UNIVERSAL SMART BOARD FOR LED & LCD DISPLAYS

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Abstract - The universal board is a universal controller board designed to support both LED and LCD displays. The board provides a range of input options, including HDMI, VGA, and AV, as well as USB and SD card slots for media playback. It also includes a built-in audio amplifier for driving external speakers.

The Universal board supports a range of display resolutions, including 1920x1080, 1280x720, and 1024x768, and includes support for both PAL and NTSC video standards. The board also includes a range of image processing features, such as brightness and contrast control, as well as support for 3D and image scaling.

The Universal board is designed for use in a variety of applications, including digital signage, kiosks, and other display systems. Its versatility and flexibility make it a popular choice for both hobbyists and professional developers alike. With its powerful feature set and compatibility with a wide range of display types, the v56U11.2 board is an ideal choice for anyone looking to create a high-quality, customizable display solution**.**

INTRODUCTION

The universal board is a driver board that is commonly used in the manufacture of LED and LCD televisions. This board is designed to provide the necessary interface between the display panel and the other components of the television, such as the power supply, mainboard, and input/output ports.

The universal board typically features a range of built-in components, including a video processor, scaler, and T-con (timing controller) that are responsible for processing the incoming video signal and converting it into the appropriate format for display on the screen. The board also typically includes connectors for the display panel, as well as ports for HDMI, USB, VGA, and other input/output interfaces.

One of the key advantages of the Universal board is its compatibility with a wide range of display panels, including both LED and LCD panels of various sizes and resolutions. This makes the board a popular choice for manufacturers looking to produce televisions with different screen sizes and resolutions, as it provides a high degree of flexibility in terms of panel selection.

When using the universal board, it's important to ensure that the board is compatible with the specific display panel being used, as well as any other components of the television, such as the power supply and mainboard. It's also important to follow the manufacturer's instructions for installation and configuration, as well as any recommended settings for optimizing the display quality and performance of the television.

PROBLEM DEFINATION

Problem: The current market for smart devices, such as TVs, monitors, and digital signage systems, is highly competitive, and customers demand increasingly advanced features and performance. However, many existing smart device solutions are limited by the processing power, storage capacity, and connectivity options of their motherboards, which can negatively impact their functionality, user experience, and overall value.

ADVANTAGES OF SYSTEM

a. Time Reducing system
b. Low cost
c. Reducing Manpower.

LITERATURE SURVEY:

"Smart TV and its features: An overview" by S. Jyothi and K. Srinivas Rao - This paper provides an overview of smart TVs and their features, including the importance of smart motherboards, and their impact on the TV industry.

The article begins by defining Smart TV as a television that is capable of connecting to the internet and running applications. The authors then discuss the various features of Smart TV, including the ability to stream content from online services like Netflix and YouTube, access social media, and use voice commands for control.

The article also explores the hardware components of Smart TV, such as processors, RAM, and storage. It explains how these components affect the performance and functionality of Smart TV.

Furthermore, the article discusses the different operating systems used in Smart TV, such as Android TV, Tizen, and WebOS. The authors also cover the importance of updates and security features for Smart TV.

Finally, the article concludes by highlighting the potential of

Smart TV in the future and how it is likely to continue evolving to meet the needs and demands of consumers.

"Universal Motherboard for Smart TV" by M. A. R. Alam and M. A. Matin - This paper discusses the design and implementation of a universal motherboard for smart TVs, including its compatibility with a range of display devices and peripherals.

"Universal Motherboard for Smart TV" by M. A. R. Alam and M. A. Matin presents the concept of a universal motherboard for Smart TV that can be used with different display panels.

The authors begin by discussing the challenges of Smart TV manufacturing, including the need for separate motherboards for different display sizes and resolutions. They propose a universal motherboard that can accommodate different display panels by incorporating an FPGA (Field-Programmable Gate Array) to manage the display interface.

