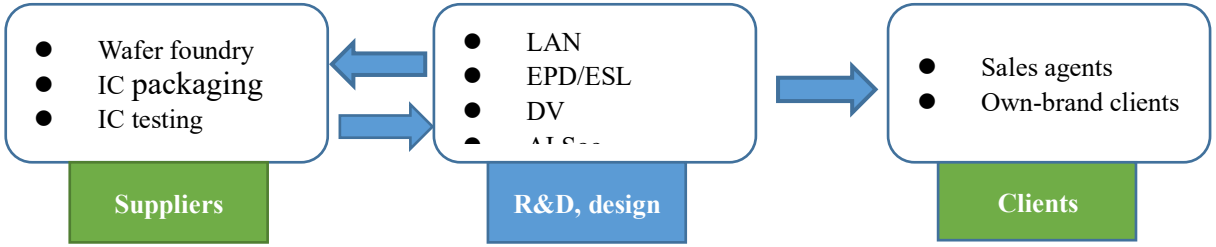
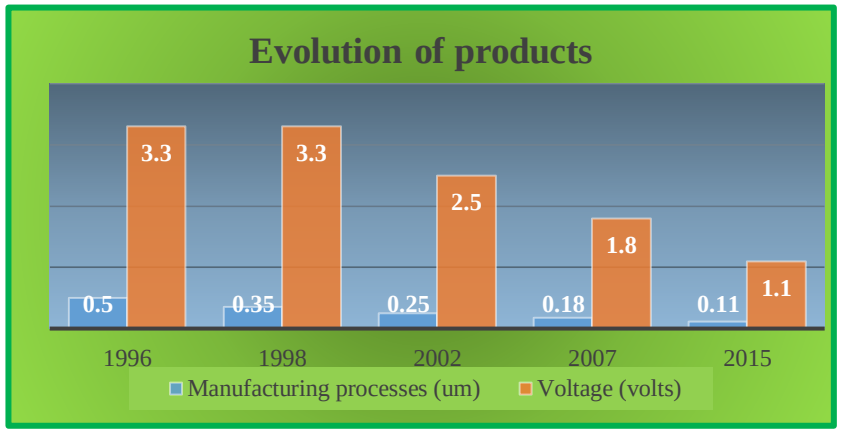
2. Enhance Cooperation among Value Chains

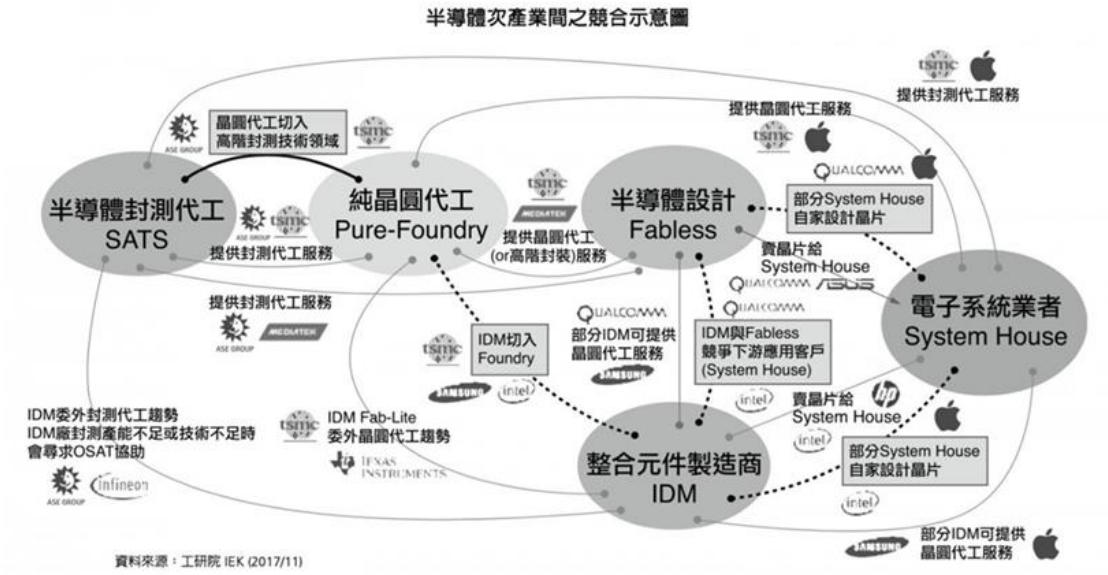
DAVICOM Semiconductor is a small-size IC design house and aims to develop durable and top-quality products. Through conforming to EICC (Electronic Industry Citizenship Coalition) Code of Conduct, we have cooperated with upstream and downstream partners. Our business covers four main product lines: Ethernet ICs, EPD (E-Paper Display) driver ICs, Video Decoder ICs, and AI SoC. We focus on niche-market products and have cooperated with suppliers and clients (B2B for both) to jointly set up green supply chains. They are our important partners for jointly creating sustainability value.



