

Overview on
Taiwan Semiconductor
Industry

(2015 Edition)



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I. Preface

This [Overview on Taiwan Semiconductor Industry](#) is a translated excerpt from an ITIS (Industrial Technology Information Services) publication, which provides an overview of Taiwan semiconductor industry in 2014. Also included is a directory of Taiwan semiconductor companies. These data should be valuable to those who wish to establish business relationship in Taiwan.

ITIS is a market research project, which is supported primarily by the Taiwan government. For semiconductor portion of the project, research was conducted in Industrial Economics & Knowledge Center of Industrial Technology Research Institute (IEK/ITRI).

Since the establishment of the Electronics Research and Service Organization of the Industrial Technology Research Institute (ERSO/ITRI) in early 1970's and its successive spin-offs of UMC and TSMC in 1980's, the semiconductor industry in Taiwan has been growing at a very fast pace. Currently TSIA represents approximately 71.3% of worldwide IC foundry revenue, around 54.8% of worldwide package and testing revenue, around 22.2% of worldwide design revenue. As the industry gains significant role in the global market place, information about Taiwan semiconductor industry is desirable worldwide. TSIA hopes this Overview on Taiwan Semiconductor Industry will serve as a useful reference for our global friends who seek to establish a closer connection with Taiwan semiconductor companies. We welcome your comments.

II. Taiwan Semiconductor industry in Year 2014

Overview of the Year

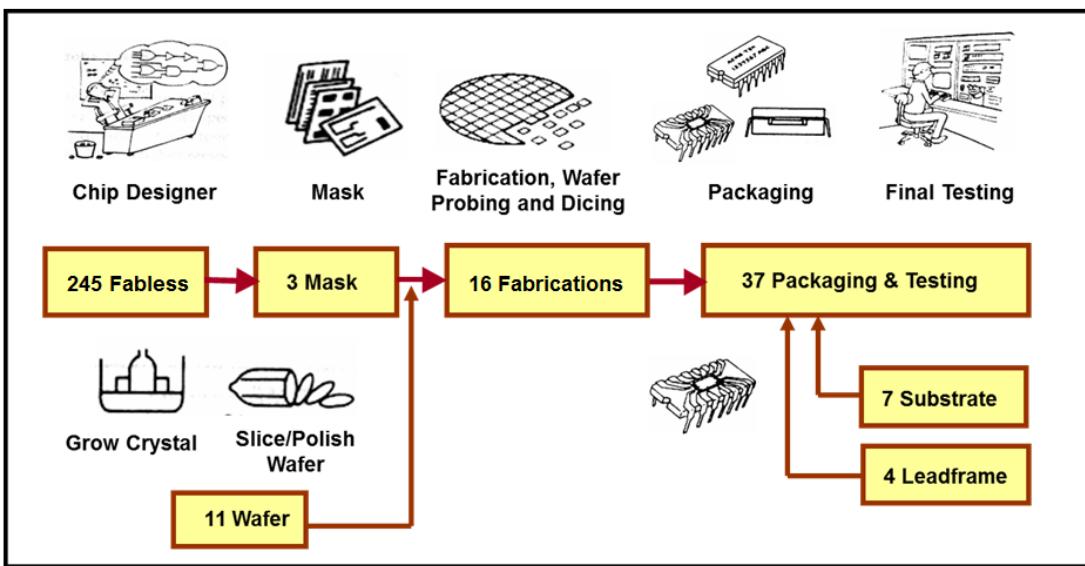
Taiwan Semiconductor revenue (including design, manufacturing, packaging, and testing) totaled NT\$2,203.3 billion (about US\$72.5B) in 2014, up 16.7% from 2013, with NT\$576.3 billion (US\$19.0B) in design, a 19.8% increase, NT\$1,173.1 billion (US\$38.6B) in manufacturing, a 17.7% increase (NT\$914.0B (US\$30.1B) in foundry, up 20.4% and NT\$259.1B (US\$8.5B) in memory, up 9.2%), NT\$316.0 billion (US\$10.4B) in packaging, up 11.1%, and NT\$137.9 billion (US\$4.5B) in testing, up 8.9%. Representing 30.4% of the US\$335.8B worldwide market, Taiwan IC industry was ranked number two, second to the US market. (Exchange rate NT\$/US\$ is 30.4.)

