DEPARTMENT OF ELECTRONICS AND COMMUNICATION

Report about Faculty Development Programme on

"Programming on real time processors"from 13/6/2016 to 18/6/2016

The department of Electronics and Communication Engineering, MVJ College of engineering conducted a Faculty Development Programme(FDP) on "Programming in real time processors" in association with Texas Instruments, National Instruments and IETE. This FDP was planned for a week to write programs on Texas Instruments TIVA-C series processors and LabVIEW software. On the first two days, Mr. Sagar Minchinal (speaker) coming from Edgate technologies Pvt ltd (Texas Instrument's university program partner) for giving the hands on-training on Texas Instruments TIVA-C series processor (TMC123C).On the next three days CLAD trainers of MVJCE gave the hands on training on LabVIEW and on the sixth day speakers from IETE have given a talk on real time applications of the Digital Signal processors. The detailed report on the FDP is given below:
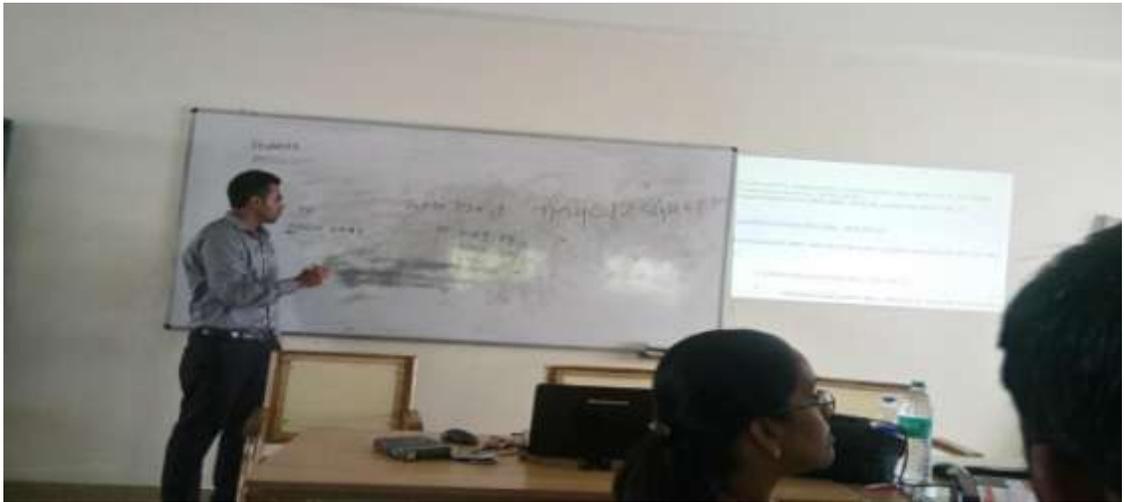
Day 1 - Inaugural function is started at 9.30am in the Seminar hall 4. The coordinators, Mr.K. Mohaideen abdul kadhar and Mrs. Aparna welcomed the speaker, dignitaries and participants of the FDP.

Session -1: speaker introduced the Texas Instrument's processor's family.

Session -2: speaker explained about the TIVAWARE and Code Composer studio (CCS) software and gave the training on how to configure the CCS with the TIVA-C series TMC123G kit.

Session -3:, Speaker explained about the General Purpose IO pins in the TIVA-C series TMC123G processor and gave the hands on training to the faculty members to configure the CCS with the TI's processor kit.

Session -4:, faculty members executed the LED blinking and switching programs in the TIVA-C series TMC123G processor kit with the use of CCS softwa

