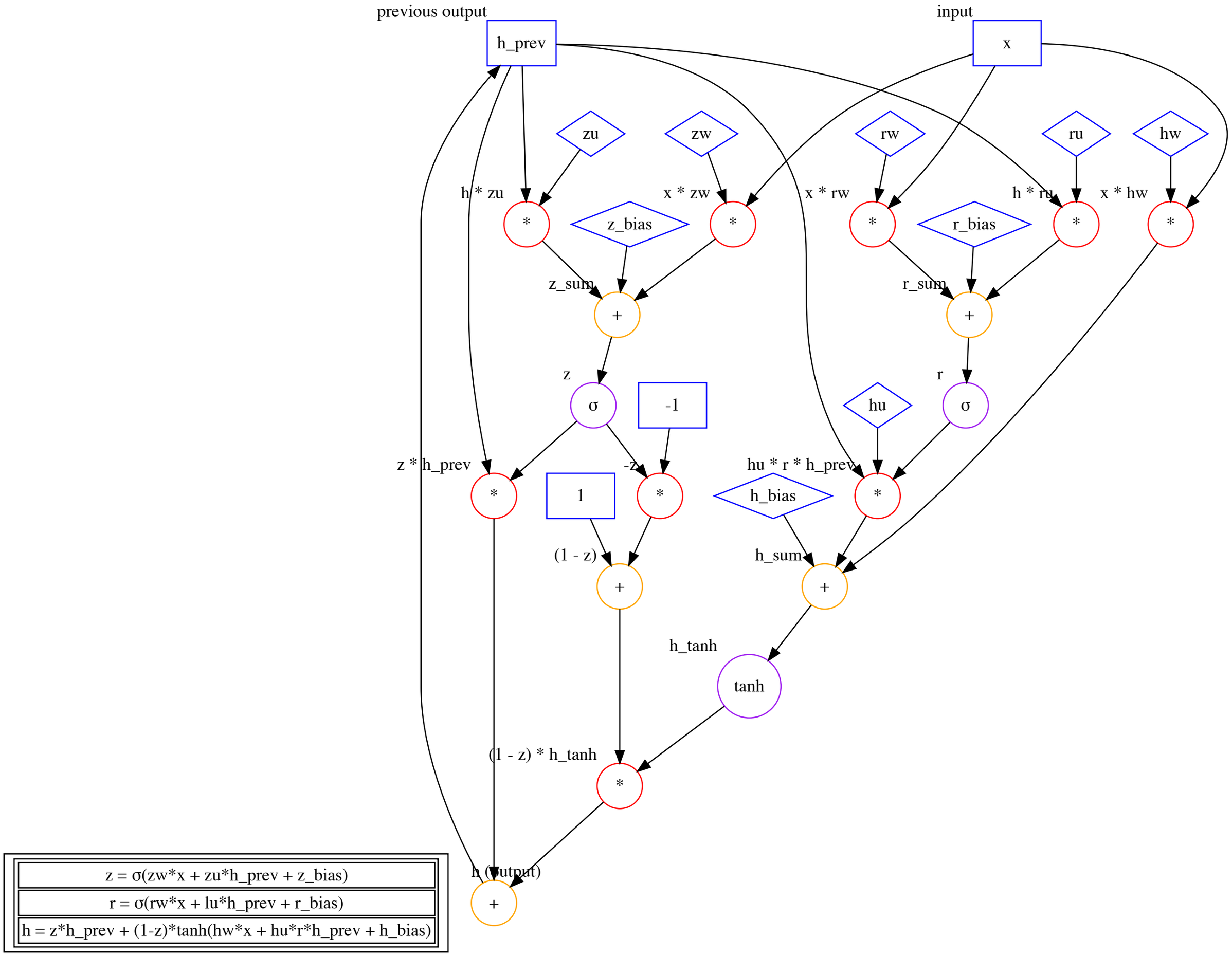
previous output
h_prev
input
x
zu
zw
rw
ru
hw
h * zu
x * zw
x * rw
h * ru
x * hw
*
z_bias
r_bias
z_sum
r_sum
+
z
r
σ
-1
hu
z * h_prev
-z
hu * r * h_prev
1
h_bias
(1 - z)
h_sum
h_tanh
tanh
(1 - z) * h_tanh
h (output)
z = σ(zw*x + zu*h_prev + z_bias)
r = σ(rw*x + lu*h_prev + r_bias)
h = z*h_prev + (1-z)*tanh(hw*x + hu*r*h_prev + h_bias)