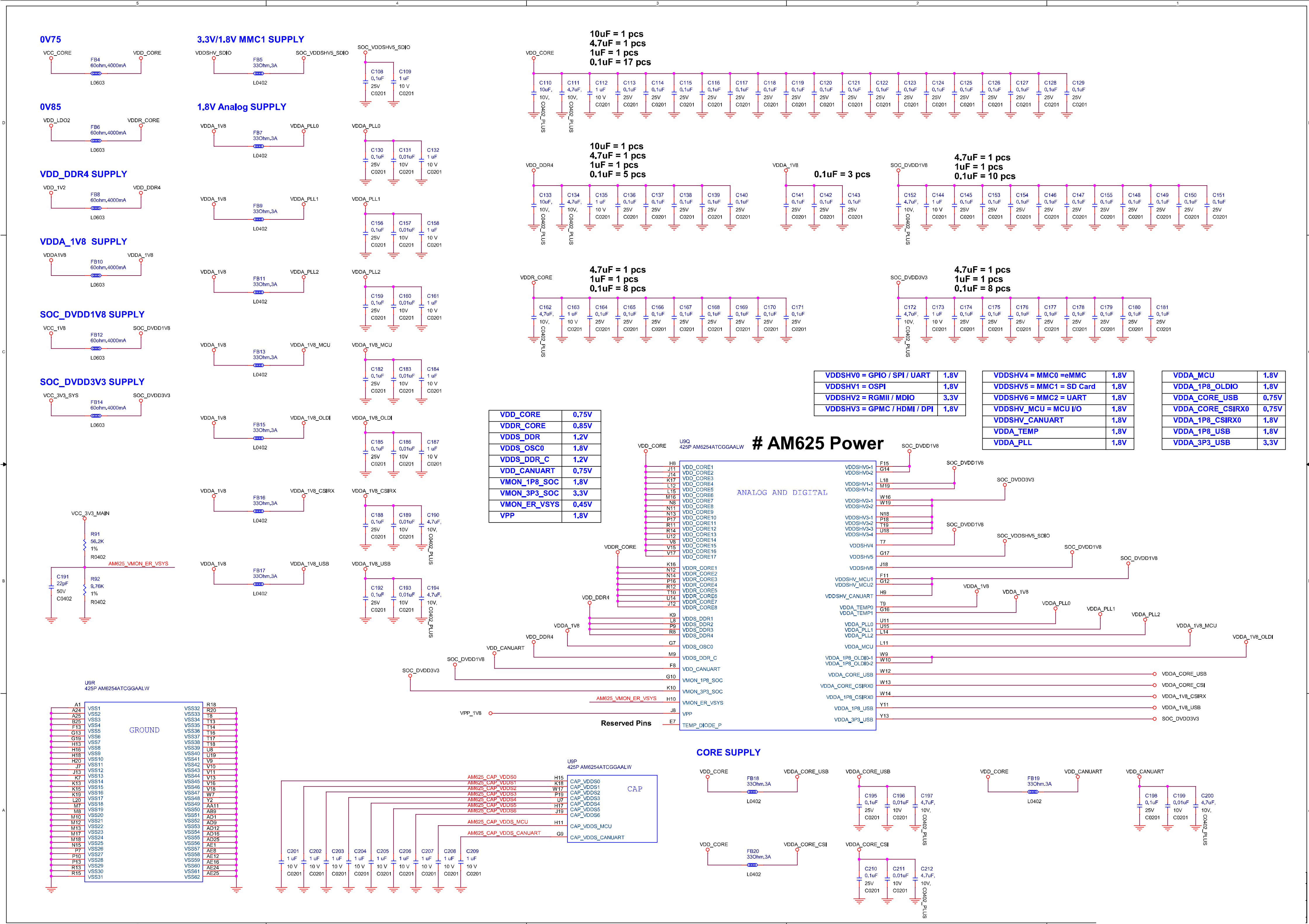


VDD_CORE	0.75V
VDDR_CORE	0.85V
VDDS_DDR	1.2V
VDDS_OSC0	1.8V
VDDS_DDR_C	1.2V
VDD_CANUART	0.75V
VMON_1P8_SOC	1.8V
VMON_3P3_SOC	3.3V
VMON_ER_VSYS	0.45V
VPP	1.8V

