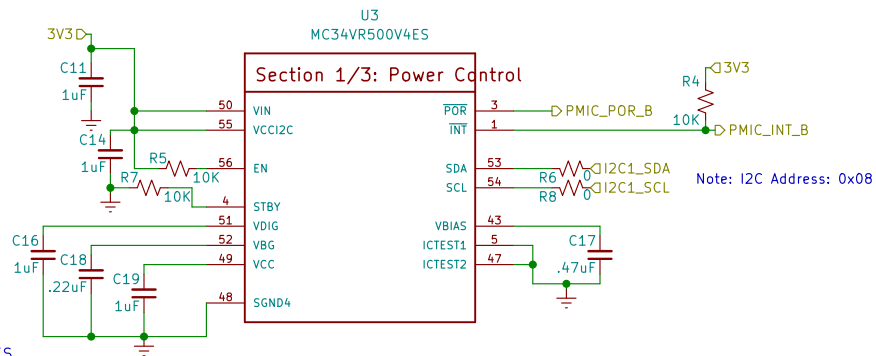
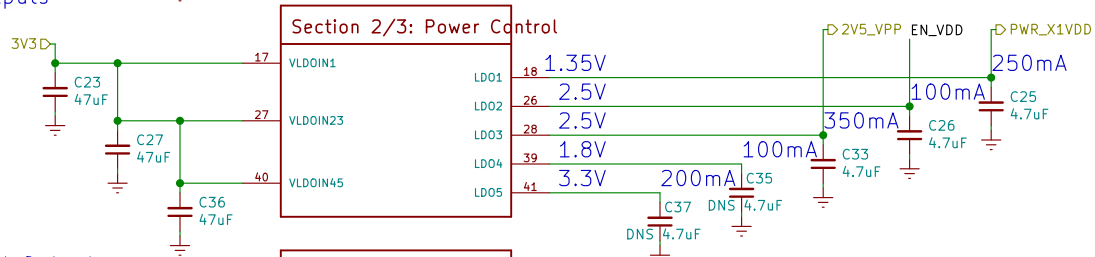


