

## **Aptina Picks Silicon Frontline's Post-Layout Verification EDA Software to Eliminate Costly Prototype Builds, Improve Manufacturing Quality**

**Campbell, CA** – November 19, 2009 – [Silicon Frontline Technology](#), Inc. (Silicon Frontline), an Electronic Design Automation (EDA) company in the post-layout verification market, announced today that [Aptina](#), the world's foremost image sensor provider, is using Silicon Frontline's F3D (Fast 3D) software for post-layout verification and for fast 3D extraction to improve Aptina's image sensor design accuracy and manufacturing quality.

By using Silicon Frontline's F3D software, Aptina's designers are resolving a range of issues including: floating diffusion (sense node) capacitance, inter-pixel coupling, color-filter effects, impact of metal fill and signal channel mismatch without having to build costly prototypes.

With F3D, Aptina designs are released up to 4 months earlier, providing significant cost reduction and an advantageous market position.

“We are focused on being the world's best image sensor provider,” said Roger Panicacci, VP of Product Development at Aptina. “In order to maintain our position we constantly look for design software that will improve our nanometer and A/MS design's accuracy. Silicon Frontline's F3D fits that bill. With it, we are able to eliminate design steps, like building prototypes to measure the accuracy and capacitance before wafer fabrication.”

“We are proud to add Aptina, an innovative leader in CMOS image sensor technology and manufacturing quality, to our list of customers,” said Yuri Feinberg, CEO, Silicon Frontline. “They are among the quality-focused customers that have picked us to improve their design productivity and manufacturing quality.”

### **Silicon Frontline's Post-Layout Verification Software with Guaranteed Accuracy**

Silicon Frontline's post-layout verification software guarantees accuracy and high performance by using rigorous 3D technology to extract parasitics. Users have the option to specify the level of

accuracy desired, net by net, at the block level or with regular expressions. By guaranteeing accuracy, Silicon Frontline is ensuring the resulting parasitics are correct within the user-specified accuracy.

### **About Silicon Frontline**

[Silicon Frontline Technology](#), Inc. provides post-layout verification software that is *Guaranteed Accurate* and works with existing design flows from major EDA vendors. Using new 3D technology, the company's software products improve silicon quality for standard and advanced nanometer processes.

The company's first products--F3D (Fast 3D) for fast 3D extraction and R3D (Resistive 3D) for 3D extraction and analysis of large resistive structure-- were announced in May. In July, two of the world's leading foundries, [UMC](#) and [TSMC](#), validated the F3D product for nanometer design technologies. At the [Design Automation Conference](#) (DAC) in August, the company was honored with a listing in [GarySmithEDA](#)'s *What To See @ DAC 2009* list.

For more information, please visit [www.siliconfrontline.com](http://www.siliconfrontline.com).

### **About Aptina**

[Aptina](#) is a global provider of CMOS image sensor solutions with a growing portfolio of products that can be found in all of the leading mobile phone and notebook computer brands. Aptina also offers a wide range of products for digital and video cameras, surveillance, medical, automotive and industrial applications, video conferencing, barcode scanners, toys and gaming. Aptina continually drives innovation in the market as seen with the introduction of the first 10MP CMOS image sensor for point-and-shoot cameras (MT9J003), and the industry's first 5MP SOC with 1/4" format (MT9P111). For additional information on Aptina, visit [www.aplina.com](http://www.aplina.com).

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