



Semiconductor

The Taiwanese Fabless IC Industry, 3Q 2020

[Taiwanese Fabless IC Shipment Value, 1Q 2018 - 4Q 2020](#)

[Taiwanese Fabless IC Shipment Value by Application Category, 1Q 2018 - 2Q 2020](#)

[Taiwanese Fabless IC Shipment Value Share by Application Category, 1Q 2018 - 2Q 2020](#)

[Taiwanese Fabless IC Shipment Value by Product Category, 1Q 2018 - 2Q 2020](#)

[Taiwanese Fabless IC Shipment Value Share by Product Category, 1Q 2018 - 2Q 2020](#)

[Taiwanese Fabless IC Shipment Value Ranking, 1Q 2018 - 2Q 2020](#)

[Taiwanese Fabless IC Shipment Value by tier, 1Q 2018 - 2Q 2020](#)

[Research Scope & Definitions](#)

By Kai-An Cheng

Document Code: SCSTL2020102701

Publication Date: October 2020

Check out MIC on the Internet!

<http://mic.iii.org.tw>

MIC.

© Copyright 2020 Market Intelligence & Consulting Institute

The content herein represents our analysis of information generally available to the public or communicated to us by knowledgeable individuals or companies, but is not guaranteed as to its accuracy or completeness.

Shipment Value

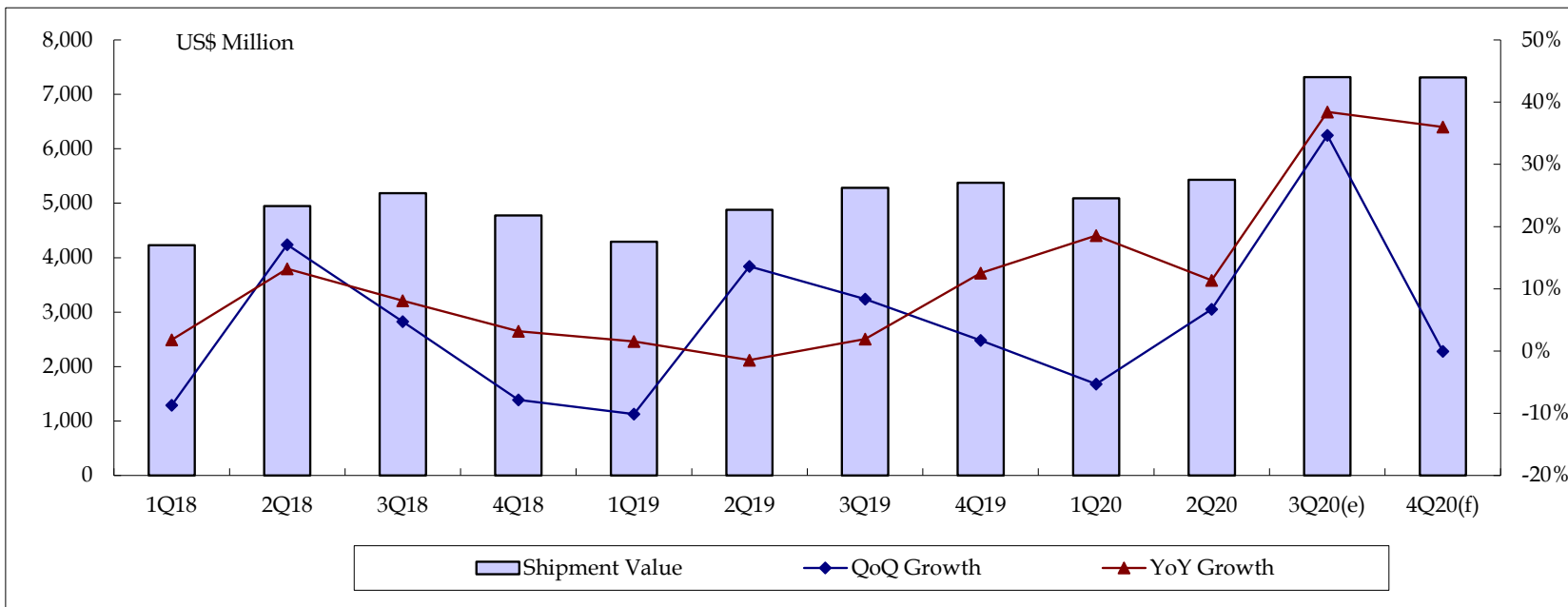
[Back to Index](#)

