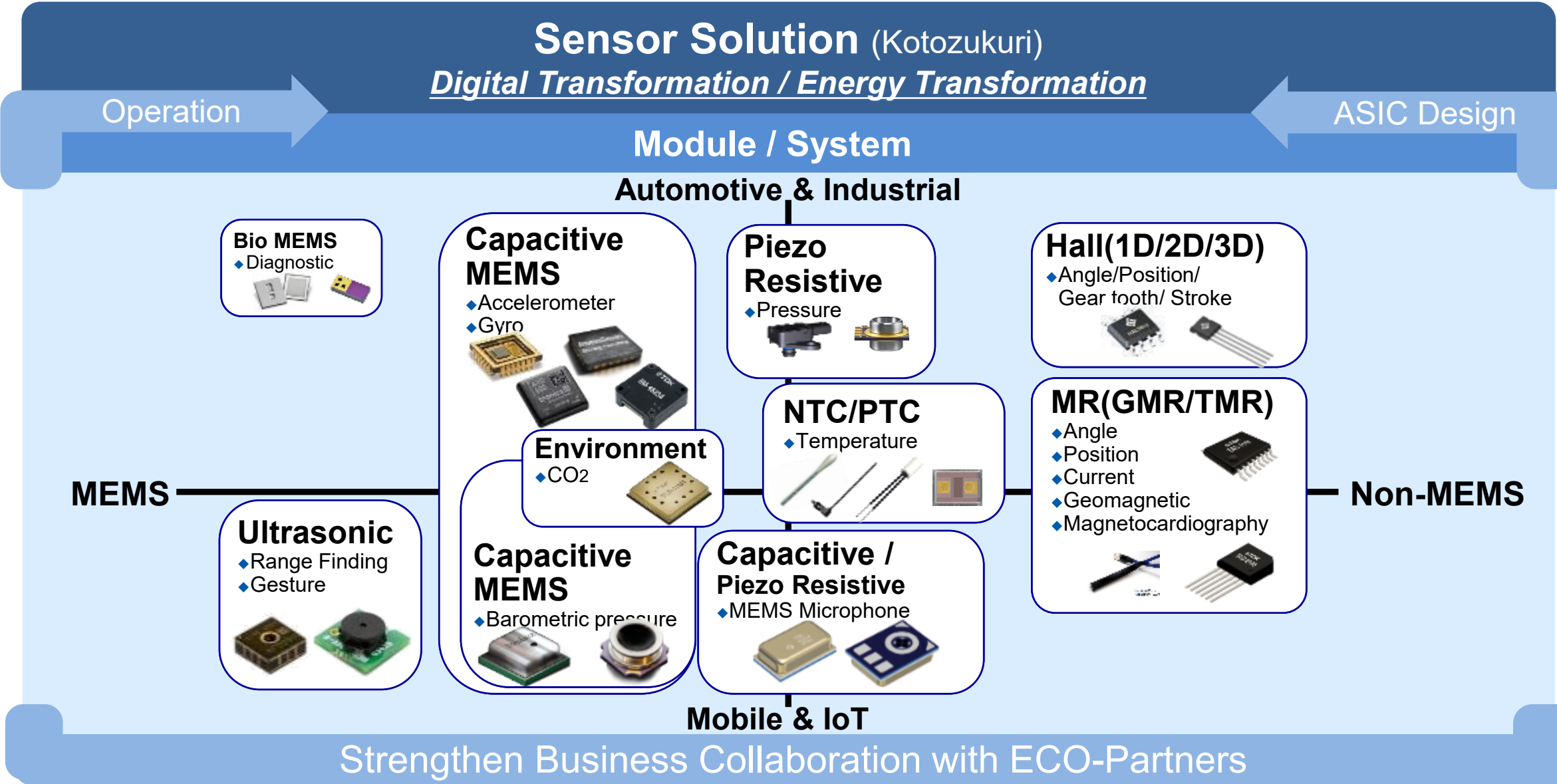
EMC & RF Engineering

- EMC¹ test systems
- Anechoic chambers
- Radio wave absorbers



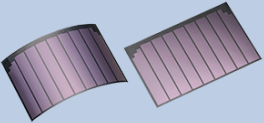
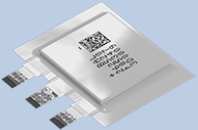
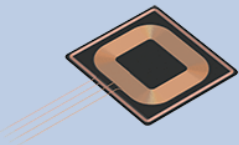
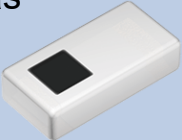
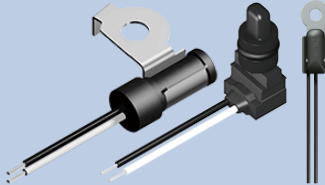
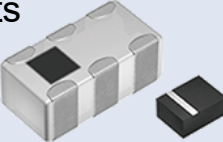
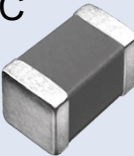
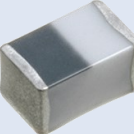
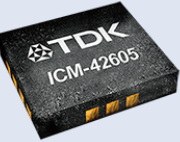
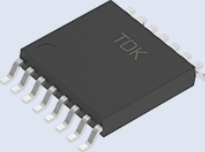

¹ Electromagnetic Compatibility



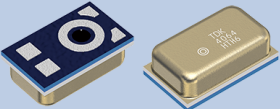



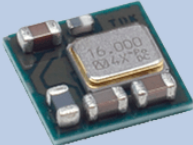
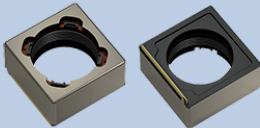

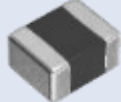


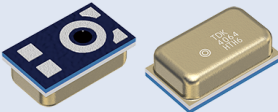

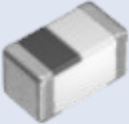

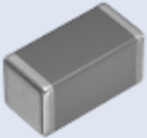


Digital Transformation (DX):

