

Design Forecast Tool (DFT)TM for Mobile Handsets

How Would Handset OEMs Play Out in Economy Crisis

By Tina Teng, Analyst

Measures and Update Frequency

- Feature shipment volumes for 32 brands and for all others, 2007, 2008 actuals and 2009 – 2013 forecast
- 2007, 2008 actuals and 2009 -2013 forecast handset market introductions by brand and by feature
- Forecast of handset design starts by brand and feature 2007 - 2012
- Design chain relationships: key design sources and influencers for each brand
- Updated in Q2 and Q4 each year

Features by Brand

- Air Interface (incl: GSM, GPRS, EDGE, CDMA 1x RTT, EVDO, WCDMA, HSDPA, HSUPA, TD-SCDMA, 4G)
- Display (primary, sub, by technology, by resolution – example TFT/260K color/QVGA, OLED, etc.)
- Form Factor (Bar, clam shell, slider, swivel, PC card)
- Camera (primary, secondary, by resolution, by sensor type, zoom, autofocus, flash bulb)
- Multimedia (Music Playback, FM Radio, GPS, Video Calling, Video Playback, mobile TV by standard)
- Connectivity (WiFi, USB, Bluetooth, Contactless Communications)
- Smart Features (input method, touchscreen, motion sensor, finger print sensor)
- Smartphone by OS
- Storage (flash card slot by form factor)
- Segments (smartphone, feature phone, Entry level, ULCH, PC Card)

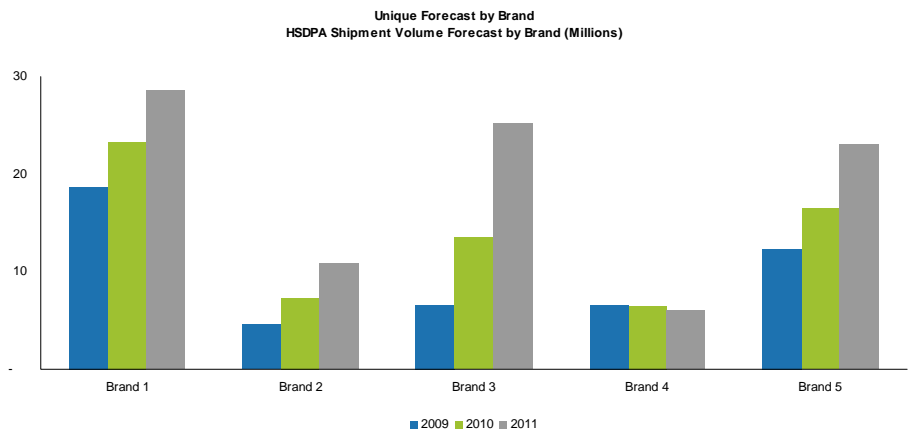
Other Global Feature Forecast

- Haptics feedback
- Micro projector
- HD connector
- ASP (ranges from below \$30 to above \$400)

One of the toughest things to do in business is to prepare for upcoming opportunities and competitive threats. iSuppli's Design Forecast Tool (DFT)TM for Mobile Handsets was developed to help the mobile handset industry peer into the future using all the facts at hand. This Excel based tool forecasts for the top 32 global handset brands and their feature shipments in millions of units, model introduction counts, and model design start counts. Actual market data for 2008 is used and the forecast horizon extends to 2013. In addition, design chain relationship for each brand is presented as well as a table highlighting the leading independent influencers of handset design.

Everyone in the handset value chain, or who tracks it, can find benefit in this tool for plotting future courses of actions such as:

- Sales and marketing resource investment, deployment and optimization
- R & D project prioritization
- Customer, supplier, and partner selection decisions
- Investor risk assessment



Critical Questions Answered

- For suppliers of products and services to handset brands
 - How many design windows are there for my product/service? How big is each one in volume? Timing?
 - Which brands are going to adopt first or be ready for re-designs?
 - Who controls the design process and supplier selections for a given brand?
 - What are the feature roadmaps of the various brands?
- For handset manufacturers
 - What are the roadmaps of my competitors?
 - What processes and relationships are they following to acquire design capabilities?
- For service providers
 - What are the roadmaps (from a 3rd party view) of current and potential handset partners?

Who Should Use This Tool?

- Service Providers
- Semiconductor Suppliers
- Handset Manufacturers
- Handset Display Panel Makers and Module Integrators
- Camera Sensor and Module Companies
- Passive/EM Component Suppliers
- Design/IP/ODM Companies
- Software Licensees

Lead Analyst**Tina Teng, Senior Analyst**

At iSuppli, Tina is responsible for analysis and forecasting the mobile handset market.

Prior to joining iSuppli, Tina worked for Texas Instruments and MCI WorldCom. At Texas Instruments her main focus includes competitors benchmarking and database analysis. While working for MCI Worldcom as a Data Network Engineer, Tina was responsible for test plan design, network testing as well as network management and integration.

Tina earned a Master of Science in Electrical Engineering from University of Texas at Dallas with concentration in Telecommunications and an Master of Business Administration from the University of Texas at Austin.

Mobile Handset Brands

- Amoi
- Apple
- BenQ-Siemens
- CECT
- ChangHong
- HTC
- Fujitsu
- Haier
- Hitachi
- Huawei
- Konka
- Kyocera
- Lenovo
- LG
- Motorola
- NEC
- Ningbo Bird
- Nokia
- Palm
- Panasonic
- Pantech Group
- Research In Motion
- Sagem
- Samsung
- Sanyo
- Sharp
- Sony-Ericsson
- TCL-Alcatel
- TianYu
- Toshiba
- UTStarcom
- ZTE
- Others

Forecast Methodology

The following factors were used to create the forecasts by brand:

- Global Market Factors
 - Operator technology choices, service plans, ROI
 - Roadmaps of major building block/ design suppliers
 - Looking for cross-over points – the “no-cost” feature
 - Time-to-market trends
- Target Market Factors
 - Demographic preferences
 - Regional variations
 - Industrial design versus electronics intensive features

Company Portfolio Strategy

- Past tendencies in portfolio migration and product introduction
- Brand strength
- Future roadmap indicators
- Financial strength and R&D investment plans

Research Methodology

- Primary and Secondary Research
- Design IP Houses and ODM relationships
- Brand Design Chain Relationships
 - Teardown analysis
 - Design wins