

'Space Cube' could be world's smallest PC

August 28 2008, by Lisa Zyga



The Space Cube is designed for use in space, where it can communicate with NASA, ESA, and JAXA, the space agencies of the U.S., Europe, and Japan, respectively. Credit: PC Pro.

Measuring just 2 inches by 2 inches, the Space Cube is roughly the size of a large die. However, the cube is actually a tiny PC, developed by the Shimafuji Corporation in Japan.

The PC is designed for use in space, where its task is to control various electronics and manage an "interstellar computer network." While it's normally only available in Japan, the UK-based site PC Pro recently got hold of a Space Cube, and revealed several interesting details.

First, the Space Cube's metal chassis is "utterly rock solid," enabling it to withstand cosmic encounters. As might be expected, it has very low power requirements, running on just 5 watts.

Inside the tiny computer, there's a CPU with a top speed of 300 MHz, and 16 MB of on-board flash memory - low by today's standards, but impressive for its size. The PC runs on a Linux OS from a 1GB CompactFlash card that fits into a slot in its side. The Space Cube's hard drive is a 64MB SDRAM card, and it also comes equipped with a LAN port, USB port, Ethernet port, and a VGA monitor connector. A pair of jacks even accommodates speakers and headphones.

In addition to the normal computer features, the Space Cube also has some more unique characteristics. It has a SpaceWire port, which is an extremely thin socket that serves as an interface used by NASA, ESA, and JAXA, the space agencies of the U.S., Europe, and Japan, respectively. When the Space Cube goes into space, it can link up to each agency's systems, where the SpaceWire acts as a common interface for linking together different kinds of devices.

PC Pro discovered that the Space Cube isn't all serious, though. For instance, they found that typing "xeye" in the command line brings up a pair of googly eyes that follow the cursor around the screen.

Although the Space Cube isn't currently available outside of the Japan, a company called Star Dundee plans to start selling the device after making some improvements. Star Dundee, a spin-off company from the Space Systems Research Group of the University of Dundee in Scotland, supports users and developers of SpaceWire technology. When it goes for sale, the Space Cube will be priced at around £1,500 (\$2,750). As PC Pro speculates, rocket and robotics clubs might find the device quite useful.

More information: <http://www.star-dundee.com/>

via: [PC Pro](#) and [CNet Crave](#)

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