

Release 6.2i - xst G.28

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--> Parameter TMPDIR set to __projnav

CPU : 0.00 / 0.59 s | Elapsed : 0.00 / 0.00 s

--> Parameter xsthdpdir set to ./xst

CPU : 0.00 / 0.59 s | Elapsed : 0.00 / 0.00 s

--> Reading design: decryptor.prj

TABLE OF CONTENTS

- 1) Synthesis Options Summary
- 2) HDL Compilation
- 3) HDL Analysis
- 4) HDL Synthesis
- 5) Advanced HDL Synthesis
 - 5.1) HDL Synthesis Report
- 6) Low Level Synthesis
- 7) Final Report
 - 7.1) Device utilization summary
 - 7.2) TIMING REPORT

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* Synthesis Options Summary *

---- Source Parameters

Input File Name : decryptor.prj
Input Format : mixed
Ignore Synthesis Constraint File : NO
Verilog Include Directory :

---- Target Parameters

Output File Name : decryptor
Output Format : NGC
Target Device : xc3s400-5-pq208

---- Source Options

Top Module Name : decryptor
Automatic FSM Extraction : YES
FSM Encoding Algorithm : Auto
FSM Style : lut
RAM Extraction : Yes
RAM Style : Auto

ROM Extraction : Yes
ROM Style : Auto
Mux Extraction : YES
Mux Style : Auto
Decoder Extraction : YES
Priority Encoder Extraction : YES
Shift Register Extraction : YES
Logical Shifter Extraction : YES
XOR Collapsing : YES
Resource Sharing : YES
Multiplier Style : auto
Automatic Register Balancing : No

---- Target Options

Add IO Buffers : YES
Global Maximum Fanout : 500
Add Generic Clock Buffer(BUFG) : 8
Register Duplication : YES
Equivalent register Removal : YES
Slice Packing : YES
Pack IO Registers into IOBs : auto

---- General Options

Optimization Goal : Speed
Optimization Effort : 1
Keep Hierarchy : NO
Global Optimization : AllClockNets
RTL Output : Yes
Write Timing Constraints : NO
Hierarchy Separator : _
Bus Delimiter : <>
Case Specifier : maintain
Slice Utilization Ratio : 100
Slice Utilization Ratio Delta : 5

---- Other Options

lso : decryptor.lso
Read Cores : YES
cross_clock_analysis : NO
verilog2001 : YES
Optimize Instantiated Primitives : NO

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* HDL Compilation *

Compiling vhdl file g:/try/decry/../../project/Encryptor_Design1/full_adder.vhd in Library work.

Architecture behavioral of Entity full_adder is up to date.

Compiling vhdl file g:/try/decry/../../project/Encryptor_Design1/carrysave_adder.vhd in Library work.

Architecture behavioral of Entity carrysave_adder is up to date.

Compiling vhdl file g:/try/decry/../../project/Encryptor_Design1/carrylook_ahead2.vhd in Library work.

Architecture behavioral of Entity carrylook_ahead2 is up to date.

Compiling vhdl file g:/try/decry/../../project/Encryptor_Design1/wallace_structure.vhd in Library work.

Architecture behavioral of Entity wallace_structure is up to date.

Compiling vhdl file g:/try/decry/../../project/Encryptor_Design1/multiplier.vhd in Library work.

Architecture behavioral of Entity multiplier is up to date.

Compiling vhdl file g:/try/decry/decry.vhdl in Library work.

Architecture arch_decryptor of Entity decryptor is up to date.

* HDL Analysis *

Analyzing Entity <decryptor> (Architecture <arch_decryptor>).

WARNING:Xst:1610 - g:/try/decry/decry.vhdl line 303: Width mismatch. <A_pre> has a width of 16 bits but assigned expression is 31-bit wide.

WARNING:Xst:1610 - g:/try/decry/decry.vhdl line 307: Width mismatch. <C_pre> has a width of 16 bits but assigned expression is 31-bit wide.

INFO:Xst:1304 - Contents of register <last_round> in unit <decryptor> never changes during circuit operation. The register is replaced by logic.

INFO:Xst:1304 - Contents of register <cleanup> in unit <decryptor> never changes during circuit operation. The register is replaced by logic.

INFO:Xst:1304 - Contents of register <ready_d_pre> in unit <decryptor> never changes during circuit operation. The register is replaced by logic.

Entity <decryptor> analyzed. Unit <decryptor> generated.

Analyzing Entity <multiplier> (Architecture <behavioral>).

Entity <multiplier> analyzed. Unit <multiplier> generated.

Analyzing Entity <wallace_structure> (Architecture <behavioral>).

Entity <wallace_structure> analyzed. Unit <wallace_structure> generated.

Analyzing Entity <carrysave_adder> (Architecture <behavioral>).
Entity <carrysave_adder> analyzed. Unit <carrysave_adder> generated.

Analyzing Entity <full_adder> (Architecture <behavioral>).
Entity <full_adder> analyzed. Unit <full_adder> generated.

