


e-SOM_i.MX6 - System - On - Module

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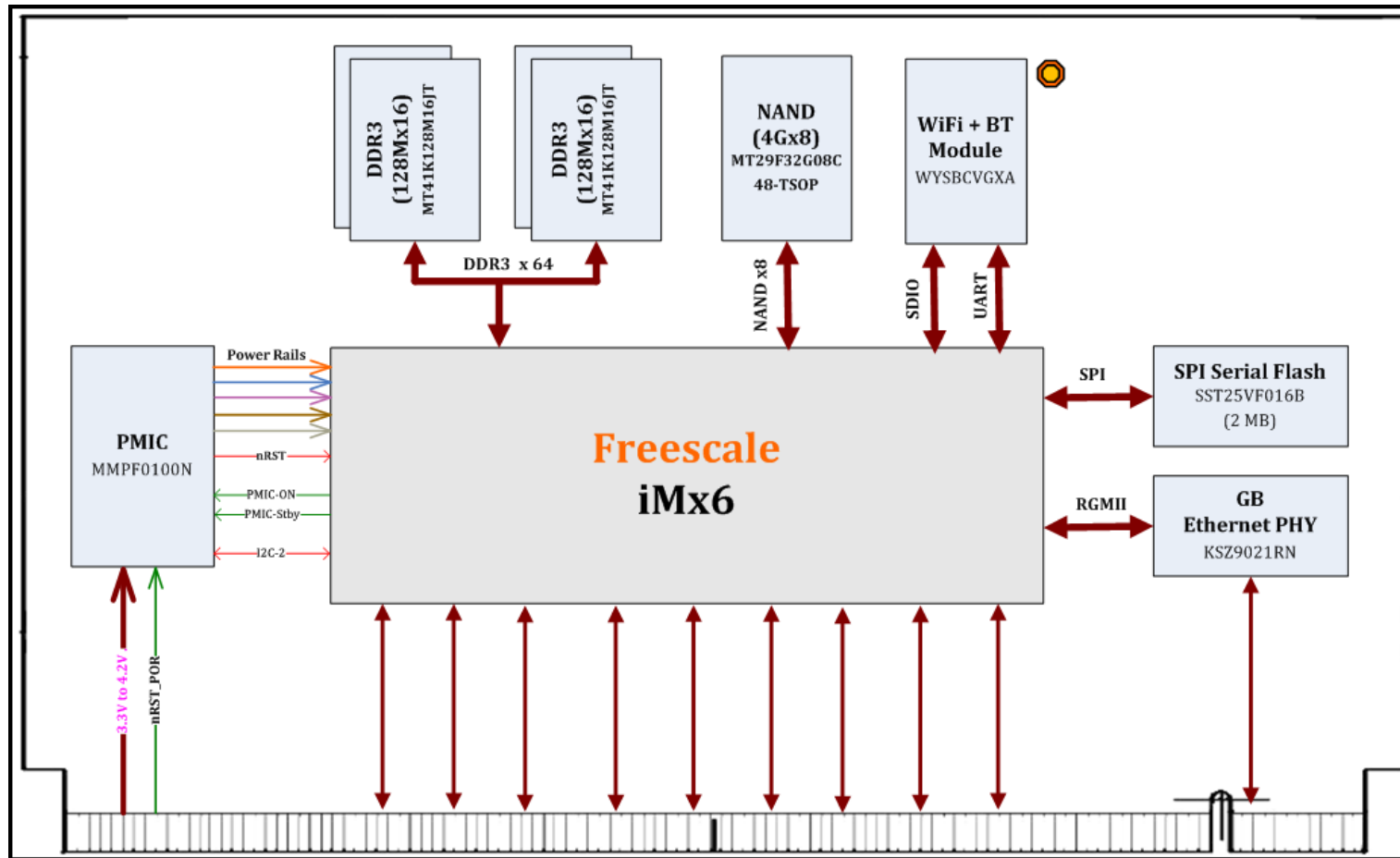
Project Name

e-SOM_iMX6_REVA

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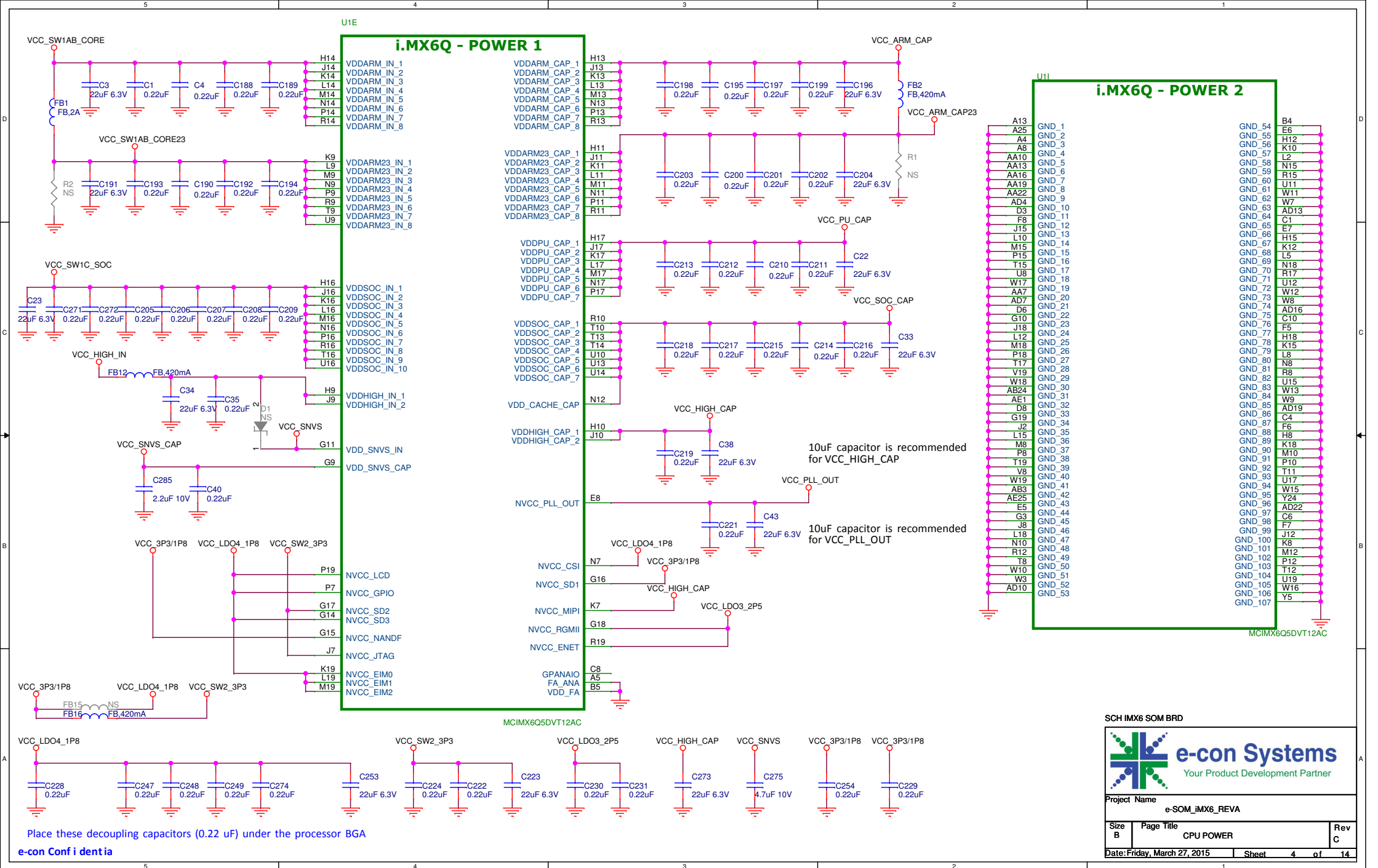


