MH242X_LQFP64_Demo_V1.0

Revision History

Revision	Date	Designer	Reviewer	Aprover	Description
V1.0	2026-06-21		HW Department		First Version

Schematic Index

01 Covering
02 System Block Diagram
03) POWER&USART&USB FS&CAN&ETH
04 MCU&I2S/SPI&OSPI&DCMI&AD&DA
05) QSPI&SDIO

PCB Stack

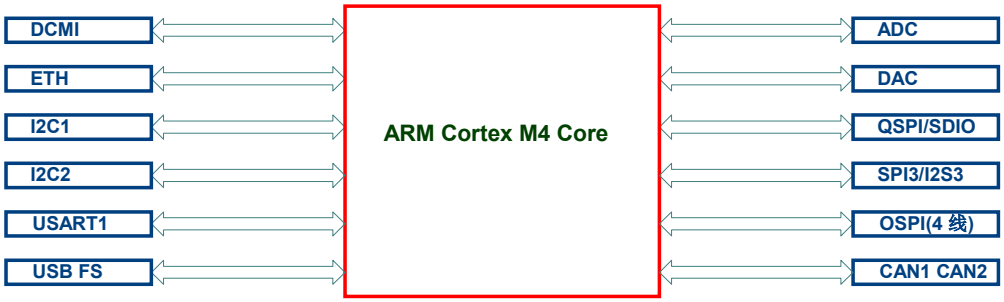
PCB 2 Layer Definition:

