```
Release 14.7 - xst P.20131013 (nt64)
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--> Parameter TMPDIR set to xst/projnav.tmp
Total REAL time to Xst completion: 0.00 secs
Total CPU time to Xst completion: 0.15 secs
--> Parameter xsthdpdir set to xst
Total REAL time to Xst completion: 0.00 secs
Total CPU time to Xst completion: 0.15 secs
--> Reading design: encryptRSA.prj
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            8.4.5) Cross Clock Domains Report
______
    Synthesis Options Summary
______
---- Source Parameters
Input File Name : "encryptRSA.prj"
Ignore Synthesis Constraint File : NO
---- Target Parameters
Output File Name
                                : "encryptRSA"
Output Format
                                 : NGC
Target Device
                                 : xc7vx330t-3-ffq1157
rop Module Name : encryptRSA
Automatic FSM Extraction : YES
FSM Encoding Algorithm : Auto
Safe Implementation : No
FSM Style : LUT
RAM Extraction : Yes
RAM Style : Auto
ROM Extraction : Yes
Shift Register Extraction
---- Source Options
Top Module Name
Shift Register Extraction : YES
```

: Auto

ROM Style

Resource Sharing : YES Asynchronous To Synchronous : NO Shift Register Minimum Size : 2 Use DSP Block : Auto Automatic Register Balancing : No ---- Target Options : Auto LUT Combining Reduce Control Sets : Auto : YES Add IO Buffers Global Maximum Fanout : 100000 Add Generic Clock Buffer (BUFG) : 32 Register Duplication Optimize Instantiated Primitives : NO Use Clock Enable : Auto Use Synchronous Set : Auto
Use Synchronous Reset : Auto
Pack IO Registers into IOBs : Auto Use Synchronous Set Equivalent register Removal : YES ---- General Options : Speed Optimization Goal Optimization Effort : 1 Power Reduction : NO Keep Hierarchy : No : As Optimized Netlist Hierarchy : Yes RTL Output Global Optimization : AllClockNets Read Cores : YES Write Timing Constraints : NO Cross Clock Analysis : NO Hierarchy Separator : / Bus Delimiter : <> Case Specifier : Maintain Case Specifier

Slice Utilization Ratio : 100 BRAM Utilization Ratio : 100 DSP48 Utilization Ratio : 100 : NO Auto BRAM Packing Slice Utilization Ratio Delta : 5 \_\_\_\_\_\_ \_\_\_\_\_\_ \* HDL Parsing \* \_\_\_\_\_\_ Parsing VHDL file "E:\uni\term 5\FPGA\project\RSA virtex encryption\RSA virtex\encryptRSA.vhd" into library work Parsing entity <encryptRSA>. Parsing architecture <Behavioral> of entity <encryptrsa>. \_\_\_\_\_\_ HDL Elaboration \_\_\_\_\_\_ Elaborating entity <encryptRSA> (architecture <Behavioral>) from library <work>. \_\_\_\_\_\_ HDL Synthesis \_\_\_\_\_\_

```
Synthesizing Unit <encryptRSA>.
    Related source file is "E:\uni\term
5\FPGA\project\RSA virtex encryption\RSA virtex\encryptRSA.vhd".
    Found 256-bit register for signal <power result>.
    Found 32-bit register for signal <cnt>.
    Found 32-bit register for signal <encryptdata>.
    Found 1-bit register for signal <encryptReady>.
    Found 32-bit register for signal <private key>.
    Found 32-bit register for signal <index>.
   Found 1-bit register for signal <err>.
   Found 32-bit adder for signal <cnt[31] GND 7 o add 9 OUT> created at line 61.
   Found 32-bit adder for signal <index[31]_GND_7_o_add_21_OUT> created at line 77.
   Found 16-bit subtractor for signal <GND_7_o_GND_7_o_sub_1_OUT<15:0>> created at line 46.
   Found 16-bit subtractor for signal <GND 7 o GND 7 o sub 2 OUT<15:0>> created at line 47.
   Found 16x16-bit multiplier for signal <n0049> created at line 48.
   Found 16x16-bit multiplier for signal <GND 7 o GND 7 o MuLt 4 OUT> created at line 51.
   Found 31x16-bit multiplier for signal <n0052> created at line 59.
   Found 32x32-bit multiplier for signal <n0061> created at line 71.
    Found 33-bit comparator greater for signal <GND_7_o_cnt[31]_LessThan_8_o> created at
line 58
   Found 33-bit comparator equal for signal <GND 7 o cnt[31] equal 11 o> created at line 62
    Summary:
        inferred 4 Multiplier(s).
        inferred 4 Adder/Subtractor(s).
        inferred 386 D-type flip-flop(s).
        inferred 2 Comparator(s).
        inferred 1 Multiplexer(s).
Unit <encryptRSA> synthesized.
Synthesizing Unit <rem 32u 31u>.
    Related source file is "".
    Found 63-bit adder for signal <n3373> created at line 0.
    Found 63-bit adder for signal <GND 9 o b[30] add 1 OUT> created at line 0.
    Found 62-bit adder for signal <n3377> created at line 0.
    Found 62-bit adder for signal \langle GND\_9\_o\_b[30]\_add\_3\_OUT \rangle created at line 0.
   Found 61-bit adder for signal <n3381> created at line 0.
    Found 61-bit adder for signal \langle \text{GND 9 o b}[30] \text{ add 5 OUT} \rangle created at line 0.
   Found 60-bit adder for signal <n3385> created at line 0.
   Found 60-bit adder for signal <GND 9 o b[30] add 7 OUT> created at line 0.
   Found 59-bit adder for signal <n3389> created at line 0.
    Found 59-bit adder for signal <GND 9 o b[30]_add_9_OUT> created at line 0.
    Found 58-bit adder for signal <n3393> created at line 0.
   Found 58-bit adder for signal <GND 9 o b[30] add 11 OUT> created at line 0.
    Found 57-bit adder for signal <n3397> created at line 0.
    Found 57-bit adder for signal <GND 9 o b[30] add 13 OUT> created at line 0.
    Found 56-bit adder for signal <n3401> created at line 0.
    Found 56-bit adder for signal <GND 9 o b[30] add 15 OUT> created at line 0.
    Found 55-bit adder for signal <n3405> created at line 0.
    Found 55-bit adder for signal <GND 9 o b[30] add 17 OUT> created at line 0.
    Found 54-bit adder for signal <n3409> created at line 0.
    Found 54-bit adder for signal <GND 9 o b[30] add 19 OUT> created at line 0.
    Found 53-bit adder for signal <n3413> created at line 0.
    Found 53-bit adder for signal <GND 9 o b[30] add 21 OUT> created at line 0.
    Found 52-bit adder for signal <n3417> created at line 0.
    Found 52-bit adder for signal <GND 9 o b[30] add 23 OUT> created at line 0.
    Found 51-bit adder for signal <n3421> created at line 0.
    Found 51-bit adder for signal <GND 9 o b[30]_add_25_OUT> created at line 0.
    Found 50-bit adder for signal <n3425> created at line 0.
    Found 50-bit adder for signal \leqGND 9 o b[30] add 27 OUT> created at line 0.
    Found 49-bit adder for signal <n3429> created at line 0.
    Found 49-bit adder for signal <GND 9 o b[30] add 29 OUT> created at line 0.
```

```
Found 48-bit adder for signal <n3433> created at line 0.
Found 48-bit adder for signal <GND_9_o_b[30]_add_31_OUT> created at line 0.
Found 47-bit adder for signal <n3437> created at line 0.
Found 47-bit adder for signal <GND 9 o b[30] add 33 OUT> created at line 0.
Found 46-bit adder for signal <n3441> created at line 0.
Found 46-bit adder for signal <GND 9 o b[30] add 35 OUT> created at line 0.
Found 45-bit adder for signal <n3445> created at line 0.
Found 45-bit adder for signal \leqGND 9 o b[30] add 37 OUT> created at line 0.
Found 44-bit adder for signal <n3449> created at line 0.
Found 44-bit adder for signal <GND 9 o b[30] add 39 OUT> created at line 0.
Found 43-bit adder for signal <n3453> created at line 0.
Found 43-bit adder for signal <GND 9 o b[30] add 41 OUT> created at line 0.
Found 42-bit adder for signal <n3457> created at line 0.
Found 42-bit adder for signal <GND 9 o b[30] add 43 OUT> created at line 0.
Found 41-bit adder for signal <n3461> created at line 0.
Found 41-bit adder for signal <GND 9 o b[30]_add_45_OUT> created at line 0.
Found 40-bit adder for signal <n3465> created at line 0.
Found 40-bit adder for signal <GND 9 o b[30] add 47 OUT> created at line 0.
Found 39-bit adder for signal <n3469> created at line 0.
Found 39-bit adder for signal <GND 9 o b[30] add 49 OUT> created at line 0.
Found 38-bit adder for signal <n3473> created at line 0.
Found 38-bit adder for signal <GND 9 o b[30] add 51 OUT> created at line 0.
Found 37-bit adder for signal <n3477> created at line 0.
Found 37-bit adder for signal \langle GND\_9\_o\_b[30]\_add\_53\_OUT \rangle created at line 0.
Found 36-bit adder for signal <n3481> created at line 0.
Found 36-bit adder for signal <GND 9 o b[30] add 55 OUT> created at line 0.
Found 35-bit adder for signal <n3485> created at line 0.
Found 35-bit adder for signal <GND 9 o b[30] add 57 OUT> created at line 0.
Found 34-bit adder for signal <n3489> created at line 0.
Found 34-bit adder for signal \langle GND\_9\_o\_b[30]\_add\_59\_OUT \rangle created at line 0.
Found 33-bit adder for signal <n3493> created at line 0.
Found 33-bit adder for signal <GND 9 o b[30] add 61 OUT> created at line 0.
Found 32-bit adder for signal <n3497> created at line 0.
Found 32-bit adder for signal \langle a[31] b[30] \rangle add 63 OUT> created at line 0.
Found 32-bit adder for signal <n3501> created at line 0.
Found 32-bit adder for signal <a[31] GND 9 o add 65 OUT> created at line 0.
Found 63-bit comparator lessequal for signal <BUS 0001> created at line 0
Found 62-bit comparator lessequal for signal <BUS 0002> created at line 0
Found 61-bit comparator lessequal for signal <BUS 0003> created at line 0
Found 60-bit comparator lessequal for signal <BUS 0004> created at line 0
Found 59-bit comparator lessequal for signal <BUS 0005> created at line 0
Found 58-bit comparator lessequal for signal <BUS 0006> created at line 0
Found 57-bit comparator lessequal for signal <BUS 0007> created at line 0
Found 56-bit comparator lessequal for signal <BUS 0008> created at line 0
Found 55-bit comparator lessequal for signal <BUS 0009> created at line 0
Found 54-bit comparator lessequal for signal <BUS 0010> created at line 0
Found 53-bit comparator lessequal for signal <BUS 0011> created at line 0
Found 52-bit comparator lessequal for signal <BUS 0012> created at line 0
Found 51-bit comparator lessequal for signal <BUS 0013> created at line 0
Found 50-bit comparator lessequal for signal <BUS 0014> created at line 0
Found 49-bit comparator lessequal for signal <BUS 0015> created at line 0
Found 48-bit comparator lessequal for signal <BUS 0016> created at line 0
Found 47-bit comparator lessequal for signal <BUS 0017> created at line 0
Found 46-bit comparator lessequal for signal <BUS 0018> created at line 0
Found 45-bit comparator lessequal for signal <BUS 0019> created at line 0
Found 44-bit comparator lessequal for signal <BUS 0020> created at line 0
Found 43-bit comparator lessequal for signal <BUS 0021> created at line 0
Found 42-bit comparator lessequal for signal <BUS 0022> created at line 0
Found 41-bit comparator lessequal for signal <BUS 0023> created at line 0
Found 40-bit comparator lessequal for signal <BUS 0024> created at line 0
Found 39-bit comparator lessequal for signal <BUS 0025> created at line 0
```

```
Found 38-bit comparator lessequal for signal <BUS 0026> created at line 0
    Found 37-bit comparator lessequal for signal <BUS 0027> created at line 0
    Found 36-bit comparator lessequal for signal <BUS 0028> created at line 0
    Found 35-bit comparator lessequal for signal <BUS 0029> created at line 0
    Found 34-bit comparator lessequal for signal <BUS 0030> created at line 0
    Found 33-bit comparator lessequal for signal <BUS 0031> created at line 0
    Found 32-bit comparator lessequal for signal <BUS 0032> created at line 0
    Found 32-bit comparator lessequal for signal <BUS 0033> created at line 0
    Summary:
        inferred 66 Adder/Subtractor(s).
        inferred 33 Comparator(s).
        inferred 1025 Multiplexer(s).
Unit <rem 32u 31u> synthesized.
Synthesizing Unit <rem 31u 31u>.
    Related source file is "".
    Found 62-bit adder for signal <n3236> created at line 0.
    Found 62-bit adder for signal <GND 11 o b[30] add 1 OUT> created at line 0.
    Found 61-bit adder for signal <n3240> created at line 0.
    Found 61-bit adder for signal \langle \text{GND 11} \rangle o b[30] add 3 OUT> created at line 0.
    Found 60-bit adder for signal <n3244> created at line 0.
    Found 60-bit adder for signal <GND 11 o b[30] add 5 OUT> created at line 0.
    Found 59-bit adder for signal <n3248> created at line 0.
    Found 59-bit adder for signal \langle \text{GND 11} \rangle o b[30] add 7 OUT> created at line 0.
    Found 58-bit adder for signal <n3252> created at line 0.
    Found 58-bit adder for signal \langle \text{GND 11} \rangle o b[30] add 9 OUT> created at line 0.
    Found 57-bit adder for signal <n3256> created at line 0.
    Found 57-bit adder for signal <GND 11 o b[30] add 11 OUT> created at line 0.
    Found 56-bit adder for signal <n3260> created at line 0.
    Found 56-bit adder for signal <GND 11 o b[30] add 13 OUT> created at line 0.
    Found 55-bit adder for signal <n3264> created at line 0.
    Found 55-bit adder for signal <GND 11 o b[30] add 15 OUT> created at line 0.
    Found 54-bit adder for signal <n3268> created at line 0.
    Found 54-bit adder for signal <GND 11 o b[30] add 17 OUT> created at line 0.
    Found 53-bit adder for signal <n3272> created at line 0.
    Found 53-bit adder for signal <GND 11 o b[30] add 19 OUT> created at line 0.
    Found 52-bit adder for signal <n3276> created at line 0.
    Found 52-bit adder for signal <GND 11 o b[30] add 21 OUT> created at line 0.
    Found 51-bit adder for signal <n3280> created at line 0.
    Found 51-bit adder for signal <GND 11 o b[30] add 23 OUT> created at line 0.
    Found 50-bit adder for signal <n3284> created at line 0.
    Found 50-bit adder for signal <GND 11 o b[30] add 25 OUT> created at line 0.
    Found 49-bit adder for signal <n3288> created at line 0.
    Found 49-bit adder for signal <GND 11 o b[30] add 27 OUT> created at line 0.
    Found 48-bit adder for signal <n3292> created at line 0.
    Found 48-bit adder for signal \langle GND\_11\_o\_b[30]\_add\_29\_OUT \rangle created at line 0.
    Found 47-bit adder for signal <n3296> created at line 0.
    Found 47-bit adder for signal \langle \text{GND 11 o b}[30] \text{ add 31 OUT} \rangle created at line 0.
    Found 46-bit adder for signal <n3300> created at line 0.
    Found 46-bit adder for signal <GND 11 o b[30] add 33 OUT> created at line 0.
    Found 45-bit adder for signal <n3304> created at line 0.
    Found 45-bit adder for signal <GND_11_o_b[30]_add_35_OUT> created at line 0.
    Found 44-bit adder for signal <n3308> created at line 0.
    Found 44-bit adder for signal <GND 11 o b[30] add 37 OUT> created at line 0.
    Found 43-bit adder for signal <n3312> created at line 0.
    Found 43-bit adder for signal <GND 11 o b[30] add 39 OUT> created at line 0.
    Found 42-bit adder for signal <n3316> created at line 0.
    Found 42-bit adder for signal <GND 11 o b[30] add 41 OUT> created at line 0.
    Found 41-bit adder for signal <n3320> created at line 0.
    Found 41-bit adder for signal <GND 11 o b[30] add 43 OUT> created at line 0.
    Found 40-bit adder for signal <n3324> created at line 0.
```