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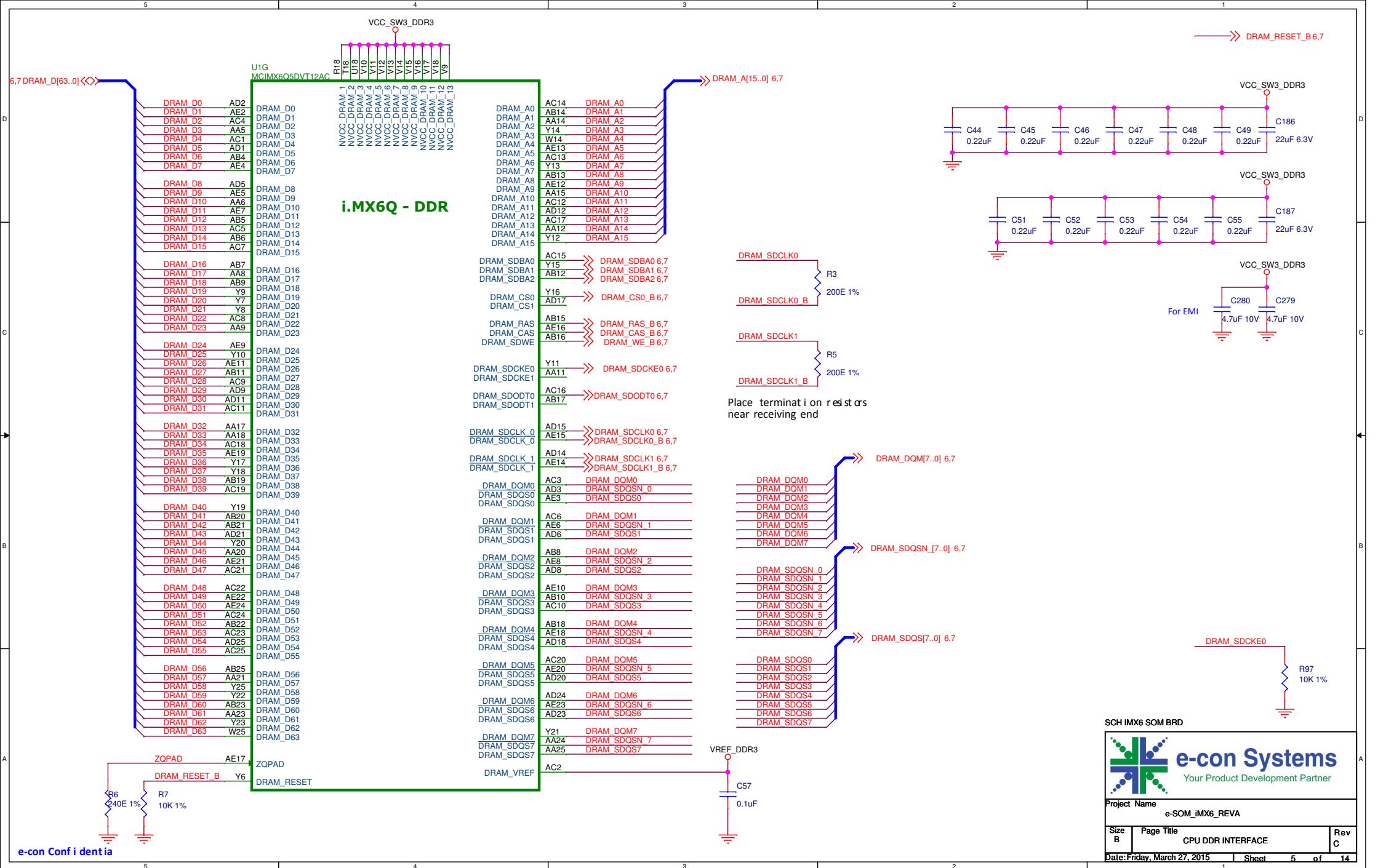