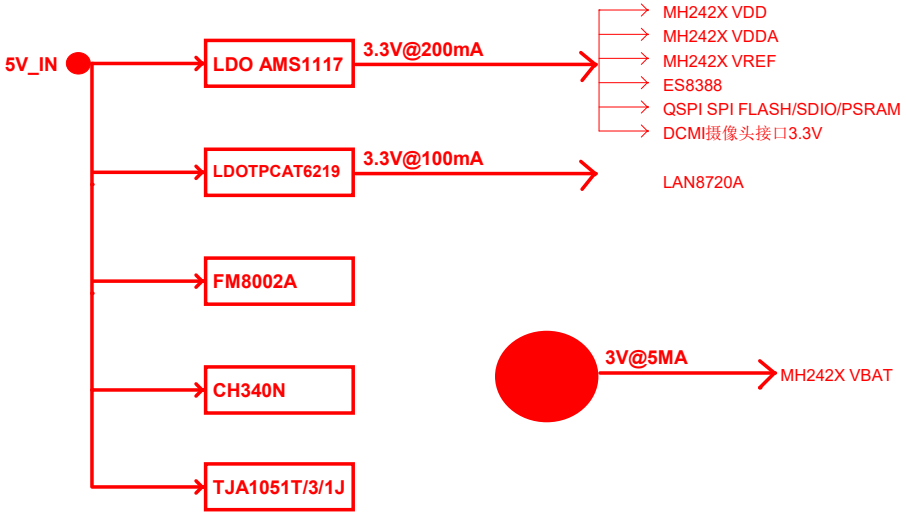
Notice

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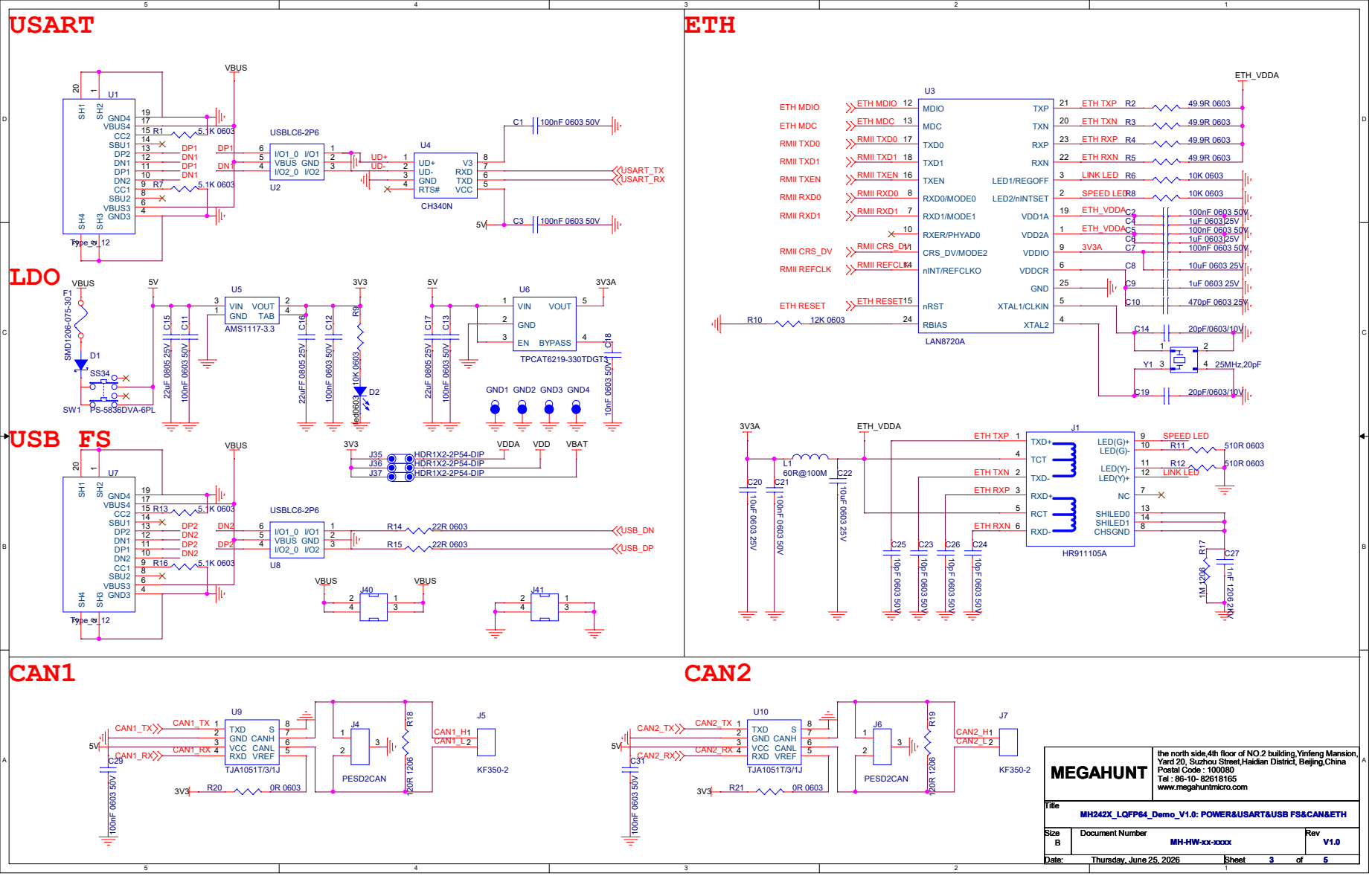
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System Block Diagram