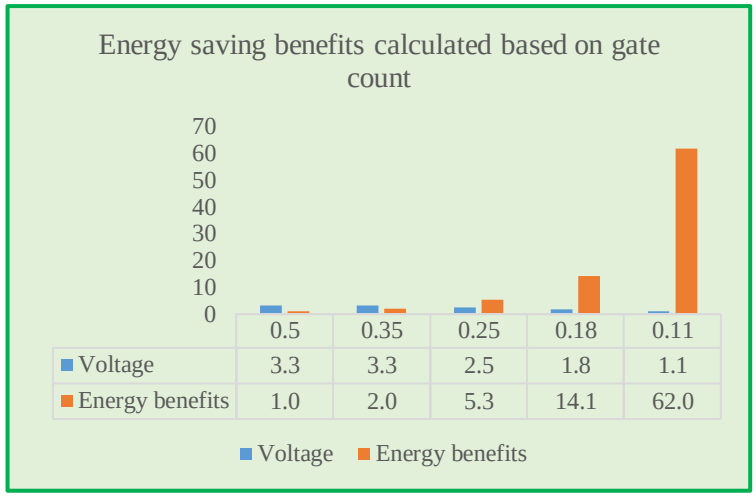
2.1 Innovation R&D and services

DAVICOM Semiconductor have made efforts to develop energy-saving products and keep carrying on innovation R&D through following international market trends. We focus on R&D of four main product lines: Ethernet ICs, EPD (E-Paper Display) driver ICs, Video Decoder ICs, AI SoC, and continue innovation and technological improvement to enhance functions, reduce weight and dimensions, save energy and reduce carbon emissions, add AI functions for products. Because of diversity of market demand, semiconductor manufacturing processes are improving and IC sizes are decreasing, making IC design more and more complicated. We announced continued investment in R&D including R&D manpower in 2017 and set an energy-saving target of reduction in power consumption by 20%, and then have developed new products with less power consumption and equipped with diversified IoT systems to help clients meet diverse demand. Help clients develop diversified IoT systems.





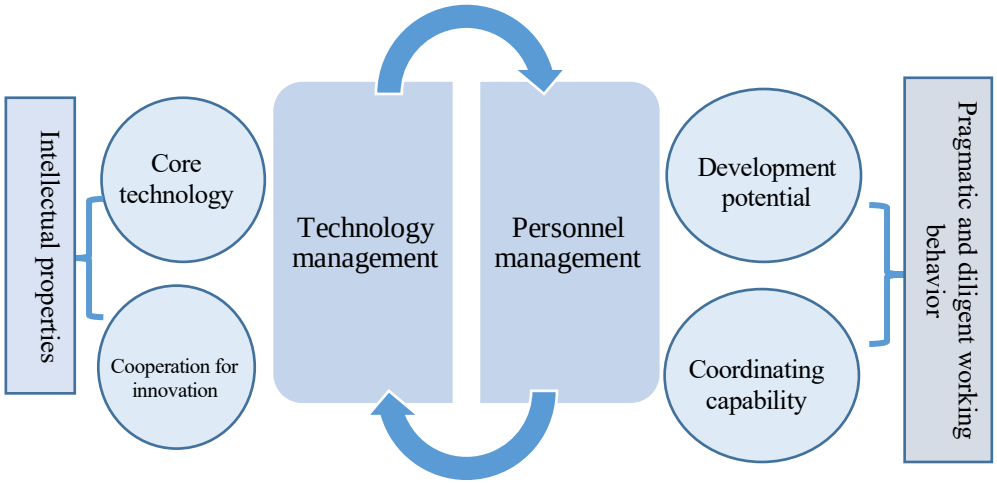
▲ **Interrelations of our products in the secondary semiconductor industry**