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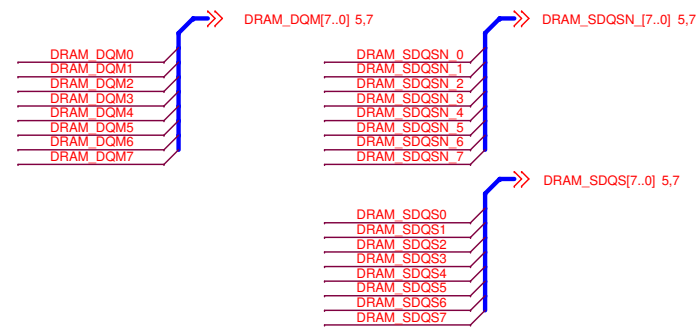
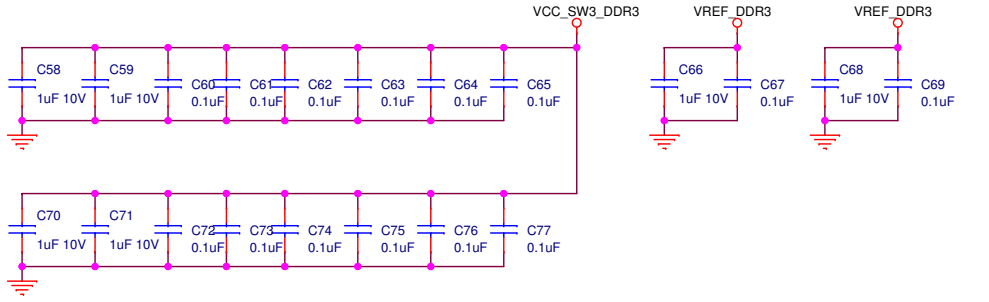
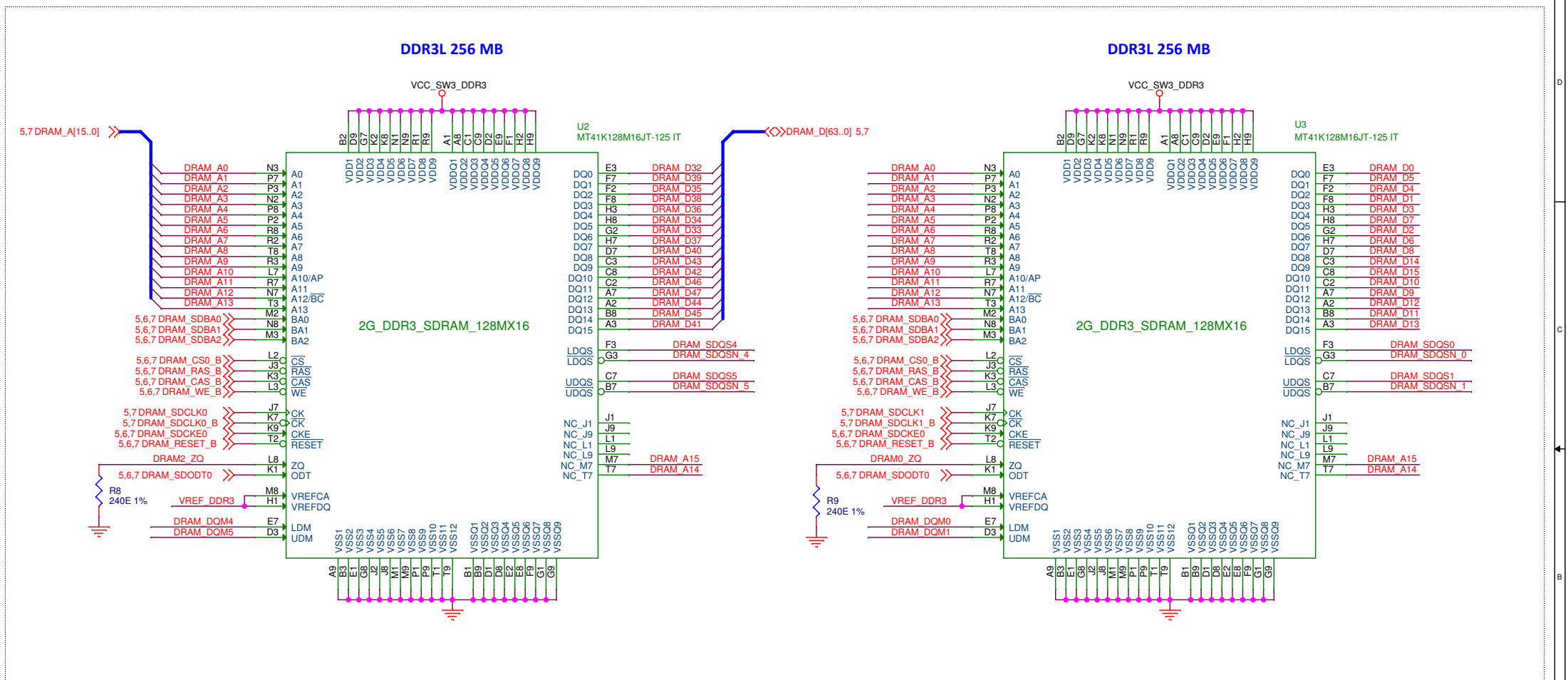
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Size B	Page Title CPU DDR INTERFACE	Rev C
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SD & NAND FLASH INTERFACE

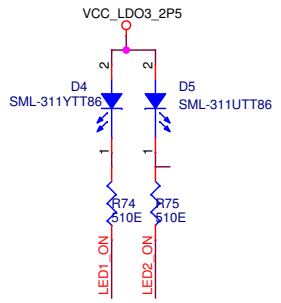
SD1_CMD R171 22E B21
SD1_CLK R170 22E D20
SD1_DAT0 R172 22E A21
SD1_DAT1 R173 22E C20
SD1_DAT2 R174 22E E19
SD1_DAT3 R175 22E F18