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Found 40-bit adder for signal <GND 11 o b[30] add 45 OUT> created at line 0.
    Found 39-bit adder for signal <n3328> created at line 0.
    Found 39-bit adder for signal <GND 11 o b[30] add 47 OUT> created at line 0.
    Found 38-bit adder for signal <n3332> created at line 0.
    Found 38-bit adder for signal <GND 11 o b[30] add 49 OUT> created at line 0.
    Found 37-bit adder for signal <n3336> created at line 0.
    Found 37-bit adder for signal <GND 11 o b[30] add 51 OUT> created at line 0.
    Found 36-bit adder for signal <n3340> created at line 0.
    Found 36-bit adder for signal <GND 11 o b[30] add 53 OUT> created at line 0.
    Found 35-bit adder for signal <n3344> created at line 0.
    Found 35-bit adder for signal <GND 11 o b[30] add 55 OUT> created at line 0.
    Found 34-bit adder for signal <n3348> created at line 0.
    Found 34-bit adder for signal <GND 11 o b[30]_add_57_OUT> created at line 0.
    Found 33-bit adder for signal <n3352> created at line 0.
    Found 33-bit adder for signal <GND 11 o b[30] add 59 OUT> created at line 0.
    Found 32-bit adder for signal <n3356> created at line 0.
    Found 32-bit adder for signal <GND 11 o b[30] add 61 OUT> created at line 0.
    Found 31-bit adder for signal <n3360> created at line 0.
    Found 31-bit adder for signal <a[30] b[30] add 63 OUT[30:0]> created at line 0.
    Found 62-bit comparator lessequal for signal <BUS 0001> created at line 0
    Found 61-bit comparator lessequal for signal <BUS 0002> created at line 0
    Found 60-bit comparator lessequal for signal <BUS 0003> created at line 0
    Found 59-bit comparator lessequal for signal <BUS 0004> created at line 0
    Found 58-bit comparator lessequal for signal <BUS 0005> created at line 0
    Found 57-bit comparator lessequal for signal <BUS 0006> created at line 0
    Found 56-bit comparator lessequal for signal <BUS 0007> created at line 0
    Found 55-bit comparator lessequal for signal <BUS 0008> created at line 0
    Found 54-bit comparator lessequal for signal <BUS 0009> created at line 0
    Found 53-bit comparator lessequal for signal <BUS 0010> created at line 0
    Found 52-bit comparator lessequal for signal <BUS 0011> created at line 0
    Found 51-bit comparator lessequal for signal <BUS 0012> created at line 0
    Found 50-bit comparator lessequal for signal <BUS 0013> created at line 0
    Found 49-bit comparator lessequal for signal <BUS 0014> created at line 0
    Found 48-bit comparator lessequal for signal <BUS 0015> created at line 0
    Found 47-bit comparator lessequal for signal <BUS 0016> created at line 0
    Found 46-bit comparator lessequal for signal <BUS 0017> created at line 0
    Found 45-bit comparator lessequal for signal <BUS 0018> created at line 0
    Found 44-bit comparator lessequal for signal <BUS 0019> created at line 0
    Found 43-bit comparator lessequal for signal <BUS 0020> created at line 0
    Found 42-bit comparator lessequal for signal <BUS 0021> created at line 0
    Found 41-bit comparator lessequal for signal <BUS 0022> created at line 0
    Found 40-bit comparator lessequal for signal <BUS 0023> created at line 0
    Found 39-bit comparator lessequal for signal <BUS 0024> created at line 0
    Found 38-bit comparator lessequal for signal <BUS 0025> created at line 0
    Found 37-bit comparator lessequal for signal <BUS 0026> created at line 0
    Found 36-bit comparator lessequal for signal <BUS 0027> created at line 0
   Found 35-bit comparator lessequal for signal <BUS 0028> created at line 0
   Found 34-bit comparator lessequal for signal <BUS 0029> created at line 0
   Found 33-bit comparator lessequal for signal <BUS 0030> created at line 0
    Found 32-bit comparator lessequal for signal <BUS 0031> created at line 0
   Found 31-bit comparator lessequal for signal <BUS 0032> created at line 0
    Summary:
       inferred 64 Adder/Subtractor(s).
       inferred 32 Comparator(s).
       inferred 932 Multiplexer(s).
Unit <rem 31u 31u> synthesized.
```

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HDL Synthesis Report

# Multipliers	: 4
16x16-bit multiplier	: 2
31x16-bit multiplier	: 1
32x32-bit multiplier	: 1
# Adders/Subtractors	: 200
16-bit subtractor	: 2
31-bit adder	<b>:</b> 2
32-bit adder	: 12
33-bit adder	: 6
34-bit adder	: 6
	: 6
35-bit adder	
36-bit adder	: 6
37-bit adder	: 6
38-bit adder	: 6
39-bit adder	: 6
40-bit adder	: 6
41-bit adder	: 6
42-bit adder	: 6
43-bit adder	: 6
44-bit adder	: 6
45-bit adder	: 6
46-bit adder	: 6
47-bit adder	: 6
48-bit adder	: 6
49-bit adder	: 6
50-bit adder	: 6
51-bit adder	: 6
52-bit adder	: 6
53-bit adder	: 6
54-bit adder	: 6
55-bit adder	: 6
56-bit adder	: 6
57-bit adder	: 6
58-bit adder	: 6
59-bit adder	: 6
60-bit adder	: 6
61-bit adder	: 6
62-bit adder	: 6
63-bit adder	. o : 4
# Registers	· · · · · · · · · · · · · · · · · · ·
1-bit register	: 2
256-bit register	: 1
32-bit register	: 4
# Comparators	: 100
31-bit comparator lessequal	: 1
32-bit comparator lessequal	<b>:</b> 5
33-bit comparator equal	: 1
33-bit comparator greater	: 1
33-bit comparator lessequal	: 3
34-bit comparator lessequal	<b>:</b> 3
35-bit comparator lessequal	: 3
36-bit comparator lessequal	: 3
37-bit comparator lessequal	: 3
38-bit comparator lessequal	: 3
39-bit comparator lessequal	: 3
40-bit comparator lessequal	: 3
	· 3
41-bit comparator lessequal	
42-bit comparator lessequal	
43-bit comparator lessequal	: 3
44-bit comparator lessequal	: 3
45-bit comparator lessequal	: 3

```
46-bit comparator lessequal
                                                        : 3
47-bit comparator lessequal
                                                        : 3
48-bit comparator lessequal
                                                        : 3
49-bit comparator lessequal
                                                        : 3
                                                        : 3
50-bit comparator lessequal
51-bit comparator lessequal
                                                        : 3
52-bit comparator lessequal
                                                       : 3
53-bit comparator lessequal
                                                        : 3
54-bit comparator lessequal
                                                        : 3
55-bit comparator lessequal
                                                        : 3
56-bit comparator lessequal
                                                       : 3
57-bit comparator lessequal
                                                        : 3
58-bit comparator lessequal
                                                        : 3
59-bit comparator lessequal
                                                        : 3
60-bit comparator lessequal
                                                        : 3
61-bit comparator lessequal
62-bit comparator lessequal
                                                        : 3
63-bit comparator lessequal
                                                       : 2
# Multiplexers
                                                       : 2983
1-bit 2-to-1 multiplexer
                                                       : 2978
31-bit 2-to-1 multiplexer
32-bit 2-to-1 multiplexer
```

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* Advanced HDL Synthesis *
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WARNING:Xst:1710 - FF/Latch <encryptdata 31> (without init value) has a constant value of
0 in block <encryptRSA>. This FF/Latch will be trimmed during the optimization process.
WARNING: Xst: 2677 - Node <power result 31> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 32> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 33> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 34> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 35> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 36> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 37> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 38> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 39> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 40> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 41> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 42> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 43> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 44> of sequential type is unconnected in block
WARNING: Xst: 2677 - Node <power result 45> of sequential type is unconnected in block
<encryptRSA>.
```

```
WARNING: Xst: 2677 - Node <power result 46> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 47> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 48> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 49> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 50> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 51> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 52> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 53> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 54> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 55> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 56> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 64> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 65> of sequential type is unconnected in block
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WARNING:Xst:2677 - Node <power result 66> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 67> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 68> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 69> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 73> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 74> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 75> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 76> of sequential type is unconnected in block
```

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<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 77> of sequential type is unconnected in block
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<encryptRSA>.
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WARNING: Xst: 2677 - Node <power result 98> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 105> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 106> of sequential type is unconnected in block
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```

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WARNING: Xst: 2677 - Node <power result 107> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 109> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 112> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 126> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 129> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 130> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 132> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 133> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 134> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 135> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 136> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 137> of sequential type is unconnected in block
```

```
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<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 140> of sequential type is unconnected in block
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WARNING:Xst:2677 - Node <power result 141> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 143> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 144> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 145> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 146> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 147> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 151> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 156> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 157> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 158> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 159> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 160> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 161> of sequential type is unconnected in block
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<encryptRSA>.
WARNING:Xst:2677 - Node <power result 163> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 164> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 165> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 166> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 167> of sequential type is unconnected in block
<encryptRSA>.
```

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WARNING: Xst: 2677 - Node <power result 168> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 169> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 170> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 171> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 172> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 173> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 174> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 175> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 176> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 177> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 178> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 179> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 180> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 181> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 185> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 186> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 187> of sequential type is unconnected in block
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WARNING:Xst:2677 - Node <power result 188> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 189> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 190> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 191> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 192> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 193> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 194> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 195> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 196> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 197> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 198> of sequential type is unconnected in block
```

```
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 199> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 200> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 201> of sequential type is unconnected in block
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WARNING:Xst:2677 - Node <power result 202> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 204> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 212> of sequential type is unconnected in block
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<u>WARNING</u>: Xst: 2677 - Node <power result 213> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 214> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 215> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 216> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 217> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 218> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 219> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 220> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 221> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 222> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 223> of sequential type is unconnected in block
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WARNING:Xst:2677 - Node <power result 224> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 225> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 226> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 227> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 228> of sequential type is unconnected in block
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```

```
WARNING: Xst: 2677 - Node <power result 229> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 230> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 231> of sequential type is unconnected in block
<encryptRSA>.
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<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 233> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 234> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 235> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 236> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 237> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 238> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 239> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 240> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 241> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 244> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 245> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 246> of sequential type is unconnected in block
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<u>WARNING</u>: Xst: 2677 - Node <power result 247> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 248> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 249> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 250> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 251> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 252> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 253> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 254> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 255> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2404 - FFs/Latches <encryptdata < 31: 31>> (without init value) have a constant
value of 0 in block <encryptRSA>.
```

Synthesizing (advanced) Unit <encryptRSA>.
The following registers are absorbed into

The following registers are absorbed into counter <index>: 1 register on signal <index>. The following registers are absorbed into counter <cnt>: 1 register on signal <cnt>. Unit <encryptRSA> synthesized (advanced).

```
WARNING: Xst: 2677 - Node <power result 31> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 32> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 33> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 34> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 35> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 36> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 37> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 38> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 39> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 40> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 41> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 42> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 43> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 44> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 45> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 46> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 47> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 48> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 49> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 50> of sequential type is unconnected in block
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WARNING:Xst:2677 - Node <power result 51> of sequential type is unconnected in block
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<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 53> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 54> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 55> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 56> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 57> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 58> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 59> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 60> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 61> of sequential type is unconnected in block
```

```
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 62> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 63> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 64> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 65> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 66> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 67> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 68> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 69> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 70> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 71> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 72> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 73> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 74> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 75> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 76> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 77> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 79> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 80> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 81> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 82> of sequential type is unconnected in block
<encryptRSA>.
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<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 84> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 85> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 86> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 87> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 88> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 89> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 90> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 91> of sequential type is unconnected in block
<encryptRSA>.
```

```
WARNING: Xst: 2677 - Node <power result 92> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 93> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 94> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 95> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 96> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 97> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 98> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 99> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 100> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 101> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 102> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 103> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 104> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 105> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 106> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 107> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 108> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 109> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 110> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 111> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 112> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 113> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 114> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 115> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 116> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 117> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 118> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 119> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 120> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 121> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 122> of sequential type is unconnected in block
```

```
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 123> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 124> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 125> of sequential type is unconnected in block
<encryptRSA>.
<u>WARNING</u>: Xst: 2677 - Node <power result 126> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 127> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 128> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 129> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 130> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 131> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 132> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 133> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 134> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 135> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 136> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 137> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 138> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 139> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 140> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 141> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 142> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 143> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 144> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 145> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 146> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 147> of sequential type is unconnected in block
<encryptRSA>.
<u>WARNING</u>: Xst: 2677 - Node <power result 148> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 149> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 150> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 151> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 152> of sequential type is unconnected in block
<encryptRSA>.
```

```
WARNING: Xst: 2677 - Node <power result 153> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 154> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 155> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 156> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 157> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 158> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 159> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 160> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 161> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 162> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 163> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 164> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 165> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 166> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 167> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 168> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 169> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 170> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 171> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 172> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 173> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 174> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 175> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 176> of sequential type is unconnected in block
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WARNING: Xst: 2677 - Node <power result 177> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 178> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 179> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 180> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 181> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 182> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 183> of sequential type is unconnected in block
```

```
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 184> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 185> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 186> of sequential type is unconnected in block
<encryptRSA>.
<u>WARNING</u>: Xst: 2677 - Node <power result 187> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 188> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 189> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 190> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 191> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 192> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 193> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 194> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 195> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 196> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 197> of sequential type is unconnected in block
<encryptRSA>.
<u>WARNING</u>: Xst: 2677 - Node <power result 198> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 199> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 200> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 201> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 202> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 203> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 204> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 205> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 206> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 207> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 208> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 209> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 210> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 211> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 212> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 213> of sequential type is unconnected in block
<encryptRSA>.
```

```
WARNING: Xst: 2677 - Node <power result 214> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 215> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 216> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 217> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 218> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 219> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 220> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 221> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 222> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 223> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 224> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 225> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 226> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 227> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 228> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 229> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 230> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 231> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 232> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 233> of sequential type is unconnected in block
<encryptRSA>.
WARNING:Xst:2677 - Node <power result 234> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 235> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 236> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 237> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 238> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 239> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 240> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 241> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 242> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 243> of sequential type is unconnected in block
<encryptRSA>.
WARNING: Xst: 2677 - Node <power result 244> of sequential type is unconnected in block
```

<encryptRSA>. WARNING: Xst: 2677 - Node <power result 245> of sequential type is unconnected in block <encryptRSA>. WARNING: Xst: 2677 - Node <power result 246> of sequential type is unconnected in block <encryptRSA>. WARNING: Xst: 2677 - Node <power result 247> of sequential type is unconnected in block <encryptRSA>. WARNING: Xst: 2677 - Node <power result 248> of sequential type is unconnected in block <encryptRSA>. WARNING: Xst: 2677 - Node <power result 249> of sequential type is unconnected in block <encryptRSA>. WARNING: Xst: 2677 - Node <power result 250> of sequential type is unconnected in block <encryptRSA>. WARNING: Xst: 2677 - Node <power result 251> of sequential type is unconnected in block <encryptRSA>. WARNING: Xst: 2677 - Node <power result 252> of sequential type is unconnected in block <encryptRSA>. WARNING: Xst: 2677 - Node <power result 253> of sequential type is unconnected in block <encryptRSA>. WARNING: Xst: 2677 - Node <power result 254> of sequential type is unconnected in block <encryptRSA>. WARNING: Xst: 2677 - Node <power result 255> of sequential type is unconnected in block <encryptRSA>.

\_\_\_\_\_\_

## Advanced HDL Synthesis Report

Macro Statistics

Macio Statistics		
# Multipliers	:	4
16x16-bit multiplier	:	2
31x16-bit multiplier	:	1
32x32-bit multiplier		1
# Adders/Subtractors		100
16-bit subtractor	:	2
31-bit adder carry in	:	34
32-bit adder carry in	:	64
# Counters	:	2
32-bit up counter	:	2
# Registers	:	96
Flip-Flops	:	96
# Comparators	:	100
31-bit comparator lessequal	:	1
32-bit comparator lessequal	:	5
33-bit comparator equal	:	1
33-bit comparator greater	:	1
33-bit comparator lessequal	:	3
34-bit comparator lessequal	:	3
35-bit comparator lessequal	:	3
36-bit comparator lessequal	:	3
37-bit comparator lessequal	:	3
38-bit comparator lessequal	:	3
39-bit comparator lessequal	:	3
40-bit comparator lessequal	:	3
41-bit comparator lessequal	:	3
42-bit comparator lessequal	:	3
43-bit comparator lessequal	:	3
44-bit comparator lessequal	:	3
45-bit comparator lessequal	:	3
46-bit comparator lessequal	:	3
47-bit comparator lessequal	:	3
48-bit comparator lessequal	:	3

