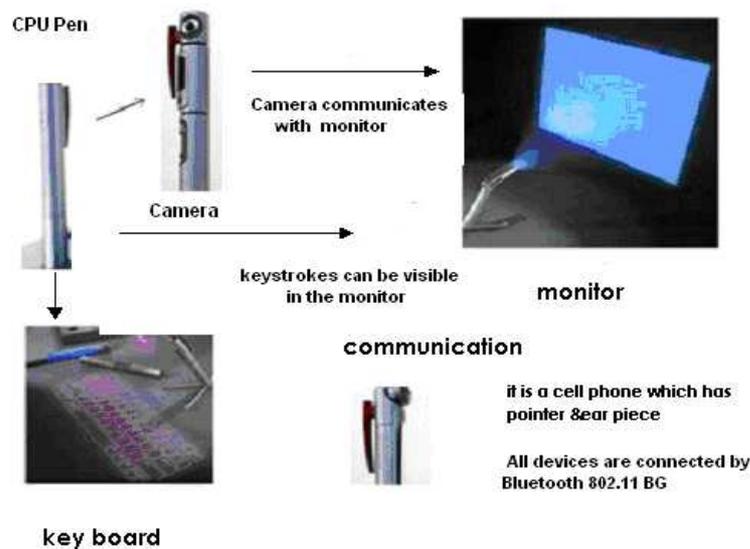# Five Pen Technology

Ashwini Kadam

Department of Computer Science & Engineering, SVERI'S College of Engineering, Pandharpur

INTRODUCTION:

Five pen technology is also called as P-ISM technology means "Pen-style Personal Networking tool /Gadget Package".P-ISM includes five pens functions: a CPU pen ,communication pen with a cellular phone function, virtual keyboard, a very small projector, and a camera. P-ISM 's are connected with one another short-range wireless technology. These five pens are connected to internet through the cellular phone function. This personal device or gadget in least possible size pen style which enables ultimate computing work everywhere.

Fig: 5 pen pc technology

HISTORY:

The conceptual prototype of the "pen" computer was built in 2003. The prototype device, named as "P-ISM", was a "Pen-style Personal Networking Gadget" created in 2003 by Japanese technology company NEC. The P-ISM was featured at the 2003 ITU Telecom World held in Geneva, Switzerland. However, although a conceptual prototype of the "pen" computer was built in 2003; such devices are not yet available to consumers. "The design concept uses five different pens to make a computer. One pen is a CPU, another camera, one creates a virtual keyboard, another projects the visual output and thus the display and another communicator (a phone). All five pens

can rest in a holding block which recharges the batteries and holds the mass storage. Each pen communicates wireless, possibly Bluetooth."

CPU pen:

The functionality of the CPU is done by one of the pen. It is also known as computing engine. It consists of dual core processor embedded in it and it works with WINDOWS operation system. The central processing unit (CPU) is the portion of a computer system that carries out the instructions of a computer program, and is the primary element carrying out the computer's functions. The central processing unit carries out each instruction of the program in sequence, to perform the basic arithmetical, logical, and input/output operations of the system.

Diagram for CPU pen

It includes:

- Control unit
- Clock rate
- Operation
- Microprocessor
- Performance

COMMUNICATION Pen:

They are connected through Tri-wireless modes (Blue tooth, 802.11B/G, and terabytes of data, exceeding the capacity of today's hard disks. This is very effective because we can able to connect whenever we need without having wires. They are used at the frequency band of 2.4 GHz ISM (although they use different access mechanisms). Blue tooth mechanism is used for exchanging signal status information between two devices.
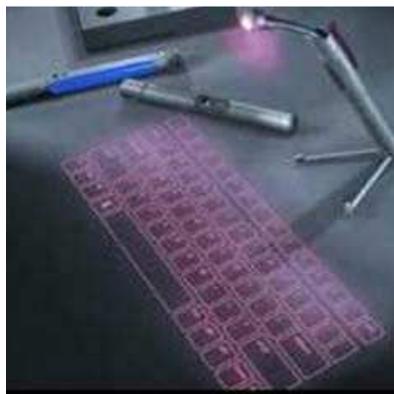
Communication pen

It includes:

- Bluetooth

- IEEE 802.11

- Cellular network

VIRTUAL keyboard:

Virtual laser keyboard is the important new device for PC users. The VKB emits laser on to the desk where it looks like the keyboard having QWERTY arrangement of keys i.e., it uses a laser beam to generate a full-size perfectly operating laser keyboard that smoothly connects to of PC and most of the handheld devices. As we type on the laser projection, it analyses what we are typing according to the co-ordinates of the location. A virtual keyboard is a software component that allows a user to enter characters.

Virtual keyboard

DIGITAL camera:

The digital camera is in the shape of pen .It is useful in video recording, video conferencing, simply it is called as web cam. It is also connected with other devices through Blue tooth. It is a 360 degrees visual communication device. This terminal will enable us to know about the surrounding atmosphere and group to group communication with a round display and a central super wide angle camera.

Digital camera

LED projector:

The role of monitor is taken by LED Projector which projects on the screen. The size of the projector is of A4 size. It has the approximate resolution capacity of 1024 X 768. Thus it is gives more clarity and good picture.

ADVANTAGES:

- Portable everywhere
- Makes use of WI-Fi technology
- Mobility
- Touch and feel the technology

CONCLUSION:

The communication devices are becoming smaller and compact. "The design concept uses five different pens to make a computer. One pen is a CPU, another camera, one creates a virtual keyboard, another projects the visual output and thus the display and another communicator (a phone). All five pens can rest in a holding block which recharges the batteries and holds the mass storage. Each pen communicates wireless, possibly Bluetooth."

REFERENCES:

[1] http://www.computinghistory.org.uk/history.html

[2] http://en.wikipidia.org/wiki/pen_computing

[3] http://www.softwaretoolbar.com/virtual_keboard.html

[4] http://www.compinfo_center.com/ledprojector.html

[5] www.scribed.com/doc/67990223/report_on_5_pen_pct_echnology

[6] http://www.rockinglearners.blogspot.in/p/virtual_keboard.html