VDDSHV0 = GPIO / SPI / UART	1.8V
VDDSHV1 = OSPI	1.8V
VDDSHV2 = RGMII / MDIO	3.3V
VDDSHV3 = GPMC / HDMI / DPI	1.8V

VDDSHV4 = MMC0 =eMMC	1.8V
VDDSHV5 = MMC1 = SD Card	1.8V
VDDSHV6 = MMC2 = UART	1.8V
VDDSHV_MCU = MCU I/O	1.8V
VDDSHV_CANUART	1.8V
VDDA_TEMP	1.8V
VDDA_PLL	1.8V

VDDA_MCU	1.8V
VDDA_1P8_OLDIO	1.8V
VDDA_CORE_USB	0.75V
VDDA_CORE_CSIRX0	0.75V
VDDA_1P8_CSIRX0	1.8V
VDDA_1P8_USB	1.8V
VDDA_3P3_USB	3.3V

AM625 DDR4

U9G
425P AM6254ATCGGAALW

DDR
PwrGrp:VDDS_DDR, VDDS_DDR_C

NOTE: DDR DQ Lines Swapped Within Data Byte

Reserved Pins

VDDS_DDR	1.2V

DDR Signals Voltage level - 1.2V

U10
96P MT40A1G16TB-062E IT:F

R87 near memory device

DDR Power

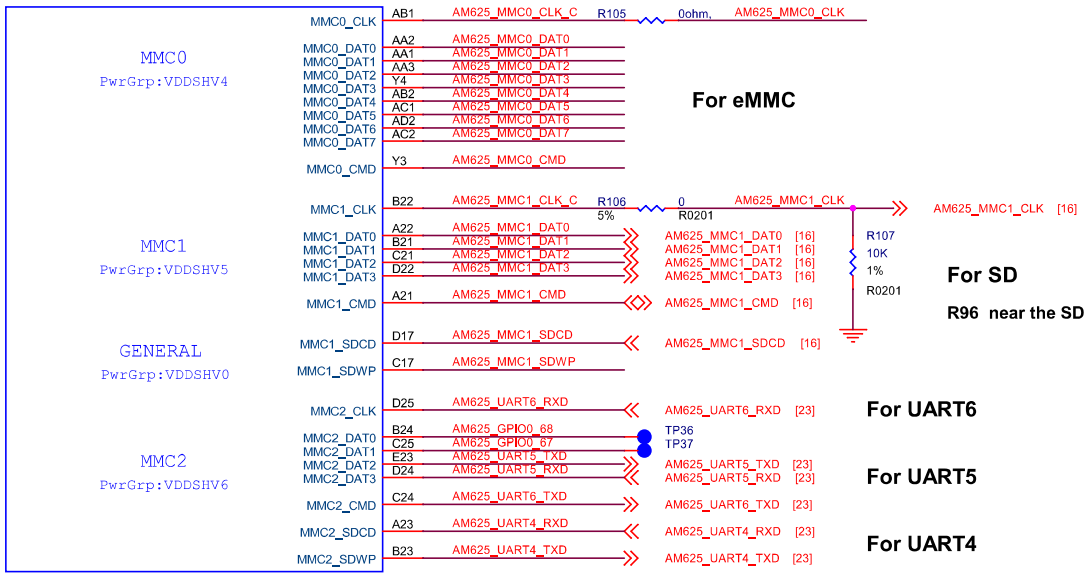
decap near to VREFCA pin