12SD2_CMD F19
12SD2_CLK_IN C21
12SD2_DAT0 A22
12SD2_DAT1 E20
12SD2_DAT2 A23
12SD2_DAT3 B22

11SD3_CMD R125 22E B13
11SD3_CLK_IN R76 22E D14
11SD3_DAT0 R120 22E E14
11SD3_DAT1 R121 22E F14
11SD3_DAT2 R122 22E A15
11SD3_DAT3 R123 22E B15
11WIFI_MOD_EN D13
10WIFI_PWR_EN C13
12UART1_RX E13
12UART1_TX F13
11UART3_CTS D15

B11 MLB_CP
A11 MLB_CN
B9 MLB_SP
A9 MLB_SN
A10 MLB_DP
B10 MLB_DN

INDICATION LEDs



ENET_MDC V20 R136 22E
ENET_MDIO U21
ENET_CRS_DV V22
ENET_REF_CLK W23
ENET_RX_ER V21
ENET_TX_EN W21
ENET_RXD0 W22
ENET_RXD1 U20
ENET_TXD0 LED1 ON
ENET_TXD1 LED2 ON

CPU_RGMII_nRST 11
PMIC_INT_B 13
VCC_LDO3_2P5
R63 NS

KEY_COL0 W5
KEY_ROW0 U7
KEY_COL1 U6
KEY_ROW1 W6
KEY_COL2 W4
KEY_ROW2 U5
KEY_COL3 T7
KEY_ROW3 T6
KEY_COL4 V5
KEY_ROW4 U5

CGM_CLKO1_AUD 12
PWM2_CLKOUT 12
CGM_CLKO2_CAM 12
I2C3_SCL 12
I2C3_SDA 12
I2C3_INT 11
CLK_32KHZ_WIFI-IN 11
WDG_RESET_IND 12
SPDIF_IN 12
SPDIF_OUT 12
GPIO7_13_1P8 10
BT_MOD_EN 11

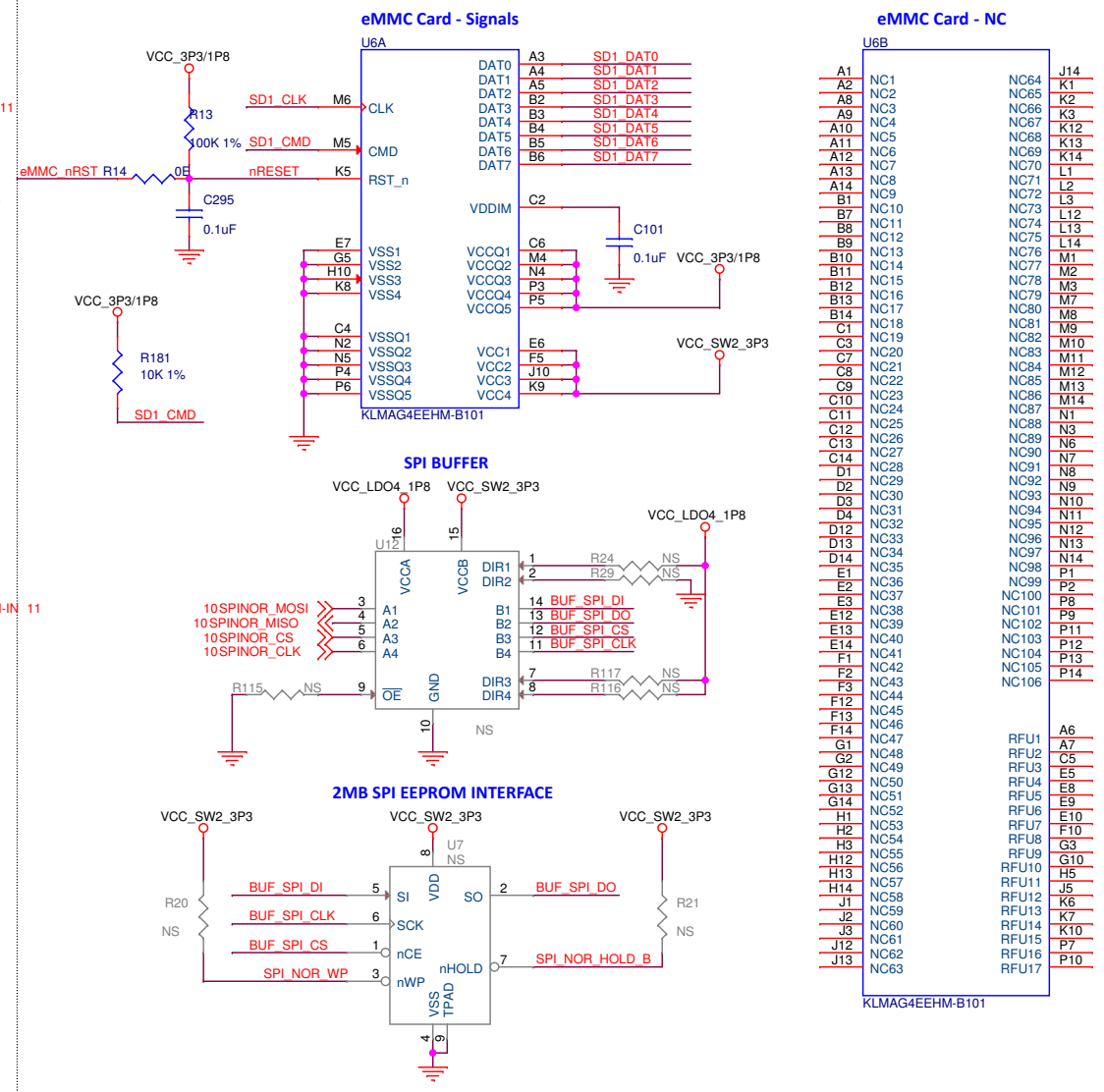
NANDF_CS0 F15
NANDF_CS1 C16
NANDF_CS2 A17
NANDF_CS3 D16
eMMC_nRST

NANDF_ALE A16
NANDF_CLE C15
NANDF_WP E15
NANDF_RB0 B16
NANDF_D0 A18
NANDF_D1 C17
NANDF_D2 F16
NANDF_D3 D17
NANDF_D4 A19
NANDF_D5 E17
NANDF_D6 B18
NANDF_D7 C18