Analyzing Entity <carrylook_ahead2> (Architecture <behavioral>).
Entity <carrylook_ahead2> analyzed. Unit <carrylook_ahead2> generated.

```
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=====
*                HDL Synthesis                *
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```

Synthesizing Unit <full_adder>.
Related source file is g:/try/decry/../../project/Encryptor_Design1/full_adder.vhd.
WARNING:Xst:646 - Signal <sig<15>> is assigned but never used.
Found 16-bit xor3 for signal <sf>.
Summary:
inferred 16 Xor(s).
Unit <full_adder> synthesized.

Synthesizing Unit <carrylook_ahead2>.
Related source file is
g:/try/decry/../../project/Encryptor_Design1/carrylook_ahead2.vhd.
WARNING:Xst:646 - Signal <c<16>> is assigned but never used.
Found 15-bit xor2 for signal <s1<15:1>>.
Found 16-bit xor2 for signal <p>.
Unit <carrylook_ahead2> synthesized.

Synthesizing Unit <carrysave_adder>.
Related source file is g:/try/decry/../../project/Encryptor_Design1/carrysave_adder.vhd.
Unit <carrysave_adder> synthesized.

Synthesizing Unit <wallace_structure>.
Related source file is
g:/try/decry/../../project/Encryptor_Design1/wallace_structure.vhd.
WARNING:Xst:1780 - Signal <c_out> is never used or assigned.
Unit <wallace_structure> synthesized.

Synthesizing Unit <multiplier>.

Related source file is g:/try/decry/../../project/Encrytor_Design1/multiplier.vhd.
Unit <multiplier> synthesized.

Synthesizing Unit <decryptor>.

Related source file is g:/try/decry/decry.vhdl.

WARNING:Xst:646 - Signal <ttemp1<15:4>> is assigned but never used.

WARNING:Xst:646 - Signal <utemp1<15:4>> is assigned but never used.

WARNING:Xst:646 - Signal <last_round> is assigned but never used.

Register <utemp1> equivalent to <u> has been removed

Register <ttemp1> equivalent to <t> has been removed

Found finite state machine <FSM_0> for signal <state>.

```
-----  
| States      | 12          |  
| Transitions | 14          |  
| Inputs      | 2           |  
| Outputs     | 12          |  
| Clock       | clock (rising_edge) |  
| Reset       | reset (positive) |  
| Reset type  | asynchronous |  
| Reset State | 000000000001 |  
| Encoding    | automatic   |  
| Implementation | LUT        |  
-----
```

Found finite state machine <FSM_1> for signal <state_out>.

```
-----  
| States      | 5           |  
| Transitions | 5           |  
| Inputs      | 0           |  
| Outputs     | 5           |  
| Clock       | clock (rising_edge) |  
| Reset       | reset (positive) |  
| Reset type  | asynchronous |  
| Reset State | 00001       |  
| Encoding    | automatic   |  
| Implementation | LUT        |  
-----
```

Found 16-bit register for signal <plaintext_d>.

Found 1-bit register for signal <ready_d>.

Found 16-bit subtractor for signal <\$n0003> created at line 297.

Found 16-bit shifter logical right for signal <\$n0005> created at line 303.

Found 16-bit subtractor for signal <\$n0006> created at line 298.

Found 16-bit shifter logical right for signal <\$n0008> created at line 307.

Found 8-bit comparator less for signal <\$n0014> created at line 314.

Found 16-bit adder for signal <\$n0039> created at line 165.
Found 16-bit adder for signal <\$n0040> created at line 167.
Found 16-bit adder for signal <\$n0041>.
Found 16-bit adder for signal <\$n0042>.
Found 16-bit adder for signal <\$n0043>.
Found 16-bit adder for signal <\$n0044>.
Found 16-bit adder for signal <\$n0045>.
Found 16-bit adder for signal <\$n0046>.
Found 16-bit adder for signal <\$n0047>.
Found 16-bit adder for signal <\$n0048>.
Found 16-bit adder for signal <\$n0049>.
Found 16-bit adder for signal <\$n0050>.
Found 16-bit adder for signal <\$n0051>.
Found 16-bit adder for signal <\$n0052>.
Found 16-bit adder for signal <\$n0053>.
Found 16-bit adder for signal <\$n0054>.
Found 16-bit adder for signal <\$n0055>.
Found 16-bit adder for signal <\$n0056>.
Found 16-bit adder for signal <\$n0057>.
Found 16-bit adder for signal <\$n0058>.
Found 16-bit adder for signal <\$n0059>.
Found 16-bit adder for signal <\$n0060>.
Found 16-bit adder for signal <\$n0061>.
Found 16-bit adder for signal <\$n0062>.
Found 16-bit adder for signal <\$n0063>.
Found 16-bit adder for signal <\$n0064>.
Found 16-bit adder for signal <\$n0065>.
Found 16-bit adder for signal <\$n0066>.
Found 16-bit adder for signal <\$n0067>.
Found 16-bit adder for signal <\$n0068>.
Found 16-bit adder for signal <\$n0069>.
Found 16-bit adder for signal <\$n0070>.
Found 16-bit adder for signal <\$n0071>.
Found 16-bit adder for signal <\$n0072>.
Found 16-bit adder for signal <\$n0073>.
Found 16-bit adder for signal <\$n0074>.
Found 16-bit adder for signal <\$n0075>.
Found 16-bit adder for signal <\$n0076>.
Found 16-bit adder for signal <\$n0077>.
Found 16-bit adder for signal <\$n0078>.
Found 16-bit adder for signal <\$n0079>.
Found 16-bit adder for signal <\$n0080>.
Found 7-bit adder for signal <\$n0081> created at line 315.
Found 16-bit subtractor for signal <\$n0082> created at line 244.
Found 16-bit subtractor for signal <\$n0083> created at line 338.
Found 16-bit subtractor for signal <\$n0084> created at line 245.

Found 16-bit subtractor for signal <\$n0085> created at line 330.
Found 16-bit xor2 for signal <\$n0087> created at line 305.
Found 16-bit xor2 for signal <\$n0088> created at line 309.
Found 16-bit register for signal <A>.
Found 16-bit register for signal <A_final>.
Found 16-bit register for signal .
Found 16-bit register for signal <B_final>.
Found 16-bit register for signal <C>.
Found 16-bit register for signal <C_final>.
Found 7-bit register for signal <cnt>.
Found 16-bit register for signal <D>.
Found 16-bit register for signal <D_final>.
Found 16-bit adder for signal <l<40:35>>.
Found 16-bit adder for signal <l<33:25>>.
Found 16-bit adder for signal <l<23:0>>.
Found 16-bit adder for signal <s<43:1>>.
Found 16-bit register for signal <t>.
Found 16-bit register for signal <u>.

Summary:

- inferred 2 Finite State Machine(s).
- inferred 184 D-type flip-flop(s).
- inferred 131 Adder/Subtractor(s).
- inferred 1 Comparator(s).
- inferred 2 Combinational logic shifter(s).

Unit <decryptor> synthesized.

