3M Enhances 3D Display Capabilities for Handheld Displays with 3D Optical Film

Company's 3D Field Sequential Optical Film for Handheld Display Devices Delivers True Autostereoscopic Viewing without the Need for Glasses

3M's Optical Systems Division today announced that 3M has developed a new, field sequential 3D optical film for handheld devices—enabling true auto stereoscopic 3D viewing on mobile phones, gaming and other handheld devices without the need for glasses.

"Mobile device capabilities have been significantly enhanced in recent years with the emergence of new applications and features like touch screens and streaming video. 3M has enabled these new capabilities, and is now enabling the next generation of advancement with features like 3D viewing," noted Jim Bauman, vice president of 3M's Optical Systems Division. Our 3D optical film solution is designed to enhance communication and interaction by providing an immersive, compelling visual 3D experience for mobile devices.

The company's 3D optical film can be easily integrated into the backlight module—providing a simple 3D solution. Furthermore, the film only requires one LCD panel and operates at a 120Hz refresh rate. Backlight module assembly is nearly identical to existing systems—allowing for simple integration at the assembly stage. The standard optical film stack is replaced with a reflective film, custom light guide and 3D film. By using directional backlight technology, left and right images are focused sequentially into the viewer's eyes—enabling a full resolution display of the panel. (See Figure 1.)

3M's will show its 3D display for mobile concept at the Korea Electronics Show, to be held October 13-16 at the KINTEX (Korea International Exhibition Center) at Booth #1600.

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About 3M

A recognized leader in research and development, 3M produces thousands of innovative products for dozens of diverse markets. 3M's core strength is applying its more than 40 distinct technology platforms - often in combination - to a wide array of customer needs. With \$25 billion in sales, 3M employs 75,000 people worldwide and has operations in more than 60 countries.

Photos/Multimedia Gallery Available: http://www.businesswire.com/cgi-bin/mmg.cgi?eid=6064681&lang=en

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