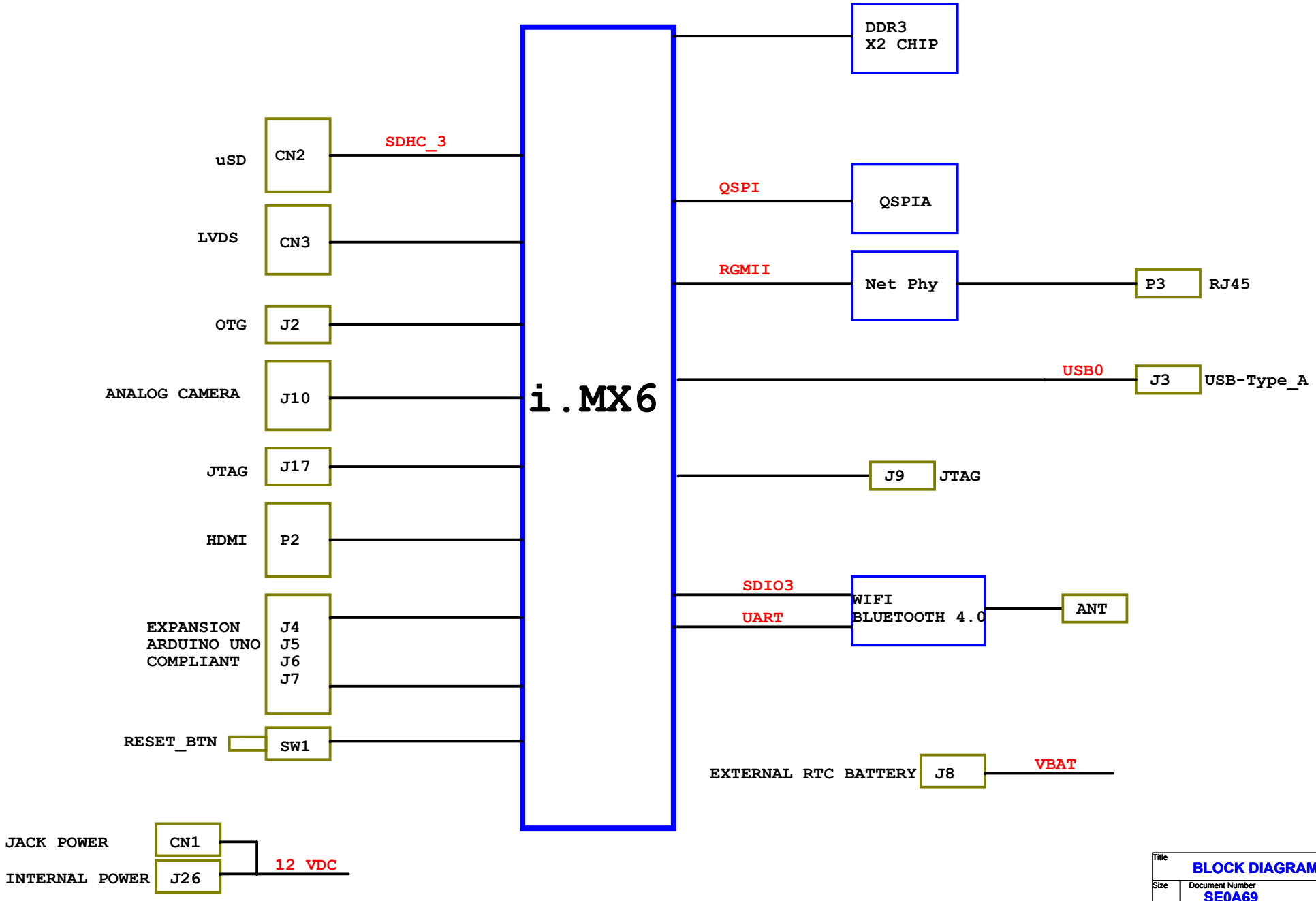
UDOO NEO

REV.D

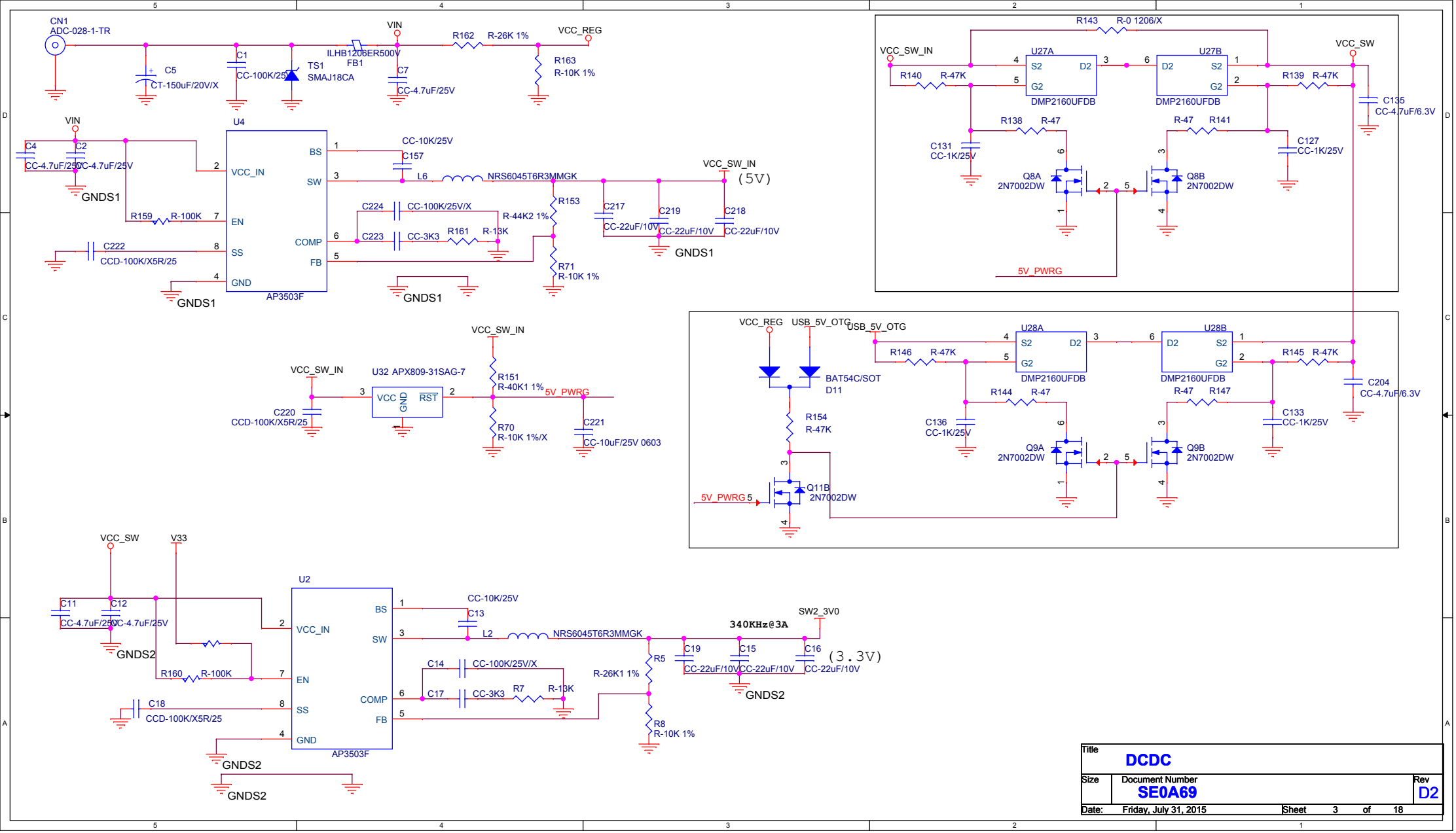
Legenda

/X	<VALUE/X> = DO NOT MOUNT
/PP	<VALUE/PP> = TO □E PROGRAMMED
/CFG	<VALUE/CFG> = TO □E CONFIGURED

Title: COVER		
Size	Document Number: SE0A69	Rev: D2
Date: Friday, July 31, 2015	Sheet 1 of 18	



Title	BLOCK DIAGRAM	
Size	Document Number SE0A69	Rev D2
Date: Friday, July 31, 2015	Sheet 2 of 18	