```
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*           Advanced HDL Synthesis           *
=====
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```

Advanced RAM inference ...
Advanced multiplier inference ...
Selecting encoding for FSM_1 ...
Optimizing FSM <FSM_1> on signal <state_out> with one-hot encoding.
Selecting encoding for FSM_0 ...
Optimizing FSM <FSM_0> on signal <state> with one-hot encoding.
Dynamic shift register inference ...

```
=====
=====
```

HDL Synthesis Report

Macro Statistics

```
# FSMs : 2
# Adders/Subtractors : 131
  16-bit subtractor : 6
  7-bit adder : 1
  16-bit adder : 124
# Registers : 30
  1-bit register : 18
  16-bit register : 11
  7-bit register : 1
# Comparators : 1
  8-bit comparator less : 1
# Logic shifters : 2
  16-bit shifter logical right : 2
# Xors : 78
  16-bit xor3 : 14
  16-bit xor2 : 2
  1-bit xor2 : 62
```

```
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=====
```

```
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```

```
* Low Level Synthesis *
```

```
=====
=====
```

Optimizing unit <decryptor> ...

Optimizing unit <carrylook_ahead2> ...

Optimizing unit <full_adder> ...

Optimizing unit <multiplier> ...

Loading device for application Xst from file '3s400.nph' in environment C:/Xilinx.

Mapping all equations...

Building and optimizing final netlist ...

Found area constraint ratio of 100 (+ 5) on block decryptor, actual ratio is 45.

FlipFlop D_3 has been replicated 1 time(s)

FlipFlop B_3 has been replicated 1 time(s)

FlipFlop B_5 has been replicated 1 time(s)

FlipFlop B_1 has been replicated 1 time(s)

FlipFlop B_2 has been replicated 1 time(s)

FlipFlop D_4 has been replicated 1 time(s)

FlipFlop B_0 has been replicated 1 time(s)

FlipFlop D_0 has been replicated 1 time(s)
FlipFlop B_4 has been replicated 1 time(s)
FlipFlop B_0 has been replicated 1 time(s)
FlipFlop D_3 has been replicated 1 time(s)
FlipFlop B_1 has been replicated 1 time(s)
FlipFlop B_6 has been replicated 1 time(s)
FlipFlop D_1 has been replicated 1 time(s)
FlipFlop D_2 has been replicated 1 time(s)
FlipFlop D_5 has been replicated 1 time(s)
FlipFlop B_2 has been replicated 1 time(s)
FlipFlop B_3 has been replicated 1 time(s)

* Final Report *

Final Results

RTL Top Level Output File Name : decryptor.ngr
Top Level Output File Name : decryptor
Output Format : NGC
Optimization Goal : Speed
Keep Hierarchy : NO

Design Statistics

IOs : 52

Macro Statistics :

Registers : 13
1-bit register : 1
16-bit register : 11
7-bit register : 1
Logic shifters : 2
16-bit shifter logical right: 2
Adders/Subtractors : 131
16-bit adder : 124
16-bit subtractor : 6
7-bit adder : 1
Comparators : 1
8-bit comparator less : 1
Xors : 14
16-bit xor3 : 14

Cell Usage :

BELS : 6498
GND : 1