Table 1 Major Indices for Taiwan IC Industry

	2013	2014	2015(e)	2016(f)	2017(f)
Industry Revenue	1,888.6	2,203.3	2,246.6	2,374.9	2,529.0
IC Design	481.1	576.3	562.6	600.0	640.0
IC Manufacturing	996.5	1,173.1	1,242.7	1,320.9	1,403.0
Foundry	759.2	914.0	1,013.7	1,105.9	1,192.2
Memory	237.3	259.1	229.0	215.0	210.8
IC Packaging	284.4	316.0	310.0	318.0	340.0
IC Testing	126.6	137.9	131.3	136.0	146.0
Product Revenue	718.4	835.4	791.6	815.0	850.8

Source : IEK-ITRI, TSIA (August 2015)

By the end of 2014, Taiwan Semiconductor industry consisted of 245 IC fabless design houses, 16 fabrication companies, 37 packaging and testing houses, 7 substrate suppliers, 11 wafer suppliers, 3 mask makers, and 4 leadframes companies, etc. (Figure 1). The advantages of cost efficiency, flexibility, and speed resulted from the vertically integrated infrastructure and the industry cluster effect have made Taiwan IC industry highly competitive in the global market.



Source : IEK-ITRI, TSIA (July 2015)

Fig. 1 Unique Infrastructure in Taiwan (2014)

IC Fabless Companies

In 2014, there were 245 design houses in Taiwan (Table 2). Benefited from the growing demand for smart mobile devices in China and some companies' entering into the 20nm technology, Taiwan IC design industry grew 19.8% on-year in 2014, with revenue reaching NT\$576.3 billion, which accounted for 22.2% of worldwide IC design market and ranked number 2 worldwide, following the US. Worldwide market share of Taiwan IC design industry is expected to increase to 22.3% driven by the continuing growth of mobile devices.

Taiwan IC design companies invested NT\$95.1 billion in R&D in 2014, which represented 16.5% of total fabless revenue and is expected to grow to 16.8% in 2015 due to the needs for smaller chip sizes and power saving.

Table 2 Major Indices of Taiwan IC Design Business

	2011	2012	2013	2014	2015(e)
# of Companies	250	260	250	245	240
Revenue(NT\$B)	385.6	411.5	481.1	576.3	562.6
Growth (%)	-15.2%	6.7%	16.9%	19.8%	-2.4%
WW Market Share	20.1%	19.7%	20.8%	22.2%	22.3%
WW Ranking	2	2	2	2	2
Value Added (NT\$B)	94.9	115.6	141.9	166.8	166.0
Value Added Rate (%)	24.6%	28.1%	29.5%	28.9%	29.5%
R&D Employee (p)	2,738.0	2,751.8	2,781.3	2,957.3	3,063
R&D Expense (NT\$B)	64.0	69.5	77.5	95.1	94.5
R&D Expense/ Revenue (%)	16.6%	16.9%	16.1%	16.5%	16.8%
Workforce(P)	37,000	37,800	39,500	42,000	43,000
Average revenue per workforce (NT\$M)	10.4	10.9	12.2	13.7	13.1

Source : IEK-ITRI, TSIA (August 2015)

Table 3 Top 10 Fabless Companies in Taiwan, 2014

NT\$B

2013 Ranking	2014 Ranking	Company	2013 Revenue	2014 Revenue	Growth (%)
1	1	Mediatek	136.1	213.1	56.6%
2	2	Novatek	41.5	54.1	30.4%
4	3	PHISON	32.2	33.1	2.8%
5	4	Realtek	28.2	31.3	10.9%
6	5	Himax	22.8	25.4	11.3%
8	6	Richtek	10.7	11.9	11.2%
9	7	Ilitek	9.6	10.1	4.4%
10	8	Focaltech	9.4	9.9	5.7%
14	9	ESMT	6.8	9.8	44.0%
11	10	Sunplus	8.5	8.7	2.2%

Note: 1. Based on companies' combined revenue.

