**32-point DIT FFT**

Compilation Report:

A screenshot of a computer

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This panel reports FMAX for every clock in the design, regardless of the user-specified clock periods. FMAX is only computed for paths where the source and destination registers or ports are driven by the same clock. Paths of different clocks, including generated clocks, are ignored. For paths between a clock and its inversion, FMAX is computed as if the rising and falling edges are scaled along with FMAX, such that the duty cycle (in terms of a percentage) is maintained. Altera recommends that you always use clock constraints and other slack reports for sign-off analysis.

A screenshot of a computer

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Start state:

A screen shot of a computer

Description automatically generated

Do file:

restart

force -freeze sim:/fft32/clk 1 0, 0 {50 ps} -r 100

force -freeze sim:/fft32/reset 1 0

run

force -freeze sim:/fft32/reset 0 0

run

force -freeze sim:/fft32/xi\_in 10 0

force -freeze sim:/fft32/xr\_in 10 0

run

force -freeze sim:/fft32/xr\_in 20 0

run

force -freeze sim:/fft32/xr\_in 30 0

run

force -freeze sim:/fft32/xr\_in 40 0

run

force -freeze sim:/fft32/xr\_in 50 0

run

force -freeze sim:/fft32/xr\_in 60 0

run

force -freeze sim:/fft32/xr\_in 70 0

run

force -freeze sim:/fft32/xr\_in 80 0

run

force -freeze sim:/fft32/xr\_in 90 0

run

force -freeze sim:/fft32/xr\_in 10 0

run

force -freeze sim:/fft32/xr\_in 11 0

run

force -freeze sim:/fft32/xr\_in 12 0

run

force -freeze sim:/fft32/xr\_in 13 0

run

force -freeze sim:/fft32/xr\_in 14 0

run

force -freeze sim:/fft32/xr\_in 15 0

run

force -freeze sim:/fft32/xr\_in 16 0

run

force -freeze sim:/fft32/xr\_in 17 0

run

force -freeze sim:/fft32/xr\_in 18 0

run

force -freeze sim:/fft32/xr\_in 19 0

run

force -freeze sim:/fft32/xr\_in 20 0

run

force -freeze sim:/fft32/xr\_in 21 0

run

force -freeze sim:/fft32/xr\_in 22 0

run

force -freeze sim:/fft32/xr\_in 23 0

run

force -freeze sim:/fft32/xr\_in 24 0

run

force -freeze sim:/fft32/xr\_in 25 0

run

force -freeze sim:/fft32/xr\_in 26 0

run

force -freeze sim:/fft32/xr\_in 27 0

run

force -freeze sim:/fft32/xr\_in 28 0

run

force -freeze sim:/fft32/xr\_in 29 0

run

force -freeze sim:/fft32/xr\_in 30 0

run

force -freeze sim:/fft32/xr\_in 31 0

run

force -freeze sim:/fft32/xr\_in 32 0

run

Start if the Output frame:

A screen shot of a computer

Description automatically generated

The first input is from 0.2ns, the first output is 19.5ns.

State Machine Viewer:

A screenshot of a computer

Description automatically generated

RTL Viewer:

A drawing of a building

Description automatically generated

**20-point RV-DFT**

**8-bit word:**

Compilation result:

A screenshot of a computer

Description automatically generated

**A screenshot of a computer

Description automatically generated**

**A screenshot of a computer

Description automatically generated**

Do file:

restart

force -freeze sim:/dtft/clk 1 0, 0 {50 ps} -r 100

force -freeze sim:/dtft/reset 1 0

run

force -freeze sim:/dtft/reset 0 0

run

force -freeze sim:/dtft/x 1 0

run

force -freeze sim:/dtft/x 2 0

run

force -freeze sim:/dtft/x 3 0

run

force -freeze sim:/dtft/x 4 0

run

force -freeze sim:/dtft/x 5 0

run

force -freeze sim:/dtft/x 6 0

run

force -freeze sim:/dtft/x 7 0

run

force -freeze sim:/dtft/x 8 0

run

force -freeze sim:/dtft/x 9 0

run

force -freeze sim:/dtft/x 10 0

run

force -freeze sim:/dtft/x 11 0

run

force -freeze sim:/dtft/x 12 0

run

force -freeze sim:/dtft/x 13 0

run

force -freeze sim:/dtft/x 14 0

run

force -freeze sim:/dtft/x 15 0

run

force -freeze sim:/dtft/x 16 0

run

force -freeze sim:/dtft/x 17 0

run

force -freeze sim:/dtft/x 18 0

run

force -freeze sim:/dtft/x 19 0

run

force -freeze sim:/dtft/x 20 0

run

Wave:

A screen shot of a computer

Description automatically generated

A screen shot of a computer

Description automatically generated

The first input is from 0.2ns, the first output is 2.6ns.

RTL Viewer:

A blueprint of a computer

Description automatically generated

State Machine Viewer:

A screenshot of a computer

Description automatically generated

**16-bit word:**

A diagram of a computer

Description automatically generated