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Radxa Cubie A7Z

Schematic

V2.00

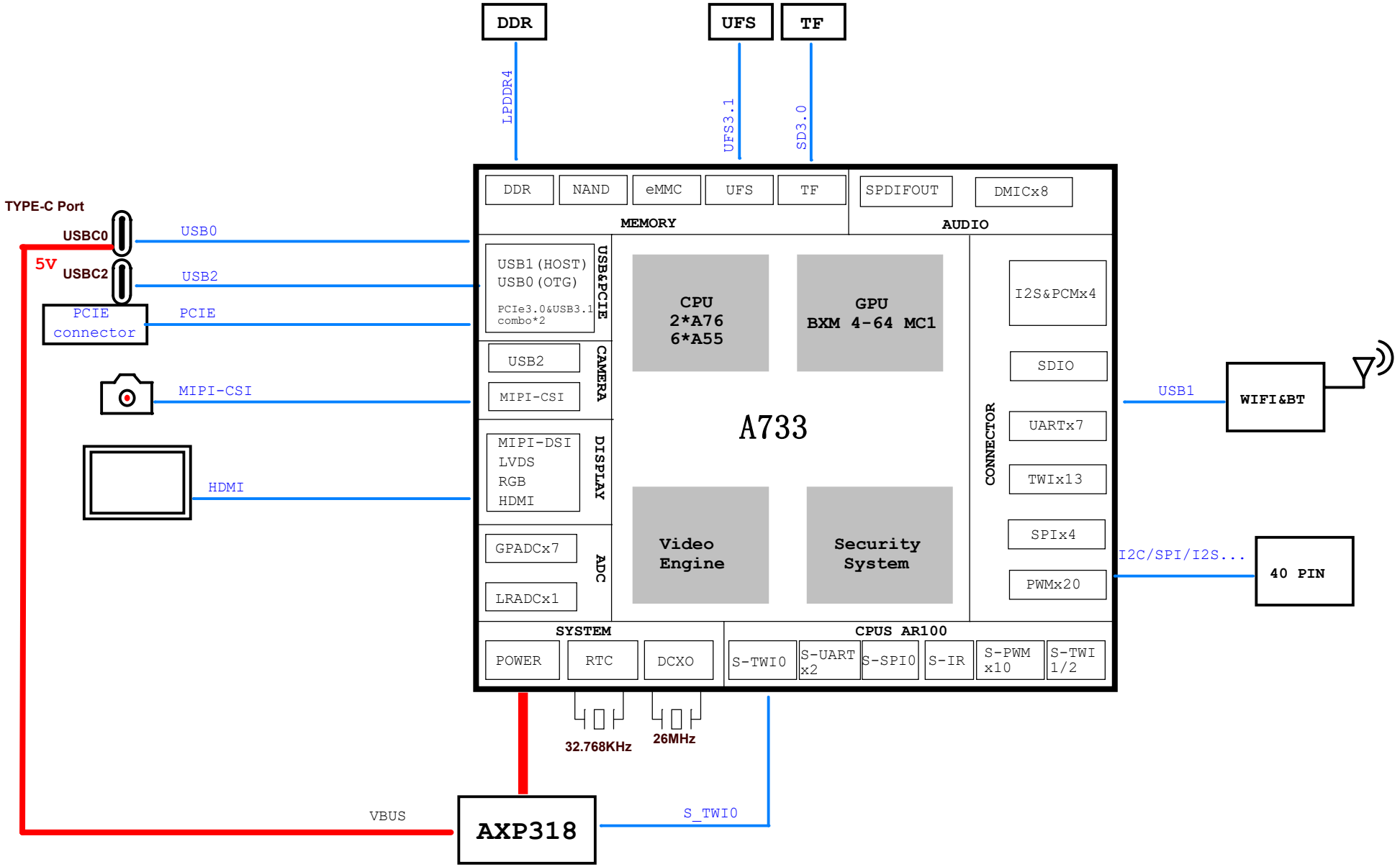
Index

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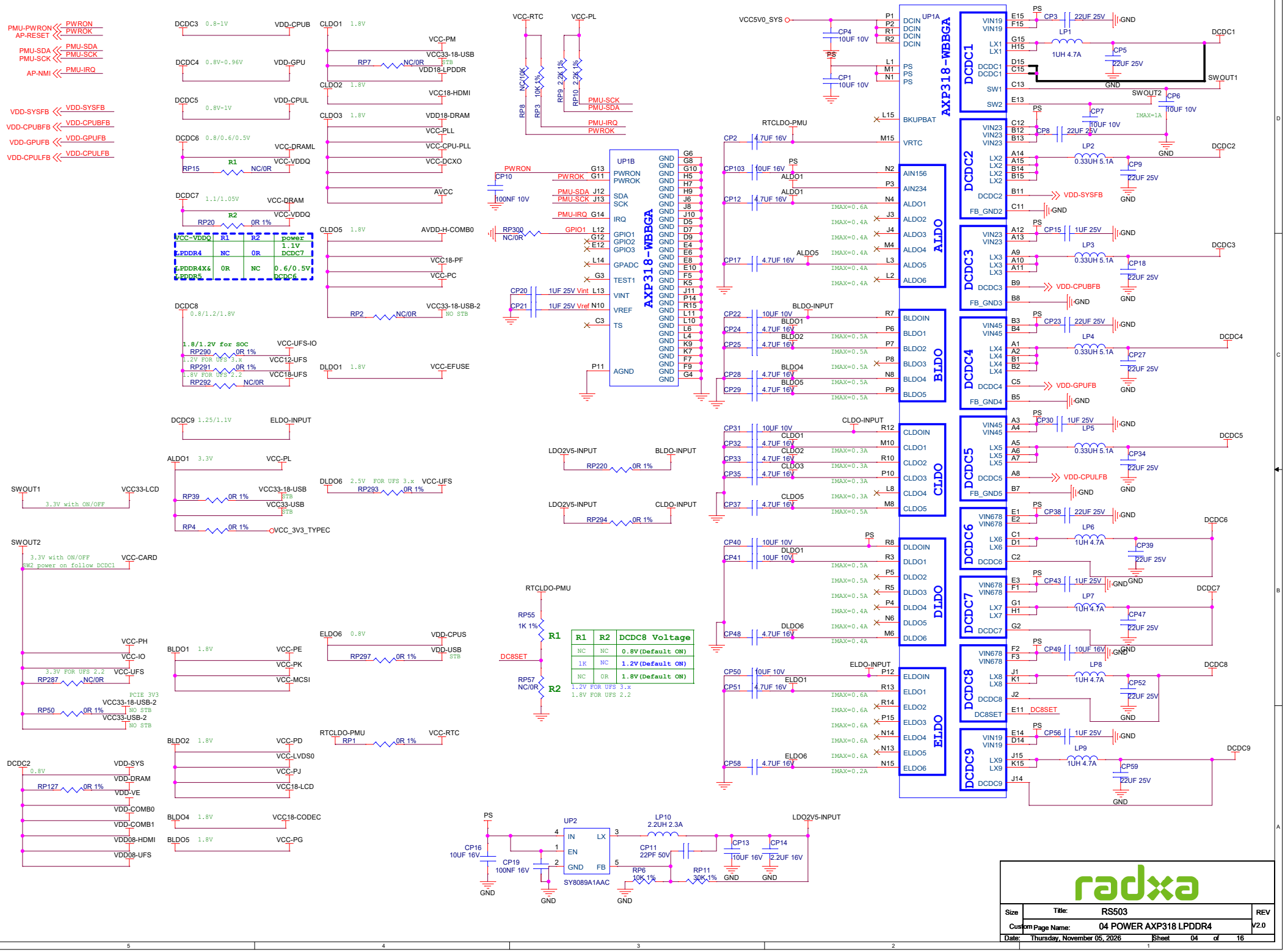
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BLOCK



