

## I'VE SEEN THE FUTURE, AND THE FUTURE IS INKJET...

September 2006

There was an interesting Press and Analysts event held in San Francisco on October 3rd. I say interesting because I think the most significant announcement was thrown in as a "by-the-way."

Most of the press event concerned announcements of new marketing initiatives and partnerships with third-party application developers. Interesting stuff to the rest of the company, but I'm the house Geek.

What floated my boat was the formal announcement of HP's Edgeline technology and forthcoming product. We actually were briefed on this technology a while back under NDA, and have been anxiously holding our breath, waiting to see it as a commercial product.

Edgeline is a refinement of HP's Scalable Print Technology (SPT) announced over a year ago and first used in the OfficeJet 550. This technology uses a very high nozzle density printhead to print a larger swath with high resolution across the page.

Edgeline carries this idea a bit further. Instead of moving the printhead, as is commonly done in inkjet printing, Edgeline arrays multiple SPT large printheads in a single fixed mounting, and moves the paper underneath the printhead. With only the paper being moved, Edgeline printers can provide eyeball-snapping performance. HP claims up to 71ppm!

The first products using Edgeline technology are on the high-end. The HP Photosmart Express Station retail

photo kiosk uses Edgeline technology to crank out up to 20 4 x 6 inch photos in less than two minutes. While the recently introduced Photosmart pm1000 Microlab printer can kick out a print in as little as five seconds.

The as yet unnamed business product, to be delivered in Spring 2007, is a business-oriented MFP. HP hasn't released the specs yet, but it appears that the device will offer a terrific price/performance ratio.

What I find fascinating, as a tech-oriented market follower, is that Edgeline technology has the potential to blow the printer market open. Today's inkjet technology is dependent on how fast you can shuttle the heads back and forth across the width of a page. Adding more printheads just ups the moving parts and complexity. I remember years ago when OTC used this approach in its dual-head dot matrix printer. Obviously, it didn't become an industry-standard approach.

Laser printers require lots of moving parts. The laser itself is stationary, but the scanning mechanism, photoconductor drums, and lots of other parts, are all participating in a carefully choreographed dance where one misstep can bring the print process to a grinding halt.

When it comes to high-speed anything, simpler is better. There's just less than go wrong. Fewer parts also mean economies in manufacturing and pricing. Right now, HP needs to start recouping the over \$1 billion investment it has made

in R&D of Scalable Print Technology. The wafer fab process for generating the complex printheads will also probably take a while for HP to work out the kinks and get yields up.

But if HP is serious about Edgeline, and from all indications they are, the rest of the industry better look out. There's a reason why you can buy a color inkjet printer for \$39 at your local supermarket, while the least expensive color laser printer is still in the \$300 range.

HP doesn't have to bring out a \$300 70ppm Edgeline-based color printer to blow away much of the low end color laser printer market (including its own models in that space). How does a \$250 50-ppm photo-quality printer sound to you – scary?

To a techie like me, it sounds like nirvana. And with a bit of time, some manufacturing experience, and economies of scale, seeing such a printer in the somewhat near future wouldn't surprise me at all.

For more information about Edgeline, visit [www.hp.com](http://www.hp.com) and search for "edgeline" or call Cherie Britt from HP at (209) 551-1027 or Jenna Skidmore from Porter Novelli at (415) 975-2263.

#### LabNotes

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