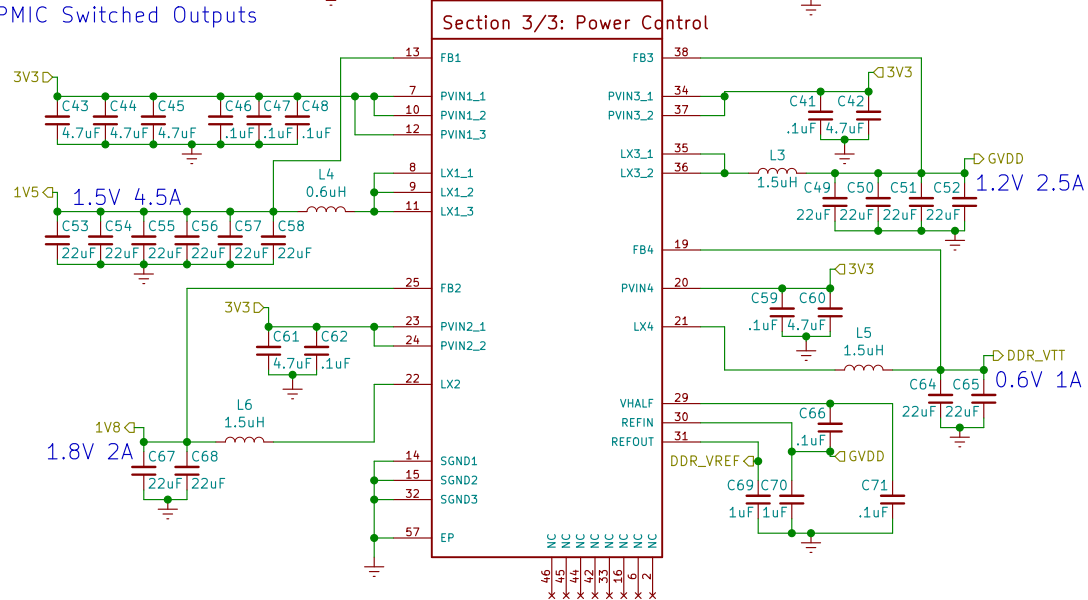
PMIC Control



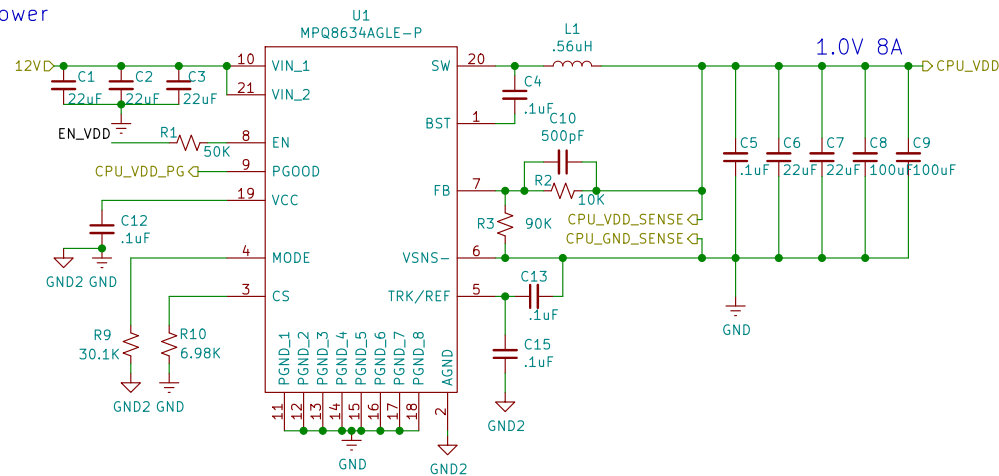
PMIC LDO Outputs



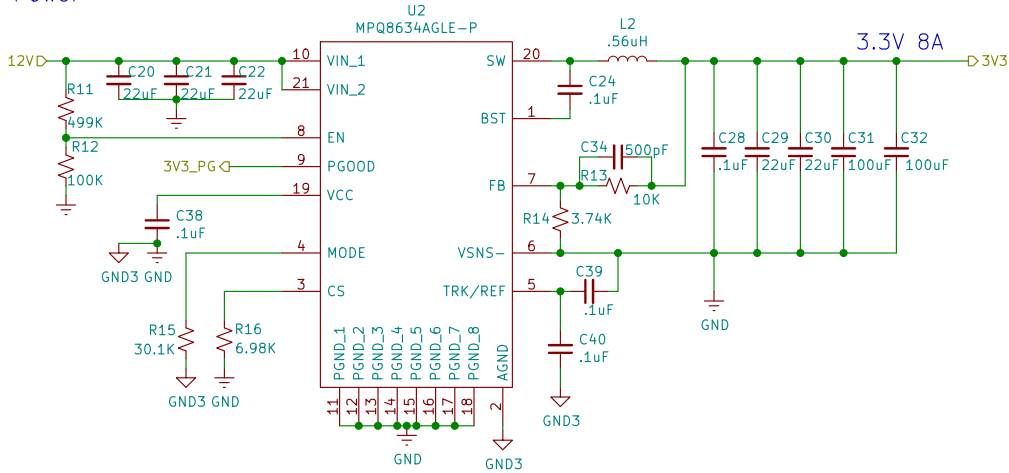
PMIC Switched Outputs



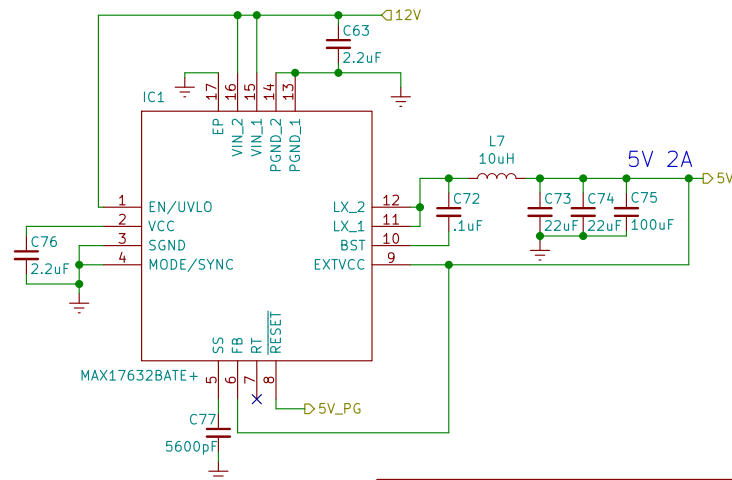
CPU VDD Power



3.3V Power



5V Power



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Sheet: /Power/
File: Power.kicad_sch

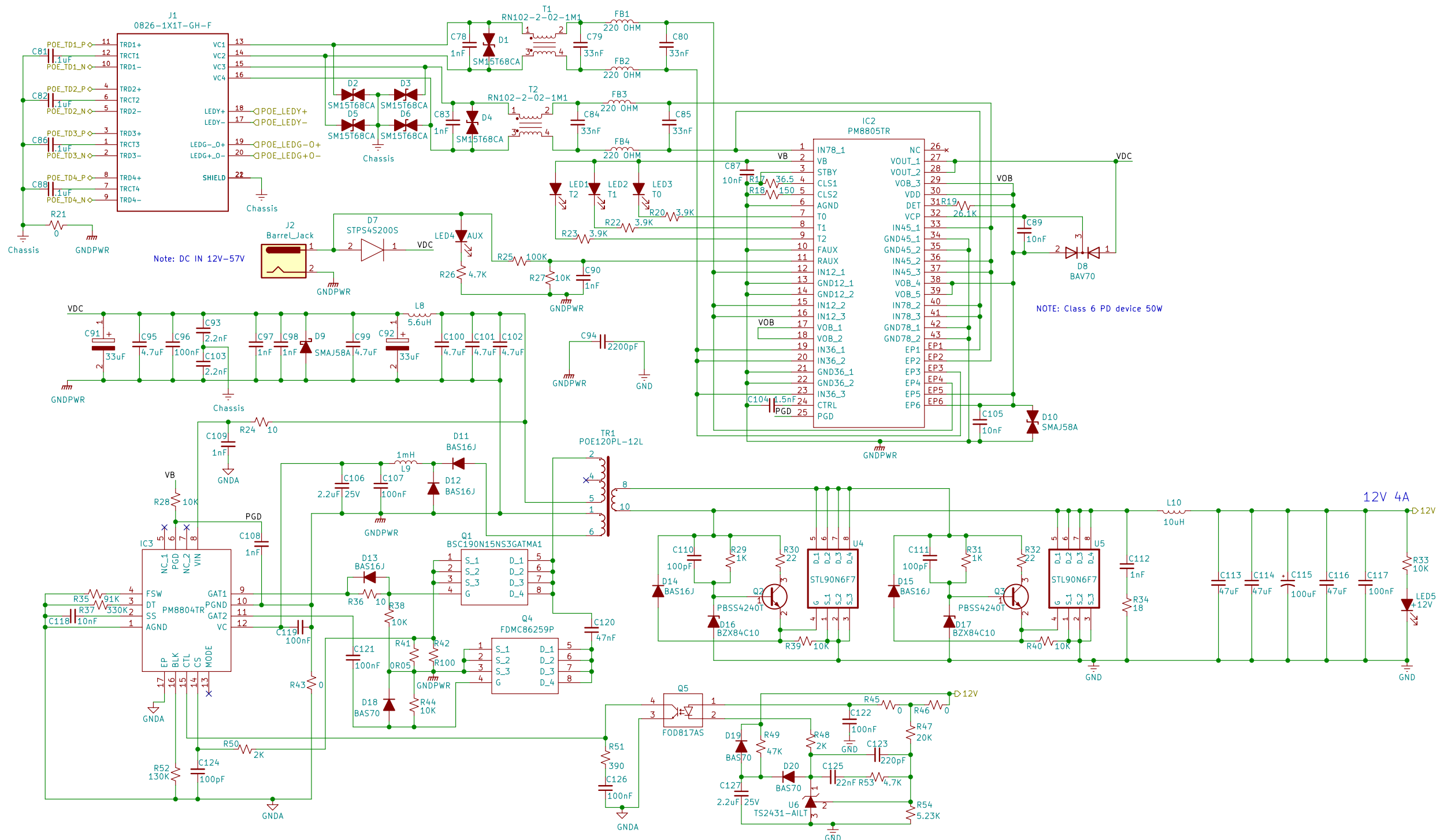
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Size: USLedger Date: 2020-10-06

