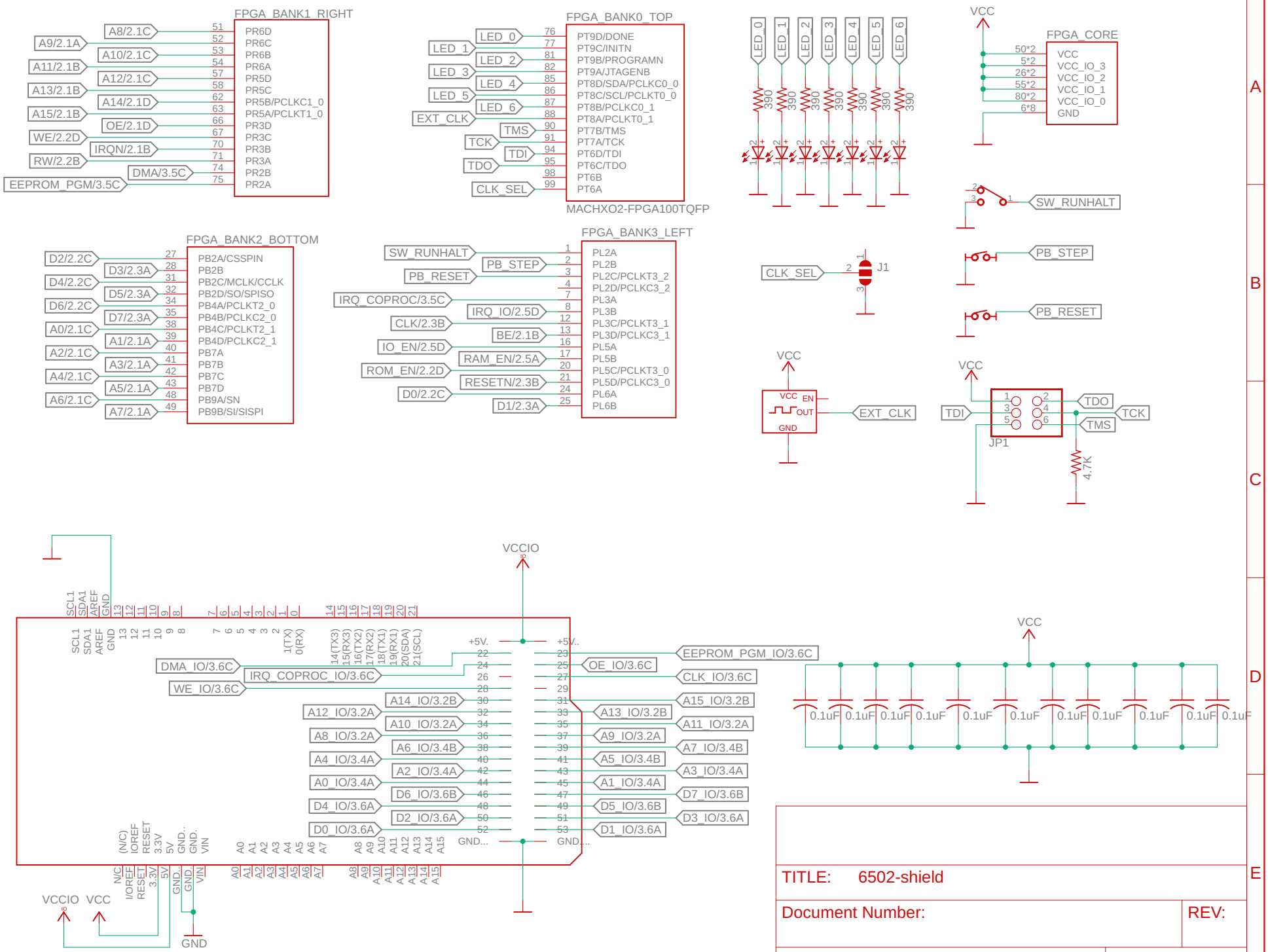
FPGA_BANK1_RIGHT
A8/2.1C
A9/2.1A
A10/2.1C
A11/2.1B
A12/2.1C
A13/2.1B
A14/2.1D
A15/2.1B
OE/2.1D
WE/2.2D
IRQN/2.1B
RW/2.2B
DMA/3.5C
EEPROM_PGM/3.5C
PR6D
PR6C
PR6B
PR6A
PR5D
PR5C
PR5B/PCLKC1_0
PR5A/PCLKT1_0
PR3D
PR3C
PR3B
PR3A
PR2B
PR2A
FPGA_BANK0_TOP
LED_0
LED_1
LED_2
LED_3
LED_4
LED_5
LED_6
EXT_CLK
TMS
TCK
TDI
TDO
CLK_SEL
PT9D/DONE
PT9C/INITN
PT9B/PROGRAMN
PT9A/JTAGENB
PT8D/SDA/PCLKC0_0
PT8C/SCL/PCLKT0_0
PT8B/PCLKC0_1
PT8A/PCLKT0_1
PT7B/TMS
PT7A/TCK
PT6D/TDI
PT6C/TDO
PT6B
PT6A
MACHXO2-FPGA100TQFP
390
VCC
FPGA_CORE
VCC
VCC_IO_3
VCC_IO_2
VCC_IO_1
VCC_IO_0
GND
50*2
5*2
26*2
55*2
80*2
6*8
SW_RUNHALT
PB_STEP
PB_RESET
FPGA_BANK2_BOTTOM
D2/2.2C
D3/2.3A
D4/2.2C
D5/2.3A
D6/2.2C
D7/2.3A
A0/2.1C
A1/2.1A
A2/2.1C
A3/2.1A
A4/2.1C
A5/2.1A
A6/2.1C
A7/2.1A
PB2A/CSSPIN
PB2B
PB2C/MCLK/CCLK
PB2D/SO/SPISO
PB4A/PCLKT2_0
PB4B/PCLKC2_0
PB4C/PCLKT2_1
PB4D/PCLKC2_1
