

Touch Panel Market Analysis Q4'12 Update

December 2012

Authorized Users may not provide this report, or any part, to non-Authorized Users (internal or external) as stated in the Terms & Condition



Important Notice

- Copyright © 2012 DisplaySearch, LLC, an NPD Group Company
- All Rights Reserved. Proprietary and Confidential. This report and all informatherein is the property of DisplaySearch and is provided for the confidential used DisplaySearch clients only, in accordance with DisplaySearch's Terms and Confidential DisplaySearch makes no representations or warranties of any kind, express or respect to this report. No reproduction or disclosure of this report, in any main part, is permitted except as may be expressly authorized in writing by DisplaySearch as the source.
- If you would like to add a user to your account or have questions on your account contact your company administrator or send an email to sitelicense@displayse
- Sourcing DisplaySearch Information
- Refer to this report as "DisplaySearch Quarterly Touch Panel Market Analysis citations.
- If you would like to quote data from this report in an external press release, p at media@DisplaySearch.com.

DisplaySearch

2350 Mission College Blvd. Suite 705 Santa Clara, CA 95054 Voice: 1.408.418.1900 Fax: 1.408.418.1910

<u>www.DisplaySearch.com</u> • <u>contactinDisplaySearch.com</u>



Touch Danel Market Analysis

Table of Contents

1.0	Executive Summary
2.0	Methodology and Definitions
3.0	2012 Touch Panel Market Trend Summary
4.0	2012 Preliminary Top Makers Shipment Survey
5.0	Shipment Forecast Update for Major Applications
6.0	Regional Update and Supplier Analysis
6.1	Taiwan
6.2	China
6.3	Korea
6.4	<u>Japan</u>
6.5	US, Europe and ROW

Conference Review: FPD International and CEATEC 2012



7.0

8.0

Touch Application Trends



1.0 Executive Summary



Executive Summary

- Q4 Preliminary Survey of Regional Top Module Makers
 - We perform an overall shipment survey every Q2 and a regional top makers Q4. This allows us to summarize current market trends. Also, we use the Q4 to revise the Q2 forecast.
 - Although regional top makers do not represent all shipments, their percenta most valuable results, especially for major applications. The touch industry applications are radically different, so we have revised the forecast to reflect trends.
- 2012 Touch Panel Market Trend Summary
 - Major Applications
 - Mobile Phones: Per our latest Q4 shipment forecast update, mobile phone penetration could reach almost 70% in 2012.
 - Tablet PC: We expect brands' entry tablet PC ASPs in 2013 to be only \$10 are likely to squeeze white brands. Meanwhile, tablet PC shipments will re 200M, close to the notebook PC market size, but all tablets have touch sc
 - Notebook PC: Notebook PCs with touch screens have two negative factors ASP for components, not to mention the touch and CPU expense. The sec behavior—high ASPs and work-usage behavior may hinder touch screen p
 - Emerging Touch Sensor Structures
 - OGS is used for larger sizes, especially notebook PC applications.
 - In-cell and on-cell touch has benefited from Apple and Samsung Super Al
 - GF1 will replace GFF. A single layer can support multi-touch and reduce la
 - GF2 debuts in the iPad mini. It reduces thickness, but still has a poor yield



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