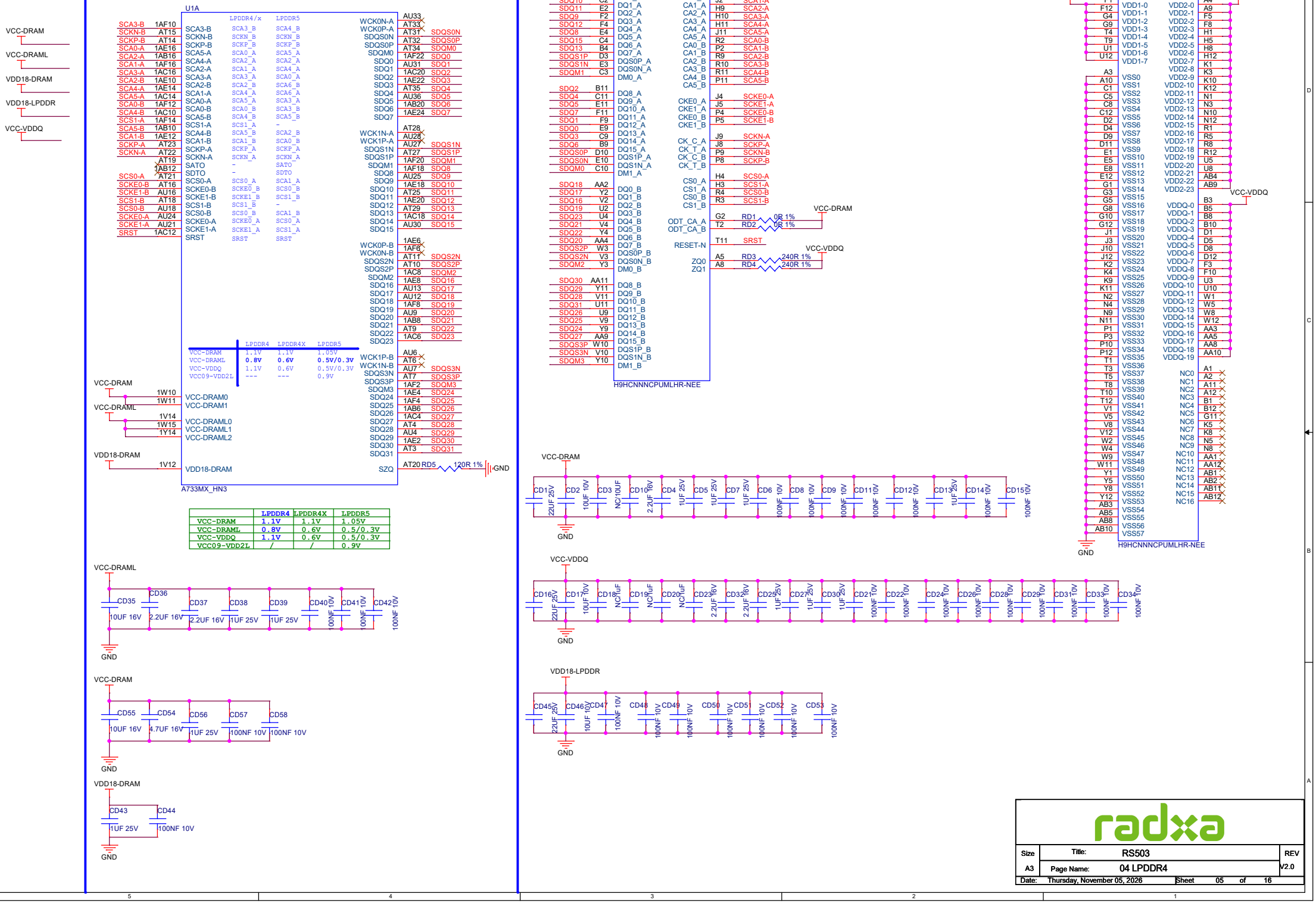
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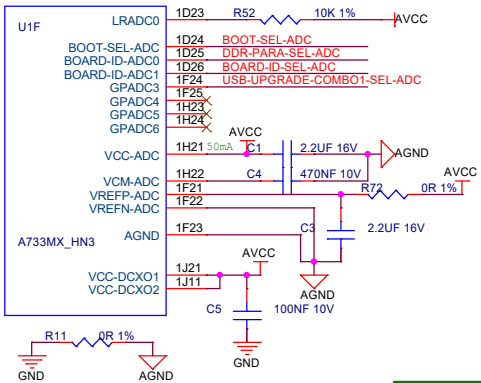
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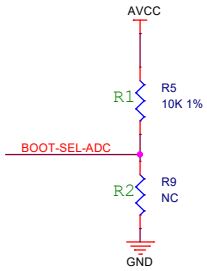
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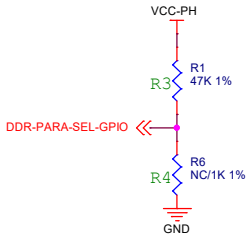


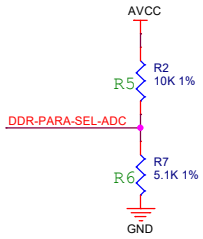
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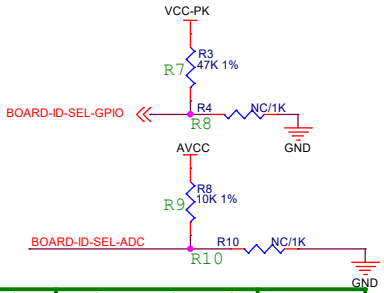
ADC

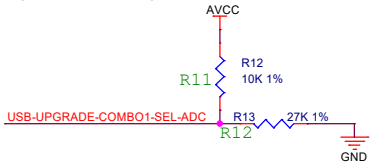












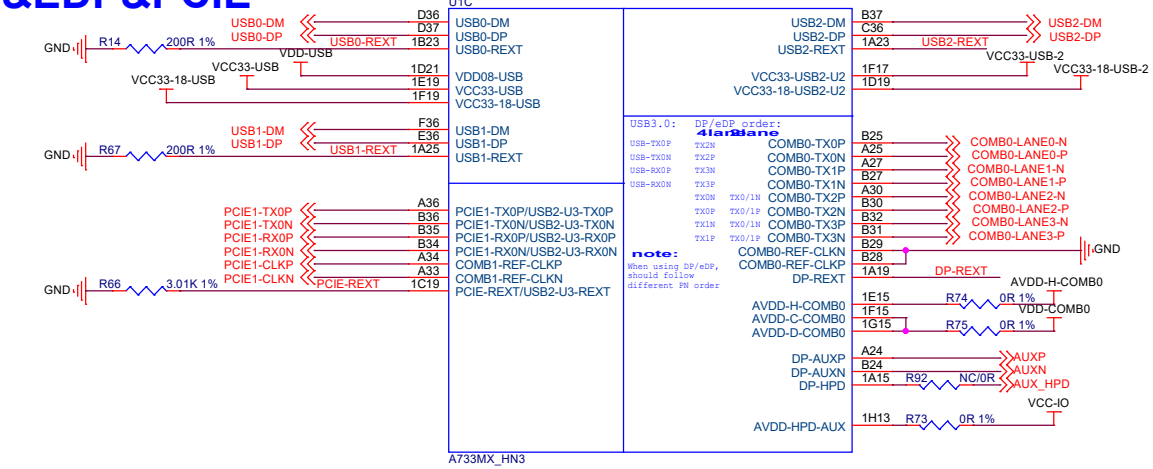
R11	R12	Volt	Upgrade	COMBO1
10K -1%	1K-1%	163mV		PCIE
	2K7-1%	382mV		USB
	5K1-1%	608mV		floating
	27K-1%	1315mV	USB0	PCIE
	68K-1%	1569mV	USB0	USB
	NC	1800mV	USB0	floating