2. Morning Star revenue goes to Mediatek from February 2014

Source : Company Statement; IEK-ITRI, TSIA (May 2015)

Table 3 shows the top 10 Taiwan Fabless Companies in 2014. The baseband chipset design company, Mediatek, remained at the top, earning \$54.1 billion with a 56.6% increase in revenue due to its strength in chips for smart handheld devices. LCD driver IC design company, Novatek, and PHISON Electronic Corps, ranked number two and three, with NT\$33.1 billion and NT\$31.3 billion in revenue, respectively. Realtek was fourth, earning NT\$25.4 billion while Himax was fifth, with NT\$11.9 billion in revenue

IC Fabrication

As of 2014, there were 16 IC wafer fabrication companies in Taiwan, including foundry companies such as TSMC, UMC, Powerchip, Vanguard, Episil, Mosel, Lite-on Semiconductor, AMPI, Maxchip, Win Semiconductors, Nuvoton and AWSC; IDMs such as Winbond and MXIC; and memory manufacturers such as Nanya and Inotera. Rexchip was acquired by Micron in 2013 and was not included in this list.

Taiwan IC manufacturing revenue (including foundry and memory) hit a record high in 2014 to reach NT\$1,173.1 billion, up 17.7% from 2013, thanks to the revenue growth from new mobile communication devices and demand for special process technology for IoT products. Foundry revenue grew 20.4% to reach NT\$914 billion and Memory revenue increased 9.2% to reach NT\$259.1 billion.

Table 4 Major Indices of Taiwan IC Fabrication Business

	2011	2012	2013	2014	2015(e)
# of Companies	16	15	15	16	16
Revenue(NT\$B)	786.7	829.2	996.5	1,173.1	1,242.70
Growth (%)	-12.6%	5.4%	20.2%	17.7%	5.9%
WW Market Share	69.0%	67.8%	70.3%	71.4%	71.9%
WW Ranking	1	1	1	1	1
Value Added (NT\$B)	436.6	486.7	585.9	696.2	732
Value Added Rate (%)	55.5%	58.7%	58.8%	59.4%	58.9%
Capital Investment (NT\$B)	396.2	377.6	346.8	384.9	466.5
Capital Investment /Revenue (%)	50.4%	45.5%	34.8%	32.8%	37.5%
R&D Employee (p)	8,382	8,473	8,563	8,784	8,986
R&D Expense (NT\$B)	65.2	73.2	86.6	95.4	102.1
R&D Expense/ Revenue (%)	8.3%	8.8%	8.7%	8.1%	8.2%
Workforce(P)	80,614	83,526	83,854	85,674	87,000
Average revenue per workforce (NT\$M)	9.8	9.9	11.9	13.7	14.3

Source : IEK-ITRI, TSIA (August 2015)

Overall, Taiwan IC manufacturing companies increased 11% in capital investment compared to 2013 to reach NT\$384.9 billion, with foundry companies spending NT\$339.4 billion due to growing demand for smart mobile products and capacity expansion in advanced production process (mainly in 20nm and 16 nm). Capital expending of DRAM companies was NT\$45.5 billion due to the transition into 20nm process technology. The R&D spending in 2014 was NT\$95.4 billion and accounted for 8.14% of total Taiwan IC manufacturing revenue.

Communication application was the largest application area of Taiwan foundry companies in 2014, comprising 55.2%. Information application, the second largest application area, accounted for 17% and consumer application accounted for 12.2%.

Fabless design companies are the major customers of Taiwan IC fabrication companies in 2014, comprising 87.1%. Logic IC was the major product type. 97.2% of Taiwan IC foundry revenue came from micro devices and logic chips.

Table 5 Top 10 Fabrication Companies in Taiwan, 2014 (NT\$B)

2013 Ranking	2014 Ranking	Company	2013 Revenue	2014 Revenue	Growth (%)
1	1	TSMC	597.0	762.8	27.8%
2	2	UMC	123.8	140.0	13.1%
3	3	Inotera	59.0	82.6	40.0%
4	4	Nanya	47.0	49.1	4.5%
6	5	Powerchip	36.2	40.1	10.8%
7	6	Winbond	33.1	38.0	14.7%
9	7	Vanguard	21.1	23.9	13.3%
8	8	MXIC	22.2	22.4	0.9%
10	9	Lite-On	9.6	10.2	5.8%
5	-	Micron Memory Taiwan	44.7	-	-

Note: Rexchip acquired by Micron and became Micron Memory Taiwan in 2013.

Source : Company Statement, IEK-ITRI, TSIA (May 2015)

Nine of the top ten Taiwan IC manufacturing companies enjoyed revenue growth in 2014. TSMC and UMC remained the top two, with revenue increased by 27.8% (driven by demand for 20nm advanced process technology) and 13.1% (driven by demand for 8 inch capacity for IoT products), respectively.

