

Taiwan digital cameras

DIGITIMES Research ICT Report – 4Q 2008

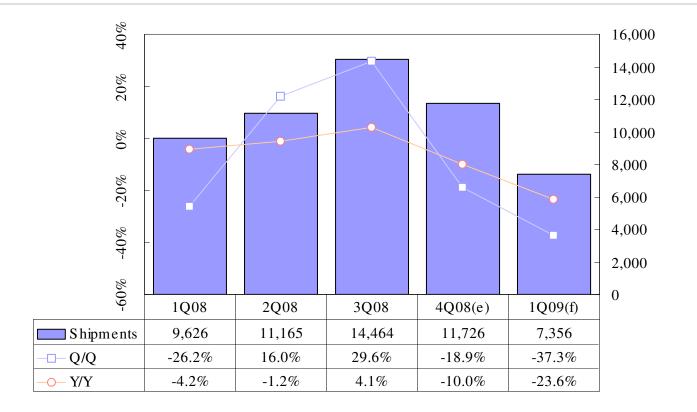
Original Chinese: Joanne Chien, DIGITIMES Research, January 2009 English edition: Joseph Tsai, DIGITIMES, January 2009

Introduction

- ✓ Taiwan shipped 11.7 million digital cameras in the fourth quarter of 2008, down 18.9% sequentially and 10% from the same period one year earlier.
- ✓ Digital camera shipments will drop 37% sequentially in the first quarter of 2009, and will be down 23.6% from the same period in 2008.
- ✓ Taiwan shipped 47.1 million digital cameras in 2008, representing negative growth of 2.8% from 2007, while global demand grew 1.9%.
- ✓ Taiwan accounted for 33.6% of the global digital camera market in 2008 and the share is forecast to increase slightly to 34.6% in 2009.
- ✓ NOTE: Unless otherwise indicated, all figures and tables in this report refer to output from Taiwan makers.



Digital camera shipments, 1Q08-1Q09 (k units)

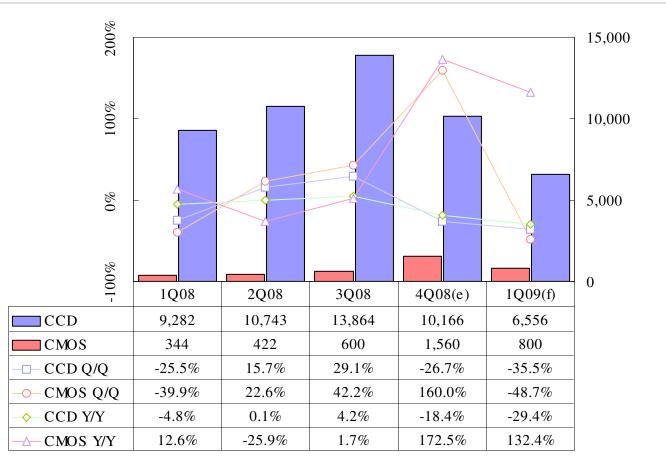


Industry watch

- ✓ Although Taiwan's shipment drop in the fourth quarter was not as bad as expected, digital camera vendors still had overstocked inventory and delayed new digital camera shipments from Taiwan.
- ✓ The traditional slow season plus a further order delay from digital camera vendors will greatly damage both Taiwan's on-year and on-quarter shipment growth in first-quarter 2009.
- ✓ North America, Western Europe and Japan markets are unlikely to see further growth in digital camera sales in 2009 due to already high penetration rates.
- ✓ But the markets with low penetration rate such as Asia Pacific and emerging markets will have a chance to see growth surpassing that of Western Europe and North America in term of digital camera sales.
- ✓ Digitimes Research estimates that Asia Pacific and emerging markets will together account for 36% of global digital camera sales in 2009, while Western Europe will be at 31%, North America at 26% and Japan at 7%.



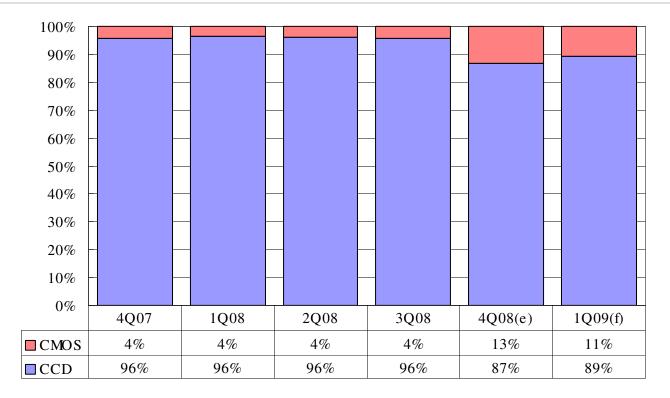
CCD- and CMOS-based shipments, 1Q08-1Q09 (k units)



