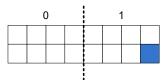
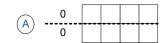
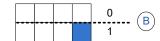
First stage (Left, Right)

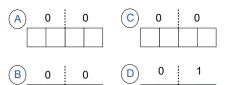


Second stage (Upper, Lower)

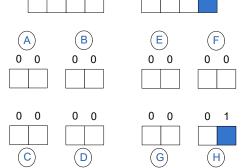


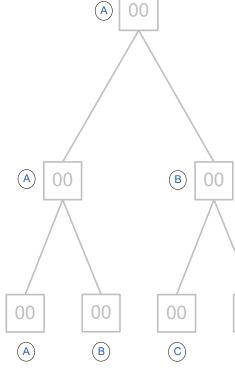


Third stage (left, right)



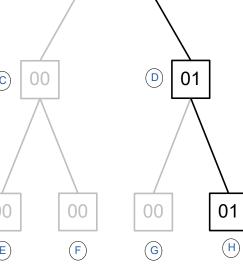
Fourth stage all bits







01



01

B

Concatenate pairs of bits in the tree that are not both zero

01 - 01 - 01 - 01

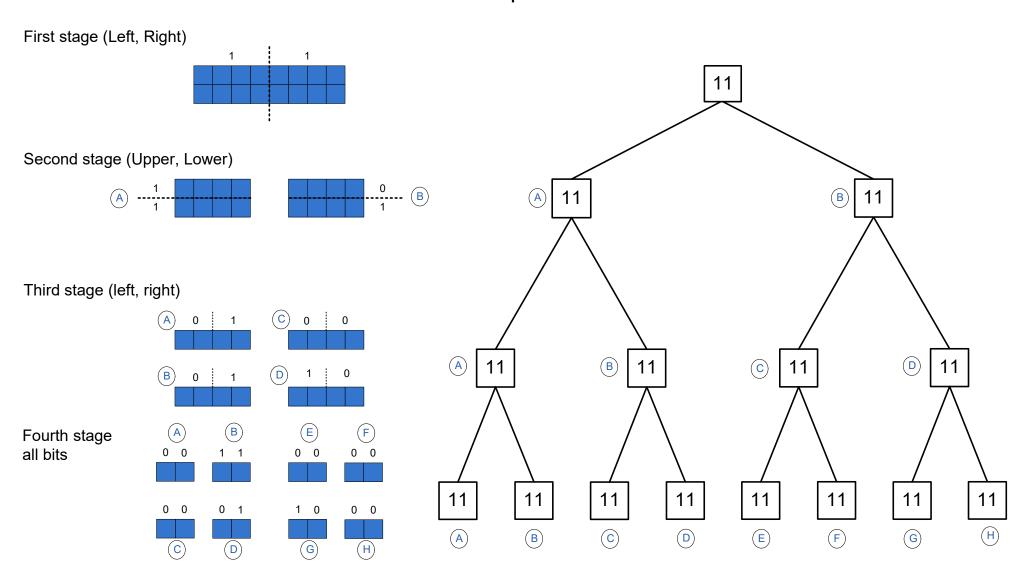
(8 bits)

D

Bit code replacement of '01' with '0'

0 - 0 - 0 - 0 (4 bits)

Hit Map 0xFFFF



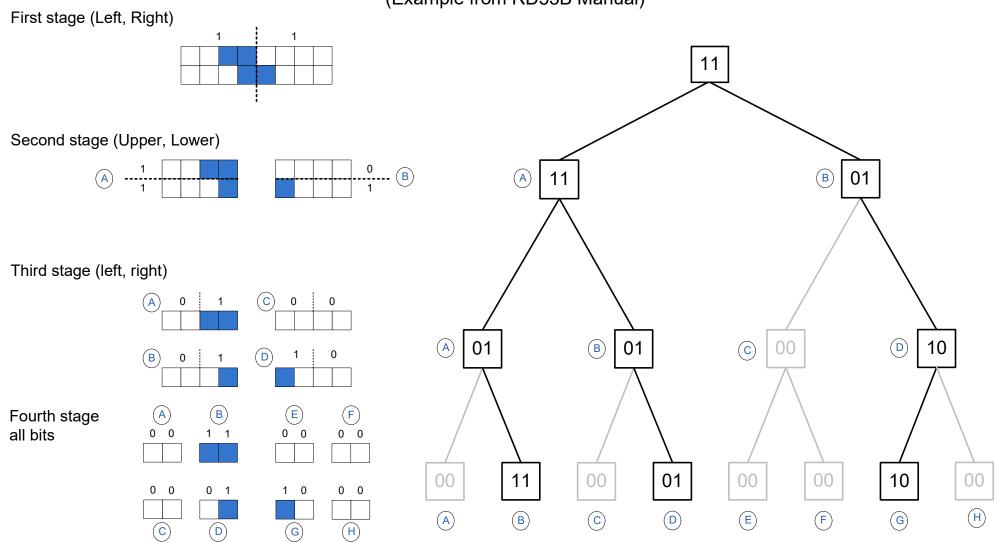
Concatenate pairs of bits in the tree that are not both zero