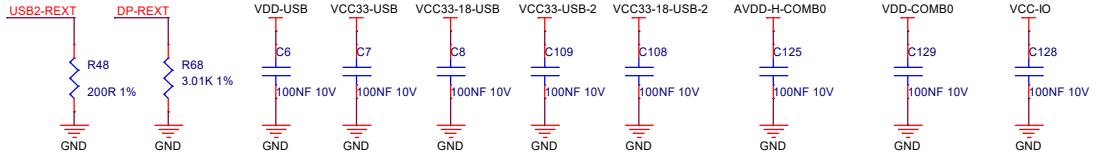
BOOT-SEL-ADC			Boot Media Type Select
R1-1%	R2-1%	Volt	
NC	10K	0mV	SMHC0->MLC NAND->SLC NAND->TRY(except SPI4 in PI)
10K	1K	163mV	SMHC0->SLC NAND->MLC NAND->TRY(except SPI4 in PI)
10K	2K2	325mV	SMHC0->EMMC_USER->EMMC_BOOT->TRY(except SPI4 in PI)
10K	3K9	505mV	SMHC0->EMMC_BOOT->EMMC_USER->TRY(except SPI4 in PI)
6K8	4K7	736mV	SMHC0->SPI0 NOR->TRY(except SPI4 in PI)
6K8	6K8	900mV	SMHC0->SPI0 NAND->TRY(except SPI4 in PI)
4K3	6K8	1102mV	SMHC0->SPI4 NOR in PI->TRY(except SPI4 in PI)
2K2	10K	1475mV	SMHC0->SPI4 NAND in PI->TRY(except SPI4 in PI)
10K	NC	1800mV	SMHC0->UFS->TRY(except SPI4 in PI)

GPIO Level(Set by the R3 pull-up and R4 pull-down resistance of PH16 GPIO)	GPADC Voltage(Fixed pull-up R5 is 10K-1%,Set the voltage by adjusting pull-down resistor R6)	DDR PARA
0	163mV(1K-1%)	DDR PARA 1
0	382mV(2.7K-1%)	DDR PARA 2
0	608mV(5.1K-1%)	DDR PARA 3
0	811mV(8.2K-1%)	DDR PARA 4
0	1050mV(14K-1%)	DDR PARA 5
0	1315mV(27K-1%)	DDR PARA 6
0	1569mV(68K-1%)	DDR PARA 7
0	1800mV(NC)	DDR PARA 8
1	163mV(1K-1%)	DDR PARA 9
1	382mV(2.7K-1%)	DDR PARA 10
1	608mV(5.1K-1%)	DDR PARA 11
1	811mV(8.2K-1%)	DDR PARA 12
1	1050mV(14K-1%)	DDR PARA 13
1	1315mV(27K-1%)	DDR PARA 14
1	1569mV(68K-1%)	DDR PARA 15
1	1800mV(NC)	DDR PARA 16

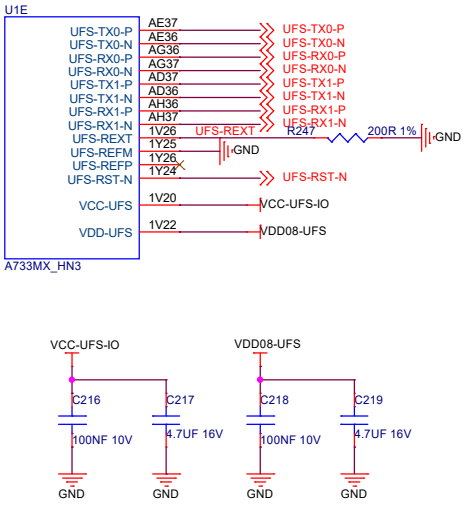
GPIO-SET		BOARD-ID-SEL-ADC			BoardID Config
R7	R8	R9	R10	Volt	
NC	1K pull down	10K -1%	1K-1%	163mV	Config-1
			2K7-1%	382mV	Config-2
			5K1-1%	608mV	Config-3
			8K2-1%	811mV	Config-4
			14K-1%	1050mV	Config-5
			27K-1%	1315mV	Config-6
			68K-1%	1569mV	Config-7
			NC	1800mV	Config-8
47K pull up	NC	10K -1%	1K-1%	163mV	Config-9
			2K7-1%	382mV	Config-10
			5K1-1%	608mV	Config-11
			8K2-1%	811mV	Config-12
			14K-1%	1050mV	Config-13
			27K-1%	1315mV	Config-14
			68K-1%	1569mV	Config-15
			NC	1800mV	Config-16