CN1
ADC-028-1-TR
C5
CT-150uF/20V/X
C1
CC-100K/25V
TS1
SMAJ18CA
VIN
ILHB1206ER500V
FB1
C7
CC-4.7uF/25V
R162
R-26K 1%
VCC_REG
R163
R-10K 1%
U4
AP3503F
BS
SW
VCC_IN
EN
COMP
FB
SS
GND
C4
C2
CC-4.7uF/25V
GNDS1
R159
R-100K
C222
CCD-100K/X5R/25
C157
CC-10K/25V
L6
NRS6045T6R3MMGK
VCC_SW_IN
(5V)
C224
CC-100K/25V/X
C223
CC-3K3
R161
R-13K
R-44K2 1%
R153
R71
R-10K 1%
C217
C219
C218
CC-22uF/10V
R143
R-0 1206/X
U27A
U27B
DMP2160UFDB
VCC_SW
R140
R-47K
R139
C135
CC-4.7uF/6.3V
R138
R-47
C131
CC-1K/25V
R141
C127
Q8A
2N7002DW
Q8B
5V_PWRG
U32 APX809-31SAG-7
VCC
GND
RST
R151
R-40K1 1%
R70
R-10K 1%/X
C220
C221
CC-10uF/25V 0603
U28A
U28B
R146
R145
C204
CC-4.7uF/6.3V
R144
R147
C136
C133
Q9A
Q9B
VCC_REG
USB_5V_OTG
BAT54C/SOT
D11
R154
R-47K
Q11B
U2
V33
C11
C12
R160
C18
C13
L2
C14
C17
R7
R5
R-26K1 1%
R8
C19
C15
C16
SW2_3V0
340KHz@3A
(3.3V)
GNDS2
Title
DCDC
Size
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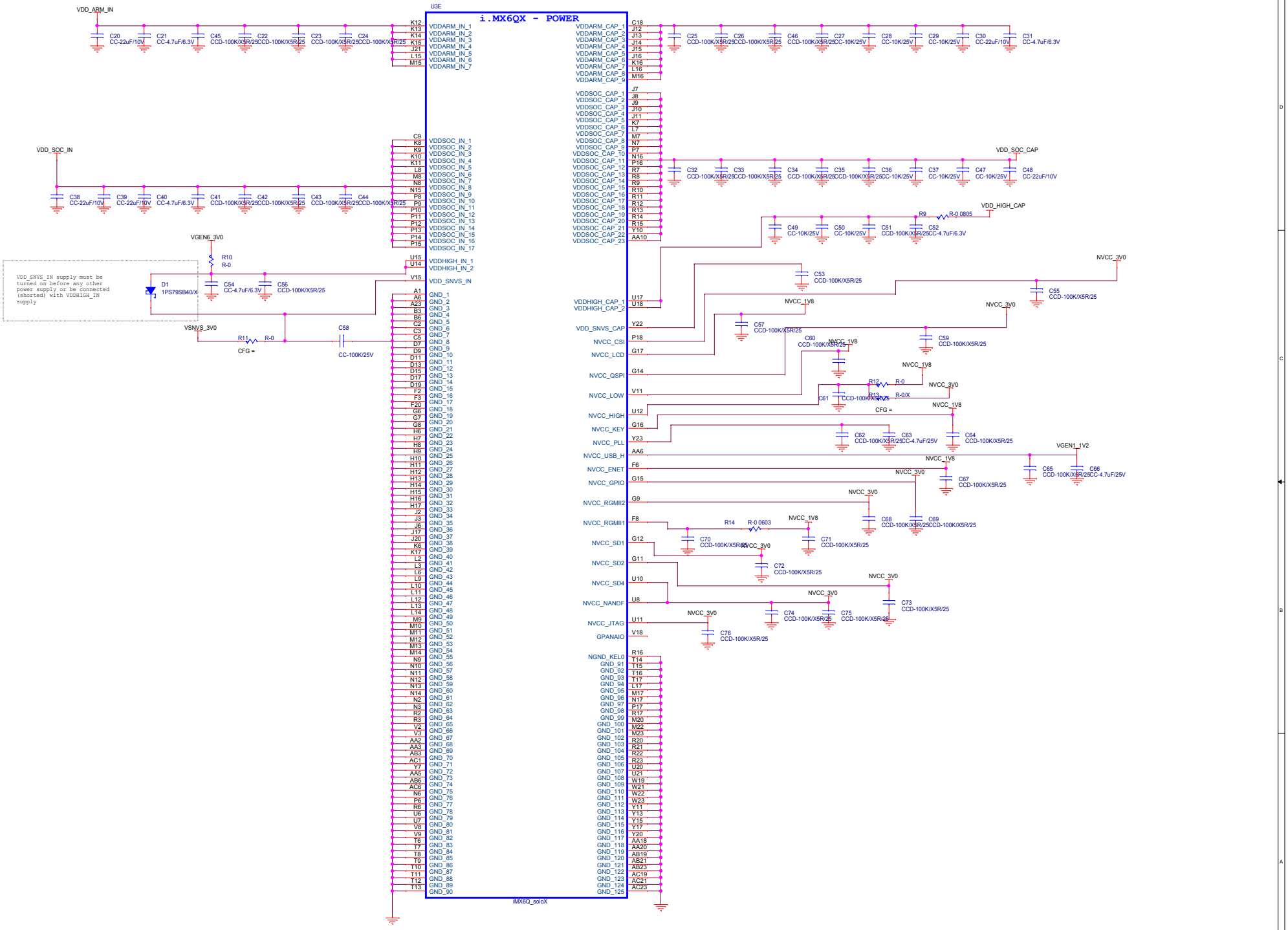