```
: 3
49-bit comparator lessequal
50-bit comparator lessequal
                                      : 3
51-bit comparator lessequal
                                      : 3
52-bit comparator lessequal
                                      : 3
53-bit comparator lessequal
54-bit comparator lessequal
55-bit comparator lessequal
                                     : 3
56-bit comparator lessequal
                                      : 3
57-bit comparator lessequal
                                      : 3
58-bit comparator lessequal
59-bit comparator lessequal
                                     : 3
60-bit comparator lessequal
61-bit comparator lessequal
62-bit comparator lessequal
63-bit comparator lessequal
# Multiplexers
                                      : 2982
1-bit 2-to-1 multiplexer
                                      : 2978
31-bit 2-to-1 multiplexer
______
______
                 Low Level Synthesis
______
WARNING: Xst: 2677 - Node < Mmult n00613> of sequential type is unconnected in block
<encryptRSA>.
Optimizing unit <encryptRSA> ...
Optimizing unit <rem 32u 31u> ...
Optimizing unit <rem 31u 31u> ...
Mapping all equations...
Building and optimizing final netlist ...
Found area constraint ratio of 100 (+ 5) on block encryptRSA, actual ratio is 2.
Final Macro Processing ...
______
Final Register Report
Macro Statistics
# Registers
                                     : 146
Flip-Flops
                                      : 146
______
______
                  Partition Report
______
Partition Implementation Status
No Partitions were found in this design.
______
```

Design Summary

\*

\_\_\_\_\_\_

Top Level Output File Name : encryptRSA.ngc

## Primitive and Black Box Usage:

# BELS : 9407 GND : 1 INV : 50 LUT1 : 65 : 63 LUT2 : 784 LUT3 LUT4 : 1789 LUT5 : 1197 LUT6 : 1195 MUXCY : 2661 # VCC XORCY : 1601 : 146 # FlipFlops/Latches FD : 32 FDE # : 64 FDRE : 48 FDSE : 2 # Clock Buffers BUFGP : 1 # IO Buffers : 146 IBUF : 81 OBUF : 65 # DSPs : 7 # DSP48E1 : 7

## Device utilization summary:

Selected Device: 7vx330tffg1157-3

Slice Logic Utilization:				
Number of Slice Registers:	145	out of	408000	0%
Number of Slice LUTs:	5143	out of	204000	2%
Number used as Logic:	5143	out of	204000	2%

Slice Logic Distribution:				
Number of LUT Flip Flop pairs used:	5162			
Number with an unused Flip Flop:	5017	out of	5162	97%
Number with an unused LUT:	19	out of	5162	0%
Number of fully used LUT-FF pairs:	126	out of	5162	2%
Number of unique control sets:	6			
IO Utilization:				
Number of IOs:	147			
Number of bonded IOBs:	147	out of	600	24%
IOB Flip Flops/Latches:	1			

Specific Feature Utilization:

-						
Number of	BUFG/BUFGCTRLs:	1	out	of	32	3%
Number of	DSP48E1s:	7	out	of	1120	0%

Partition Resource Summary:

-----

Timing Report

NOTE: THESE TIMING NUMBERS ARE ONLY A SYNTHESIS ESTIMATE.

FOR ACCURATE TIMING INFORMATION PLEASE REFER TO THE TRACE REPORT

GENERATED AFTER PLACE-and-ROUTE.

Clock Information:

\_\_\_\_\_

Clock Signal | Clock buffer(FF name) | Load | clk | BUFGP | 148 |

Asynchronous Control Signals Information:

No asynchronous control signals found in this design

Timing Summary:
----Speed Grade: -3

Minimum period: 51.909ns (Maximum Frequency: 19.264MHz) Minimum input arrival time before clock: 58.853ns Maximum output required time after clock: 0.515ns

Maximum combinational path delay: No path found

Timing Details:

-----

All values displayed in nanoseconds (ns)

Timing constraint: Default period analysis for Clock 'clk'

Clock period: 51.909ns (frequency: 19.264MHz)
Total number of paths / destination ports:

Delay: 51.909ns (Levels of Logic = 454)

Source: index\_16 (FF)
Destination: Mmult\_n00611 (DSP)
Source Clock: clk rising

Source Clock: clk rising Destination Clock: clk rising

Data Path: index 16 to Mmult n00611

Gate Net

Cell:in->out fanout Delay Delay Logical Name (Net Name)

-----

FDE:C->Q 4 0.232 0.293 index\_16 (index\_16)

DSP48E1:B16->PCOUT47 1 2.406 0.000 Mmult\_n0061

(Mmult n0061 PCOUT to Mmult n00611 PCIN 47)

DSP48E1:PCIN47->PCOUT47 1 1.064 0.000 Mmult n00611

(Mmult n00611 PCOUT to Mmult n00612 PCIN 47)

DSP48E1:PCIN47->P14 4 0.938 0.357 Mmult n00612 (n0061<31>)

LUT5:13->0 1 0.043 0.000

```
index[31] GND 7 o rem 19/Mcompar BUS 0002 INV 84 o lut<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0002_INV_84_o_lut<0>)
                             0.230 0.000
    MUXCY:S->O
index[31] GND 7 o rem 19/Mcompar BUS 0002 INV 84 o cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0002 INV 84 o cy<0>)
                                    0.000
    MUXCY:CI->O
                         1 0.013
index[31] GND 7 o rem 19/Mcompar BUS 0002 INV 84 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0002 INV 84 o cy<1>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0002 INV 84 o cy<2>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0002_INV_84_o_cy<2>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0002_INV_84_o_cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0002 INV 84 o cy<3>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0002 INV 84 o cy<4>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0002_INV_84_o_cy<4>)
                            0.013 0.000
    MUXCY:CI->O
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0002 INV 84 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0002 INV 84 o cy<5>)
    MUXCY:CI->O
                         2 0.147 0.293
index[31] GND 7 o rem 19/Mcompar BUS 0002 INV 84 o cy<6>
(index[31]_GND_7_o_rem_19/BUS_0002_INV_84_o)
    LUT3:I2->O
                          2
                            0.043 0.460
index[31] GND 7 o rem 19/Mmux a[31] GND 9 o MUX 219 o11
(index[31]_GND_7_o_rem_19/a[31]_GND_9_o_MUX_219_o)
    LUT5:I1->0
                            0.043
                        0
                                     0.000
index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o lutdi)
                         1 0.218 0.000
    MUXCY:DI->O
index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o cy<0>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0003 INV 147 o cy<1>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0003_INV_147_o_cy<1>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o cy<2>)
                             0.013 0.000
    MUXCY:CI->O
                          1
index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o cy<3>)
    MUXCY:CI->O
                       1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o cy<4>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0003_INV 147 o cy<5>)
    MUXCY:CI->O
                            0.147 0.312
index[31] GND 7 o rem 19/Mcompar BUS 0003 INV 147 o cy<6>
(index[31]_GND_7_o_rem_19/BUS_0003_INV_147_o)
    LUT3:I2->0
                          5 0.043 0.475
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 372 o1231
({\tt index[31]\_GND\_7\_o\_rem\_19/a[30]\_GND\_9\_o\_MUX\_342\_o})
                          0 0.043 0.000
    LUT4:I0->0
index[31] GND 7 o rem 19/Mcompar BUS 0004 INV 209 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0004 INV 209 o lutdi)
    MUXCY:DI->O
                  1 0.218
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0004 INV 209 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0004 INV 209 o cy<0>)
                  1 0.013
                                    0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0004 INV 209 o cy<1>
```

```
(index[31] GND 7 o rem 19/Mcompar BUS 0004 INV 209 o cy<1>)
    MUXCY:CI->O 1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0004 INV 209 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0004 INV 209 o cy<2>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0004 INV 209 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0004 INV 209 o cy<3>)
                  1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0004 INV 209 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0004 INV 209 o cy<4>)
    MUXCY:CI->O
                        1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0004 INV 209 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0004_INV_209_o_cy<5>)
    MUXCY:CI->O
                         7 0.147 0.317
index[31] GND 7 o rem 19/Mcompar BUS 0004 INV 209 o cy<6>
(index[31]_GND_7_o_rem_19/BUS_0004_INV_209_o)
    LUT3:I2->0
                          4 0.043 0.470
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 492 o1211
({\tt index[31]\_GND\_7\_o\_rem\_19/a[29]\_GND\_9\_o\_MUX\_463\_o})
                            0.043
    LUT4:I0->0
                        0
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o lutdi)
                         1 0.218 0.000
    MUXCY:DI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0005_INV_270_o_cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0005_INV_270_o_cy<0>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o cy<1>
(\verb"index[31]_GND_7_o_rem_19/Mcompar_BUS_0005_INV_270_o\_cy<1>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o cy<2>)
                            0.013 0.000
    MUXCY:CI->O
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o cy<3>
(index[31] GND 7 o rem_19/Mcompar_BUS_0005_INV_270_o_cy<3>)
    MUXCY:CI->O
                        1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o cy<4>)
                                    0.000
    MUXCY:CI->O
                  1 0.013
index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0005 INV 270 o cy<5>)
                      1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0005 INV 270 o cy<6>)
    MUXCY:CI->O
                        8 0.147 0.321
index[31]_GND_7_o_rem_19/Mcompar_BUS 0005 INV 270 o cy<7>
(index[31]_GND_7_o_rem_19/BUS_0005_INV_270_o)
    LUT3:I2->0
                          3 0.043 0.466
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 610 o1201
(index[31]_GND_7_o_rem_19/a[28]_GND_9_o_MUX_582_o)
                 0 0.043
    LUT4:I0->O
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o lutdi)
                                    0.000
    MUXCY:DI->O
                            0.218
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o cy<0>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0006_INV_330_o_cy<1>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0006 INV 330 o cy<1>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o cy<2>)
```

```
MUXCY:CI->O
                          1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0006_INV_330_o_cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0006 INV 330 o cy<3>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o cy<4>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o cy<5>)
                          1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0006 INV 330 o cy<6>)
    MUXCY:CI->O
                        14
                            0.147
                                    0.349
index[31]_GND_7_o_rem_19/Mcompar_BUS 0006 INV 330 o cy<7>
(index[31] GND 7 o rem 19/BUS 0006 INV 330 o)
                            0.043 0.466
    LUT3:I2->0
                          3
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 726 o1191
(index[31]_GND_7_o_rem_19/a[27]_GND_9_o_MUX_699_o)
                 0 0.043 0.000
    LUT4:I0->0
index[31] GND 7 o rem 19/Mcompar BUS 0007 INV 389 o lutdi
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0007 INV 389 o lutdi)
    MUXCY:DI->O
                  1 0.218 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0007 INV 389 o cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0007_INV_389_o_cy<0>)
                            0.013 0.000
    MUXCY:CI->O
                          1
index[31]_GND_7_o_rem_19/Mcompar_BUS 0007 INV 389 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0007 INV 389 o cy<1>)
                         1 0.013
                                    0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0007 INV 389 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0007 INV 389 o cy<2>)
    MUXCY:CI->O
                          1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0007 INV 389 o cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0007_INV_389_o_cy<3>)
                       1 0.013 0.000
    MUXCY:CI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0007_INV_389_o_cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0007 INV 389 o cy<4>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0007 INV 389 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0007_INV_389_o_cy<5>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0007 INV 389 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0007 INV 389 o cy<6>)
    MUXCY:CI->O
                            0.147 0.384
                       22
index[31] GND 7 o rem 19/Mcompar BUS 0007 INV 389 o cy<7>
(index[31]_GND_7_o_rem_19/BUS_0007_INV_389_o)
                            0.043 0.470
    LUT3:I2->0
                          4
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 840 o1181
(index[31] GND 7 o rem 19/a[26] GND 9 o MUX 814 o)
    LUT4:I0->0
                        0 0.043
                                     0.000
index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o lutdi
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0008 INV 447 o lutdi)
                  1 0.218 0.000
    MUXCY:DI->O
index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o cy<0>)
    MUXCY:CI->O
                            0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0008 INV 447 o cy<1>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0008_INV_447_o_cy<1>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o cy<2>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0008_INV_447_o_cy<2>)
```

1 0.013 0.000

MUXCY:CI->O

```
index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0008_INV_447_o_cy<3>)
    MUXCY:CI->O
                             0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0008 INV 447 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o cy<4>)
                                    0.000
    MUXCY:CI->O
                         1 0.013
index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o cy<5>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0008_INV_447_o_cy<6>)
    MUXCY:CI->O
                            0.013
                                    0.000
                          1
index[31]_GND_7_o_rem_19/Mcompar_BUS_0008_INV_447_o_cy<7>
(index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o cy<7>)
                        27 0.147 0.395
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0008 INV 447 o cy<8>
(index[31]_GND_7_o_rem_19/BUS_0008_INV_447_o)
    LUT3:I2->0
                          3 0.043 0.466
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 952 o1171
({\tt index[31]\_GND\_7\_o\_rem\_19/a[25]\_GND\_9\_o\_MUX\_927\_o})
    LUT4:I0->0
                         0 0.043
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o lutdi
(index[31] GND 7 o rem_19/Mcompar_BUS_0009_INV_504_o_lutdi)
    MUXCY:DI->O
                          1 0.218 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0009 INV 504 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<0>)
    MUXCY:CI->O
                       1 0.013
                                     0.000
index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<1>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<2>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0009 INV 504 o cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0009_INV_504_o_cy<3>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<4>)
                             0.013 0.000
    MUXCY:CI->O
                          1
index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<5>)
    MUXCY:CI->O
                       1 0.013
                                     0.000
index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<6>)
                          1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0009 INV 504 o cy<7>)
    MUXCY:CI->O
                             0.147 0.395
                        26
index[31] GND 7 o rem 19/Mcompar BUS 0009 INV 504 o cy<8>
(index[31]_GND_7_o_rem_19/BUS_0009_INV_504_o)
    LUT3:I2->0
                          4 0.043 0.470
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 1062 o1161
(index[31]_GND_7_o_rem_19/a[24]_GND_9_o_MUX_1038_o)
                          0 0.043 0.000
    LUT4:I0->0
index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o lutdi)
    MUXCY:DI->O
                  1 0.218
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0010 INV 560 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<0>)
                  1 0.013
                                    0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<1>
```

```
(index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<1>)
    MUXCY:CI->O 1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0010 INV 560 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<2>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0010 INV 560 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<3>)
                  1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<4>)
    MUXCY:CI->O
                        1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0010 INV 560 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0010_INV_560_o_cy<5>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<6>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0010_INV_560_o_cy<7>)
    MUXCY:CI->O
                       35
                            0.147
                                    0.397
index[31] GND 7 o rem 19/Mcompar BUS 0010 INV 560 o cy<8>
(index[31] GND 7 o rem 19/BUS 0010 INV 560 o)
                         3 0.043 0.466
    LUT3:I2->0
index[31]_GND_7_o_rem_19/Mmux_a[0]_GND_9_o_MUX_1170_o1151
(index[31]_GND_7_o_rem_19/a[23]_GND 9 o MUX 1147 o)
    LUT4:I0->O
                         0 0.043 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o lutdi
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0011_INV_615_o_lutdi)
    MUXCY:DI->O
                  1 0.218 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<0>)
                            0.013 0.000
    MUXCY:CI->O
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<1>
(index[31] GND 7 o rem_19/Mcompar_BUS_0011_INV_615_o_cy<1>)
    MUXCY:CI->O
                        1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<2>)
                                    0.000
    MUXCY:CI->O
                         1 0.013
index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0011 INV 615 o cy<3>)
    MUXCY:CI->O
                      1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<4>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0011 INV 615 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0011_INV_615_o_cy<5>)
                         1
    MUXCY:CI->O
                            0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0011 INV 615 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0011 INV 615 o cy<6>)
    MUXCY:CI->O
                  1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<7>
(index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<7>)
                                    0.396
    MUXCY:CI->O
                        32
                            0.147
index[31] GND 7 o rem 19/Mcompar BUS 0011 INV 615 o cy<8>
(index[31]_GND_7_o_rem_19/BUS_0011_INV_615_o)
                        4 0.043 0.470
    LUT3:I2->0
index[31]_GND_7_o_rem_19/Mmux_a[0]_GND 9 o MUX 1276 o1141
(index[31]_GND_7_o_rem_19/a[22]_GND_9_o_MUX_1254_o)
                 0 0.043 0.000
    LUT4:I0->O
index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o lutdi)
```

```
MUXCY:DI->O
                         1 0.218
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0012_INV_669_o_cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0012 INV 669 o cy<0>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<1>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<2>)
                          1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<3>)
                  1 0.013
    MUXCY:CI->O
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<4>)
                                    0.000
    MUXCY:CI->O
                         1 0.013
index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0012_INV_669_o_cy<5>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0012 INV 669 o cy<6>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0012_INV_669_o_cy<7>)
                            0.013 0.000
    MUXCY:CI->O
                         1
index[31]_GND_7_o_rem_19/Mcompar_BUS 0012 INV 669 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<8>)
                            0.147
                                    0.398
    MUXCY:CI->O
                       43
index[31] GND 7 o rem 19/Mcompar BUS 0012 INV 669 o cy<9>
(index[31]_GND_7_o_rem_19/BUS_0012_INV_669_o)
                            0.043 0.466
    LUT3:I2->0
                          3
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 1380 o1131
(index[31]_GND_7_o_rem_19/a[21]_GND_9_o_MUX_1359_o)
                            0.043
    LUT4:I0->0
                                    0.000
                        0
index[31]_GND_7_o_rem_19/Mcompar_BUS_0013_INV_722_o_lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0013 INV 722 o lutdi)
    MUXCY:DI->O
                         1 0.218 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0013 INV 722 o cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0013_INV_722_o_cy<0>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0013 INV 722 o cy<1>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0013_INV_722_o_cy<1>)
    MUXCY:CI->O
                 1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0013 INV 722 o cy<2>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0013_INV_722_o_cy<2>)
    MUXCY:CI->O
                         1
                            0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0013 INV 722 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0013 INV 722 o cy<3>)
    MUXCY:CI->O
                        1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0013 INV 722 o cy<4>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0013 INV 722 o cy<4>)
    MUXCY:CI->0 1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0013 INV 722 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0013 INV 722 o cy<5>)
    MUXCY:CI->O
                            0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0013 INV 722 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0013_INV_722_o_cy<6>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0013 INV 722 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0013_INV_722_o_cy<7>)
                   1 0.013 0.000
    MUXCY:CI->O
```

