

## Task 0 - Robot Hardware Testing

### Hardware Testing Folder Description

Please find following folders within the folder that contains this Read Me file. The folders have been numbered.

1. Software and Installations: This folder contains the following sub-folders
  - a) The **Hardware and Software Manuals** folder which contains PDF files of the **Firebird V Hardware and Software** as well as the **AVR USB Programmer Manual V3**.
  - b) The **AVR USB ISP STK500V2** folder which contains drivers and executable files for the AVR USB ISP Programmer
  - c) A text file named **Google\_Drive\_Link\_SW.txt**. This file contains a link to the Google Drive containing the **Software and Drivers** folder. You must download the folder from the drive and unzip its contents to your PC into the **Software and Installations** folder.

You will find the following files/folders in the **Software and Drivers** Folder:

- AVR Bootloader
- AVR Studio 4.17
- AVR USB Programmer Driver
- CDM 2.06.00 WHQL Certified
- Microsoft dotnet framework 2.0 as on 2010-02-06
- Terminal Software from NEX Robotics
- WIN AVR 2009-03-13
- X-CTU latest as on 2011-01-03

**Please Note: This folder can also be found on the e-Yantra DVD in the Firebird V ATMEGA2560 Robot. If you possess the DVD, there is no need to download these files. You may find the Software and Drivers Folder in e-Yantra DVD\Firebird V ATMEGA2560 Robot\Software and Drivers**

You must install the following software:

- WIN AVR 2009-03-13
- AVR Studio 4.17
- AVR Bootloader

**Refer to the SOFTWARE MANUAL for steps on how to install the required software.**

2. Firebird V Robot GUI: This folder contains two files:
  - e-YantraRoboTestSetup.exe - GUI software that is to be downloaded.
  - FB5\_USB\_GUI.hex - GUI Firmware to be burned in the Firebird
3. Firebird Hardware Test Checklist: This folder contains
  - An Excel sheet called **Firebird\_Hardware\_Test\_Checklist.xlsx**. It will be used to verify the working Hardware components of the Robot provided to you by your college.

4. Hardware Testing Instructions: This folder contains:
  - A PDF named Instructions for Hardware Testing which contains instructions to be followed to test the Hardware of the Firebird V Robot provided to you by your college using the Firebird V GUI.