Wide range of products & technologies

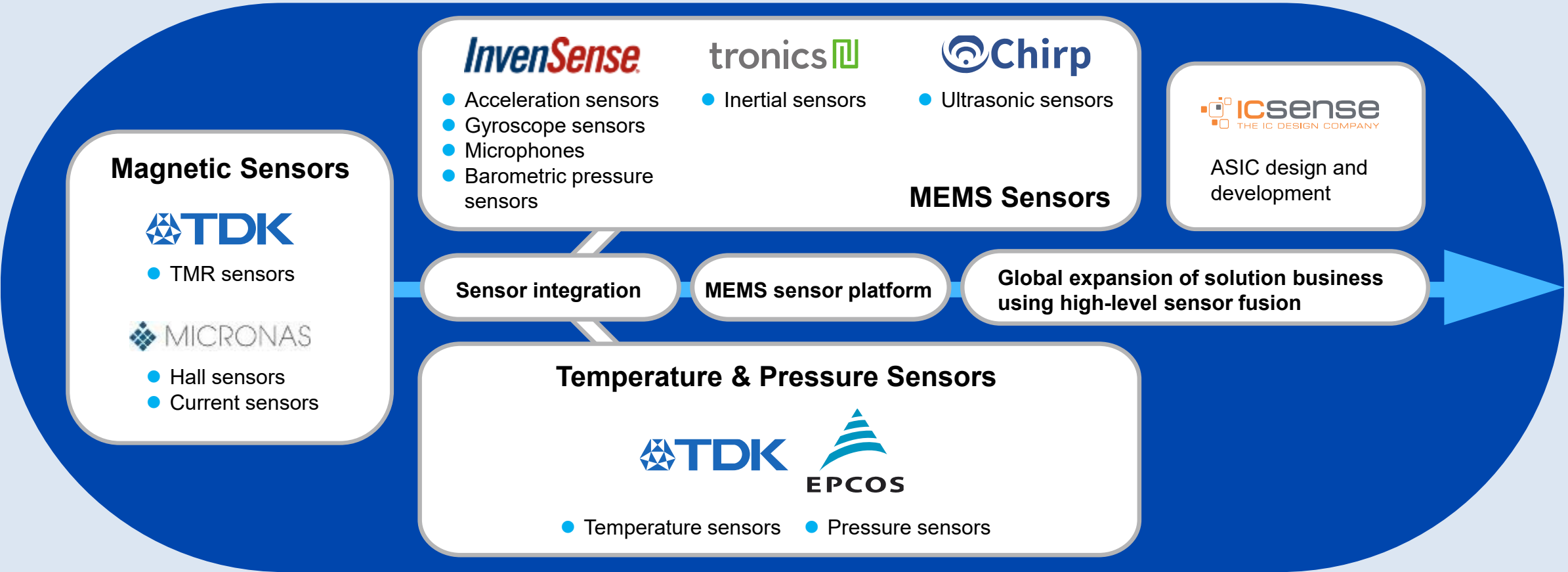
IoT			5G	
Storing and supplying energy <ul style="list-style-type: none"> ● Solid-state batteries ● Solar cells ● Multilayer varistors for ESD protection ● Electric double layer capacitors ● Coils for wireless charging   	Sending and receiving radio waves <ul style="list-style-type: none"> ● Chip antennas ● Inductors for near-field communication (NFC) circuits ● Noise suppression sheets for NFC 	Capturing data <ul style="list-style-type: none"> ● Temperature sensors ● Pressure sensors ● Barometric pressure ● Motion sensors ● Angle sensors 	Communication circuits <ul style="list-style-type: none"> ● Multilayer RF components ● Inductors for NFC circuits ● High Q RF inductors   	Sensing <ul style="list-style-type: none"> ● MEMS motion sensors ● TMR magnetic sensors ● Noise suppression sheets   

Digital Transformation (DX): Wide range of products & technologies

Drone			ADAS (Autonomous driving)	
<div>Generating and capturing sound</div> <div><ul style="list-style-type: none">MEMS microphones</div> <div><ul style="list-style-type: none">Lithium-ion batteries</div> <div><ul style="list-style-type: none">MEMS motion sensors for navigation and safety</div>	<div>Suppressing noise</div> <div><ul style="list-style-type: none">Chip beadsNoise filtersNoise suppression sheets</div> <div><ul style="list-style-type: none">Varistors for ESD protection</div>	<div>Realizing further compactness and efficiency</div> <div><ul style="list-style-type: none">Semiconductor Embedded in substrates (SESUB)Piezo actuators for haptic feedbackTransparent conductive filmsLens actuators</div>	<div>Custom products</div> <div><ul style="list-style-type: none">Common mode chokes for CAN-BUS/1000BASE-T1Multilayer power inductors for infotainment and ADASHall sensorsMEMS motion sensors for navigation and safetyMEMS microphones for communication</div>	<div><ul style="list-style-type: none">Power inductors for noise suppression and voltage stabilizationMultilayer RF inductors for connectivityHigh precision TMR angle & motion sensorsHigh reliability MLCCs for smoothing</div>

Digital Transformation (DX): Expansion of sensor product range

Expansion of non-optical sensors in a vertically integrated business model



Energy Transformation (EX): 3 business groups carry TDK's energy business

Attracting Tomorrow



EX

Energy Solutions Business Company

Power Systems Business Group

- Power supplies
- Power line EMC filters



Energy Devices Business Group

- Lithium-ion batteries, etc.



