



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution



Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

19ECT312 – EMBEDDED SYSTEM DESIGN

III YEAR/ VI SEMESTER
1

UNIT 1 – INTRODUCTION TO EMBEDDED SYSTEMS

TOPIC 9 strategy selection of Processor & memory



STRATEGY SELECTION OF PROCESSOR & MEMORY



Step 1: Choose between AMD and Intel

Step 2: Check processor labels and generations

Step 3: Enquire about cores and threads

Step 4: Know more about Integrated Graphics

Step 5: Clocks and IPC

Step 6: Power and thermals specifications



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How To Choose The Right Processor For Your Laptop?



STRATEGY SELECTION OF PROCESSOR & MEMORY



Requirements	Intel Processor Families	AMD Processor Families
Browsing or Chatting	Intel Celeron, Intel Pentium	AMD A4, AMD A6
Watching or Streaming	Intel Core i3, Intel Core i5	AMD A8- A10, AMD Ryzen 3
Office Work or Study	Intel Core i3, Intel Core i5	AMD Ryzen 5, AMD Ryzen 7
Programming	Intel Core i5, Intel Core i7	AMD Ryzen 5, AMD Ryzen 7
Gaming	Intel Core i5, Intel Core i7	AMD Ryzen 5, AMD Ryzen 7
Designing	Intel Core i7, Intel Core i9	AMD Ryzen 7



STRATEGY SELECTION OF PROCESSOR & MEMORY



How do you select processor and memory for an embedded system?

its performance.

architecture and its silicon design.

Evolution of fabrication techniques helped packing more transistors in same area

there by reducing the propagation delay

What are the important considerations when selecting a processor?

- **the number of cores needed,**
- **what the computer will be used for,**
- **the type of software to be run,**
- **processor compatibility, and the speed of the CPU.**





STRATEGY SELECTION OF PROCESSOR & MEMORY



What is memory selection?

to store flight software,
payload data,
health monitoring data, etc.
enough RAM to execute all the software.

Different type of memories can be classified as follows :-

Volatile memory:

It requires constant power to maintain the stored information.





SUMMARY & THANK YOU