Taiwanese Fabless IC Shipment Value, 1Q 2018 - 4Q 2020

Unit: Million US\$

	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20(e)	4Q20(f)
Shipment Value	4,227	4,950	5,184	4,777	4,293	4,878	5,284	5,376	5,091	5,432	7,315	7,311
QoQ Growth	-8.7%	17.1%	4.7%	-7.8%	-10.1%	13.6%	8.3%	1.7%	-5.3%	6.7%	34.7%	-0.1%
YoY Growth	1.8%	13.2%	8.1%	3.2%	1.6%	-1.5%	1.9%	12.5%	18.6%	11.4%	38.4%	36.0%

Source: MIC, October 2020



Application Mix

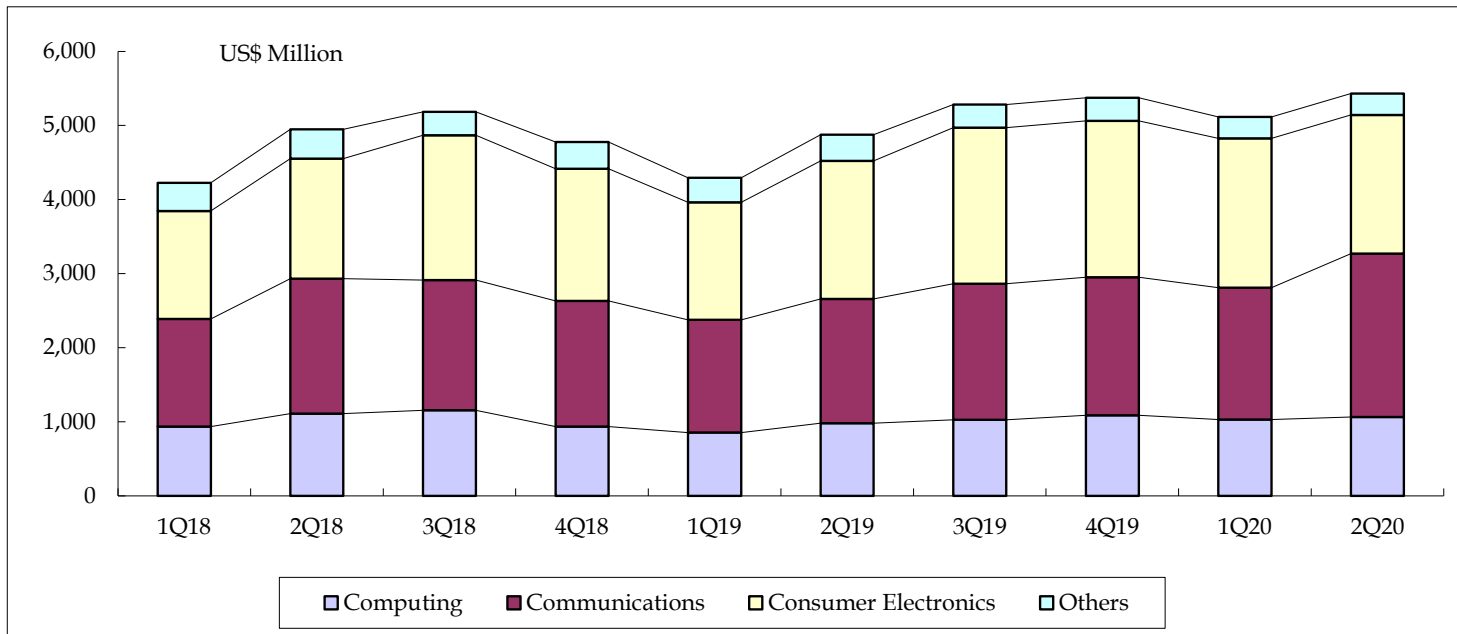
[Back to Index](#)