Energy Systems Business Group

- DC-DC converters for xEV
- On-board chargers for xEV

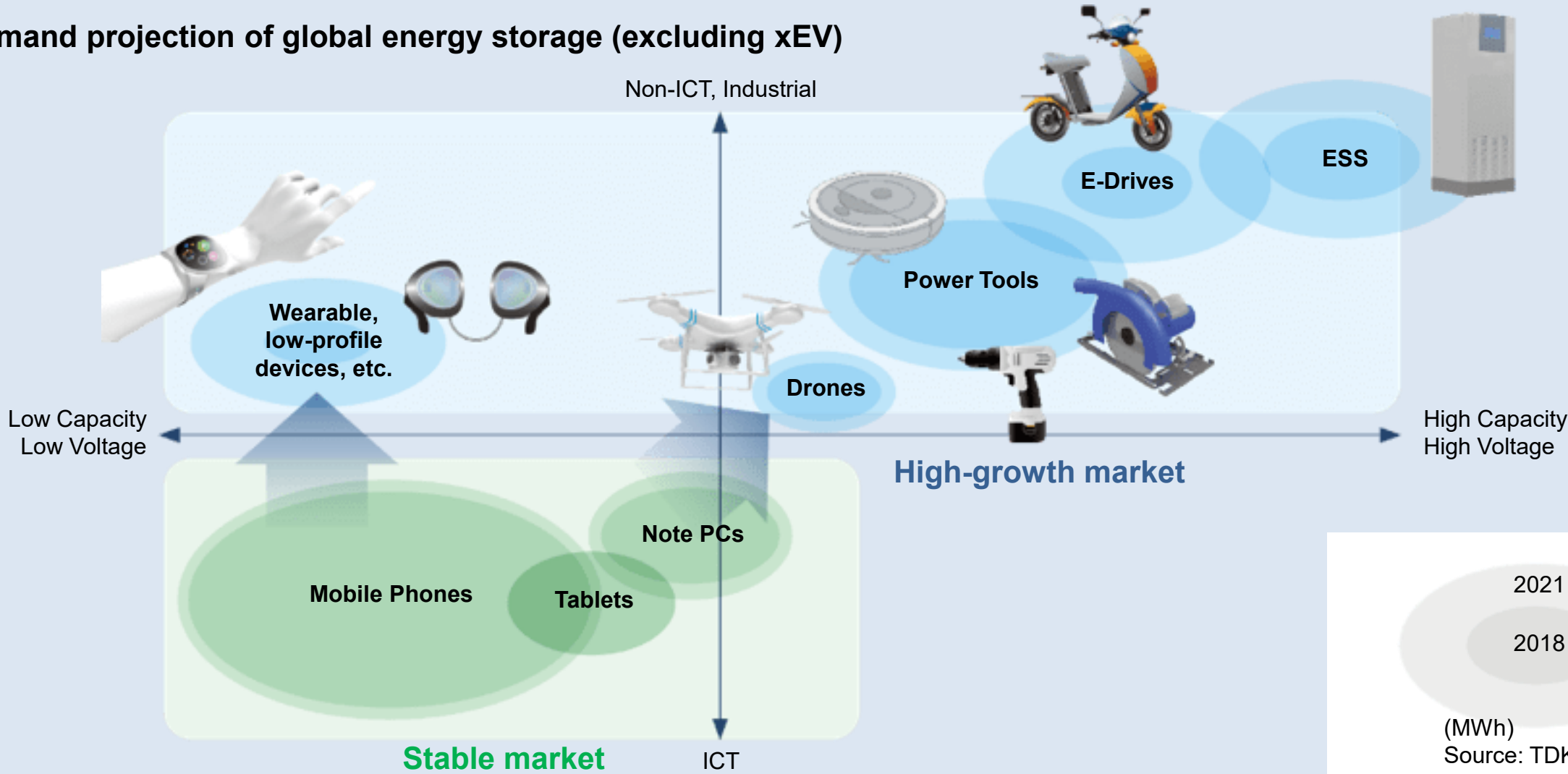


General view of ATL's Ningde Factory

EX: Expansion of lithium-ion batteries to mini-cell and power cell markets

EX







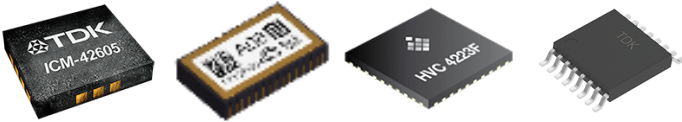

Demand projection of global energy storage (excluding xEV)



Energy Transformation (EX)

Wide range of products & technologies

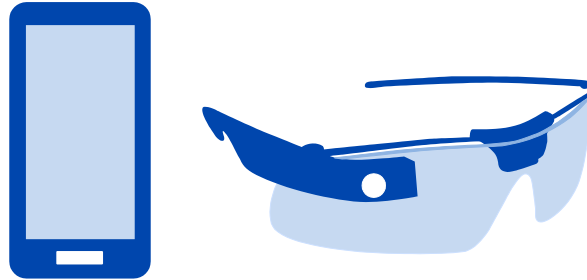
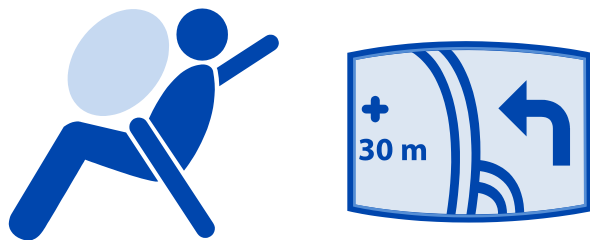
EX

Generation	Conversion	Transmission
 <p>Neodymium magnets Solar cells</p>	 <p>DC-DC converters / AC-DC switching power supplies</p>	 <p>High power film capacitors Ultra-high voltage ceramic capacitors</p>
Protection	Storage	Control
 <p>Over-voltage protection varistors/arrestors Various EMC countermeasure components/anechoic chambers</p>	 <p>Lithium-ion batteries</p>	 <p>Aluminum electrolytic capacitors</p>
Detection	Charging	
 <p>Temperature/pressure sensors, magnetic sensors, MEMS sensors</p>	<p>Wireless power transfer for ICT equipment</p> 	

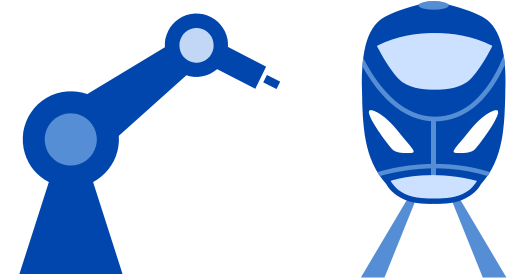
TDK's key markets



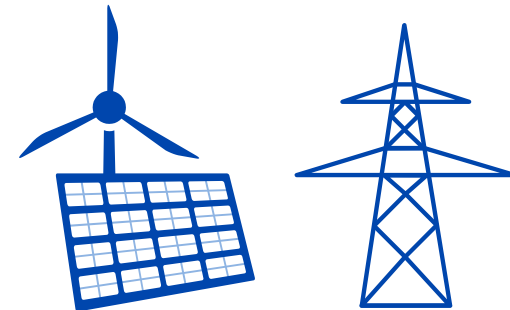
Automotive



Information &
Communication
Technology



Industrial &
Energy



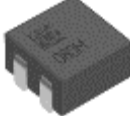



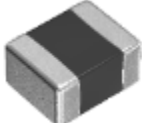

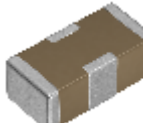
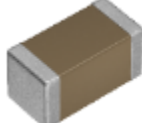