```
index[31] GND 7 o rem 19/Mcompar BUS 0013 INV 722 o cy<8>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0013_INV_722_o_cy<8>)
    MUXCY:CI->O
                              0.147 0.397
                         38
index[31]_GND_7_o_rem_19/Mcompar_BUS 0013 INV 722 o cy<9>
(index[31]_GND_7_o_rem_19/BUS_0013_INV_722_o)
                         4 0.043 0.470
    LUT3:I2->0
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 1482 o1121
(index[31]_GND_7_o_rem_19/a[20]_GND_9_o_MUX_1462_o)
    LUT4:I0->0
                         0 0.043 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o lutdi)
    MUXCY:DI->O
                         1 0.218
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0014_INV_774_o_cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<0>)
                  1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<1>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0014_INV_774_o_cy<1>)
                             0.013 0.000
    MUXCY:CI->O
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<2>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<3>
(index[31] GND 7 o rem_19/Mcompar_BUS_0014_INV_774_o_cy<3>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0014 INV 774 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<4>)
    MUXCY:CI->O
                       1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<5>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<6>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0014 INV 774 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0014_INV_774_o_cy<7>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS 0014 INV 774 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<8>)
                             0.147 0.399
    MUXCY:CI->O
                        51
index[31] GND 7 o rem 19/Mcompar BUS 0014 INV 774 o cy<9>
(index[31]_GND_7_o_rem_19/BUS_0014_INV_774_o)
    LUT3:I2->0
                         3
                            0.043
                                    0.466
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 1582 o1101
(index[31] GND 7 o rem 19/a[19] GND 9 o MUX 1563 o)
                         0 0.043 0.000
    LUT4:I0->O
index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o lutdi
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0015 INV 825 o lutdi)
    MUXCY:DI->O
                            0.218 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<0>)
    MUXCY:CI->O
                         1
                            0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<1>
(\verb"index[31]_GND_7_o_rem_19/Mcompar_BUS_0015_INV_825_o\_cy<1>)
                          1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<2>)
    MUXCY:CI->O
                  1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0015 INV 825 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<3>)
                                    0.000
                  1 0.013
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<4>
```

```
(index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<4>)
    MUXCY:CI->O 1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0015 INV 825 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<5>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0015 INV 825 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<6>)
                  1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<7>
(index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<7>)
    MUXCY:CI->O
                        1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0015 INV 825 o cy<8>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0015_INV_825_o_cy<8>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<9>
(index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<9>)
                            0.147 0.398
    MUXCY:CI->O
                         44
index[31] GND 7 o rem 19/Mcompar BUS 0015 INV 825 o cy<10>
(index[31]_GND_7_o_rem_19/BUS_0015_INV_825_o)
    LUT3:I2->0
                        4
                            0.043
                                    0.470
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 1680 o191
(index[31] GND 7 o rem 19/a[18] GND 9 o MUX 1662 o)
                         0
                            0.043 0.000
    LUT4:I0->0
index[31]_GND_7_o_rem_19/Mcompar_BUS_0016_INV_875_o_lutdi
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0016_INV_875_o_lutdi)
    MUXCY:DI->O
                         1 0.218 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0016_INV_875_o_cy<0>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<1>)
                            0.013 0.000
    MUXCY:CI->O
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<2>
(index[31] GND 7 o rem_19/Mcompar_BUS_0016_INV_875_o_cy<2>)
                         1 0.013
    MUXCY:CI->O
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<3>)
                                    0.000
    MUXCY:CI->O
                         1 0.013
index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<4>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0016 INV 875 o cy<4>)
    MUXCY:CI->O
                       1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<5>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0016_INV_875_o_cy<6>)
    MUXCY:CI->O
                          1
                            0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0016 INV 875 o cy<7>
(index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<7>)
    MUXCY:CI->O
                  1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<8>)
                                    0.000
    MUXCY:CI->O
                            0.013
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<9>
(index[31] GND 7 o rem 19/Mcompar BUS 0016 INV 875 o cy<9>)
                            0.147 0.400
    MUXCY:CI->O
                        59
index[31]_GND_7_o_rem_19/Mcompar_BUS_0016_INV_875_o_cy<10>
(index[31]_GND_7_o_rem_19/BUS_0016_INV_875_o)
    LUT3:I2->O
                          3 0.043 0.466
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 1776 o181
(index[31] GND 7 o rem 19/a[17] GND 9 o MUX 1759 o)
```

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LUT4:I0->0
                          0
                            0.043
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0017_INV_924_o_lutdi
({\tt index[31]\_GND\_7\_o\_rem\_19/Mcompar~BUS~0017~INV~924~o~lutdi})
                         1 0.218 0.000
    MUXCY:DI->O
index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<0>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<1>)
                          1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<2>)
                  1 0.013
    MUXCY:CI->O
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<3>)
                                    0.000
    MUXCY:CI->O
                         1 0.013
index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<4>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0017_INV_924_o_cy<4>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0017 INV 924 o cy<5>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0017_INV_924_o_cy<6>)
    MUXCY:CI->O
                            0.013 0.000
                          1
index[31]_GND_7_o_rem_19/Mcompar_BUS 0017 INV 924 o cy<7>
(index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<7>)
                        1 0.013
                                    0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<8>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0017 INV 924 o cy<9>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0017_INV_924_o_cy<9>)
                            0.147 0.399
    MUXCY:CI->O
                       50
index[31]_GND_7_o_rem_19/Mcompar_BUS_0017_INV_924_o_cy<10>
(index[31]_GND_7_o_rem_19/BUS 0017 INV 924 o)
    LUT3:I2->0
                         4 0.043 0.470
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 1870 o171
(index[31]_GND_7_o_rem_19/a[16]_GND_9_o_MUX_1854_o)
    LUT4:I0->O
                          0 0.043 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o lutdi
(\verb"index[31]_GND_7_o_rem_19/Mcompar_BUS_0018_INV_972\_o_lutdi)
    MUXCY:DI->O
                  1 0.218 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0018_INV_972_o_cy<0>)
    MUXCY:CI->O
                          1
                             0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<1>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0018 INV 972 o cy<2>
(index[31]_GND_7_o_rem_19/Mcompar_BUS 0018 INV 972 o cy<2>)
                1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<3>)
    MUXCY:CI->O
                            0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0018 INV 972 o cy<4>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0018_INV_972_o_cy<4>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0018_INV_972_o_cy<5>)
                   1 0.013 0.000
    MUXCY:CI->O
```

```
index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0018_INV_972_o_cy<6>)
    MUXCY:CI->O
                              0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS 0018 INV 972 o cy<7>
(index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<7>)
                             0.013 0.000
    MUXCY:CI->O
                          1
index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<8>)
    MUXCY:CI->O
                         1 0.013
                                     0.000
index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<9>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0018_INV_972_o_cy<9>)
    MUXCY:CI->O
                          1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0018_INV_972_o_cy<10>
(index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<10>)
                        67 0.147 0.401
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0018 INV 972 o cy<11>
(index[31]_GND_7_o_rem_19/BUS_0018_INV_972_o)
    LUT3:I2->0
                          3 0.043 0.466
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 1962 o161
({\tt index[31]\_GND\_7\_o\_rem\_19/a[15]\_GND\_9\_o\_MUX\_1947\_o})
    LUT4:I0->0
                          0 0.043
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o lutdi
(index[31] GND 7 o rem_19/Mcompar_BUS_0019_INV_1019_o_lutdi)
    MUXCY:DI->O
                          1 0.218 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0019 INV 1019 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<0>)
    MUXCY:CI->O
                       1 0.013
                                     0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0019 INV 1019 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<1>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<2>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0019 INV 1019 o cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0019_INV_1019_o_cy<3>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<4>)
                             0.013 0.000
    MUXCY:CI->O
                          1
index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<5>)
    MUXCY:CI->O
                         1 0.013
                                     0.000
index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<6>)
                          1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0019 INV 1019 o cy<7>)
    MUXCY:CI->O
                         1
                             0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<8>)
    MUXCY:CI->O
                          1
                             0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<9>
(\verb"index[31]_GND_7_o_rem_19/Mcompar_BUS_0019_INV_1019_o\_cy<9>)
                          1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<10>
(index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<10>)
    MUXCY:CI->O
                        56
                             0.147
                                     0.400
index[31] GND 7 o rem 19/Mcompar BUS 0019 INV 1019 o cy<11>
(index[31] GND 7 o rem 19/BUS 0019 INV 1019 o)
                             0.043 0.470
                   4
    LUT3:I2->0
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2052 o151
```

```
(index[31]_GND_7_o_rem_19/a[14]_GND_9_o_MUX_2038_o)
    LUT4:I0->0 0.043 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0020 INV 1065 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o lutdi)
    MUXCY:DI->O
                1 0.218
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0020 INV 1065 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<0>)
                  1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<1>)
    MUXCY:CI->O
                        1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<2>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0020_INV_1065_o_cy<2>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<3>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<4>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0020 INV 1065 o cy<4>)
    MUXCY:CI->O
                  1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<5>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0020_INV_1065_o_cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0020 INV 1065 o cy<6>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0020_INV_1065_o_cy<7>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<8>)
                            0.013 0.000
    MUXCY:CI->O
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<9>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0020_INV_1065_o_cy<9>)
    MUXCY:CI->O
                        1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<10>
(index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<10>)
                       75 0.147
                                   0.403
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0020 INV 1065 o cy<11>
(index[31]_GND_7_o_rem_19/BUS_0020_INV 1065 o)
    LUT3:12->0
                         3 0.043 0.466
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2140 o141
(index[31]_GND_7_o_rem_19/a[13]_GND 9 o MUX 2127 o)
                         0 0.043 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o lutdi
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0021_INV_1110_o_lutdi)
    MUXCY:DI->O
                          1 0.218 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0021 INV 1110 o cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0021 INV 1110 o cy<0>)
    MUXCY:CI->O
                  1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<1>)
    MUXCY:CI->O
                            0.013
                                    0.000
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<2>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0021_INV_1110_o_cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<3>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<4>)
```

```
MUXCY:CI->O
                          1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0021_INV_1110_o_cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0021 INV 1110 o cy<5>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<6>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0021 INV 1110 o cy<7>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<8>)
                         1 0.013
    MUXCY:CI->O
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<9>
(index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<9>)
                                    0.000
    MUXCY:CI->O
                         1 0.013
index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<10>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0021_INV_1110_o_cy<10>)
    MUXCY:CI->O
                            0.147 0.401
                         62
index[31] GND 7 o rem 19/Mcompar BUS 0021 INV 1110 o cy<11>
(index[31]_GND_7_o_rem_19/BUS 0021 INV 1110 o)
    LUT3:I2->0
                         4 0.043 0.470
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2226 o131
(index[31]_GND_7_o_rem_19/a[12]_GND_9_o_MUX_2214_o)
                             0.043 0.000
    LUT4:I0->0
                          0
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o lutdi)
                         1 0.218
                                    0.000
    MUXCY:DI->O
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<0>)
    MUXCY:CI->O
                          1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<1>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0022_INV_1154_o_cy<1>)
                       1 0.013 0.000
    MUXCY:CI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0022_INV_1154_o_cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<2>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<3>
(\verb"index[31]_GND_7_o_rem_19/Mcompar_BUS_0022_INV 1154 o cy<3>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<4>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0022 INV 1154 o cy<4>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0022_INV_1154_o_cy<5>)
    MUXCY:CI->O
                          1
                             0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<6>)
    MUXCY:CI->O
                         1 0.013
                                     0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0022 INV 1154 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0022 INV 1154 o cy<7>)
                  1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<8>)
    MUXCY:CI->O
                             0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0022 INV 1154 o cy<9>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0022_INV_1154_o_cy<9>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<10>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0022_INV_1154_o_cy<10>)
                         1 0.013 0.000
    MUXCY:CI->O
```

```
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<11>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0022_INV_1154_o_cy<11>)
    MUXCY:CI->O
                              0.147 0.404
                         83
index[31] GND 7 o rem 19/Mcompar BUS 0022 INV 1154 o cy<12>
(index[31]_GND_7_o_rem_19/BUS_0022_INV_1154_o)
                          3 0.043 0.466
    LUT3:I2->0
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2310 o122
(index[31]_GND_7_o_rem_19/a[11]_GND_9_o_MUX_2299_o)
    LUT4:I0->0
                         0 0.043 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o lutdi)
    MUXCY:DI->O
                         1 0.218
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0023 INV 1197 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<0>)
                  1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<1>
(\verb"index[31]_GND_7_o_rem_19/Mcompar_BUS_0023_INV 1197 o cy<1>)
                             0.013 0.000
    MUXCY:CI->O
                          1
index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<2>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<3>
(index[31] GND 7 o rem_19/Mcompar_BUS_0023_INV_1197_o_cy<3>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0023 INV 1197 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<4>)
    MUXCY:CI->O
                       1 0.013
                                     0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0023 INV 1197 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<5>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<6>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0023 INV 1197 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0023_INV_1197_o_cy<7>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<8>)
                             0.013 0.000
    MUXCY:CI->O
                          1
index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<9>
(index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<9>)
    MUXCY:CI->O
                         1 0.013
                                     0.000
index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<10>
(index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<10>)
                          1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<11>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0023 INV 1197 o cy<11>)
    MUXCY:CI->O
                             0.147 0.402
                        68
index[31] GND 7 o rem 19/Mcompar BUS 0023 INV 1197 o cy<12>
(index[31]_GND_7_o_rem_19/BUS_0023_INV_1197_o)
    LUT3:I2->0
                          4 0.043 0.470
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2392 o111
(index[31]_GND_7_o_rem_19/a[10]_GND_9_o_MUX_2382_o)
                          0 0.043 0.000
    LUT4:I0->0
index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o lutdi)
    MUXCY:DI->O
                  1 0.218
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0024 INV 1239 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<0>)
                                    0.000
                  1 0.012
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<1>
```

```
(index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<1>)
    MUXCY:CI->O 1 0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0024 INV 1239 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<2>)
    MUXCY:CI->O
                        1 0.012
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0024 INV 1239 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<3>)
                  1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<4>)
    MUXCY:CI->O
                        1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0024_INV_1239_o_cy<5>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<6>)
                          1 \quad 0.012 \quad 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0024 INV 1239 o cy<7>)
    MUXCY:CI->O
                  1 0.012
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<8>)
                         1 0.012 0.000
    MUXCY:CI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0024_INV_1239_o_cy<9>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0024 INV 1239 o cy<9>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<10>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0024_INV_1239_o_cy<10>)
    MUXCY:CI->O
                  1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<11>
(index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<11>)
    MUXCY:CI->O
                        91
                            0.148 0.405
index[31] GND 7 o rem 19/Mcompar BUS 0024 INV 1239 o cy<12>
(index[31]_GND_7_o_rem_19/BUS_0024_INV_1239_o)
                            0.043 0.466
    LUT3:I2->0
                         3
index[31]_GND_7_o_rem_19/Mmux_a[0]_GND 9 o MUX 2472 o1301
(index[31] GND 7 o rem 19/a[9] GND 9 o MUX 2463 o)
                0 0.043 0.000
    LUT4:I0->0
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o lutdi
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0025_INV_1280_o_lutdi)
                       1 0.218 0.000
    MUXCY:DI->O
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<0>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0025 INV 1280 o cy<1>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0025_INV_1280_o_cy<1>)
    MUXCY:CI->O
                          1
                            0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0025 INV 1280 o cy<2>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0025 INV 1280 o cy<2>)
    MUXCY:CI->O
                  1 0.012
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<3>)
                                    0.000
    MUXCY:CI->O
                            0.012
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<4>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0025_INV_1280_o_cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<5>)
    MUXCY:CI->O
                  1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<6>)
```

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MUXCY:CI->O
                          1 0.012
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0025_INV_1280_o_cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0025 INV 1280 o cy<7>)
                         1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<8>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<9>
(index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<9>)
    MUXCY:CI->O
                          1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<10>
(index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<10>)
                         1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<11>
(index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<11>)
                                    0.000
    MUXCY:CI->O
                         1 0.012
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<12>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0025_INV_1280_o_cy<12>)
    MUXCY:CI->O
                        74
                            0.148 0.403
index[31] GND 7 o rem 19/Mcompar BUS 0025 INV 1280 o cy<13>
(index[31]_GND_7_o_rem_19/BUS 0025 INV 1280 o)
    LUT3:I2->0
                         4 0.043 0.470
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2550 o1291
(index[31]_GND_7_o_rem_19/a[8]_GND_9_o_MUX_2542_o)
                            0.043 0.000
    LUT4:I0->0
                          0
index[31]_GND_7_o_rem_19/Mcompar_BUS_0026 INV 1320 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o lutdi)
                         1 0.218
                                    0.000
    MUXCY:DI->O
index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<0>)
    MUXCY:CI->O
                         1 0.012
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<1>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0026_INV_1320_o_cy<1>)
                      1 0.012 0.000
    MUXCY:CI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0026_INV_1320_o_cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<2>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0026_INV 1320 o cy<3>)
    MUXCY:CI->O
                          1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<4>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0026_INV_1320_o_cy<4>)
    MUXCY:CI->O
                  1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0026_INV_1320_o_cy<5>)
    MUXCY:CI->O
                          1
                             0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<6>)
    MUXCY:CI->O
                         1 0.012
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0026 INV 1320 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0026 INV 1320 o cy<7>)
                  1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<8>)
    MUXCY:CI->O
                            0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0026 INV 1320 o cy<9>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0026_INV_1320_o_cy<9>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<10>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0026_INV_1320_o_cy<10>)
                         1 0.012 0.000
    MUXCY:CI->O
```

