# DSP Project

## The reg & MUX module:

A screen shot of a computer program

Description automatically generated

## The testbench:

A screen shot of a computer program

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Waveform:

A screenshot of a computer

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## Main project code:

A screenshot of a computer program

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A screenshot of a computer program

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A screen shot of a computer program

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A screenshot of a computer program

Description automatically generated

A computer screen with text and numbers

Description automatically generated

## Testbench:

A screen shot of a computer

Description automatically generated

A screenshot of a computer program

Description automatically generated

First test:

A screenshot of a computer program

Description automatically generated

Second & Third tests:

A screen shot of a computer program

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Cascade:

A screen shot of a computer program

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Do file:

A screenshot of a computer program

Description automatically generated

## Waveforms:

First test:

A screen shot of a computer

Description automatically generated

Second test:

A screenshot of a computer

Description automatically generated

third test:

A screenshot of a computer

Description automatically generated

Cascade:

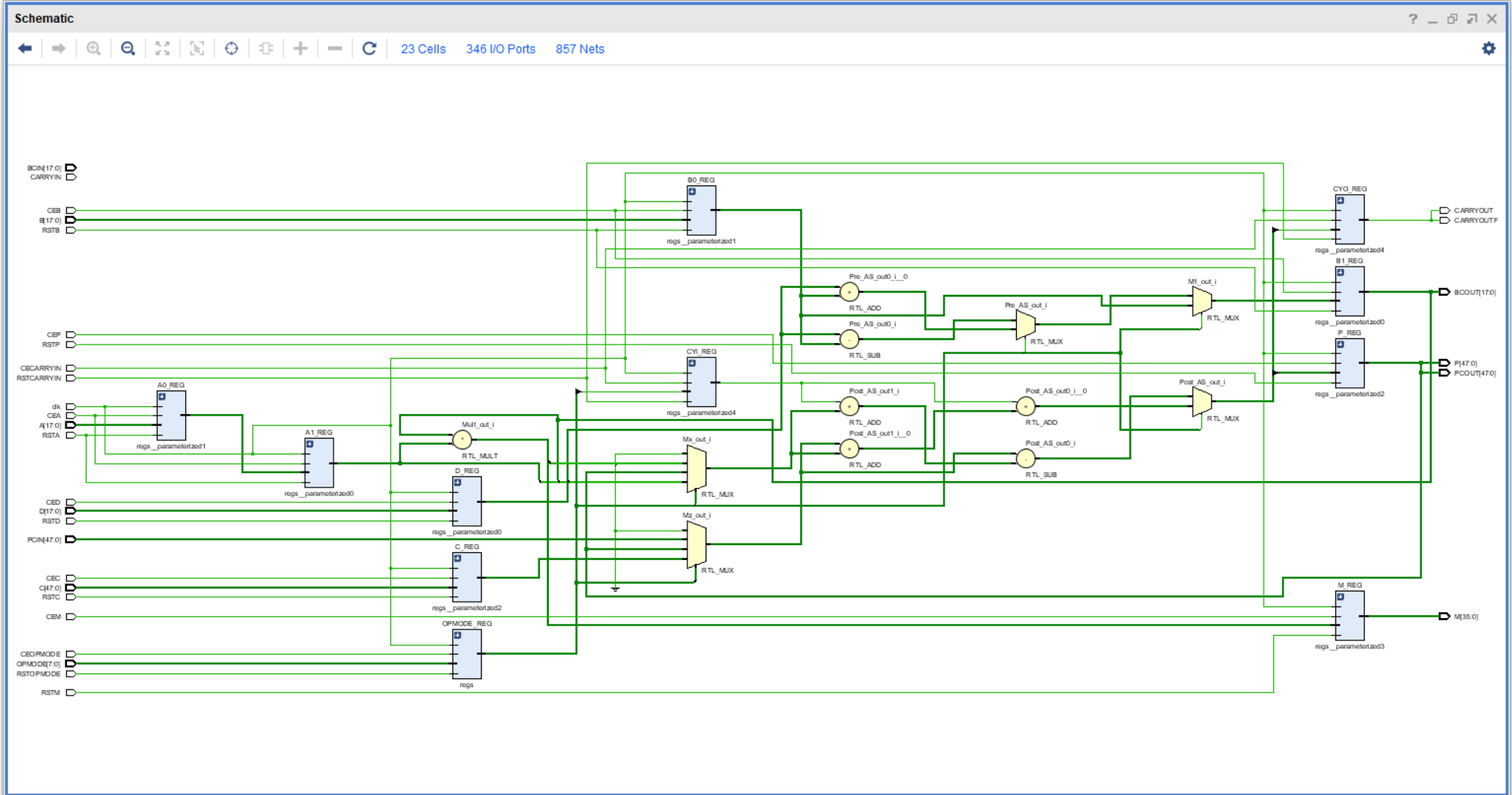
A screenshot of a computer

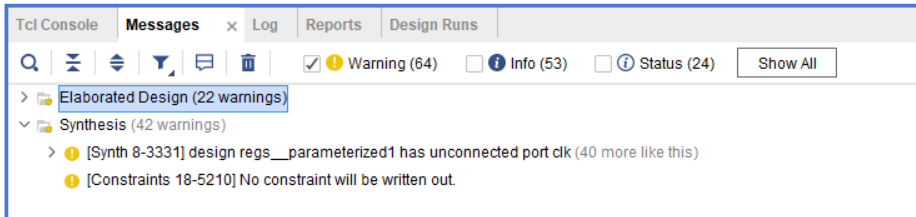
Description automatically generated

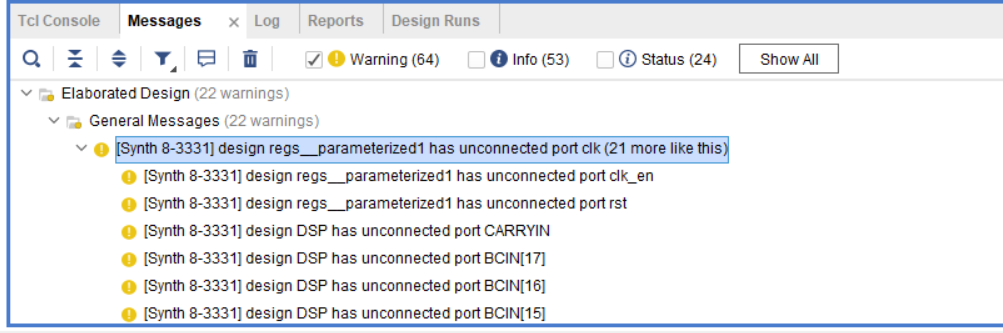
## Vivado:

Elaboration:

Schematic:







As the parameter default is direct not cascade so the input used in cascade are not used.

Synthesis:

A computer screen shot of a computer

Description automatically generated

A computer screen shot of a diagram

Description automatically generated

Utilizations:

A screenshot of a computer

Description automatically generated

Timing report:

A screenshot of a computer

Description automatically generated

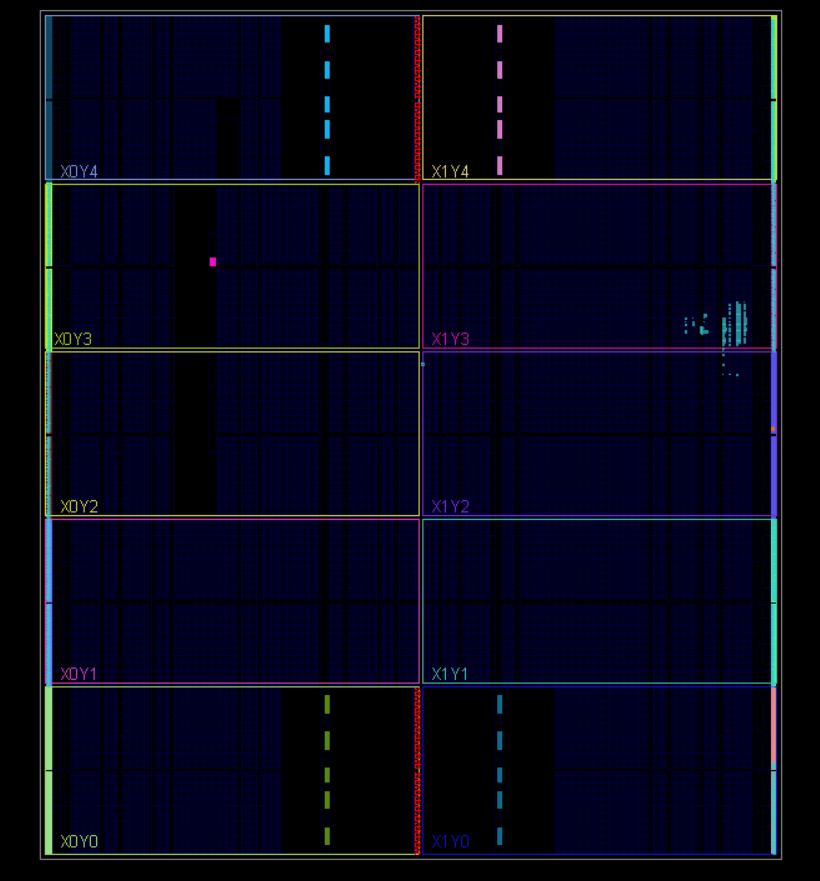
Messages:

A screenshot of a computer

Description automatically generated

Implementation:

Schematic:



Utilization:

A screenshot of a computer

Description automatically generated

Timing:

A screenshot of a computer

Description automatically generated

Message:

A screenshot of a computer

Description automatically generated

Constrain file:

A screenshot of a computer program

Description automatically generated

A screen shot of a computer program

Description automatically generated