▲ **Energy saving for new products is the primary goal for innovation R&D**

■ Management framework for innovation R&D

In terms of technology management, we introduce new technologies through merger and acquisition, technological transfers, industry-university cooperation for application to design and development of new products, and combine introduced technologies with our core technologies to design next products. Introduction of technologies is an engineering feat, for it enables us to keep expanding product lines, improving quality of products and hiking production efficiency to meet clients' needs.



For human resource management, we encourage employees to materialize various types of innovation in their work through internal performance evaluation and an incentive mechanism. Especially for transferring technologies from other companies, we lay emphasis on engineers' development potential and inter-person coordinating capability to facilitate technological transfers and cooperation on the corresponding items. Employee management and development is a basis for our success and, especially in environment characterized by rapid development, to maintain high-level innovation and strong competitiveness is an important strategy to realize long-term development.

■ **Technologies and R&D**

Year	R&D expense	Proportions
2021	NT$72.716 million	26%
2022	NT$74.524 million	24%

We develop and produce high-speed Ethernet ICs and ICs used in consumer communication devices, following are our various products:

Embedded system with high speed ethernet network IC - 10/100/1000 M SPI、USB bus, PCI bus, MAC+PHY single chip
Embedded system with high speed ethernet network and switch IC - 10/100M multi-port smart switch IC
E-Paper Display driver ICs and SoC
MCU chips
Video DecoderICs

2.2 Responsible production and consumption

In DAVICOM Semiconductor, we have learned that responsible production and consumption can create social and environmental values. Our production processes strictly comply with international standards regarding environment, Wellness and safety as well as the international regulations concerned. We will give importance to promoting green management to keep reducing energy consumption, carbon emissions, emissions of pollutants in a bid to decrease the negative influence of production and consumption on environment. We will also endeavor to develop durable products and deliver them using green logistics processes as well as encourage consumers to adopt energy-saving and waste-minimizing actions. We hold the strong belief that responsible production and consumption can lead to better future for the world.

■ **Quality management**

DAVICOM Semiconductor's production process: R&D, design →layout→ masks→ wafer foundry →IC packaging →IC testing →products As wafer foundry, IC packaging and IC testing are outsourced, we carefully select suppliers for these processes and cooperate with them to maintain healthy ecological environment for the Earth.

In our history, there have been no cases of violation of environmental protection regulations, and our environmental management system has won clients' high trust. Since 2006, our products have obtained Sony Green Partner environmental quality certification for many times, with DAVICOM Semiconductor and its parent company UMC, IC packager Siliconware Precision Industries (SPIL) being Sony's green partners. (For DAVICOM code number FC008920; UMC code numbers FC007537, FC007538, FC007532, FC007533, FC007534, FC007535, FC007536, FC007539; SPIL code number FC005118) There have been historically no cases of violation of environmental protection regulations, and our environmental management system has won clients' high trust.

For our products, we provide clients with self-declaration of conformity indicating compliance with the corresponding environmental protection regulations and management procedures.