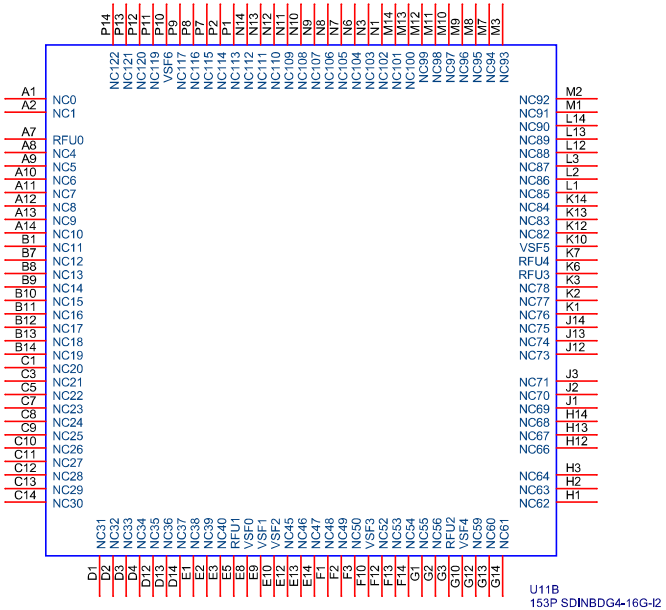
decap near to DDR_VPP pin

P/S：1468X00042

U9I
425P AM6254ATCGGAALW

AM625 eMMC

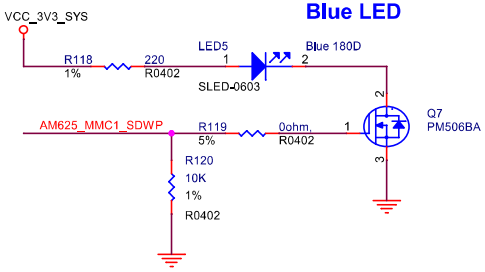


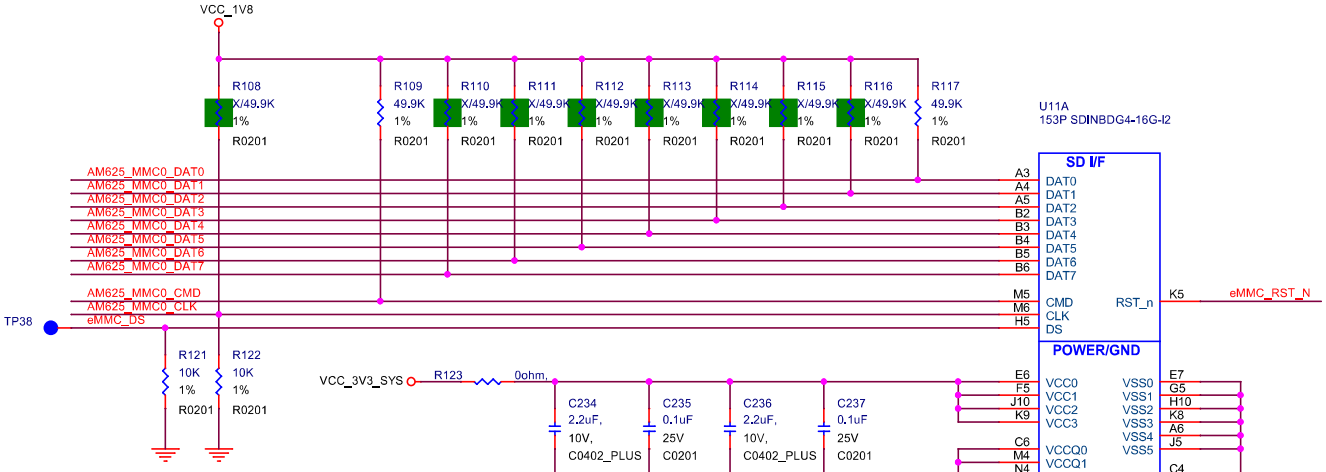


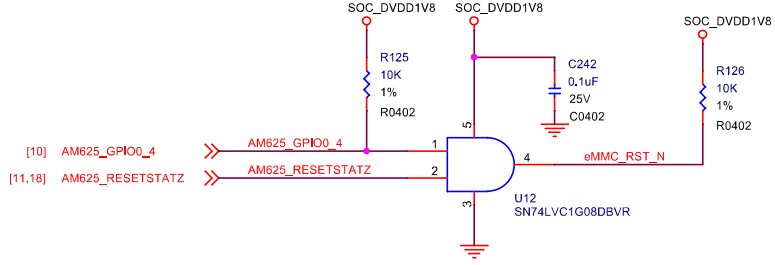
P/S：1469X00035

VDDSHV4	1.8V
VDDSHV5	3.3V
VDDSHV0	1.8V
VDDSHV6	1.8V

P/S：1304500240
Blue LED







AM625 I/O

U9A
425P AM6254ATCGGAALW

For CAN / GPIO

For UART0

Reserved Pins

VDDSHV0	1.8V
VDDS_OSC	1.8V

For I2C0

For I2C1

Reserved Pins

SOC_DVDD1V8

AM625 I/O

U9J
425P AM6254ATCGGAALW

For GPIO0 0.3.4.5.6

For SPI1

For GPIO0 11.12.13.14

For UART5 RTS/CTS

VDDSHV1	1.8V

SOC_DVDD1V8

SOC_DVDD1V8

AM625 WKUP

U9O
425P AM6254ATCGGAALW

co-lay

ground the XI when is not used

