

PREFACE

This report presents my training experience during the 6 months of industrial training which I underwent as per the module EN3992 – Industrial Training of the B.Sc. Engineering degree program at University of Moratuwa. The training was conducted in ParaQum Technologies (Pvt) Ltd from 20th October 2014 to 10th April 2015 with the guidance of Department of Electronic and Telecommunication Engineering, University of Moratuwa.

During this period, I was able to work with a vibrant group of young engineers highly talented and well versed in their fields. Working with three major projects I was able to improve my skills and gather a huge amount of knowledge and experience in both technical and non-technical domains.

This report describes the work I did and the experience gathered over the 6 months of industrial training.

The first chapter brings an introduction to the training establishment ParaQum Technologies which is a startup company. It brings up the short history, current situation, structure, strengths, weaknesses and possible areas of improvement.

In the second chapter I have described the work I carried out and the experience gained by working on three major internship projects over the training period of 25 weeks. The details of my work and training experience are explained in a methodological manner, divided into sections and subsections, with some technical details and figures to give a clear understanding.

Third chapter contains my own overall assessment and conclusion on my training experience and the training program as a whole.

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My sincere thanks go to National Apprentice and Industrial Training Authority (NAITA) for coordinating the training program which gave us a tremendous opportunity to get an early exposure to corporate environment.

I also thank Dr. Ajith Pasquel, the Head of Department of Electronic and Telecommunication Engineering and the CEO of ParaQum Technologies for selecting me as a trainee and making it a memorable 6 months. I'm very grateful for the opportunity I was provided to work on my passionate fields.

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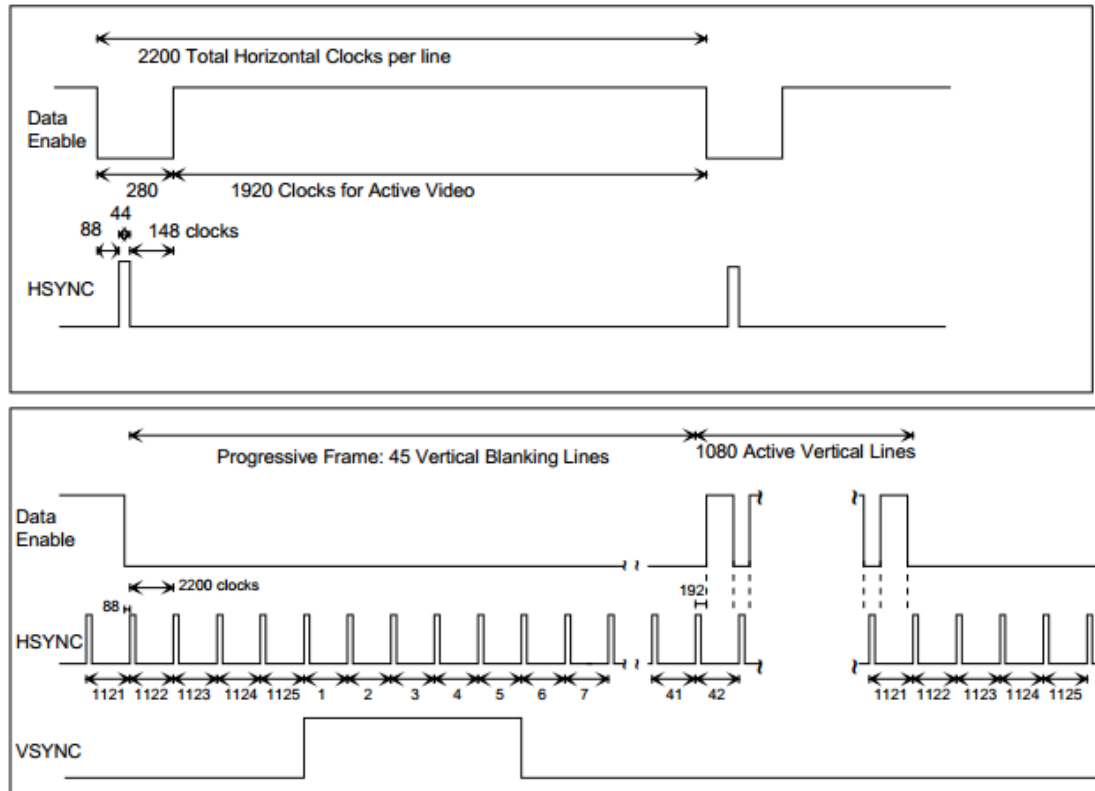
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ANNEX 1

Synchronization pulses for 1080P 30-fps video according to CAE-861-D standards.



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ACRONYMS AND ABBREVIATIONS

ADC	Analog to Digital Converter
ASIC	Application Specific Integrated Circuit
CP	Component Processor
FPGA	Field Programmable Gates Array
Fps	Frames per second
HDMI	High Definition Media Interface
HEVC	High Efficiency Video Coder
I2C communication	Inter integrated circuit communication
IC	Integrated Circuit
ILA	Integrated Logic Analyzer
SDI	Serial Digital Interface
SDP	Standard Definition Processor