Design and development of Virtex-6 FPGA based DSP hardware for FMCW Radar

Major Project Report

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF TECHNOLOGY

 \mathbf{IN}

INSTRUMENTATION & CONTROL ENGINEERING

(Control and Automation)

By Arpit Rathi (14MICC02)



Instrumentation & Control Engineering Section Department of Electrical Engineering INSTITUTE OF TECHNOLOGY NIRMA UNIVERSITY AHMEDABAD 382481 MAY 2016

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Dr. D. M. Adhyaru Mr. Nilang Trivedi



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Declaration

This is to certify that,

- i. The thesis comprises my original work towards the degree of Master of Technology in Instrumentation & Control Engineering (Control and Automation) at Nirma University and has not been submitted elsewhere for a Degree.
- ii. Due acknowledgement has been made in the text to all other material used.

Arpit Rathi (14MICC02)

Undertaking for Originality of the Work

I, Arpit Rathi (14MICC02) give undertaking that the Major Project entitled "Design and development of Virtex-6 FPGA based DSP hardware for FMCW Radar" submitted by me, towards the partial fulfilment of the requirements for the degree of Master of Technology in Instrumentation and Control Engineering (Control and Automation) of Nirma University, Ahmedabad, is the original work carried out by me and I give assurance that no attempt of plagiarism has been made. I understand that in the event of any similarity found subsequently with any published work or any dissertation work elsewhere; it will result in severe disciplinary action.

Date -Place - Ahmedabad

Student

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