

DESIGN AND IMPLEMENTATION OF ENVIRONMENTAL STATUS INDICATION SYSTEM

K.Deepika,
Final year ECE,
M.Kumarasamy College of Engineering,
Karur-639113,Tamilnadu.
deepikakannadasan1995@mkce.ac.in

K.Dhivya,
Final year ECE,
M.Kumarasamy College of Engineering,
Karur-639113,Tamilnadu.
dhivyadk96@mkce.ac.in

Abstract- The main objective of this system is to detect the environment status of the surrounding. In the past, they have separate sensor for the Audio and LED blinking which are controlled by wire or cables. By putting multiple LED drivers in parallel, an array of RGB LEDs can be synchronized to blink, pulse, and breathe, enhancing customer experience. Audio feedback is also integrated to show a combined status indication solution with LEDs and audio device. Then audio status indication subsystem produces an audio tone through an Mixed-Signal Microcontroller 430 to generated PWM signal. The MSP430 is a which is used for the low powered embedded devices. Featured applications of this project is IP, Clothes Washer and Dryer, Dish Washers, Ovens (Microwave and Other), Refrigerators & Freezers, Fire Alarm Control Panel.

Amplifiers or earphones change over electrical sound flag into sound. Sound signs have to some degree institutionalized levels relying upon application. Yields of expert blending consoles are most usually alluded to a "mic level". Buyer sound hardware will likewise yield at a lower level. At the point when the LED drivers are in a remain by state and no LEDs are controlled, every LED driver expend in the vicinity of 25 and 37 mA. To cut power from these gadgets and lessen the standby spillage to 0.5 μ A, the TPS22918 stack switch is set between the 5-V control rail and the Vcc pins of all the TLC59116 gadgets.

I. INTRODUCTION

A light-transmitting diode (LED) is a two-lead semiconductor light source. It is a p-n intersection diode, which emanates light when initiated. At the point when an appropriate voltage was connected to the leads, electrons can recombine with electron openings inside the gadget, discharging vitality as photons. LEDs has many focal points brilliant light sources including lower vitality utilization, longer lifetime, enhanced physical vigor, littler size, and quicker exchanging. Light-emanating diode is currently utilized as a part of utilizations as assorted as aeronautics lighting, car headlamps, promoting, general lighting, activity signals, camera flashes and lit backdrop

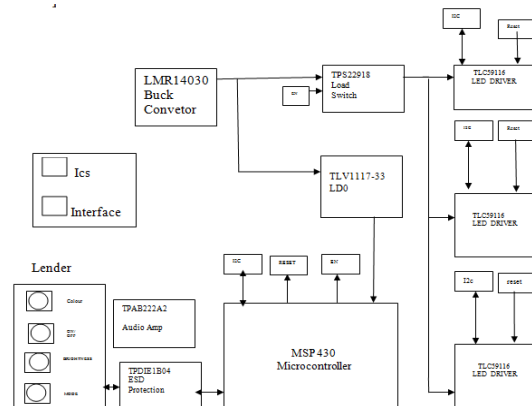
III. WORKING PRINCIPLE

A LED is frequently little in region (under 1 mm²) and coordinated optical parts might be utilized to shape its radiation design. Showing up as useful electronic parts in 1962, the most punctual LEDs discharged low-force infrared light. Infrared LEDs is still much of the time utilized as transmitting components in remote-control circuits, for example, remote controls for a wide assortment of buyer gadgets. The principal obvious light LEDs are additionally of low power, and constrained to red. Cutting edge LEDs are accessible over the unmistakable, bright, and infrared wavelengths, with high splendor.

II. AUDIO SIGNAL

An Audio flag is a representation of sound, regularly as an electrical voltage. Sound signs have frequencies in the sound recurrence scope of about 20 to 20,000 Hz (the cutoff points of human hearing). Sound signs might be blended specifically or may begin at a transducer such tape

BLOCK DIAGRAM



A. TPS22918

The TPS22918 is 5.5-V, 2-A heap switch in a 6-stick SOT-23 bundle. To lessen voltage drop for low-voltage and high-current rails, the gadget actualizes a low-resistance N-channel MOSFET, which diminishes the drop out voltage over the gadget. The gadget additionally highlights a brisk yield release (QOD) stick, which considers the setup of the release rate of VOUT. Snappy yield release happens once the switch handicapped. The gadget have low spillage ebbs and flows amid shutdown, which additionally mitigates spillage for downstream modules amid standby. The incorporated control rationale, driver charge pump, yield release FET dispenses with the requirement for any outside parts, which decreases arrangement size and bill of materials (BOM) tally.

B. TPD1E1B04

The TPD1E1B04 is bidirectional transient voltage concealment (TVS) based electrostatic release (ESD) security diode including low RDYN (dynamic resistance) and low cinching voltage. The TPD1E1B04 rates to disseminate ESD strikes at the most extreme level indicated in the IEC 61000-4-2 global standard (level 4). The ultra-low element resistance (0.15 Ω) and transmission line heartbeat is guarantee framework level security against transient occasions. This gadget includes a 1-pF IO capacitance making it perfect for ensuring interfaces, for example, USB 2.0. The TPD1E1B04 is offered in the business standard 0402 (DPY) bundle.