Taiwanese Fabless IC Shipment Value by Application Category, 1Q 2018 - 2Q 2020

Unit: Million US\$

	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Computing	937	1,110	1,155	937	855	981	1,029	1,087	1,031	1,066
Communications	1,451	1,824	1,758	1,697	1,522	1,678	1,836	1,864	1,778	2,205
Consumer Electronics	1,460	1,619	1,956	1,781	1,588	1,864	2,108	2,110	2,018	1,873
Others	380	397	315	363	328	355	312	315	289	289
Total	4,227	4,950	5,184	4,777	4,293	4,878	5,284	5,376	5,091	5,432

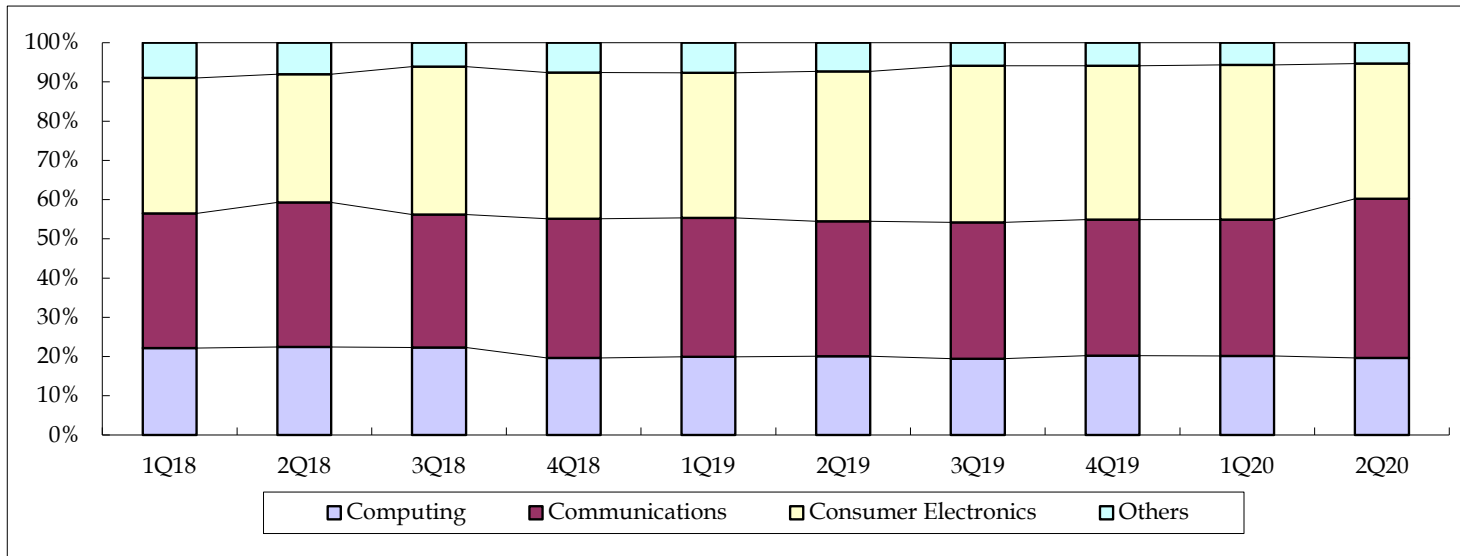
Source: MIC, October 2020



Taiwanese Fabless IC Shipment Value Share by Application Category, 1Q 2018 - 2Q 2020

