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# **Upcoming Computer Technology: E-BALL**

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**ABSTRACT:** The word computer comes from the compute that means to calculate or manipulate. So that generally people consider that the computer is a device which is used to calculate or manipulate any operation within a less amount of time. The E-ball is a new concept of pc which having all the features like a traditional pc. E-ball technology is nothing but the whole computer within the ball shape hence it called as a E-ball as a traditional pc. Basically the E-ball pc is a sphere shaped computer it is smallest computer among all the laptops and desktops. The E-ball having all feature and element which is same as a traditional computer like keyboard, mouse, DVD,large screen display etc in innovative manner. E-ball is designed to be placed on two stands. This can be opens by pressing and holding the two buttons simultaneously which are located on each side. The wireless mouse and the laser keyboard can be activated by pressing a particular button. E-ball pc having 6inch diameter sphere and the 120mm ×120mm motherboard.

**KEYWORDS:** E-ball pc, laser keyboard, optical mouse, LCD display

#### I. INTRODUCTION

The concept of E-ball pc is introduced by the Apostol Tnokovski. This is sphere shaped pc. This is the smallest pc among all the laptops and desktops. It having all the features and the elements like a traditional pc. E-ball pc is designed to be placed on two stands which can be opens and closed by pressing and holding a particular buttons on each side. E-ball pc does not required any external source for the display purpose. It has inbuilt projector that can be pop by pressing a button focus the screen on the wall which can be adjusted with the navigation keys. E-ball pc having a 6 inch diameter sphere and the 120mm × 120mm motherboard. This pc is designed only for Microsoft Windows Operating System. E-ball has feature like a dual core processor, 250-500 GB hard disk drive, 2GB of RAM, Integrated graphic card, sound card. 2x50 W speakers, DVD recorder, wireless optical mouse, laser keyboard, LAN and WLAN card, Web camera, and integrated LCD projector.

### II. RELATED WORK

The E-ball is a new concept of pc which having the smallest size pc among all the laptops, and the desktops. This pc is designed such that it is fixed between the two stands. The user can be open this pc by pressing and holding the buttons which are located at the both side of the stands. Ones the pc is turn on user can connect the optical mouse to this pc by pressing the proper button of the mouse as per her requirement. The E-ball pc has a laser keyboard shown in fig.1 This keyboard is visible only when the pc is in working condition. The keyboard is not physically present it is interpreted by lasers that appears after press the button on it. The laser keyboard recognizes the user fingers with the help of an IR sensors when the user typing at a particular place. E-Ball pc don't have any external display unit, it has a button when this button is press a projector will pop and it focus the screen on the wall which can be adjusted using navigation keys. When we are working in place where no projector is available then we can make use of a paper sheet as a screen. This technology supports the paper sheet and can be act as a display unit so that we can easily perform the work in the absence of external display unit. The E-ball pc supports all the windows operating system. The work with this pc is easy when the user making a presentation, watching a movies with family and chatting with the friend on the net.



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Fig. 1 working on paper sheet

## III. HARDWARESPECIFICITATION

### A. Hard Disk Drive:

In every pc the hard disk drive is the major part it is a secondary storage device. It is a non-volatile in nature. It consists of metal plate covered with oxide that can be magnetized to represents data so that the data can be easily access from the hard disk drive. The E-ball pc has a 350-500 GB hard disk drive.

#### B. RAM:

Ram stands for the Random Access Memory it is a volatile memory. It is also the storage device but the data is not store permanently. It is called random because it access the information in non-sequential manner. The E-ball pc basically uses the 5 GB of RAM.

# C. LAN and WLAN Card:

The LAN and WAN cards are the hardware devices which can be present in the main hardware of the computer with the help of this cards the user can connect the internet connection to the computer.

## D. PROJECTOR:

Basically there are two types of projectors used Liquid Crystal Display (LCD) Projector



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Digital Light Processing (DLP) Projector

In the E-ball pc the liquid crystal display type projector is used. LCD projector is the system which projects the information onto a flat surface. This projected information is called a video signal. Video signal is nothing but the combination of three colours red, green and blue each having a separate glass panel. Each panel consist of two plates of glass with a layer of liquid crystal between them. When a charge is applied the crystal opens to allow the light through or close to block it. The forms of the image is dependence on the opening and closing the pixels

#### IV. RESULT

The E-ball concept pc is a sphere shaped computer which is the smallest design among all the laptops and desktops. This computer has all the feature like a traditional computer elements like keyboard or mouse, dvd, large screen display. E Ball is designed that pc is be placed on two stands, opens by pressing and holding the two buttons located on each side of the E-Ball pc, this pc is the latest concept technology. This concept PC will measure 160mm in diameter and it was designed for Microsoft Windows OS, sorry about the others. For the moment there is no word on pricing or when it's going to be available. It is Design by APOSTOL TNOKOVSKI.E-Ball concept pc doesn't have any external display unit. The scenario of use of E-Ball computer concept is as shown in fig.2. In the first part as well as the last part of the fig.2 the user is working on the E-ball pc. The user interface to the computer through the laser keyboard and optical mouse. The software interface of E-Ball pc highly stylized with icons that can be remembered easily that support all type of windows operating systems. E-Ball concept pc don't have any external display unit. Hence the user working on the paper sheet in this part. In the second part of the fig.2 the user is used as a projector or the display unit to the E-ball pc. When we are working in an open place we can make use of a paper sheet as a screen. Paper sheet holder is placed at the back panel of this computer. The holder can be opened by pressing it in the lower part. In the third part of the fig.2 the user uses the E-ball for watching the videos like movies or other as well as for the listening purpose.



Fig.2 Scenario of use

### V. ADVANTAGES AND LIMITATIONS

E-Ball is portable. It has large memory. Useful for making video presentations. These have greater speed. Supports user-defined keyboard layouts. It is efficient. It is very easy to use It is more secure than other computer. But normal



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OS can't work in these computers. Also cost of E-Ball is very high and it is difficult to understand if any problems occur in hardware components.

#### VI. FUTURE SCOPE

It can be used in high-tech and industrial sectors, used with smart phones, PDAs, email, word processing and spreadsheet tasks, also in operation theatres. It can be PDA input/ as computer. Also in gaming control and TV remote control

#### VII. CONCLUSION

As years passes, the computer size is becoming smaller. Today's technology is at its peak point beyond what we could ever imagine. New inventions and innovations are emerging on daily basis. Our imaginations have dressed into reality and today it has become possible to have a whole computer in our pocket all the time. This ball computer has taken the computer technology to new horizons.

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