Title	i.MX6Q - POWER	
Size	Document Number SE0A69	Rev D2
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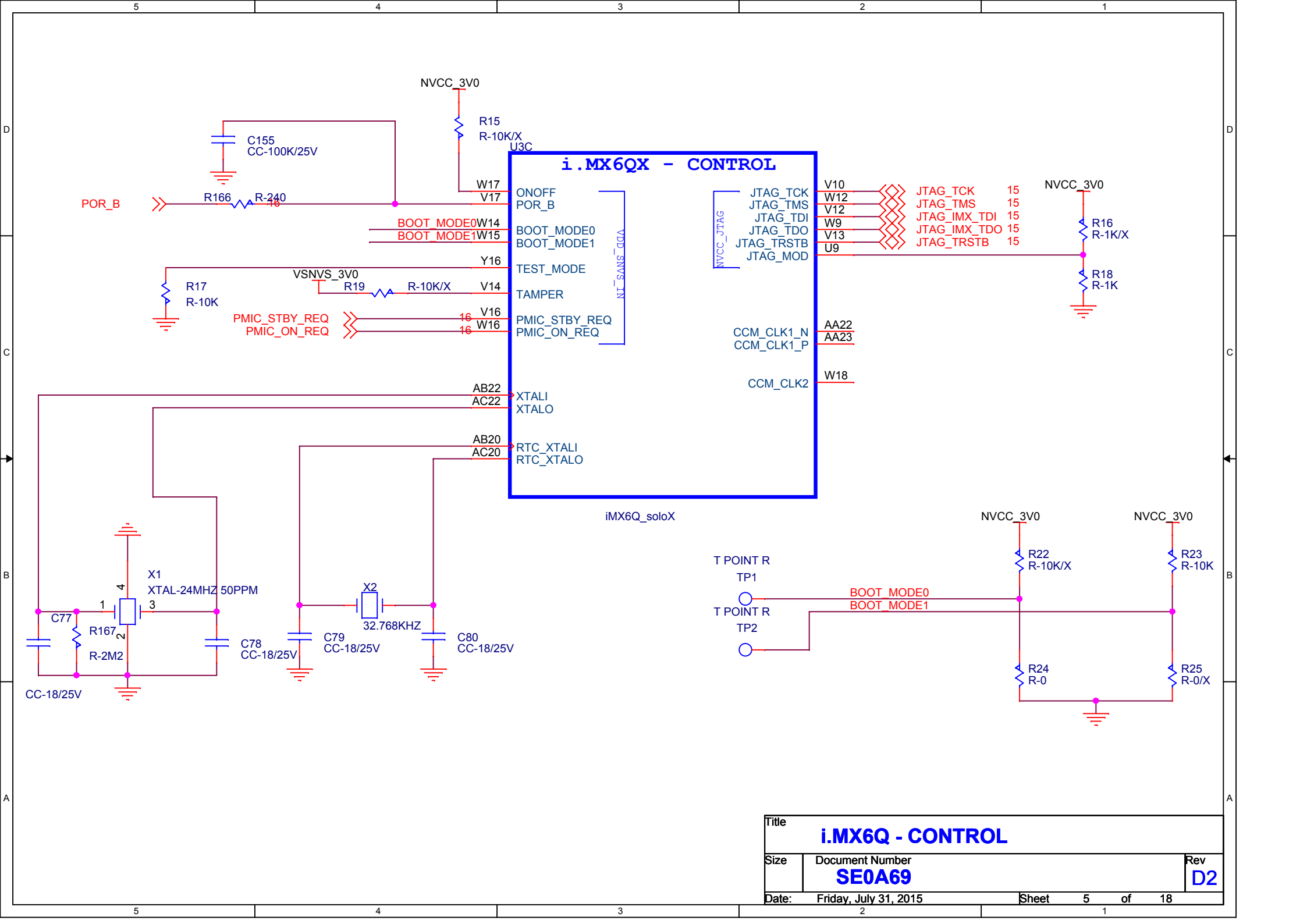
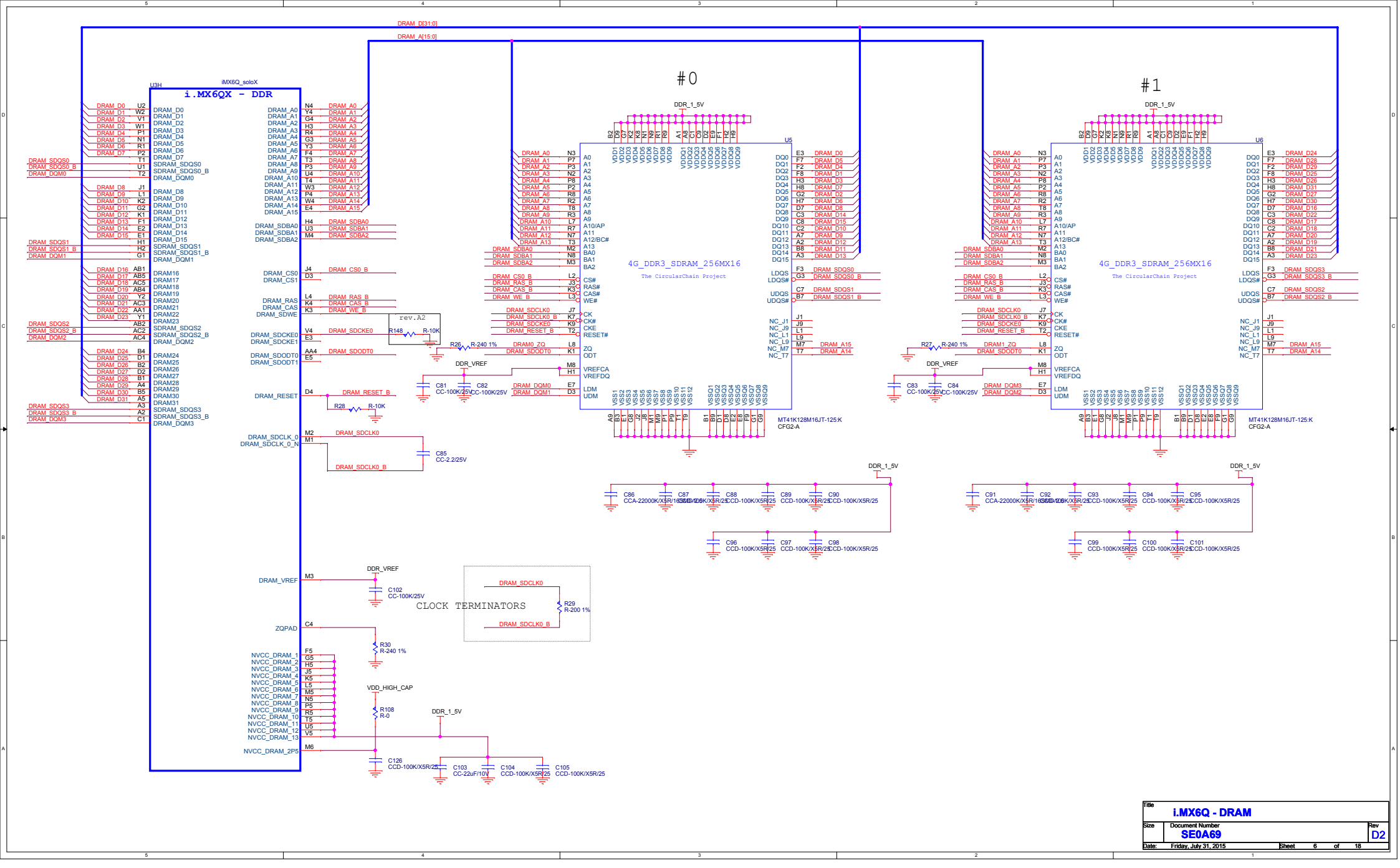


Title	i.MX6Q - CONTROL	
Size	Document Number SE0A69	Rev D2