USB&EDP&PCIE

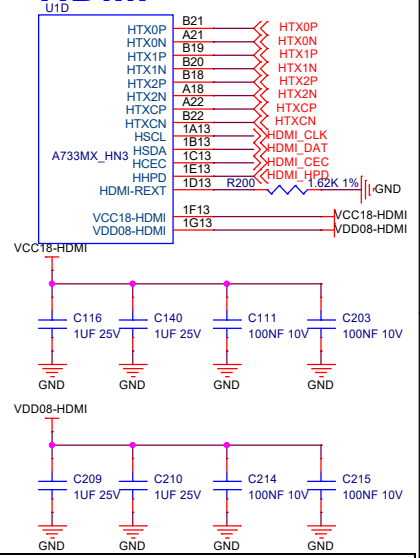


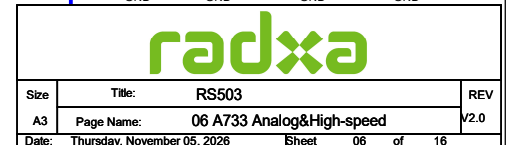


UFS

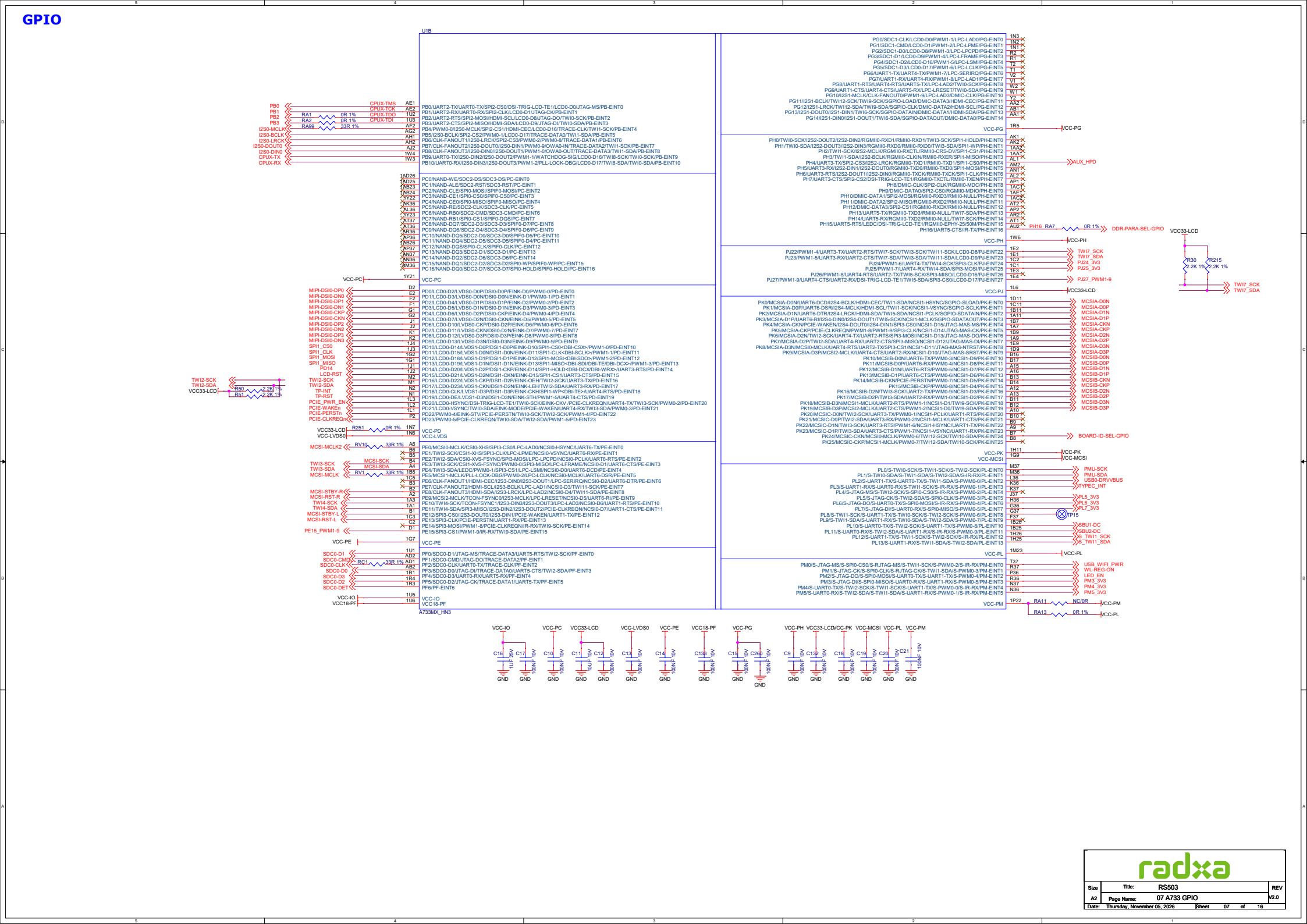


HDMI



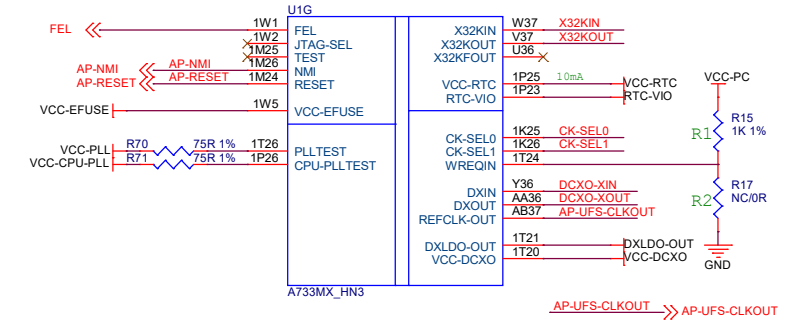


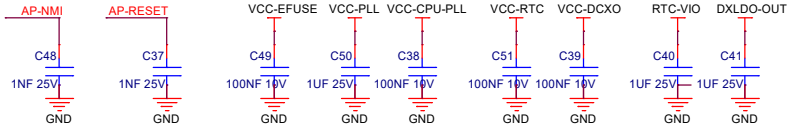
GPIO

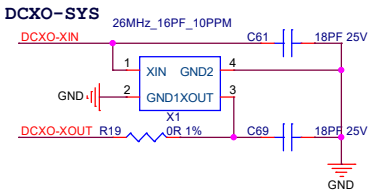


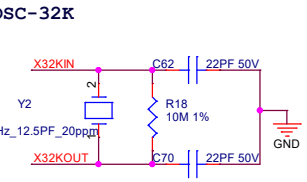
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A2	Page Name: 07 A733 GPIO		V2.0
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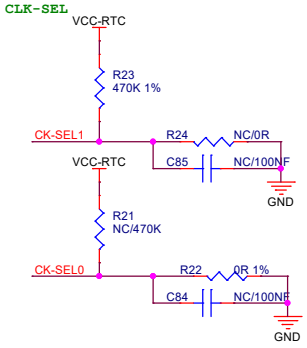
SYS