IC Packaging & Testing

Taiwan IC packaging and testing revenue reached NT\$453.9 billion (including domestic and overseas sales) in 2014, with NT\$316 billion from packaging and NT\$137.9 billion from testing. Taiwan IC packaging and testing industry remained the number one worldwide, representing 55.9% of worldwide packaging and testing revenue, followed by the US and Singapore. Total capital investment reached NT\$95.3 billion in 2014 and is expected to increase slightly to NT\$96.2 billion in 2015.

Table 6 Major Indices of Taiwan Packaging and Testing Industry

	2011	2012	2013	2014	2015(e)
# of Companies	37	37	37	37	37
Revenue (NT\$B)	390.4	393.5	411.0	453.9	441.3
Growth (%)	-5.9%	0.8%	4.4%	10.4%	-2.8%
WW Market Share	55.2%	55.3%	55.2%	55.9%	56.2%
WW Ranking	1	1	1	1	1
Value-Added (NT\$B)	187.8	192.0	201.0	222.9	217.0
Value-Added Rate (%)	48.1%	48.8%	48.9%	49.1%	49.2%
Capital Investment (NT\$B)	84.7	88.8	87.2	95.3	92
Capital Investment/ Revenue (%)	21.7%	22.6%	20.3%	21.0%	20.8%
R&D Employee (p)	3,755	3,870	4,000	4,060	4,100
R&D Expense (NT\$B)	11.3	13.0	14.6	15.4	15.6
R&D Expense/Revenue(%)	2.9%	3.3%	3.4%	3.4%	3.5%
Workforce (p)	91,520	92,000	93,700	94,000	95,000
Average revenue per workforce (NT\$M)	4.3	4.3	4.6	4.8	4.6

Source : IEK-ITRI, TSIA (August 2015)

Table 7 Top 10 IC Packaging and Testing Companies

2013 Ranking	2014 Ranking	Company	2013 Revenue	2014 Revenue	Growth (%)	NT\$B
1	1	ASE*	143.3	150.8	5.2%	
2	2	SPIL	69.4	83.1	19.7%	
3	3	PTI**	37.6	40.0	6.5%	
4	4	Chipmos	17.3	22.0	27.2%	
5	5	Chipbond	15.8	17.7	12.0%	
6	6	KYEC	14.7	16.3	10.9%	
7	7	OSE	9.6	13.8	43.8%	
8	8	FATC	9.0	10.7	18.9%	
9	9	Walton	8.9	10.0	12.4%	
10	10	Tong Hsing	7.9	8.3	5.1%	

* ASE:USI revenue excluded;

** PTI: Greatek revenue included

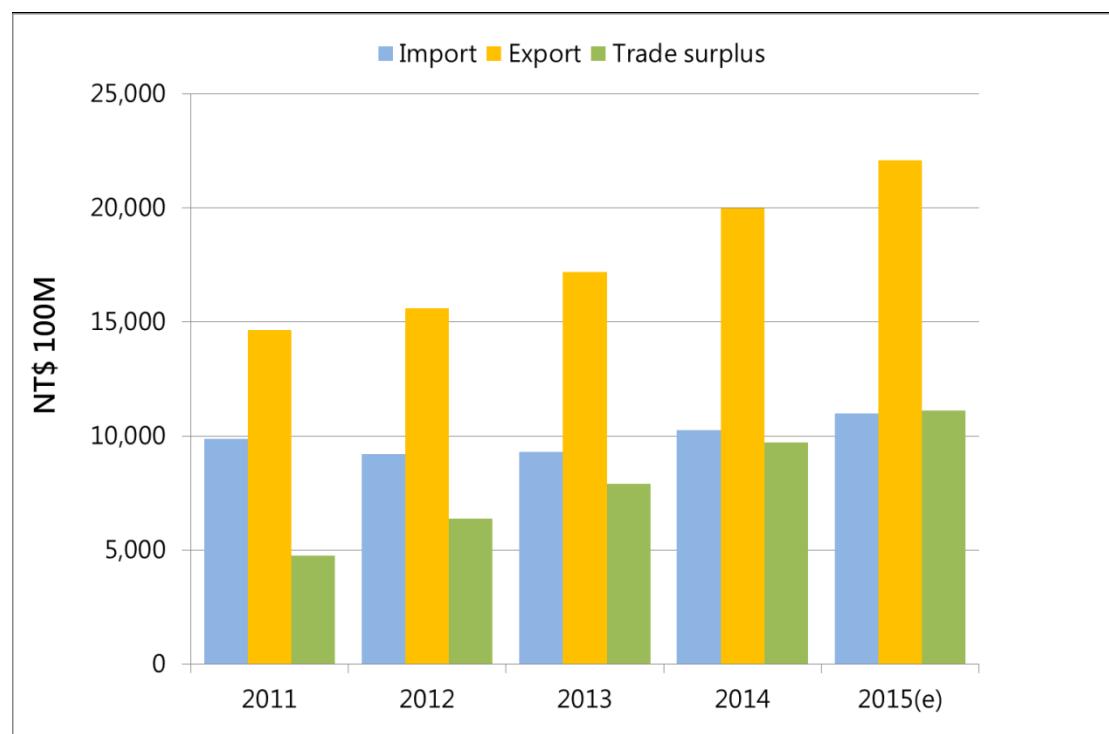
Source : Market Observation Post System; IEK-ITRI, TSIA (May 2015)

