Diagram

Description automatically generatedDiagram

Description automatically generatedDiagram

Description automatically generatedGraphical user interface

Description automatically generated

CRITICAL PATH

Adder: and (10)

Full Adder: 2x Adders, or (10)

Ripple Carry: 4x Full

Signed Full Adder: 4x Ripple, not (0), and (10), or (10)

PROPOGATION DELAY

((((2 \* 10) + 10) \* 4) \* 4) + 10 + 10 = 500