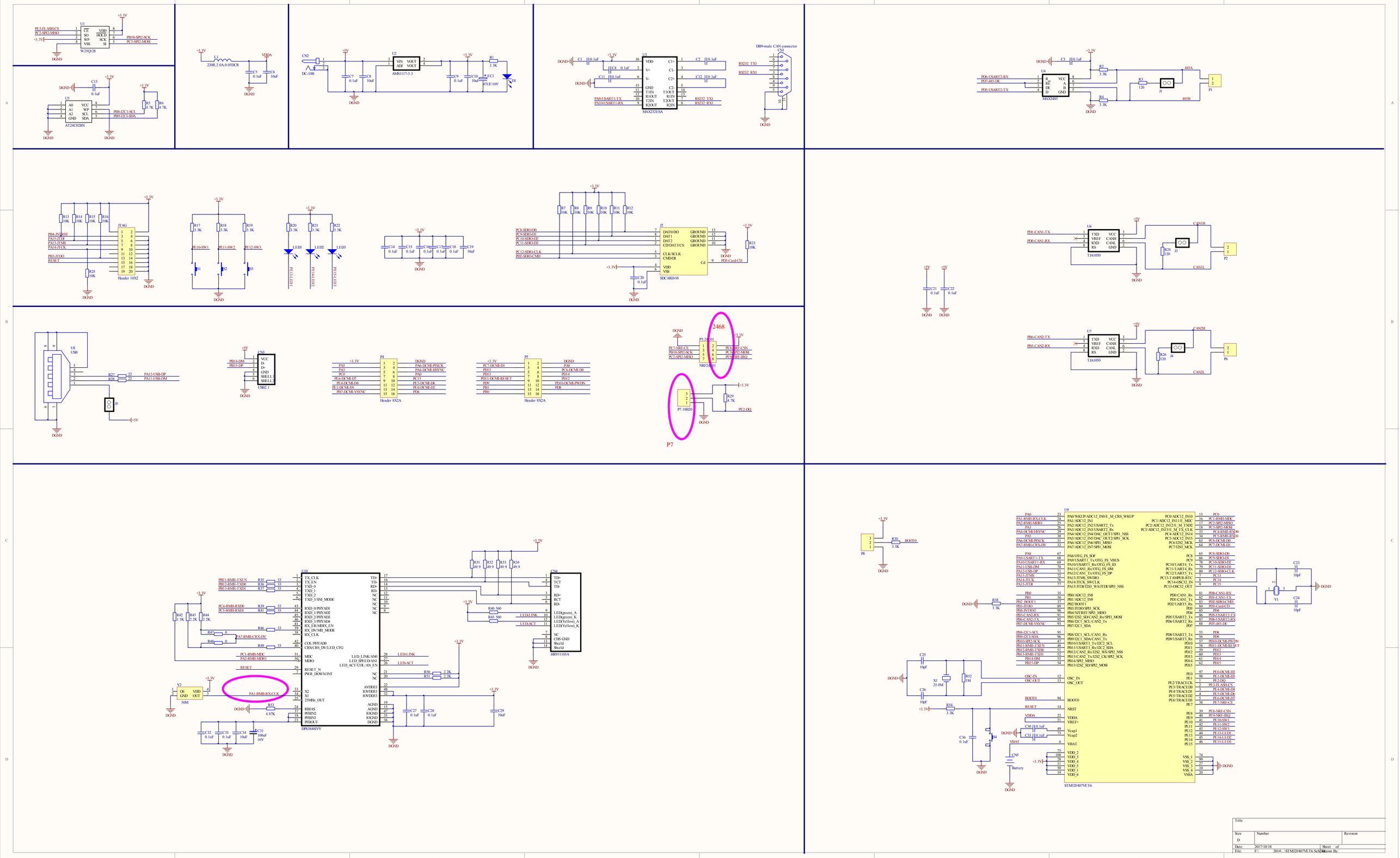
U3
W25Q128
CE
SO
WP
VSS
VDD
HOLD
SCK
SI
PE3-FLASH-CS
PC2-SPI2-MISO
PB10-SPI2-SCK
PC3-SPI2-MOSI
+3.3V
DGND
U5
AT24C02BN
A0
A1
A2
GND
VCC
WP
SCL
SDA
C13
0.1uF
R5
4.7K
R6
4.7K
PB8-I2C1-SCL
PB9-I2C1-SDA
L1
220R,2.0A,0.05DCR
VDDA
C5
0.1uF
C6
10uF
CN2
DC-10B
U2
AMS1117-3.3
VIN
ADJ
VOUT
VOUT
C7
0.1uF
C8
10uF
C9
0.1uF
C10
10uF
E C1
47UF/10V
R1
3.3K
D1
U1
MAX232ESA
VDD
V+
V-
GND
C1+
C1-
C2+
C2-
T1IN
R1OUT
T2IN
R2OUT
T1OUT
R1IN
T2OUT
R2IN
C1
0.1uF
C2
0.1uF
C4
0.1uF
C11
0.1uF
C12
0.1uF
PA9-USART1-TX
PA10-USART1-RX
RS232_TX1
RS232_RX1
DB9-male CAN connector
CN1
U4
MAX3485
R
RE
DE
D
VCC
A
B
GND
C3
0.1uF
PD6-USART2-RX
PD7-485-DE
PD5-USART2-TX
R2
3.3K
R3
120
R4
3.3K
J1
485A
485B
P1
U6
TJA1050
TXD
VREF
RXD
RS
VCC
CANH
CANL
GND
PD1-CAN1-TX
PD0-CAN1-RX
R24
120
J3
CANH
CANL
P2
U7
TJA1050
PB6-CAN2-TX
PB5-CAN2-RX
R26
120
J4
CAN2H
CAN2L
P6
C21
0.1uF
C22
0.1uF
R13
10K
R14
10K
R15
10K
R16
10K
JTAG
Header 10X2
PB4-JNTRST
PA15-JTDI
PA13-JTMS
PA14-JTCK
PB3-JTDO
RESET
R25
10K
R17
3.3K
R18
3.3K
R19
3.3K
PE10-SW1
PE11-SW2
PE12-SW3
S1
S2
S3
R20
3.3K
R21
3.3K
R22
3.3K
LED1
LED2
LED3
PE13-LED1
PE14-LED2
PE15-LED3
C14
0.1uF
C15
0.1uF
C16
0.1uF
C17
0.1uF
C18
0.1uF
C19
10uF
R7
10K
R8
10K
R9
10K
R10
10K
R11
10K
R12
10K
J2
SDCARD-M
PC8-SDIO-D0
PC9-SDIO-D1
PC10-SDIO-D2
PC11-SDIO-D3
PC12-SDIO-CLK
PD2-SDIO-CMD
DAT0/DO
DAT1
DAT2
CD/DAT3/CS
CLK/SCLK
CMD/DI
VDD
VSS
GROUND
Cd
PD3-Card-CD
R23
10K
C20
0.1uF
U8
USB
R27
R28