	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Computing	22.2%	22.4%	22.3%	19.6%	19.9%	20.1%	19.5%	20.2%	20.2%	19.6%
Communications	34.3%	36.9%	33.9%	35.5%	35.4%	34.4%	34.7%	34.7%	34.8%	40.6%
Consumer Electronics	34.5%	32.7%	37.7%	37.3%	37.0%	38.2%	39.9%	39.2%	39.4%	34.5%
Others	9.0%	8.0%	6.1%	7.6%	7.7%	7.3%	5.9%	5.9%	5.6%	5.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: MIC, October 2020



Product Mix

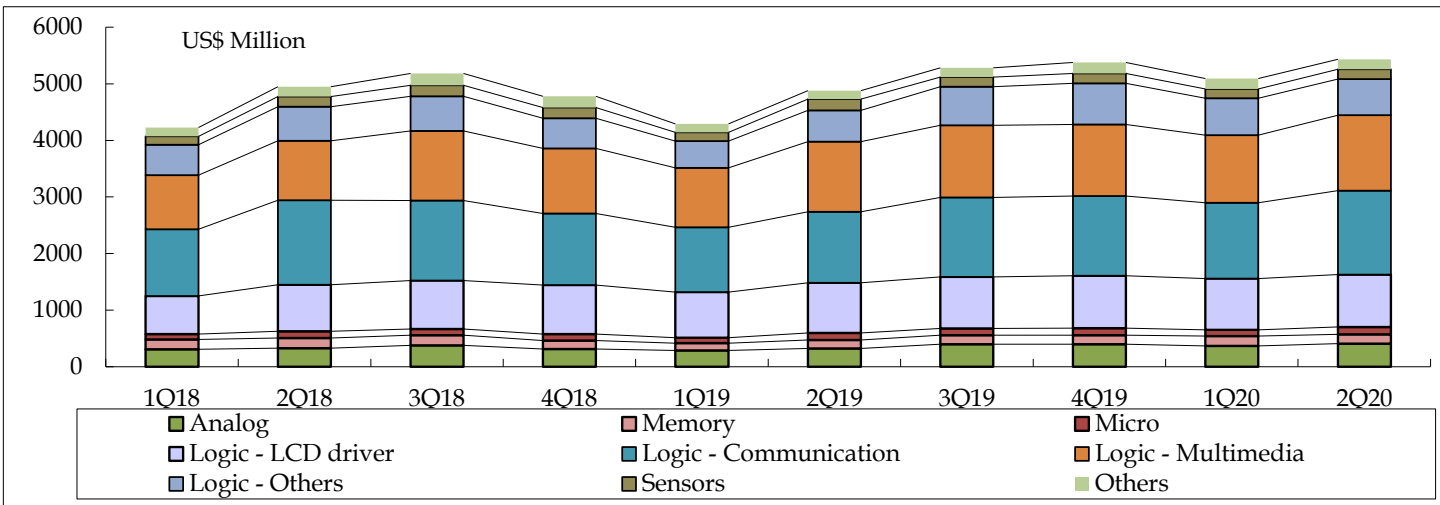
[Back to Index](#)

Taiwanese Fabless IC Shipment Value by Product Category, 1Q 2018 - 2Q 2020

Unit: Million US\$

	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Analog	306	326	380	313	288	325	396	397	369	408
Memory	177	182	176	151	128	149	162	162	174	164
Micro	96	120	112	114	97	122	120	124	108	131
Logic - LCD driver	672	819	858	867	807	890	907	925	909	925
Logic - Communication	1,178	1,493	1,413	1,265	1,146	1,252	1,406	1,410	1,340	1,483
Logic - Multimedia	956	1,052	1,226	1,148	1,046	1,240	1,275	1,262	1,195	1,332
Logic - Others	538	602	616	531	474	554	680	725	651	639
Sensors	148	182	191	190	156	197	171	177	163	173
Others	156	173	212	198	150	150	167	192	182	176
Total	4,227	4,950	5,184	4,777	4,293	4,878	5,284	5,376	5,091	5,432