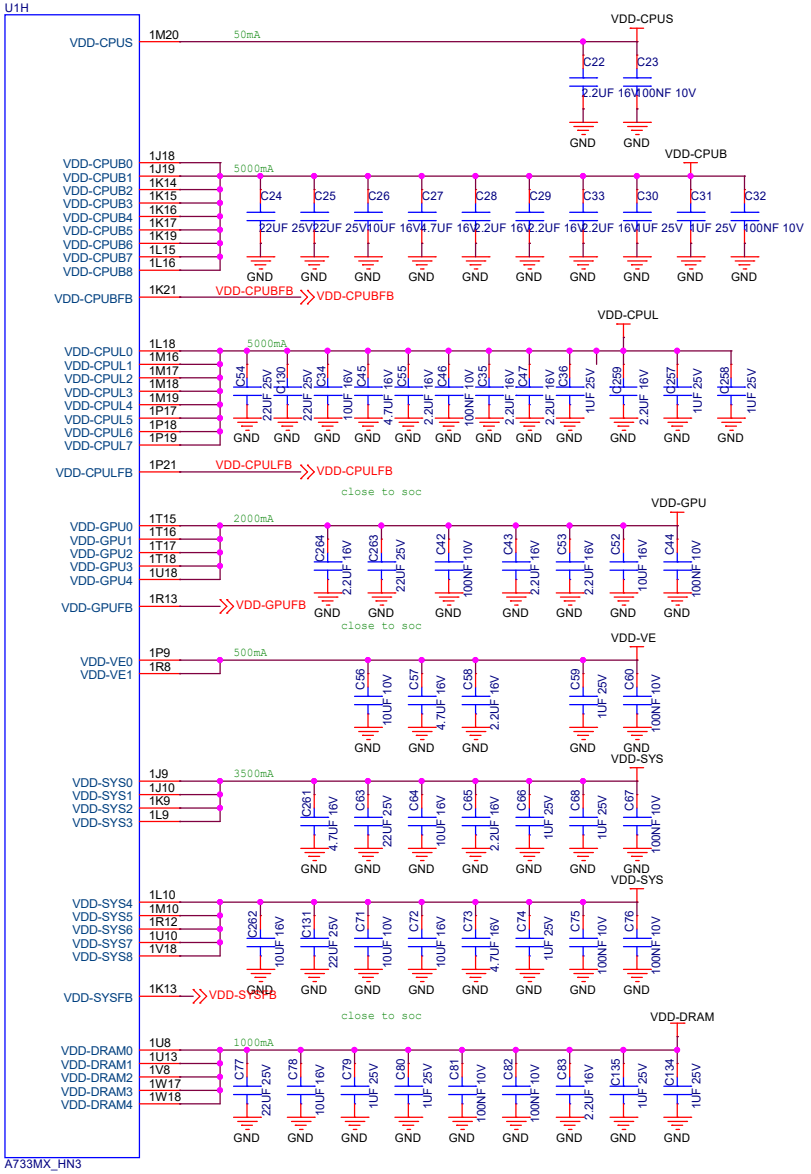


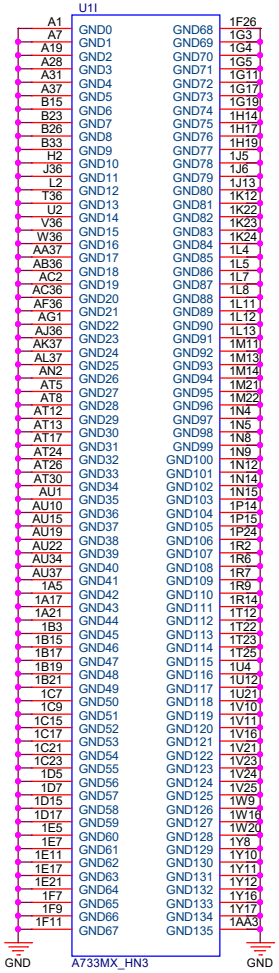


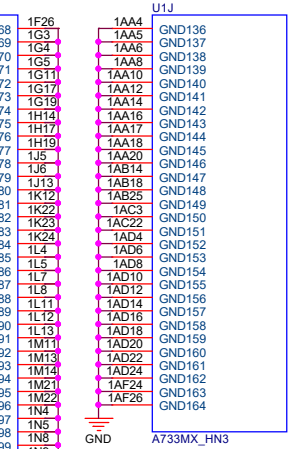


default 24M	SEL1	SEL0
SOC=19.2M	0	1
SOC=26M	1	0
SOC=24M,UFS=19.2M	1	1
SOC=24M,UFS=26M	0	0

CORE POWER



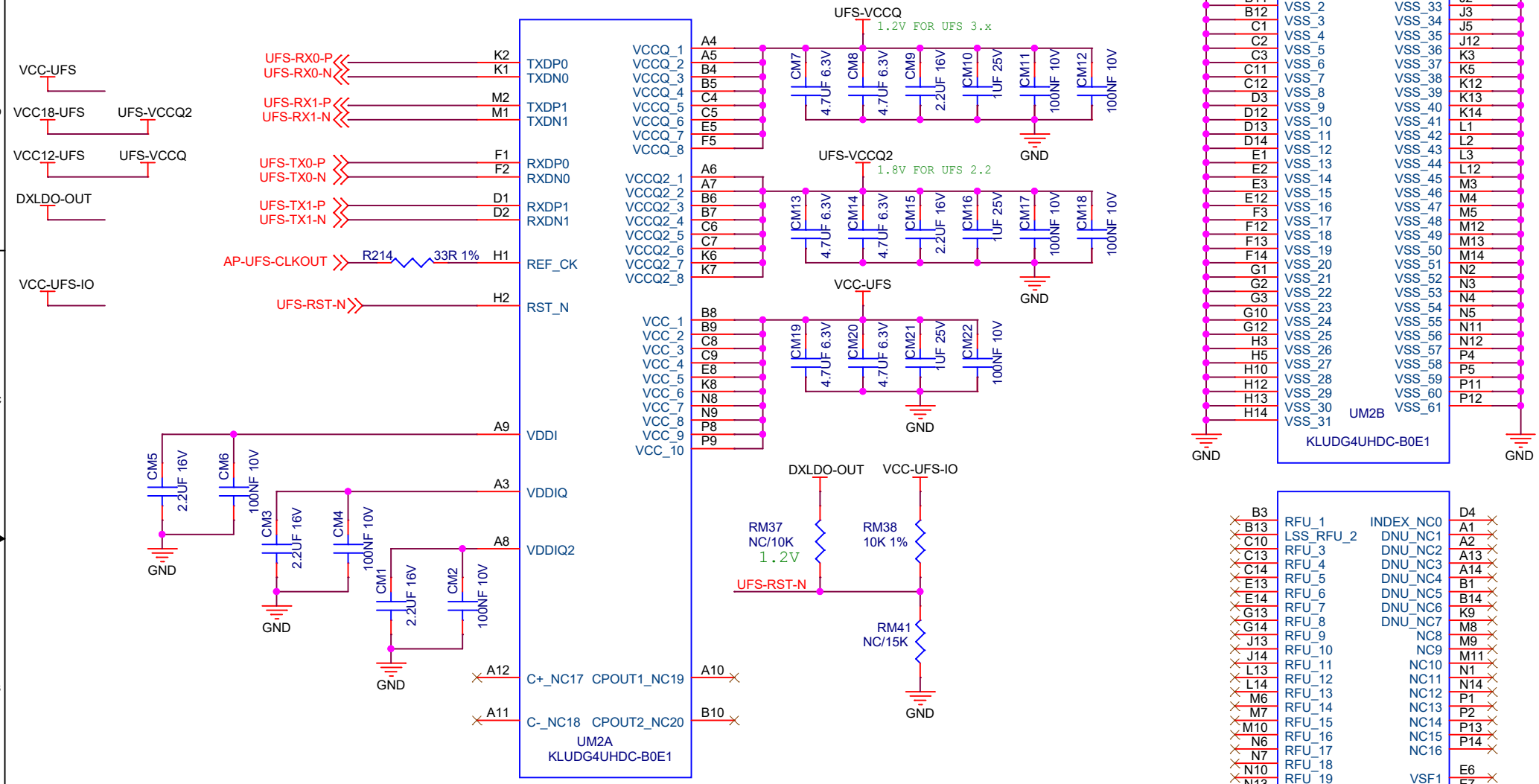




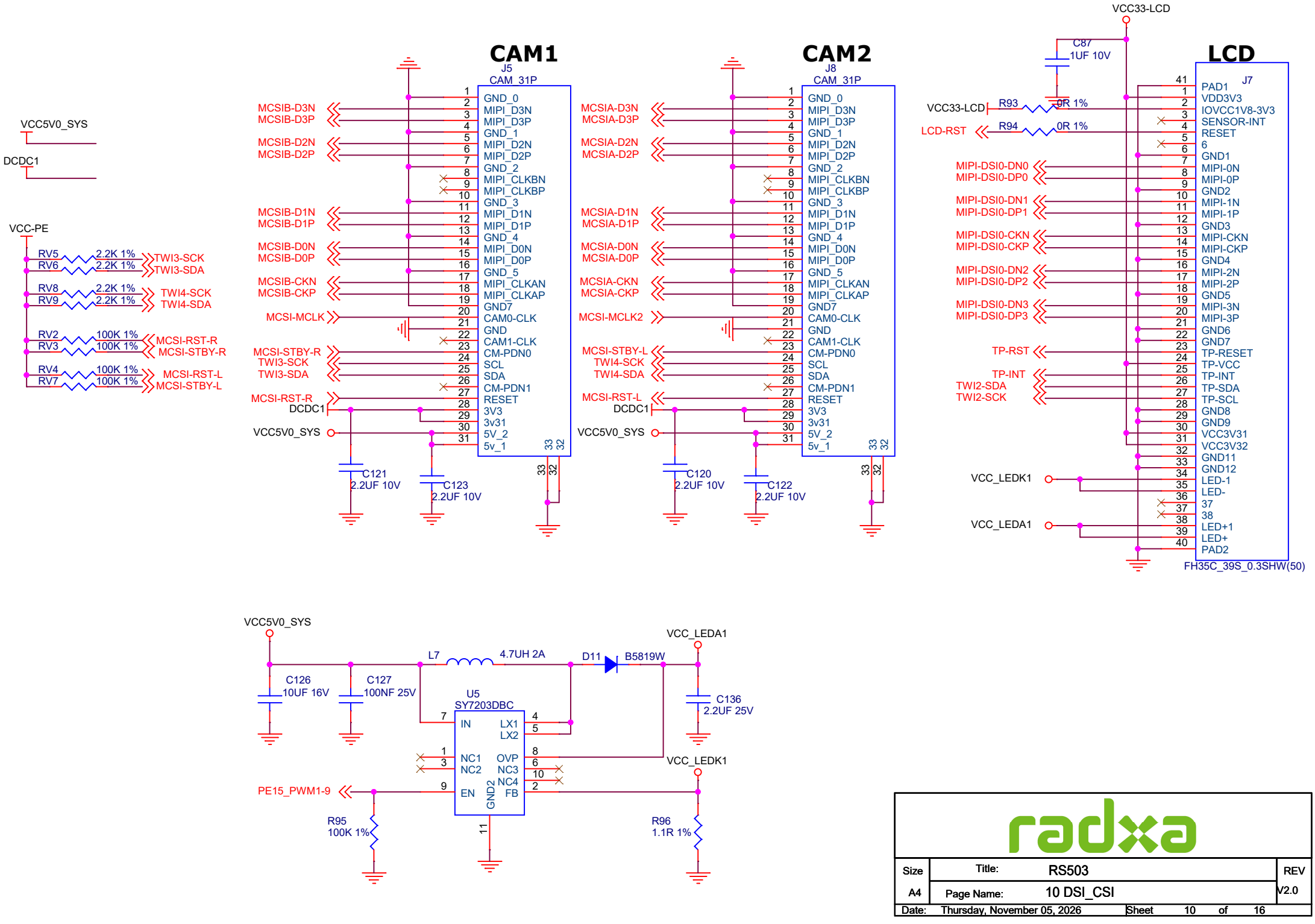
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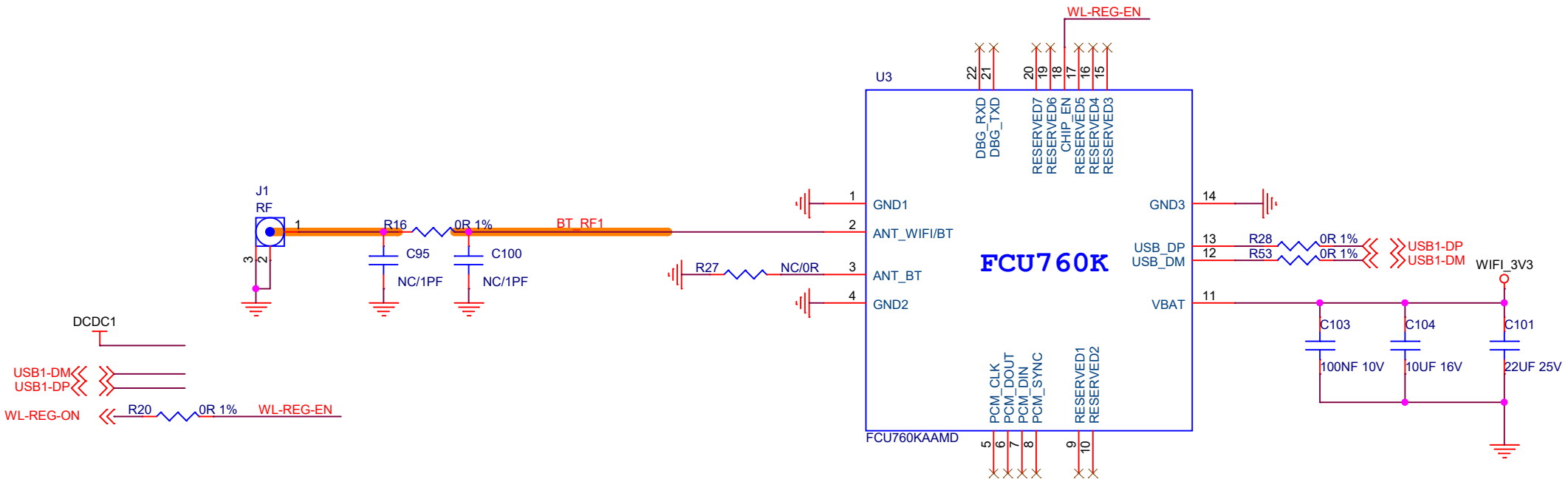
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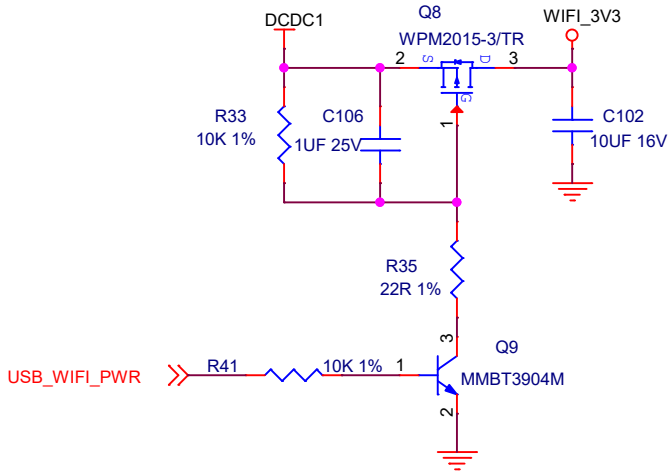


