

Investment Opportunities in the Communications Industry in Taiwan

I. Introduction

The communication industry in Taiwan possesses a unique advantage stemming from the complete industrial value chain from the upstream to the downstream. This fact makes Taiwan the anchor town for the global communications industry. More than 80% of the ICT (information, communications and technology products) products are supplied by OEM manufacturers in Taiwan. This, when coupled with the trend that the production processes of the global IT industry is continuously outsourced and they focus on cost cuts, distinctively distinguishes the unique position of the communication industry in Taiwan.

II. The advantages of the communication industry in Taiwan

1. Top reasons to invest in the communication industry in Taiwan

- (1) In terms of technology advancement and control on production process, the communication industry in Taiwan is up to world standards.
- (2) After deregulation in the industry, the telecommunication service market has been growing rapidly.
- (3) The abilities of the industry to develop new technologies and innovate exist applications are very strong and information dissemination is fast and easy.
- (4) For development of communication terminal products, Taiwan's manufacturers' technical level is very high and they also hold a strong market position. In

terms of OEM for broadband accessing equipments such as DSL and Cable Modems, their manufacturing ability is very flexible.

- (5) The communications industry maintains tight control over technology of critical components.
- (6) The government is actively assisting developments and initiatives, such as E Taiwan, M Taiwan and U Taiwan, in the industry.
- (7) Possesses large potential to develop the Chinese market via cross strait collaboration.
- (8) The industrial chain of the communication industry (both upstream and downstream) is tightly and completely integrated.
- (9) The communication industry in Taiwan is open to international collaboration and development in the world market and is focused on attracting international IPOs to purchase from Taiwan suppliers.
- (10) The communication industry in Taiwan has established a certification environment to shorten product development lead time to the market.

2. Important Companies in Taiwan Communication Industry

Table 1 Revenue and Net Profit Ratio of Major Manufacturers in Taiwan from 2011~2013

Company Name	2013		2012		2011	
	Revenue (NT\$100 million)	Net Profit Ratio (%)	Revenue (NT\$100 million)	Net Profit Ratio (%)	Revenue (NT\$100 million)	Net Profit Ratio (%)
Accton Technology Corp	226.40	2.46%	200.04	4.36%	188.26	4.58%
ZyXEL	174.30	1.99%	0.96	-31.44%	14.09	89%
Alpha Networks Inc.	241.00	3.23%	233.52	3.06%	239.09	3.97%
CyberTAN Technology	129.10	1.23%	94.04	0.74%	122.93	5.33%

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	Revenue (NT\$100 million)	Net Profit Ratio (%)	Revenue (NT\$100 million)	Net Profit Ratio (%)	Revenue (NT\$100 million)	Net Profit Ratio (%)
Gemtek Technology	199.30	2.29%	240.70	3.83%	259.93	0.04%
Tecom Co.,	70.76	0.57%	64.88	-10.23%	79.44	-7.20%
Cameo Communications	88.60	1.18%	115.88	1.41%	114.26	-1.13%
Zinwell Corp	83.74	8.91%	77.58	6.67%	106.17	8.44%
SerComm Corp	190.80	4.43%	165.99	4.54%	108.11	5.39%
Prime Electronics and Satellitics	118.30	2.94%	92.35	4.67%	84.33	5.30%
HTC	2034.00	-0.65%	2707.01	6.19%	4550.79	13.61%
Qisda Corp	1192.00	1.18%	751.20	-3.46%	691.87	-4.93%
Arima Communications	307.10	0.45%	200.71	-2.38%	253.12	1.68%
MERRY ELECTRONICS	112.60	9.16%	63.82	7.54%	56.44	5.58%
Catcher Technology	432.50	32.00%	117.43	92.74%	165.73	64.42%
Silitech Technology	68.65	3.85%	32.97	25.99%	66.77	19.97%
Microelectronics Technology	68.08	-13.40%	75.10	-13.74%	66.16	-26.83%
Wistron NeWeb Corp.	366.50	4.14%	321.03	3.51%	318.91	5.36%

Source: Market Observation Post System (2014.06)

