FULL ADDER 2-BIT (CASCADED FULL ADDER COMPONENT)

(I_1)

A
(J_1)

B

Carry In

Sum (k_1)

CarryOut

Carry In

(I_0)

A
(J_0)

B

Carry Out

Sum (k_0)

$k_1 = I_1 + J_1$

$k_0 = I_0 + J_0 + $ carry in