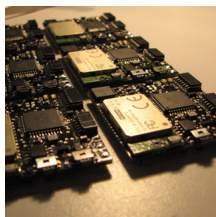


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By: Bogdan Botezatu, Hardware Editor



Internal view of a  
Siftables unit  
MIT

## **MIT's Siftables, the Domino-Like Computer**

*The tiny computers "feel" when they are placed in the proximity of their siblings*

Researchers at the MIT Media Lab managed to amaze the tech community once again with the unveiling of their newest prototype, called the Siftables. According to its inventors, David Merrill and Jeevan Kalanithi, the Siftables concept takes a new approach at computing that is similar to splitting up a personal computer into smaller devices, ready to be manipulated individually. The Siftables units are half-domino sized computers that can be clustered together to add extended functionalities to the already existing structure. The prototype pitches at enabling "people to interact with information and media in physical, natural ways that approach interactions with physical objects in our everyday lives." The new computing platform is extremely interactive and allows users to manipulate data in a more natural manner. Each "Siftables" unit is in fact a miniature computer that is powered by a 20 MHz AVR processor with ultra-low power requirements. The computer uses a tiny OLED panel to interact with the human, and an infrared sensor that allows it to communicate with other "Siftables" computers. Each unit also includes Bluetooth radio, rechargeable Li-Polymer batteries, tactile/haptic actuation driver circuits, a 3-axis accelerometer, on-board flash memory, and tiny expansion slots for additional sensors. The "Siftables" miniature computers can be handled individually either. The devices can "understand" a large number of gestural interaction languages and HCI applications, as seen in the attached mini-clip below. The use of OLED-based panels as an interaction interface with the human operator makes the Siftables mini-computers look as if they were tiny OLED keycaps pulled out from an Optimus Maximus keyboard, but the comparison ends here. At the moment, there are no known applications for the new concept cooked at the MIT laboratories, but it could open new possibilities to developing new interaction methods between computers.