Size	Title: RS503		REV
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CAM1
J5
CAM_31P
CAM2
J8
CAM_31P
LCD
J7
FH35C_39S_0.3SHW(50)
VCC5V0_SYS
DCDC1
VCC-PE
RV5 2.2K 1%
RV6 2.2K 1%
TWI3-SCK
TWI3-SDA
RV8 2.2K 1%
RV9 2.2K 1%
TWI4-SCK
TWI4-SDA
RV2 100K 1%
RV3 100K 1%
MCSI-RST-R
MCSI-STBY-R
RV4 100K 1%
RV7 100K 1%
MCSI-RST-L
MCSI-STBY-L
MCSIB-D3N
MCSIB-D3P
MCSIB-D2N
MCSIB-D2P
MCSIB-D1N
MCSIB-D1P
MCSIB-D0N
MCSIB-D0P
MCSIB-CKN
MCSIB-CKP
MCSI-MCLK
MCSI-STBY-R
TWI3-SCK
TWI3-SDA
MCSI-RST-R
GND_0
MIPI_D3N
MIPI_D3P
GND_1
MIPI_D2N
MIPI_D2P
GND_2
MIPI_CLKBN
MIPI_CLKBP
GND_3
MIPI_D1N
MIPI_D1P
GND_4
MIPI_D0N
MIPI_D0P
GND_5
MIPI_CLKAN
MIPI_CLKAP
GND7
CAM0-CLK
GND
CAM1-CLK
CM-PDN0
SCL
SDA
CM-PDN1
RESET
3V3
3v31
5V_2
5v_1
C121 2.2UF 10V
C123 2.2UF 10V
MCSIA-D3N
MCSIA-D3P
MCSIA-D2N
MCSIA-D2P
MCSIA-D1N
MCSIA-D1P
MCSIA-D0N
MCSIA-D0P
MCSIA-CKN
MCSIA-CKP
MCSI-MCLK2
MCSI-STBY-L
TWI4-SCK
TWI4-SDA
MCSI-RST-L
C120 2.2UF 10V
C122 2.2UF 10V
VCC33-LCD
C87 1UF 10V
R93 0R 1%
R94 0R 1%
LCD-RST
MIPI-DSI0-DN0
MIPI-DSI0-DP0
MIPI-DSI0-DN1
MIPI-DSI0-DP1
MIPI-DSI0-CKN
MIPI-DSI0-CKP
MIPI-DSI0-DN2
MIPI-DSI0-DP2
MIPI-DSI0-DN3
MIPI-DSI0-DP3
TP-RST
TP-INT
TWI2-SDA
TWI2-SCK
PAD1
VDD3V3
IOVCC1V8-3V3
SENSOR-INT
RESET
6
GND1
MIPI-0N
MIPI-0P
GND2
MIPI-1N
MIPI-1P
GND3
MIPI-CKN
MIPI-CKP
GND4
MIPI-2N
MIPI-2P
GND5
MIPI-3N
MIPI-3P
GND6
GND7
TP-RESET
TP-VCC
TP-INT
TP-SDA
TP-SCL
GND8
GND9
VCC3V31
VCC3V32
GND11
GND12
LED-1
LED-
37
38
LED+1
LED+
PAD2
VCC_LEDK1
VCC_LEDA1
VCC5V0_SYS
L7 4.7UH 2A
D11 B5819W
VCC_LEDA1
C126 10UF 16V
C127 100NF 25V
U5
SY7203DBC
IN
LX1
LX2
NC1
NC2
OVP
NC3
NC4
EN
GND2
FB
C136 2.2UF 25V
VCC_LEDK1
PE15_PWM1-9
R95 100K 1%
R96 1.1R 1%
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Page Name: 10 DSI_CSI
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WIFI/BT

