```
In file system - console
Enter the number of files:
1
0: Enter the name of an ASM-file you want to work with (without .txt):
simple_values
File 0: tests\simple_values.txt
Data memory file path: tests\simple_values-data.txt
Program memory file path: tests\simple_values-prog.txt
Common info file path: tests\simple_values-info.txt
Error file path: tests\simple_values-error.txt
OpCode file path: tests\opcodes_dbl.txt

avoid = 0x0000000000000000 address 0 = 00000000
x = 0x4000000000000000 address 1 = 00000001
z = 0x4010000000000000 address 2 = 00000010
y = 0x4028000000000000 address 3 = 00000011
q = 0x4010000000000000 address 4 = 00000100
u = 0x3FD0000000000000 address 5 = 00000101
p = 0x4014000000000000 address 6 = 00000110
l = 0x4018000000000000 address 7 = 00000111
w = 0x405A400000000000 address 8 = 00001000
v = 0x4014000000000000 address 9 = 00001001
x_plus_z = 0x0000000000000000 address 10 = 00001010
y_div_xz = 0x0000000000000000 address 11 = 00001011
q_mul_u = 0x0000000000000000 address 12 = 00001100
p_mul_l = 0x0000000000000000 address 13 = 00001101
v_plus_pl = 0x0000000000000000 address 14 = 00001110
w_div_vpl = 0x0000000000000000 address 15 = 00001111
yxz_sub_qu = 0x0000000000000000 address 16 = 00010000
a = 0x0000000000000000 address 17 = 00010001
1 add x z x_plus_z2 div y x_plus_z y_div_xz3 out y_div_xz ? 04 mul q u q_mul_u5 out q_mul_u
? 06 mul p l p_mul_l7 add v p_mul_l v_plus_pl8 div w v_plus_pl w_div_vpl9 out w_div_vpl ?
010 sub y_div_xz q_mul_u yxz_sub_qu11 add yxz_sub_qu w_div_vpl a12 out a ? 0
--------------------------------
add index: 1 level: 1
     operand :x
         read- 1,
         write-
     operand :z
         read- 1,
         write-
     operand :x_plus_z
         read- 2,
         write- 1,
--------------------------------
div index: 2 level: 2
     operand :y
         read- 2,
         write-
     operand :x_plus_z
         read- 2,
         write- 1,
     operand :y_div_xz
         read- 3, 10,
         write- 2,
--------------------------------
out index: 3 level: 3
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     operand :y_div_xz
         read- 3, 10,
         write- 2,
     operand :?
         read-
         write-
     operand :0
         read-
         write-
--------------------------------
mul index: 4 level: 1
     operand :q
         read- 4,
         write-
     operand :u
         read- 4,
         write-
     operand :q_mul_u
         read- 5, 10,
         write- 4,
--------------------------------
out index: 5 level: 2
     operand :q_mul_u
         read- 5, 10,
         write- 4,
     operand :?
         read-
         write-
     operand :0
         read-
         write-
--------------------------------
mul index: 6 level: 1
     operand :p
         read- 6,
         write-
     operand :l
         read- 6,
         write-
     operand :p_mul_l
         read- 7,
         write- 6,
--------------------------------
add index: 7 level: 2
     operand :v
         read- 7,
         write-
     operand :p_mul_l
         read- 7,
         write- 6,
     operand :v_plus_pl
         read- 8,
         write- 7,
--------------------------------
div index: 8 level: 3
     operand :w
         read- 8,
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         write-
     operand :v_plus_pl
         read- 8,
         write- 7,
     operand :w_div_vpl
         read- 9, 11,
         write- 8,
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out index: 9 level: 4
     operand :w_div_vpl
         read- 9, 11,
         write- 8,
     operand :?
         read-
         write-
     operand :0
         read-
         write-
--------------------------------
sub index: 10 level: 3
     operand :y_div_xz
         read- 3, 10,
         write- 2,
     operand :q_mul_u
         read- 5, 10,
         write- 4,
     operand :yxz_sub_qu
         read- 11,
         write- 10,
--------------------------------
add index: 11 level: 4
     operand :yxz_sub_qu
         read- 11,
         write- 10,
     operand :w_div_vpl
         read- 9, 11,
         write- 8,
     operand :a
         read- 12,
         write- 11,
--------------------------------
out index: 12 level: 5
     operand :a
         read- 12,
         write- 11,
     operand :?