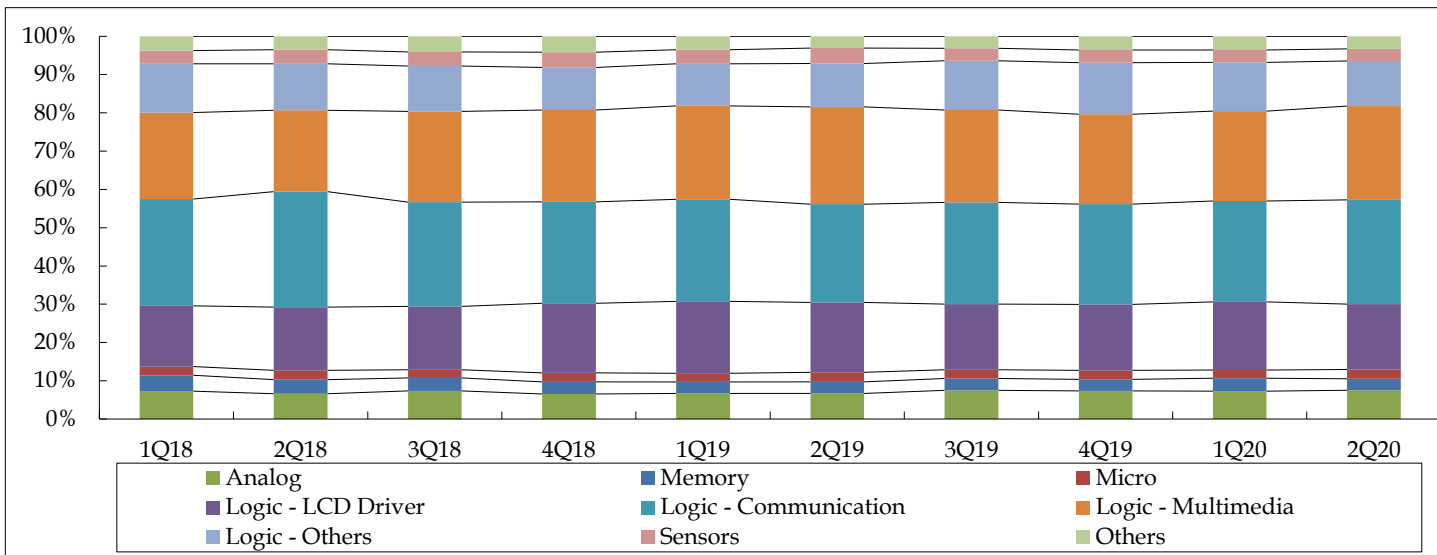
Source: MIC, October 2020



Taiwanese Fabless IC Shipment Value Share by Product Category, 1Q 2018 - 2Q 2020

	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Analog	7.2%	6.6%	7.3%	6.6%	6.7%	6.7%	7.5%	7.4%	7.2%	7.5%
Memory	4.2%	3.7%	3.4%	3.2%	3.0%	3.1%	3.1%	3.0%	3.4%	3.0%
Micro	2.3%	2.4%	2.2%	2.4%	2.3%	2.5%	2.3%	2.3%	2.1%	2.4%
Logic - LCD Driver	15.9%	16.6%	16.5%	18.1%	18.8%	18.2%	17.2%	17.2%	17.9%	17.0%
Logic - Communication	27.9%	30.2%	27.3%	26.5%	26.7%	25.7%	26.6%	26.2%	26.3%	27.3%
Logic - Multimedia	22.6%	21.2%	23.7%	24.0%	24.4%	25.4%	24.1%	23.5%	23.5%	24.5%
Logic - Others	12.7%	12.2%	11.9%	11.1%	11.0%	11.3%	12.9%	13.5%	12.8%	11.8%
Sensors	3.5%	3.7%	3.7%	4.0%	3.6%	4.0%	3.2%	3.3%	3.2%	3.2%
Others	3.7%	3.5%	4.1%	4.1%	3.5%	3.1%	3.2%	3.6%	3.6%	3.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: MIC, October 2020



Vendor Share

[Back to Index](#)

