Electronics Designs Customization: Every Phase is Important

by Shubhranshu Agarwal

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Many times Electronics Engineers found themselves puzzled while designing a specific product or using a specific technology because now the demands of industry is to innovate end to end solutions for any need whether it is product designing, Robotics and Embedded, Electronics Design, Circuit Diagrams, Microcontroller Projects, Analog Design or Electronics Circuits.

Customized electronics design & product development services:

Many manufactures fulfill the expectations of consumers by providing the services of Custom Electronic Design and Product development in which the customer has to provide the design of an electronic device which he wants to purchase. The customers who are not from the field of electronics only have the basic idea of the device they ask for the suggestions from the manufactures while others give every technical detail of the device to be designed. The customer basically needs to provide all specifications regarding the product only then customization can be done as per expectations.

Embedded systems design (hardware and firmware/software):

A microprocessor or a microcontroller (MCU) is embedded into the electronics design by an embedded system. Our daily usage products like washing machines, geysers, television, computer, microwave ovens, vehicles all have microcontrollers embedded inside them. The functions performed by these embedded systems are software controlled. It means that there will be no much loss of files and documents and the hardware could be redesigned easily. Though embedded systems forms part of our electronic gadgets design but sometimes these are considered to be a separate device.

PCB (printed circuit board) design & prototyping (single & multilayer): The earlier stage of PCB design is prototyping in which expertise engineers take into account the development of hardware so that specifications regarding the design layout can be met. It is actually concerned with the defining of an application or system. The main objective of prototyping is to have a product that can meet specifications and is quite accurate and efficient. Product Development makes the PCB design ready for use. Once the product is validated by taking measurements from the board by ensuring that it is meeting all the specifications then it is hand over to Product Development experts.

Complete electronics design from concept to completion:

This comprises of the complete development of the product until it is ready to be delivered to vendors. The steps that follow in designing and in the full fledged development of the product are as follows â€“

- Part research and selection in which engineers have to select components for the product

- Schematic capture in which symbolic representation of the components is done

- Stimulation in which behavior of components is checked in virtual environment

- Board layout in which the design is finally completed

- Validation and verification

Shubhranshu Agarwal - About Author:
Kavita is an eminent and amateur writer primarily focusing on do it yourself projects, a target_new electronic circuits, electronic and electrical component, microcontroller project, a target_new electronic design, and DIY projects related topics, and working with one of the reputable Electronic and electrical company since 4 years.

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