PB7A
PB7B
PB7C
PB7D
PB9A/SN
PB9B/SI/SISPI
FPGA_BANK3_LEFT
SW_RUNHALT
PB_STEP
PB_RESET
IRQ_COPROC/3.5C
IRQ_IO/2.5D
CLK/2.3B
BE/2.1B
IO_EN/2.5D
RAM_EN/2.5A
ROM_EN/2.2D
RESETN/2.3B
D0/2.2C
D1/2.3A
PL2A
PL2B
PL2C/PCLKT3_2
PL2D/PCLKC3_2
PL3A
PL3B
PL3C/PCLKT3_1
PL3D/PCLKC3_1
PL5A
PL5B
PL5C/PCLKT3_0
PL5D/PCLKC3_0
PL6A
PL6B
CLK_SEL
J1
VCC
VCC
EN
OUT
GND
EXT_CLK
VCC
TDI
TDO
TCK
TMS
JP1
4.7K
VCCIO
SCL1
SDA1
AREF
GND
1(TX)
0(RX)
14(TX3)
15(RX3)
16(TX2)
17(RX2)
18(TX1)
19(RX1)
20(SDA)
21(SCL)
+5V.
DMA_IO/3.6C
IRQ_COPROC_IO/3.6C
WE_IO/3.6C
A14_IO/3.2B
A12_IO/3.2A
A10_IO/3.2A
A8_IO/3.2A
A6_IO/3.4B
A4_IO/3.4A
A2_IO/3.4A
A0_IO/3.4A
D6_IO/3.6B
D4_IO/3.6A
D2_IO/3.6A
D0_IO/3.6A
GND...
EEPROM_PGM_IO/3.6C
OE_IO/3.6C
CLK_IO/3.6C
A15_IO/3.2B
A13_IO/3.2B
A11_IO/3.2A
A9_IO/3.2A
A7_IO/3.4B
A5_IO/3.4B
A3_IO/3.4A
A1_IO/3.4A
D7_IO/3.6B
D5_IO/3.6B
D3_IO/3.6A
D1_IO/3.6A
(N/C)
IOREF
RESET
3.3V
5V
GND...
GND...
