



Global and China FPCB (Flexible Printed Circuit Board) Industry Report, 2014

Nov. 2014

STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- ◆ To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- ◆ To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- ◆ To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- ◆ To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications.

Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

Global and China FPCB Industry Report, 2014 mainly deals with the followings:

1. Overview of FPCB;
2. FPCB market;
3. FPCB industry;
4. 22 FPCB vendors;
5. 9 FCCL vendors.

In 2013, FPCB industry enjoyed a high-speed growth with the market size approximating USD12.03 billion, up 16.2% from the level in 2012. The South Korean vendors developed rapidly and were excessively upbeat about the industry's outlook, aggressively expanding capacity starting from the very beginning of 2012. As a result, most of new capacity was available in Q2 2013. However, the FPCB companies in South Korea without diversified customers, were heavily dependent on the key accounts such as Samsung and LG, thus making them less competitive during negotiations. Therefore, these vendors cut the prices steeply in Q4 2013, sending them into price war.

Ranking of Major FPCB Vendors Worldwide by Revenue, 2010-2014

	USD mln				
	2010	2011	2012	2013	2014
NOK	2071	2248	2606	2529	2830
ZDT	274	528	658	978	1518
SEI	700	927	1222	1268	1290
NITTO DENKO	496	513	518	528	650
M-FLEX	803	831	815	710	626
FUJIKURA	777	601	288	412	550
CAREER	321	394	475	460	557
Interflex	362	460	677	905	550
SI FLEX	306	345	366	626	493
FLEXIUM	144	260	366	460	409
ICHIA	152	211	213	231	330
BHflex	96	133	201	336	302
FLEXCOM	134	155	219	516	286
GDS	78	121	156	238	253
Xiamen Hongxin		39	60	108	150
Newflex	60	54	102	155	150
MFS		102	80	109	115

In 2014, price decline continued to deteriorate, which led to a sharp fall in revenue of South Korean vendors. The implications of high-speed capacity expansion are high fixed costs, which would thus result in a plunge in profit margin. It is projected that the revenue of INTERFLEX, a leading South Korean FPCB company, would tumble by 50%, and its operating margin would record a 27% loss in 2014 in contrast to no-profit-no-loss in 2013. Additionally, affected by the order shift of Apple, the company has hardly received any orders from Apple in 2014.

Another pressure for the vendors in South Korea came from the depreciated yen, and the won appreciated against the yen. However, the Japanese products have better performance; coupled with the reduced prices bought on by yen depreciation, they are more competitive.

Apple shortened the supply chain, giving more of its orders to the vendors in Taiwan, which resulted in a fall in revenue of M-Flex, at an estimated 20% drop in 2014. And as the losses expand, M-Flex's operating margin is expected to slip from -8.4% in 2013 to -11.8%.

Despite a substantial decline in revenue of the South Korean vendors, the biggest customer of FPCB market—Apple did not bring down the purchase price. Meanwhile, the new iPhones have bigger size and therefore need more FPCBs. Consequently, the vendors in Taiwan and Japan saw a big increase in revenue, thereby filling in the vacuum. We predict that in 2014 the market size of FPCB worldwide reached USD12.608 billion, up 4.8% from 2013.

Of the Taiwanese vendors, ZDT generated the most revenue. ZDT under Hon Hai obtained more of the orders from Apple. It is forecasted that its revenue will jump by 55% to USD1.518 billion in 2014, overtaking Japan's SEI as the world's second. In contrast, the world's first NOK reduced the capacity in Japan, instead expanded the capacity in Thailand and Mainland China, which helped not only substantially increase its revenue but also rapidly turn out of red. At the same time, the global HDD market tends to be stable, with the shipments rising mildly from 2013. The HDD for FPCB is the main product of NOK, an Apple's leading supplier.

We project that in 2015 smartphones will present a slowing growth, tablet PCs will begin to decline, notebook computers will grow slightly or be flat. Moreover, LCD-TVs are expected to grow by a small margin. And wearable devices are very likely to rise significantly, but its application of FPCB is too small to fuel the market. In 2015, it is more than likely that LCD-TV will be the mainstay to drive the market. And after 6-8 years of popularization, LCD-TV is expected to undergo a boom of TV set replacement. And consumers will choose 4K TV with higher resolution or change the original smaller 32-37 inch television to 40-42 inch television.

We expect that it will be very hard for the South Korean vendors to reverse the downtrend when Samsung's mobile phone shipments slow down and its LCD shipments are falling with losses. It is more likely that the South Korean vendors will suffer collapse, while the companies from Japan and China's Taiwan will benefit from it, especially Japanese ones that had improved the competitiveness after the repeated depreciation of yen.

1 Overview of FPCB

- 1.1 Overview
- 1.2 Single Side FPCB
- 1.3 Double Side, Double Access Flexible Circuit, Single+Single, and Multi-layer
- 1.4 Manufacturing Process of FPCB
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2 FPCB Market

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- 2.4 China's Mobile Phone Market
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- 2.7 Desktop PC Market
- 2.8 Touch Panel Market Size
- 2.9 Ranking of Touch Panel Companies
- 2.10 Supplier Relationship between Touch Panel Companies and Their Customers
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- 3.3 Geographical Distribution

- 3.4 FPCB Supplier Relationship
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- 4.9 AKM
- 4.10 Xiamen Hongxin Electron-Tech Co., Ltd.
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- 4.12 SI Flex
- 4.13 Sumitomo Electric Industries
- 4.14 DAEDUCK GDS
- 4.15 Interflex
- 4.16 Shenzhen JingChengDa Circuit Technology Co., Ltd.
- 4.17 BHflex
- 4.18 Newflex
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4.20 MFS

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