```
index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<11>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0026_INV_1320_o_cy<11>)
    MUXCY:CI->O
                              0.012 0.000
                          1
index[31]_GND_7_o_rem_19/Mcompar_BUS_0026 INV 1320 o cy<12>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0026 INV 1320 o cy<12>)
                                    0.406
    MUXCY:CI->O
                        99
                             0.148
index[31] GND 7 o rem 19/Mcompar BUS 0026 INV 1320 o cy<13>
(index[31]_GND_7_o_rem_19/BUS_0026_INV_1320_o)
                             0.043 0.466
    LUT3:I2->0
                          3
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2626 o1281
(index[31]_GND_7_o_rem_19/a[7]_GND_9_o_MUX_2619_o)
    LUT4:I0->0
                         0 0.043 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0027_INV_1359_o_lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o lutdi)
                  1 0.218 0.000
    MUXCY:DI->O
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<0>
(\verb"index[31]_GND_7_o_rem_19/Mcompar_BUS_0027_INV 1359 o cy<0>)
                             0.012 0.000
    MUXCY:CI->O
                          1
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<1>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<2>
(index[31] GND 7 o rem_19/Mcompar_BUS_0027_INV_1359_o_cy<2>)
    MUXCY:CI->O
                          1 0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0027 INV 1359 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<3>)
    MUXCY:CI->O
                       1 0.012
                                     0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0027 INV 1359 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<4>)
                         1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<5>)
    MUXCY:CI->O
                          1 0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0027 INV 1359 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0027_INV_1359_o_cy<6>)
                         1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<7>
(index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<7>)
                             0.012 0.000
    MUXCY:CI->O
                          1
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<8>)
    MUXCY:CI->O
                         1 0.012
                                     0.000
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<9>
(index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<9>)
                          1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<10>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0027 INV 1359 o cy<10>)
    MUXCY:CI->O
                         1
                             0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<11>
(index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<11>)
    MUXCY:CI->O
                          1
                             0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<12>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0027_INV_1359_o_cy<12>)
                            0.148 0.403
    MUXCY:CI->O
                         80
index[31] GND 7 o rem 19/Mcompar BUS 0027 INV 1359 o cy<13>
(index[31]_GND_7_o_rem_19/BUS_0027_INV_1359_o)
    LUT3:I2->0
                         4
                            0.043
                                     0.470
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2700 o1271
(index[31] GND 7 o rem 19/a[6] GND 9 o MUX 2694 o)
                  0 0.043 0.000
    LUT4:I0->0
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o lutdi
```

```
(index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o lutdi)
    MUXCY:DI->0 1 0.218 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0028 INV 1397 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<0>)
    MUXCY:CI->O
                         1 0.012
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0028 INV 1397 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<1>)
                  1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<2>)
    MUXCY:CI->O
                        1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0028_INV_1397_o_cy<3>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<4>)
                          1 \quad 0.012 \quad 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0028_INV_1397_o_cy<5>)
    MUXCY:CI->O
                  1 0.012
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<6>)
                         1 0.012 0.000
    MUXCY:CI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0028_INV_1397_o_cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0028 INV 1397 o cy<7>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<8>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0028_INV_1397_o_cy<8>)
    MUXCY:CI->O
                  1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<9>
(index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<9>)
                            0.012 0.000
    MUXCY:CI->O
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<10>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0028_INV_1397_o_cy<10>)
                        1 0.012
    MUXCY:CI->O
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<11>
(index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<11>)
                  1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<12>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0028 INV 1397 o cy<12>)
                      1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<13>
(index[31] GND 7 o rem 19/Mcompar BUS 0028 INV 1397 o cy<13>)
    MUXCY:CI->O
                       107 0.148 0.408
index[31]_GND_7_o_rem_19/Mcompar_BUS_0028 INV 1397 o cy<14>
(index[31]_GND_7_o_rem_19/BUS_0028_INV_1397_o)
    LUT3:I2->0
                          3 0.043 0.466
index[31]_GND_7_o_rem_19/Mmux_a[0]_GND 9 o MUX 2772 o1261
(index[31]_GND_7_o_rem_19/a[5]_GND_9_o_MUX_2767_o)
    LUT4:I0->O
                 0 0.043
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o lutdi)
                                    0.000
    MUXCY:DI->O
                            0.218
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<0>
(index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<0>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0029_INV_1434_o_cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<1>)
    MUXCY:CI->O
                  1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<2>)
```

```
MUXCY:CI->O
                          1 0.012
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0029_INV_1434_o_cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0029 INV 1434 o cy<3>)
                         1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<4>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<5>)
                          1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<6>)
                         1 0.012
    MUXCY:CI->O
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<7>
(index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<7>)
                                    0.000
    MUXCY:CI->O
                         1 0.012
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<8>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0029_INV_1434_o_cy<8>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<9>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0029 INV 1434 o cy<9>)
    MUXCY:CI->O
                  1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<10>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0029_INV_1434_o_cy<10>)
    MUXCY:CI->O
                            0.012 0.000
                          1
index[31]_GND_7_o_rem_19/Mcompar_BUS_0029 INV 1434 o cy<11>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0029_INV_1434_o_cy<11>)
                         1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<12>
(index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<12>)
    MUXCY:CI->O
                         1 0.012
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0029 INV 1434 o cy<13>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0029_INV_1434_o_cy<13>)
                       86
                            0.148 0.404
    MUXCY:CI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0029_INV 1434 o cy<14>
(index[31]_GND_7_o_rem_19/BUS 0029 INV 1434 o)
    LUT3:I2->0
                         4 0.043 0.470
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2842 o1251
(index[31]_GND_7_o_rem_19/a[4]_GND_9_o_MUX_2838_o)
    LUT4:I0->O
                          0 0.043 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o lutdi
(\verb"index[31]_GND_7_o_rem_19/Mcompar_BUS_0030_INV_1470_o_lutdi)
    MUXCY:DI->O
                  1 0.218 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0030_INV_1470_o_cy<0>)
    MUXCY:CI->O
                          1
                             0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<1>)
    MUXCY:CI->O
                         1 0.012
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0030 INV 1470 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<2>)
                  1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<3>)
    MUXCY:CI->O
                            0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0030 INV 1470 o cy<4>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0030_INV_1470_o_cy<4>)
                         1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0030_INV_1470_o_cy<5>)
                   1 0.012 0.000
    MUXCY:CI->O
```

```
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0030_INV_1470_o_cy<6>)
    MUXCY:CI->O
                              0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0030 INV 1470 o cy<7>
(index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<7>)
                            0.012 0.000
    MUXCY:CI->O
                          1
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<8>)
    MUXCY:CI->O
                         1 0.012
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<9>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0030_INV_1470_o_cy<9>)
    MUXCY:CI->O
                         1 0.012
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0030 INV 1470 o cy<10>
(index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<10>)
                  1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<11>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0030_INV_1470_o_cy<11>)
                             0.012 0.000
    MUXCY:CI->O
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<12>
(index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<12>)
    MUXCY:CI->O
                         1 0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<13>
(index[31] GND 7 o rem 19/Mcompar_BUS_0030_INV_1470_o_cy<13>)
    MUXCY:CI->O
                        116
                            0.148 0.409
index[31] GND 7 o rem 19/Mcompar BUS 0030 INV 1470 o cy<14>
(index[31] GND 7 o rem 19/BUS 0030 INV 1470 o)
    LUT3:I2->0
                             0.043
                                     0.470
                         4
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2910 o1241
(index[31] GND 7 o rem 19/a[3] GND 9 o MUX 2907 o)
                         0 0.043 0.000
    LUT4:I0->0
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o lutdi
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0031_INV_1505_o_lutdi)
    MUXCY:DI->O
                          1 0.218 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0031 INV 1505 o cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0031_INV_1505_o_cy<0>)
                         1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<1>
(index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<1>)
                             0.012 0.000
    MUXCY:CI->O
                          1
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<2>)
    MUXCY:CI->O
                         1 0.012
                                     0.000
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<3>
(index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<3>)
                          1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<4>
(\verb"index[31]_GND_7_o_rem_19/Mcompar_BUS_0031_INV 1505 o cy<4>)
    MUXCY:CI->O
                         1
                             0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<5>
(index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<5>)
    MUXCY:CI->O
                          1
                             0.012 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<6>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0031_INV_1505_o_cy<6>)
                          1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<7>
(index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<7>)
    MUXCY:CI->O
                  1 0.012
                                     0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0031 INV 1505 o cy<8>
(index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<8>)
                  1 0.012
                                    0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<9>
```

```
(index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<9>)
    MUXCY:CI->O 1 0.012 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0031 INV 1505 o cy<10>
(index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<10>)
    MUXCY:CI->O
                        1 0.012
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0031 INV 1505 o cy<11>
(index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<11>)
                  1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<12>
(index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<12>)
                      1 0.012 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<13>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0031_INV_1505_o_cy<13>)
    MUXCY:CI->O
                       119 0.148 0.409
index[31] GND 7 o rem 19/Mcompar BUS 0031 INV 1505 o cy<14>
(index[31]_GND_7_o_rem_19/BUS_0031_INV_1505_o)
    LUT3:I2->0
                          3 0.043 0.466
index[31] GND 7 o rem 19/Mmux a[0] GND 9 o MUX 2976 o1221
(index[31]_GND_7_o_rem_19/a[2]_GND_9_o_MUX_2974_o)
                       0 0.043
    LUT4:I0->0
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o lutdi)
                         1 0.218 0.000
    MUXCY:DI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0032_INV_1539_o_cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0032 INV 1539 o cy<0>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<1>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0032_INV_1539_o_cy<1>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<2>
(index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<2>)
                            0.013 0.000
    MUXCY:CI->O
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0032_INV_1539_o_cy<3>)
                        1 0.013
                                    0.000
    MUXCY:CI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0032 INV 1539 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<4>)
                 1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0032_INV_1539_o_cy<5>)
    MUXCY:CI->O
                      1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<6>)
    MUXCY:CI->O
                        1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0032 INV 1539 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0032_INV_1539_o_cy<7>)
    MUXCY:CI->O
                          1
                            0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<8>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0032 INV 1539 o cy<8>)
    MUXCY:CI->O
                  1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<9>
(index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<9>)
                                    0.000
    MUXCY:CI->O
                            0.013
                         1
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<10>
(index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<10>)
    MUXCY:CI->O
                        1 0.013 0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0032_INV_1539_o_cy<11>
(index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<11>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<12>
(index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<12>)
```

```
MUXCY:CI->O
                         1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0032_INV_1539_o_cy<13>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0032 INV 1539 o cy<13>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<14>
(index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<14>)
    MUXCY:CI->O
                        80
                            0.148 0.403
index[31] GND 7 o rem 19/Mcompar BUS 0032 INV 1539 o cy<15>
(index[31]_GND_7_o_rem_19/BUS_0032_INV_1539_o)
                          2 0.043 0.461
    LUT3:I2->0
index[31] GND 7 o rem 19/Mmux a[0] a[31] MUX 3040 o1111
(index[31]_GND_7_o_rem_19/a[1]_a[31]_MUX_3039_o)
                        0 0.043 0.000
    LUT4:I0->0
index[31]_GND_7_o_rem_19/Mcompar_BUS_0033 INV 1572 o lutdi
(index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o lutdi)
                                    0.000
                         1 0.218
    MUXCY:DI->O
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<0>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033_INV_1572_o_cy<0>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<1>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033 INV 1572 o cy<1>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<2>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033_INV_1572_o_cy<2>)
    MUXCY:CI->O
                            0.013 0.000
                         1
index[31]_GND_7_o_rem_19/Mcompar_BUS_0033 INV 1572 o cy<3>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033_INV_1572_o_cy<3>)
                         1 0.013
                                    0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<4>
(index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<4>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<5>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033_INV_1572_o_cy<5>)
                      1 0.013 0.000
    MUXCY:CI->O
index[31]_GND_7_o_rem_19/Mcompar_BUS_0033_INV_1572_o_cy<6>
(index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<6>)
    MUXCY:CI->O
                         1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<7>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033_INV_1572_o_cy<7>)
    MUXCY:CI->O
                          1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<8>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033 INV 1572 o cy<8>)
    MUXCY:CI->O
                  1 0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<9>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033_INV_1572_o_cy<9>)
    MUXCY:CI->O
                         1
                             0.013 0.000
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<10>
(index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<10>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
index[31]_GND_7_o_rem_19/Mcompar_BUS_0033 INV 1572 o cy<11>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033 INV 1572 o cy<11>)
                 1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<12>
(index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<12>)
    MUXCY:CI->O
                            0.013 0.000
                         1
index[31]_GND_7_o_rem_19/Mcompar_BUS_0033 INV 1572 o cy<13>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033_INV_1572_o_cy<13>)
                         1 0.013 0.000
    MUXCY:CI->O
index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<14>
(index[31]_GND_7_o_rem_19/Mcompar_BUS_0033_INV_1572_o_cy<14>)
                       21 0.148 0.380
    MUXCY:CI->O
```

```
(index[31]_GND_7_o_rem_19/BUS_0033_INV_1572_o)
    LUT3:12->0
                       1 0.043 0.000 GND 7 o index[31] equal 21 o<30> wg lut<0>
(GND 7 o index[31] equal 21 o<30> wg lut<0>)
                                        GND 7 o index[31] equal 21 o<30> wg cy<0>
                          0.230
                                 0.000
    MUXCY:S->O
(GND 7 o index[31] equal 21 o<30> wg cy<0>)
    MUXCY:CI->O
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<1>
(GND 7 o index[31] equal 21 o<30> wg cy<1>)
                                        GND 7 o index[31] equal 21 o<30> wg cy<2>
    MUXCY:CI->O
                       1
                          0.013
(GND_7_o_index[31]_equal_21_o<30>_wg_cy<2>)
    MUXCY:CI->O
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<3>
(GND 7 o index[31] equal 21 o<30> wg cy<3>)
    MUXCY:CI->O
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<4>
(GND 7 o index[31] equal 21 o<30> wg cy<4>)
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<5>
    MUXCY:CI->O
(GND 7 o index[31] equal 21 o<30> wg cy<5>)
    MUXCY:CI->O
                      1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<6>
(GND_7_o_index[31]_equal_21_o<30>_wg_cy<6>)
    MUXCY:CI->O
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<7>
(GND 7 o index[31] equal 21 o<30> wg cy<7>)
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<8>
    MUXCY:CI->O
(GND 7 o index[31] equal 21 o<30> wg cy<8>)
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<9>
    MUXCY:CI->O
(GND_7_o_index[31]_equal_21_o<30>_wg_cy<9>)
    MUXCY:CI->O
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<10>
(GND_7_o_index[31]_equal_21_o<30>_wg_cy<10>)
    MUXCY:CI->O
                       1 0.013
                                        GND 7 o index[31] equal 21 o<30> wg cy<11>
                                 0.000
(GND 7 o index[31] equal 21 o<30> wg cy<11>)
    MUXCY:CI->O
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<12>
(GND 7 o index[31] equal 21 o<30> wg cy<12>)
                       1 0.013
                                        GND 7 o index[31] equal 21 o<30> wg cy<13>
    MUXCY:CI->O
                                 0.000
(GND 7 o index[31] equal 21 o<30> wg cy<13>)
                                        GND 7 o index[31] equal 21 o<30> wg cy<14>
    MUXCY:CI->O
                       1 0.013 0.000
(GND 7 o index[31] equal 21 o<30> wg cy<14>)
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<15>
    MUXCY:CI->O
(GND 7 o index[31] equal 21 o<30> wg cy<15>)
    MUXCY:CI->O
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<16>
(GND 7 o index[31] equal 21 o<30> wg cy<16>)
                      1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<17>
    MUXCY:CI->O
(GND_7_o_index[31]_equal_21_o<30>_wg_cy<17>)
    MUXCY:CI->O
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<18>
(GND 7 o index[31] equal 21 o<30> wg cy<18>)
    MUXCY:CI->O
                       1 0.013 0.000
                                        GND 7 o index[31] equal 21 o<30> wg cy<19>
(GND 7 o index[31] equal 21 o<30> wg cy<19>)
                                        GND 7 o index[31] equal 21 o<30> wg cy<20>
    MUXCY:CI->O
                           0.013
                                 0.401
                      64
(GND 7 o index[31] equal 21 o)
                       5 0.043
    LUT2:I1->0
                                  0.298 Mcount index eqn 311 (Mcount index eqn 31)
                          0.275
    DSP48E1:B14
                                        Mmult n00611
   Total
                          51.909ns (23.661ns logic, 28.249ns route)
                                  (45.6% logic, 54.4% route)
______
Timing constraint: Default OFFSET IN BEFORE for Clock 'clk'
 Total number of paths / destination ports:
______
                  58.853ns (Levels of Logic = 435)
Offset:
 Source:
                  q in<0> (PAD)
              err (FF)
```

index[31] GND 7 o rem 19/Mcompar BUS 0033 INV 1572 o cy<15>

Destination:

Destination Clock: clk rising