KiCad E.D.A. kicad 5.99.0-unknown-763da6b3b104ubuntu20.04.1

Rev: 1

Id: 2/12



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File: poe.kicad_sch

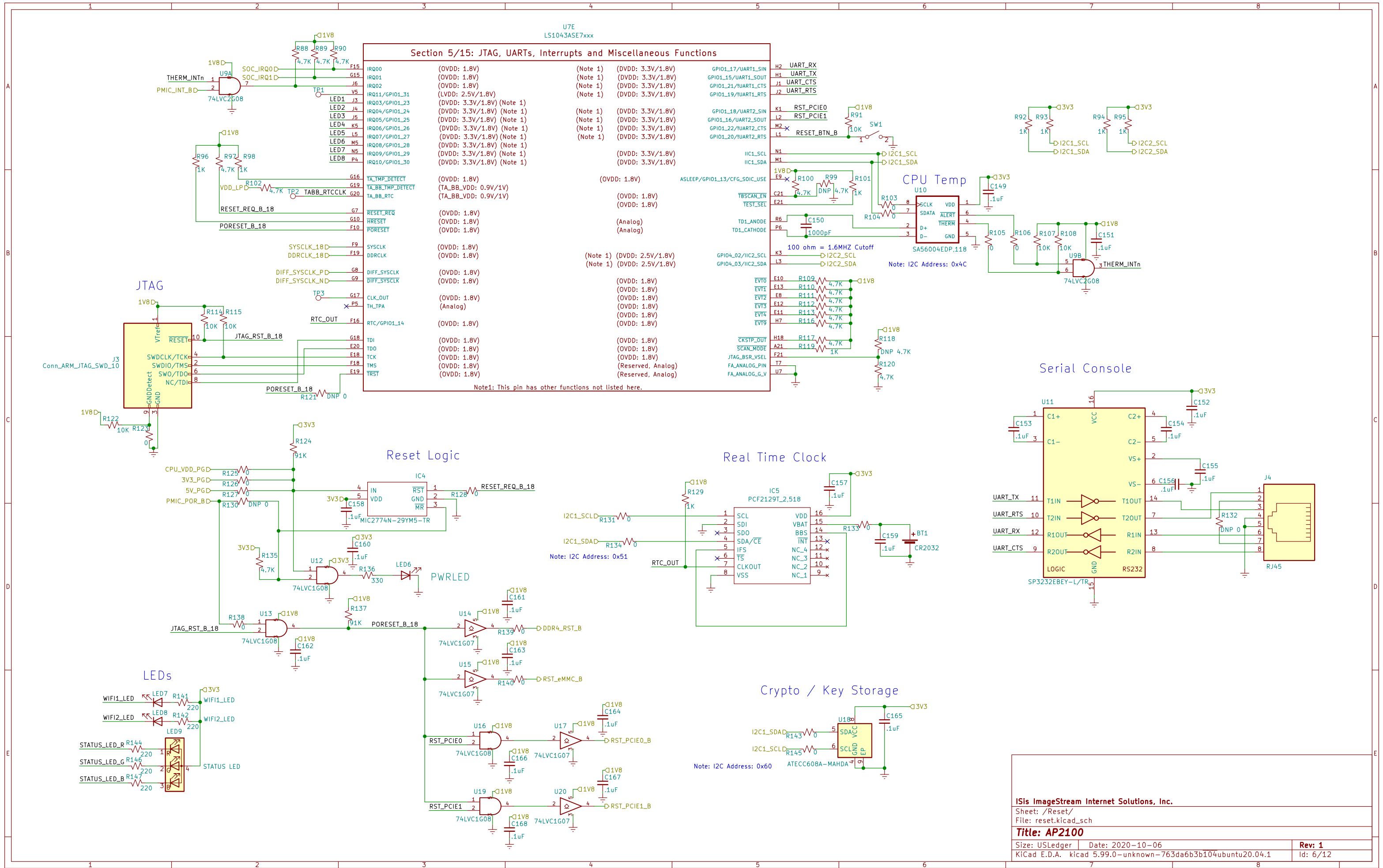
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Size: USLdger | Date: 2020-10-06