SD4_CLK E16
SD4_CMD B17
SD4_DAT0 D18
SD4_DAT1 B19
SD4_DAT2 F17
SD4_DAT3 A20
SD4_DAT4 E18
SD4_DAT5 C19
SD4_DAT6 B20
SD4_DAT7 D19

GPIO7_10_1P8 12
GPIO7_09_1P8 12
GPIO2_08_1P8 12
PWM3_CLKOUT 12
PWM4_CLKOUT 12
GPIO2_11_1P8 12
UART2_RX12
UART2_RTS_B 12
UART2_CTS_B 12
UART2_TX12

MCIMX6Q5DVT12AC

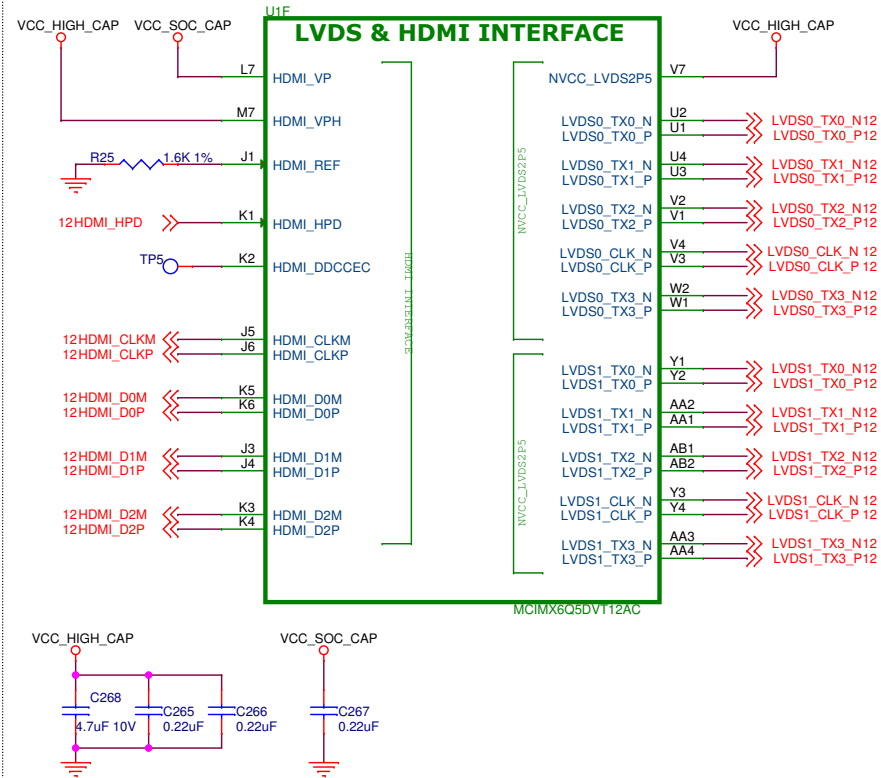


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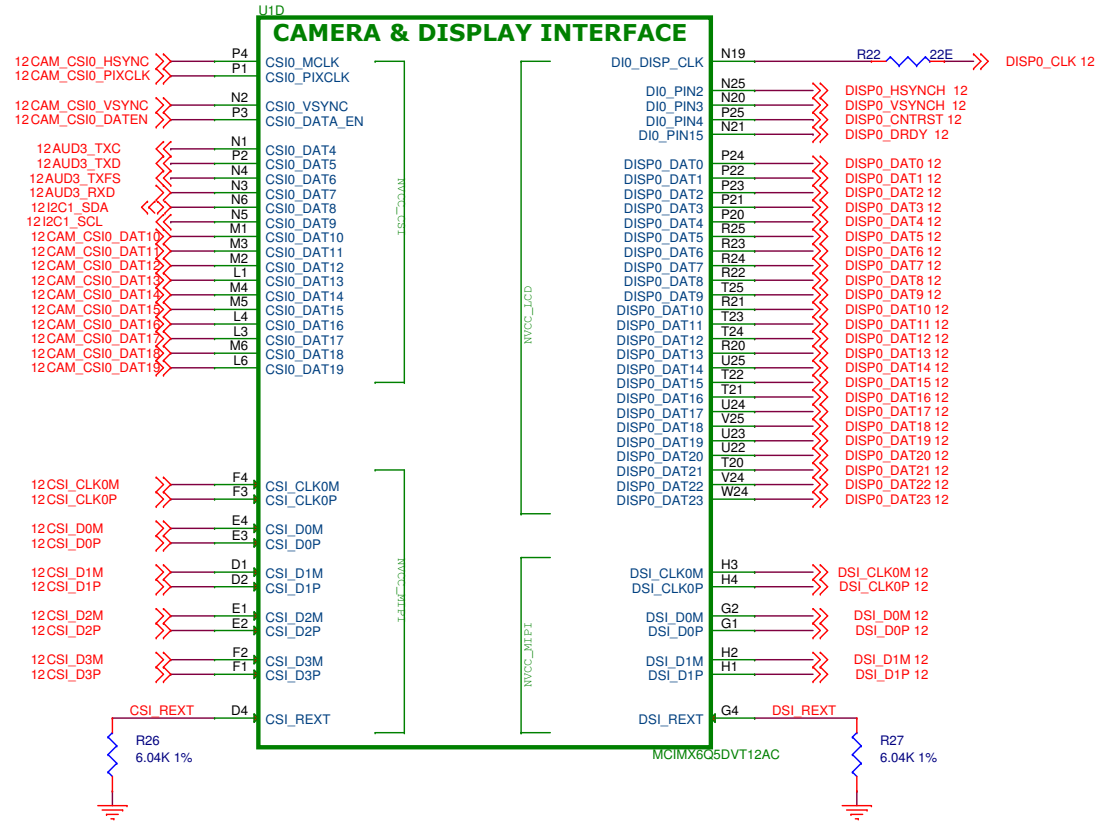