IV. APPLICATION

IP Phones, Clothes Washer and Dryer, Dish Washers Ovens (Microwave and Other), Refrigerators and Freezers, Fire Alarm Control Panel and Security Intrusion Control Panel, Heating, Ventilating, Air Conditioning (HVAC) System Controller and Remote Network Video Controller (NVR).

V. ADVANTAGE

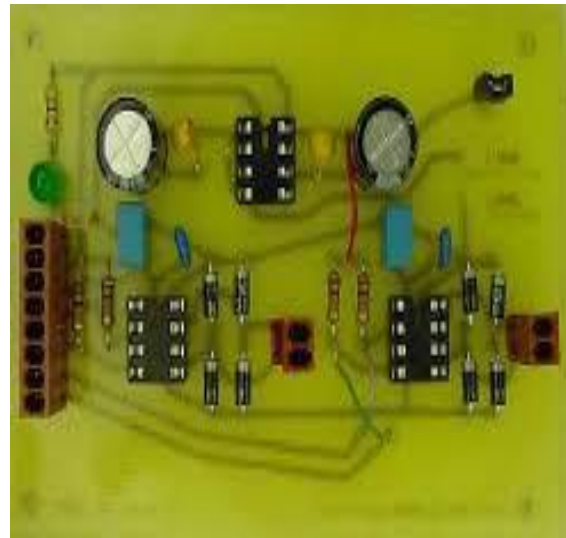
To help guarantee the venture accomplishes expected ecological advantages with lower range and it devours low power. It can be helpful for directing task advance and minimal effort

TYPES OF PCBs

The scope of decisions to bundling electronic circuits are very wide. A portion of the parameters that impact the decisions are weight, measure, cost, speed, simplicity of produce, repairability and function of the circuit. The more common types are listed as

VI. SINGLE AND DOUBLE SIDE PCBs

These PCBs have conductor designs on one or both sides of a base overlay with or without plated through-openings to interconnect the two sides. They are the work stallions of shopper hardware, car gadgets, and the F/microwave industry. They are the most reduced cost decision for shopper items. Cover materials run from sap impregnated paper for buyer gadgets to mixes of low-misfortune Teflon $T\mu$ for RF applications



VII. MULTILAYER PCBs

These PCBs have at least one conductor layers (ordinarily control planes) covered inside expansion to having a conductor layer on each outside surface. The internal layers are associated with each other and to the external layers by plated through-gaps or by means of. These are the bundles of decision for almost all advanced applications running from PCs to supercomputers.

VIII. RESULT

Proposed framework has profoundly installed the ecological status sign framework. Venture can be produced grow usefulness and range by including other RF structures, for example, Bluetooth. Remote sensor recovery and correspondence by means of portal associated with LAN or Internet. Web server is speak with MCU for simple administration locally or remotely. gateway connected to LAN or Internet. Web server is communicate with MCU for easy management locally or remotely.

IX. CONCLUSION

This project represents an example of systematic approach to the assessment of wearable sensors for physiological parameter measurement. If it is fixed in vehicles such as moving robots, then it is used as a public source. By this project health condition is monitored continuously. In case of any trouble, they will be alarmed and protected easily. In future, this project will be enhanced by using wireless approach for fast and accurate performance.

REFERENCES

1. V.Kavitha, V.Palanisamy, "New Burst Assembly and Scheduling T technique for Optical Burst Switching Networks", *Journal of Computer Science*, Vol. 9, Issue 8, pp.1030-1040, 2013.
2. V.Kavitha, V.Palanisamy, "Simultaneous Multi-path Transmission for Burst Loss Recovery in Optical Burst Switching Networks", *European Journal of Scientific Research*, Vol. 87, Issue 3, pp.412-416, 2012.
3. K. Sundaravadivu and S. Bharathi, "STBC codes for generalized spatial modulation in MIMO systems," 2013 IEEE International Conference ON Emerging Trends in Computing, Communication and Nanotechnology (ICECCN), Tirunelveli, 2013, pp. 486-490. doi: 10.1109/ICECCN.2013.6528548.
4. S.Palanivel Rajan, "Review and Investigations on Future Research Directions of Mobile Based Tele care System for Cardiac Surveillance", *Journal of Applied Research and Technology*, Vol.13, Issue 4, pp.454-460, 2015.
5. S.Palanivel Rajan, M.Paranthaman, Dr.C.Vivek, "Design and Enhancement of Wideband Reconfigurability using Two E-Shaped Patch Antenna", *Asian Journal of Research in Social Sciences and Humanities*, ISSN : 2249-7315, Vol.6, Issue 9, pp. 317-327, 2016.
6. C.Vivek, S.Palanivel Rajan, "Z-TCAM : An Efficient Memory Architecture Based TCAM", *Asian Journal of Information Technology*, Vol.15, Issue 3, pp.448-454, 2016
7. S.Palanivel Rajan, K.Sheik Davood, "Performance Evaluation on Automatic Follicles Detection in the Ovary", *International Journal of Applied Engineering Research*, Vol.10, Issue 55, pp.1-5, 2015.