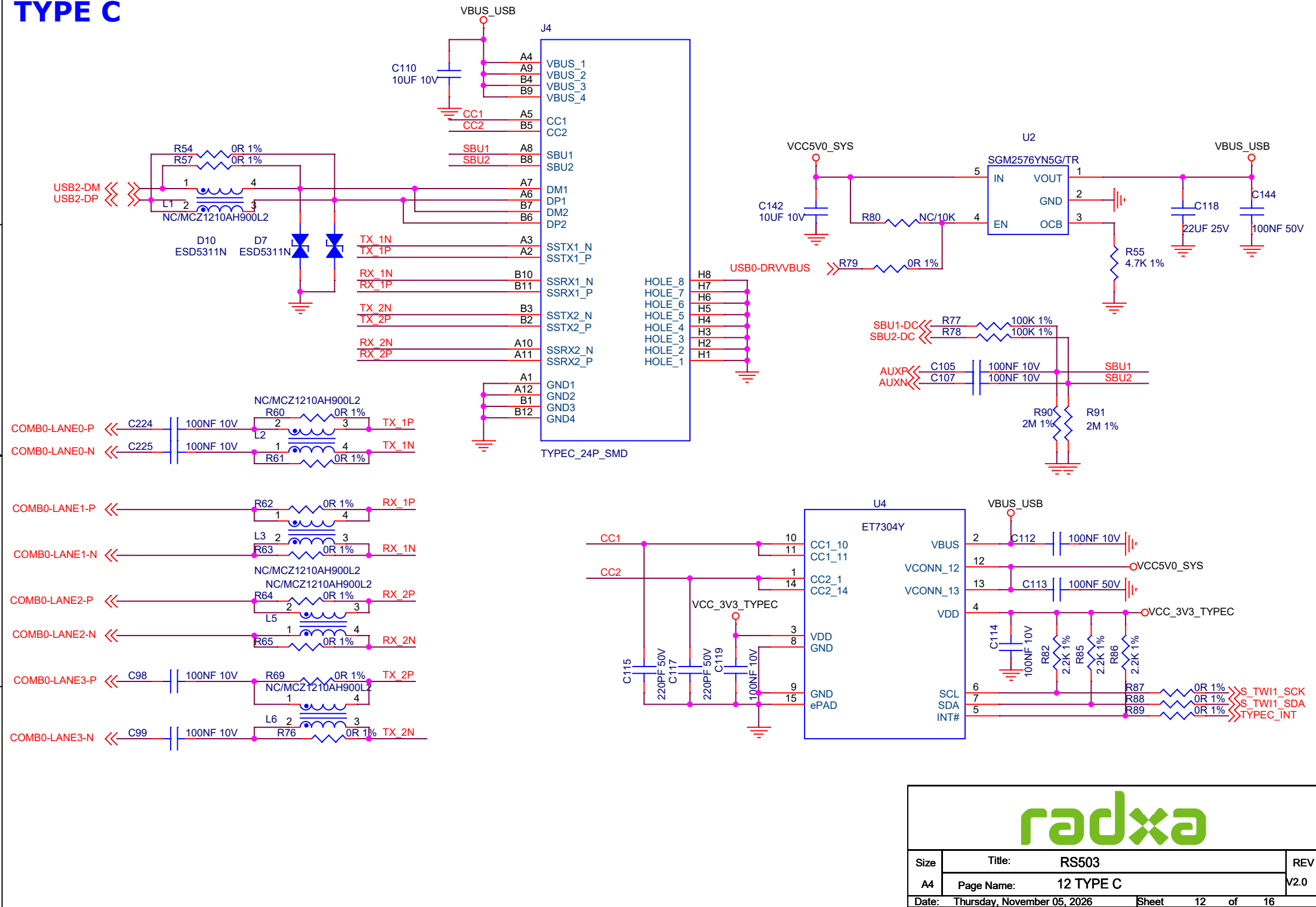




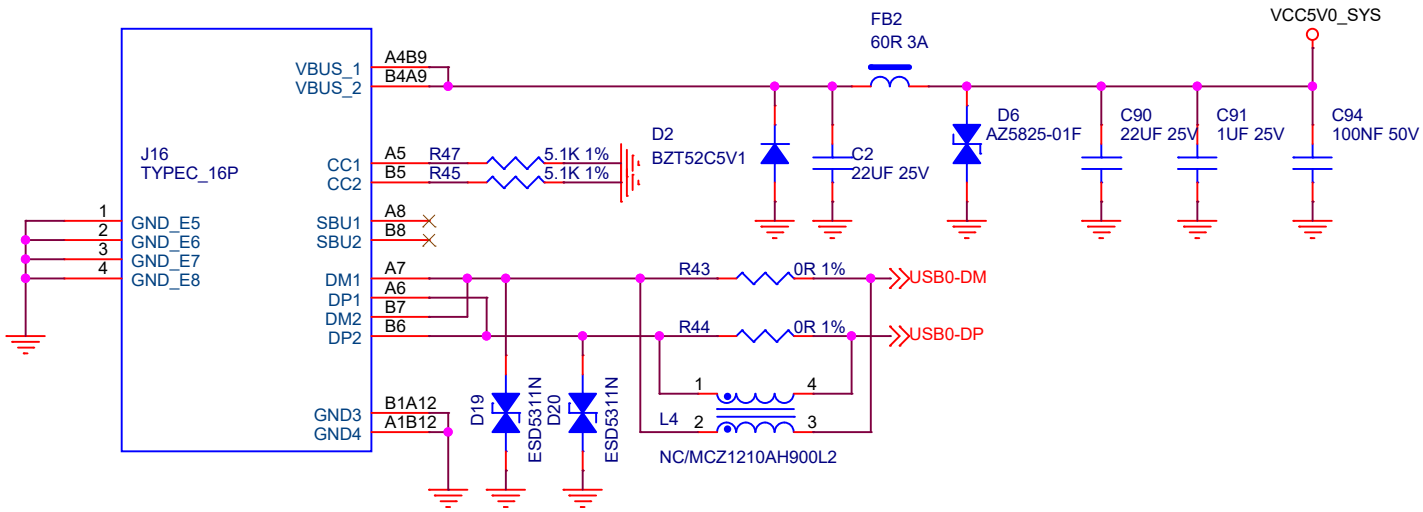
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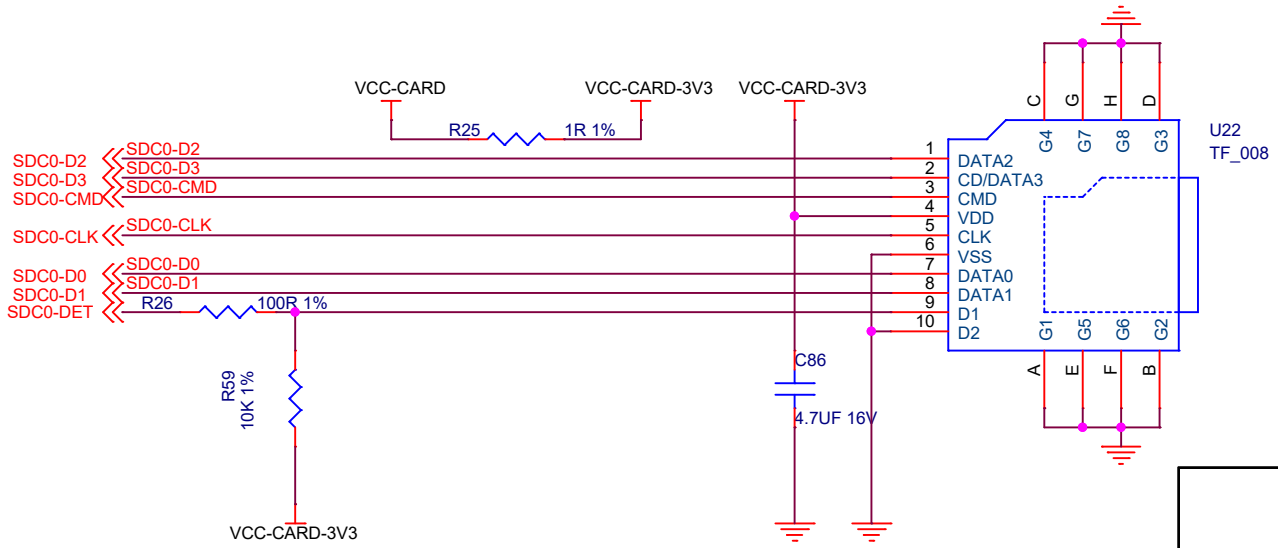
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A4	Page Name:	11 WIFI/BT	V2.0
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TYPE C