Taiwanese Fabless IC Shipment Value Ranking, 1Q 2018 - 2Q 2020

	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
1	Mediatek	Mediatek	Mediatek	Mediatek	Mediatek	Mediatek	Mediatek	Mediatek	Mediatek	Mediatek
2	Realtek	Novatek	Novatek	Novatek	Novatek	Novatek	Novatek	Realtek	Novatek	Novatek
3	Novatek	Realtek	Realtek	Realtek	Realtek	Realtek	Realtek	Novatek	Realtek	Realtek
4	Himax	Himax	Himax	Himax	Himax	Himax	Phison	Phison	Himax	Himax
5	Phison	Phison	Phison	Phison	Phison	Phison	Himax	Himax	Phison	Silicon Motion
6	Silicon Motion	Silicon Motion	Silicon Motion	GUC	Raydium	Raydium	Sitronix	Silicon Motion	ESMT	Phison
7	ESMT	GUC	GUC	Silicon Motion	ESMT	Sitronix	Raydium	Sitronix	Silicon Motion	ESMT
8	GUC	ESMT	ESMT	Raydium	Silicon Motion	ESMT	ESMT	Raydium	Raydium	Raydium
9	Focaltech	Focaltech	Focaltech	Sitronix	Sitronix	Silicon Motion	Silicon Motion	GUC	GUC	GUC
10	Sitronix	Sitronix	Sitronix	ESMT	GUC	GUC	ELAN	ESMT	Sitronix	FocalTech

Note: Mstar's 1Q 2014 revenue was consolidated into Mediatek; Orise's 1Q 2015 revenue was consolidated into Focaltech; 2Q 2016 revenues of Richtek and ilitek were consolidated into Mediatek