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Rev: 1

Id: 3/12



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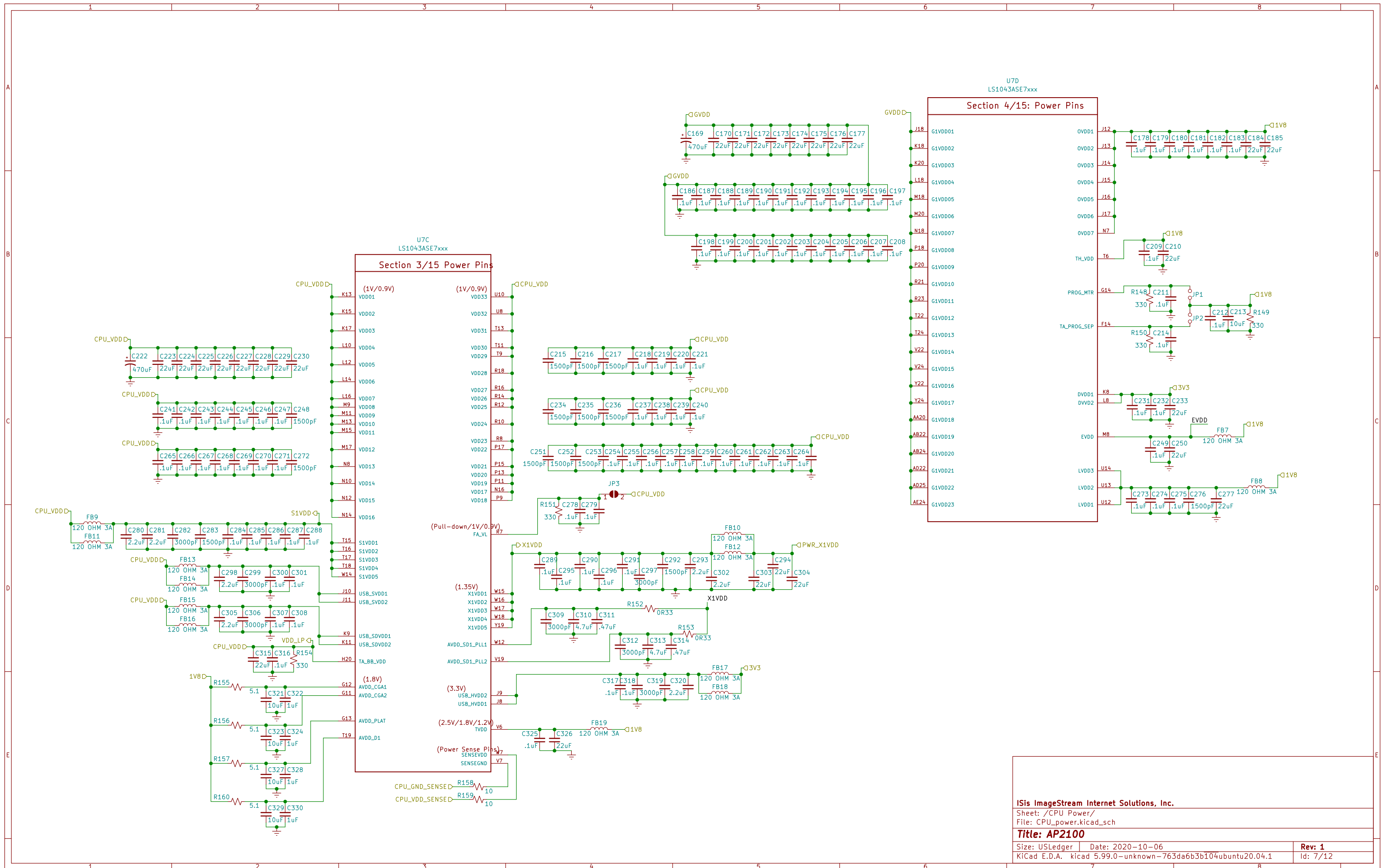
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Size: USLedger Date: 2020-10-06

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Rev: 1

Id: 6/12



The schematic diagram illustrates the memory configuration for a system with 1GB of DDR4 memory. It features three memory modules (U7H, U8H, U9H) and their connections to the CPU memory controller (U7H). The diagram includes pin connections, component values, and a title block.