22
PA12-USB-DP
PA11-USB-DM
J5
CN3
USB2.1
PB14-DM
PB15-DP
VCC
D-
D+
GND
SHELL1
SHELL2
P4
Header 8X2A
PA5
PA3
PC0
PE6-DCMI-D7
PE4-DCMI-D4
PE1-DCMI-D1
PB7-DCMI-VSYNC
DGND
PA6-DCMI-PIXCK
PA4-DCMI-HSYNC
PA0
PC13
PE5-DCMI-D6
PE0-DCMI-D2
PD4
P5
Header 8X2A
PC7-DCMI-D1
PD15
PD13
PD11-DCMI-RESET
PD9
PB1
PB0
PA8
PA7
PC6-DCMI-D0
PD14
PD12
PD10-DCMI-PWDN
PD8
2468
P9-24L01
NRF24L01
PE7-NRF-CE
PB10-SPI2-SCK
PC2-SPI2-MISO
PE8-NRF-CSN
PC3-SPI2-MOSI
PE9-NRF-IRQ
P7: 18B20
R29
4.7K
PE2-DQ
P7
PB11-RMII-TXEN
PB12-RMII-TXD0
PB13-RMII-TXD1
PC4-RMII-RXD0
PC5-RMII-RXD1
R35
R36
R37
R39
R41
R42
1.5K
R43
2.2K
R44
2.2K
R46
R47
R48
PA7-RMII-CRX_DV
R49
PC1-RMII-MDC
PA2-RMII-MDIO
RESET
Y2
50M
PA1-RMII-RX/CLK
R53
4.87K
C32
0.1uF
C33
0.1uF
C34
10uF
C31
100uF
16V
U10
DP83848IVV
TX_CLK
TX_EN
TXD_0
TXD_1
TXD_2
TXD_3/SNI_MODE
RXD_0/PHYAD0
RXD_1/PHYAD1
RXD_2/PHYAD2
RXD_3/PHYAD4
RX_ER/MDIX_EN
RX_DV/MII_MODE
RX_CLK
COL/PHYAD0
CRS/CRS_DV/LED_CFG
MDC
MDIO
RESET_N
PWR_DOWN/INT
LED_LINK/AN0
LED_SPEED/AN1
LED_ACT/COL/AN_EN
NC
X2
X1
25MHz_OUT
RBIAS
PHIN2
PHIN1
PHOUT
AVDD33
IOVDD33
AGND
IOGND
DGND
TD+
TD-
RD+
RD-
LED-LINK
LED-ACT
R50
2.2K
R51
2.2K
C27
0.1uF
C28
0.1uF
C29
10uF
R31
49.9
R32
49.9
R33
49.9
R34
49.9
CN4
HR911105A
TD+
TCT
TD-
RD+
RCT
RD-
LED(green)_A
LED(green)_K
LED(Yellow)_A
LED(Yellow)_K
NC
CHS GND
Shield
R40 560
R45 560
LED-LNK
LED-ACT
P8
R39
3.3K
BOOT0
U9
STM32F407VET6
PA0
PA1-RMII-RX/CLK
PA2-RMII-MDIO
PA3
PA4-DCMI-HSYNC
PA5
PA6-DCMI-PIXCK
PA7-RMII-CRX/DV
