



Touch Panel Market Analysis Q4'12 Update

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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 percentage 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 reach 200M, close to the notebook PC market size, but all tablets have touch screens.
 - Notebook PC: Notebook PCs with touch screens have two negative factors: ASP for components, not to mention the touch and CPU expense. The second behavior—high ASPs and work-usage behavior may hinder touch screen penetration.
 - 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 AMOLED.
 - GF1 will replace GFF. A single layer can support multi-touch and reduce layer count.
 - GF2 debuts in the iPad mini. It reduces thickness, but still has a poor yield.





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