



LCD Market Conditions: Tight Supply and Raw Material Shortages Create Shifts in Market

Due to the economic slow down, manufactures are managing their costs very carefully by keeping their stock levels low and stream-lining their production capacity by building to the lower end of customers' forecasts. They are also reducing their operational and manpower cost by shuttering low performing fabrication facilities. We have seen instances where some manufacturers are charging premiums for expedited orders when compared to the standard eight to twelve week lead times.

Often in times of a challenged economic environment participants respond very quickly to the unknown; leading to supply imbalances such as shortages and stretched lead times like those we are now experiencing in the LCD market.

TV panels are consuming most of LCD demand and production; driven by the Chinese government's stimulus package for the purchase of electrical consumer items to offset the global downturn.

All panels will be affected by the transition from CCFL backlighting to LED backlighting which is sure to cause supply-demand imbalances.

Note Book Panels

Average pricing for most NB (sizes above 12.1") OEM panel pricing increased \$3 to \$5 per unit in May compared to April prices due to raw material shortage for both AUO and CMO panels. Driven by the 5% - 7% increase in the value of the Korean Yuan, pricing for Samsung and LG panels has climbed. Independent distribution has not only experienced cost increases of anywhere from \$5 to \$8 per panel but also a reduction in allocation.

For the short term, expect to see upward pressure on pricing. However, independent suppliers do expect to get their normal allocation in July when the component shortages ease, in turn stabilizing pricing.

We have seen a great deal of activity for 14.1" and 15.4" sizes which will carry over into July. We expect to see upward pricing pressure well into July.

Monitor panels

Monitor panels have seen their average pricing increase anywhere from \$3 to \$5 in May compared to Q1. Shortages are fueled by component shortages and the shifting of capacity to support TV panel demand driven China's rural consumer stimulus program. However, anticipated demand is expected to quickly normalize, resulting in lead times of 4-6 weeks and stabilization of pricing.

TV panels (PH)

TV panels have been impacted the most by China's rural consumer stimulus program. However, due to global economic conditions panel manufacturers have been very conservative in production and only manufacture based on forecast given by distributors and direct OEM customers. Although the supply shortage is not as severe as it was in March and April, CMO is still experiencing shortages in 21.6", 32" and 42". Expected lead times range from 8 weeks to as long as 10 weeks in some cases. AUO is not supporting its distributors of TV panels, but there is support for the General Display (industrial) business unit which commands a premium in price. Lead time for AUO TV panels is 6-8 weeks as well.

LG and Samsung are also making later than expected deliveries. Expect to see tight supply on TV panels well into the third quarter (Q3).

Industrial panels (PH)

Since industrial panel usage is not as large as NB or monitor, suppliers are not seeing much price or demand fluctuation in the industrial panel market. Industrial panels' supply has been stable and consistent with average lead times of 4 to 6 weeks on commonly used models. Following the market trend, more LED-backlight panels are being introduced by panel manufacturers to replace traditional CCFL backlight. The main sizes are still 10.4", 12.1", and 15" with SVGA resolutions and LVDS interface. AUO still has the highest market share (50%-60%) in industrial panel market.