III. The industrial output value of the communication industry exceeded NTD\$1000 billion, and the personal mobile device sector is the fastest growing sector by this measure

Taiwan's communication industry is an important industry with the output value over NT\$1,000 billion per year. The industry total output, including communication equipment and communication services, reached NT\$ 1,293 billion in 2013. As stimulated by the downstream demands of terminal products, the component sector in the overall communication industry, the output value of communication equipment sector was NT\$ 861.3 billion in 2013, and will reach

NT\$ 957.2 billion in 2014 with a 11.1% growth. The personal mobile device, in particular, has seen the fastest growth. Its output value is estimated to reach NT\$ 533.3 million in 2014 with a rapid 19.4% growth rate.

Table 2 Output Value Statistics and Forecast of Taiwan’s Communication Industry

Unit: NT\$100 million

	2012	2013	2014(e)	Growth Rate (%)
Network Communication Equipment	3,994	4,148	4,239	2.20
Personal Mobile Devices	5,417	4,465	5,333	19.40
Communications Equipment	9,411	8,613	9,572	11.10
Communication Services	3,990	4,318	4,398	1.90
Total Communication Industry	13,401	12,931	13,970	8.00

Note: Network communications equipment sub-sectors, including Ethernet LAN Switch, WLAN, DSL CPE, Cable CPE, IP STB, 4G access products. Personal mobile devices sub-industries, including mobile phones, satellite positioning products, PHS. Communication services including mobile communications, indoor calls, international calls, long distance calls, leased circuit, Internet and value-added services, MOD.

Source: IEK, IT IS Project. (2014.05)

For all communication equipment supplied by the communication industry, the key products include handsets, GPS, Ethernet LAN Switches, WLAN, DSL CPE and Cable CPE, and their aggregated industrial production is more than 67% of that for the entire sector. As for other products, including WLAN NIC (Wireless Network Interface Card), WLAN AP (Access Point), DSL Modems, Cable Modems, IP Phones and so on, their annual growth rate has grown steadily.

Currently, for most consumer IT products including desktop PCs, handsets, game consoles, TVs, STBs, digital cameras and in-vehicle infotainment systems,

they have built-in wireless connection features, and the trend to include WiFi modules in the product design is on the rise. Products with 100% WLAN attach rate include media tablets, access point/routers and handheld video game consoles, whereas products with an attach rate of near 100% include mobile PCs, home video game consoles, and so on. Therefore, stimulated by the downstream demands of terminal products, this industry is expected to continuously grow. In addition, demand of network communication equipments, like Switch, Cable, CPE, will maintain a high growth rate for the sharp demand from cloud service industry.

As for communication service sector, its revenue growth went slow due to the declining of mobile voice services. However, the 4G service starts from second half of 2014 is expected to bring in another huge user growth of mobile web services. The output value of communication service sector is predicted to reach NT\$ 439.8 billion in 2014, 1.9% growth. Looking into the future, it is forecasted that in 2014, across the entire communication industry in Taiwan, the output value will reach NT\$1,397 billion, which is 8% growth comparing to 2013.

The communication industry in Taiwan has a complete industrial value chain, and this attracts renowned international chip suppliers, including Broadcom, to set IPO offices, RD centers and regional operational HQs in Taiwan. This will enable technology exchanges or chip OEM collaborations to take place more easily between these international brands and Taiwan suppliers, enhance industrial production and create business opportunities for the communication industry in Taiwan.

They may also cooperate together via cross-strait collaborations and find areas, such as 4G broadband, cloud computing and communication terminals,

they can complement one another. In 2010 Cross-Strait Telecommunications Co-operation and Exchange Forum, it was proposed to set up Tri-networks integration (Triple Play) and TD-SCDMA experimental networks in Taiwan. In 2011, the emphases are focused on 4G (TD-LTE), wireless smart city, mobile internetworking and smart terminals and by combining strengths from both parties, they can dominate the global market. Reviewing the current status of the communications industry in Taiwan, Taiwan plays an indispensable role in the world communications industry and hence, it is advantageous to invest in the communications industry in Taiwan.