

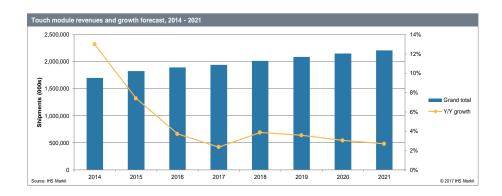
**TECHNOLOGY, MEDIA & TELECOM ABSTRACT** 

# **Touch Panel Market Tracker**

Calvin Hsieh, Director

The quarterly Touch Panel Market Tracker focuses on display-based user interfaces, and provides a comprehensive analysis of touch panel technologies, sensor structures, applications, module area, ASPs, cost models, active stylus, force touch, emerging trends, and market forecasts. The report includes a quarterly analysis of the entire market and four Excel databases (pivot table format) throughout the year.

IHS Markit surveys and profiles near 100 makers of touch panel modules (including add-on types and embedded types from panel makers) to produce this report. Shipments and revenues for near 100 touch panel makers are included.



# Key Issues Addressed

- Touch UI-related technologies, sensor structures, applications, and other industry trends
- In-cell and on-cell evolution
- Flexible touch evolution
- Panel maker profiles featuring embedded touch activity, technological innovations, product specifications, and more
- Supply chain on controller, material and module ends
- The latest trends in touch with user interface enhancements
- Forecasts and roadmaps for technologies and applications most likely to thrive

# Applicable To

- Brand manufacturers, OEMs, ODMs
  - Product marketing managers
  - Procurement managers
- Panel makers
  - Product marketing/strategic planning managers
  - Marketing intelligence managers
- Touch module makers
- Touch-related materials (such as adhesive and cover glass) and component suppliers
- Touch controller and display driver IC makers
- The investment community

### **ACTUALS AND FORECAST**

### Frequency, Time Period

- Quarterly update
- Quarterly survey on embedded touch
- Quarterly forecast update

### Measures

- Shipments, revenue, and ASP by:
  - Technology
  - Sensor structure
  - Sensor substrate
  - Application
  - Module size
  - Module area
- Module maker
- Module cost model by:
  - Application
  - Module size
- Controller shipments and ASP by:
  - Application
- Active stylus shipments by:
  - Application
  - Technology
  - Pressure sensing
  - Module size

### PRODUCTS COVERED

- Smart watch
- Mobile phone
- Tablet PC
- Notebook PC
- All-in-one PC
- Other consumer applications
- Commercial applications

# **TECHNOLOGIES COVERED**

- Projected capacitive
- In-cell TFT LCD
- On-cell TFT LCD
- On-cell AMOLED
- Flexible touch displays
- Force touch enhancement
- Display-based fingerprint
- Active stylus supportController IC trends
- ITO material replacement

# Lead analyst

### **Calvin Hsieh - Director**

Calvin Hsieh is a research director at IHS. He has more than a decade of experience crafting strategies and managing product lines at leading display organizations across the globe. Prior to joining DisplaySearch, Calvin was the product marketing director at Proview Electronics, one of the world's largest LCD monitor and TV manufacturers. His past experiences also include imaging software development, e-commerce and display-related industry.

### **About IHS**

IHS (NYSE: IHS) is the leading source of information, insight and analytics in critical areas that shape today's business landscape. Businesses and governments in more than 165 countries around the globe rely on the comprehensive content, expert independent analysis and flexible delivery methods of IHS to make highimpact decisions and develop strategies with speed and confidence. IHS has been in business since 1959 and became a publicly traded company on the New York Stock Exchange in 2005. Headquartered in Englewood, Colorado, USA, IHS is committed to sustainable, profitable growth and employs 8,000 people in 31 countries around the world.

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- Force touch
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### Historical market analysis

- Embedded touch (in-cell and on-cell)
- Applications
- Technologies
- Sensor structures
- Regions and makers

### Key products value chain relationships

- Apple iPhone and iPad products
- Smartphones
- Tablet PCs

# New emerging trends analysis

- Embedded touch (in-cell and on-cell)
- Touch-related user interfaces
- Display-based fingerprint solution
- Touch related semiconductor
- Touch related materials

## Regional news and maker updates

- China
- Taiwan
- Korea
- Japan
- Others

For more information technology.ihs.com

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IHS Markit (Nasdaq: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.