

## ■ Double and Quadruple Frame Rate Penetration Expected to Reach 19% of LCD TV Panels in 2009; Samsung Led Q1'09 Shipments

AUSTIN, TEXAS, June 9, 2009—Double frame rate (also known as 100 Hz/120 Hz) and quadruple frame rate (also known as 200 Hz/240 Hz) LCD TV panels are rapidly taking important positions in LCD TV panel makers' product roadmaps and shipment plans. DisplaySearch reports that 2009 shipments of 100 Hz/120 Hz and 200 Hz/240 Hz LCD TV panels will reach 22.5 million units and 4.8 million units, respectively, accounting for 15.8% and 3.4%, respectively, of the total 142 million units panel makers are targeting, according to the company's latest [Quarterly Double Frame Rate TV Panel Shipment & Forecast Report](#).

According to [David Hsieh](#), Vice President of DisplaySearch, "As the LCD TV industry is looking for more differentiation, double and quadruple frame rates have been recognized as the ultimate solution to solve motion blur issues." Hsieh added, "In 2008, penetration of double frame rate panels broke the 10% milestone. 2009 will see continued growth as double and quadruple frame rate panels will reach 17.1% penetration, and quadruple frame rate panels 4.2%, in Q4'09 according to panel makers targets."

In Q1'09, shipments of double frame rate LCD TV panels reached 3.5 million units, achieving a 14.3% penetration. Samsung led shipments with a 33.7% share, followed by AUO at 18.3% and LG Display, Sharp, CMO and IPS-Alpha. Currently, only Samsung and LG Display are mass producing 200 Hz/240 Hz LCD TV panels, with Samsung holding a dominant 92.3% market share in Q1'09, as shown in Table 1. Some quadruple frame rate panels use blinking backlighting technology to simulate quadruple picture performance.

Table 1: Q1'09 Double Frame Rate and Quadruple Frame Rate LCD TV Panel Shipment Share (Units)

	100 Hz/120 Hz	200 Hz/240 Hz
Samsung	33.7%	92.3%
AUO	18.3%	
LG Display	17.3%	7.7%
Sharp	15.7%	
CMO	9.9%	
IPS-Alpha	4.6%	

Source: DisplaySearch Q2'09 [Quarterly Double Frame Rate TV Panel Shipment & Forecast Report](#)

40" is the largest segment with a 25% share of double frame panels, 46" is #2 with 18%, and 32" is #3 with 14%. Quadruple frame rate panel shipments mostly focused on 40", 46" and 52". Table 2 shows the double frame rate LCD TV panels shipment sizes, shares, penetrations as well as the main panel suppliers.

Table 2: Q1'09 Double Frame Rate LCD TV Panel Shipment Share, Penetration, and Major Panel Suppliers by Size

	Share	Penetration	Top Three Makers
32"	14.3%	5.1%	AUO, Sharp, IPS-Alpha
37"	13.7%	22.6%	AUO, Sharp, LG Display
40"	25.1%	39.6%	Samsung, CMO, AUO
42"	14.7%	23.1%	LG Display, CMO, Sharp
46"	17.8%	51.0%	Samsung, AUO, Sharp
47"	4.5%	36.4%	LG Display, CMO
52"	5.1%	39.0%	Samsung, Sharp
55"	4.2%	91.2%	LG Display, Samsung, CMO
65"	0.5%	91.8%	Sharp
70"+	0.01%	100%	Samsung
Total	100%	14.3%	

Source: DisplaySearch Q2'09 [Quarterly Double Frame Rate TV Panel Shipment & Forecast Report](#)

DisplaySearch's forecast for the segment shows that in Q4'09, the penetration of double frame rate and quadruple frame rate will reach 17.1% and 4.2%, respectively, and in Q1'10 penetration will increase to 19.5% and 5.3%, as LCD TV panel makers are aggressively developing upgraded refresh rate panels for additional value.

The newly released DisplaySearch [\*Quarterly Double Frame Rate TV Panel Shipment & Forecast Report\*](#) tracks TFT LCD manufacturers' shipments of 100 Hz/120 Hz and 200 Hz/240 Hz LCD TV panels and includes forecasts by size, by resolution, and by panel manufacturers through 2010. This unique report is the most comprehensive way to find out how faster refresh rates will contribute to growth across the industry, making it a key guide for panel buyers, LCD TV product planners and component makers. For information on the DisplaySearch [\*Quarterly Double Frame Rate TV Panel Shipment & Forecast Report\*](#), contact Charles Camaroto at 1.888.436.7673 or 1.516.625.2452, email [contact@displaysearch.com](mailto:contact@displaysearch.com), or contact your regional DisplaySearch office in China, Japan, Korea or Taiwan.

#### About DisplaySearch

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