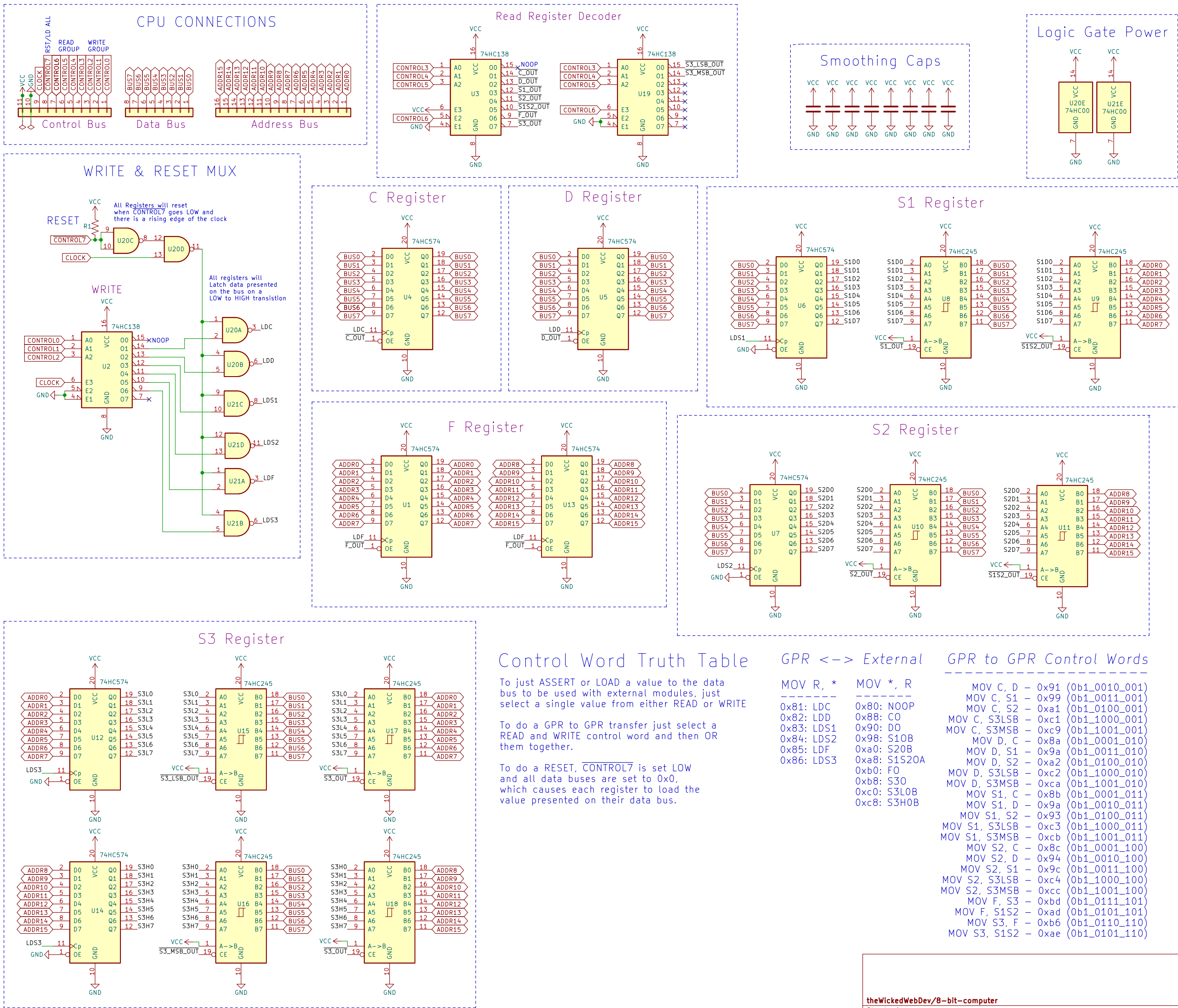


GENERAL PURPOSE REGISTER ARRAY

8bit & 16bit C8, D8, S18, S28, S1S216, F16, S316



Control Word Truth Table

To just ASSERT or LOAD a value to the data bus to be used with external modules, just select a single value from either READ or WRITE

To do a GPR to GPR transfer just select a READ and WRITE control word and then OR them together.

To do a RESET, CONTROL7 is set LOW and all data buses are set to 0x0, which causes each register to load the value presented on their data bus.

GPR <-> External

MOV R, *
0x81: LDC
0x82: LDD
0x83: LDS1
0x84: LDS2
0x85: LDF
0x86: LDS3

MOV *, R
0x80: NOOP
0x88: CO
0x90: DO
0x98: S10B
0xa0: S20B
0xa8: S1S20A
0xb0: F0
0xb8: S30
0xc0: S3L0B
0xc8: S3H0B

GPR to GPR Control Words

MOV C, D - 0x91 (0b1_0010_001)
MOV C, S1 - 0x99 (0b1_0011_001)
MOV C, S2 - 0xa1 (0b1_0100_001)
MOV C, S3LSB - 0xc1 (0b1_1000_001)
MOV C, S3MSB - 0xc9 (0b1_1001_001)
MOV D, C - 0x8a (0b1_0001_010)
MOV D, S1 - 0x9a (0b1_0011_010)
MOV D, S2 - 0xa2 (0b1_0100_010)
MOV D, S3LSB - 0xc2 (0b1_1000_010)
MOV D, S3MSB - 0xca (0b1_1001_010)
MOV S1, C - 0x8b (0b1_0001_011)
MOV S1, D - 0x9a (0b1_0010_011)
MOV S1, S2 - 0x93 (0b1_0100_011)
MOV S1, S3LSB - 0xc3 (0b1_1000_011)
MOV S1, S3MSB - 0xcb (0b1_1001_011)
MOV S2, C - 0x8c (0b1_0001_100)
MOV S2, D - 0x94 (0b1_0010_100)
MOV S2, S1 - 0x9c (0b1_0011_100)
MOV S2, S3LSB - 0xc4 (0b1_1000_100)
MOV S2, S3MSB - 0xcc (0b1_1001_100)
MOV F, S3 - 0xbd (0b1_0111_101)
MOV F, S1S2 - 0xad (0b1_0101_101)
MOV S3, F - 0xb6 (0b1_0110_110)
MOV S3, S1S2 - 0xae (0b1_0101_110)

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Sheet: /

File: Minified-Gpr.kicad_sch

Title: General Purpose Register Array

Size: User Date: 2022-02-10

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

Rev: v2

Id: 1/1