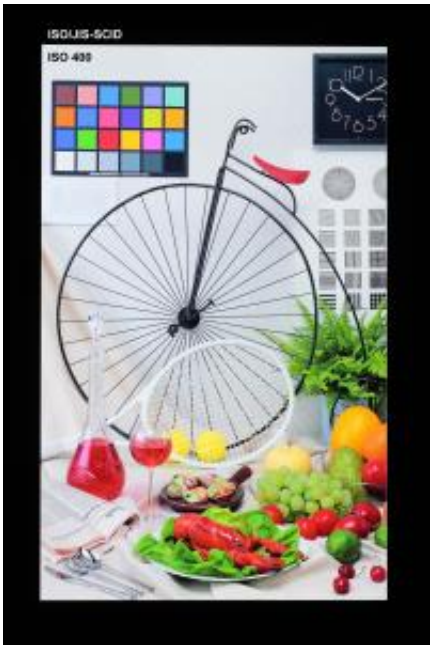
Toshiba bites Apple with 498 ppi display

October 24 2011, by Nancy Owano



(PhysOrg.com) -- As soon as Toshiba announced its 6.1-inch Liquid crystal display (LCD) panel last week, bloggers and tech news sites were noting the numbers and poking at mobile display monarchs Apple. Toshiba's new display packs a 2560x1600 resolution with a 1000:1 contrast ratio. The display works out to 498 pixels per inch (ppi).

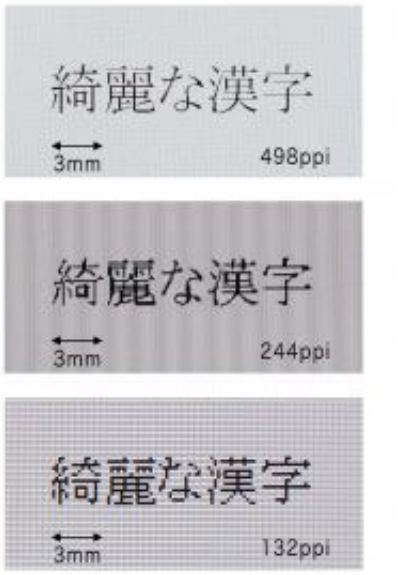
"Astounding," “staggering,” and "Prepare to have your eyes melted," were some of the reactions. Reports hastened to compare display numbers with those from Apple.

Suddenly Apple's "retina display" iPhone 4/4S smartphones of 326 ppi was a less exciting feat. Adjectives like "razor sharp" were usurped from Apple's gate and replanted at Toshiba's.

Among other bragging points is the fact that Toshiba's display can show 16.7 million different colors.

Toshiba describes the display technology as based on processing techniques with low-temperature poly-silicon (LTPS) thin-film transistors (TFT) on glass substrates and other fabrication techniques that Toshiba has cultivated over the years.

Toshiba credits its LTPS technology as the enabler of advancements like the new LCD display. Low temperature poly silicon makes possible higher pixel density, which in turn makes text and images more readable. That's especially useful in smaller device screens like handhelds and portable diagnostic equipment, as well as for larger screens, says Toshiba.



The display is for 2-D images but the LCD panel achieves “high-definition images with photographic quality,” says Toshiba, and those images impart depth and realism.

Missing from the announcement were specifics on how the display will translate into product. Many are wondering what type of end product will use the display.

One easy assumption is that the display will translate into smaller tablets but a few observers are raising questions about that. The hardware review site AnandTech asks, what is the use for a 6.1-inch display? The report points out that smaller 4.5-inch displays are, with a few exceptions, the maximum for most smartphones. As for tablets, they usually start at 7 inches. Toshiba’s display at 6.1 inches hovers over both categories, too big for smartphones and too small for tablets.

Others guess that Toshiba's targets may be e-reader manufacturers who want to take their displays to a newer level.

Those in Yokohama, Japan, this week will be able to see the LCD panel at the FPD International 2011 from October 26 to 28.

Enhanced viewing and graphics capabilities are a competitive feature in mobile devices, as manufacturers strive to respond to user wants, needs, and expectations.

Toshiba’s new-to-showcase LCD, with its superior resolution, has already attracted much attention. For now, though, in the absence of any product details from Toshiba, Apple can still rest on its laurels. As Apple

tells the world, its "retina display" makes viewing "hundreds of pixels better."

More information: Press release