Table 7 shows the top 10 Taiwan packaging and testing companies in 2014. Total revenue of top 5 companies comprised 69% of total Taiwan packaging and testing revenue and that of top 10 comprised 81.1%. Thus it is difficult for small companies to compete in this industry.

ASE, SPIL, and PTI remained the top 3 packaging and testing companies in Taiwan in 2014. Smart phones and IoT applications are expected to be the major drivers for revenue growth in 2015.

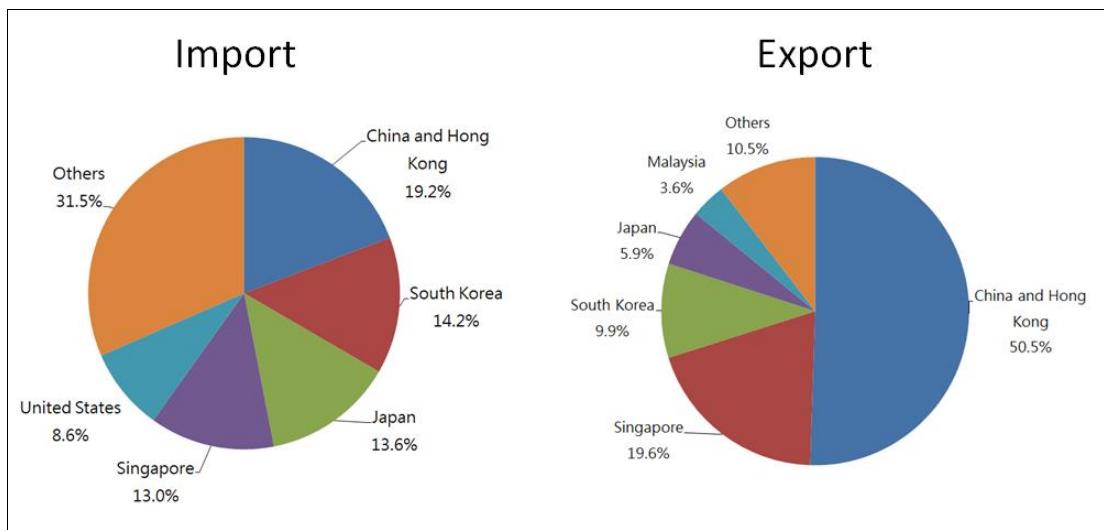
III. Taiwan IC Market

In 2014, imported ICs increased 10.3% to NT\$1,024.8 billion (NT\$928.9B in 2013) and exported ICs increased 16.3% to NT\$1,997.5 billion (NT\$1,718.2B in 2013). Major import countries of Taiwan in 2014 were China (including HK), South Korea, Japan, Singapore, and US. Major export countries of Taiwan were China (including HK), Singapore, South Korea, Japan, and Malaysia. Surplus was NT\$972.7 billion in 2014, up 23.2% on-year and is expected to increase 14.1% to reach NT\$1,110.0 billion in 2015.