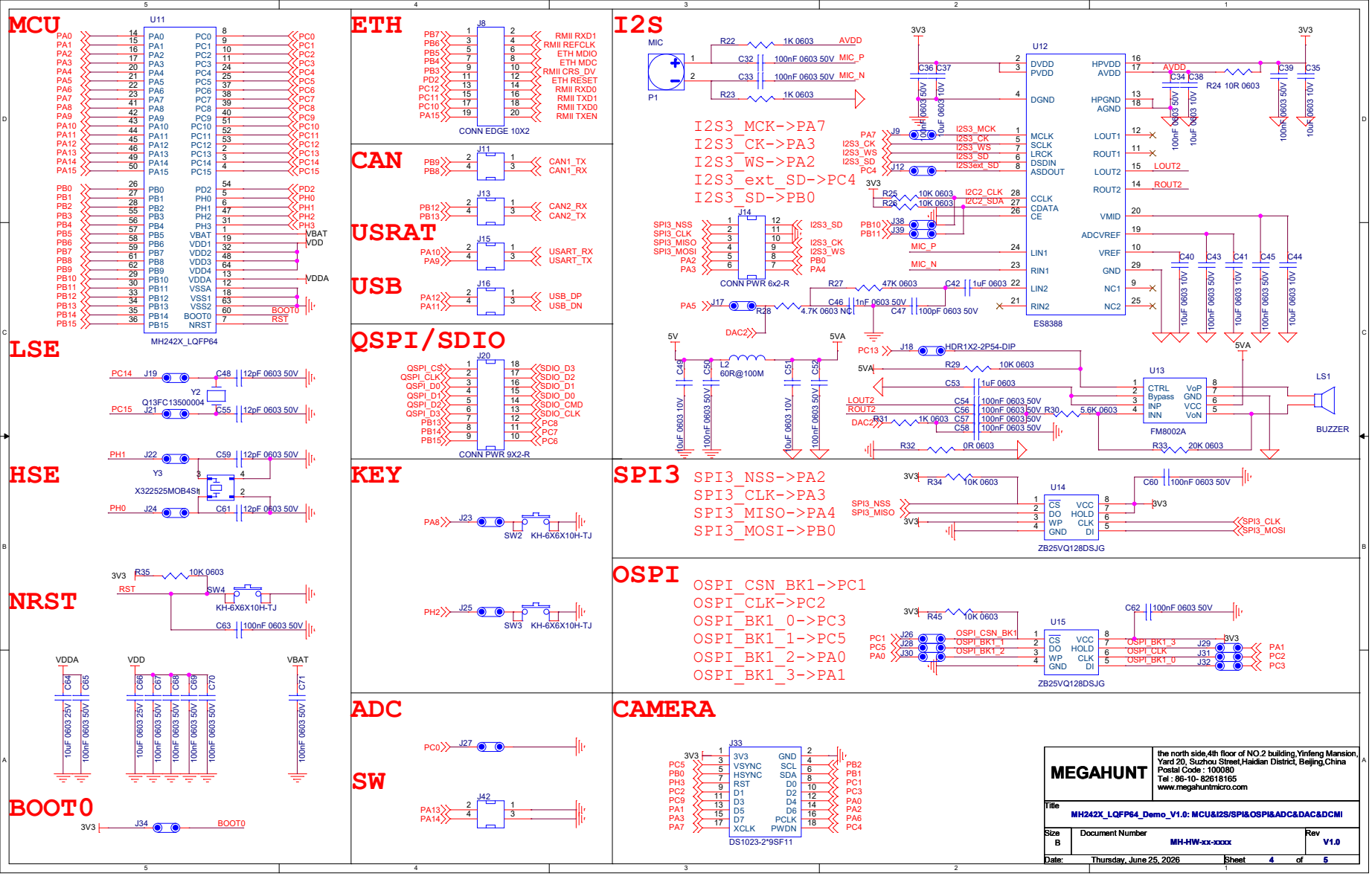




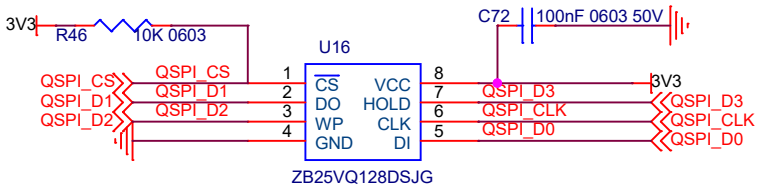
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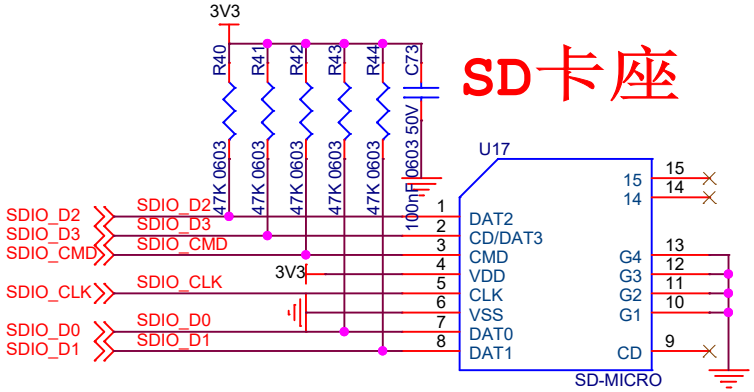

MCU
U11
MH242X_LQFP64
ETH
J8
CONN EDGE 10X2
RMII RXD1
RMII REFCLK
ETH MDIO
ETH MDC
RMII CRS_DV
ETH RESET
RMII RXD0
RMII TXD1
RMII TXD0
RMII TXEN
CAN
J11
J13
CAN1_TX
CAN1_RX
CAN2_RX
CAN2_TX
USRAT
J15
USART_RX
USART_TX
USB
J16
USB_DP
USB_DN
QSPI/SDIO
J20
CONN PWR 9X2-R
SDIO_D3
SDIO_D2
SDIO_D1
SDIO_D0
SDIO_CMD
SDIO_CLK
I2S
MIC
P1
R22 1K 0603
C32 100nF 0603 50V
C33 100nF 0603 50V
R23 1K 0603
MIC_P
MIC_N
U12
ES8388
I2S3_MCK->PA7
I2S3_CK->PA3
I2S3_WS->PA2
I2S3_ext_SD->PC4
I2S3_SD->PB0
J9
J12
J14
CONN PWR 6x2-R
J17
R27 47K 0603
C42 1uF 0603
C46 4.7K 0603 NC
C47 100pF 0603 50V
DAC2
J18
HDR1X2-2P54-DIP
R29 10K 0603
C53 1uF 0603
C54 100nF 0603 50V
C56 100nF 0603 50V
C57 100nF 0603 50V
C58 100nF 0603 50V
R30 5.6K 0603