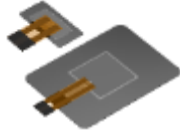

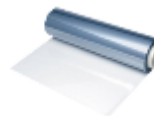






We provide advanced solutions for Automotive - xEV, Fuel Efficiency, Motor Control

	DC-DC converters for xEV		On-board chargers for xEV		Rare earth & ferrite magnets for motors and generators
	Gate-drive transformers for motor inverters		High-current chokes for DC-DC converters		High-voltage contactors for DC switching
	Film capacitors for DC link & EMI suppression		Multilayer ceramic chip capacitors (MLCCs)		Aluminum electrolytic capacitors for buck-boost converters
	Hybrid polymer capacitors for electrical motors control unit		CeraLink® capacitors		Leaded ceramic capacitors for noise suppression
	TMR angle & motion sensors		Hall sensors & embedded controllers		Temperature sensors for HVAC, motor, battery, ATF
	PTC thermistors for heating		Surge arresters for overvoltage protection		Ring varistors for noise suppression
	Ferrite cores for wireless charging		Pressure sensors for fuel efficiency		Gear tooth & position sensors for fuel efficiency



TDK Technology
Attractive mobility.

We provide advanced solutions for Automotive - Autonomous, Connectivity, Safety

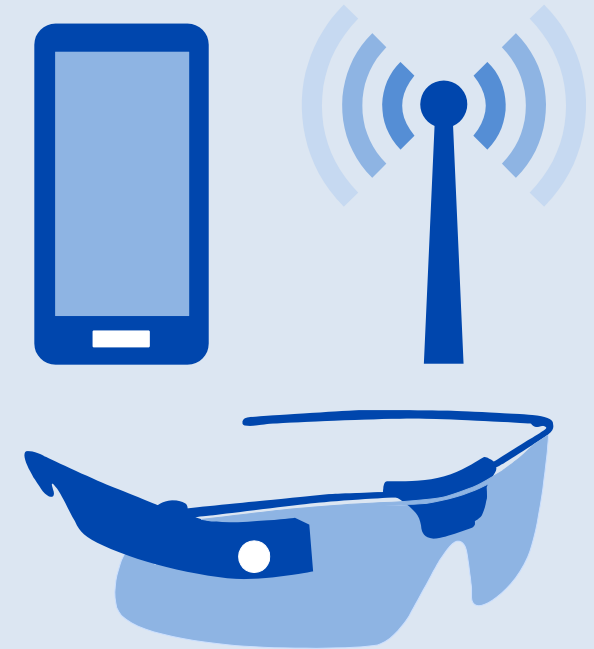
	Power inductors for SoC power management at ADAS front camera		Wire-wound inductors for LVDS & PoC for infotainment		Common mode chokes for CAN-BUS/1000BASE-T1
	Power inductors for noise suppression and voltage stabilization		Multilayer power inductors for infotainment and ADAS		Chip beads for noise reduction in power lines
	3-terminal feedthrough filters for decoupling and filtering		MLCCs for noise suppression and voltage stabilization		Multilayer varistors for ESD and NTC thermistors for temp. measurement
	Multilayer RF components for connectivity		Multilayer RF inductors for connectivity		Chip antennas for WiFi / Bluetooth connection
	Piezo actuators with haptic feedback for touchscreens		Piezo actuators with haptic feedback for dashboards		Ag-stacked film for window
	Coils for wireless charging according to Qi standard		Noise suppression sheets for EMC improvement		Transponder coils for tire pressure monitoring systems (TPMS)
	MEMS motion sensors for navigation and safety		MEMS microphones for communication		Anechoic chambers with 10 m test range



TDK Technology
Attractive mobility.

We provide advanced solutions for Information & Communication

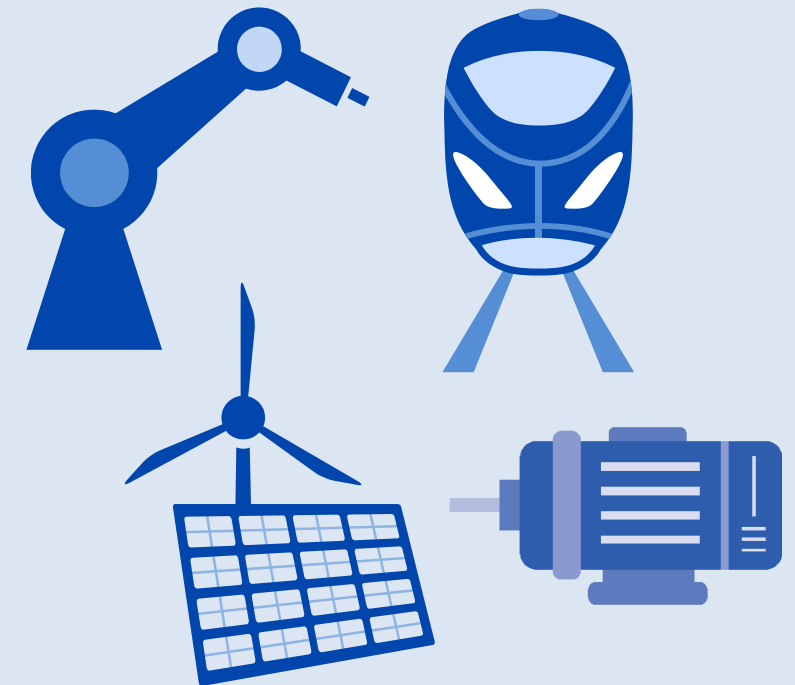
	DC-DC converter for Point-of-Load		Microphones for mobile devices		Motion sensors for mobile devices
	Lens actuators for camera modules		PTC & NTC thermistors for temperature measurement		ToF ultrasonic sensors
	3-terminal feedthrough filter for decoupling and filtering		Thin-film & multilayer RF components for filtering		MEMS pressure sensors for drones
	Modules with SESUB (Semiconductor Embedded in substrate)		Isolators & Circulators for Base Station		Piezo actuators for haptic feedback and speaker solutions
	HDD magnetic heads and suspensions		Surge arresters for overvoltage & surge protection		Neodymium magnets for voice coil motors
	lithium-ion batteries for energy storage		Coils for wireless charging		Multilayer varistors for overvoltage and ESD protection
	Power inductors for power management		Transformers & chokes for DC-DC converters		High Q RF inductors for filtering



TDK Technology
Attractive
connections.

