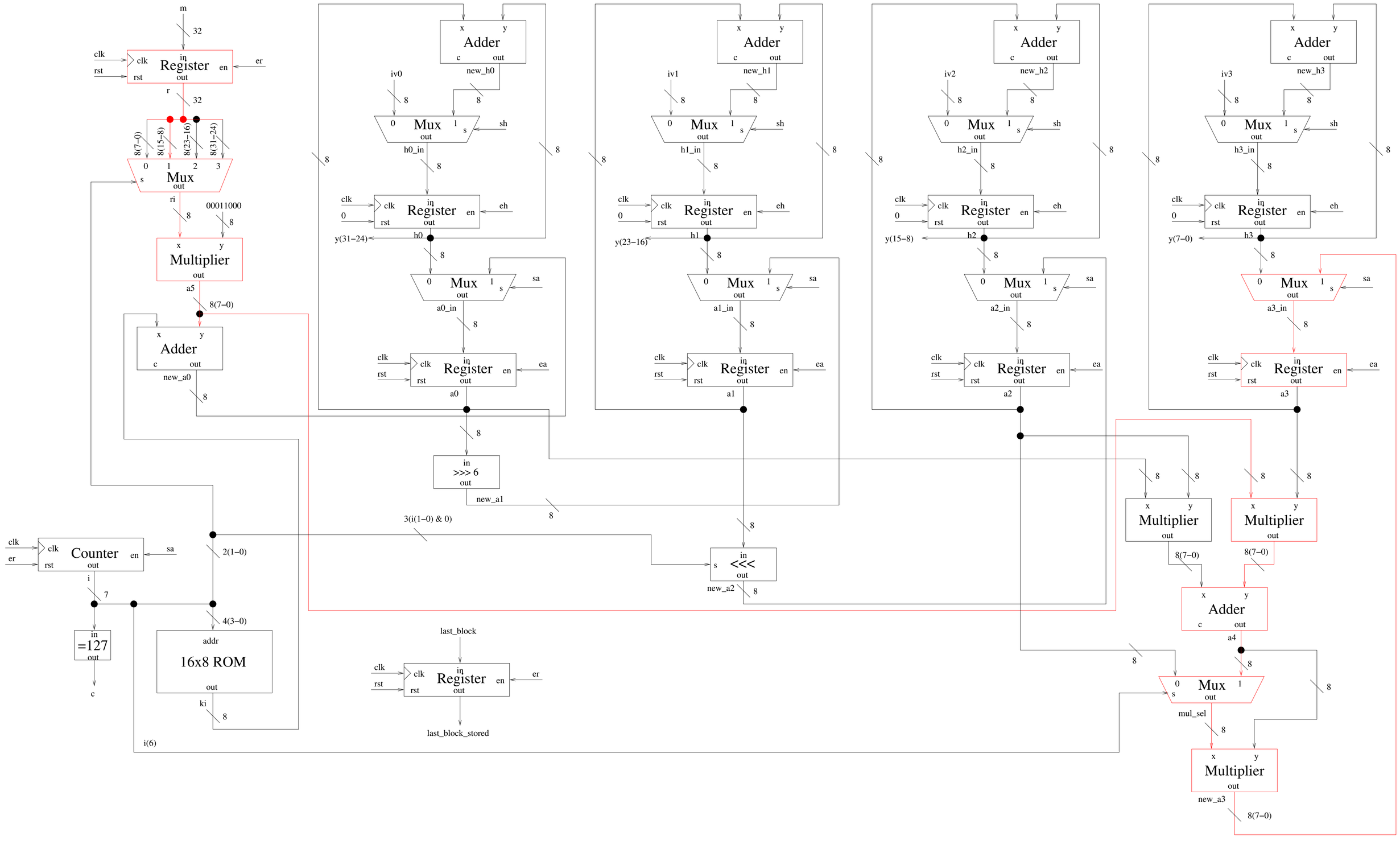
m
32
clk
rst
Register
in
out
en
er
r
32
8(7–0)
8(15–8)
8(23–16)
8(31–24)
Mux
ri
8
00011000
Multiplier
a5
8(7–0)
Adder
new_a0
Adder
new_h0
iv0
Mux
sh
h0_in
Register
eh
y(31–24)
h0
sa
a0_in
ea
a0
>>> 6
new_a1
Adder
new_h1
iv1
h1_in
y(23–16)
h1
a1_in
a1
<<<
new_a2
Adder
new_h2
iv2
h2_in
y(15–8)
h2
a2_in
a2
Adder
new_h3
iv3
h3_in
y(7–0)
h3
a3_in
a3
Multiplier
8(7–0)
Adder
a4
Mux
mul_sel
Multiplier
new_a3
8(7–0)
Counter
sa
2(1–0)
i
7
=127
c
4(3–0)
addr
16x8 ROM
ki
i(6)
3(i(1–0) & 0)
last_block
Register
last_block_stored