VIN
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
VCCIO
VCC
GND
VCC
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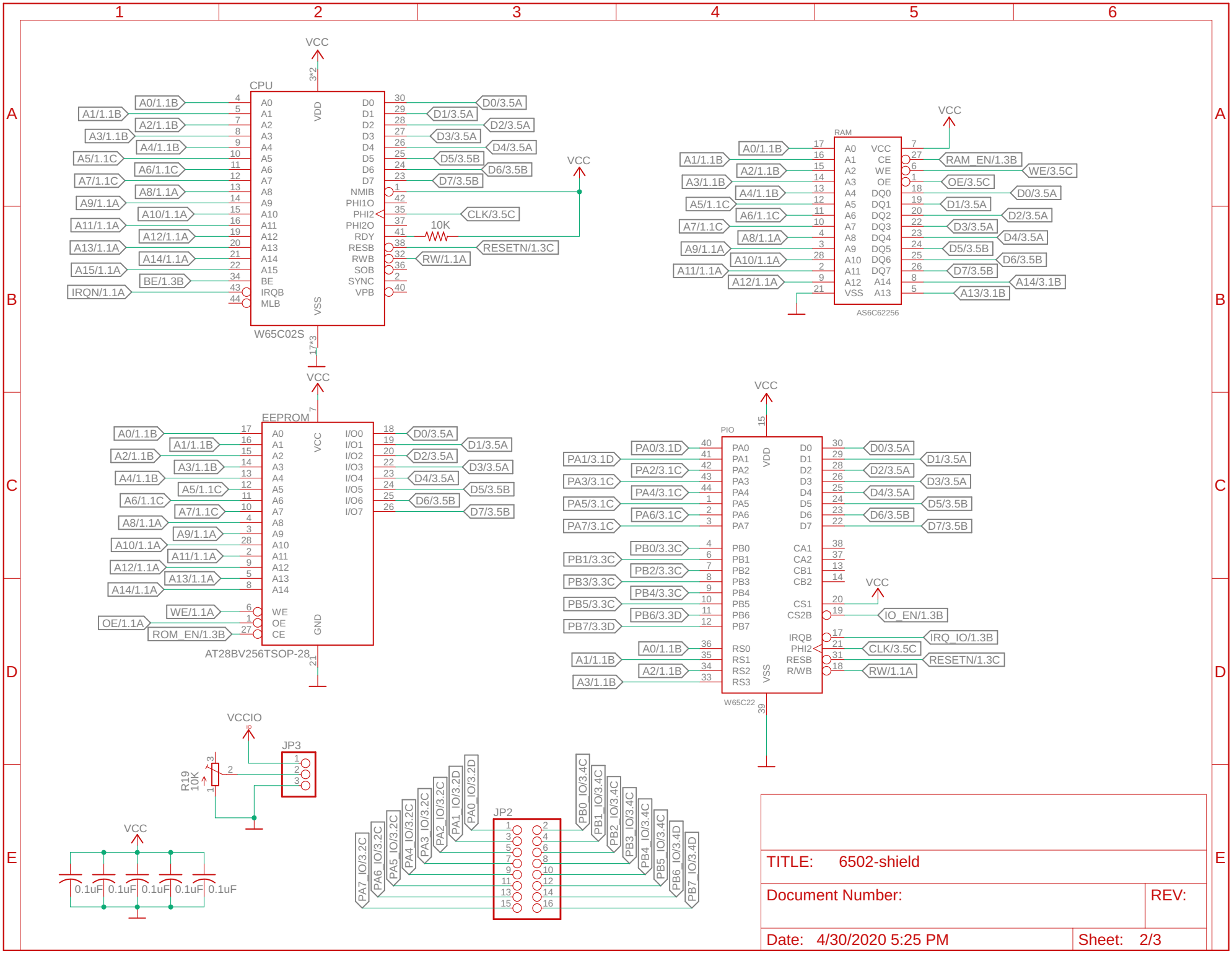
Sheet: 1/3


CPU
W65C02S
VCC
3*2
17*3
A0/1.1B
A1/1.1B
A2/1.1B
A3/1.1B
A4/1.1B
A5/1.1C
A6/1.1C
A7/1.1C
A8/1.1A
A9/1.1A
A10/1.1A
A11/1.1A
A12/1.1A
A13/1.1A
A14/1.1A
A15/1.1A
BE/1.3B
IRQN/1.1A
D0/3.5A
D1/3.5A
D2/3.5A
D3/3.5A
D4/3.5A
D5/3.5B
D6/3.5B
D7/3.5B
CLK/3.5C
10K
RESETN/1.3C
RW/1.1A
RAM
AS6C62256
RAM_EN/1.3B
WE/3.5C
OE/3.5C
A14/3.1B
A13/3.1B
EEPROM
AT28BV256TSOP-28
7
21
WE/1.1A
OE/1.1A
ROM_EN/1.3B
PIO
W65C22
15
39
PA0/3.1D
PA1/3.1D
PA2/3.1C
PA3/3.1C
PA4/3.1C
PA5/3.1C
PA6/3.1C
PA7/3.1C
PB0/3.3C
PB1/3.3C
PB2/3.3C
PB3/3.3C
PB4/3.3C
PB5/3.3C
PB6/3.3D
PB7/3.3D
IO_EN/1.3B
IRQ_IO/1.3B
VCCIO
JP3
R19
10K
JP2
PA0_IO/3.2D
PA1_IO/3.2D
PA2_IO/3.2C
PA3_IO/3.2C
PA4_IO/3.2C
PA5_IO/3.2C
PA6_IO/3.2C
PA7_IO/3.2C
PB0_IO/3.4C
PB1_IO/3.4C
PB2_IO/3.4C