We provide advanced solutions for Industrial & Energy

	Power line EMC filters		CeraLink® capacitors		Common-mode chokes for input filtering
	Neodymium magnets for wind power generators / industrial motors		Power film capacitors for DC link, AC filtering		High density film capacitors for DC link
	Pulse transformers for LAN interfaces		Varistors & surge arresters for overvoltage protection		AC-DC power supplies
	ModCap & high-power film capacitor for DC link application		High voltage contactors		PFC components for power quality solutions
	Aluminum electrolytic capacitors for frequency converter		LCL filter, sinewave, DC-AC reactors, output chokes.		DC-DC converters / bidirectional DC-DC converters
	MEGA Cap & Low Resistance inline MEGA Cap		Industrial SSD & memory cards		Flip Chip bonding machines
	Ferrite cores for switching power supplies		UHV ceramic capacitors		Sensors for position, angle, motion, vibration, current, temperature, pressure measurement



TDK Technology
Attractive energy.

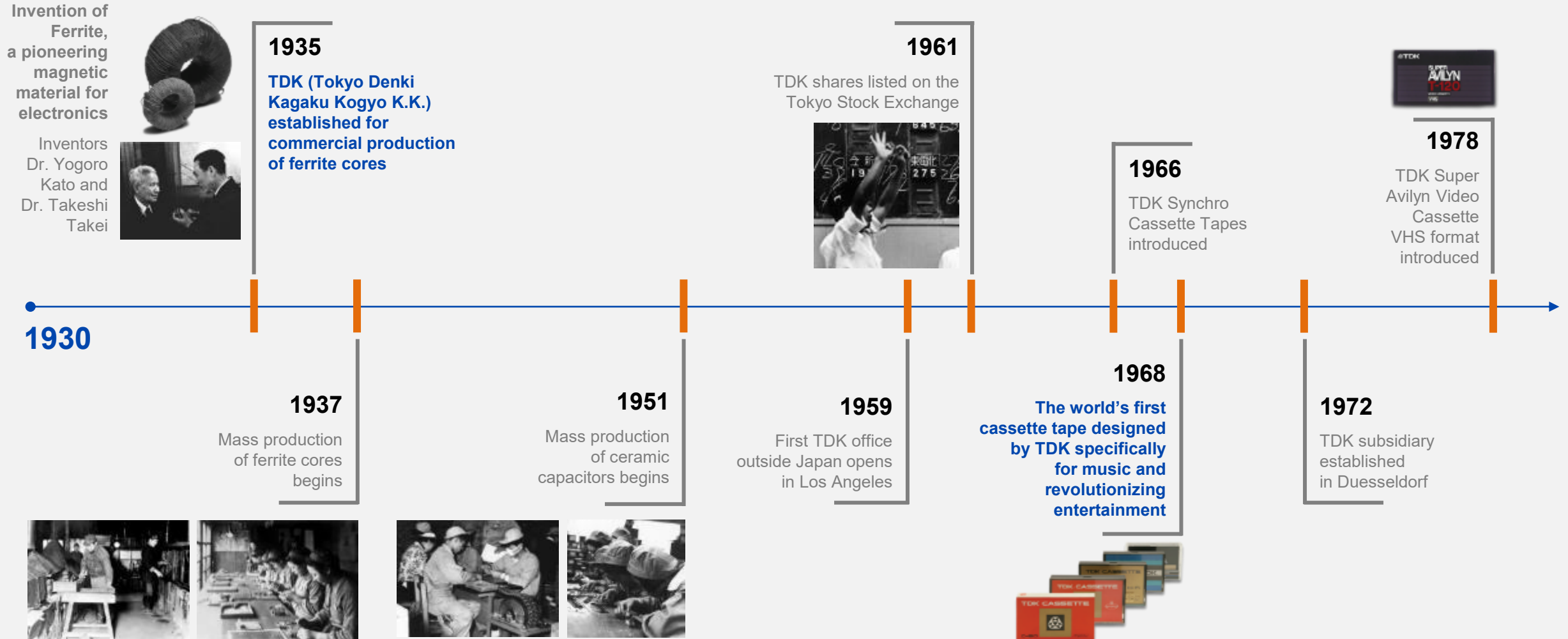
We provide advanced solutions for Home & Healthcare

	Varistors, PTC- and NTC-ICLs for input protection		Modules with SESUB (Semiconductor Embedded in substrate)		Electric double layer capacitor & solar cell for energy storage & harvesting
	CeraCharge for energy storage		MEMS microphones motion sensors (accel/gyro) pressure sensors		Coils for wireless charging
	Piezo actuators for haptic feedback and speaker solutions		Power inductors for noise suppression and voltage stabilization		Capacitors for motor run application under normal and harsh environment
	Aluminum electrolytic capacitors for inverters		Piezoelectric buzzers / electromagnetic buzzers		Lithium-ion batteries for energy storage
	MEMS Microphones		X2 film capacitors for EMI suppression		MLCCs and mid-voltage ceramic capacitors for noise suppression
	Feedthrough ceramic capacitors for magnetron		Pressure sensors		Neodymium magnets for motors
	Ferrites, inductors, EMC components & transformers for power supplies		Humidity Sensors		NTC thermistors