Source : Taiwan Customs ; IEK-ITRI, TSIA (May 2015)

Figure 2 Import/Export Value of Taiwan IC Market



Source : Taiwan Customs ; IEK-ITRI, TSIA (May 2015)

Figure 3 Top 10 Import/Export Regions of Taiwan IC Market

IV. Outlook

2015 Taiwan IC revenue is expected to reach NT\$2,246.6 billion, up 2.0% from 2014, with NT\$562.6 billion in design, a 2.4% decrease; NT\$1,242.7 billion in manufacturing, a 5.9% increase (NT\$1,013.7 billion in foundry, up 10.9%, and NT\$229.0 billion in memory, down 11.6%), NT\$310.0 billion in packaging, down 1.9%, and NT\$131.3 billion in testing, down 4.8%.

V. Directory of Taiwan Semiconductor Companies

Fabless

5V Technologies TEL:886-2-27888118 FAX:886-2-27887366 www.5vtechnologies.com	AAT TEL:886-3-5633125 FAX:886-3-5633126 www.aat-ic.com	ACARD TEL:886-2-85122290 FAX:886-2-85122548 www.acard.com
AccFast TEL:886-3-6662756 FAX:886-3-6662758 www.accfast.com.tw	Acute TEL:886-3-5790680 FAX:886-3-5775606 www.acutecomm.com.tw	AIC TEL: 886-3-5772500 FAX:886-3- 5772510 www.analog.com.tw
AIT TEL:886-3-6560528 FAX:886-3-5589827 www.a-i-t.com.tw	AiT TEL:886-2-26961202 FAX:886-2-26961201 www.ait-ic.com	Airoha TEL: 886-3-6128800 FAX:886-3- 6118833 wwwairoha.com.tw
Alchip Technologies TEL: 886-2-27992318 FAX:886-2-27997389 www.alchip.com	Alcor Micro TEL:886-2-26535000 FAX:886-2-26534000 www.alcormicro.com	AlfaPlus TEL:886-3-5163270 FAX:886-3-5163267 www.alfaplus.com.tw
ALI TEL:886-2-87522000 FAX:886-2-87511001 www.ali.com.tw	Alpha TEL:886-3-5736660 FAX:886-3-5736661 www.ealpha.com.tw	Altus TEL:886-37-586860 www.altus-tech.com
Ambarella TEL:886-3-6668828 FAX:886-3-6661282 www.ambarella.com	AMIC TEL:886-3-5679966 FAX:886-3-5679977 www.amictechnology.com	AMICCOM TEL:886-3-5785818 FAX:886-3-5785819 www.amiccom.com.tw
Amtek TEL:886-2-29998989 FAX:886-2-29992929 www.amtek-semi.com	ANA TEL:886-2-26558628 FAX:886-2-26558676 www.anatek.com.tw	AnaGlobe TEL:886-3-5752420 FAX:886-3-5750704 www.anaglobe.com.tw

ANDES TEL:886-3-6668300 FAX:886-3-6668322 www.andestech.com	AnMO TEL:886-3-5357868 FAX:886-3-5358098 www.anmo.com.tw	ANPEC TEL:886-3-5642000 FAX:886-3-5642050 www.anpec.com.tw
AnSC TEL:886-3-6669898 FAX:886-3-5632246 www.ansc.com.tw	APEC TEL:886-3-6215899 FAX:886-3-6215999 www.a-power.com.tw	APLUS TEL:886-2-27829266 FAX:886-2-27829255 www.aplusinc.com.tw
Appo Tech TEL: 886-3-5719960 FAX: 886-3-5719969 www.appotech.com	ASIX TEL:886-3-5799500 FAX:886-3-5799558 www.asix.com.tw	Asmedia TEL:886-2-22196088 FAX:886-2-22196080 www.asmedia.com.tw
Asolid TEL:886-3-5736032 FAX:886-3-5736300 www.asolid-tek.com	ASPEED TEL:886-3-5789568 FAX:886-3-5789586 www.aspeedtech.com	ASUKA TEL:886-3-6667117 FAX:886-3-6667104 www.asuka-mobile-tv.com
ATECH TEL:886-2-82215488 FAX:886-2-82215489 www.8tec.com	AuMOS TEL:886-3-5790567 FAX:886-3-5775909 www.aumos.com.tw	AverLogic TEL:886-2-87523988 FAX:886-2-87523989 www.averlogic.com
AVID TEL:886-3-5795222 FAX:886-3-5787789 www.avid.com.tw	Avisonic TEL:886-3-5778077 FAX:886-3-6661301 www.avisonic.com	AviQ TEL:886-3-5225019 FAX:886-3-5225839 www.aviqtech.com
AXElite TEL:886-3-5776662 FAX:886-3-5788661 www.axelite.com.tw	BiTEK TEL:886-2-25705818 FAX:886-2-25708118 www.bitek.com.tw	Capella TEL:886-2-82186600 FAX:886-2-82186602 www.capellamicro.com
CDT TEL:886-2-22994908 FAX:886-2-22990133 www.cdt.com.tw	CFP TEL:886-2-22326558 FAX:886-2-22327558 www.cfpt.com.tw	Champion TEL:886-3-5679979 FAX:886-3-5679909 www.championmicro.com.tw