Date: Friday, July 31, 2015	Sheet 5 of 18	



Title	i.MX6Q - DRAM
Size	
Document Number	SE0A69
Rev	D2
Date:	Friday, July 31, 2015
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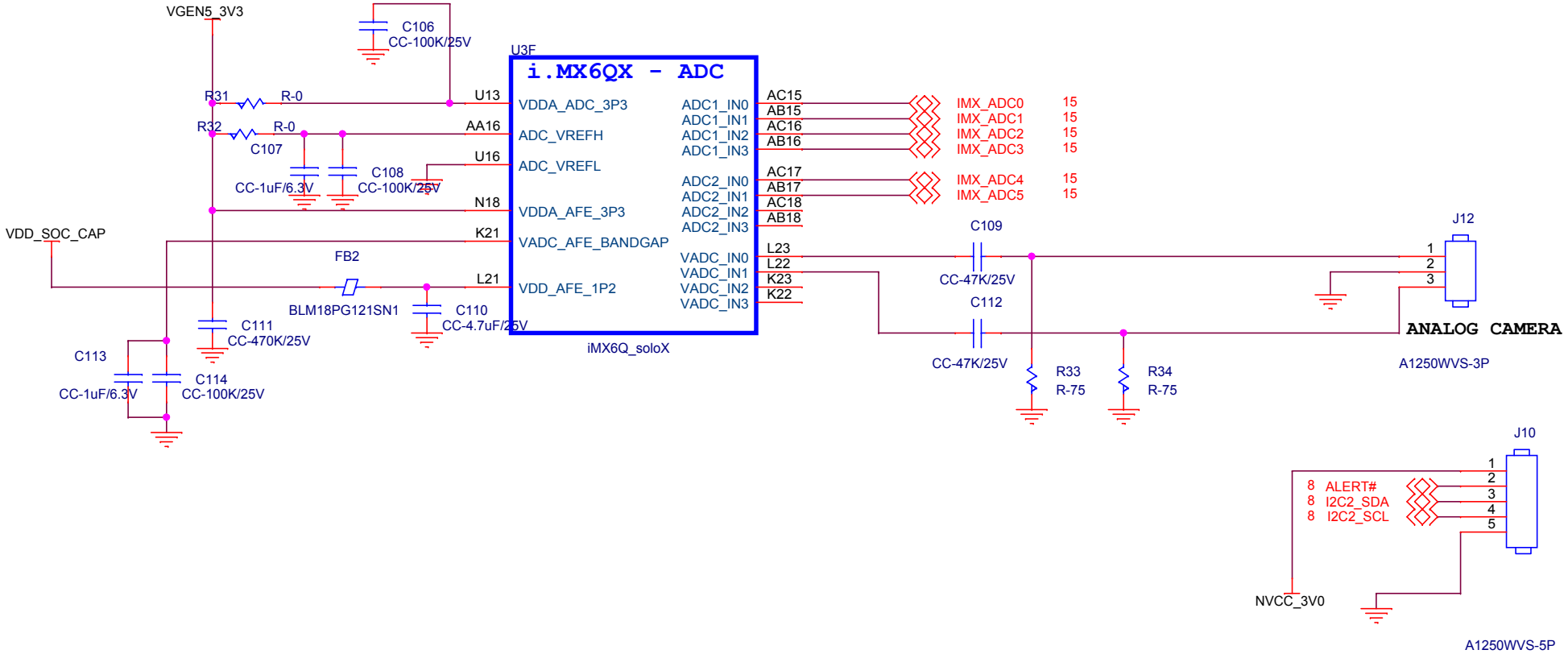
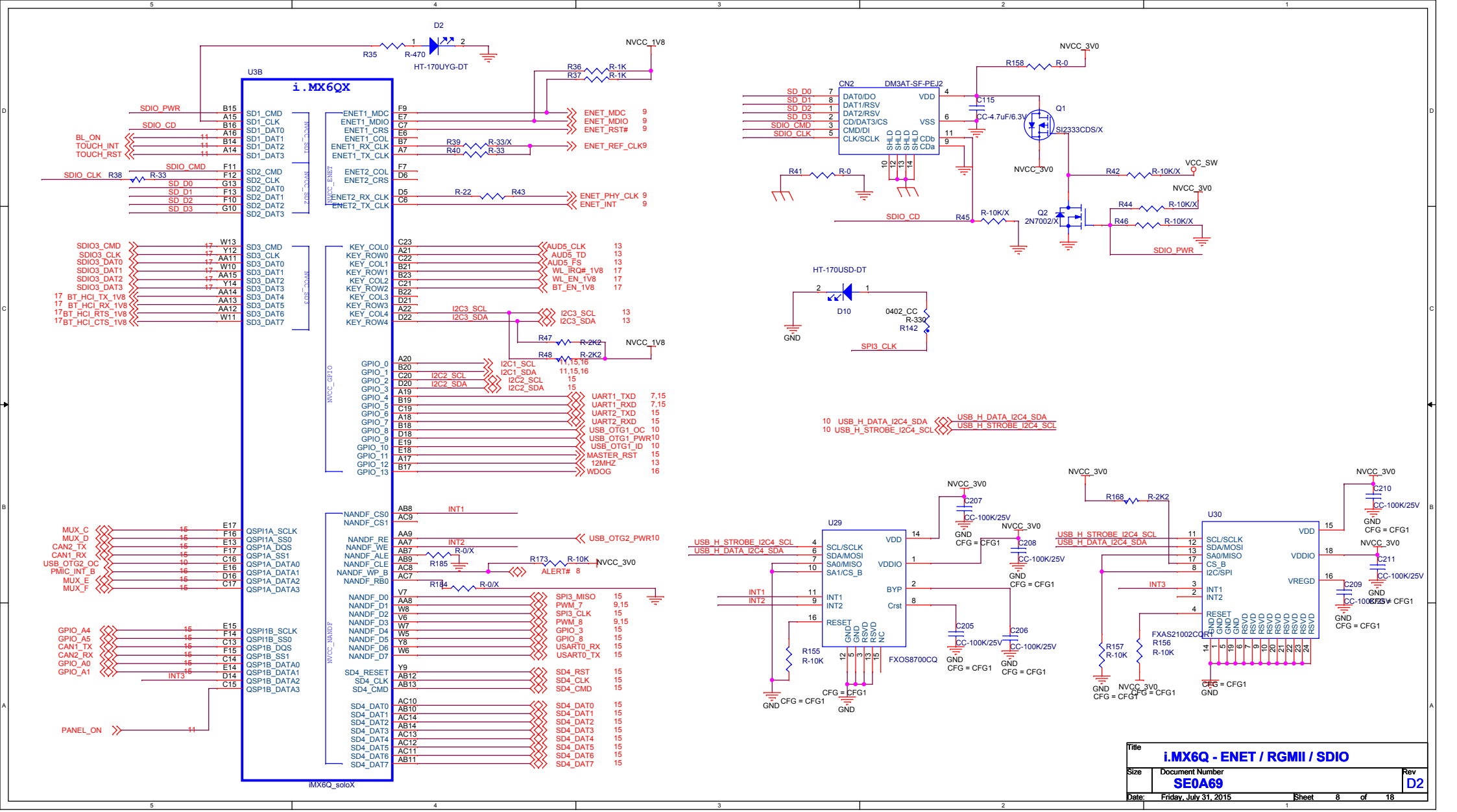