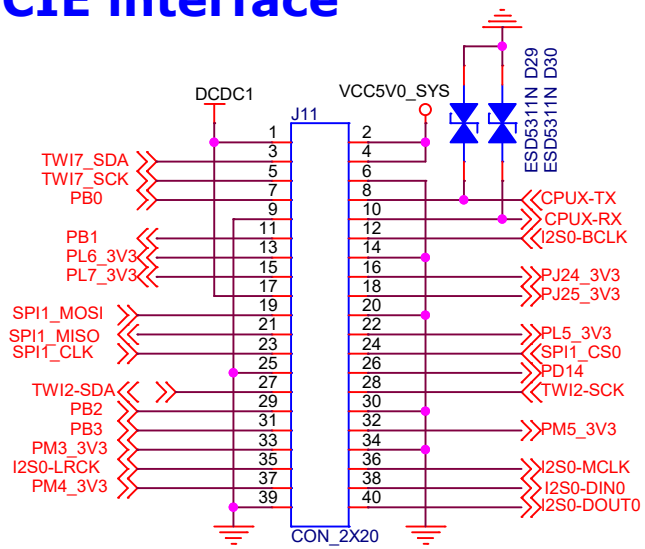
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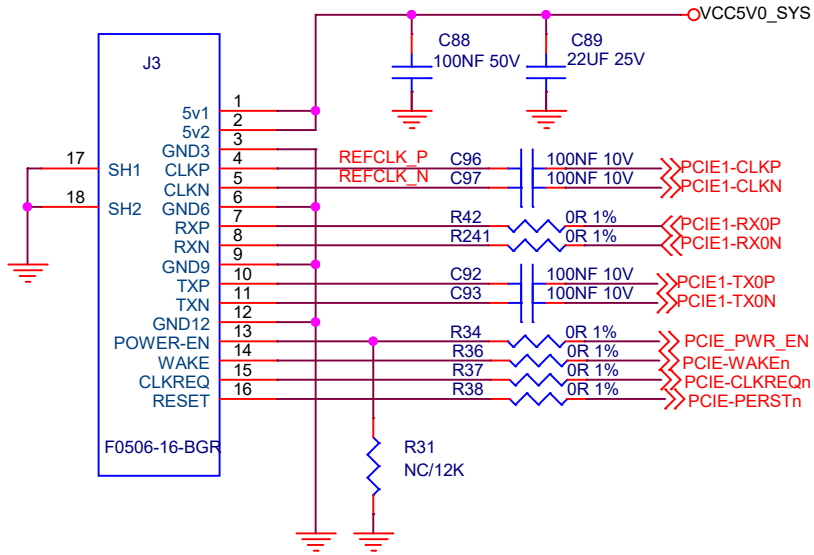


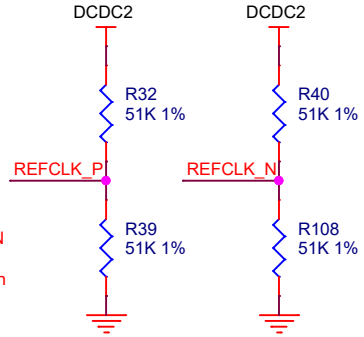


Size	Title: RS503		REV
A4	Page Name: 13 DC 5V_T-CARD		V2.0
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40PIN Connctor/PCIE interface

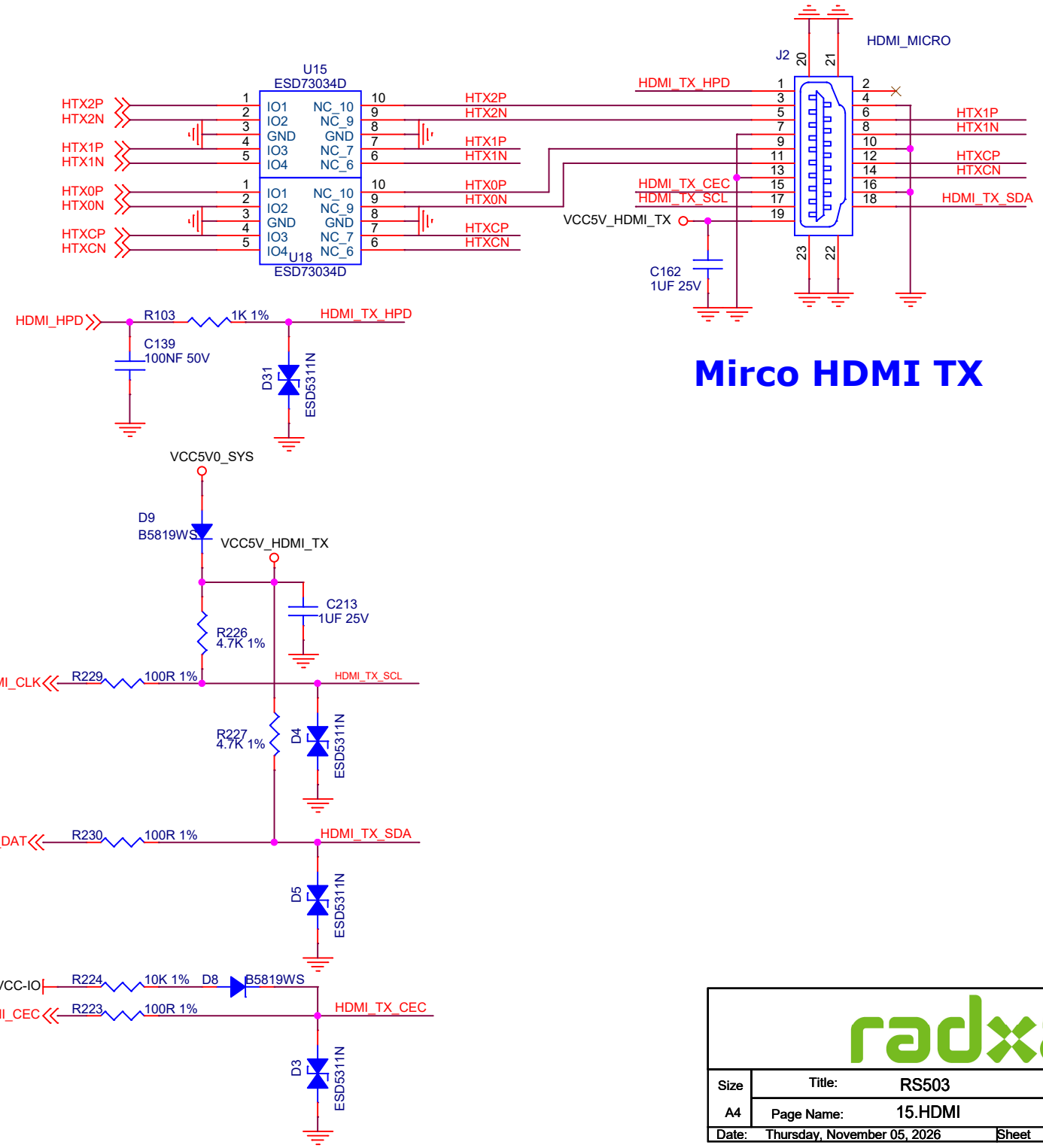






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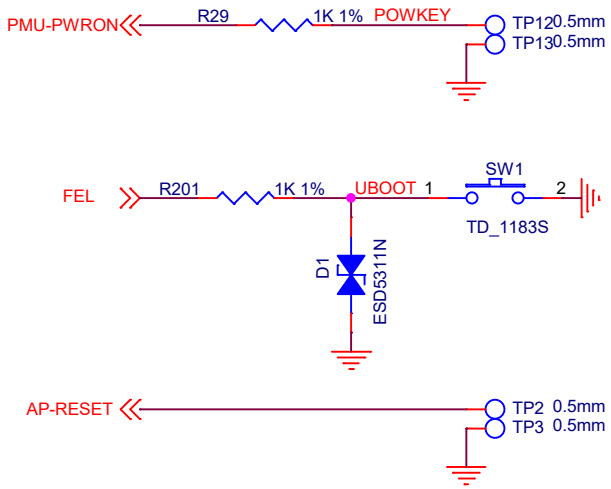
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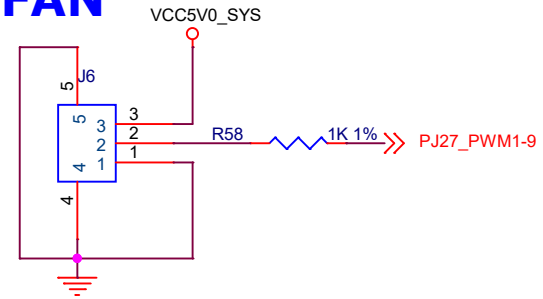
Mirco HDMI TX

Size	Title: RS503	REV
A4	Page Name: 15.HDMI	V2.0
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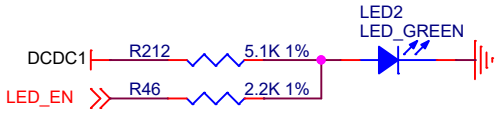
KEY



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LED



Size	Title: RS503	REV
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