VDDSHV2	3,3V
VDDSHV_MCU	1,8V
VDDS_OSC	1,8V
VDDSHV_CANUART	1,8V

AM625 I/O

U9E
425P AM6254ATCGGAALW

For GPIO1 9.10

For UART1

VDDSHV0	1.8V

VDDSHV_MCU	1.8V
VDDS_OSC	1.8V
VDDSHV_CANUART	1.8V

SOC_DVDD1V8

AM625 MCU

U9H
425P AM6254ATCGGAALW

SOC_DVDD1V8

SOC_DVDD1V8

AM625 JTAG

U9B
425P AM6254ATCGGAALW

VDDSHV_MCU	1.8V

SOC_DVDD1V8

P/S : 165300520W

VCC_3V3_SYS

SOC_DVDD1V8

VCC_3V3_SYS

AM625 RESET

U9C
425P AM6254ATCGGAALW

VDDS_OSC	1.8V
VDDSHV_MCU	1.8V
VDDSHV0	1.8V

P/S：1601000990

AM625 BOOTMODE

U9F
425P AM6254ATCGGAALW

VDDSHV3	1.8V

BOOTMODE PINS

Bit 0 - 3

Bit 4 - 7

Bit 8 - 11

Bit 12 - 15

VSEL_SD_SOC = GPMC0_CLK

For I2C2

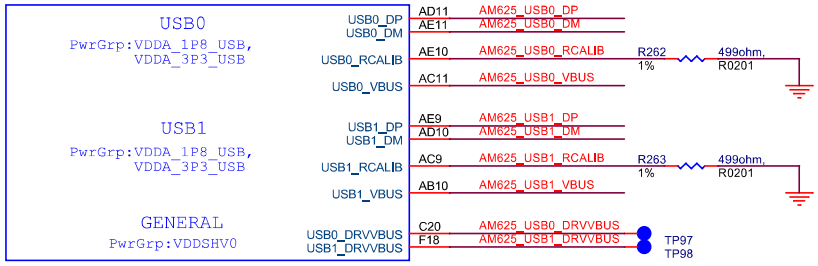
For HDMI Audio (Reserved)

