



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

DIGITAL SIGNAL PROCESSING LABORATORY

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Overview:

Signal processing is the root of many advanced technologies nowadays, including telecommunication, internet, multimedia and biomedical information processing. This lab is to impart knowledge on various DSP processors like TMS320C5X series. An exposure on real time applications is also given. The digital signal processing applications are becoming more prevalent in everyday use. The field of DSP was developed due to the flexibility offered by the use of digital computers in implementing signal processing algorithms and systems. There is a constant need for designing systems with lower power, higher speed and lower area. The DSP lab is equipped with hordes of personal computers. The students enrich their knowledge in signal processing through simulation using MATLAB and implementation using processor kits. Facilities available in laboratory are listed below

The area of laboratory is 121 Sq.m

Major equipments:

- Personal computers (Pentium dual core G3250 processor, 2 GB RAM, 500GB HDD)
- DSP starter Kit based on TMS 320C5416, TMS 320VC5416, DSP trainer Kits
Based on ALS-SDA 320C50M, TMS 320VC33, TMS 320C6713
- Dot matrix Printers and CD Writer
- MATLAB R20008a with Tool boxes for Simulink, Power system, optimization



Tool, communication block & tool, dsp block set, image processing, signal Processing, statistic tool, wavelet tool, CDMA, control system, filter design, System identification, fuzzy logic & neural network

- Vi-debugger and code composer studio (to program the DSP processors)
- Operating system: Windows 2000 professional, XP professional edition.



Snapshot of digital signal processing laboratory