PA8
PA9-USART1-TX
PA10-USART1-RX
PA11-USB-DM
PA12-USB-DP
PA13-JTMS
PA14-JTCK
PA15-JTDI
PB0
PB1
PB2-BOOT1
PB3-JTDO
PB4-JNTRST
PB5-CAN2-RX
PB6-CAN2-TX
PB7-DCMI-VSYNC
PB8-I2C1-SCL
PB9-I2C1-SDA
PB10-SPI2-SCK
PB11-RMII-TXEN
PB12-RMII-TXD0
PB13-RMII-TXD1
PB14-DM
PB15-DP
PC0
PC1-RMII-MDC
PC2-SPI2-MISO
PC3-SPI2-MOSI
PC4-RMII-RXD0
PC5-RMII-RXD1
PC6-DCMI-D0
PC7-DCMI-D1
PC8
PC9
PC10-UART4_Tx
PC11-UART4_Rx
PC12-UART5_Tx
PC13-TAMPER-RTC
PC14-OSC32_IN
PC15-OSC32_OUT
PD0-CAN1_Rx
PD1-CAN1_Tx
PD2-UART5_Rx
PD3
PD4
PD5-USART2_Tx
PD6-USART2_Rx
PD7
PD8-USART3_Tx
PD9-USART3_Rx
PD10
PD11
PD12
PD13
PD14
PD15
PE0
PE1
PE2-TRACECK
PE3-TRACED0
PE4-TRACED1
PE5-TRACED2
PE6-TRACED3
PE7
PE8
PE9
PE10
PE11
PE12
PE13
PE14
PE15
VSS_1
VSS_2
VSS_3
VSS_4
VSSA
PA0-WKUP/ADC12_IN0/E_M_CRS_WKUP
PA1/ADC12_IN1
PA2/ADC12_IN2/USART2_Tx
PA3/ADC12_IN3/USART2_Rx
PA4/ADC12_IN4/DAC_OUT1/SPI1_NSS
PA5/ADC12_IN5/DAC_OUT2/SPI1_SCK
PA6/ADC12_IN6/SPI1_MISO
PA7/ADC12_IN7/SPI1_MOSI
PA8/OTG_FS_SOF
PA9/USART1_Tx/OTG_FS_VBUS
PA10/USART1_Rx/OTG_FS_ID
PA11/CAN1_Rx/OTG_FS_DM
PA12/CAN1_Tx/OTG_FS_DP
PA13/JTMS_SWDIO
PA14/JTCK_SWCLK
PA15/JTDI/TIM2_W5/JTDI/SPI3_NSS
PB0/ADC12_IN8
PB1/ADC12_IN9
PB2/BOOT1
PB3/JTDO/SPI3_SCK
PB4/NJTRST/SPI3_MISO
PB5/I2S2_SD/CAN2_Rx/SPI3_MOSI
PB6/I2C1_SCL/CAN2_Tx
PB7/I2C1_SDA
PB8/I2C1_SCL/CAN1_Rx
PB9/I2C1_SDA/CAN1_Tx
PB10/USART3_Tx/I2C2_SCL
PB11/USART3_Rx/I2C2_SDA
PB12/CAN2_Rx/I2S2_WS/SPI2_NSS
PB13/CAN2_Tx/I2S2_CK/SPI2_SCK
PB14/SPI2_MISO
PB15/I2S2_SD/SPI2_MOSI