P/S：1600030803

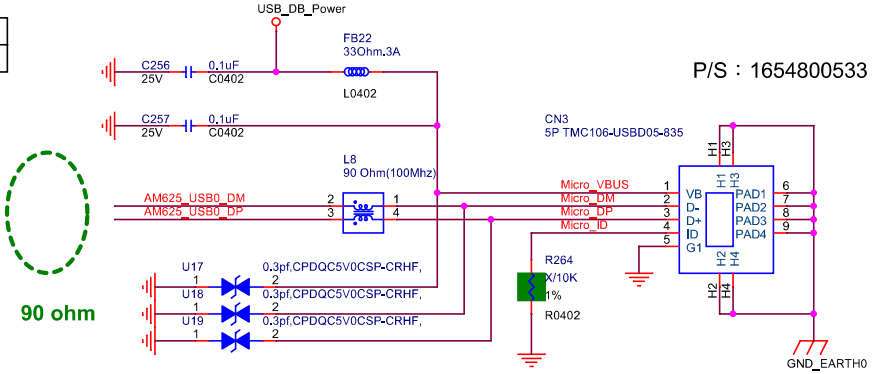
U9D
425P AM6254ATCGGAALW

AM625 USB

VDDA_1P8_USB	1.8V
VDDA_3P3_USB	3.3V

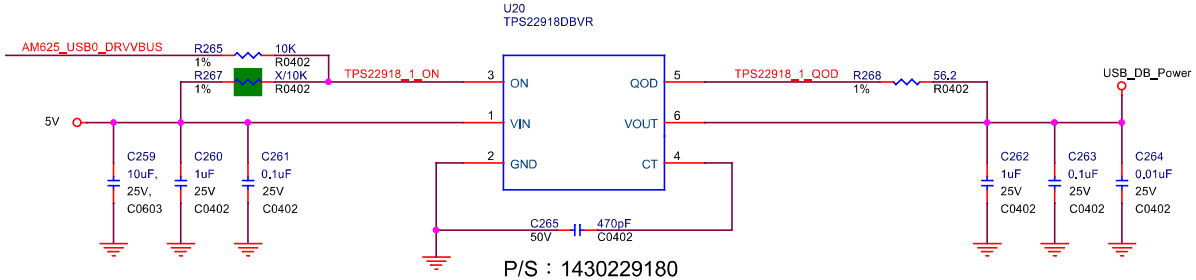


DRVVBUS = Enable

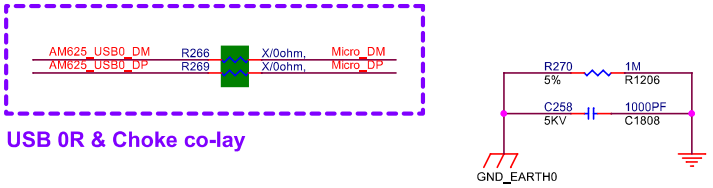


P/S：1654800533

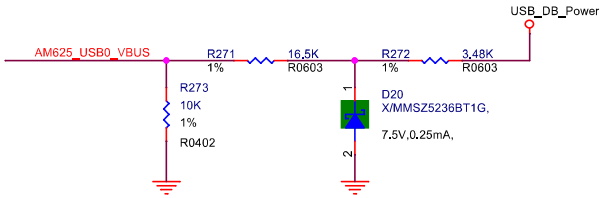
90 ohm

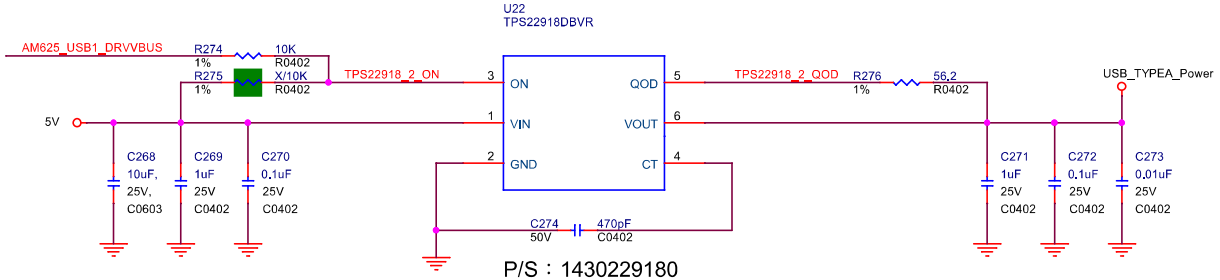


P/S：1430229180

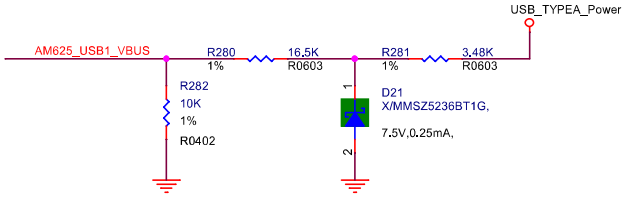


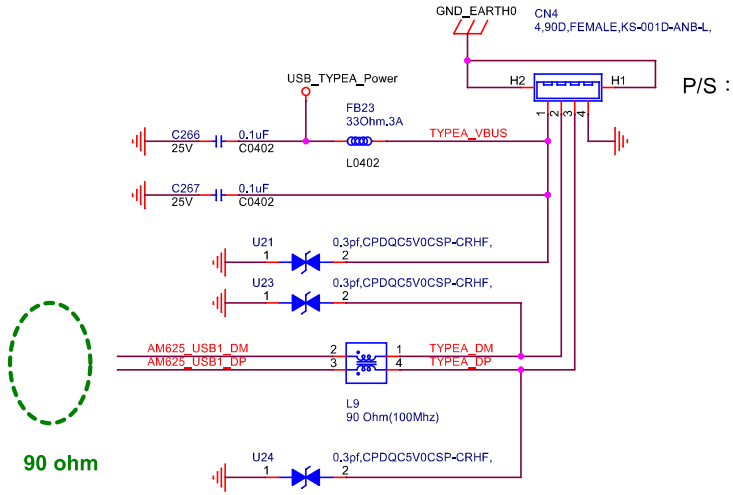
USB 0R & Choke co-lay





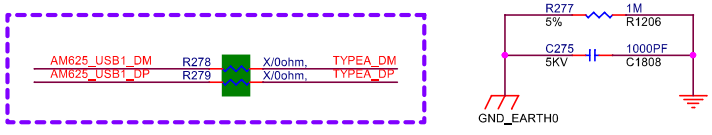
P/S：1430229180





P/S：165480430A

90 ohm



USB 0R & Choke co-lay

U9M
425P AM6254ATCGGAALW

AM625 RGMII

VDDSHV2	3.3V

AM625 LVDS

U9L
425P AM6254ATCGGAALW

OLDI
PwrGrp:VDDA_1P8_OLDI

OLDI0_A0P	Y6	AM625_CH1_LVDS_A0P	
OLDI0_A0N	AA5	AM625_CH1_LVDS_A0N	
OLDI0_A1P	AB4	AM625_CH1_LVDS_A1P	
OLDI0_A1N	AD3	AM625_CH1_LVDS_A1N	
OLDI0_A2P	AA8	AM625_CH1_LVDS_A2P	
OLDI0_A2N	Y8	AM625_CH1_LVDS_A2N	
OLDI0_A3P	AA7	AM625_CH1_LVDS_A3P	
OLDI0_A3N	AB6	AM625_CH1_LVDS_A3N	
OLDI0_A4P	AC5	AM625_CH2_LVDS_A0P	
OLDI0_A4N	AC6	AM625_CH2_LVDS_A0N	
OLDI0_A5P	AD6	AM625_CH2_LVDS_A1P	
OLDI0_A5N	AE5	AM625_CH2_LVDS_A1N	