Title	i.MX6Q - ADC	
Size	Document Number SE0A69	Rev D2
Date: Friday, July 31, 2015	Sheet 7 of 18	


U3B
i.MX6QX
iMX6Q_soloX
D2
HT-170UYG-DT
R35
R-470
R36
R-1K
R37
R-1K
NVCC_1V8
SDIO_PWR
SDIO_CD
BL_ON
TOUCH_INT
TOUCH_RST
SDIO_CLK
R38
R-33
SDIO_CMD
SD_D0
SD_D1
SD_D2
SD_D3
SD1_CMD
SD1_CLK
SD1_DAT0
SD1_DAT1
SD1_DAT2
SD1_DAT3
SD2_CMD
SD2_CLK
SD2_DAT0
SD2_DAT1
SD2_DAT2
SD2_DAT3
NVCC_SD1
NVCC_SD2
ENET1_MDC
ENET1_MDIO
ENET1_CRS
ENET1_COL
ENET1_RX_CLK
ENET1_TX_CLK
ENET2_COL
ENET2_CRS
ENET2_RX_CLK
ENET2_TX_CLK
NVCC_ENET
R39
R-33/X
R40
R-33
R-22
R43
ENET_MDC
ENET_MDIO
ENET_RST#
ENET_REF_CLK
ENET_PHY_CLK
ENET_INT
SDIO3_CMD
SDIO3_CLK
SDIO3_DAT0
SDIO3_DAT1
SDIO3_DAT2
SDIO3_DAT3
BT_HCI_TX_1V8
BT_HCI_RX_1V8
BT_HCI_RTS_1V8
BT_HCI_CTS_1V8
SD3_CMD
SD3_CLK
SD3_DAT0
SD3_DAT1
SD3_DAT2
SD3_DAT3
SD3_DAT4
SD3_DAT5
SD3_DAT6
SD3_DAT7
NVCC_SD3
KEY_COL0
KEY_ROW0
KEY_COL1
KEY_ROW1
KEY_COL2
KEY_ROW2
KEY_COL3
KEY_ROW3
KEY_COL4
KEY_ROW4
AUD5_CLK
AUD5_TD
AUD5_FS
WL_IRQ#_1V8
WL_EN_1V8
BT_EN_1V8
I2C3_SCL
I2C3_SDA
R47
R-2K2
R48
R-2K2
GPIO_0
GPIO_1
GPIO_2
GPIO_3
GPIO_4
GPIO_5
GPIO_6
GPIO_7
GPIO_8
GPIO_9
GPIO_10
GPIO_11
GPIO_12
GPIO_13
I2C1_SCL
I2C1_SDA
I2C2_SCL
I2C2_SDA
UART1_TXD
UART1_RXD
UART2_TXD
UART2_RXD
USB_OTG1_OC
USB_OTG1_PWR
USB_OTG1_ID
MASTER_RST
12MHZ
WDOG
NVCC_GPIO
MUX_C
MUX_D
CAN2_TX
CAN1_RX
USB_OTG2_OC
PMIC_INT_B
MUX_E
MUX_F
QSPI1A_SCLK
QSPI1A_SS0
QSPI1A_DQS
QSPI1A_SS1
QSPI1A_DATA0
QSPI1A_DATA1
QSPI1A_DATA2
QSPI1A_DATA3
GPIO_A4
GPIO_A5
CAN1_TX
CAN2_RX
GPIO_A0
GPIO_A1
INT3
PANEL_ON
QSPI1B_SCLK
QSPI1B_SS0
QSPI1B_DQS
QSPI1B_SS1
QSPI1B_DATA0
QSPI1B_DATA1
QSPI1B_DATA2
QSPI1B_DATA3
NANDF_CS0
NANDF_CS1
NANDF_RE
NANDF_WE
NANDF_ALE
NANDF_CLE
NANDF_WP_B
NANDF_RB0
NANDF_D0
NANDF_D1
NANDF_D2
NANDF_D3
NANDF_D4
NANDF_D5
NANDF_D6
NANDF_D7
INT1
INT2
R185
R-0/X
R173
R-10K
ALERT#
R184
R-0/X
USB_OTG2_PWR
SPI3_MISO
PWM_7
SPI3_CLK
PWM_8
GPIO_3
GPIO_8
USART0_RX
USART0_TX
SD4_RESET
SD4_CLK
SD4_CMD
SD4_DAT0
SD4_DAT1
SD4_DAT2
SD4_DAT3
SD4_DAT4
SD4_DAT5
SD4_DAT6
SD4_DAT7
NVCC_NANDF
CN2
DM3AT-SF-PEJ2
DAT0/DO
DAT1/RSV
DAT2/RSV
CD/DAT3/CS
CMD/DI
CLK/SCLK
VDD
VSS
CDb
CDa
SHLD
C115
CC-4.7uF/6.3V
Q1
SI2333CDS/X
R158
R-0
R41
R-0
R42
R-10K/X
R44
R-10K/X
R46
R-10K/X
R45
R-10K/X
Q2
2N7002/X
VCC_SW
NVCC_3V0
HT-170USD-DT
D10
0402_CC
R-330
R142
SPI3_CLK
USB_H_DATA_I2C4_SDA
USB_H_STROBE_I2C4_SCL
U29
SCL/SCLK
SDA/MOSI
SA0/MISO
SA1/CS_B
VDDIO
BYP
Crst
RESET
FXOS8700CQ
C207
C208
C205
C206
CC-100K/25V
R155
R-10K
U30
CS_B
I2C/SPI
VREGD
FXAS21002CQR1
R156
R157
R-10K
R168
R-2K2
C210
C211
C209
GND
CFG = CFG1
Title
i.MX6Q - ENET / RGMII / SDIO
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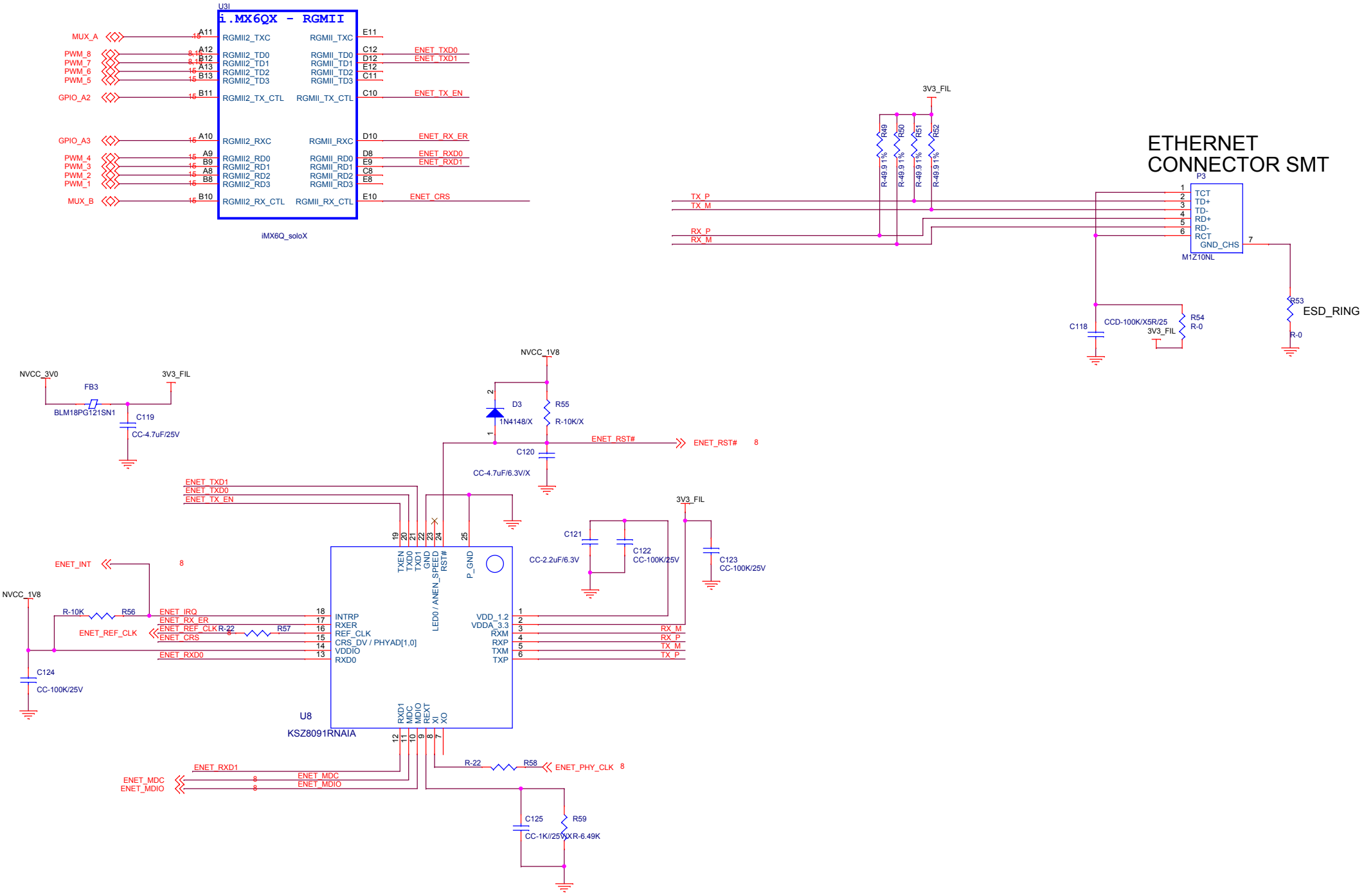

