LCD Downstream Industry Overview, Q1-2007

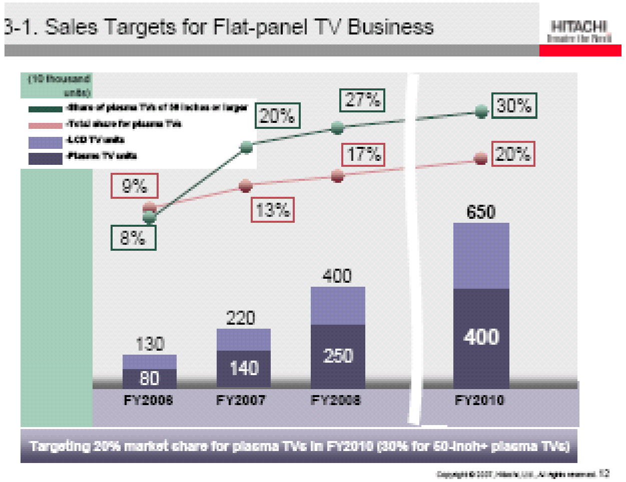
Tom Lo

TV Maker strategy update~ Japan Makers

- Toshiba
  - –No change on SED TV (withdrew from SED panel development, but will still launch SED TV in 2009.) Doesn't see SED TV as having the same position as LCD TVs.
    - •But Canon announce delay mp of SED again and doesn't give exact date.
  - –OLED TV to enter mass production in 2009.
  - –Promote HD DVD and Regza LCD TV from 26" to 57" together.
  - –Launch Purezza LCD with OCB（Optically Compensated Bend) technology to reach the level of 2ms response time and 1M:1 contrast ratio.
  - –Introduced LCD TVs with external HDD.
- Sharp
  - –9m LCD TV shipment in 2007. JP market: 3.2M and overseas market: 5.8m, including 2.9m in Europe
  - –In contrast to the 55% in 2006, 30" and above LCD TV shipments to reach 80% in 2007. 40" and above will hit 40%.
  - –Aquos TVs: 37" above FHD models will reach 90%.
  - –US Market to gain 15% share in 2007, compared to 13~14% in 2006.
  - –G8 capacity plan: Q107: 30k/m, Q307:60K, Q308:90k.
  - –32 and 37" panels will be purchased from CMO and AUO on a case by case basis.
  - –Develop new Aquos models for web surfing.
  - –Five major assembly plants located in Japan, China, Poland, Mexico, and Malaysia.

TV Maker strategy update ~Japan Makers

- Hitachi
  - Shipment Target:
    - In 2007, LCD TV: 0.8m and PDP TV: 1.4m.
    - In 2012, PDP TV: 20% share, 50” and above class accounting 30%.
  - Market: Focus on JP and US in 2007. Expand to EU and China markets in 2008.
  - MP PDP TV in Malaysia and Czech (5 worldwide manufacturing bases).
  - Cooperate with Matsushita on R&D, Production, Marketing and IP.
  - Launch 85in PDP TV in 2008.
  - Develop both LCD and PDP TV in 40” sector. For 50” and above, focus on PDP TV.
  - Newly added TV functions:
    - Removable HDDs.
    - Improve movie picture performance
    - Promote IPTV
- JVC
  - Emphasize on LCD TV (Not D-ILA projection TV).
  - Change TV size to 42 and 47” from 40” and 46”.
  - Promote 120Hz frame rate LCD TV.
- Pioneer
  - Withdraw from PDP TV OEM market.
  - Delay expansion plans.
- Funai
  - 4m LCD TV shipment target in 2007
  - Withdraw from PDP TV.
  - Launch 42” FHD LCD TV in mid 2007.
  - Seek for more OEM orders.
  - Launch LCD TV/ DVD combo from 15~37”.
  - Poland factory mp in the Summer of 2007.
  - Procure panel in cell and in-house modulization.



WitsView LCD Research Institution

Summary

- Street price of mainstream 32, 37, 40, 42” LCD TVs slipped 33~54% for 2006. In order to compete with the 40”, 42” saw the largest decline.
  - 32” slipped below $1,000.
  - 42” and 40” prices from more than $1,000 difference to currently almost no gap.
  - 37” slipped below $1,000 for the first time in N.A Market.
  - In Japan market, 42” have a large drop as JVC and Sharp new products released. Sony currently dominates 40” class.
  - Virtually no price gap is seen between 40/42” class in China market. Amid Chinese Lunar New Year in Q1, 32~42” slipped by 13~17%, higher than the 9~14% in the North American market.
- For Monitors
  - Price gap between 15, 17, 19w within $5, price gap between 19” and19w expands further.
  - In 1Q07, 22” and 20” prices continue to decline. Some 22” models are lower than the 20” class.
- Estimated retail price in 4Q07:32”: $830, 37”:$1,175, 40/42”: $1,300~1,400.
- Industry trend：
  - TV makers must choose between PDP TV and LCD TV at the moment. Many give up PDP TV manufacturing.
  - Following LG, Samsung has also unveiled a Dual blue ray disc player.
  - Japan’s two major TV makers have announced their OLED mp plans.
  - China retail chain stores still in a consolidation process. Retailing becoming more and more powerful in China market.
- Recent actions from makers:
  - Tier 1 FPD TV target for 2007 set to grow more than 50%.
  - FHD is key development focus for 2007.
  - Makers hold high hopes for BRIC, a key focus in 2007~2008.
  - Makers continue to expand their relevant worldwide TV assembly lines. Excluding Eastern Europe and China, Russia, Brazil and South East Asia are the next key assembly locations.