OLDI0_A6P	AD7	AM625_CH2_LVDS_A2P	
OLDI0_A6N	AE6	AM625_CH2_LVDS_A2N	
OLDI0_A7P	AE7	AM625_CH2_LVDS_A3P	
OLDI0_A7N	AD8	AM625_CH2_LVDS_A3N	
OLDI0_CLK0P	AE3	AM625_CH1_LVDS_CLKP	
OLDI0_CLK0N	AD4	AM625_CH1_LVDS_CLKN	
OLDI0_CLK1P	AD5	AM625_CH2_LVDS_CLKP	
OLDI0_CLK1N	AE4	AM625_CH2_LVDS_CLKN	

VDDA_1P8_OLDI	1.8V

100 ohm

100 ohm

100 ohm

U25
10,AZ1045-04F,

AM625_CH1_LVDS_A0P	1	Line-1	NC1	10	AM625_CH1_LVDS_A0P
AM625_CH1_LVDS_A0N	2	Line-2	NC2	9	AM625_CH1_LVDS_A0N
AM625_CH1_LVDS_A1P	3	GND	GND1	8	AM625_CH1_LVDS_A1P
AM625_CH1_LVDS_A1N	4	Line-3	NC3	7	AM625_CH1_LVDS_A1N
	5	Line-4	NC4	6	

U26
10,AZ1045-04F,

AM625_CH1_LVDS_A2P	1	Line-1	NC1	10	AM625_CH1_LVDS_A2P
AM625_CH1_LVDS_A2N	2	Line-2	NC2	9	AM625_CH1_LVDS_A2N
AM625_CH1_LVDS_A3P	3	GND	GND1	8	AM625_CH1_LVDS_A3P
AM625_CH1_LVDS_A3N	4	Line-3	NC3	7	AM625_CH1_LVDS_A3N
	5	Line-4	NC4	6	

U27
10,AZ1045-04F,

AM625_CH1_LVDS_CLKP	1	Line-1	NC1	10	AM625_CH1_LVDS_CLKP
AM625_CH1_LVDS_CLKN	2	Line-2	NC2	9	AM625_CH1_LVDS_CLKN
AM625_CH2_LVDS_A0N	3	GND	GND1	8	AM625_CH2_LVDS_A0N
AM625_CH2_LVDS_A0P	4	Line-3	NC3	7	AM625_CH2_LVDS_A0P
	5	Line-4	NC4	6	TP127 TP128