Preface	Our self-declaration of conformity for product management
1.	Sony SS00259 (management rules under substance environmental management for components and materials)
2.	Sony PQ-2029 (document of management procedures for environmental quality)
3.	EU RoHS (2011/65/EU, Restriction of Hazardous Substances in Electrical and Electronic Equipment, RoHS Directive)
4.	EU REACH (EC 1907/2006) SVHC (Substance of Very High Concern)
5.	PFOS (2006/122/EC, directive to restrict use of PFOS)
6.	DMF (2009/251/EC, directive to restrict use of DMF)
7.	Halogen (IEC 61249-2-21, directive to restrict use of halogen, only chlorine and bromine)

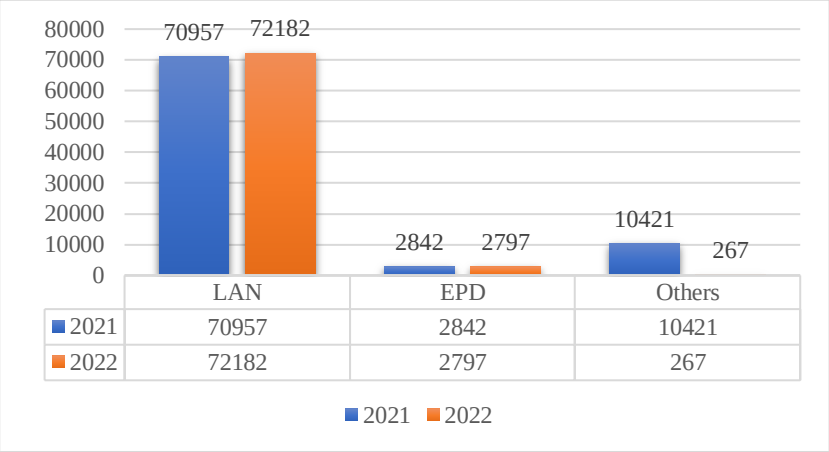
Failure to comply with regulations regarding information on products and services and required complete indication of such information: no cases in our history

Year	2018	2019	2020	2021	2022
Frequency of regulation violation	**0**	**0**	**0**	**0**	**0**

■ Operational strategies featuring leanness and agility

Lean production strategy differs from agile production strategy. Lean production focuses on minimizing waste and hiking production efficiency, while agile production stresses quick response to market demand and accordingly quick adjustment in production. Through adopting lean production strategy in combination with agile one, our high-efficiency and flexible production mode can turn out high-quality products.

During COVID-19 pandemic, realization of lean and agile production strategies necessitated adoption of series responsive measures. For lean production, we closely track suppliers' production capacities, hike our production efficiency, strengthen inventory management and production scheduling, avoid waste and impact of COVID-19 pandemic on operating cost. For agile production, we sense quick changes in market demand and thereby actively adjust production lines to respond to new demand as well as enhance supply chain management to ensure stability of IC supply. Through these measures, we were able to maintain high-efficiency production and stable sales during COVID-19 pandemic.



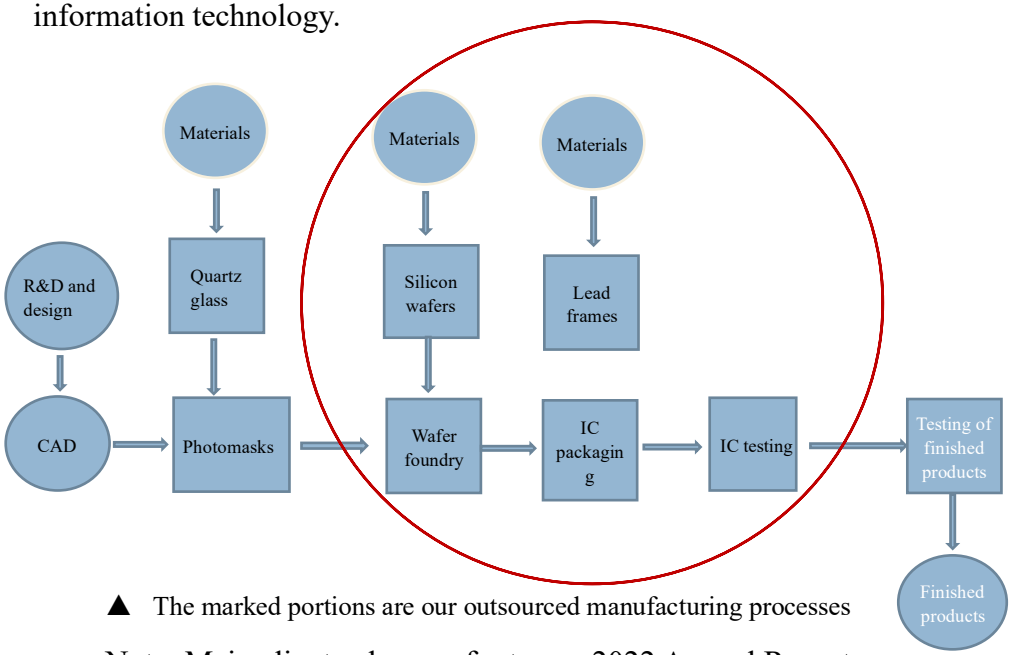
Note:

1. Production line adjustment mitigation in 2022 due to COVID-19 pandemic, but output of main LAN products was not affected.

2.3 Customer relationship management

As we are committed to sharing benefits with clients, we provide products and services for clients along with forming partner alliances, boosting joint innovation and offering professional solutions for win-win. We will keep paying attention to clients' needs and cooperate with clients to create better future.

In order to avoid unnecessary competition, we focus on niche markets in China, Japan, South Korea, Europe and North America. In order to maximize benefit from allocating resources and more efficiently obtain orders from target clients, we have arranged sales agents in these niche markets and set up online technological service platforms at our headquarters in Taiwan to meet needs from clients in these markets via information technology.



▲ The marked portions are our outsourced manufacturing processes

Note: Main clients please refer to our 2022 Annual Report

■ Benefit-sharing business model

As sales agents are main partners for our operation, we collaborate with them via sharing of benefits to respond to needs from and provide online services for diverse clients. For example: IoV (Internet of vehicles), smart power grids, electronic labels and other system products as well as technological services.

■ Protect customer privacy

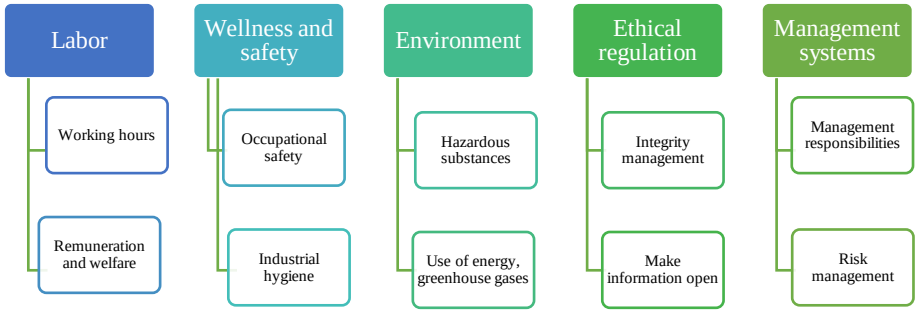
Since B2B is our operational model, protection of clients' business secrets to maintain industrial ethics and competition order is a serious problem. We have adopted two systems to efficiently manage clients' privacy.

As for employees, they are required to abide by professional ethics not to leak clients' methods, technologies, manufacturing processes, formulae, software programs, designs or other information that can be applied to operation, production or marketing.

In addition, we have set up a reliable information security system and recorded content of services provided for clients in detail.

■ Handling of client complaints

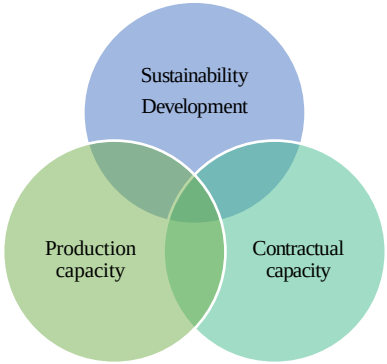
We immediately respond to clients' complaints through carefully listening to their problems, analyzing these problems and offering solutions as well as improving the products and services concerned to prevent same problems from happening again. Besides, we have set up an efficient client service system and a problem-solving mechanism to protect clients' interests and hike their satisfaction.