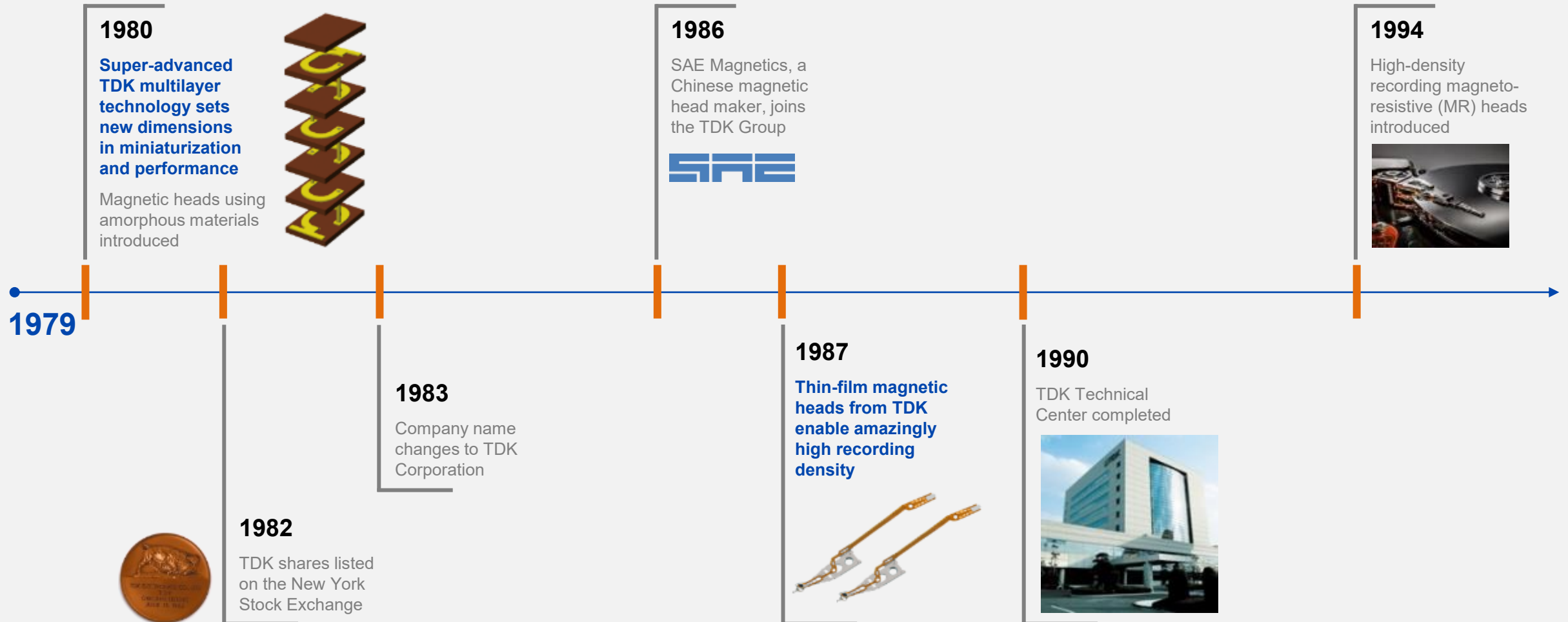


TDK Technology
Attractive energy.