1GB DDR4 Memory

DDR4 256Mx16

DDR4 256Mx16

Section 8/15: DDR3/4 Controller

U7H
LS1043ASE7xxx

U8H
LS1043ASE7xxx

U9H
LS1043ASE7xxx

IC6
AS4C256M16D4-75BCN

IC7
AS4C256M16D4-75BCN

IC8
AS4C256M16D4-75BCN

IC9
AS4C256M16D4-75BCN

IC10
AS4C256M16D4-75BCN

IC11
AS4C256M16D4-75BCN

IC12
AS4C256M16D4-75BCN

IC13
AS4C256M16D4-75BCN

IC14
AS4C256M16D4-75BCN

IC15
AS4C256M16D4-75BCN

IC16
AS4C256M16D4-75BCN

IC17
AS4C256M16D4-75BCN

IC18
AS4C256M16D4-75BCN

IC19
AS4C256M16D4-75BCN

IC20
AS4C256M16D4-75BCN

IC21
AS4C256M16D4-75BCN

IC22
AS4C256M16D4-75BCN

IC23
AS4C256M16D4-75BCN

IC24
AS4C256M16D4-75BCN

IC25
AS4C256M16D4-75BCN

IC26
AS4C256M16D4-75BCN

IC27
AS4C256M16D4-75BCN

IC28
AS4C256M16D4-75BCN

IC29
AS4C256M16D4-75BCN

IC30
AS4C256M16D4-75BCN

IC31
AS4C256M16D4-75BCN

IC32
AS4C256M16D4-75BCN

IC33
AS4C256M16D4-75BCN

IC34
AS4C256M16D4-75BCN

IC35
AS4C256M16D4-75BCN

IC36
AS4C256M16D4-75BCN

IC37
AS4C256M16D4-75BCN

IC38
AS4C256M16D4-75BCN

IC39
AS4C256M16D4-75BCN

IC40
AS4C256M16D4-75BCN

IC41
AS4C256M16D4-75BCN

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AS4C256M16D4-75BCN

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AS4C256M16D4-75BCN

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AS4C256M16D4-75BCN

IC64
AS4C256M16D4-75BCN

IC65
AS4C256M16D4-75BCN

IC66
AS4C256M16D4-75BCN

IC67
AS4C256M16D4-75BCN

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IC70
AS4C256M16D4-75BCN

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IC96
AS4C256M16D4-75BCN

IC97
AS4C256M16D4-75BCN

IC98
AS4C256M16D4-75BCN

IC99
AS4C256M16D4-75BCN

IC100
AS4C256M16D4-75BCN

IC101
AS4C256M16D4-75BCN

IC102
AS4C256M16D4-75BCN

IC103
AS4C256M16D4-75BCN

IC104
AS4C256M16D4-75BCN

IC105
AS4C256M16D4-75BCN

IC106
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IC107
AS4C256M16D4-75BCN

IC108
AS4C256M16D4-75BCN

IC109
AS4C256M16D4-75BCN

IC110
AS4C256M16D4-75BCN

IC111
AS4C256M16D4-75BCN

IC112
AS4C256M16D4-75BCN

IC113
AS4C256M16D4-75BCN

IC114
AS4C256M16D4-75BCN

IC115
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IC116
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IC117
AS4C256M16D4-75BCN

IC118
AS4C256M16D4-75BCN

IC119
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IC120
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IC121
AS4C256M16D4-75BCN

