

Global and China Touch Panel (Including Small- and Medium-sized Display) Industry Report, 2011-2012

Jul. 2012



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## The Vertical Portal for China Business Intelligence

#### 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 costeffective 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.

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# **Abstract**

Global and China Touch Panel (Including Small- and Medium-sized Display) Industry Report, 2011-2012 conducts studies on the followings:

- Downstream market of touch panel;
- Touch panel & small- and medium-sized display market;
- 11 main small- and medium-sized display manufacturers;
- 18 main touch panel manufacturers;
- 8 touch panel peripheral manufacturers

The momentous event of the small and medium-sized display industry in 2011 was Toshiba, Hitachi and Sony, Japan's three leading TFT-LCD manufacturers, merged their small and medium-sized display business into one named Japan Display, which went into formal operation in April 2012. In the future, Panasonic's TFT-LCD business is probable to be incorporated into the company.

Squeezed by counterparts from South Korea, the Japanese LCD industry has witnessed a dramatic decline for the past few years, even the government has attempted to save it. Sharp, used to perform best, slipped as badly as 42% in 2011, and the LCD business suffered the loss for the first time over the years. Even so, Sharp was still reluctant to join Japan Display.

Relying on OLED, Samsung Mobile Display (SMD) firmly holds the first worldwide, providing almost all world's AMOLED products. In 2011, the shipment soared to 96.4 million units and revenue harvested US\$3.266 billion. SMD uses LTPS TFT-LCD to drive OLED, rendering LTPS TFT-LCD's yield even lower, which makes slow process for AMOLED since presenting itself. Through seven years of research, SMD broke through the technical threshold at the end of 2010, and then grew by leaps and bounds.

Manufacturers except SMD have all abandoned LTPS TFT-LCD and geared towards Oxide TFT, which may take 4-7 years to be mass-produced, so SMD can maintain its supremacy in AMOLED at least before 2016.

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Samsung mobile phones and tablet PCs massively apply AMOLED, which constitutes one of the reasons for AMOLED's take-off. Samsung cell phone had already surpassed Nokia to become the first in the world in Q1 2012. Because core components of cell phone have been as standardized as notebooks, vendors can only achieve differentiation in screen and appearance. Nearly all cell phone vendors have introduced AMOLED display phones, which further promotes the evolution of AMOLED.

Revenue of Main Small and Medium-sized Display Manufacturers, 2010-2012 (Unit: US\$ million)

	2010	2011	2012E
Japan Display			6,798
Giantplus	411	497	582
Truly	914	1,288	1,738
Hannstar	1,772	1,415	1,373
AUO	1,352	1,720	1,506
CHIMEI-INNOLUX	2,736	3,881	3,734
LG Display	1,281	3,989	4,961
SMD	4,447	5,948	10,729
СРТ	648	1064	956
Sharp	3,188	1,862	1,760

For most touch panel manufacturers, 2011 is the fall, while 2012 the winter. In the second half of 2011, capacitive touch panel capacity was largely put into production, accompanied by plunged price, manufacturers except TPK and Wintek all showed decline in revenue. Entering 2012, the situation ran worse, small and medium-sized manufacturers in Taiwan all slipped between 20-40%. Even Wintek, Apple's main supplier, had its gross margin less than 1% in Q4 2011, and other peers' were mostly negative.

# Revenue of Main Touch Panel Manufacturers, 2010-2012 (Unit: US\$ million)

		- /	
	2010	2011	2012E
ТРК	2,046	4,736	5,608
Wintek	1,417	2,574	3,733
NISSHA Printing	579	322	480
ELK	203	212	230
MELFAS	201	171	178
ILJIN Display	96	293	469
S-MAC	yyyyyy <b>175</b> -sie	errei425 Ch	10= 485
J-TOUCH	176	245	175
Youngfast	554	561	448
O-FILM	39	130	208

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In 2012, the touch panel industry pattern has changed a lot, the rising of ON-CELL and IN-CELL became a challenge to traditional manufacturers. ON-CELL is used in AMOLED, and SMD, a full adopter of ON-CELL, have the touch sensor supplied by Taiwan-based CPT and HannsTouch. IN-CELL is launched by Japan Display, in all likelihood adopted by Apple's next-generation iPhone.

Compared with any existing touch panel, IN-CELL enjoys overwhelming superiority regardless of performance or cost, becoming an irresistible trend. At the present stage, it is only suitable for designs such as iPhone with large quantity shipment and single model, thus IN-CELL manufacturers have rich time to improve good yield.

In 2012, traditional touch panel manufacturers have all introduced TOC (Touch On Cover) solutions, i.e., ATT called by Wintek, TOL by TPK, WIS by Chimei Innolux and OGS by Cando, and in near future it will be embraced by a majority of cell phones.

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