**Wireless AVR Chip Programmer**

**Final Project Report**

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ECEN 5613 Embedded System Design

December 12, 2019

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9. Introduction

This year we had an opportunity to learn Embedded System Design, and I must say that we have learnt quite enough. This project is demonstration of what we have learnt, and how we went about applying this learning. This project is Wireless AVR Chip Programmer. Why a wireless device? It comes from Abhijeet’s love for wireless devices. Why a programmer? It comes from Atharva’s fondness for exploring the field of programmers/debuggers.

This project incorporates software that we wrote ourselves from scratch. It involves design considerations while designing a generic Embedded System. It involves our dedication to make a system that is stand-alone and can manage errors.

* 1. System Overview

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Figure .1 System Overview

Figure 1.1 shows overall system overview. We have used MSP432P401R Development Board as a programmer for our AVR Embedded System. AVR Embedded System comprises ATmega328p based system, along with elements required to help it function – power circuitry, oscillator circuit, reset circuit. We are using power circuit on our AVR Embedded System to power the Programmer Board. Transmitter will be powered from the USB connection on the Computer, and will receive data from Computer over UART Protocol. The HC-05s communicate over Bluetooth, and transfer program data and control data.

* In general, we talk about basic architecture of our system.
* Talk about AVR Emb system
* Talk about MSP432 board – Programmer
* Talk about HC-05s
* Talk about transmitter
* Describe how each element has been added in the system

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