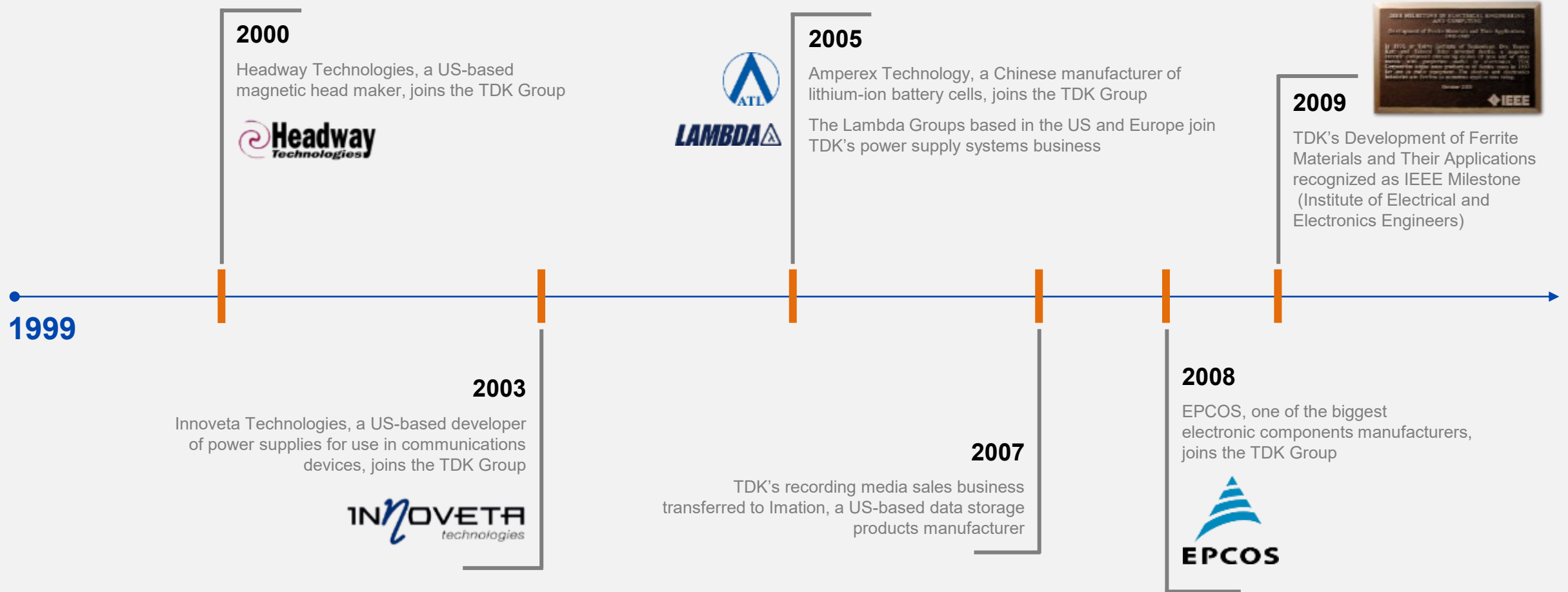
TDK timeline



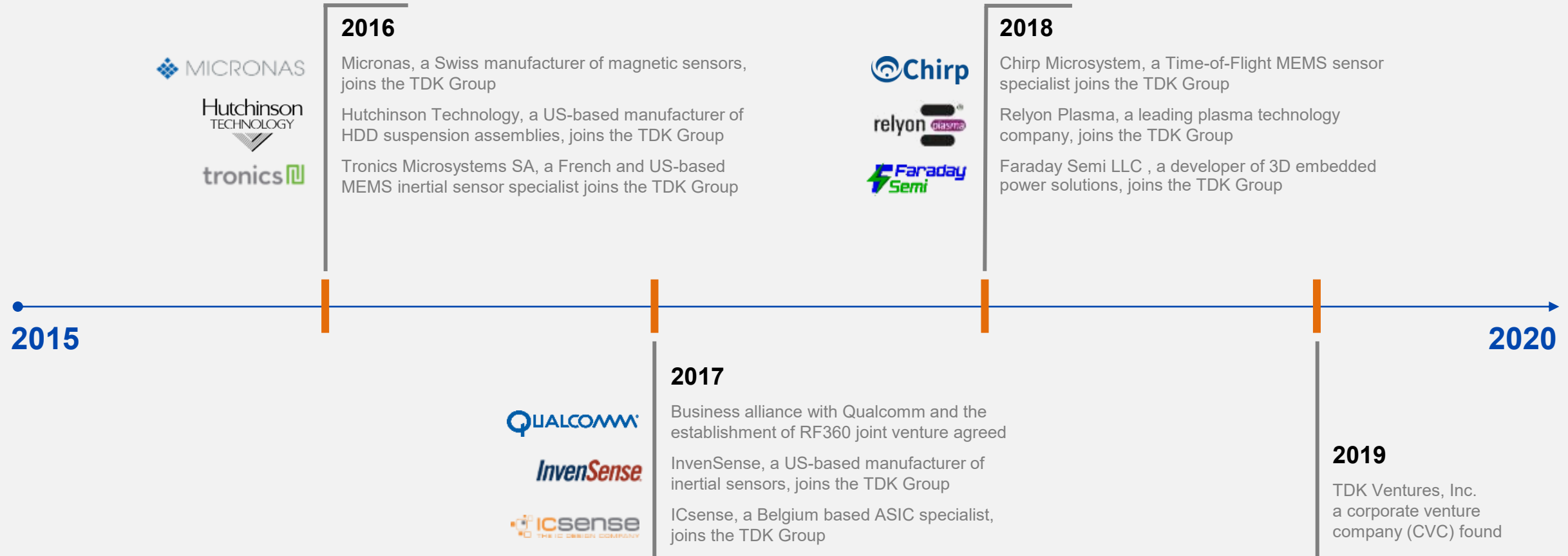
TDK timeline



TDK timeline



TDK timeline



Communication message: Attracting Tomorrow

- TDK was founded in 1935 with the purpose of commercializing ferrite, the world's first magnetic material. In 2025, we are celebrating our 90th anniversary, and to mark the occasion we have created a new **communication message**.
- These words symbolize TDK's aspirations as we have continued over the years to create new norms through encounters with various industries, including music, computers, automotive, and energy. From now on also, TDK will endeavor in various fields to build and change the future from small components.

Attracting Tomorrow

Sentiment contained in “Attracting Tomorrow” message

The verb “attract” is used to describe how a magnet draws iron.

It also has the meaning of captivating and fascinating people.

On the basis of our core competence in magnetic technology, TDK has continued to create new technological frontiers with the capacity to change the future.

Rather than just waiting for the future to happen, we should seek to attract it with our own will and effort.










Branding campaign

Make It Attractive













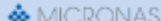






- TDK has been pursuing a global branding campaign, which focuses on seven growth applications.
 - IoT
 - Connections (5G)
 - Mobility (Autonomous Cars & EV)
 - Healthcare/Medical/Wellness
 - Renewable Energy
 - Robotics
 - Experience (AR/VR)
-
- The aim is to illustrate how existing and future innovative technologies and products of the TDK Group can realize the world of tomorrow.
 - TDK's contribution is instrumental in achieving the United Nations Sustainable Development Goals (SDGs).



TDK Corporation: Successive presidents







								
Current President Noboru SAITO	8th President Shigenao ISHIGURO	7th President Takehiro KAMIGAMA	6th President Hajime SAWABE	5th President Hiroshi SATO	4th President Yutaka OTOSHI	3rd President Fukujiro SONO	2nd President Teiichi YAMAZAKI	1st President Kenzo SAITO
Presidency: 2022/04 to present	Presidency: 2016/06 to 2022/3	Presidency: 2006/06 to 2016/06	Presidency: 1998/06 to 2006/06	Presidency: 1987/02 to 1998/06	Presidency: 1983/02 to 1987/02	Presidency: 1969/01 to 1983/02	Presidency: 1947/12 to 1969/01	Presidency: 1935/12 to 1947/12
Date of birth: September 10, 1966 Place of birth: Japan, Mie Prefecture	Date of birth: October 30, 1957 Place of birth: Japan, Shizuoka Prefecture	Date of birth: January 12, 1958 Place of birth: Japan, Kagoshima Prefecture	Date of birth: January 9, 1942 Place of birth: Japan, Tokyo	Date of birth: February 10, 1929 Place of birth: Japan, Tokyo	Date of birth: October 12, 1916 Place of birth: Japan, Hyogo Prefecture	Date of birth: August 27, 1912 Place of birth: Japan, Hyogo Prefecture	Date of birth: August 5, 1909 Place of birth: Japan, Shizuoka Prefecture	Date of birth: February 11, 1898 Place of birth: Japan, Akita Prefecture
Career 2022 Apr: President	Career 2016 Jun: President 2022 Apr: Chairman	Career 2006 Jun: President 2016 Jun: Chairman 2018 Jun: Mission Executive	Career 1998 Jun: President 2006 Jun: Chairman 2011 Jun: Director and Chairman of the Board 2012 Jun: Advisor	Career 1987 Feb: President 1998 Jun: Advisor	Career 1983 Feb: President 1987 Feb: Chairman	Career 1969 Jan: President 1983 Feb: Chairman 1987 Feb: Senior Advisor 1990 Jun: Advisor	Career 1947 Dec: President 1969 Jan: Chairman 1983 Feb: Advisor	Career 1935 Dec: Established Tokyo Denki Kagaku Kogyo K.K. 1947 Dec: Honorary Chairman