CHESEN TEL:886-2-82265589 FAX:886-2-82265181 www.chesen.com.tw	Chingis TEL:886-3-5780333 FAX:886-3-5783000 www.chingistek.com	Chip Goal TEL:886-3-5169219 FAX:886-3-5169197 www.chipgoal.com
Chip Hope TEL:886-2-82271166 FAX:886-2-82271355 www.chiphope.com.tw	CHIPMAST TEL:886-3-5510850 FAX:886-3-5510860 www(chipmast.com.tw	CHiPLUS TEL:886-3-5637887 FAX:886-3-5637877 www.chiplus.com/tw
Cion TEL:886-3-6003888 FAX:886-3-6002888	C-Media TEL:886-2-87731100 FAX:886-2-87732211 www.cmedia.com.tw	CMSC TEL:886-3-5634866 FAX:886-3-5634863 www.cmsc.com.tw
CoAsia TEL:886-2-26557699 FAX:886-2-26557189 www.coasia.com.tw	CTC TEL:886-3-5311161 FAX:886-3-5338403 www.ctcasic.com.tw	CYRUSTEK TEL:886-3-5910216 FAX:886-3-5910217 www.cyrustek.com.tw
DATARiT TEL:886-3-6589597 FAX:886-3-6589902	Davicom TEL:886-3-5798797 FAX:886-3-5646929 www.davicom.com.tw	DenMOS TEL:886-3-5665886 FAX:886-3-5665809 www.denmos.com.tw
DIGIWELL TEL:886-3-5782910 FAX:886-3-5639464 www.digiwell.com.tw	Dorado TEL:886-3-5730608 FAX:886-3-5735136 www.dorado-da.com	E-CMOS TEL:886-3-5785888 FAX:886-3-5783630 www.ecmos.com.tw
E-COM TEL:886-2-22180516 FAX:886-2-22180780 www.eecom.com.tw	EE Solutions TEL:886-3-5678568 FAX:886-3-5678611 www.e2-solutions.com.tw	EETI TEL:886-2-87515191 FAX:886-2-27978808 www.eeti.com
ELAN TEL:886-3-5639977 FAX:886-3-5639966 www.emc.com.tw	ELANSat TEL:886-3-5635105 FAX:886-3-5635107 www.elansat.com	eMemory TEL:886-3-5601168 FAX:886-3-5601169 www.ememory.com.tw

ENABLE TEL:886-3-5525233 FAX:886-3-5525236 www.enable-semi.com	ENE TEL:886-3-6662888 FAX:886-3-6662999 www.ene.com.tw	EON TEL:886-3-5525686 FAX:886-3-5525696 www.eonssi.com
EOREX TEL:886-3-5585138 FAX:886-3-5585139 www.eorex.com	Epicom TEL:886-3-5737585 FAX:886-3-5736328 www.epic.com.tw	ESMT TEL:886-3-5781970 FAX:886-3-5644432 www.esmt.com.tw
Etoms TEL:886-3-6661766 FAX:886-3-6661765 www.etomscorp.com	Etron TEL:886-3-5782345 FAX:886-3-5779001 www.etrон.com	EUTECH TEL:886-3-3164556 FAX:886-3-3164557 www.eutechmicro.com
Evercorp. TEL:886-2-87971106 FAX:886-2-87971107	EverMore TEL:886-3-5642062 FAX:886-3-5798303 www.emt.com.tw	EXPLORE TEL:886-3-5643595 FAX:886-3-5643596 www.epmi.com.tw
Faraday TEL:886-3-5787888 FAX:886-3-5787889 www.faraday-tech.com/index.html	Feeling Technology TEL:886-3-5600588 FAX:886-3-6205599 www.feeling-tech.com.tw	Fintek TEL:886-3-5600168 FAX:886-3-5600166 www.fintek.com.tw
Fitipower TEL:886-3-5788618 FAX:886-3-5788836 www.fitipower.com	Flash Silicon TEL:886-3-5600380 FAX:886-3-5600378 www.flashsilicon.com	FocalTech Systems TEL:886-3-6672758 FAX:886-3-6675515 www.focaltech-systems.com
Fortune TEL:886-2-28094742 FAX:886-2-28094874 www.ic-fortune.com	FRONTAND TEL:886-3-3240501 FAX:886-3-3249496 www.frontand.com.tw	Gemstone TEL:886-2-23886868 FAX:886-2-23882699 www.gemstone.com.tw

