Chapter 3

Methodology

Introduction

In this chapter, I will describes the methodology on the way to develop a system that can used to implement the assembly sequence in a assembly system using Arduino and monitor the system using NI Myrio. This project consists of three important parts, which is input from the objects when it is detected in a assembly system, process and response from the microcontroller (Arduino) and lastly is the output that come from the motor that control by the Arduino.
3.1 PROJECT FLOWCHART

LITERATURE REVIEW

CONSTRUCTION OF CIRCUIT DESIGN

CONSTRUCTION OF HARDWARE DESIGN

ALGORITHM OF SOFTWARE

INTEGRATION OF SOFTWARE AND HARDWARE

TESTING AND TROUBLESHOOTING

Figure 3.1.1 Flow Chart of Project
From Figure 3.1.2, the project start with gathering information that related to this assembly sequence for assembly the product using Arduino through literature review. The electrical circuits and the mechanical parts were designed for this assembly purpose and the conveyor system is fabricated to control the stepper motor. After the fabrication, the hardware and the microcontroller is assembly together by using the specific program algorithm so that it can integrated together. Result in the control of motor using L298 motor driver. The user can