Sensor Networks Research Lab

This research lab is established with support of our university and purchased equipment with funding of DST-NRDMS. This lab is used to carry out DST project work and supports new experimental research work and UG and PG students' projects. The lab having the following software and hardware to carry out research in wireless sensor network and Embedded Networks. The equipment of this lab each a sample image is shown below.

<u>MICAz mote</u> **: The MICAz is a 2.4 GHz Mote module used for enabling low-power Wireless sensor networks**.

Figure-1- 2.4 GHz IEEE 802.15.4, Tiny Wireless Measurement System

2) **Base Station MIB520**:A base station allows the aggregation of sensor network data onto a PC or other computer platform. Any MICAz Mote can function as a base station when it is connected to a standard PC interface or gateway board. The MIB510 or MIB520 provides a serial/USB interface for both programming and data communications
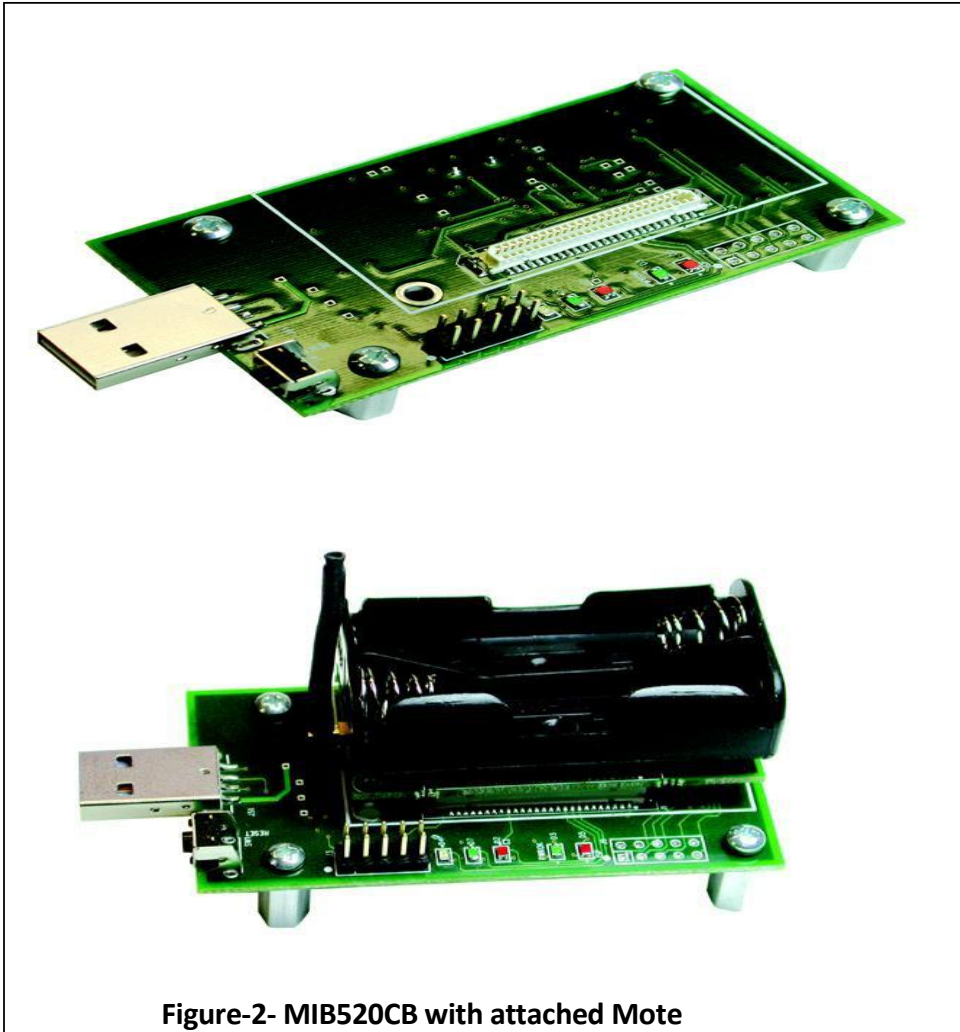

Figure-2- MIB520CB with attached Mote

3) MDA100: The MDA100CB sensor and data acquisition board has a precision thermistor, a light sensor/photocell and general prototyping area. Designed for use with the IRIS, MICAz and MICA2 Motes, the prototyping area supports connection to all 51 pins on the expansion connector, and provides an additional 42 unconnected solder points for breadboarding.
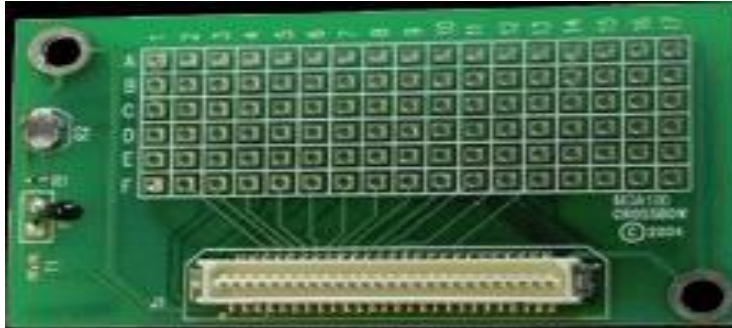

Figure-3-MDA 100CB Sensor, Data Acquisition Board

4) There are 6 desktops 1 laptop in the lab:

5) Software available:

 1) Windows7 Service Pack2

2)Ubuntu

3) Mote works tool for design and development wireless sensor networks based applications

4) NESc Editor for sensor node programming

5) Available wns simulators : NS2, NS3,QualComm,

6)NetSim

7)Openet ++

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