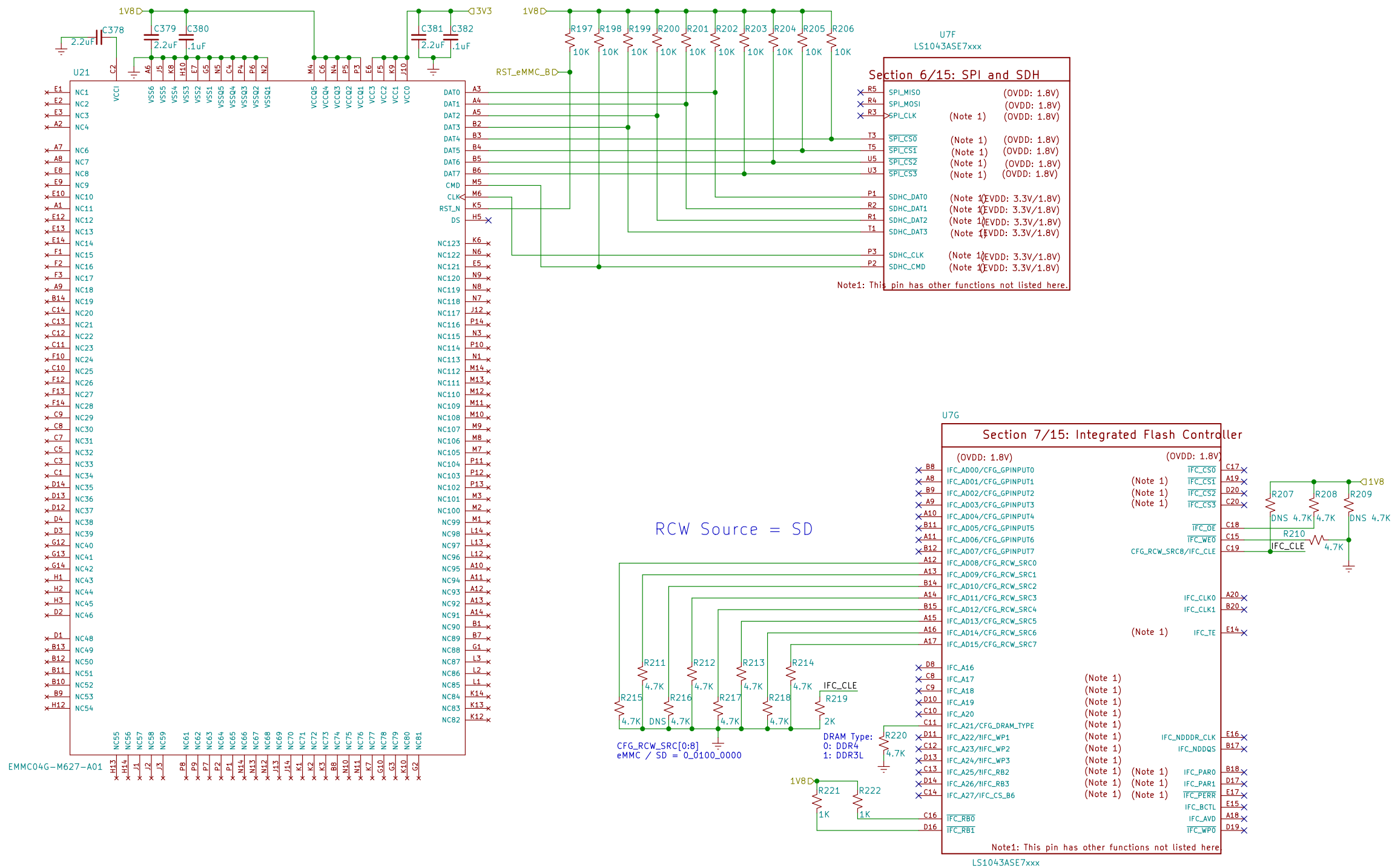
IC122
AS4C256M16D4-75BCN

IC123
AS4C256M16D4-75BCN

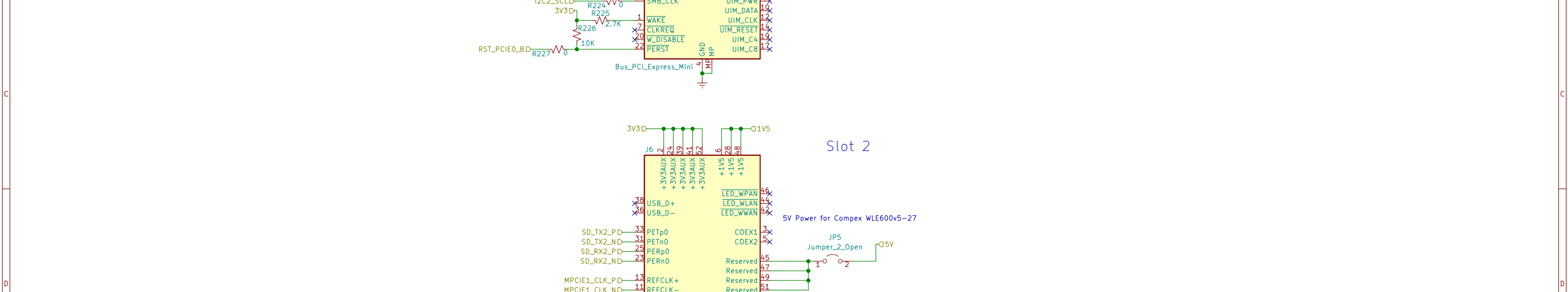
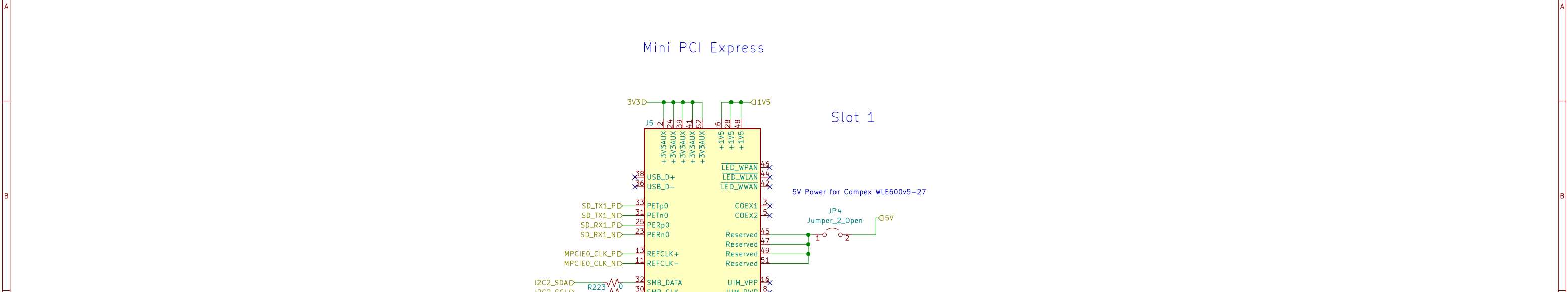
IC124
AS4C256M16

Size: USLedger	Date: 2020-10-06	Rev: 1
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4GB eMMC Flash



1	2	3	4	5	6	7	8	
---	---	---	---	---	---	---	---	--



Ethernet 0 (PoE In)

U7L

Section 12/15: Ethernet Controller 1

(LVDD: 2.5V/1.8V)