```

# LUT1 : 681
# LUT2 : 1358
# LUT2_D : 1
# LUT2_L : 16
# LUT3 : 177
# LUT3_D : 8
# LUT3_L : 5
# LUT4 : 382
# LUT4_D : 32
# LUT4_L : 12
# MUXCY : 1890
# MUXF5 : 16
# VCC : 1
# XORCY : 1918
# FlipFlops/Latches : 219
# FDC : 113
# FDCE : 8
# FDE : 96
# FDP : 1
# FDPE : 1
# Clock Buffers : 1
# BUFGP : 1
# IO Buffers : 51
# IBUF : 34
# OBUF : 17

```

```

=====
=====

```

Device utilization summary:

```

-----

```

Selected Device : 3s400pq208-5

```

Number of Slices:          1533 out of 3584  42%
Number of Slice Flip Flops: 219 out of 7168  3%
Number of 4 input LUTs:   2672 out of 7168  37%
Number of bonded IOBs:    51 out of 141  36%
Number of GCLKs:          1 out of 8  12%

```

```

=====
=====

```

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 |
-----+-----+-----+
clock             | BUFGP                 | 219  |
-----+-----+-----+

```

Timing Summary:

Speed Grade: -5

Minimum period: 5.217ns (Maximum Frequency: 191.681MHz)
 Minimum input arrival time before clock: 50.968ns
 Maximum output required time after clock: 5.602ns
 Maximum combinational path delay: No path found

Timing Detail:

 All values displayed in nanoseconds (ns)

```

-----
Timing constraint: Default period analysis for Clock 'clock'
Delay:          5.217ns (Levels of Logic = 14)
Source:         B_0 (FF)
Destination:   t_3 (FF)
Source Clock:   clock rising
Destination Clock: clock rising

```

Data Path: B_0 to t_3

Cell:in->out	Gate	Net	fanout	Delay	Delay	Logical Name (Net Name)
FDC:C->Q			10	0.000	0.806	B_0 (B_0)
LUT2:I0->O			3	0.000	0.577	a1_n00331 (a1_P2<5>)
LUT4_D:I2->O			1	0.000	0.240	a1_w1_ca1_fa0_Mxor_sf_Xo<11>1
(a1_w1_ca1_su1<5>)						
LUT4_D:I3->O			5	0.000	0.658	a1_w1_ca1_fa3_Mxor_sf_Xo<11>1
(a1_w1_ca1_su4<5>)						
LUT4_D:I1->LO			1	0.000	0.100	a1_w1_ca1_fa6_Mxor_sf_Xo<13>1
(N45137)						
LUT4:I2->O			1	0.000	0.240	a1_w1_ca2_Ker329351_SW0 (N44798)

```

LUT4_D:I1->LO      1 0.000 0.100 a1_w1_ca2_Ker329351 (N45084)
LUT4:I1->O         3 0.000 0.577 a1_w1_ca2_n01191 (a1_w1_ca2_c<9>)
LUT4_L:I0->LO      1 0.000 0.100 a1_w1_ca2_Ker329401
(a1_w1_ca2_N32942)
LUT4:I1->O         3 0.000 0.577 a1_w1_ca2_n01291 (a1_w1_ca2_c<11>)
LUT4_L:I0->LO      1 0.000 0.100 a1_w1_ca2_Ker329451
(a1_w1_ca2_N32947)
LUT4:I3->O         3 0.000 0.577 a1_w1_ca2_n01391 (a1_w1_ca2_c<13>)
LUT4:I0->O         2 0.000 0.465 a1_w1_ca2_Ker329501 (a1_w1_ca2_N32952)
LUT3_L:I0->LO      1 0.000 0.100 a1_w1_ca2_Mxor_s1<15>_Result_SW0
(N36838)
LUT4_L:I2->LO      1 0.000 0.000 a1_w1_ca2_Mxor_s1<15>_Result
(product1<15>)
FDE:D              0.000      t_3
-----
Total              5.217ns (0.000ns logic, 5.217ns route)
                  (0.0% logic, 100.0% route)

```

```

-----
Timing constraint: Default OFFSET IN BEFORE for Clock 'clock'
Offset:          50.968ns (Levels of Logic = 260)
Source:          round_keys_d<0> (PAD)
Destination:    C_1 (FF)
Destination Clock: clock rising