PB3_IO/3.4C
PB4_IO/3.4C
PB5_IO/3.4C
PB6_IO/3.4D
PB7_IO/3.4D
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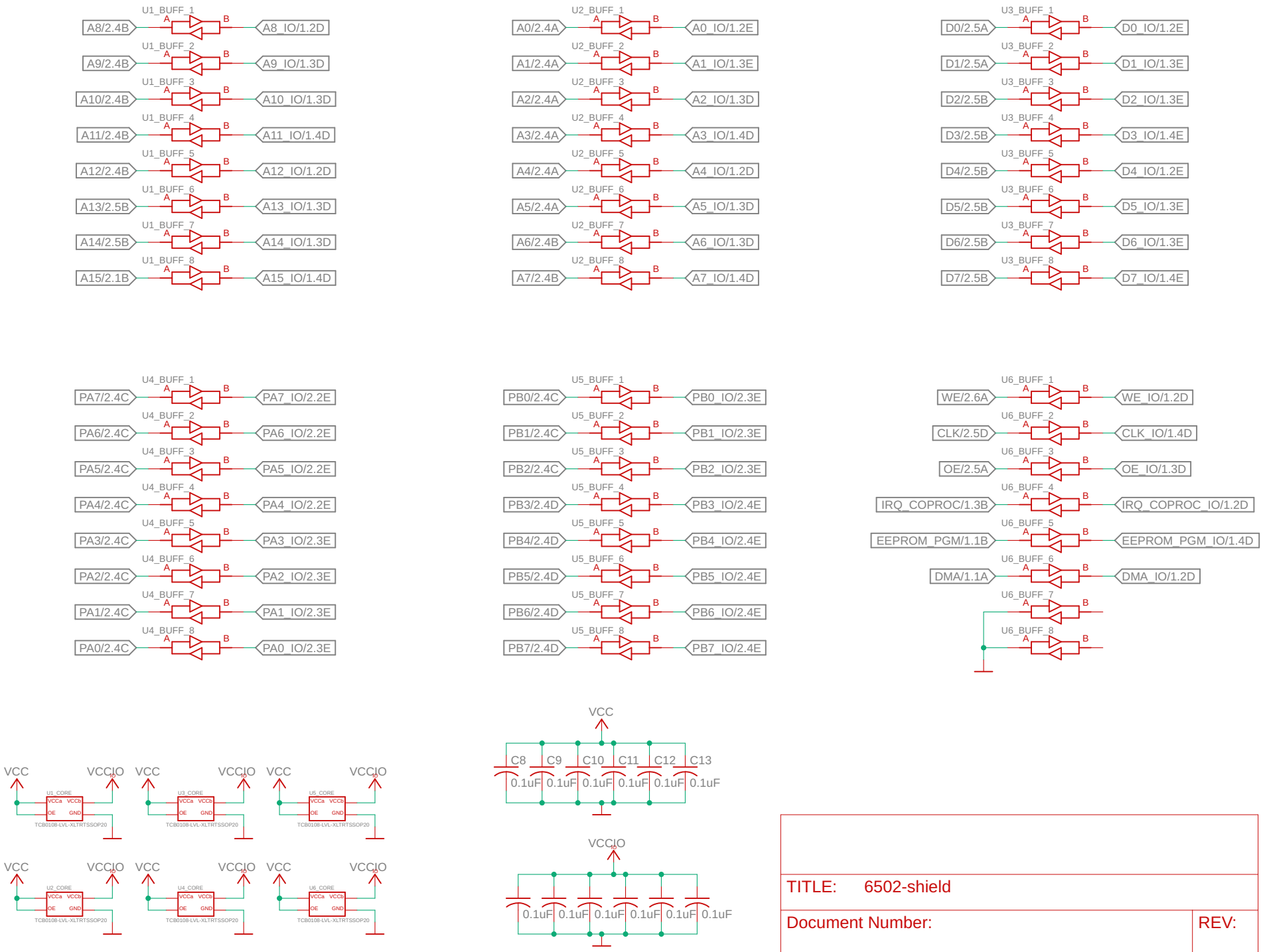
Sheet: 2/3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U1_BUFF_2 A9/2.4B A9_IO/1.3D
U1_BUFF_3 A10/2.4B A10_IO/1.3D
U1_BUFF_4 A11/2.4B A11_IO/1.4D
U1_BUFF_5 A12/2.4B A12_IO/1.2D
U1_BUFF_6 A13/2.5B A13_IO/1.3D
U1_BUFF_7 A14/2.5B A14_IO/1.3D
U1_BUFF_8 A15/2.1B A15_IO/1.4D
U2_BUFF_1 A0/2.4A A0_IO/1.2E
U2_BUFF_2 A1/2.4A A1_IO/1.3E
U2_BUFF_3 A2/2.4A A2_IO/1.3D
U2_BUFF_4 A3/2.4A A3_IO/1.4D
U2_BUFF_5 A4/2.4A A4_IO/1.2D
U2_BUFF_6 A5/2.4A A5_IO/1.3D
U2_BUFF_7 A6/2.4B A6_IO/1.3D
U2_BUFF_8 A7/2.4B A7_IO/1.4D
U3_BUFF_1 D0/2.5A D0_IO/1.2E
U3_BUFF_2 D1/2.5A D1_IO/1.3E
U3_BUFF_3 D2/2.5B D2_IO/1.3E
U3_BUFF_4 D3/2.5B D3_IO/1.4E
U3_BUFF_5 D4/2.5B D4_IO/1.2E
U3_BUFF_6 D5/2.5B D5_IO/1.3E
U3_BUFF_7 D6/2.5B D6_IO/1.3E
U3_BUFF_8 D7/2.5B D7_IO/1.4E
U4_BUFF_1 PA7/2.4C PA7_IO/2.2E