The article then describes the architecture of the proposed motherboard, which consists of an FPGA-based display interface, a system-on-chip (SoC) for processing, memory, and storage components. The authors also explain how the motherboard can support various input/output interfaces and connectivity options, such as HDMI, USB, and Ethernet.

Furthermore, the article discusses the advantages of the universal motherboard, including reduced manufacturing costs and simplified inventory management. It also highlights the potential for customization and scalability through the use of FPGAs.

The authors conclude by emphasizing the potential of the universal motherboard in Smart TV manufacturing and how it can contribute to the development of more affordable and versatile Smart TVs.

"Evaluation of Android-based Smart TV and Its Components" by M. P. Singh and P. Jain - This paper evaluates the performance of an Android-based smart TV, including its motherboard and operating system, and discusses its potential for further development.

"Evaluation of Android-based Smart TV and Its Components" by M. P. Singh and P. Jain provides an evaluation of an Android-based Smart TV and its components.

The article begins by providing an overview of the Smart TV market and the increasing demand for Android-based Smart TVs. The authors then describe the hardware components of the Smart TV, including the processor, memory, storage, and display.

The article also discusses the software components of the Smart TV, including the Android operating system, the user interface, and the various pre-installed applications. The authors evaluate the performance of the Smart TV in terms of its speed, responsiveness, and user experience.

Furthermore, the article presents a comparison of different Android-based Smart TVs, based on their hardware and software components. The authors also discuss the importance of updates and security features in Smart TV.

The article concludes by highlighting the potential of Android-based Smart TV in the future and how it can continue to evolve and improve to meet the needs and demands of consumers. It also emphasizes the need for manufacturers to focus on both hardware and software components to provide an optimal Smart TV experience.

SYSTEM ARCHITECTURE

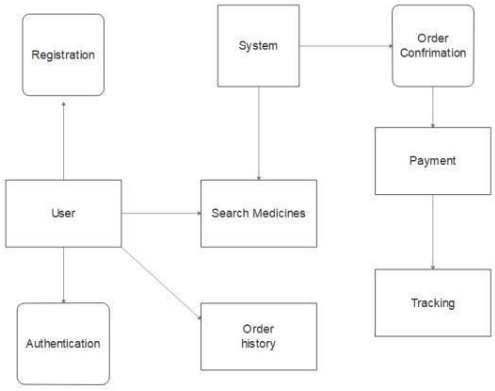

Fig -1: System Architecture Diagram

SYSTEM REQUIREMENTS

- **Software Used:**

1. Operating System: Windows XP and later versions Front End: HTML,CSS
2. Programming Language: PHP
3. Tool: XAMP & NOTEPAD ++
4. Domain: WEB APPLICATION
5. Algorithm: Hashing.

- **Hardware Used:**

1. Processor – i3 or above
2. Hard Disk – 150 GB
3. Memory – 4GB RAM

- **Conclusion**

In conclusion, the universal smart motherboard is a versatile and reliable platform for a wide range of smart devices, including TVs, monitors, and digital signage systems. It is equipped with a powerful processor, sufficient memory and storage, and a range of input and output interfaces, making it compatible with a variety of display devices and other peripherals. The built-in smart features, including Wi-Fi and Bluetooth connectivity, as well as the Android operating system, make it easy to access online content and apps, and provide a user-friendly interface for consumers.

Looking towards the future, the universal motherboard has significant potential for further development and expansion,

including enhanced processing power, increased storage capacity, and improved connectivity options. As technology advances, the Universal motherboard can continue to be a reliable and flexible platform for smart devices and applications, and contribute to the evolution of the smart device industry.

CONCLUSION

E –marketing is a part of the e-commerce and has very close relationship with e commerce. This model is useful to promote improving the e- marketing method. The model is based on demand analysis of various customers as well as a new model in E-marketing to supply medicines online with 24*7 facilities. We had also kept in mind the needs of customers and their ease in ordering medicine. This will play a very important role in providing medicines at remote places where there is unavailability of medicines. There will be a detailed list of medicines available in the stock.

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