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Global Business Ideas and Information  
for Managers and Test Engineers

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## Products: Memory

### Highest throughput rate for final test of flash memory devices

**A** new tester interface has been introduced for the Agilent Versatest Model V4100 that optimizes the system to more cost-effectively test flash memory devices during final test. Fully compatible with the industry's most popular memory handlers, the V4100 final test interface also enables the highest throughput rate for final test of high-volume memory devices.

The Model V4100, with final test interface, allows engineers to test up to 32 NAND devices in parallel, allowing for reduced cost of test and faster time-to-market. Production volume for high-density NAND flash memory

**Production volume for high-density NAND flash memory should rise dramatically as flash memory cards find applications in popular consumer electronics.**

is expected to rise dramatically as flash memory cards find applications in popular consumer electronics, including digital cameras, MP3 players and personal digital assistants. According to Web-Feet Research Inc, NAND megabit volumes will increase nearly 13-fold between 2002 through 2006, from 68,000 to 857,000 MMb(1).

The characteristics of the V4100 include:

- Unique for every device (analogous to probecards)
- Designed to minimize temperature and

vibration transfer to testhead

The popularity and demand of flash memory in consumer products places tremendous pressure on contract manufacturers to reduce cost of test (COT) for these devices. To answer this challenge, the V4100 covers a broad range of test applications, from wafer sort and final test of flash devices on a single V4100 system. Additionally, the V4100 is well suited for high-mix production environments. The system can perform wafer sort test on a wide variety of memory and logic applications, including flash memory, SRAM, embedded memory and pure logic. The versatility and flexibility of the V4100 help contract manufacturers maintain low COT as production mixes and test applications change.

The V4100's field-upgradeable performance levels of 40, 70 and 100 MHz are fully compatible with the other members of the Agilent Versatest Series. This compatibility allows test programs developed on the Model V4100 TDS (test development system) to be transferred directly to the Versatest Series' production testers -- the Model V4100 and Model V4400 -- delivering correlation and test repeatability from engineering development to high-volume wafer sort to final test. Additionally, the V4100's small, 0.5-square meter (5.8-square-foot) footprint conserves valuable floor space.

"We're helping our customers control test costs by offering a single platform that

## DID YOU KNOW?



### Future space missions

#### Martian life:

A series of Mars landers and orbiters will be launched every other year starting in 2003 to scout the Red Planet for sites where biological activity might be found. A mission to collect a sample of Martian rocks and soil and return it to Earth is planned for 2011 or 2013.

#### Extraterrestrial life:

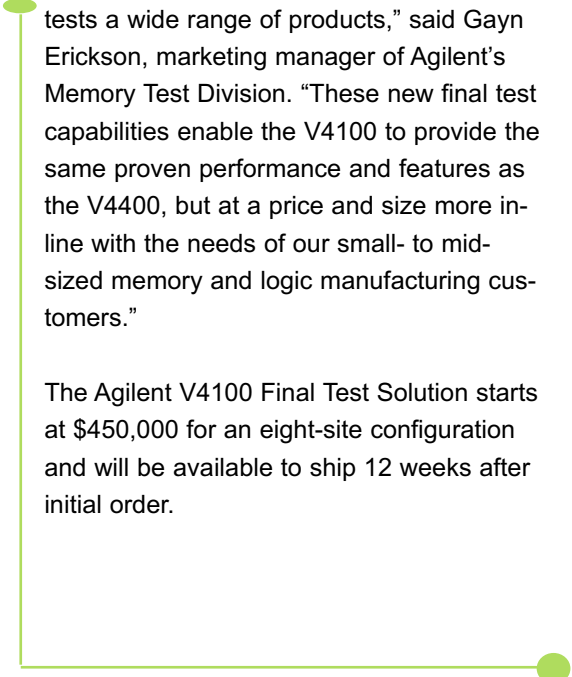
The Terrestrial Planet finder, an even more powerful space telescope that's still being designed, is planned for launch by 2015. Its mission is to investigate 50 extrasolar planets where conditions might make it possible. It then will pick 10 of these for closer study, looking for signposts of primitive life.

#### The moons of Saturn and Jupiter

NASA is designing scientific instruments that would fly on missions to Mars and the moons of Jupiter and Saturn. It is testing robots that can drill through rock, soil and ice in Antarctica and the Chilean desert.

In addition, a space probe will reach Titan, and Earth-sized moon orbiting Saturn, in 2005. Astrobiologists are interested in Titan because it may have lakes of liquid hydrocarbons, such as methane, which might host an alternative form of life.

Source: NASA

A green line starts at a small green circle at the top left, goes down, then right, and ends at another small green circle at the bottom right.

tests a wide range of products,” said Gayn Erickson, marketing manager of Agilent’s Memory Test Division. “These new final test capabilities enable the V4100 to provide the same proven performance and features as the V4400, but at a price and size more in-line with the needs of our small- to mid-sized memory and logic manufacturing customers.”

The Agilent V4100 Final Test Solution starts at \$450,000 for an eight-site configuration and will be available to ship 12 weeks after initial order.