```
Data Path: q in<0> to err
                               Gate
                                      Net
   Cell:in->out fanout Delay Delay Logical Name (Net Name)
    IBUF:I->O
                         2 0.000
                                    0.293 q in 0 IBUF (q in 0 IBUF)
    LUT1:I0->0
                         1 0.043 0.000
Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<0> rt
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<0>_rt)
                            0.230 0.000
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<0>
    MUXCY:S->O
                         1
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<0>)
    MUXCY:CI->O
                         1
                             0.013
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<1>
                                    0.000
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<1>)
    MUXCY:CI->O
                         1 0.013 0.000
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<2>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<2>)
    MUXCY:CI->O
                         1
                             0.013
                                    0.000
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<3>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<3>)
    MUXCY:CI->O
                         1 0.013 0.000
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<4>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<4>)
    MUXCY:CI->O
                         1 0.013
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<5>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<5>)
    MUXCY:CI->O
                         1 0.013 0.000
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<6>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<6>)
                                            Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<7>
    MUXCY:CI->O
                         1 0.013 0.000
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<7>)
                         1 0.013 0.000
    MUXCY:CI->O
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<8>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<8>)
    MUXCY:CI->O
                         1 0.013 0.000
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<9>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<9>)
                            0.013 0.000
    MUXCY:CI->O
                         1
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<10>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<10>)
                         1 0.013 0.000
    MUXCY:CI->O
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<11>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<11>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<12>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<12>)
                         1 0.013 0.000
    MUXCY:CI->O
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<13>
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<13>)
    MUXCY:CI->O
                                    0.000
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> cy<14>
                         0
                            0.013
(Msub_GND_7_o_GND_7_o_sub_2_OUT<15:0>_cy<14>)
XORCY:CI->O 1 0.251 0.279
    XORCY:CI->O
                         1 0.251 0.279
                                            Msub GND 7 o GND 7 o sub 2 OUT<15:0> xor<15>
(GND 7 o GND 7 o sub 2 OUT<15>)
    DSP48E1:A15->P31
                             2.392
                                     0.357 Mmult GND 7 o GND 7 o MuLt 4 OUT
(GND 7 o GND 7 o MuLt 4 OUT<31>)
                         1 0.043
                                    0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0002 INV 84 o lut<0>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0002 INV 84 o lut<0>)
    MUXCY:S->O
                          1
                              0.230 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0002_INV_84_o_cy<0>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0002 INV 84 o cy<0>)
    MUXCY:CI->O
                         1 0.013
                                    0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0002 INV 84 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0002 INV 84 o cy<1>)
    MUXCY:CI->O
                             0.013
                                    0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0002 INV 84 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0002 INV 84 o cy<2>)
                            0.013 0.000
    MUXCY:CI->O
                          1
```

GND\_7\_o\_public\_key[30]\_rem\_5/Mcompar\_BUS\_0002\_INV\_84\_o\_cy<3> (GND 7 o public key[30] rem 5/Mcompar BUS 0002 INV 84 o cy<3>)

1 0.013 GND 7 o public key[30] rem 5/Mcompar BUS 0002 INV 84 o cy<4> (GND 7 o public key[30] rem 5/Mcompar BUS 0002 INV 84 o cy<4>)

MUXCY:CI->O

```
MUXCY:CI->O
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0002 INV 84 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0002 INV 84 o cy<5>)
                              0.147 0.432
    MUXCY:CI->O
                          2
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0002 INV 84 o cy<6>
(GND 7 o public key[30] rem 5/BUS 0002 INV 84 o)
    LUT3: T0->0
                          2
                            0.043
GND 7 o public key[30] rem 5/Mmux a[31] GND 9 o MUX 219 o11
(GND 7 o public key[30] rem 5/a[31] GND 9 o MUX 219 o)
    LUT5:I1->0
                          0
                              0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o lutdi
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0003 INV 147 o lutdi)
    MUXCY:DI->O
                            0.218
                                    0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o cy<0>
(GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o cy<0>)
                                    0.000
    MUXCY:CI->O
                              0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0003_INV_147_o_cy<1>)
                              0.013 0.000
    MUXCY:CI->O
                          1
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0003_INV_147_o_cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o cy<2>)
    MUXCY:CI->O
                            0.013
                                    0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0003_INV_147_o_cy<3>)
    MUXCY:CI->O
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o cy<4>)
                            0.013 0.000
    MUXCY:CI->O
                         1
GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o cy<5>)
    MUXCY:CI->O
                          3
                              0.147
                                     0.560
GND 7 o public key[30] rem 5/Mcompar BUS 0003 INV 147 o cy<6>
(GND 7 o public key[30] rem 5/BUS 0003 INV 147 o)
                          3
                              0.043
    LUT6:I0->0
                                    0.353
(GND 7 o public key[30] rem 5/a[31] GND 9 o MUX 341 o)
                             0.043
                                    0.000
GND_7_o_public_key[30]_rem 5/Mcompar BUS 0004 INV 209 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0004_INV_209_o_lut<1>)
    MUXCY:S->O
                          1
                              0.230 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0004 INV 209 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0004 INV 209 o cy<1>)
                             0.013 0.000
    MUXCY:CI->O
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0004 INV 209 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0004 INV 209 o cy<2>)
    MUXCY:CI->O
                              0.013
                                    0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0004 INV 209 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0004 INV 209 o cy<3>)
    MUXCY:CI->O
                                     0.000
                          1
                             0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0004 INV 209 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0004 INV 209 o cy<4>)
    MUXCY:CI->O
                          1
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0004 INV 209 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0004 INV 209 o cy<5>)
    MUXCY:CI->O
                              0.147 0.564
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0004 INV 209 o cy<6>
(GND_7_o_public_key[30]_rem_5/BUS_0004_INV_209_o)
                             0.043 0.470
    LUT6:I0->0
GND_7_o_public_key[30]_rem_5/Mmux_a[0] GND 9 o MUX 492 o1231
(GND_7_o_public_key[30]_rem_5/a[30]_GND_9_o_MUX_462_o)
                          1
    LUT5:I1->0
                            0.043 0.000
```

```
GND 7 o public key[30] rem 5/Mcompar BUS 0005 INV 270 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0005 INV 270 o lut<1>)
    MUXCY:S->O
                           1
                               0.230 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0005 INV 270 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0005 INV 270 o cy<1>)
                                     0.000
    MUXCY:CI->O
                          1
                              0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0005 INV 270 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0005 INV 270 o cy<2>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0005 INV 270 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0005 INV 270 o cy<3>)
    MUXCY:CI->O
                           1
                               0.013
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0005_INV_270_o_cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0005 INV 270 o cy<4>)
    MUXCY:CI->O
                               0.013
                                     0.000
GND_7_o_public_key[30]_rem 5/Mcompar BUS 0005 INV 270 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0005 INV 270 o cy<5>)
    MUXCY:CI->O
                          1
                               0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0005_INV_270_o_cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0005 INV 270 o cy<6>)
                             0.147 0.573
    MUXCY:CI->O
                          6
GND 7 o public key[30] rem 5/Mcompar BUS 0005 INV 270 o cy<7>
(GND 7 o public key[30] rem 5/BUS 0005 INV 270 o)
                           7
    LUT6:I0->0
                              0.043
                                      0.456
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 610 o1211
(GND 7 o public key[30] rem 5/a[29] GND 9 o MUX 581 o)
     LUT4:I1->0
                           1
                              0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0006 INV 330 o lut<1>
(GND 7 o public key[30] rem_5/Mcompar_BUS_0006_INV_330_o_lut<1>)
                              0.230 0.000
    MUXCY:S->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0006 INV 330 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0006 INV 330 o cy<1>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0006 INV 330 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0006_INV_330_o_cy<2>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0006 INV 330 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0006 INV 330 o cy<3>)
                              0.013 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0006 INV 330 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0006 INV 330 o cy<4>)
    MUXCY:CI->O
                           1
                             0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0006 INV 330 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0006 INV 330 o cy<5>)
                                     0.000
    MUXCY:CI->O
                           1
                               0.013
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0006_INV_330_o_cy<6>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0006 INV 330 o cy<6>)
    MUXCY:CI->O
                          14
                              0.147 0.610
GND 7 o public key[30] rem 5/Mcompar BUS 0006 INV 330 o cy<7>
(GND 7 o public key[30] rem 5/BUS 0006 INV 330 o)
                           3
                             0.043 0.438
GND_7_o_public_key[30]_rem_5/Mmux_a[0] GND 9 o MUX 726 o1201
(GND 7 o public key[30] rem 5/a[28] GND 9 o MUX 698 o)
                          1
                              0.043
    LUT4:I1->0
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0007 INV 389 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0007 INV 389 o lut<1>)
    MUXCY:S->O
                           1
                             0.230
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0007 INV 389 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0007 INV 389 o cy<1>)
                                     0.000
     MUXCY:CI->O
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0007 INV 389 o cy<2>
```

```
(GND 7 o public key[30] rem 5/Mcompar BUS 0007 INV 389 o cy<2>)
    MUXCY:CI->O
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0007 INV 389 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0007 INV 389 o cy<3>)
    MUXCY:CI->O
                           1
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0007 INV 389 o cy<4>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0007 INV 389 o cy<4>)
                           1
                               0.013 0.000
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0007 INV 389 o cy<5>
(GND_7_o_public_key[30]_rem 5/Mcompar BUS 0007 INV 389 o cy<5>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0007 INV 389 o cy<6>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0007 INV 389 o cy<6>)
                              0.147
    MUXCY:CI->O
                          16
                                      0.619
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0007 INV 389 o cy<7>
(GND_7_o_public_key[30]_rem_5/BUS_0007_INV_389_o)
    LUT6:I0->0
                           6
                               0.043 0.479
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 840 o1201
(GND 7 o public key[30] rem 5/a[28] GND 9 o MUX 812 o)
    LUT4:I0->0
                           0
                              0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0008 INV 447 o lutdi1
(GND 7 o public key[30] rem 5/Mcompar BUS 0008 INV 447 o lutdil)
                               0.218 0.000
    MUXCY:DI->O
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0008_INV_447_o_cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0008 INV 447 o cy<1>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0008 INV 447 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0008 INV 447 o cy<2>)
    MUXCY:CI->O
                           1
                             0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0008 INV 447 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0008 INV 447 o cy<3>)
    MUXCY:CI->O
                               0.013 0.000
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0008 INV 447 o cy<4>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0008 INV 447 o cy<4>)
    MUXCY:CI->O
                           1
                             0.013
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0008 INV 447 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0008 INV 447 o cy<5>)
                           1
                                      0.000
     MUXCY:CI->O
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0008 INV 447 o cy<6>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0008_INV_447_o_cy<6>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0008 INV 447 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0008 INV 447 o cy<7>)
                          28
                              0.147 0.648
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0008 INV 447 o cy<8>
(GND_7_o_public_key[30]_rem_5/BUS 0008 INV 447 o)
    LUT5:I0->0
                           2
                               0.043
                                      0.460
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 952 o1231
(GND_7_o_public_key[30]_rem_5/a[30] GND 9 o MUX 922 o)
    LUT5:I1->0
                           1
                              0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o lut<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o lut<3>)
    MUXCY:S->O
                               0.230
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o cy<3>)
    MUXCY:CI->O
                           1
                               0.013
                                      0.000
\label{local_gnd_substitute} $$\operatorname{GND_7_o\_public\_key[30]\_rem\_5/Mcompar\_BUS\_0009\_INV 504 o cy<4>$$}
(GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o cy<4>)
    MUXCY:CI->O
                           1
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o cy<5>)
```

```
MUXCY:CI->O
                               0.013
                                       0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o cy<6>)
    MUXCY:CI->O
                          1
                              0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0009 INV 504 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o cy<7>)
    MUXCY:CI->O
                         18
                             0.147
                                     0.621
GND 7 o public key[30] rem 5/Mcompar BUS 0009 INV 504 o cy<8>
(GND 7 o public key[30] rem 5/BUS 0009 INV 504 o)
    LUT5:I0->0
                              0.043
                           6
                                       0.479
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 1062 o1181
(GND_7_o_public_key[30]_rem_5/a[26] GND 9 o MUX 1036 o)
    LUT4:I0->0
                             0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o lutdi1
(GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o lutdil)
                                     0.000
     MUXCY:DI->O
                              0.218
GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0010_INV_560_o_cy<1>)
                              0.013 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<2>)
    MUXCY:CI->O
                             0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0010_INV_560_o_cy<3>)
    MUXCY:CI->O
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<4>)
                             0.013 0.000
    MUXCY:CI->O
                         1
GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<5>)
    MUXCY:CI->O
                           1
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<6>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0010_INV_560_o_cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<7>)
    MUXCY:CI->O
                         34
                             0.147
                                     0.649
GND 7 o public key[30] rem 5/Mcompar BUS 0010 INV 560 o cy<8>
(GND 7 o public key[30] rem 5/BUS 0010 INV 560 o)
     LUT5:I0->0
                           6
                              0.043
                                     0.451
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 1170 o1161
(GND 7 o public key[30] rem 5/a[24] GND 9 o MUX 1146 o)
    LUT4:I1->0
                          1
                              0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o lut<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o lut<1>)
    MUXCY:S->O
                              0.230
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0011 INV 615 o cy<1>)
    MUXCY:CI->O
                                      0.000
                           1
                             0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o cy<2>)
    MUXCY:CI->O
                           1
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0011 INV 615 o cy<3>)
    MUXCY:CI->O
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o cy<4>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0011_INV_615_o_cy<4>)
                             0.013
                                     0.000
    MUXCY:CI->O
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o cy<5>)
                          1
                              0.013 0.000
    MUXCY:CI->O
```

```
GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o cy<6>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0011_INV_615_o_cy<6>)
                           1
    MUXCY:CI->O
                               0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0011 INV 615 o cy<7>)
                              0.147 0.645
    MUXCY:CI->O
                          24
GND 7 o public key[30] rem 5/Mcompar BUS 0011 INV 615 o cy<8>
(GND 7 o public key[30] rem 5/BUS 0011 INV 615 o)
     LUT5:I0->0
                          6
                             0.043
                                     0.479
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 1276 o1181
(GND 7 o public key[30] rem 5/a[26] GND 9 o MUX 1250 o)
    LUT4:I0->0
                           0
                               0.043
                                       0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0012_INV_669_o_lutdi2
(GND 7 o public key[30] rem 5/Mcompar BUS 0012 INV 669 o lutdi2)
    MUXCY:DI->O
                               0.218
                                     0.000
GND_7_o_public_key[30]_rem 5/Mcompar BUS 0012 INV 669 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0012 INV 669 o cy<2>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0012_INV_669_o_cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0012 INV 669 o cy<3>)
                              0.013 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0012 INV 669 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0012 INV 669 o cy<4>)
    MUXCY:CI->O
                           1
                               0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0012 INV 669 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0012 INV 669 o cy<5>)
    MUXCY:CI->O
                           1
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0012 INV 669 o cy<6>
(GND 7 o public key[30] rem_5/Mcompar_BUS_0012_INV_669_o_cy<6>)
                              0.013 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0012 INV 669 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0012 INV 669 o cy<7>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0012 INV 669 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0012_INV_669_o_cy<8>)
    MUXCY:CI->O
                          40
                              0.147
                                     0.650
GND 7 o public key[30] rem 5/Mcompar BUS 0012 INV 669 o cy<9>
(GND 7 o public key[30] rem 5/BUS 0012 INV 669 o)
    LUT5:I0->0
                              0.043 0.451
                           6
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 1380 o1141
(GND 7 o public key[30] rem 5/a[22] GND 9 o MUX 1358 o)
    LUT4:I1->0
                           1
                             0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o lut<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o lut<1>)
                                     0.000
    MUXCY:S->O
                           1
                               0.230
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0013_INV_722_o_cy<1>
({\tt GND\_7\_o\_public\_key[30]\_rem\_5/Mcompar\_BUS\_0013\_INV~722~o~cy<1>)}
    MUXCY:CI->O
                           1
                              0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0013 INV 722 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0013 INV 722 o cy<2>)
                           1
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<3>)
                           1
                               0.013 0.000
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<4>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0013 INV 722 o cy<4>)
    MUXCY:CI->O
                           1
                             0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<5>)
                                      0.000
     MUXCY:CI->O
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<6>
```

```
(GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<6>)
    MUXCY:CI->O
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0013 INV 722 o cy<7>)
    MUXCY:CI->O
                           1
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<8>
(GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<8>)
                          30
                               0.147 0.649
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0013 INV 722 o cy<9>
(GND_7_o_public_key[30]_rem_5/BUS_0013 INV 722 o)
    LUT5:I0->0
                               0.043 0.451
GND_7_o_public_key[30]_rem_5/Mmux_a[0] GND 9 o MUX 1482 o1131
(GND_7_o_public_key[30]_rem_5/a[21]_GND_9_o_MUX_1461_o)
    LUT4:I1->0
                           1
                              0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o lut<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o lut<1>)
                               0.230 0.000
    MUXCY:S->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<1>)
    MUXCY:CI->O
                           1
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<2>)
                               0.013 0.000
    MUXCY:CI->O
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0014_INV_774_o_cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0014_INV_774_o_cy<3>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<4>)
    MUXCY:CI->O
                           1
                             0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<5>)
    MUXCY:CI->O
                               0.013 0.000
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<6>)
    MUXCY:CI->O
                           1
                             0.013
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0014 INV 774 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0014 INV 774 o cy<7>)
                                      0.000
                           1
     MUXCY:CI->O
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0014_INV_774_o_cy<8>)
    MUXCY:CI->O
                               0.147 0.651
                          46
GND 7 o public key[30] rem 5/Mcompar BUS 0014 INV 774 o cy<9>
(GND 7 o public key[30] rem 5/BUS 0014 INV 774 o)
                             0.043 0.451
GND_7_o_public_key[30]_rem_5/Mmux_a[0] GND 9 o MUX 1582 o1121
(GND_7_o_public_key[30]_rem_5/a[20]_GND_9_o_MUX_1562_o)
    LUT4:I1->0
                           1
                               0.043
                                       0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0015 INV 825 o lut<1>)
                                      0.000
    MUXCY:S->O
                           1
                              0.230
GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<1>)
    MUXCY:CI->O
                               0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<2>)
    MUXCY:CI->O
                           1
                               0.013
                                      0.000
\label{local_gnd_substitute} $$\operatorname{GND_7_o\_public\_key[30]\_rem_5/Mcompar\_BUS\_0015\_INV 825 o cy<3>$$
(GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<3>)
    MUXCY:CI->O
                           1
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<4>)
```