Title	i.MX6Q - ETHERNET 10/100	
Size	Document Number SE0A69	Rev D2
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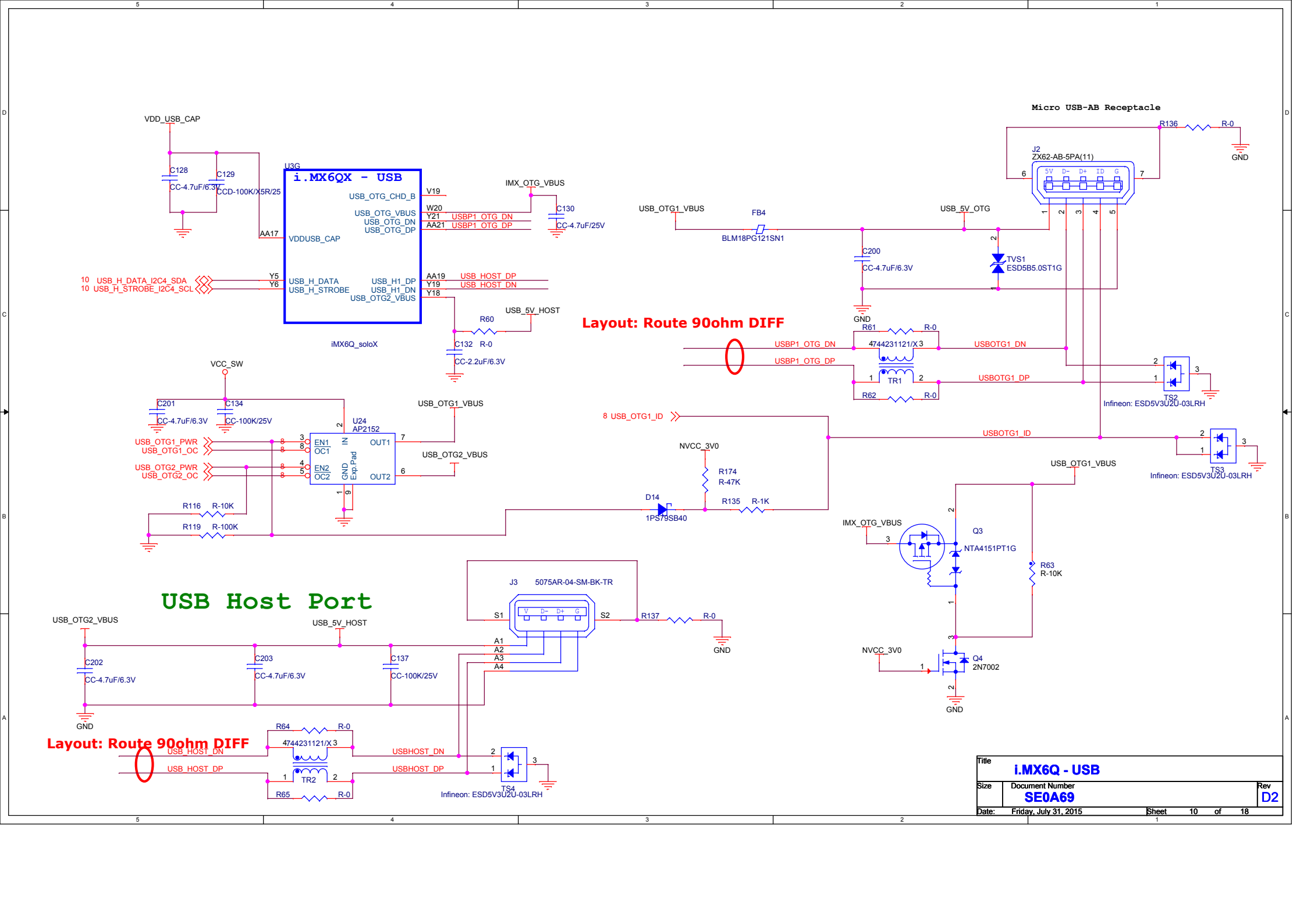
Micro USB-AB Receptacle
USB Host Port
Layout: Route 90ohm DIFF
Layout: Route 90ohm DIFF
i.MX6QX - USB
iMX6Q_soloX
J2
ZX62-AB-5PA(11)
TVS1
ESD5B5.0ST1G
FB4
BLM18PG121SN1
TR1
TR2
TS2
TS3
TS4
Infineon: ESD5V3U2U-03LRH
Infineon: ESD5V3U2U-03LRH
Infineon: ESD5V3U2U-03LRH
U24
AP2152
J3
5075AR-04-SM-BK-TR
Q3
NTA4151PT1G
Q4
2N7002
D14
1PS79SB40
VDD_USB_CAP
USB_OTG1_VBUS
USB_OTG2_VBUS
USB_5V_HOST
IMX_OTG_VBUS
USB_5V_OTG
NVCC_3V0
VCC_SW
GND
USBP1_OTG_DN
USBP1_OTG_DP
USBOTG1_DN
USBOTG1_DP
USBOTG1_ID
USB_HOST_DN
USB_HOST_DP
USBHOST_DN
USBHOST_DP
USB_H_DATA_I2C4_SDA
USB_H_STROBE_I2C4_SCL
USB_OTG1_ID
USB_OTG1_PWR
USB_OTG1_OC
USB_OTG2_PWR
USB_OTG2_OC
C128
C129
C130
C132
C134
C137
C200
C201
C202
C203
R60
R61
R62
R63
R64
R65
R116
R119
R135
R136
R137
R174
R-0
R-10K
R-100K
R-1K
R-47K
4744231121/X 3
CC-4.7uF/6.3V
CCD-100K/X5R/25
CC-100K/25V
CC-2.2uF/6.3V
Title
i.MX6Q - USB
Size
Document Number
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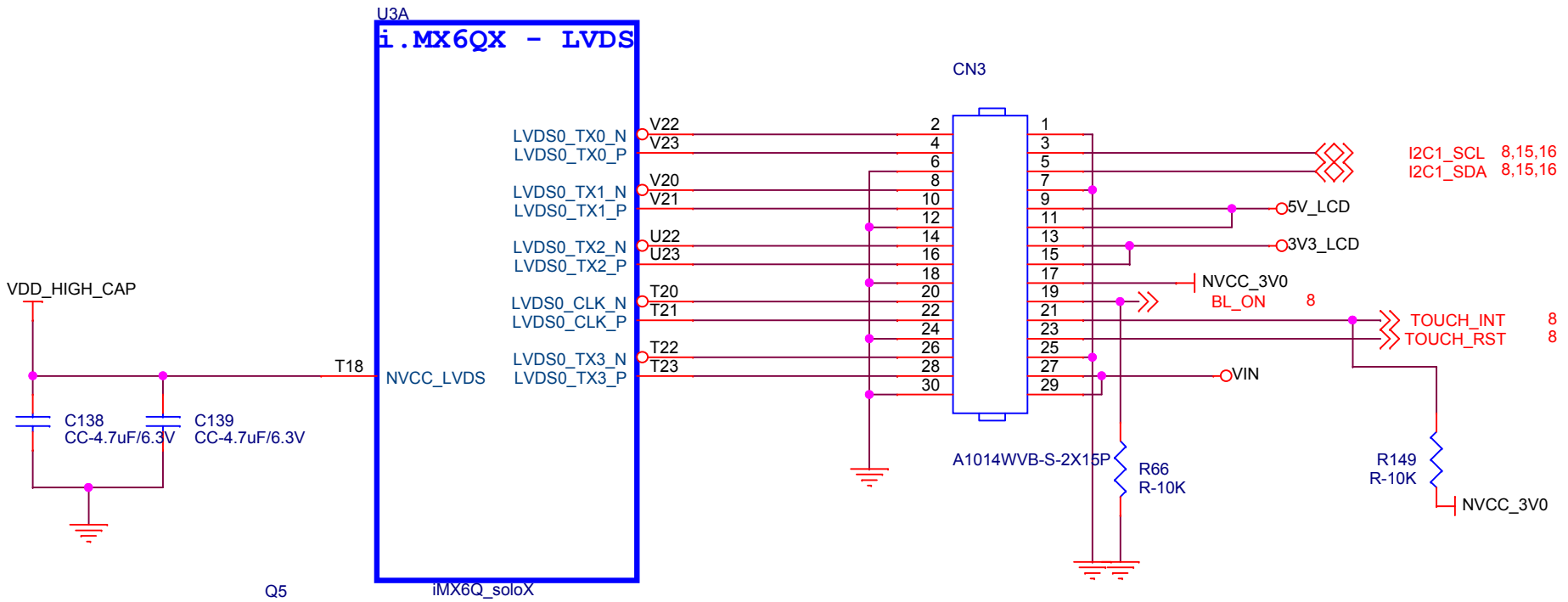