CCD- and CMOS-based shipments, 1Q08-1Q09 (k units)

- ✓ Benefiting from short-term shipments from Foxconn Electronics (Hon Hai Precision Industry's) for 9-megapixel CMOS digital cameras, Taiwan's CMOS-based digital camera shipments in 4Q08 more than doubled both on-year and on-quarter.
- ✓ A significant shipment drop to the global top-eight digital camera brands will cause Taiwan's CCD-based digital camera shipments to drop over 30% sequentially in 1Q09.

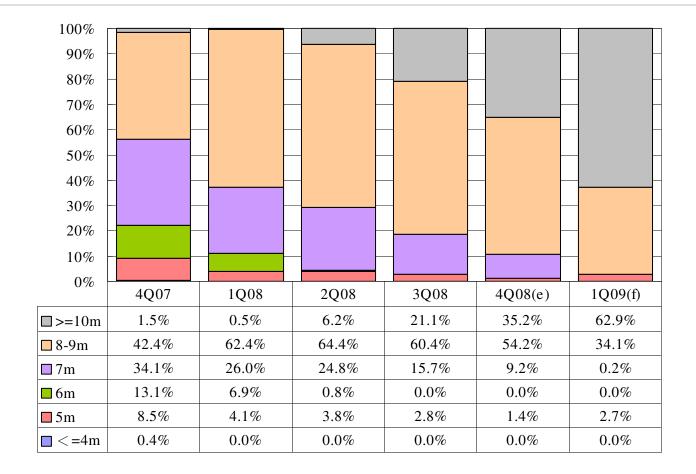
Shipment proportion by image sensor, 4Q07-1Q09



Shipment proportion by image sensor, 4Q07-1Q09

- The short term increase in CMOS-based digital camera shipments by Foxconn in 4Q08 greatly boosted the related proportion for Taiwan's overall digital camera shipments.
- ✓ Despite a dramatic drop in CCD shipments to top-eight vendors in 1Q09, the segment will gain share due to an even larger drop in CMOS shipments.

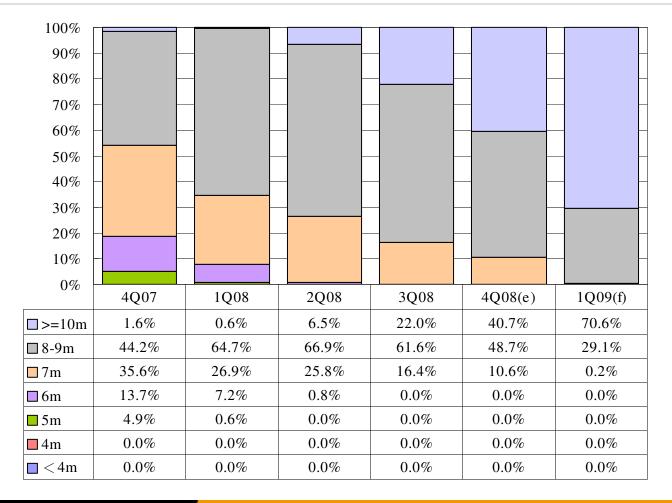
Shipments by resolution, 4Q07-1Q09



Shipments by resolution, 4Q07-1Q09

- The proportion of digital camera models with resolution of 10-megapixels and above did not expand as fast as Digitimes Research forecasted in its previous report – a share of 39% was previously posted - since vendors delayed their new orders (mostly 10 megapixels or above) due to overstocked inventory.
- In 1Q09, digital cameras with a resolution of 10-megapixels and above will become mainstream model in the market and vendors including Kodak, Samsung Electronics, Fujifilm and Olympus will be the major shipment contributors to the segment.

CCD-based shipments by resolution, 4Q07-1Q09

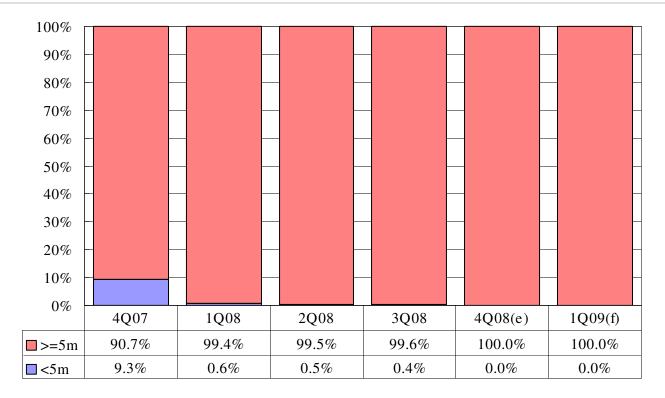


CCD-based shipments by resolution, 4Q07-1Q09

 ✓ For Taiwan's CCD digital camera shipments, 10-megapixel-and above models will become the mainstream with over 70% market share in 1Q09.