```
MUXCY:CI->O
                               0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<5>)
    MUXCY:CI->O
                          1
                              0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0015 INV 825 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<6>)
    MUXCY:CI->O
                          1
                             0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<7>)
    MUXCY:CI->O
                               0.013 0.000
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0015 INV 825 o cy<8>)
    MUXCY:CI->O
                             0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<9>
(GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<9>)
                                     0.650
     MUXCY:CI->O
                         36
                             0.147
GND 7 o public key[30] rem 5/Mcompar BUS 0015 INV 825 o cy<10>
(GND_7_o_public_key[30]_rem_5/BUS_0015_INV_825_o)
    LUT5:I0->0
                           6
                              0.043
                                     0.451
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 1680 o1101
(GND 7 o public key[30] rem 5/a[19] GND 9 o MUX 1661 o)
    LUT4:I1->0
                          1
                             0.043
GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0016_INV_875_o_lut<1>)
    MUXCY:S->O
                              0.230 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<1>)
                             0.013 0.000
    MUXCY:CI->O
                         1
GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<2>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<3>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0016_INV_875_o_cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<4>)
    MUXCY:CI->O
                             0.013
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0016 INV 875 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0016_INV_875_o_cy<5>)
    MUXCY:CI->O
                          1
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<6>)
    MUXCY:CI->O
                          1
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<7>)
    MUXCY:CI->O
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0016 INV 875 o cy<8>)
    MUXCY:CI->O
                                     0.000
                           1
                             0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<9>
(GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<9>)
    MUXCY:CI->O
                          52
                             0.147 0.652
GND 7 o public key[30] rem 5/Mcompar BUS 0016 INV 875 o cy<10>
(GND_7_o_public_key[30]_rem_5/BUS_0016 INV 875 o)
    LUT5:I0->0
                              0.043 0.451
GND_7_o_public_key[30]_rem_5/Mmux_a[0] GND 9 o MUX 1776 o191
(GND_7_o_public_key[30]_rem_5/a[18]_GND_9_o_MUX_1758_o)
    LUT4:I1->0
                             0.043
                                     0.000
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o lut<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o lut<1>)
                          1
    MUXCY:S->O
                              0.230 0.000
```

```
GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0017_INV_924_o_cy<1>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0017 INV 924 o cy<2>)
                                     0.000
    MUXCY:CI->O
                          1
                             0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<3>)
    MUXCY:CI->O
                          1
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<4>)
    MUXCY:CI->O
                           1
                               0.013
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0017_INV_924_o_cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<5>)
    MUXCY:CI->O
                               0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<6>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0017 INV 924 o cy<6>)
    MUXCY:CI->O
                          1
                               0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0017_INV_924_o_cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<7>)
                              0.013 0.000
    MUXCY:CI->O
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<8>
(GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<8>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<9>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0017 INV 924 o cy<9>)
                              0.147
                                      0.651
    MUXCY:CI->O
                          42
GND 7 o public key[30] rem 5/Mcompar BUS 0017 INV 924 o cy<10>
(GND 7 o public key[30] rem 5/BUS 0017 INV 924 o)
                           6
                             0.043 0.451
     LUT5:I0->0
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 1870 o181
(GND_7_o_public_key[30]_rem_5/a[17] GND 9 o MUX 1853 o)
    LUT4:I1->0
                           1
                              0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0018_INV_972_o_lut<1>)
    MUXCY:S->O
                              0.230
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<1>)
                              0.013 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<2>)
    MUXCY:CI->O
                           1
                             0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<3>)
                                     0.000
    MUXCY:CI->O
                           1
                               0.013
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0018_INV_972_o_cy<4>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0018 INV 972 o cy<4>)
    MUXCY:CI->O
                           1
                              0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0018 INV 972 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0018 INV 972 o cy<5>)
                          1
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<6>)
                          1
                               0.013 0.000
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0018 INV 972 o cy<7>)
    MUXCY:CI->O
                          1
                             0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<8>
(GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<8>)
                                     0.000
     MUXCY:CI->O
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<9>
```

```
(GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<9>)
    MUXCY:CI->O
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<10>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0018 INV 972 o cy<10>)
    MUXCY:CI->O
                              0.147
                          58
                                      0.653
GND 7 o public key[30] rem 5/Mcompar BUS 0018 INV 972 o cy<11>
(GND_7_o_public_key[30]_rem_5/BUS 0018 INV 972 o)
     LUT5:I0->0
                             0.043
                                     0.451
                           6
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 1962 o171
(GND_7_o_public_key[30]_rem_5/a[16] GND 9 o MUX 1946 o)
    LUT4:I1->0
                           1
                               0.043
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0019 INV 1019 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0019_INV_1019_o_lut<1>)
    MUXCY:S->O
                          1
                             0.230
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0019 INV 1019 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0019_INV_1019_o_cy<1>)
                               0.013 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<2>)
    MUXCY:CI->O
                           1
                             0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<3>)
                               0.013 0.000
    MUXCY:CI->O
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0019_INV_1019_o_cy<4>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0019_INV_1019_o_cy<4>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<5>)
    MUXCY:CI->O
                           1
                             0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<6>)
    MUXCY:CI->O
                               0.013 0.000
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0019 INV 1019 o cy<7>)
                          1 0.013
    MUXCY:CI->O
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0019 INV 1019 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0019 INV 1019 o cy<8>)
                                      0.000
                           1
     MUXCY:CI->O
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<9>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0019_INV_1019_o_cy<9>)
    MUXCY:CI->O
                           1
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0019 INV 1019 o cy<10>)
                          48
                              0.147 0.652
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0019 INV 1019 o cy<11>
(GND_7_o_public_key[30]_rem_5/BUS 0019 INV 1019 o)
    LUT5:I0->0
                           6
                               0.043
                                      0.451
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 2052 o161
(GND_7_o_public_key[30]_rem_5/a[15] GND 9 o MUX 2037 o)
    LUT4:I1->0
                           1
                              0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o lut<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o lut<1>)
    MUXCY:S->O
                               0.230
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<1>)
    MUXCY:CI->O
                           1
                               0.013
                                      0.000
\label{local_gnd_gnd} $$\operatorname{GND}_{7_o\_public\_key[30]\_rem\_5/Mcompar\_BUS\_0020\_INV\_1065\_o\_cy<2>$$
(GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<2>)
    MUXCY:CI->O
                          1
                               0.013
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0020 INV 1065 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<3>)
```

```
MUXCY:CI->O
                               0.013
                                       0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<4>)
    MUXCY:CI->O
                          1
                              0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0020 INV 1065 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<5>)
    MUXCY:CI->O
                          1
                             0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<6>)
    MUXCY:CI->O
                               0.013 0.000
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0020 INV 1065 o cy<7>)
    MUXCY:CI->O
                             0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<8>
(GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<8>)
                                     0.000
     MUXCY:CI->O
                              0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<9>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0020_INV_1065_o_cy<9>)
    MUXCY:CI->O
                           1
                              0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0020 INV 1065 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0020 INV 1065 o cy<10>)
    MUXCY:CI->O
                             0.147 0.654
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0020 INV 1065 o cy<11>
(GND 7 o public key[30] rem 5/BUS 0020 INV 1065 o)
    LUT5:I0->0
                              0.043 0.451
                           6
GND_7_o_public_key[30]_rem_5/Mmux_a[0]_GND_9_o_MUX_2140_o151
(GND 7 o public key[30] rem 5/a[14] GND 9 o MUX 2126 o)
    LUT4:I1->0
                         1
                             0.043
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o lut<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o lut<1>)
    MUXCY:S->O
                           1
                              0.230
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<1>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0021_INV_1110_o_cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<2>)
    MUXCY:CI->O
                             0.013
                                     0.000
GND_7_o_public_key[30]_rem 5/Mcompar BUS 0021 INV 1110 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0021_INV_1110_o_cy<3>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<4>)
                              0.013 0.000
    MUXCY:CI->O
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<5>)
    MUXCY:CI->O
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<6>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0021 INV 1110 o cy<6>)
    MUXCY:CI->O
                                      0.000
                           1
                             0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<7>)
    MUXCY:CI->O
                           1
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0021 INV 1110 o cy<8>)
    MUXCY:CI->O
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<9>
({\tt GND\_7\_o\_public\_key[30]\_rem\_5/Mcompar\_BUS\_0021\_INV~1110~o~cy<9>)
                          1
                             0.013
                                     0.000
    MUXCY:CI->O
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0021 INV 1110 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<10>)
                             0.147 0.652
    MUXCY:CI->O
                         54
```

```
GND 7 o public key[30] rem 5/Mcompar BUS 0021 INV 1110 o cy<11>
(GND 7 o public key[30] rem 5/BUS 0021 INV 1110 o)
    LUT5:I0->0
                               0.043
                           6
                                       0.451
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 2226 o141
(GND_7_o_public_key[30]_rem_5/a[13] GND 9 o MUX 2213 o)
    LUT4:I1->0
                           1
                              0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o lut<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o lut<1>)
    MUXCY:S->O
                           1
                               0.230
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<1>)
    MUXCY:CI->O
                           1
                               0.013
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0022_INV_1154_o_cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<2>)
    MUXCY:CI->O
                               0.013
                                      0.000
GND_7_o_public_key[30]_rem 5/Mcompar BUS 0022 INV 1154 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0022 INV 1154 o cy<3>)
    MUXCY:CI->O
                           1
                               0.013 0.000
\label{local_gnd_gnd} $$\operatorname{GND}_{7_o\_public\_key[30]\_rem\_5/Mcompar\_BUS\_0022\_INV\_1154\_o\_cy<4>$$
(GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<4>)
                               0.013 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<5>)
    MUXCY:CI->O
                           1
                               0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<6>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0022 INV 1154 o cy<6>)
    MUXCY:CI->O
                           1
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<7>)
                               0.013 0.000
                           1
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0022 INV 1154 o cy<8>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0022 INV 1154 o cy<9>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0022_INV_1154_o_cy<9>)
    MUXCY:CI->O
                               0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<10>)
                               0.013 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<11>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0022 INV 1154 o cy<11>)
    MUXCY:CI->O
                         70
                              0.147
                                      0.655
GND 7 o public key[30] rem 5/Mcompar BUS 0022 INV 1154 o cy<12>
(GND 7 o public key[30] rem 5/BUS 0022 INV 1154 o)
                                      0.451
     LUT5:I0->0
                           6
                               0.043
GND_7_o_public_key[30]_rem_5/Mmux_a[0]_GND_9_o_MUX_2310_o131
(GND_7_o_public_key[30]_rem_5/a[12]_GND_9 o MUX 2298 o)
    LUT4:I1->0
                           1
                               0.043
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0023 INV 1197 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0023 INV 1197 o lut<1>)
                           1
                              0.230
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<1>)
                           1
                               0.013 0.000
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0023 INV 1197 o cy<2>)
    MUXCY:CI->O
                           1
                              0.013
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0023 INV 1197 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<3>)
                                      0.000
     MUXCY:CI->O
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<4>
```

```
(GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<4>)
    MUXCY:CI->O
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0023 INV 1197 o cy<5>)
    MUXCY:CI->O
                           1
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<6>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0023 INV 1197 o cy<6>)
                           1
                               0.013 0.000
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0023 INV 1197 o cy<7>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0023 INV 1197 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0023_INV_1197_o_cy<8>)
                          1
                             0.013
                                      0.000
    MUXCY:CI->O
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0023 INV 1197 o cy<9>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0023_INV_1197_o_cy<9>)
                               0.013 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<10>)
    MUXCY:CI->O
                           1
                             0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<11>
(GND 7 o public key[30] rem 5/Mcompar BUS 0023 INV 1197 o cy<11>)
                              0.147 0.653
    MUXCY:CI->O
                          60
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0023_INV_1197_o_cy<12>
(GND_7_o_public_key[30]_rem_5/BUS 0023 INV 1197 o)
    LUT5:I0->0
                           6
                              0.043
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 2392 o122
(GND_7_o_public_key[30]_rem_5/a[11] GND 9 o MUX 2381 o)
    LUT4:I1->0
                           1 0.043
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o lut<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o lut<1>)
    MUXCY:S->O
                               0.230 0.000
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<1>)
    MUXCY:CI->O
                          1 0.013
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0024 INV 1239 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0024 INV 1239 o cy<2>)
                                      0.000
                           1
     MUXCY:CI->O
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0024_INV_1239_o_cy<3>)
                               0.013 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<4>)
                              0.013 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0024 INV 1239 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0024_INV_1239_o_cy<5>)
    MUXCY:CI->O
                           1
                               0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<6>)
    MUXCY:CI->O
                           1
                              0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<7>)
    MUXCY:CI->O
                               0.013
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<8>
(GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<8>)
    MUXCY:CI->O
                           1
                               0.013
                                      0.000
\label{local_gnd_gnd} $$\operatorname{GND}_{7_o\_public\_key[30]\_rem\_5/Mcompar\_BUS\_0024\_INV\_1239\_o\_cy<9>$$
(GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<9>)
    MUXCY:CI->O
                          1
                               0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<10>)
```

```
MUXCY:CI->O
                               0.013
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0024_INV_1239_o_cy<11>
(GND 7 o public key[30] rem 5/Mcompar BUS 0024 INV 1239 o cy<11>)
                              0.147 0.656
                         76
    MUXCY:CI->O
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0024 INV 1239 o cy<12>
(GND 7 o public key[30] rem 5/BUS 0024 INV 1239 o)
     LUT5:I0->0
                           6
                             0.043
                                     0.451
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 2472 o111
(GND 7 o public key[30] rem 5/a[10] GND 9 o MUX 2462 o)
    LUT4:I1->0
                               0.043
                           1
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0025 INV 1280 o lut<1>)
    MUXCY:S->O
                             0.230
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<1>)
                                     0.000
     MUXCY:CI->O
                              0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0025_INV_1280_o_cy<2>)
                              0.013 0.000
    MUXCY:CI->O
                           1
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0025_INV_1280_o_cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<3>)
    MUXCY:CI->O
                             0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<4>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0025_INV_1280_o_cy<4>)
                              0.013 0.000
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<5>)
                             0.013 0.000
    MUXCY:CI->O
                         1
GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<6>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<7>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0025_INV_1280_o_cy<8>
(GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<8>)
    MUXCY:CI->O
                             0.013
                                     0.000
GND_7_o_public_key[30]_rem 5/Mcompar BUS 0025 INV 1280 o cy<9>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0025_INV_1280_o_cy<9>)
    MUXCY:CI->O
                          1
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<10>)
                              0.013 0.000
    MUXCY:CI->O
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<11>
(GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<11>)
                                     0.000
    MUXCY:CI->O
                              0.013
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0025 INV 1280 o cy<12>
(GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<12>)
                             0.147
    MUXCY:CI->O
                                     0.654
                         66
GND 7 o public key[30] rem 5/Mcompar BUS 0025 INV 1280 o cy<13>
(GND 7 o public key[30] rem 5/BUS 0025 INV 1280 o)
     LUT5:I0->0
                           6
                             0.043 0.451
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 2550 o1301
(GND_7_o_public_key[30]_rem_5/a[9]_GND_9_o MUX 2541 o)
    LUT4:I1->0
                              0.043 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0026_INV_1320_o_lut<1>)
    MUXCY:S->O
                             0.230
                                     0.000
                          1
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0026 INV 1320 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0026_INV_1320_o_cy<1>)
                          1
                              0.012 0.000
    MUXCY:CI->O
```

```
GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0026_INV_1320_o_cy<2>)
    MUXCY:CI->O
                           1
                               0.012 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0026 INV 1320 o cy<3>)
                             0.012 0.000
    MUXCY:CI->O
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<4>)
    MUXCY:CI->O
                          1
                              0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<5>)
    MUXCY:CI->O
                           1
                              0.012
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0026_INV_1320_o_cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<6>)
    MUXCY:CI->O
                              0.012
                                     0.000
GND_7_o_public_key[30]_rem 5/Mcompar BUS 0026 INV 1320 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0026 INV 1320 o cy<7>)
    MUXCY:CI->O
                          1
                              0.012 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0026_INV_1320_o_cy<8>
(GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<8>)
                              0.012 0.000
    MUXCY:CI->O
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<9>
(GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<9>)
    MUXCY:CI->O
                           1
                              0.012
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<10>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0026 INV 1320 o cy<10>)
    MUXCY:CI->O
                           1
                             0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<11>
(GND 7 o public key[30] rem_5/Mcompar_BUS_0026_INV_1320_o_cy<11>)
                              0.012 0.000
                          1
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0026 INV 1320 o cy<12>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0026 INV 1320 o cy<12>)
    MUXCY:CI->O
                          82
                              0.148 0.657
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0026 INV 1320 o cy<13>
(GND_7_o_public_key[30]_rem_5/BUS_0026_INV_1320_o)
    LUT5:I0->0
                             0.043
                                     0.451
GND_7_o_public_key[30]_rem_5/Mmux_a[0] GND 9 o MUX 2626 o1291
(GND 7 o public key[30] rem 5/a[8] GND 9 o MUX 2618 o)
    LUT4:I1->0
                              0.043 0.000
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o lut<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o lut<1>)
    MUXCY:S->O
                          1
                             0.230
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<1>)
                                     0.000
    MUXCY:CI->O
                           1
                               0.012
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0027_INV_1359_o_cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0027 INV 1359 o cy<2>)
    MUXCY:CI->O
                          1
                              0.012 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0027 INV 1359 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0027 INV 1359 o cy<3>)
                          1
                             0.012 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<4>)
                          1
                              0.012 0.000
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0027 INV 1359 o cy<5>)
    MUXCY:CI->O
                          1
                             0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<6>)
                                     0.000
     MUXCY:CI->O
                              0.012
GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<7>
```