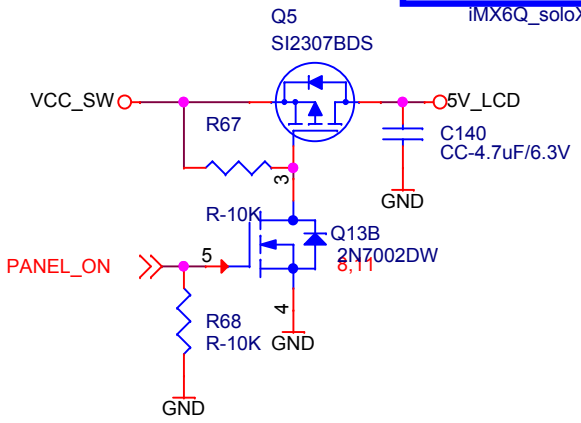

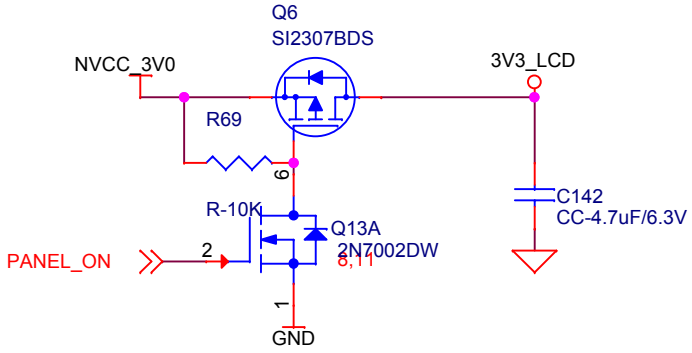

Title	i.MX6Q - LVDS	
Size	Document Number SE0A69	Rev D2
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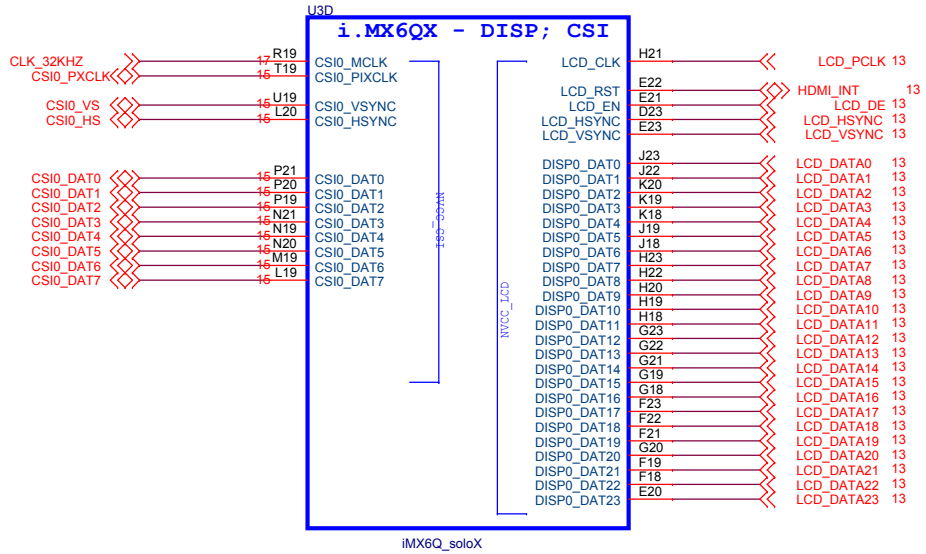
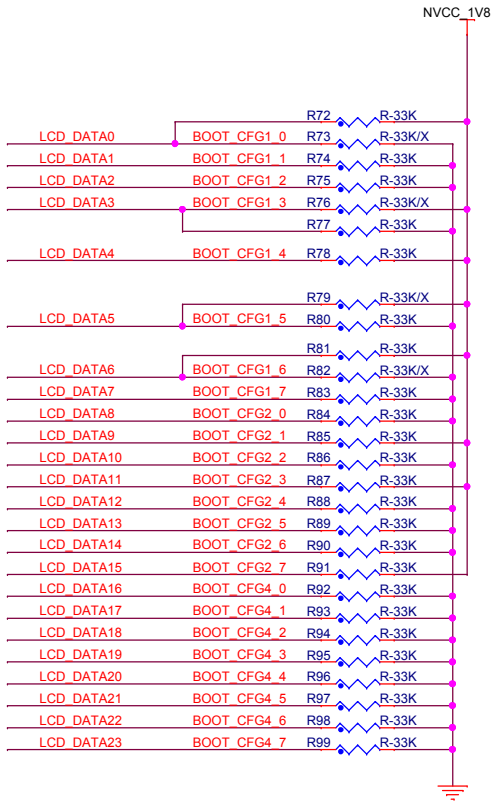
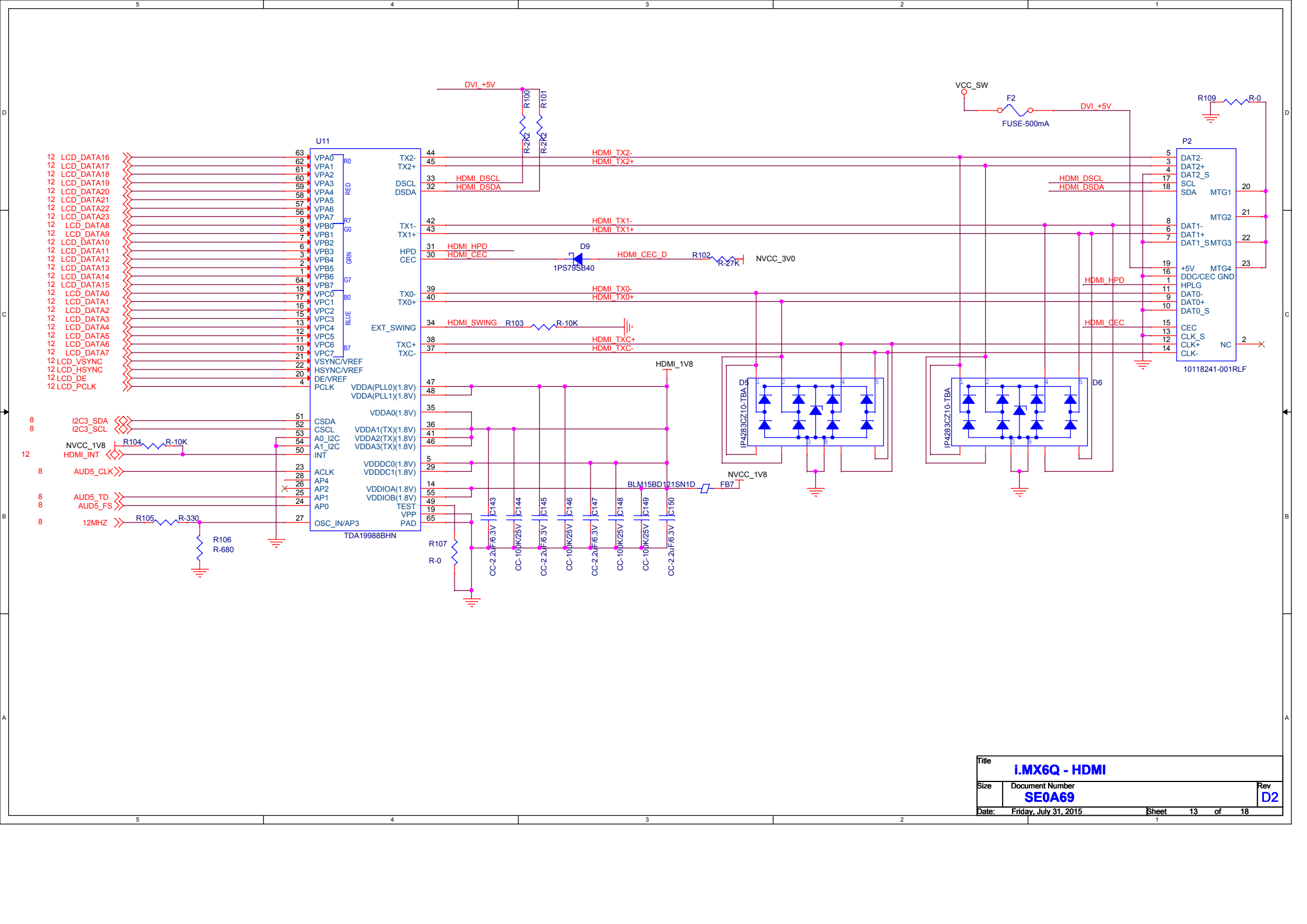
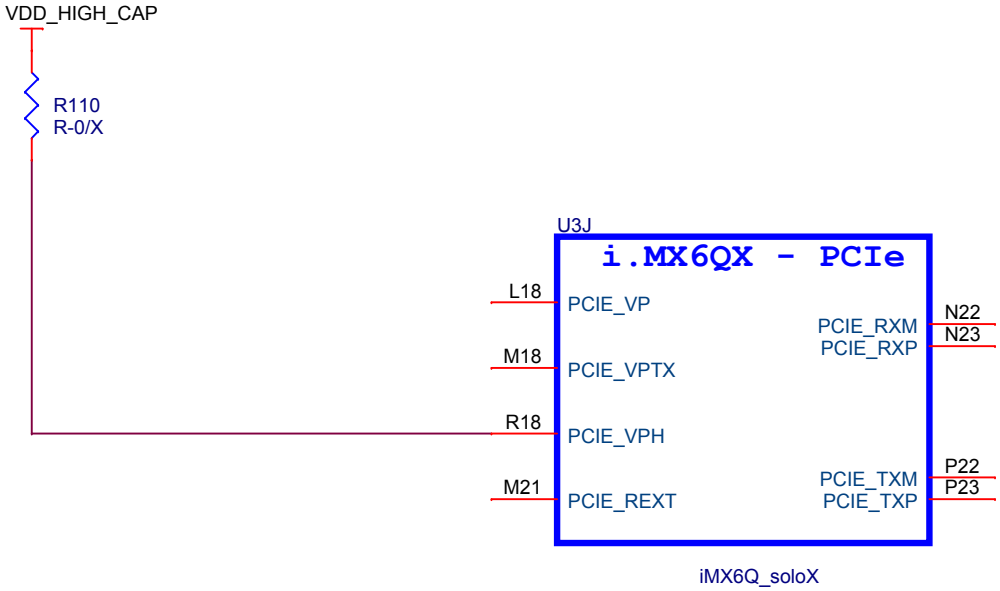




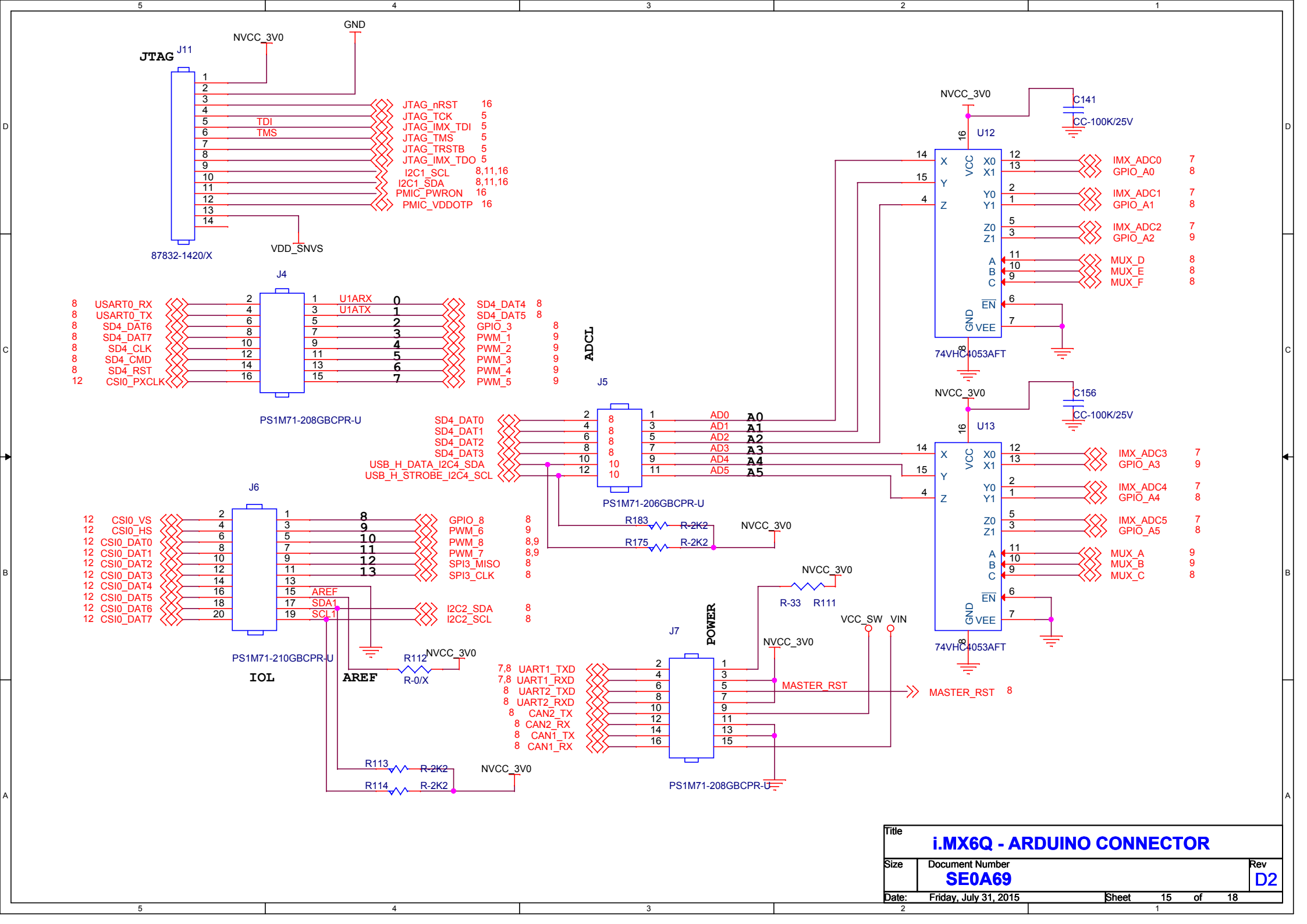
Title	i.MX6Q - DISP; CSI	
Size	Document Number SE0A69	Rev D2
Date: Friday, July 31, 2015	Sheet 12 of 18	