CMOS-based shipments by resolution, 4Q07-1Q09

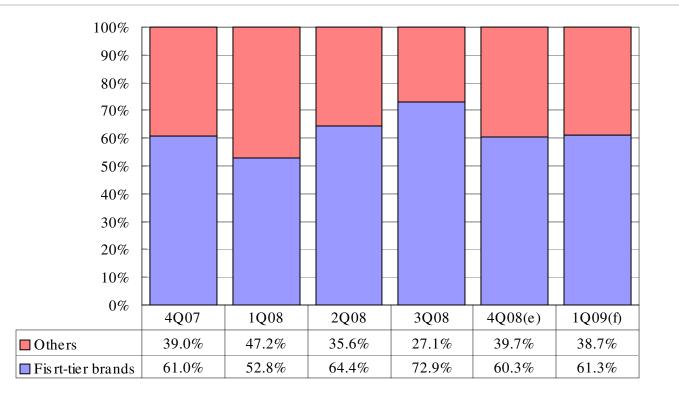


CMOS-based shipments by resolution, 4Q07-1Q09

 ✓ All Taiwan CMOS-based digital camera shipments were 5-megapixels-and-above models starting from 4Q08.



Shipments by client type, 4Q07-1Q09

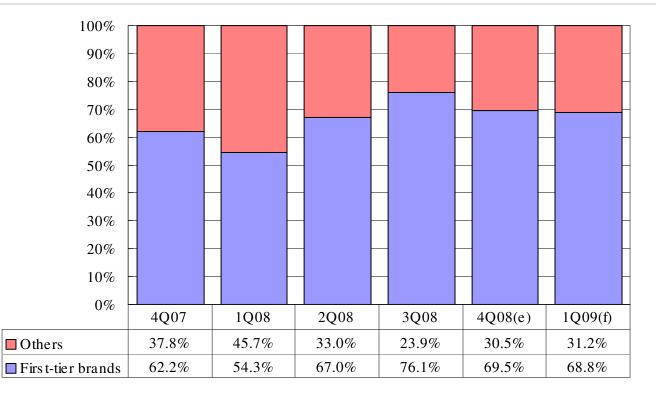


Shipments by client type, 4Q07-1Q09

- ✓ Since first-tier brand vendors suffered from overstock in 4Q08 and greatly reduced and/or delayed new orders to Taiwan makers, their proportion of overall shipments from Taiwan dropped.
- ✓ Non-first-tier brand vendors had a better performance with their low-priced digital camera models in 4Q08, and their related shipments were up 19% sequentially.
- ✓ Both first-tier and non-first-tier brand vendors will suffer from a sequential shipment drop of around 36-39% in 1Q09, with first-tier brand vendors gaining back market share due to slightly better performance.
- ✓ First-tier brand digital camera vendors (global top-eight vendors) in 4Q08 include Canon, Sony, Kodak, Olympus, Samsung, Panasonic, Nikon and Fujifilm.



CCD-based shipments by client type, 4Q07-1Q09

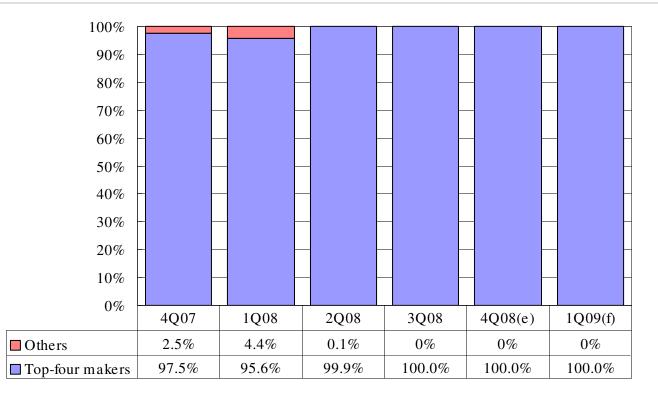


CCD-based shipments by client type, 4Q07-1Q09

 \checkmark The CCD digital camera shipment distribution in 1Q09 will remain stable from 4Q08.