```

Data Path: round_keys_d<0> to C_1

	Gate	Net			
Cell:in->out	fanout	Delay	Delay	Logical Name (Net Name)	
IBUF:I->O	33	0.518	1.322	round_keys_d_0_IBUF	
(round_keys_d_0_IBUF)					
LUT1:I0->O	1	0.000	0.000	Madd_l<0>_inst_lut2_841	
(Madd_l<0>_inst_lut2_84)					
MUXCY:S->O	1	0.000	0.000	Madd_l<0>_inst_cy_83	
(Madd_l<0>_inst_cy_83)					
MUXCY:CI->O	1	0.000	0.000	Madd_l<0>_inst_cy_84	
(Madd_l<0>_inst_cy_84)					
MUXCY:CI->O	1	0.000	0.000	Madd_l<0>_inst_cy_85	
(Madd_l<0>_inst_cy_85)					
XORCY:CI->O	3	0.000	0.577	Madd_l<0>_inst_sum_87 (l<0><3>)	
LUT1:I0->O	1	0.000	0.000	Madd_s<1>_inst_lut2_711	
(Madd_s<1>_inst_lut2_71)					
MUXCY:S->O	1	0.000	0.000	Madd_s<1>_inst_cy_70	
(Madd_s<1>_inst_cy_70)					
MUXCY:CI->O	1	0.000	0.000	Madd_s<1>_inst_cy_71	
(Madd_s<1>_inst_cy_71)					