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DISPLAY SERIAL INTERFACE



CAMERA & DISPLAY PARALLEL INTERFACE

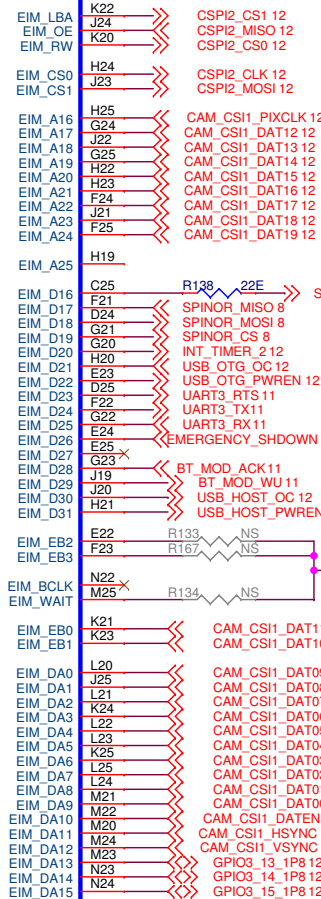


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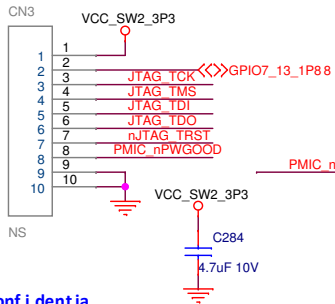
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MULTIMEDIA INTERFACE		
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i.MX6Q - EIM

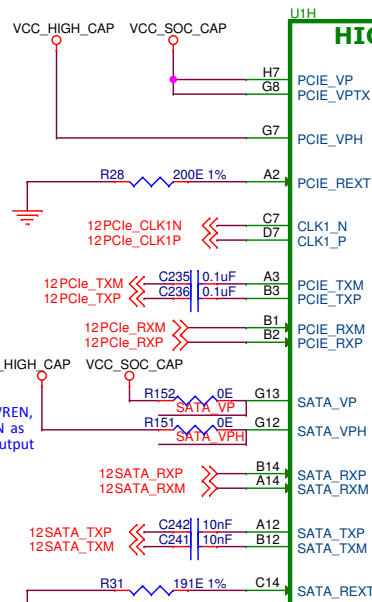


MCIMX6Q5DVT12AC

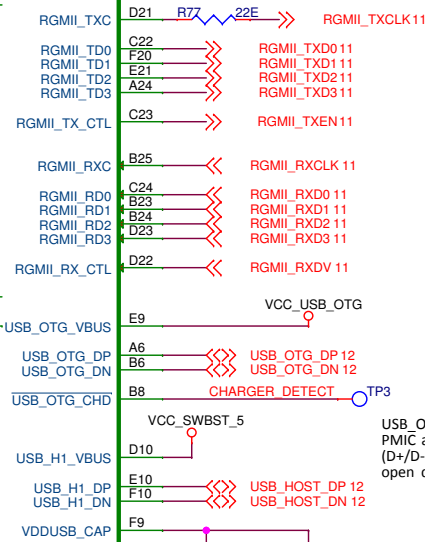
JTAG DEBUG CONNECTOR



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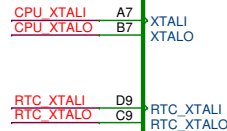
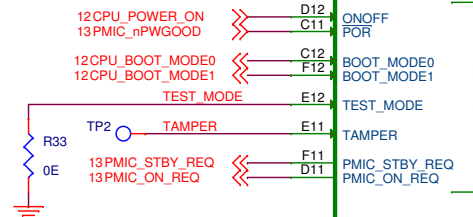
HIGH SPEED INTERFACE



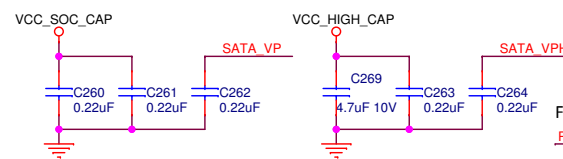
MCIMX6Q5DVT12AC

U1C

i.MX6Q - CONTROL



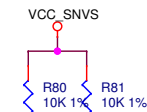
MCIMX6Q5DVT12AC



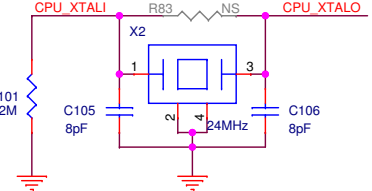
For i.MX6 warm reset

PMIC_nPWGOOD R103 <>> CPU_RESET 12,13

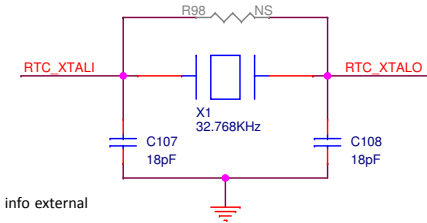
Pull up to 4.7k for high noise environments



24 MHz CRYSTAL FOR CPU

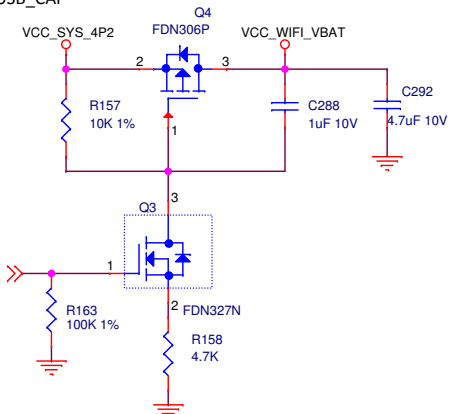


32 KHz CRYSTAL FOR RTC



USB_OTG_CHD_B: To info external PMIC a charger (D+/D- Short) is connected, it is open drain output

