

Arithmetic Module

8bit Arithmetic Module provides
ADD, ADC, SUB, SBB, INC, DEC

DEC A: MUX_SEL: 1, TC: 0, CI: 0

A - B: MUX_SEL: 0, TC: 1, CI: 1

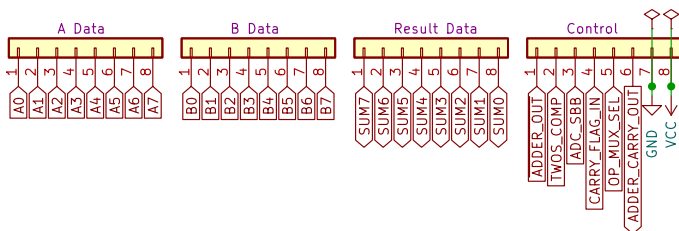
A + B: MUX_SEL: 0, TC: 0, CI: 0

INC A: MUX_SEL: 1, TC: 1, CI: 1

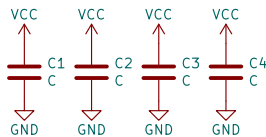
A - B - Ci: MUX_SEL: 0, TC: 1, CI: ?

A + B + Cf: MUX_SEL: 0, TC: 0, CI: ?

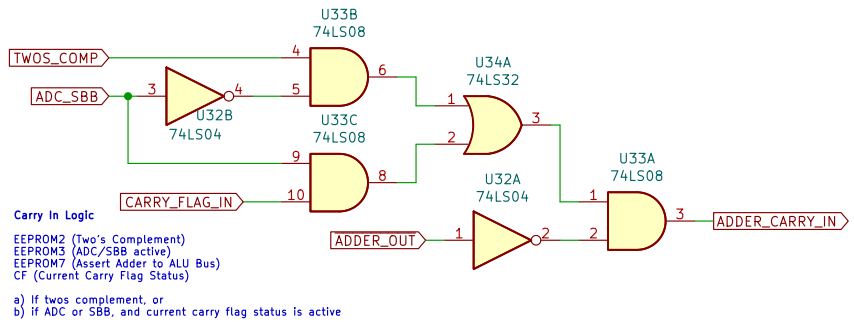