MUXCY:CI->O 1 0.000 0.000 Madd_s<1>_inst_cy_72
(Madd_s<1>_inst_cy_72)
MUXCY:CI->O 1 0.000 0.000 Madd_s<1>_inst_cy_73
(Madd_s<1>_inst_cy_73)
MUXCY:CI->O 1 0.000 0.000 Madd_s<1>_inst_cy_74
(Madd_s<1>_inst_cy_74)
MUXCY:CI->O 1 0.000 0.000 Madd_s<1>_inst_cy_75
(Madd_s<1>_inst_cy_75)
MUXCY:CI->O 1 0.000 0.000 Madd_s<1>_inst_cy_76
(Madd_s<1>_inst_cy_76)
MUXCY:CI->O 1 0.000 0.000 Madd_s<1>_inst_cy_77
(Madd_s<1>_inst_cy_77)
XORCY:CI->O 3 0.000 0.577 Madd_s<1>_inst_sum_79 (s<1><<11>)
LUT2:I0->O 1 0.000 0.000 Madd_l<1>_inst_lut2_501
(Madd_l<1>_inst_lut2_50)
XORCY:LI->O 2 0.000 0.465 Madd_l<1>_inst_sum_50 (l<1><<11>)
LUT2:I1->O 1 0.000 0.000 Madd__n0041_inst_lut2_501
(Madd__n0041_inst_lut2_50)
XORCY:LI->O 1 0.000 0.240 Madd__n0041_inst_sum_50 (_n0041<<11>)
LUT1:I0->O 1 0.000 0.000 Madd_s<2>_inst_lut2_661
(Madd_s<2>_inst_lut2_66)
XORCY:LI->O 2 0.000 0.465 Madd_s<2>_inst_sum_66 (s<2><<11>)
LUT2:I0->O 1 0.000 0.000 Madd_l<2>_inst_lut2_501
(Madd_l<2>_inst_lut2_50)
XORCY:LI->O 2 0.000 0.465 Madd_l<2>_inst_sum_50 (l<2><<11>)
LUT2:I1->O 1 0.000 0.000 Madd__n0042_inst_lut2_501
(Madd__n0042_inst_lut2_50)
XORCY:LI->O 1 0.000 0.240 Madd__n0042_inst_sum_50 (_n0042<<11>)
LUT1:I0->O 1 0.000 0.000 Madd_s<3>_inst_lut2_661
(Madd_s<3>_inst_lut2_66)
XORCY:LI->O 2 0.000 0.465 Madd_s<3>_inst_sum_66 (s<3><<11>)
LUT2:I0->O 1 0.000 0.000 Madd_l<3>_inst_lut2_501
(Madd_l<3>_inst_lut2_50)
XORCY:LI->O 2 0.000 0.465 Madd_l<3>_inst_sum_50 (l<3><<11>)
LUT2:I1->O 1 0.000 0.000 Madd__n0043_inst_lut2_501
(Madd__n0043_inst_lut2_50)
XORCY:LI->O 1 0.000 0.240 Madd__n0043_inst_sum_50 (_n0043<<11>)
LUT1:I0->O 1 0.000 0.000 Madd_s<4>_inst_lut2_661
(Madd_s<4>_inst_lut2_66)
XORCY:LI->O 2 0.000 0.465 Madd_s<4>_inst_sum_66 (s<4><<11>)
LUT2:I0->O 1 0.000 0.000 Madd_l<4>_inst_lut2_501
(Madd_l<4>_inst_lut2_50)
XORCY:LI->O 2 0.000 0.465 Madd_l<4>_inst_sum_50 (l<4><<11>)
LUT2:I1->O 1 0.000 0.000 Madd__n0044_inst_lut2_501
(Madd__n0044_inst_lut2_50)
XORCY:LI->O 1 0.000 0.240 Madd__n0044_inst_sum_50 (_n0044<<11>)

```

LUT1:I0->O      1 0.000 0.000 Madd_s<5>_inst_lut2_661
(Madd_s<5>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<5>_inst_sum_66 (s<5><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<5>_inst_lut2_501
(Madd_l<5>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<5>_inst_sum_50 (l<5><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0045_inst_lut2_501
(Madd__n0045_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0045_inst_sum_50 (_n0045<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<6>_inst_lut2_661
(Madd_s<6>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<6>_inst_sum_66 (s<6><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<6>_inst_lut2_501
(Madd_l<6>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<6>_inst_sum_50 (l<6><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0046_inst_lut2_501
(Madd__n0046_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0046_inst_sum_50 (_n0046<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<7>_inst_lut2_661
(Madd_s<7>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<7>_inst_sum_66 (s<7><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<7>_inst_lut2_501
(Madd_l<7>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<7>_inst_sum_50 (l<7><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0047_inst_lut2_501
(Madd__n0047_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0047_inst_sum_50 (_n0047<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<8>_inst_lut2_661
(Madd_s<8>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<8>_inst_sum_66 (s<8><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<8>_inst_lut2_501
(Madd_l<8>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<8>_inst_sum_50 (l<8><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0048_inst_lut2_501
(Madd__n0048_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0048_inst_sum_50 (_n0048<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<9>_inst_lut2_661
(Madd_s<9>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<9>_inst_sum_66 (s<9><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<9>_inst_lut2_501
(Madd_l<9>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<9>_inst_sum_50 (l<9><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0049_inst_lut2_501
(Madd__n0049_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0049_inst_sum_50 (_n0049<11>)

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LUT1:I0->O      1 0.000 0.000 Madd_s<10>_inst_lut2_661
(Madd_s<10>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<10>_inst_sum_66 (s<10><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<10>_inst_lut2_501
(Madd_l<10>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<10>_inst_sum_50 (l<10><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0050_inst_lut2_501
(Madd__n0050_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0050_inst_sum_50 (_n0050<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<11>_inst_lut2_661
(Madd_s<11>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<11>_inst_sum_66 (s<11><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<11>_inst_lut2_501
(Madd_l<11>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<11>_inst_sum_50 (l<11><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0051_inst_lut2_501
(Madd__n0051_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0051_inst_sum_50 (_n0051<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<12>_inst_lut2_661
(Madd_s<12>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<12>_inst_sum_66 (s<12><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<12>_inst_lut2_501
(Madd_l<12>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<12>_inst_sum_50 (l<12><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0052_inst_lut2_501
(Madd__n0052_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0052_inst_sum_50 (_n0052<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<13>_inst_lut2_661
(Madd_s<13>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<13>_inst_sum_66 (s<13><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<13>_inst_lut2_501
(Madd_l<13>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<13>_inst_sum_50 (l<13><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0053_inst_lut2_501
(Madd__n0053_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0053_inst_sum_50 (_n0053<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<14>_inst_lut2_661
(Madd_s<14>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<14>_inst_sum_66 (s<14><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<14>_inst_lut2_501
(Madd_l<14>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<14>_inst_sum_50 (l<14><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0054_inst_lut2_501
(Madd__n0054_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0054_inst_sum_50 (_n0054<11>)

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LUT1:I0->O      1 0.000 0.000 Madd_s<15>_inst_lut2_661
(Madd_s<15>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<15>_inst_sum_66 (s<15><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<15>_inst_lut2_501
(Madd_l<15>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<15>_inst_sum_50 (l<15><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0055_inst_lut2_501
(Madd__n0055_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0055_inst_sum_50 (_n0055<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<16>_inst_lut2_661
(Madd_s<16>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<16>_inst_sum_66 (s<16><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<16>_inst_lut2_501
(Madd_l<16>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<16>_inst_sum_50 (l<16><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0056_inst_lut2_501
(Madd__n0056_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0056_inst_sum_50 (_n0056<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<17>_inst_lut2_661
(Madd_s<17>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<17>_inst_sum_66 (s<17><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<17>_inst_lut2_501
(Madd_l<17>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<17>_inst_sum_50 (l<17><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0057_inst_lut2_501
(Madd__n0057_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0057_inst_sum_50 (_n0057<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<18>_inst_lut2_661
(Madd_s<18>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<18>_inst_sum_66 (s<18><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<18>_inst_lut2_501
(Madd_l<18>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<18>_inst_sum_50 (l<18><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0058_inst_lut2_501
(Madd__n0058_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0058_inst_sum_50 (_n0058<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<19>_inst_lut2_661
(Madd_s<19>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<19>_inst_sum_66 (s<19><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<19>_inst_lut2_501
(Madd_l<19>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<19>_inst_sum_50 (l<19><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0059_inst_lut2_501
(Madd__n0059_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0059_inst_sum_50 (_n0059<<11>)

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LUT1:I0->O      1 0.000 0.000 Madd_s<20>_inst_lut2_661
(Madd_s<20>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<20>_inst_sum_66 (s<20><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<20>_inst_lut2_501