Top makers' share of CCD-based shipments, 4Q07-1Q09

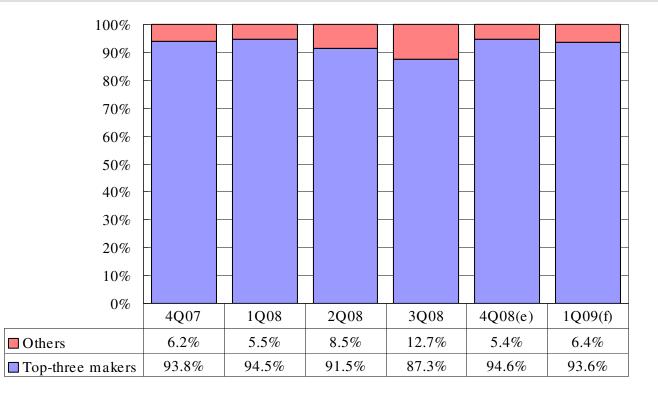


Top makers' share of CCD-based shipments, 4Q07-1Q09

- ✓ Starting from 3Q08, all Taiwan CCD-based digital cameras have been manufactured by Taiwan's top-four makers
- \checkmark Foxconn, Ability, Altek and Asia Optical were the top four makers in 4Q08.



Top makers' share of CMOS-based shipments, 4Q07-1Q09

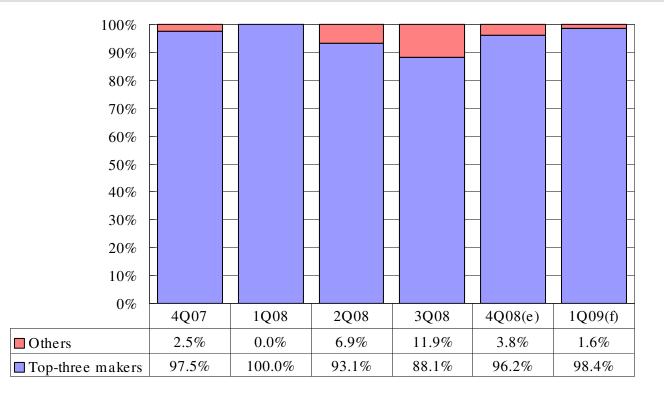


Top makers' share of CMOS-based shipments, 4Q07-1Q09

- ✓ Thanks to the 9-megapixels CMOS-based digital camera shipment from Foxconn (a top-three maker), the top-three makers' market share jumped back over 90% in 4Q08.
- \checkmark Foxconn, Ability and Altek were the top-three makers in that order.



Top makers' share of shipments to first-tier vendors, 4Q07-1Q09

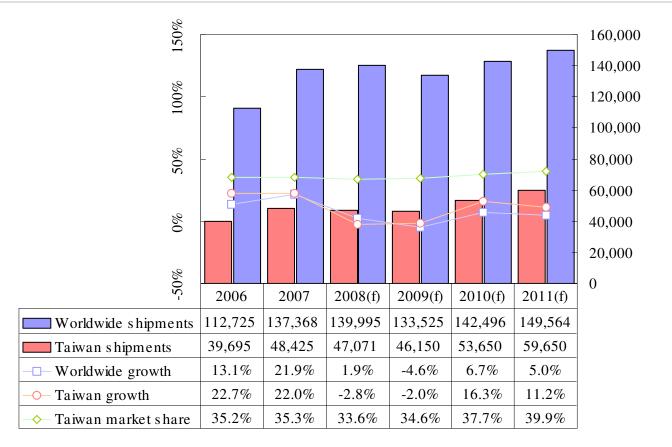


Top makers' share of shipments to first-tier vendors, 4Q07-1Q09

- ✓ Foxconn, Ability and Altek were the top-three makers, in that order, for first-tier vendors in 4Q08. With Asia Optical having a sharp drop in its Fujifilm shipments, the top-three makers' market shares rose back above 90%.
- ✓ Although the top-three makers will all see a shipment drop in 1Q09, Foxconn will remain the top maker and increase its overall share.
- ✓ Asia Optical's shipments will fall at an even faster rate than the top three makers in 1Q09.



Worldwide and Taiwan shipments, 2006-2011 (k units)



Worldwide and Taiwan shipments, 2006-2011 (k units)

- First-tier digital camera brands will have difficulty increasing their shipments in 2009 due to global economic difficulties affecting market demand. This will also cause Taiwan makers to suffer from falling orders.
- ✓ The merger between Panasonic and Sanyo will benefit Taiwan shipments in 2010, since Sanyo's three major clients Nikon, Olympus and Fujifilm are likely to outsource more orders to Taiwan makers rather than providing orders to a competitor.