TDK Group: Sales Responsibilities

Business Company	Business Group/ Business Division	Products	Brand	Sales Company
ECBC Electronic Components BC	Ceramic Capacitors BG	MLCCs etc.		TDK TDK Electronics
	Magnetics BG	Inductors, EMC Filters, Transformers, Ferrites	 	
	Communication Devices BG	High-frequency Devices		
	Piezo & Protection Devices BG	Piezo Actuators, Varistors, Thermistors, Arresters	 	
	Aluminum & Film Capacitors BG	Aluminum Electrolytic & Film Capacitors		
	Package and Foundry BD	Thin Film Device, Photovoltaic Cell, Semiconductor Embedded Substrate		TDK
SSBC Sensor Systems BC	Temperature & Pressure Sensors BG	NTC Sensors, Pressure Sensors, High grade inertial Sensors, Diagnostic Chips	  	TDK TDK Electronics Tronics
	Magnetic Sensors BG	TMR Angle & Hall Effect Sensors	 	TDK TDK-Micronas (SSG*)
	MEMS BG	Motion Sensors, Pressure Sensors, Microphones & Ultrasonic	  	InvenSense (SSG*) TDK
ESBC Energy Solutions BC	Energy Devices BG	Lithium-ion Batteries		ATL (TDK)
	Power Systems BG	Power Supplies, Power Line EMC Filters		TDK-Lambda (TDK)
	Energy Systems BG	DC-DC-Converters for xEV, On-board Chargers for xEV		TDK

* SSG = Sensors Sales Group

TDK Group: Sales Responsibilities

Business Company	Business Group/ Business Division	Products	Brand	Sales Company
MHBC Magnetic Heads BC	HDD Heads BG	HDD Heads	SAE	SAE
	HDD Components BG	HDD Components Camera Module Parts	Magnecomp Hutchinson	Magnecomp Hutchinson
	Magnet Products BG	Ferrite Magnets Neo Magnets	 TDK	TDK
	Micro-actuator Solutions BG	Image Stabilizing Devices	 TDK	TDK
	Flash Memory Applied BD	Flash Memories	 TDK	TDK
	EMC & RF Solutions BD	Radio Wave Absorbers, Anechoic Chambers, Measurement Systems	 TDK	TDK / TDK RF Solutions
	Applied Film BD	ITO Transparent Conductive Film	 TDK	TDK
	Next Generation Products & Solutions Group	Biosensors EDLC Optical Devices Position & Monitoring Systems	 TDK	TDK

TDK Group's Materiality

TDK Group's Materiality has been identified as the top priority management issues for “achieving Medium-Term Plan (2021-2023)” and “pursuing both a sustainable society and corporate growth”.

Medium Term Policy: Accelerate DX and EX in order to realize 2CX and create value for a sustainable society



Energy transformation (EX): Contribution to energy and environmental solutions by minimizing waste heat and noise with electronic devices	Quality Management	HR Management	Supply Chain Management	Opportunity & Risk Management	Pursuing Both Delegation of Authority and Internal Controls	Asset Efficiency Improvement
<ul style="list-style-type: none"> • Effective use of energy and expanding use of renewable energy toward the realization of net zero CO₂ emissions in 2050 • Provide products and solutions for creating clean energy to realize a zero-carbon society • Provide products and solution for realizing an efficient energy society by strong, converting, and controlling energy 	<ul style="list-style-type: none"> • Pursue zero-defect product quality • Reduce quality costs • Maximize customer satisfaction with products and service quality 	<ul style="list-style-type: none"> • Develop human resources to lead the TDK group • Foster greater diversity and inclusion • Improve employee engagement and job satisfaction to attract and retain talented employees 	<ul style="list-style-type: none"> • Enhance global procurement capabilities and mechanisms • Ensure responsible procurement • Ensure societal and environmental consideration in supply chain 	<ul style="list-style-type: none"> • Identify and capture business opportunities effectively by strengthening marketing capability with full use of digital technology • Strengthen the group's risk management capabilities 	<ul style="list-style-type: none"> • Ensure speed and transparency in operations, based on the clearly defined roles, authorities and responsibilities of each organization • Make management systems of each group company more effective and efficient, aligned with the group's unified policy • Implement appropriate post-merger integration(PMI) for acquired companies 	<ul style="list-style-type: none"> • Rebuild business portfolio • Optimize facilities and manufacturing sites
Digital transformation (DX): Promotion of the digitalization of society by adding software technology to material science and process technology						
<ul style="list-style-type: none"> • Provide products and solutions to help build resilient communication network infrastructure • Provide products and solutions for supporting robotics and mobility to promote human capability enhancement and complementation • Promote digitalization at TDK 						

TDK's Sustainability – sustainability vision and social assessments

“Technology for the well-being of all people”

TDK Group strives to restore and protect the global environment while promoting respect for human rights. Through its innovative core technologies and solutions, TDK Group advances the development of a sustainable society and champions well-being for all people.

Social assessments related to sustainability activities by Investors and ESG rating agencies



Named climate leader on CDP's Annual 'A List' for global water stewardship for the second consecutive year

TDK's actions for its 'Water Security' have been highly evaluated.

FTSE Blossom Japan Index

An index provided by FTSE Russell (based in the U.K.) that was designed to measure the performance of Japanese companies with outstanding ESG responses.



Recognized as leader and awarded an A ranking in CDP Supplier Engagement Rating for the second consecutive year

TDK was praised as it promotes environmental activities working with suppliers and discloses SCOPE3 emissions.

MSCI ESG Leaders Indexes

An index provided by MSCI (based in the U.S.) that selects companies with outstanding ESG assessments.

FTSE4 Good Index Series

An index provided by FTSE Russell (based in the U.K.) that was designed to measure the performance of companies that implement strong ESG measures.

MSCI Japan ESG Select Leaders Index

An index provided by MSCI (based in the U.S.) that selects Japanese companies with outstanding ESG assessments.



www.tdk.com