EC1_RXD0
EC1_RXD1
EC1_RXD2
EC1_RXD3
EC1_RX_DV
EC1_RX_CLK

EC1_TXD0
EC1_TXD1
EC1_TXD2
EC1_TXD3
EC1_TX_EN
EC1_TX_CLK

EMI1_MDIO
EMI1_MDC

EC1_GTX_CLK125

Note1: All pin have other functions not listed here.
LS1043ASE7xxx

3V3D
NTA4151P
Q6

R233 0

P0_RXD0 32
P0_RXD1 31
P0_RXD2 28
P0_RXD3 27

P0_RX_CTL/CLK125_EN 33

P0_RX_CLK 35

25MHZ_EC1_RGMII

SOC_IRQ0

1K

R246 22

R245 1K

R242 22

R241 22

R238 22

R237 22

R236 22

R235 22

R234 22

R233 0

R232 0

R231 0

R230 0

R229 0

R228 0

R227 0

R226 0

R225 0

R224 0

R223 0

R222 0

R221 0

R220 0

R219 0

R218 0

R217 0

R216 0

R215 0

R214 0

R213 0

R212 0

R211 0

R210 0

R209 0

R208 0

R207 0

R206 0

R205 0

R204 0

R203 0

R202 0

R201 0

R200 0

R199 0

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R197 0

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R188 0

R187 0

R186 0

R185 0

R184 0

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R181 0

R180 0

R179 0

R178 0

R177 0

R176 0

R175 0

R174 0

R173 0

R172 0

R171 0

R170 0

R169 0

R168 0

R167 0

R166 0

R165 0

R164 0

R163 0

R162 0

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R157 0

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R115 0

R114 0

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R112 0

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R110 0

R109 0

R108 0

R107 0

R106 0

R105 0

R104 0

R103 0

R102 0

R101 0

R100 0

R99 0

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R97 0