10uF capacitor is recommended for VDDUSB_CAP

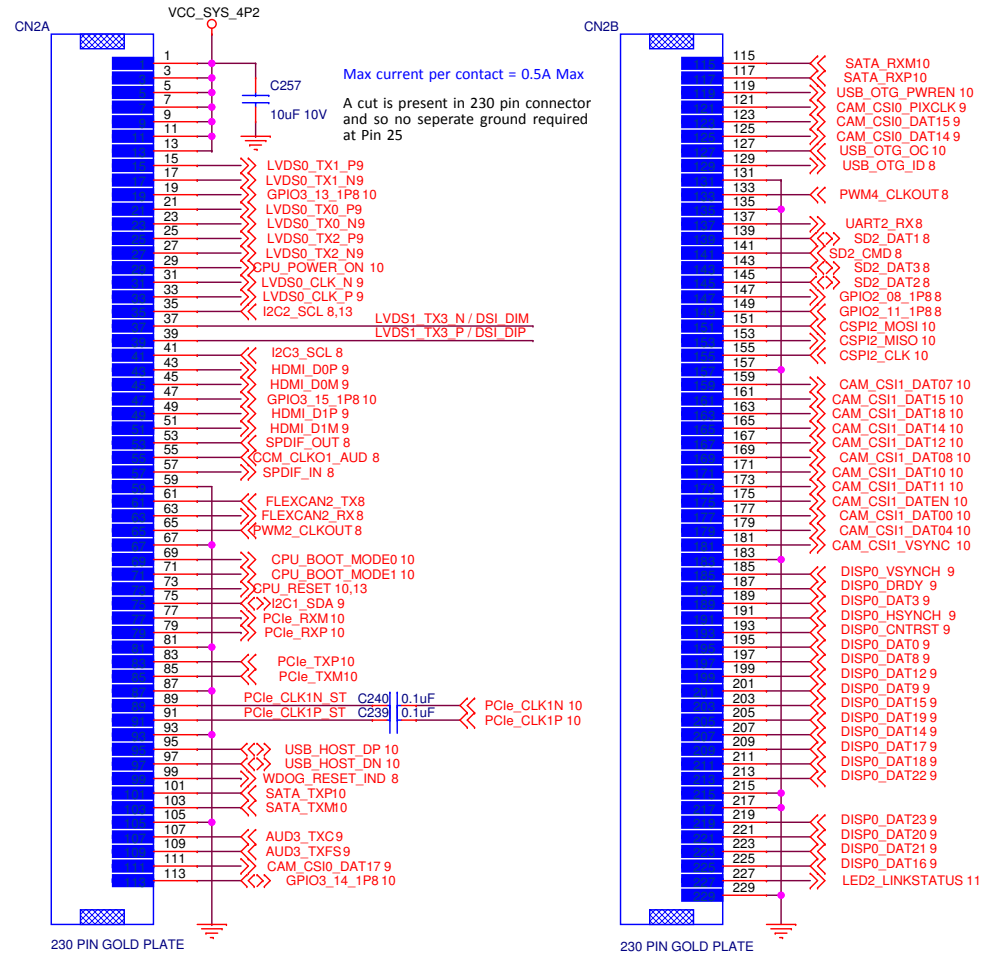


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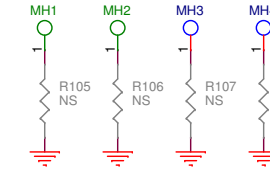
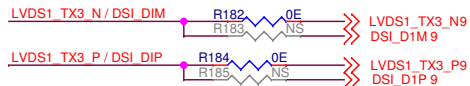
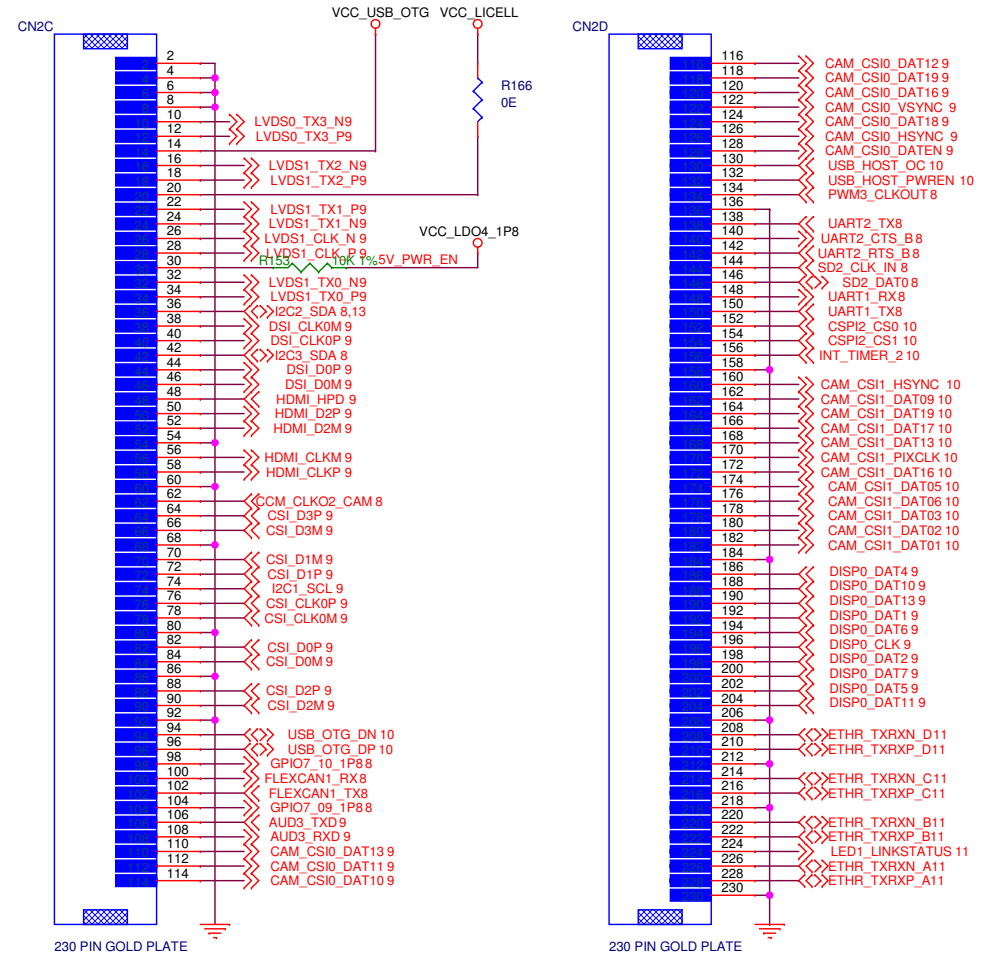
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	CPU CONTROL	
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SOM MODULE BOTTOM SIDE