Connectors



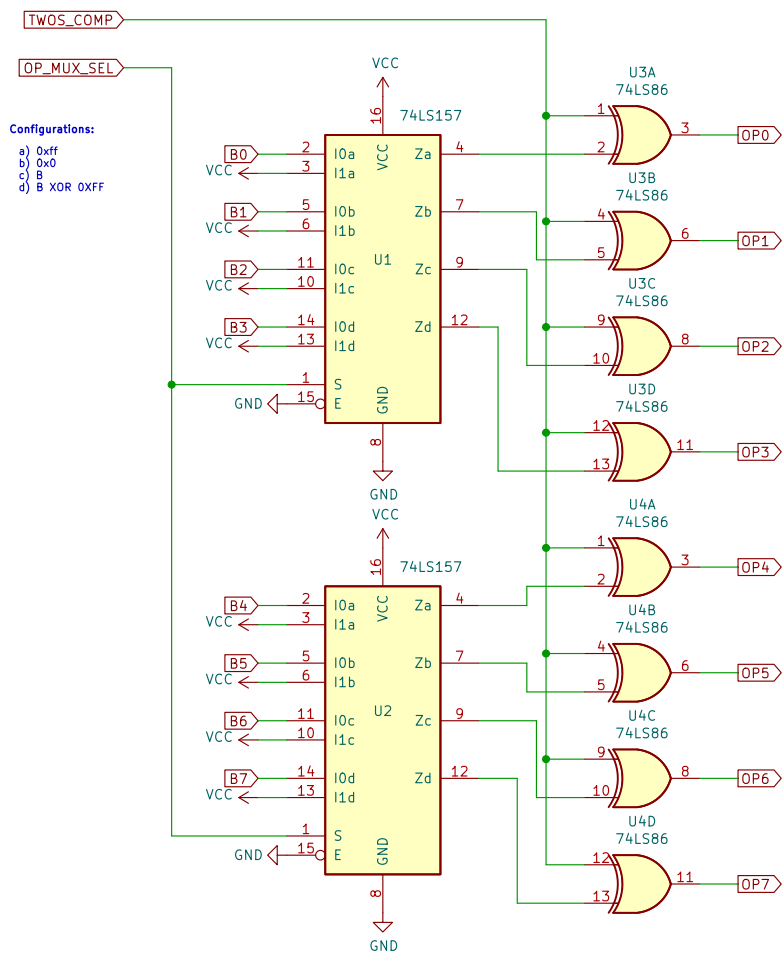
Smoothing Caps



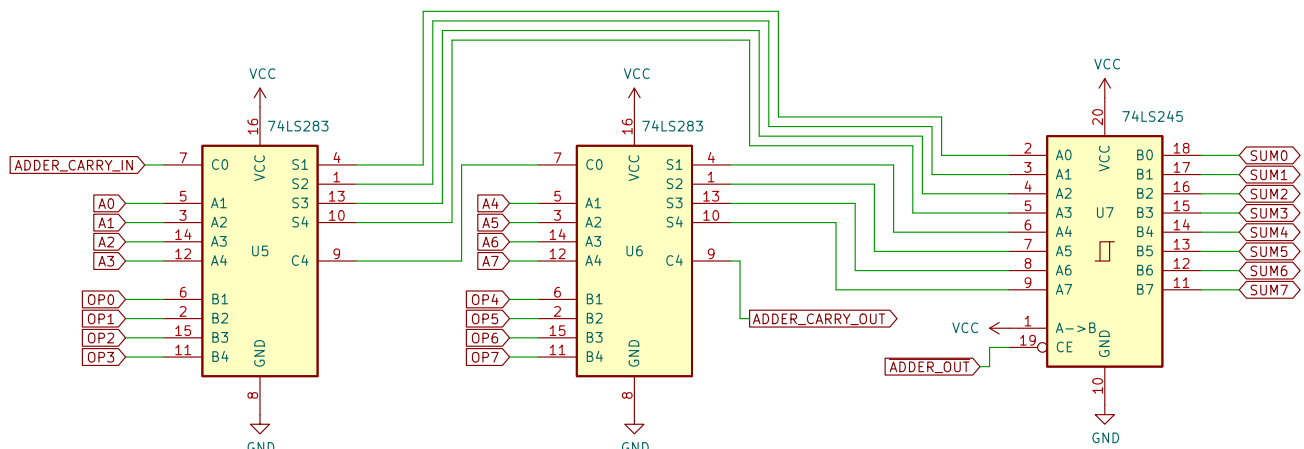
Arithmetic Carry In Logic



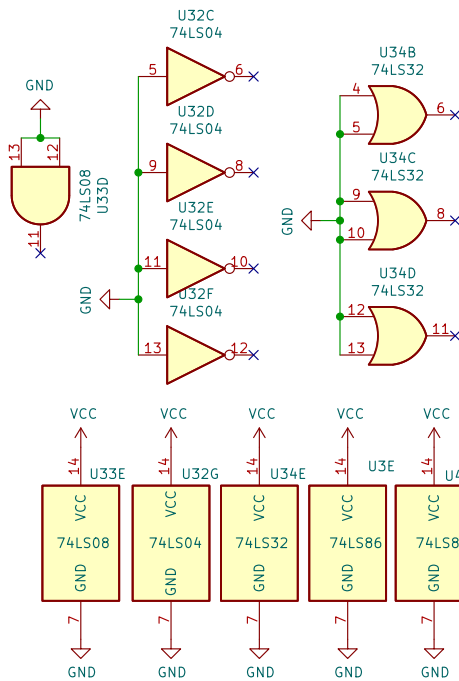
Operand Multiplexer



Full Adder w/ Carry



Logic Power



ADD / SUB / ADC / SBB / INC / DEC

Sheet: /

File: Arithmetic.kicad_sch

Title: Arithmetic Module

Size: User

Date:

KiCad E.D.A. kicad (6.0.0-0)

Rev: 3

Id: 1/1