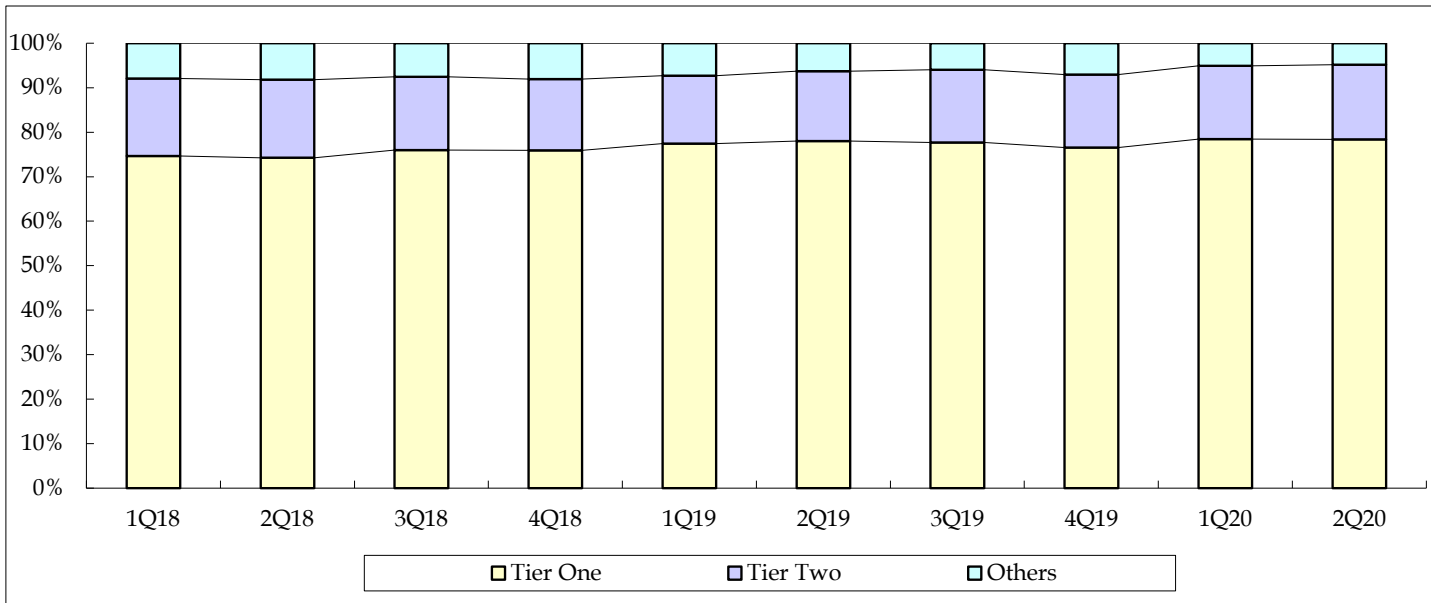
Source: MIC, October 2020

Taiwanese Fabless IC Shipment Value by tier, 1Q 2018 - 2Q 2020

	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Tier One	74.7%	74.3%	76.0%	75.9%	77.4%	78.0%	77.7%	76.5%	78.5%	78.4%
Tier Two	17.4%	17.6%	16.5%	16.1%	15.3%	15.7%	16.3%	16.4%	16.4%	16.8%
Others	7.9%	8.2%	7.5%	8.0%	7.3%	6.3%	6.0%	7.0%	5.1%	4.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: tier one means the vendors ranking from the first to the tenth and tier two means the vendors ranking from the 11th to the 30th.

Source: MIC, October 2020



Appendix

[Back to Index](#)

Research Scope

This research focuses on quarterly shipment value of IC (Integrated Circuit) design products and services of Taiwanese fabless IC companies. The research includes shipment value of in-house IC products, IC design services, and IP (Intellectual Property) licensing. Discrete components, distributed products, and module trading are not included.

Companies Covered

ELAN, ESMT, Focaltech, Global Unichip, Himax, Ilitek, Mediatek, Mstar, Novatek, Orisetech, Phison, Raydium, Realtek, Richtek, Silicon Motion, Sitronix

Product Definitions

IC

ICs consist of a variety of components such as transistors, resistors, capacitors, and diodes, and are produced on semiconductor materials.

Analog

Analog IC products include standard analog products (such as power management, amplifier, analog-to-digital converter and interface circuit), as well as application-specific analog products. RF products without digital technologies are also included.

Memory

Memory IC products include DRAM (Dynamic Random Access Memory), SRAM (Static RAM), NOR Flash, NAND Flash, EPROM (Erasable Programmable Read-Only Memory), ROM, and EEPROM (Electrically Erasable Programmable Read-Only Memory).

Micro

Microcomponent IC products include MCU (Microcontroller Unit), DSP (Digital Signal Processor), and MPU (Microprocessor Unit).

Logic- LCD Driver

LCD driver IC products are incorporated into the logic IC product category according to the definition of the WSTS (World Semiconductor Trade Statistics).

Logic- Communication

Includes logic IC products based on communications technologies, including mobile phone baseband IC, WLAN (Wireless Local Area Network) IC, and Ethernet IC.

Logic- Multimedia

Includes logic IC products based on multimedia processing technologies, including LCD controller and LCD TV controller IC, and multimedia processors for use in DVD players and STB (Set-Top-Box)

Logic- Others

Includes other logic IC products, including computer chipset, computer peripheral controller IC, and storage media controller IC.

Sensor

Includes IC products with sensor capability, such as CMOS (Complementary Metal Oxide Semiconductor) image sensors.

Others

Includes IC design services and related income from designing wafer or IC products, as well as IP royalties.

Application Definitions

Computer

ICs used in the computing and computer peripheral sectors, including desktop PC, notebook PC, optical disk drive, LCD screen, keyboard, and mouse.

Communications

ICs used in the communications and networking sectors, including mobile phone, cable modem, DSL, router, and VoIP (Voice over Internet Protocol) device.

Consumer Electronics

ICs used in the consumer electronics sector, including LCD TV, DVD players, STB, game console, digital camera, multimedia player, toys, and small home appliances.

Others

ICs used in other terminal products, and revenue from related IC design services.