(Madd_l<20>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<20>_inst_sum_50 (l<20><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0060_inst_lut2_501
(Madd__n0060_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0060_inst_sum_50 (_n0060<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<21>_inst_lut2_661
(Madd_s<21>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<21>_inst_sum_66 (s<21><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<21>_inst_lut2_501
(Madd_l<21>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<21>_inst_sum_50 (l<21><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0061_inst_lut2_501
(Madd__n0061_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0061_inst_sum_50 (_n0061<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<22>_inst_lut2_661
(Madd_s<22>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<22>_inst_sum_66 (s<22><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<22>_inst_lut2_501
(Madd_l<22>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<22>_inst_sum_50 (l<22><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0062_inst_lut2_501
(Madd__n0062_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0062_inst_sum_50 (_n0062<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<23>_inst_lut2_661
(Madd_s<23>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<23>_inst_sum_66 (s<23><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<23>_inst_lut2_501
(Madd_l<23>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<23>_inst_sum_50 (l<23><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0063_inst_lut2_501
(Madd__n0063_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0063_inst_sum_50 (_n0063<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<24>_inst_lut2_661
(Madd_s<24>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<24>_inst_sum_66 (s<24><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<29>_inst_lut2_501
(Madd_l<29>_inst_lut2_50)
XORCY:LI->O     4 0.000 0.629 Madd_l<29>_inst_sum_50 (l<29><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0064_inst_lut2_501
(Madd__n0064_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0064_inst_sum_50 (_n0064<11>)

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LUT1:I0->O      1 0.000 0.000 Madd_s<25>_inst_lut2_661
(Madd_s<25>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<25>_inst_sum_66 (s<25><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<25>_inst_lut2_501
(Madd_l<25>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<25>_inst_sum_50 (l<25><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0065_inst_lut2_501
(Madd__n0065_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0065_inst_sum_50 (_n0065<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<26>_inst_lut2_661
(Madd_s<26>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<26>_inst_sum_66 (s<26><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<26>_inst_lut2_501
(Madd_l<26>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<26>_inst_sum_50 (l<26><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0066_inst_lut2_501
(Madd__n0066_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0066_inst_sum_50 (_n0066<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<27>_inst_lut2_661
(Madd_s<27>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<27>_inst_sum_66 (s<27><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<27>_inst_lut2_501
(Madd_l<27>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<27>_inst_sum_50 (l<27><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0067_inst_lut2_501
(Madd__n0067_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0067_inst_sum_50 (_n0067<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<28>_inst_lut2_661
(Madd_s<28>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<28>_inst_sum_66 (s<28><11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<28>_inst_lut2_501
(Madd_l<28>_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd_l<28>_inst_sum_50 (l<28><11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0068_inst_lut2_501
(Madd__n0068_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0068_inst_sum_50 (_n0068<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<29>_inst_lut2_661
(Madd_s<29>_inst_lut2_66)
XORCY:LI->O     1 0.000 0.240 Madd_s<29>_inst_sum_66 (s<29><11>)
LUT2:I0->O      1 0.000 0.000 Madd__n0069_inst_lut2_501
(Madd__n0069_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0069_inst_sum_50 (_n0069<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<30>_inst_lut2_661
(Madd_s<30>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<30>_inst_sum_66 (s<30><11>)

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LUT2:I0->O      1 0.000 0.000 Madd_l<30>_inst_lut2_501
(Madd_l<30>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<30>_inst_sum_50 (l<30><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0070_inst_lut2_501
(Madd__n0070_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0070_inst_sum_50 (_n0070<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<31>_inst_lut2_661
(Madd_s<31>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<31>_inst_sum_66 (s<31><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<31>_inst_lut2_501
(Madd_l<31>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<31>_inst_sum_50 (l<31><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0071_inst_lut2_501
(Madd__n0071_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0071_inst_sum_50 (_n0071<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<32>_inst_lut2_661
(Madd_s<32>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<32>_inst_sum_66 (s<32><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<32>_inst_lut2_501
(Madd_l<32>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<32>_inst_sum_50 (l<32><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0072_inst_lut2_501
(Madd__n0072_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0072_inst_sum_50 (_n0072<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<33>_inst_lut2_661
(Madd_s<33>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<33>_inst_sum_66 (s<33><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<33>_inst_lut2_501
(Madd_l<33>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<33>_inst_sum_50 (l<33><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0073_inst_lut2_501
(Madd__n0073_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0073_inst_sum_50 (_n0073<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<34>_inst_lut2_661
(Madd_s<34>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<34>_inst_sum_66 (s<34><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<39>_inst_lut2_501
(Madd_l<39>_inst_lut2_50)
XORCY:LI->O     4 0.000 0.629 Madd_l<39>_inst_sum_50 (l<39><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0074_inst_lut2_501
(Madd__n0074_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0074_inst_sum_50 (_n0074<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<35>_inst_lut2_661
(Madd_s<35>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<35>_inst_sum_66 (s<35><<11>)

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LUT2:I0->O      1 0.000 0.000 Madd_l<35>_inst_lut2_501
(Madd_l<35>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<35>_inst_sum_50 (l<35><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0075_inst_lut2_501
(Madd__n0075_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0075_inst_sum_50 (_n0075<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<36>_inst_lut2_661
(Madd_s<36>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<36>_inst_sum_66 (s<36><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<36>_inst_lut2_501
(Madd_l<36>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<36>_inst_sum_50 (l<36><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0076_inst_lut2_501
(Madd__n0076_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0076_inst_sum_50 (_n0076<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<37>_inst_lut2_661
(Madd_s<37>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<37>_inst_sum_66 (s<37><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<37>_inst_lut2_501
(Madd_l<37>_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd_l<37>_inst_sum_50 (l<37><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0077_inst_lut2_501
(Madd__n0077_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0077_inst_sum_50 (_n0077<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<38>_inst_lut2_661
(Madd_s<38>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<38>_inst_sum_66 (s<38><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<38>_inst_lut2_501
(Madd_l<38>_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd_l<38>_inst_sum_50 (l<38><<11>)
LUT2:I1->O      1 0.000 0.000 Madd__n0078_inst_lut2_501
(Madd__n0078_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0078_inst_sum_50 (_n0078<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<39>_inst_lut2_661
(Madd_s<39>_inst_lut2_66)
XORCY:LI->O     1 0.000 0.240 Madd_s<39>_inst_sum_66 (s<39><<11>)
LUT2:I0->O      1 0.000 0.000 Madd__n0079_inst_lut2_501
(Madd__n0079_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd__n0079_inst_sum_50 (_n0079<<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<40>_inst_lut2_661
(Madd_s<40>_inst_lut2_66)
XORCY:LI->O     3 0.000 0.577 Madd_s<40>_inst_sum_66 (s<40><<11>)
LUT2:I0->O      1 0.000 0.000 Madd_l<40>_inst_lut2_501
(Madd_l<40>_inst_lut2_50)
XORCY:LI->O     1 0.000 0.240 Madd_l<40>_inst_sum_50 (l<40><<11>)