PC0/ADC12_IN10
PC1/ADC12_IN11/E_MDC
PC2/ADC12_IN12/E_M_TXD2
PC3/ADC12_IN13/E_M_TX_CLK
PC4/ADC12_IN14
PC5/ADC12_IN15
PC6/I2S2_MCK
PC7/I2S3_MCK
PC8
PC9
PC10/UART4_Tx
PC11/UART4_Rx
PC12/UART5_Tx
PC13-TAMPER-RTC
PC14-OSC32_IN
PC15-OSC32_OUT
PD0/CAN1_Rx
PD1/CAN1_Tx
PD2/UART5_Rx
PD3
PD4
PD5/USART2_Tx
PD6/USART2_Rx
PD7
PD8/USART3_Tx
PD9/USART3_Rx
PD10
PD11
PD12
PD13
PD14
PD15
PE0
PE1
PE2/TRACECK
PE3/TRACED0
PE4/TRACED1
PE5/TRACED2
PE6/TRACED3
PE7
PE8
PE9
PE10
PE11
PE12
PE13
PE14
PE15
VSS_1
VSS_2
VSS_3
VSS_4
VSSA
BOOT0
RESET
VDDA
VREF+
Vcap1
Vcap2
VBAT
VDD_2
VDD_3
VDD_4
VDD_5
VDD_1
VDD_6
OSC_IN
OSC_OUT
NRST
PC0
PC1-RMII-MDC
PC2-SPI2-MISO
PC3-SPI2-MOSI
PC4-RMII-RXD0
PC5-RMII-RXD1
PC6-DCMI-D0
PC7-DCMI-D1
PC8-SDIO-D0
PC9-SDIO-D1
PC10-SDIO-D2
PC11-SDIO-D3
PC12-SDIO-CLK
PC13
PC14
PC15
PD0-CAN1-RX
PD1-CAN1-TX
PD2-SDIO-CMD
PD3-Card-CD
PD4
PD5
PD6-USART2-TX
PD7-485-DE
PD8
PD9
PD10-DCMI-PWDN
PD11-DCMI-RESET
PD12
PD13
PD14
PD15
PE0-DCMI-D2
PE1-DCMI-D3
PE2-DQ
PE3-FLASH-CS
PE4-DCMI-D4
PE5-DCMI-D6
PE6-DCMI-D7
PE7-NRF-CE
PE8-NRF-CSN
PE9-NRF-IRQ
PE10-SW1
PE11-SW2
PE12-SW3
PE13-LED1
PE14-LED2
PE15-LED3
VDD_2
VDD_3
VDD_4
VDD_5
VDD_1
VDD_6
+3.3V
DGND
+VDGND
R30
3.3K
R38
3.3K
C25
10pF
C26
10pF
X1
25.0M
R52
1M
R54
3.3K
C30
0.1uF
C35
0.1uF
C36
0.1uF
S4
CN5
Battery
C23
10pF
C24
10pF
Y1
Title
Size
D
Number
Revision
Date:
2017/10/18
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File:
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