         read-
         write-
     operand :0
         read-
         write-
takt: 0
 - started 4
 - rf{1 add x z x_plus_z=[1 add x z x_plus_z, 2 div y x_plus_z y_div_xz], 10 sub y_div_xz
 q_mul_u yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6
 mul p l p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready [1 add x z x_plus_z, 4 mul q u q_mul_u, 6 mul p l p_mul_l]
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takt: 1
 - started 6
 - rf{1 add x z x_plus_z=[1 add x z x_plus_z, 2 div y x_plus_z y_div_xz], 10 sub y_div_xz
 q_mul_u yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6
 mul p l p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready [1 add x z x_plus_z, 6 mul p l p_mul_l]
takt: 2
 - started 1
 - rf{1 add x z x_plus_z=[1 add x z x_plus_z, 2 div y x_plus_z y_div_xz], 10 sub y_div_xz
 q_mul_u yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6
 mul p l p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready [1 add x z x_plus_z]
takt: 3
 - rf{1 add x z x_plus_z=[1 add x z x_plus_z, 2 div y x_plus_z y_div_xz], 10 sub y_div_xz
 q_mul_u yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6
 mul p l p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 4
 - rf{1 add x z x_plus_z=[1 add x z x_plus_z, 2 div y x_plus_z y_div_xz], 10 sub y_div_xz
 q_mul_u yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6
 mul p l p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 5
 - rf{1 add x z x_plus_z=[1 add x z x_plus_z, 2 div y x_plus_z y_div_xz], 10 sub y_div_xz
 q_mul_u yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6
 mul p l p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 6
 - started 2
 - bypass 1 add x z x_plus_z to 2 div y x_plus_z y_div_xz
 - rf{2 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6 mul p l
 p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 7
 - rf{2 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6 mul p l
 p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 8
 - rf{2 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6 mul p l
 p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 9
 - rf{2 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6 mul p l
 p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 10
 - rf{2 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6 mul p l
 p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 11
 - rf{2 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6 mul p l
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 p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 12
 - rf{2 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6 mul p l
 p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 13
 - rf{2 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6 mul p l
 p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 14
 - rf{2 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6 mul p l
 p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 15
 - writeback4 mul q u q_mul_u
 - rf{2 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a], 6 mul p l
 p_mul_l=[6 mul p l p_mul_l, 7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl]}
 - ready []
takt: 16
 - started 7
 - bypass 6 mul p l p_mul_l to 7 add v p_mul_l v_plus_pl
 - rf{7 add v p_mul_l v_plus_pl=[7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl], 2
 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10
 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 17
 - ended 4 mul q u q_mul_u
3 of 12
 - rf{7 add v p_mul_l v_plus_pl=[7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl], 2
 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10
 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 18
 - rf{7 add v p_mul_l v_plus_pl=[7 add v p_mul_l v_plus_pl, 8 div w v_plus_pl w_div_vpl], 2
 div y x_plus_z y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10
 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 19
 - started 8
 - bypass 7 add v p_mul_l v_plus_pl to 8 div w v_plus_pl w_div_vpl
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 20
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 21
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
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 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 22
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 23
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 24
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 25
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 26
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 27
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 28
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 29
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 30
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 31
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 32
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
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takt: 33
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 34
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 35
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 36
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 37
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 38
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 39
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 40
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 41
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 42
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 43
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 44
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 2 div y x_plus_z
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 y_div_xz=[2 div y x_plus_z y_div_xz], 10 sub y_div_xz q_mul_u yxz_sub_qu=[10 sub y_div_xz
 q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 45
 - writeback2 div y x_plus_z y_div_xz
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 46
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 47
 - ended 2 div y x_plus_z y_div_xz
5 of 12
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 48
 - started 10
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready [3 out y_div_xz ? 0, 10 sub y_div_xz q_mul_u yxz_sub_qu]
takt: 49
 - started 3
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready [3 out y_div_xz ? 0]
takt: 50
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 51
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 10 sub y_div_xz q_mul_u
 yxz_sub_qu=[10 sub y_div_xz q_mul_u yxz_sub_qu, 11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 52
 - failed -10 sub y_div_xz q_mul_u yxz_sub_qu11 add yxz_sub_qu w_div_vpl ataktOccupiedtrue
statusnotPermittedStatus
 - writeback10 sub y_div_xz q_mul_u yxz_sub_qu
 - ended 3 out y_div_xz ? 0
6 of 12
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 11 add yxz_sub_qu w_div_vpl
 a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 53
 - started 5
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 11 add yxz_sub_qu w_div_vpl
 a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready [5 out q_mul_u ? 0]
takt: 54
 - ended 10 sub y_div_xz q_mul_u yxz_sub_qu
7 of 12
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 11 add yxz_sub_qu w_div_vpl
 a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 55
```

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 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 11 add yxz_sub_qu w_div_vpl
 a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 56
 - ended 5 out q_mul_u ? 0
8 of 12
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 11 add yxz_sub_qu w_div_vpl
 a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 57
 - rf{8 div w v_plus_pl w_div_vpl=[8 div w v_plus_pl w_div_vpl], 11 add yxz_sub_qu w_div_vpl
 a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 58
 - writeback8 div w v_plus_pl w_div_vpl
 - rf{11 add yxz_sub_qu w_div_vpl a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 59
 - rf{11 add yxz_sub_qu w_div_vpl a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 60
 - ended 8 div w v_plus_pl w_div_vpl
9 of 12
 - rf{11 add yxz_sub_qu w_div_vpl a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 61
 - started 11
 - rf{11 add yxz_sub_qu w_div_vpl a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready [9 out w_div_vpl ? 0, 11 add yxz_sub_qu w_div_vpl a]
takt: 62
 - started 9
 - rf{11 add yxz_sub_qu w_div_vpl a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready [9 out w_div_vpl ? 0]
takt: 63
 - rf{11 add yxz_sub_qu w_div_vpl a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 64
 - rf{11 add yxz_sub_qu w_div_vpl a=[11 add yxz_sub_qu w_div_vpl a]}
 - ready []
takt: 65
 - writeback11 add yxz_sub_qu w_div_vpl a
 - ended 9 out w_div_vpl ? 0
10 of 12
 - rf{}
 - ready []
takt: 66
 - rf{}
 - ready []
takt: 67
 - ended 11 add yxz_sub_qu w_div_vpl a
11 of 12
 - rf{}
 - ready []
takt: 68
 - started 12
 - rf{}
 - ready [12 out a ? 0]
```

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takt: 69
 - rf{}
 - ready []
takt: 70
 - rf{}
 - ready []
takt: 71
 - ended 12 out a ? 0
12 of 12
 - rf{}
 - ready []
```