SOM MODULE TOP SIDE

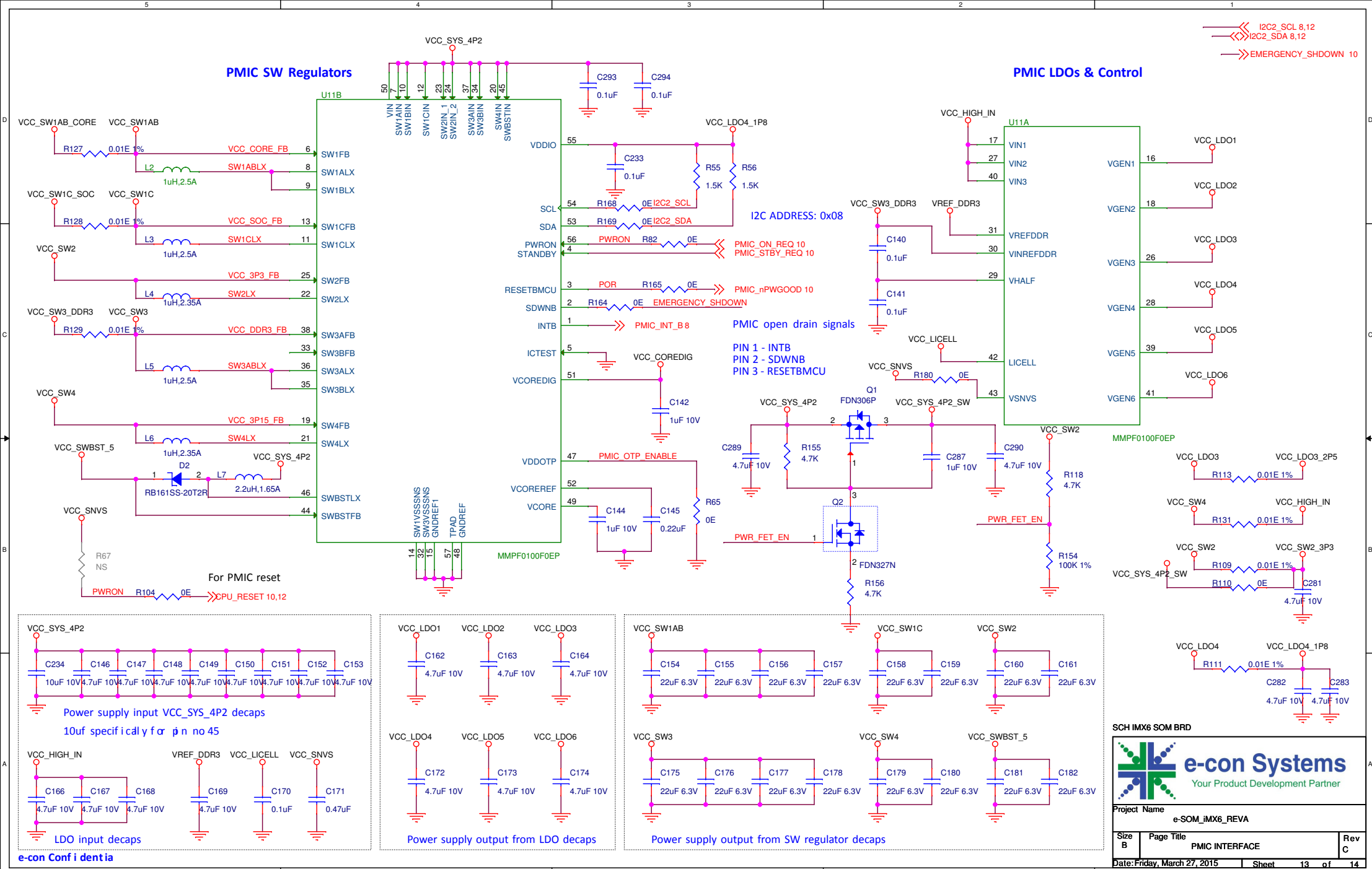
Max current per contact = 0.5A Max



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REVISION HISTORY

Rev No	Date	Descript i on	Remarks
A	28 OCT 2013	Init i d R d e a s e	
B	24 SEP 2014	1. Pg.No.4 Removed R135, FB15 and FB16 in pg no.4 2. Pg.No.8 Replaced NAND f l a s h i r t e f a c e w i t h e M M C Connected UART3_CTS to ball D15 Removed FB17 and FB18 Changed R74 and R75 values to 510 ohm 3. Pg.No.10 Connected UART3_RTS to ball D25 Added resistor R167 to ball F23 Set R68 and R103 to NS 4. Pg.No.11 Changed R49 value to 12.1k ohm Set R99 and R100 to mount 5. Pg.No.12 Added resistor R166 to SOM connector pin no.20 6. Pg.No.13 Added resistor R164, R168 and R169 resistors Removed resistors R110, R112, R114 and R130 Mounted R104 and no mount R67 Removed 3.3V Power Switch sect i on	
C	26 MARCH 2015	1 Pg.No.09 R182 R183 R184 R185 are added to give swapping opt i on f o r L V D S 1 _ D A T 3 and D 8 _ D A T 1 l a n e s	

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