U4_BUFF_2 PA6/2.4C PA6_IO/2.2E
U4_BUFF_3 PA5/2.4C PA5_IO/2.2E
U4_BUFF_4 PA4/2.4C PA4_IO/2.2E
U4_BUFF_5 PA3/2.4C PA3_IO/2.3E
U4_BUFF_6 PA2/2.4C PA2_IO/2.3E
U4_BUFF_7 PA1/2.4C PA1_IO/2.3E
U4_BUFF_8 PA0/2.4C PA0_IO/2.3E
U5_BUFF_1 PB0/2.4C PB0_IO/2.3E
U5_BUFF_2 PB1/2.4C PB1_IO/2.3E
U5_BUFF_3 PB2/2.4C PB2_IO/2.3E
U5_BUFF_4 PB3/2.4D PB3_IO/2.4E
U5_BUFF_5 PB4/2.4D PB4_IO/2.4E
U5_BUFF_6 PB5/2.4D PB5_IO/2.4E
U5_BUFF_7 PB6/2.4D PB6_IO/2.4E
U5_BUFF_8 PB7/2.4D PB7_IO/2.4E
U6_BUFF_1 WE/2.6A WE_IO/1.2D
U6_BUFF_2 CLK/2.5D CLK_IO/1.4D
U6_BUFF_3 OE/2.5A OE_IO/1.3D
U6_BUFF_4 IRQ_COPROC/1.3B IRQ_COPROC_IO/1.2D
U6_BUFF_5 EEPROM_PGM/1.1B EEPROM_PGM_IO/1.4D
U6_BUFF_6 DMA/1.1A DMA_IO/1.2D
U6_BUFF_7
U6_BUFF_8
VCC VCCIO
U1_CORE U3_CORE U5_CORE U2_CORE U4_CORE U6_CORE
VCCa VCCb OE GND
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C8 C9 C10 C11 C12 C13
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Sheet: 3/3