2.4 Sustainable suppliers

2.4.1 Carefully select partners

According to EICC (predecessor of Responsible Business Alliance, RBA) Code of Conduct, we have formulated a supplier sustainability management policy, a systematic management policy intended to check whether suppliers meet regulatory standards in labor, wellness and safety, environment, ethics and management system in a bid to realize our corporate social responsibility. We hope to cooperate with upstream semiconductor suppliers, via their influencing effects, to set up a sustainability industry characterized by emphasis on environmental protection, social responsibility and sincere management as well as promote mutually trusting and benefiting partnership between us and our suppliers.



As an IC design house, our social and environmental influence is limited. We give importance to suppliers' ethical responsibility, performance in environmental protection and labor policy and check their efforts in UN Sustainable Development Goals, a criterion for us to select long-term partners.

As regards environment, we ask suppliers of wafer foundry, IC packaging and IC testing services to have ISO 14001 and ISO 14064 certification and ensure that all materials for use comply with Sony's management rules under substance environmental management for components and materials and EU ROHS Directive.

Note: Conflict minerals refer to minerals mined under conditions of armed clash and human rights violation, especially tin, gold, tantalum and tungsten produced in Democratic Republic of Congo and its neighboring countries. Mining of conflict minerals is through exploiting local workers who are forced to undertake inhumane mining under bad working environment, with country rulers using profits from conflict minerals in wars and looting resources. Continued civil wars in these countries have aggravated poverty and worsened public security, with violence against women, forced recruitment of child labor by anti-government army, employment of children for mining being common.

We will continue supplier management as well as keep examining raw material supply processes and material control mechanisms to prevent conflict metals from infiltrating our production process. We will comply with EICC regulation to provide safe working environment and respect employees' interests, a bid to be responsible for environment and realize our corporate social responsibility.

Surveys of and maintaining conformity to environmental protection:

We will continue supplier management to secure raw material supply

processes and material control mechanisms so as to prevent conflict metals from infiltrating our production process. We will comply with EICC regulation to provide safe working environment and respect employees' interests, a bid to be responsible for environment and realize our corporate social responsibility.

Maintain labor safety and health as well as ethical regulation for employees:

We inspect suppliers' open information to see if they comply with EICC standards and human rights guiding principles. We cooperate with suppliers to formulate regulations regarding green environmental protection, safety and health, hike employee welfare and reduce environmental hazards to realize integrity management and risk control, with annual reports of results displaying our social responsibility of endeavoring to upgrade sustainability supply chain.

2.4.2 Supplier management

Management goals	Management strategies		Expected fruition
	Targets of auditing	Content of evaluation	
Maintain long-term and stable relations with excellent suppliers	Once a year	Twice a year (the first and second halves)	DAVICOM Semiconductor ISO 9001 Execution results of documents
	Wafer foundry service providers: 50 or more wafers per month	Contractual capacity Social responsibility:	IC packaging service providers: one million or more ICs per month IC testing service providers: one million or more ICs per month or equivalent of 50 or more wafers per month	Environment: ISO14000 (including ISO14001, ISO14062, ISO14063, ISO14064), no use of conflict minerals. Social aspects: salary, wellness, human rights for labor, equal rights for men and women, social concern	100% attainment, the same as in 2020

Main suppliers

Name	Item	Proportion of annual procurement (%)		Note
		2021	2022	
A	Wafers	69.18	81.29	Due to vertical integration in semiconductor market, we procure main silicon wafers from UMC.
C	Wafers	13.79	—	
G	IC packaging and testing	11.45	—	
H	IC packaging and testing	—	16.08	
I	IC packaging and testing	—	1.21	
Others	IC packaging and testing	5.58	1.42	

Supplier auditing and evaluation

	Auditing	Evaluation
Suppliers	Wafer foundry service provider: UMC IC packaging and testing: H, I	Wafer foundry service provider: UMC IC packaging and testing: H, I
Fruition	100% meets requirements	All belong to excellent suppliers

Note: we audit and evaluate suppliers through reviewing documents submitted by them and checking their factories and facilities.