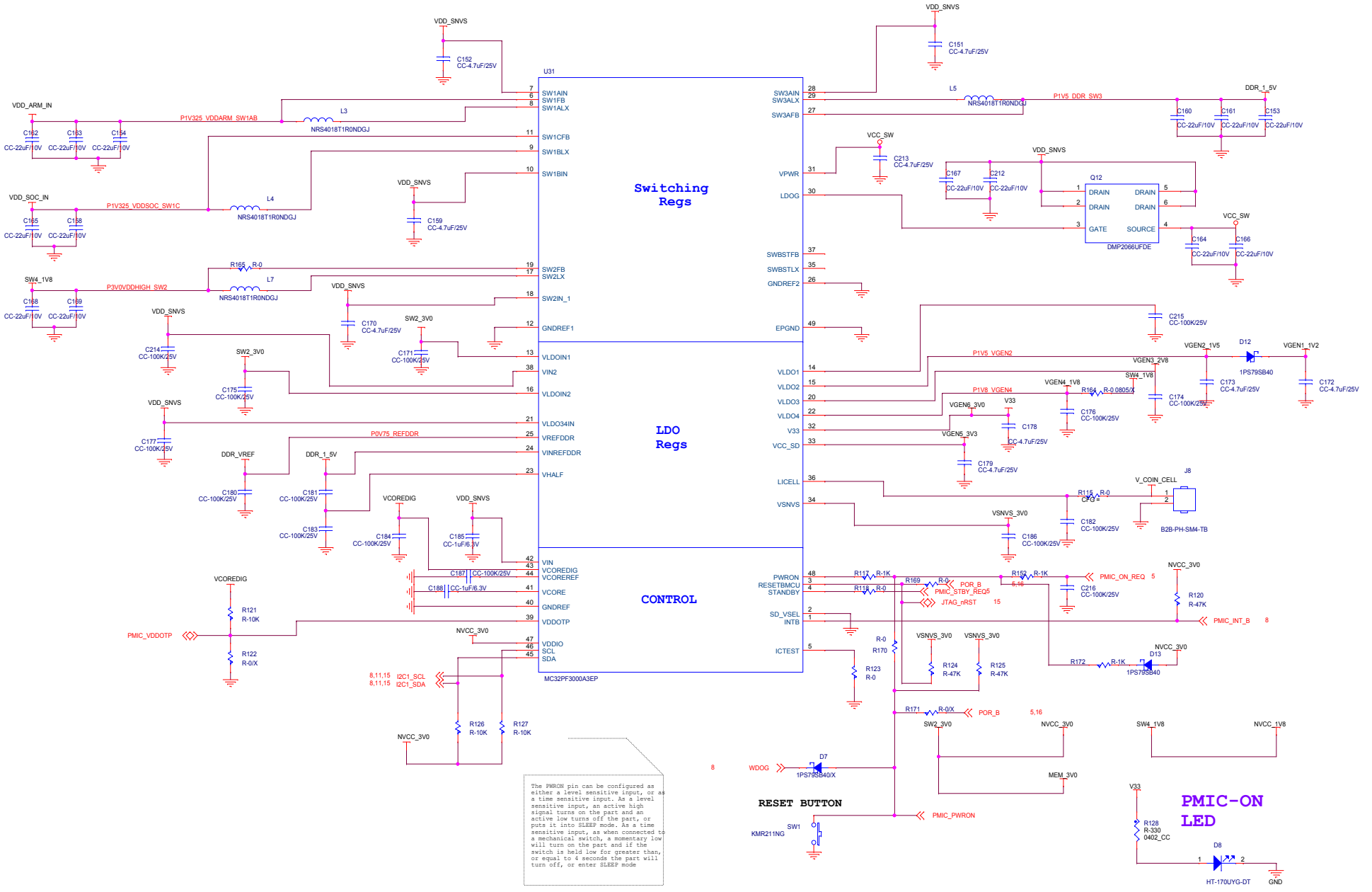
Title	i.MX6Q - HDMI	
Size	Document Number SE0A69	Rev D2
Date: Friday, July 31, 2015	Sheet 13 of 18	



Title	i.MX6Q - PCIe	
Size	Document Number SE0A69	Rev D2
Date: Friday, July 31, 2015	Sheet 14 of 18	



Title	i.MX6Q - ARDUINO CONNECTOR	
Size	Document Number SE0A69	Rev D2
Date: Friday, July 31, 2015	Sheet 15 of 18	



SECO S.r.l.		
Title: PMIC		
Size	Document Number: SE0A69	Rev: D2
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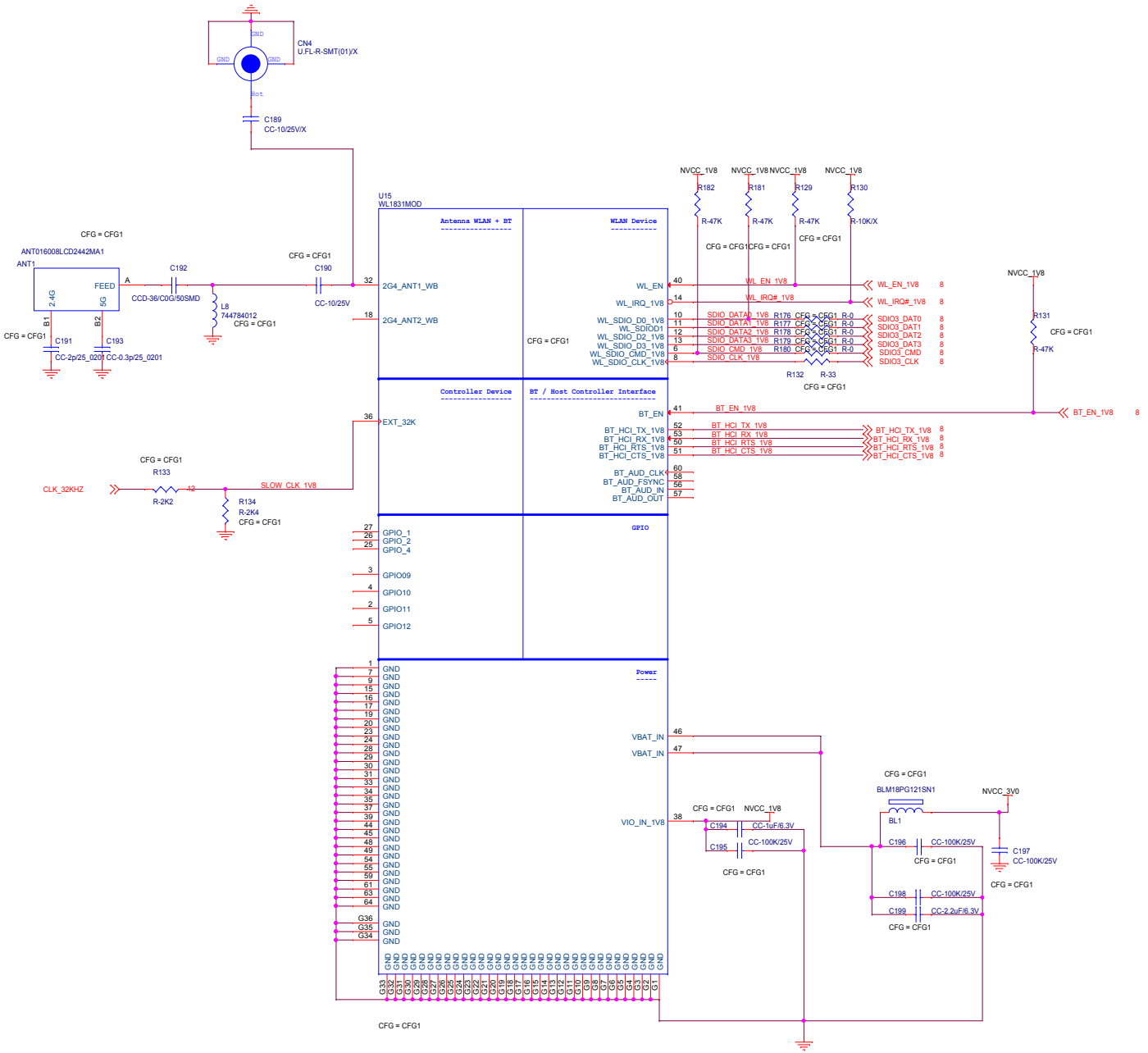

SECO S.r.l.		
Title: i.MX6Q - WIFI/BLUETOOTH		
Size	Document Number: SE0A69	Rev: D2
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