R31 1K 0603
R32 0R 0603
R33 20K 0603
U13
FM8002A
LS1
BUZZER
LSE
Y2
Q13FC13500004
C48 12pF 0603 50V
C55 12pF 0603 50V
HSE
Y3
X322525MOB4SI
C59 12pF 0603 50V
C61 12pF 0603 50V
NRST
R35 10K 0603
SW4
KH-6X6X10H-TJ
C63 100nF 0603 50V
KEY
SW2 KH-6X6X10H-TJ
SW3 KH-6X6X10H-TJ
SPI3
SPI3_NSS->PA2
SPI3_CLK->PA3
SPI3_MISO->PA4
SPI3_MOSI->PB0
U14
ZB25VQ128DSJG
R34 10K 0603
C60 100nF 0603 50V
OSPI
OSPI_CSN_BK1->PC1
OSPI_CLK->PC2
OSPI_BK1_0->PC3
OSPI_BK1_1->PC5
OSPI_BK1_2->PA0
OSPI_BK1_3->PA1
U15
ZB25VQ128DSJG
R45 10K 0603
C62 100nF 0603 50V
ADC
J27
SW
J42
CAMERA
J33
DS1023-2*9SF11
VDDA
VDD
VBAT
BOOT0
J34
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QSPI



QSPI_CLK->PB14
QSPI_CS->PB13
QSPI_D0->PB15
QSPI_D1->PC6
QSPI_D2->PC7
QSPI_D3->PC8

SD卡座



SDIO_CLK->PB13
SDIO_CMD->PB14
SDIO_D0->PB15
SDIO_D1->PC6
SDIO_D2->PC7
SDIO_D3->PC8

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