Abstract

This paper presents comparison and utilization of resources, delay and minimum period with efficient data transmission using SDI of FPGA. Normally while farming, human labours must visit the fields at time to time and must check the parameters like humidity, temperature, dew point, soil moisture and water level of a well manually and regularly. This traditional method is considered time consuming and needs a lot of work and effort. In the proposed new system, the data related to different parameters will be collected and stored in flash memory. After this process, the data is analyzed, displayed in LCD screen and the data is transmitted by SDI using different coding techniques.

References

- Overview of Xilinx 7 series FPGA.
- Implementing SMPTE SDI interfaces with Virtex-7 GTX transceivers.
- Xilinx SMPTE SD/HD/3G-SDI- IP FACTS.
- HD44780 LCD Starter Guide.

Index Terms

Computer Science  Networks

Keywords

Delay  Field Programmable Gate Array (FPGA)  LCD display  SDI (Serial Digital Interface).