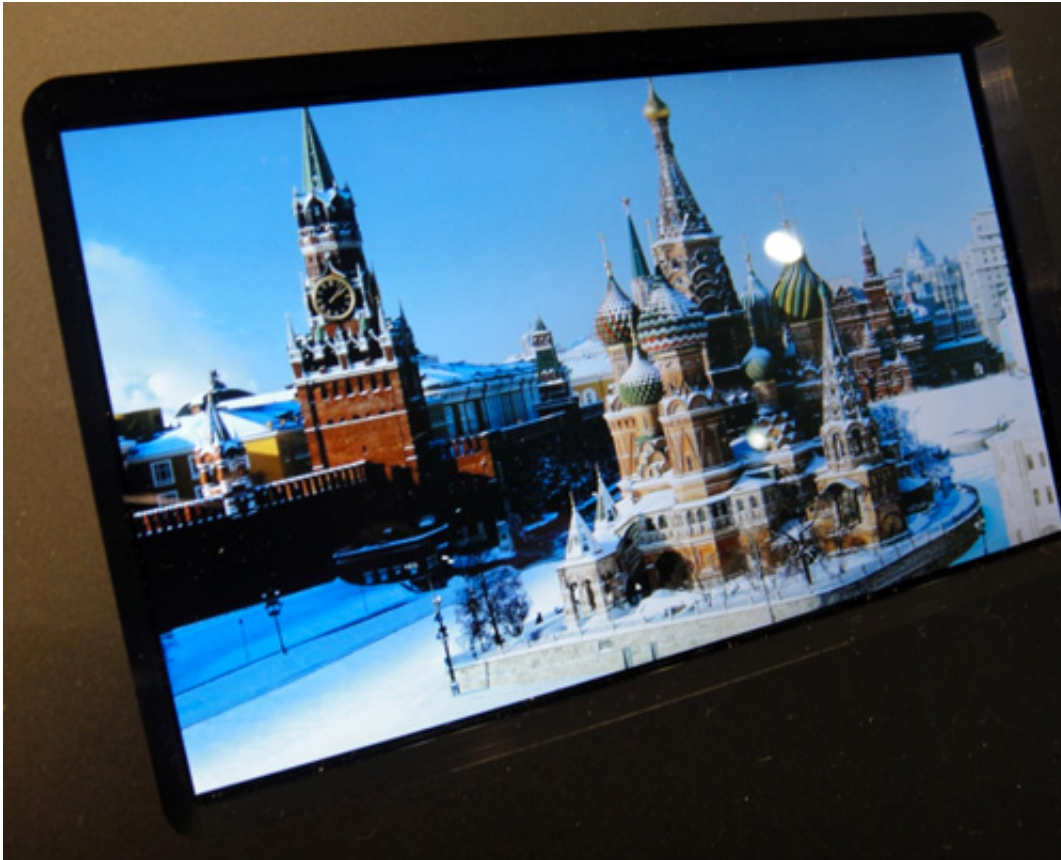


# The worlds smallest 3D HD display

May 16 2011, by Katie Gatto

---



(PhysOrg.com) -- It seems like small displays are all of the rage these days, and they just keep getting more and more advanced. In October of last year Ortus Technology created a 4.8-inch liquid crystal display that showed full color images. At the time, this screen with its pixel density of 458 pixels per inch, a density beyond the detection limit of the human

eye, was the latest and greatest in the world of tiny screens. Now, it is only the most advanced of the 2D screens out there.

Now, it has some 3D competition, and the call is coming from inside the house. Ortus has created a Hyper [Amorphous Silicon](#) TFT (HAST) screen. This new screen reduces the space between the pixels and gives it a whole new view. The 4.8-inch LCD screen will still show 2D images at the 458 pixels per inch rate, but now it can also show 3D images at a fairly impressive rate of 229 pixels per inch. This rate of pixels per inch will be able to show full HD resolution images with a final resolution of 1920 x 1080 pixels. The 3D does require the use of glasses to see the images pop, unlike other small format 3D screens such as the one found on the [Nintendo](#) 3DS. The 3D images will have a viewing angle of 160 degrees, and will be able to display up to 16.77 million colors.

The 3D effect is created with a circular polarizing film known as Xpol, which was developed by Arisawa Manufacturing. The film needs to be precisely placed on the screen because this technology shows images for the left and right eye alternately on each line, halving the vertical resolution.

**More information:** [www.ortustech.co.jp/english/](http://www.ortustech.co.jp/english/)

© 2010 PhysOrg.com

Citation: The worlds smallest 3D HD display (2011, May 16) retrieved 19 April 2024 from <https://phys.org/news/2011-05-worlds-smallest-3d-hd.html>

|  |
|--|
| <p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p> |
|--|