Day 2 - **Session -1:** speaker has explained about the basics of Analog to Digital Converter(ADC) and gave a hands on training to access the ADC by using the program.
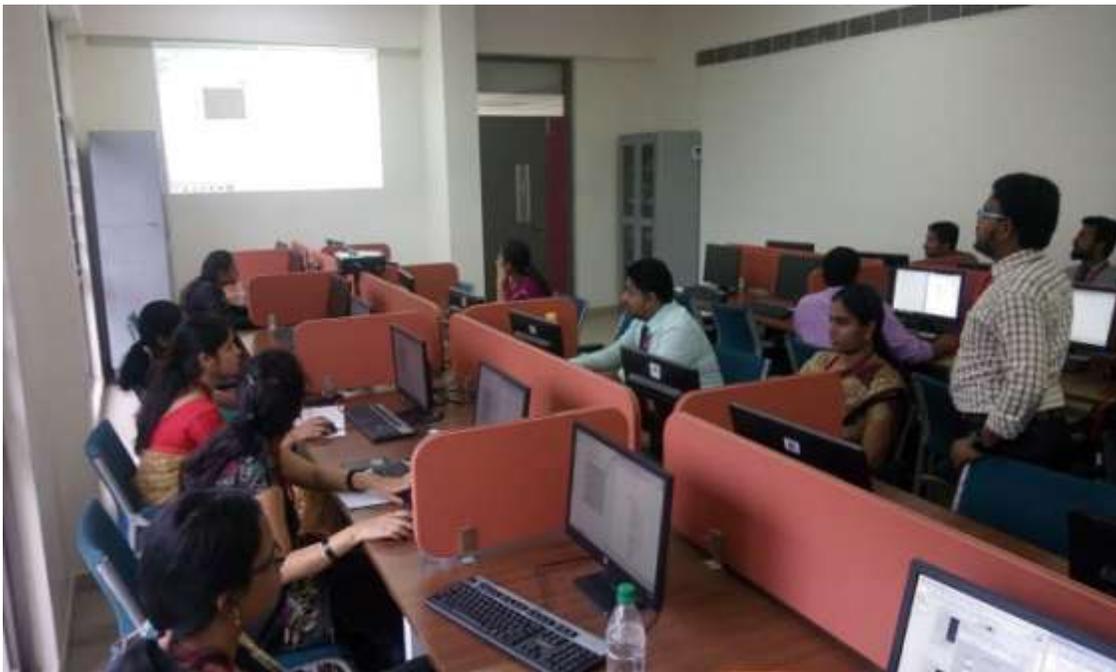
Session -2: Interfacing of temperature sensor program was explained and executed by the faculty members.

Session -3: Speaker explained about the booster pack kit which contains the set of sensors. The steps of configuring the booster pack to TIVA C-series were also explained. **Session -4:** The hands on training was given to the faculty members to access the sensors in the booster pack kit with the help of TIVA C-series processor kit.

Day 3 - Session – 1: Our Vice Principal,Prof. Brindha Mohan has started with the introduction of Virtual Instrumentation(VI) and given hands on training in basics of LabVIEW. **Session-2:** Mrs. Aparna and Mr. Kareemulla of MVJCE explained the programming structures in LabVIEW.

In the afternoon session, Hands on training has been given to the faculty members

Day - 4 - **Session-1 & 2:** Mrs. Aparna and Mr. Kareemulla explained the programming using loops (i.e while, for, etc), case structure, arrays and strings in LabVIEW software. **Session-3:** Data communication and synchronization in LabVIEW have been explained. In the afternoon session, Hands on training has been given to the faculty members about the topics discussed in the forenoon session.

Day -5- Session –1:The fundamentals of creating functions in LabVIEW, server VIs and error handling VIs are discussed.

Session –2: Expert has explained the Sub-routine VI and how to debug a program in LabVIEW.

In the afternoon session, Hands on training has been given to the faculty members about the topics discussed in the forenoon session.

Day –6 : The speakers have come from IETE and the Coordinator of IETE, department of ECE, Mrs. Akkamma koti welcomed the guest Mr.Malhar desh Pande, Country Manager, cytech global company, Bangalore and Mr.Veeraphadrappa, Assistant professor, JSS academy of technical education.

Session-1:The programme has been started at 9.45am with Mr.Malhar desh Pande who has presented the "Hardware Implementation of Digital Signal Processor

Session 2: The Guest gave a talk on "Applications of Digital Signal Processors". Finally, at the valedictory function, our chief guest Mr.Veeraphadrappa has distributed the certificates to the participants

Signature of the Principal with Seal

Principal
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