

## Network Communication Equipment Industry Report, 2009



Network communication has a relatively long industry chain, with a big portion of its clients being operators, administrative organs and large companies. These units still have sufficient capital during economic downturn. In particular, Chinese government is enlarging its expenditure. The economic recession causes people to reduce outdoor activities and increase indoor recreational activities. As network communication is the basis of household recreation activities, the network communication industry has great anti-drop strength. Companies all carried cost reduction in order to overcome the difficulties incurred by the economic crisis. Big companies have large potential of cost reduction. Their operating profit margin in 2009 mostly is 0.2-1% higher than that in 2008, which is quite a lot since the operating profit margin of those big companies is in general lower than 10%.

European and American companies focus on COE, so they enjoy a large market scale but smaller profits; while Taiwan companies focus on CPE, with small market scale but higher profits. In 2009, Taiwan takes a global market share of over 90% in Cable Modem, 90% in WLAN NIC, 79% in DSL CPE, 77% in VoIP router, 75% in IP Phone, 50% more in IP STB, over 50% in WiMAX CPE, and over 85% in WLAN router.

Company	Revenue, 2008 (\$m)	Revenue, 2009 (\$m)
FLEXTRONICS	11,116	7,048
Jabil	3,451	2,688
CELESTICA	3,148	2,208
SCI-Sanmina	2,588	1,864
D-Link	1,002	961
Alpha	737	490
Gemtek	653	545
Accton	457	434
ZyXEL	457	317
Delta Networks	410	358
CAMEO	364	337
Arca dyan	319	354
CyberTAN	314	315
Fiberhome (excluding Fiber Optic Cable Revenue)	314	485
SerComm	259	218
DASAN	116	102
Hiltron Technologies	110	106

At present, the booming sectors of network communication are WiMAX, Femtocell, FTTx, 802.11n, VDSL and IP STB, whose upstream chip industry is facing fierce competition. It costs USD\$ 5-15 million to design one model of ASIC chip, which is highly risky if failed, but quite profitable if success is made. So each chip company is backed up by 5-15 venture capital companies.

In WiMAX, the monopoly of Intel has been broken up as Beceem, GCT, Sequans and Fujitsu all have entered this sector. Beceem has developed rapidly, showing the sign of becoming a leader. Intel still leads the NPU sectors, with 36% market shares, while LSI, Wintegra, Ezchip and AMCC accumulatively take 44%. The Femtocell market is still immature, where PicoChip, Qualcomm and Percello are competing fiercely and PicoChip is trying its best to become the leader.

The competition in PON sector is the fiercest. Cortina, Teknovus and PMC-Sierra evenly occupy the EPON sector. Cortina entered this sector in Mar 2007 through acquiring Immenstar, PMC-SIERRA entered the PON sector by acquiring Israel-based Passave (at the price of \$300 million) in May 2006, and Teknovus emphasizes technology leadership, launching 10G EPON. Seen from the current situation, PMC-SIERRA has the strongest development capability.

In GPON sector, 10 chip companies support GPON, including Broadcom, BroadLight, Centillium, Conexant, PMC-Sierra, FreeScale, Cortina, etc, of which, PMC-Sierra and Cortina support both GPON and EPON. Teknovus and Oplan only support EPON. Centillium was acquired by Transwitch, Conexant (including PON broadband access business) was acquired by Ikanos in Apr 2009 (at the price of \$54 million). Broadcom has just entered this sector, while BroadLight has the strongest capability.

In xDSL sector, Infineon, Broadcom and Ikano are leaders; Broadcom dominates the ADSL sector; Ikanos takes a market share of 80% more in VDSL sector; Broadcom, Intel, Atheros, Ralink Technology and Marvell have occupied the WLAN sector, Ralink Technology, a Taiwan-based company, surpassed Marvell to rank 5th in 2009.

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