```

```

LUT2:I1->O      1 0.000 0.000 Madd__n0039_inst_lut2_501
(Madd__n0039_inst_lut2_50)
XORCY:LI->O     2 0.000 0.465 Madd__n0039_inst_sum_50 (l<41><<11>)
LUT1:I0->O      1 0.000 0.000 Madd_s<41>_inst_lut2_661
(Madd_s<41>_inst_lut2_66)
XORCY:LI->O     2 0.000 0.465 Madd_s<41>_inst_sum_66 (s<41><<11>)
LUT2:I1->O      1 0.000 0.000 Msub__n0006_inst_lut2_111
(Msub__n0006_inst_lut2_11)
XORCY:LI->O     3 0.000 0.577 Msub__n0006_inst_sum_11 (_n0006<11>)
LUT3:I0->O      3 0.000 0.577 Ker295971 (N29599)
LUT3:I2->O      2 0.000 0.465 Mshift__n0008_Sh<9>
(Mshift__n0008_Sh<9>)
LUT3:I2->O      2 0.000 0.465 Ker297931 (N29795)
LUT3:I1->O      1 0.000 0.240 Mshift__n0008_Result<1>37 (_n0265<17>)
LUT3:I0->O      1 0.000 0.240 _n0035<1>17 (CHOICE1055)
LUT4:I0->O      1 0.000 0.000 _n0035<1>39 (_n0035<1>)
FDC:D           0.000      C_1
-----
Total           50.968ns (0.518ns logic, 50.450ns route)
                (1.0% logic, 99.0% route)

```

```

-----
Timing constraint: Default OFFSET OUT AFTER for Clock 'clock'
Offset:          5.602ns (Levels of Logic = 1)
Source:         ready_d (FF)
Destination:    ready_d (PAD)
Source Clock:   clock rising

```

```

Data Path: ready_d to ready_d
              Gate  Net
Cell:in->out  fanout Delay Delay Logical Name (Net Name)
-----
FDC:C->Q      2 0.000 0.465 ready_d (ready_d_OBUF)
OBUF:I->O     5.137      ready_d_OBUF (ready_d)
-----
Total         5.602ns (5.137ns logic, 0.465ns route)
                (91.7% logic, 8.3% route)

```

```

=====
====
CPU : 35.13 / 36.26 s | Elapsed : 35.00 / 36.00 s

```

-->

Total memory usage is 98908 kilobytes