11 - 11.11 - 11.11.11 - 11.11.11.11.11.11 (30 bits)

Bit code replacement of '01' with '0'

11 - 11.11 - 11.11.11 - 11.11.11.11.11.11 (30 bits)

(Example from RD53B Manual)

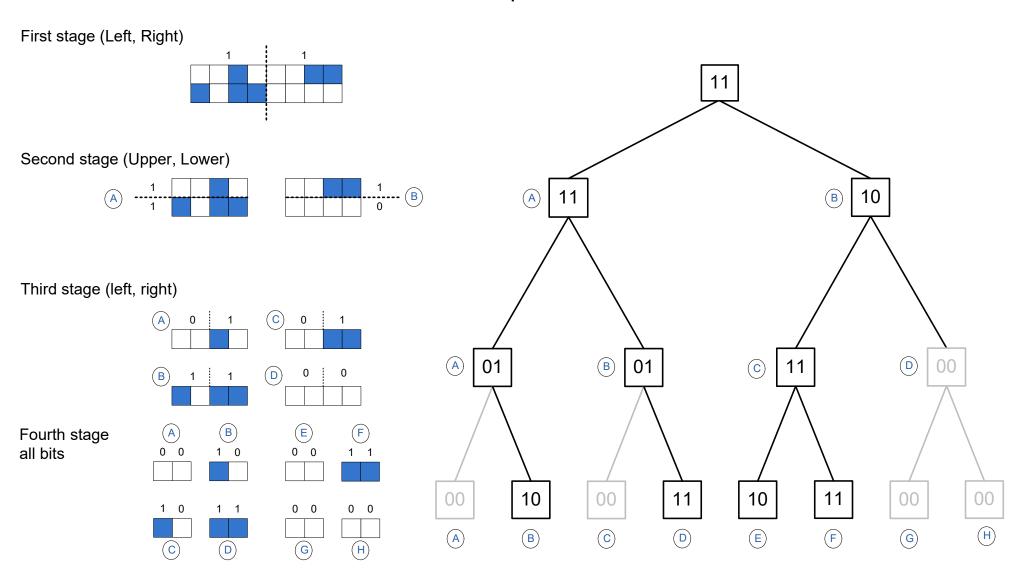


Concatenate pairs of bits in the tree that are not both zero

11 - 11.01 - 01.01.10 - 11.01.10 (18 bits)

Bit code replacement of '01' with '0'

11 - 11.0 - 0.0.10 - 11.0.10 (14 bits)



Concatenate pairs of bits in the tree that are not both zero

11 - 11.10 - 01.01.11 - 10.11.10.11 (20 bits)

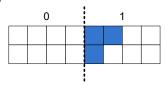
Bit code replacement of '01' with '0'

11 - 11.10 - 01.0.11 - 10.11.10.11 (19 bits)

A

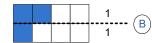
 \bigcirc B

First stage (Left, Right)

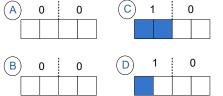


Second stage (Upper, Lower)

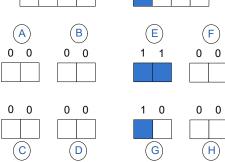




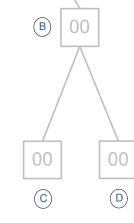
Third stage (left, right)

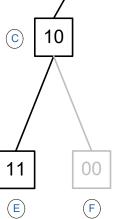


Fourth stage all bits



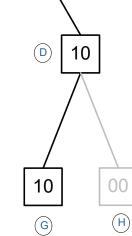






 $\left(\mathsf{B} \right)$

01



Concatenate pairs of bits in the tree that are not both zero

$$01 - 11 - 10.10 - 11.10$$
 (12 bits)

Bit code replacement of '01' with '0'

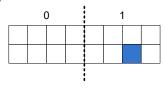
$$0 - 0.0 - 10.10 - 11.10$$
 (11 bits)

(Example from RD53B Manual)

A

00

First stage (Left, Right)

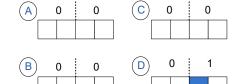


Second stage (Upper, Lower)

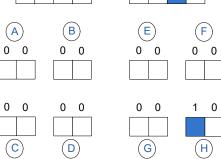




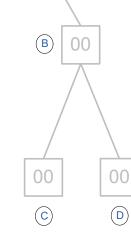
Third stage (left, right)

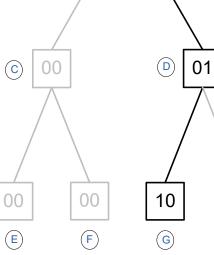


Fourth stage all bits



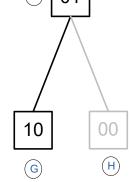






(B)

01



Concatenate pairs of bits in the tree that are not both zero

00

 \bigcirc B

01

Bit code replacement of '01' with '0'