SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ECE

ONEDAY SEMINAR

EMBEDDED SYSTEMS IN INDUSTRY AUTOMATION

DATE: 13/06/2021

INDEX

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CIRCULAR

05.06.2021

One day workshop on **"Embedded Systems in Industry Automation"** is scheduled to be conducted on 13.06.2021. This seminar makes the students familiar with the basic concepts and terminology of the embedded systems design flow and provides basic knowledge and job opportunity in embedded automotive. Henceforth, students are requested to attend this workshop and get benefitted.

Resource Person:

Mr.N.Gopinath
Assistant Manager
India Nippon Electricals Ltd
Hosur.

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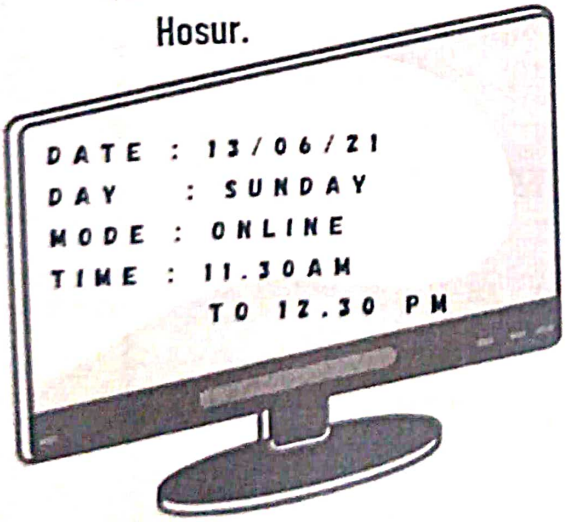
One day seminar on "Embedded Systems in Industry Automation ".

RESOURCE PERSON

Mr.N.GOPINATH

Assistant Manager,
Indian Nippon Electricals Ltd,
Hosur.



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Dr.S.KARTHIGAI LAKSHMI ,Professor

Principal

Dr.D.SENTHIL KUMARAN

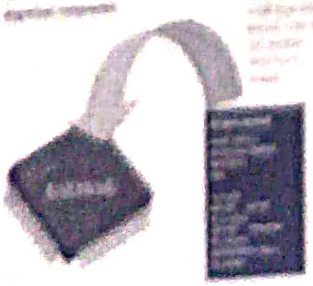
EMBEDDED SYSTEMS IN INDUSTRY AUTOMATION

REAL TIME EMBEDDED SYSTEMS

TOPICS TO BE DISCUSSED

STAND ALONE EMBEDDED SYSTEMS:

INTRODUCTION OF EMBEDDED SYSTEMS



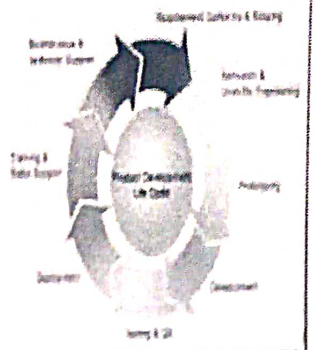
MEDIUM SCALE EMBEDDED SYSTEMS :

CIRCUITS USED IN APPLICATIONS

- When the embedded system is design there are several hardware components that can be used for design purposes.
- The selection of the circuit is completely dependent on the application used for the embedded systems.
- For example, in temperature sensor applications there is a requirement of temperature sensors for measuring the temperature

PRODUCT DEVELOPMENT LIFE CYCLE

- The product development life cycle is the set of commonly identified stages in the life of commercial product.
- Step1 Requirement Gathering
- Step2 Analysis the Feasibility
- Step3 Factorying
- Step4 Development
- Step5 Testing & Quality analysis
- Step6 Deployment
- Step7 Training & Sales Support
- Step8 Maintenance & Technical Support

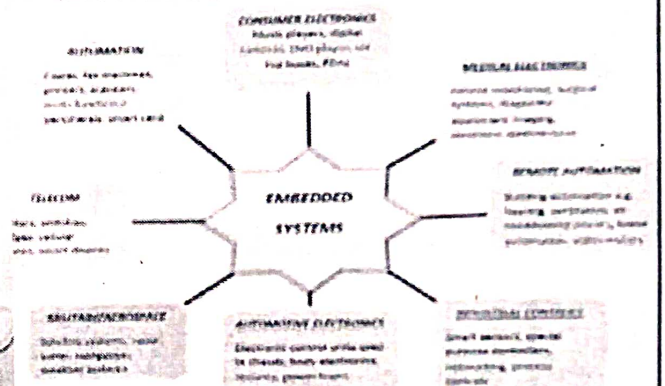


TIMERS & COUNTERS

- In some of the applications there is always a requirement of delay that needed to provide in the application
- For example, in LED display applications there is a requirement of some delay so that LED can be continuing blink.
- The programming can be done in such a way so that delay can be generating the embedded system.
- The delay time span can be decided by using the crystal oscillator and system frequency so that delay can be generated as per user requirement.

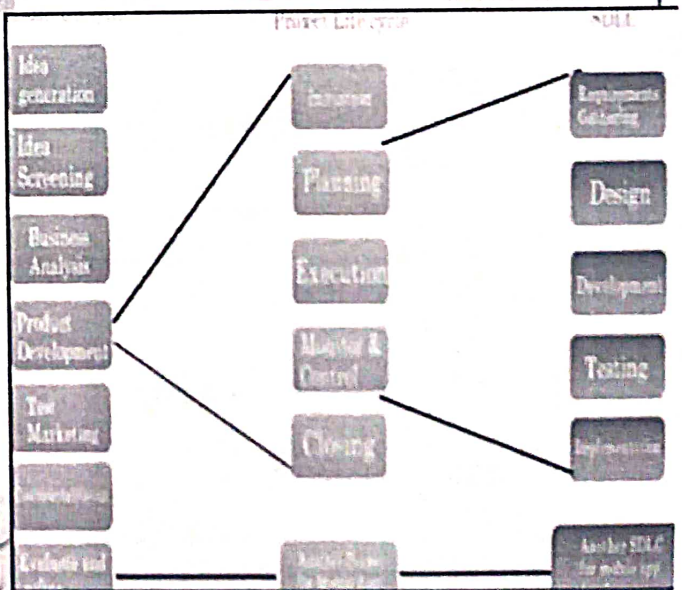
APPLICATIONS OF EMBEDDED SYSTEMS

The embedded system can be used in various sectors like industries, agricultural devices, medical devices and automobiles industry, and many more sectors.



ASSEMBLER:

- The assembler is used when the programming language used for designing the application is assembly language.
- The assembly language program is then converted into the HEX code so that it can be further processed
- And after writing the code the programmer is used for writing the program in the chip



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- Domnic Vishal
- FEBRONIA JEROME
- Gokul Vinayagam M
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