R96 0

R95 0

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R64 0

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R62 0

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R58 0

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R56 0

R55 0

R54 0

R53 0

R52 0

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R50 0

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R45 0

R44 0

R43 0

R42 0

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R37 0

R36 0

R35 0

R34 0

R33 0

R32 0

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R29 0

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R3 0

R2 0

R1 0

R0 0

R-1 0

R-2 0

R-3 0

R-4 0

R-5 0

R-6 0

R-7 0

R-8 0

R-9 0

R-10 0

R-11 0

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R-31 0

R-32 0

R-33 0

R-34 0

R-35 0

R-36 0

R-37 0

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R-42 0

R-43 0

R-44 0

R-45 0

R-46 0

R-47 0

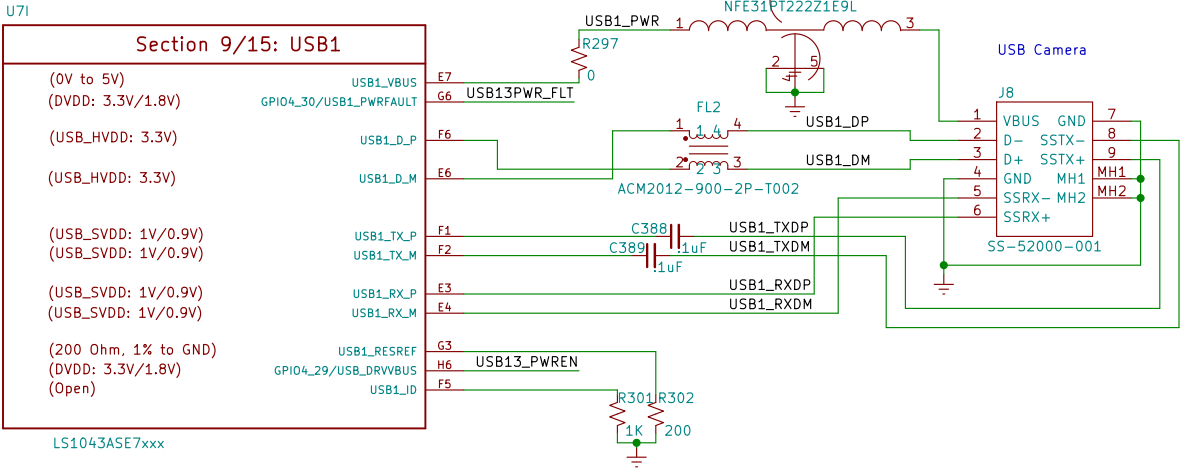
R-48 0

R-49 0

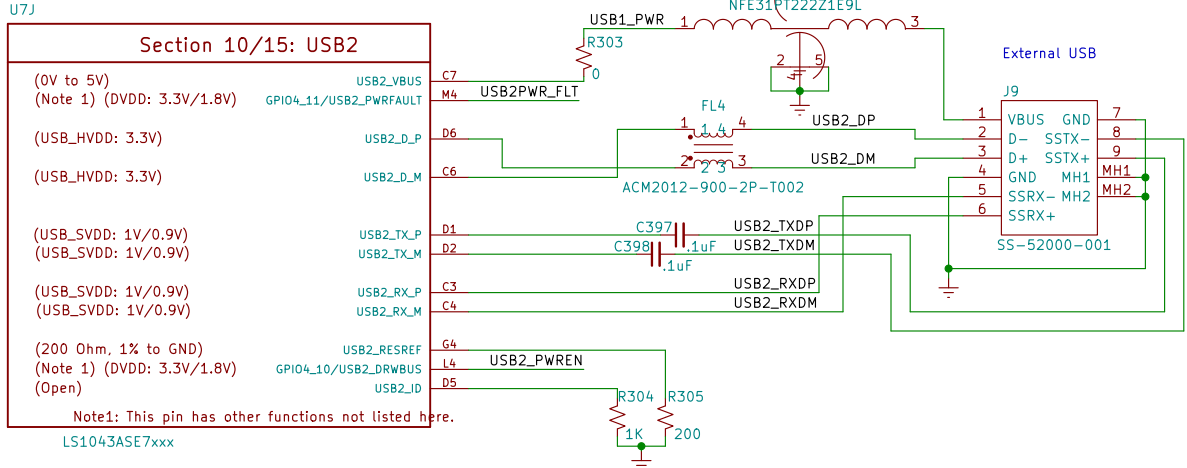
R-50 0

R-

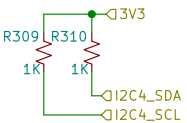
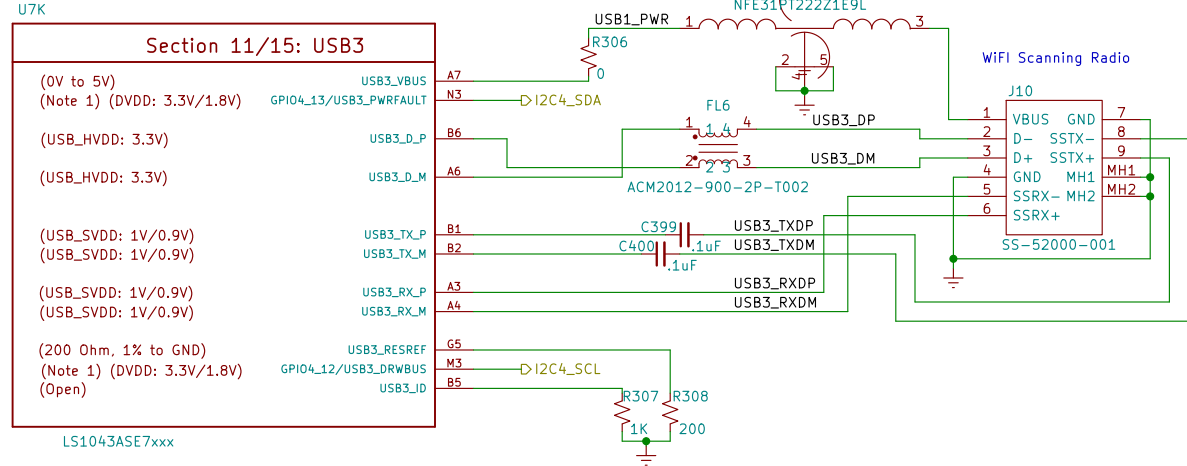
USB3 Port 1



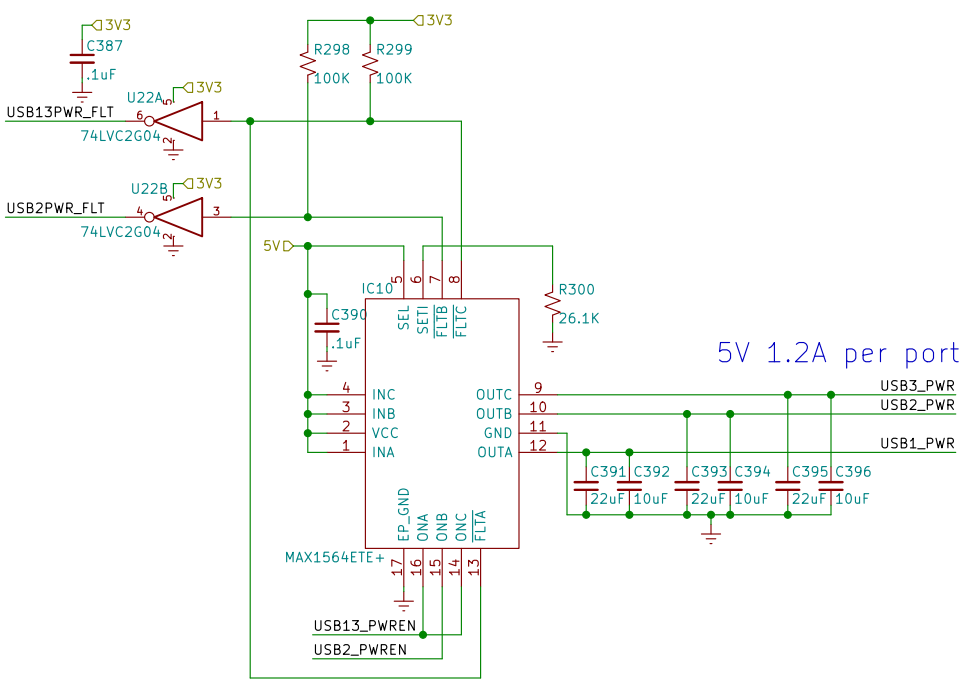
USB3 Port 2



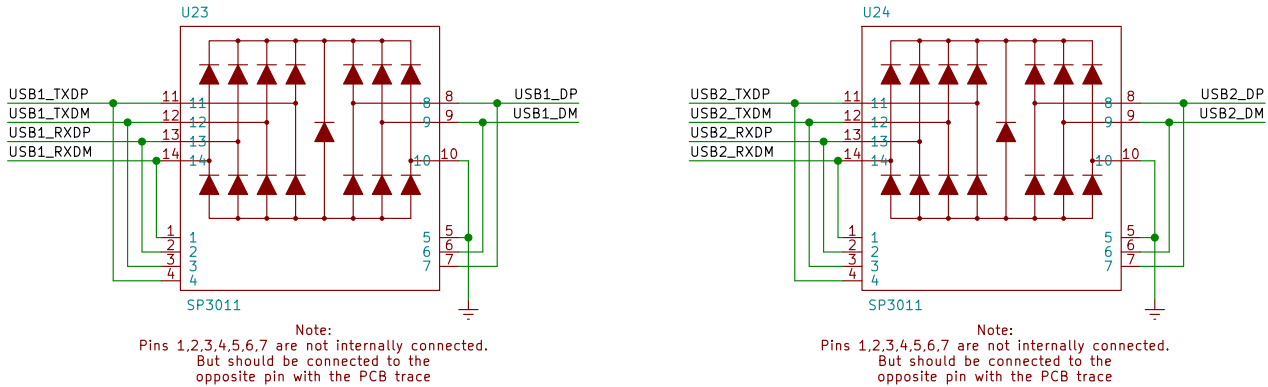
USB3 Port 3



USB Power



ESD Protection



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Sheet: /USB/
File: USB.kicad_sch

Title: AP2100

Size: USLedger Date: 2020-10-06

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