Genesys Logic TEL:886-2-89131888 FAX:886-2-89131688 www.genesyslogic.com	G-Link TEL:886-3-5526827 FAX:886-3-5525270	Global Unichip Corp. TEL:886-3-5646600 FAX:886-3-5636386 www.globalunichip.com
GMT TEL:886-2-82273608 FAX:886-2-82273606 www.gmt.com.tw	Goyatek TEL:886-3-5631051 FAX:886-3-5631052 www.goya.com.tw	Green Mark TEL:886-2-89132089 FAX:886-2-89132068 www.green-mark.com
Greenergy TEL:886-3-5786363 FAX:886-3-5643838 www.greenergy-ic.com	GSC TEL: 886-3-5739828 FAX: 886-3-5738903 www.gscoore.com.tw/	G-Time TEL:886-3-5733606 FAX:886-3-5733638 www.g-time.com.tw
HIGHERWAY TEL:886-4-23550011 FAX:886-4-23550022 www.higherway.com.tw	Himax TEL:886-6-5050880 FAX:886-6-5070000 www.himax.com.tw	Holtek TEL:886-2-26557070 FAX:886-2-26557373 www.holtek.com.tw
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FAX:886-2-22683703
www.rectron.com.tw

Taiwan Semiconductor

TEL:886-2-89131588
FAX:886-2-89131788
www.ts.com.tw

Vishay

TEL:886-2-29113861
FAX:886-2-29160846
www.vishay.com

Zowie

TEL:886-2-22195533
FAX:886-2-22191133
www.zowie.com.tw

Opto-Semiconductor

AOC

TEL:886-3-5970888
FAX:886-3-5985999
www.aocepi.com

COSMO

TEL:886-2-82271877
FAX:886-2-82271855
www.cosmo-ic.com

CS Bright's

TEL:886-2-82211988
FAX:886-2-82211336
www.csbright.com.tw

Everlight

TEL:886-2-26856688
FAX:886-2-26856699
www.everlight.com

EPISTAR

TEL:886-3-5678000
FAX:886-3-5678755
www.epistar.com.tw

King Bright

TEL:886-2-22499224
FAX:886-2-22403981
www.kingbright.com

Hexawave

TEL:886-3-5785100
FAX:886-3-5770512
www.hw.com.tw

LEDTECH

TEL:886-2-22186891
FAX:886-2-22182894
www.ledtech.com.tw

Ligitek

TEL:886-2-77036000
FAX:886-2-77036285
www.ligitek.com

Lite-On
TEL:886-2-87982888
FAX:886-2-87982868
www.liteon.com

Opto Tech
TEL:886-3-5638951
FAX:886-3-5783696
www.opto.com.tw

Sinonar
TEL:886-3-5783366
FAX:886-3-5781812
www.sinonar.com.tw

Tyntek
TEL:886-3-7582997
FAX:886-3-7582908
www.tyntek.com.tw

U.O.C
TEL:886-3-4852687
FAX:886-3-4751625
www.uocnet.com

Design Tools

Avery Design Systems
TEL:886-2-23278766
FAX:886-2-23278763
wwwavery-design.com

Cadence Taiwan
TEL:886-3-5778951
FAX:886-3-5780422
www.cadence.com.tw

Incentia
TEL:886-3-5782868
FAX:886-3-5785618
www.incentia.com.tw

Mentor Graphics
TEL:886-3-5131000
FAX:886-3-5734734
www.mentorg.com.tw

Silvaco Taiwan
TEL:886-3-5679686
FAX:886-3-5679682
www.silvaco.com

Synopsys
TEL:886-2-23453020
FAX:886-2-27228931
www.synopsys.com