```
(GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<7>)
     MUXCY:CI->O
                              0.012 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0027 INV 1359 o cy<8>)
     MUXCY:CI->O
                            1
                              0.012
                                       0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<9>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0027 INV 1359 o cy<9>)
                                0.012 0.000
     MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<10>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0027 INV 1359 o cy<10>)
    MUXCY:CI->O
                           1
                                0.012 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0027 INV 1359 o cy<11>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0027_INV_1359_o_cy<11>)
                           1
                               0.012
     MUXCY:CI->O
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0027 INV 1359 o cy<12>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0027_INV_1359_o_cy<12>)
                                0.148 \quad 0.\overline{655}
     MUXCY:CI->O
                          72
GND 7 o public key[30] rem 5/Mcompar BUS 0027 INV 1359 o cy<13>
(GND 7 o public key[30] rem 5/BUS 0027 INV 1359 o)
     LUT5:I0->0
                              0.043
                                       0.451
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 2700 o1281
(GND 7 o public key[30] rem 5/a[7] GND 9 o MUX 2693 o)
                               0.043 0.000
     LUT4:I1->0
                            1
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0028_INV_1397_o_lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0028 INV 1397 o lut<1>)
    MUXCY:S->O
                           1
                               0.230 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<1>)
     MUXCY:CI->O
                           1
                              0.012 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<2>)
     MUXCY:CI->O
                                0.012 0.000
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<3>)
    MUXCY:CI->O
                           1
                              0.012
                                       0.000
\label{local_gnd_gnd} $$\operatorname{GND}_{7_o\_public\_key[30]\_rem\_5/Mcompar\_BUS}$ 0028 INV 1397 o cy<4>$$
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0028 INV 1397 o cy<4>)
                            1
                                       0.000
     MUXCY:CI->O
                                0.012
GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0028_INV_1397_o_cy<5>)
                               0.012 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<6>)
                              0.012 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0028 INV 1397 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0028_INV_1397_o_cy<7>)
     MUXCY:CI->O
                            1
                                0.012 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0028 INV 1397 o cy<8>)
    MUXCY:CI->O
                           1
                              0.012
                                       0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<9>
(GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<9>)
     MUXCY:CI->O
                               0.012
                                       0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<10>)
    MUXCY:CI->O
                            1
                               0.012
                                      0.000
\label{local_gnd_substitute} $$\operatorname{GND_7_o\_public\_key[30]\_rem_5/Mcompar\_BUS\_0028\_INV\_1397\_o\_cy<11>$$
(GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<11>)
     MUXCY:CI->O
                          1
                                0.012
GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<12>
(GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<12>)
```

```
MUXCY:CI->O
                               0.012
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0028_INV_1397_o_cy<13>
(GND 7 o public key[30] rem 5/Mcompar BUS 0028 INV 1397 o cy<13>)
    MUXCY:CI->O
                         88
                              0.148 0.658
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0028 INV 1397 o cy<14>
(GND 7 o public key[30] rem 5/BUS 0028 INV 1397 o)
     LUT5:I0->0
                           6
                             0.043
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 2772 o1271
(GND 7 o public key[30] rem 5/a[6] GND 9 o MUX 2766 o)
     LUT4:I1->0
                           1
                              0.043
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0029 INV 1434 o lut<1>)
    MUXCY:S->O
                             0.230
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<1>)
                                     0.000
     MUXCY:CI->O
                              0.012
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0029_INV_1434_o_cy<2>)
    MUXCY:CI->O
                           1
                              0.012 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0029_INV_1434_o_cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<3>)
    MUXCY:CI->O
                             0.012
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<4>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0029_INV_1434_o_cy<4>)
                              0.012 0.000
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<5>)
                             0.012 0.000
    MUXCY:CI->O
                         1
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<6>)
    MUXCY:CI->O
                           1
                              0.012
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<7>)
                              0.012
    MUXCY:CI->O
                           1
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0029_INV_1434_o_cy<8>
(GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<8>)
    MUXCY:CI->O
                             0.012 0.000
GND_7_o_public_key[30]_rem 5/Mcompar BUS 0029 INV 1434 o cy<9>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0029_INV_1434_o_cy<9>)
    MUXCY:CI->O
                          1
                              0.012 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<10>)
                              0.012 0.000
    MUXCY:CI->O
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<11>
(GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<11>)
    MUXCY:CI->O
                              0.012
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<12>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0029 INV 1434 o cy<12>)
    MUXCY:CI->O
                             0.012
                                     0.000
                           1
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0029 INV 1434 o cy<13>
(GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<13>)
    MUXCY:CI->O
                         78
                             0.148 0.656
GND 7 o public key[30] rem 5/Mcompar BUS 0029 INV 1434 o cy<14>
(GND_7_o_public_key[30]_rem_5/BUS_0029 INV 1434 o)
    LUT5:I0->0
                              0.043 0.451
GND_7_o_public_key[30]_rem_5/Mmux_a[0] GND 9 o MUX 2842 o1261
(GND_7_o_public_key[30]_rem_5/a[5]_GND_9_o_MUX_2837_o)
    LUT4:I1->0
                             0.043
                          1
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0030_INV_1470_o_lut<1>)
                          1
                              0.230 0.000
    MUXCY:S->O
```

```
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0030_INV_1470_o_cy<1>)
    MUXCY:CI->O
                           1
                               0.012 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0030 INV 1470 o cy<2>)
                              0.012 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<3>)
    MUXCY:CI->O
                           1
                              0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<4>)
    MUXCY:CI->O
                           1
                               0.012
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0030_INV_1470_o_cy<5>
(GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<5>)
    MUXCY:CI->O
                               0.012
                                     0.000
GND_7_o_public_key[30]_rem 5/Mcompar BUS 0030 INV 1470 o cy<6>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0030 INV 1470 o cy<6>)
    MUXCY:CI->O
                           1
                               0.012 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0030_INV_1470_o_cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<7>)
                              0.012 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<8>
(GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<8>)
    MUXCY:CI->O
                           1
                               0.012
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<9>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0030 INV 1470 o cy<9>)
    MUXCY:CI->O
                           1
                              0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<10>)
                              0.012 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<11>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0030 INV 1470 o cy<11>)
    MUXCY:CI->O
                           1
                               0.012 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0030 INV 1470 o cy<12>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0030_INV_1470_o_cy<12>)
    MUXCY:CI->O
                             0.148
                                     0.299
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<13>
(GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<13>)
                              0.043 0.658
    LUT5:I4->0
                          90
GND 7 o public key[30] rem 5/Mcompar BUS 0030 INV 1470 o cy<14>
(GND 7 o public key[30] rem 5/BUS 0030 INV 1470 o)
    LUT5:I0->0
                           6
                             0.043
                                     0.451
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 2910 o1251
(GND 7 o public key[30] rem 5/a[4] GND 9 o MUX 2906 o)
     LUT4:I1->0
                           1
                               0.043
                                       0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0031_INV_1505_o_lut<1>
({\tt GND\_7\_o\_public\_key[30]\_rem\_5/Mcompar\_BUS\_0031\_INV~1505~o~lut<1>)}
    MUXCY:S->O
                           1
                              0.230 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0031 INV 1505 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0031 INV 1505 o cy<1>)
                           1
                              0.012 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<2>)
                           1
                               0.012 0.000
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<3>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0031 INV 1505 o cy<3>)
    MUXCY:CI->O
                           1
                             0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<4>)
                                     0.000
                           1
     MUXCY:CI->O
                               0.012
GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<5>
```

```
(GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<5>)
    MUXCY:CI->O
                              0.012 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<6>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0031 INV 1505 o cy<6>)
    MUXCY:CI->O
                           1
                              0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<7>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0031 INV 1505 o cy<7>)
                           1
                               0.012 0.000
    MUXCY:CI->O
GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<8>
(GND_7_o_public_key[30]_rem 5/Mcompar BUS 0031 INV 1505 o cy<8>)
    MUXCY:CI->O
                           1
                               0.012 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0031 INV 1505 o cy<9>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0031_INV_1505_o_cy<9>)
                          1
                              0.012
    MUXCY:CI->O
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0031 INV 1505 o cy<10>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0031_INV_1505_o_cy<10>)
                               0.012 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<11>
(GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<11>)
    MUXCY:CI->O
                           1
                              0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<12>
(GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<12>)
                               0.148 0.289
    MUXCY:CI->O
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0031_INV_1505_o_cy<13>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0031 INV 1505 o cy<13>)
    LUT6:I5->0
                          85
                               0.043 0.657
GND 7 o public key[30] rem 5/Mcompar BUS 0031 INV 1505 o cy<14>
(GND 7 o public key[30] rem 5/BUS 0031 INV 1505 o)
    LUT5:I0->0
                             0.043
                                     0.447
GND 7 o public key[30] rem 5/Mmux a[0] GND 9 o MUX 2976 o1241
(GND 7 o public key[30] rem 5/a[3] GND 9 o MUX 2973 o)
    LUT4:I1->0
                               0.043 0.000
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o lut<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o lut<1>)
    MUXCY:S->O
                           1
                             0.230
                                      0.000
\label{local_gnd_gnd} $$\operatorname{GND}_{7_o\_public\_key[30]\_rem\_5/Mcompar\_BUS}$ 0032 INV 1539 o cy<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0032 INV 1539 o cy<1>)
                           1
                                      0.000
     MUXCY:CI->O
                               0.012
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<2>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0032_INV_1539_o_cy<2>)
                               0.012 0.000
    MUXCY:CI->O
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<3>)
                              0.012 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0032 INV 1539 o cy<4>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0032_INV_1539_o_cy<4>)
    MUXCY:CI->O
                           1
                               0.012 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0032 INV 1539 o cy<5>)
    MUXCY:CI->O
                           1
                              0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<6>)
    MUXCY:CI->O
                               0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<7>)
    MUXCY:CI->O
                           1
                               0.012
                                      0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0032_INV_1539_o_cy<8>
(GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<8>)
    MUXCY:CI->O
                          1
                               0.012
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<9>
(GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<9>)
```

```
MUXCY:CI->O
                               0.012
                                      0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<10>
(GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<10>)
    MUXCY:CI->O
                          1
                              0.012 0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0032 INV 1539 o cy<11>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0032 INV 1539 o cy<11>)
    MUXCY:CI->O
                          1
                             0.012
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<12>
(GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<12>)
    MUXCY:CI->O
                               0.012 0.000
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<13>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0032 INV 1539 o cy<13>)
    MUXCY:CI->O
                             0.148
                                     0.546
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<14>
(GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<14>)
                                     0.656
     LUT5:I0->0
                         79
                             0.043
GND 7 o public key[30] rem 5/Mcompar BUS 0032 INV 1539 o cy<15>
(GND_7_o_public_key[30]_rem_5/BUS_0032_INV_1539_o)
    LUT5:I0->0
                           2
                              0.043
                                     0.432
GND 7 o public key[30] rem 5/Mmux a[0] a[31] MUX 3040 o1221
(GND_7_o_public_key[30]_rem_5/a[2] a[31] MUX 3038 o)
    LUT4:I1->0
                          1
                             0.043
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o lut<1>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0033_INV_1572_o_lut<1>)
    MUXCY:S->O
                              0.230 0.000
                           1
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<1>
(GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<1>)
                             0.013 0.000
    MUXCY:CI->O
                         1
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<2>
(GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<2>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<3>
(GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<3>)
    MUXCY:CI->O
                           1
                              0.013
                                     0.000
GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0033_INV_1572_o_cy<4>
(GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<4>)
    MUXCY:CI->O
                             0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<5>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0033_INV_1572_o_cy<5>)
    MUXCY:CI->O
                          1
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<6>
(GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<6>)
                              0.013 0.000
    MUXCY:CI->O
                          1
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<7>
(GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<7>)
                                     0.000
    MUXCY:CI->O
                              0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<8>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0033 INV 1572 o cy<8>)
    MUXCY:CI->O
                                     0.000
                           1
                             0.013
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<9>
(GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<9>)
    MUXCY:CI->O
                           1
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<10>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0033 INV 1572 o cy<10>)
    MUXCY:CI->O
                              0.013 0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<11>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0033_INV_1572_o_cy<11>)
                          1
                             0.013
    MUXCY:CI->O
                                     0.000
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<12>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0033_INV_1572_o_cy<12>)
                          1
                              0.013 0.000
    MUXCY:CI->O
```

```
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS_0033_INV 1572 o cy<13>)
    MUXCY:CI->O 1 0.147 0.550
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<14>
(GND_7_o_public_key[30]_rem_5/Mcompar_BUS 0033 INV 1572 o cy<14>)
    LUT6:I0->0 21 0.043 0.641
GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<15>
(GND 7 o public key[30] rem 5/BUS 0033 INV 1572 o)
                      1 0.043 0.000 _n0196<0>_wg_lut<1> (_n0196<0>_wg_lut<1>)
     LUT6:I0->0
    MUXCY:S->O
                          1 0.230 0.000 n0196<0> wg cy<1> ( n0196<0> wg cy<1>)
                         1 0.012 0.000 n0196<0> wg cy<2> ( n0196<0> wg cy<2>)
    MUXCY:CI->O
                         1 0.012 0.000 n0196<0> wg cy<3> ( n0196<0> wg cy<3>)
    MUXCY:CI->O
                        1 0.012 0.000 _n0196<0>_wg_cy<4> (_n0196<0>_wg_cy<4>)
1 0.012 0.000 _n0196<0>_wg_cy<5> (_n0196<0>_wg_cy<5>)
1 0.012 0.000 _n0196<0>_wg_cy<6> (_n0196<0>_wg_cy<6>)
    MUXCY:CI->O
    MUXCY:CI->O
    MUXCY:CI->O
                         1 0.012 0.000 _n0196<0>_wg_cy<7> (_n0196<0>_wg_cy<7>)
1 0.012 0.000 _n0196<0>_wg_cy<8> (_n0196<0>_wg_cy<8>)
    MUXCY:CI->O
    MUXCY:CI->O
    MUXCY:CI->O
                         1 0.012 0.000 n0196<0> wg cy<9> ( n0196<0> wg cy<9>)
    MUXCY:CI->O
                         1 0.012 0.000 n0196<0> wg cy<10> ( n0196<0> wg cy<10>)
                         1 0.012 0.000 _n0196<0>_wg_cy<11> (_n0196<0>_wg_cy<11>)
    MUXCY:CI->O
                       1 0.013 0.000 n0196<0> wg_cy<12> (n0196<0> wg_cy<12>)
1 0.013 0.000 n0196<0> wg_cy<13> (n0196<0> wg_cy<13>)
1 0.013 0.000 n0196<0> wg_cy<14> (n0196<0> wg_cy<13>)
1 0.013 0.000 n0196<0> wg_cy<14> (n0196<0> wg_cy<14>)
1 0.013 0.000 n0196<0> wg_cy<15> (n0196<0> wg_cy<15>)
1 0.013 0.000 n0196<0> wg_cy<16> (n0196<0> wg_cy<15>)
    MUXCY:CI->O
    MUXCY:CI->O
    MUXCY:CI->O
    MUXCY:CI->O
    MUXCY:CI->O
                         1 0.013 0.000 n0196<0> wg cy<17> ( n0196<0> wg cy<17>)
    MUXCY:CI->O
                       1 0.013 0.000 _n0196<0>_wg_cy<18> (_n0196<0>_wg_cy<18>)
1 0.013 0.000 _n0196<0>_wg_cy<19> (_n0196<0>_wg_cy<19>)
    MUXCY:CI->O
    MUXCY:CI->O
                         1 0.159 0.000 _n0196<0>_wg cy<20> ( n0196)
    MUXCY:CI->O
                            -0.001 err
                             58.853ns (21.961ns logic, 36.893ns route)
    Total
                                      (37.3% logic, 62.7% route)
______
Timing constraint: Default OFFSET OUT AFTER for Clock 'clk'
  Total number of paths / destination ports: 64 / 64
______
 Destination: private_key_31 (FF)
Source Clock: clk risin~
                   0.515ns (Levels of Logic = 1)
Offset:
  Data Path: private key 31 to private key<31>
                              Gate Net
   Cell:in->out fanout Delay Delay Logical Name (Net Name)
    -----
    FD:C->Q
                 2 0.232 0.283 private_key_31 (private_key_31)
    OBUF:I->O
                             0.000 private key 31 OBUF (private key<31>)
                              0.515ns (0.232ns logic, 0.283ns route)
                                      (45.0% logic, 55.0% route)
_______
Cross Clock Domains Report:
_____
Clock to Setup on destination clock clk
-----
```

| Src:Rise| Src:Fall| Src:Rise| Src:Fall|

GND 7 o public key[30] rem 5/Mcompar BUS 0033 INV 1572 o cy<13>

\_\_\_\_\_\_

Total REAL time to Xst completion: 36.00 secs Total CPU time to Xst completion: 35.64 secs

-->

Total memory usage is 4704968 kilobytes

Number of errors : 0 ( 0 filtered)
Number of warnings : 453 ( 0 filtered)
Number of infos : 0 ( 0 filtered)