U28
10,AZ1045-04F,

AM625_CH2_LVDS_A1P	1	Line-1	NC1	10	AM625_CH2_LVDS_A1P
AM625_CH2_LVDS_A1N	2	Line-2	NC2	9	AM625_CH2_LVDS_A1N
AM625_CH2_LVDS_CLKP	3	GND	GND1	8	AM625_CH2_LVDS_CLKP
AM625_CH2_LVDS_CLKN	4	Line-3	NC3	7	AM625_CH2_LVDS_CLKN
	5	Line-4	NC4	6	TP129 TP130 TP131 TP132

U29
10,AZ1045-04F,

AM625_CH2_LVDS_A3N	1	Line-1	NC1	10	AM625_CH2_LVDS_A3N
AM625_CH2_LVDS_A3P	2	Line-2	NC2	9	AM625_CH2_LVDS_A3P
AM625_CH2_LVDS_A2P	3	GND	GND1	8	AM625_CH2_LVDS_A2P
AM625_CH2_LVDS_A2N	4	Line-3	NC3	7	AM625_CH2_LVDS_A2N
	5	Line-4	NC4	6	TP133 TP134 TP135 TP136

CH2_Reserved

LVDS Backlight Power

15V — FB24 50 Ohm@(100Mhz) 25%,6000mA,DCR=0.008 Ohm L1206 — LVDS_VCC_BKLT

C276 10uF, 25V, C0603 — C277 0.1uF 25V C0402

LVDS LCD Power

5V — FB25 X/60ohm,4000mA L0603 — LVDS_VSEL

VCC_3V3_SYS — FB42 60ohm,4000mA L0603

C278 10uF, 25V, C0603 — C279 0.1uF 25V C0402

VCC_3V3_SYS — R295 10K 1% R0402 — U30 AD5247BKSZ10-1RL7 — R296 0ohm, 5% R0402

AD5247_VDD — C280 0.1uF 25V C0402

VDD A GND W SCL SDA

BKLT_CTRL_VR

AD5247_I2C_SDA — R297 0ohm, AM625_I2C0_SDA_H — AM625_I2C0_SDA_H [6,14,17,23]

AD5247_I2C_SCL — R298 0ohm, AM625_I2C0_SCL_H — AM625_I2C0_SCL_H [6,14,17,23]

P/S：14S3524701

LVDS_VSEL — R299 1M 0.1% R0402 — R300 100K 1% R0402 — Q8 AP2301GN — C281 1000pF 50V C0402 — C282 22uF 25V C0805 — C283 0.1uF 25V C0402 — LVDS_VDD

LVDS_VDD_EN — R302 100K 1% R0402 — Q9 2N7002K

SOC_DVDD1V8 — C284 25V — 0.1uF C0402 — R301 1% 10K R0402 — R303 0ohm, 5% R0402

VCC_3V3_SYS — R304 0ohm, 5% R0402 — C285 0.1uF 25V C0402

U31 NTS0104GU12

VCCA A1 A2 A3 A4 GND OE VCCB B1 B2 B3 B4

[10] AM625_GPIO0_11 — R305 0ohm, LVDS_BL_PWM_L — LVDS_BL_PWM_H — R308 0ohm, LVDS_BL_PWM

[10] AM625_GPIO0_12 — R306 0ohm, LVDS_EN_L — LVDS_EN_H — R309 0ohm, LVDS_EN

[10] AM625_GPIO0_13 — R307 0ohm, LVDS_VDD_EN_L — LVDS_VDD_EN_H — R310 0ohm, LVDS_VDD_EN

[6,14,17,23] AM625_I2C0_SDA_H — AM625_I2C0_SDA_H — R311 0ohm, LVDS_I2C_SDA

[6,14,17,23] AM625_I2C0_SCL_H — AM625_I2C0_SCL_H — R312 0ohm, LVDS_I2C_CLK

LVDS Connector

LVDS_VDD

CN5
30P 180D CSI-4585-300R-NH

CH1_N

LVDS_EN	BKLEN	BKLCTL	LVDS_BKLT_CTL
AM625_CH1_LVDS_CLKN	PPVCC_0	GND_0	AM625_CH1_LVDS_CLKP
	TXLCLK#	TXLCLK	
AM625_CH1_LVDS_A0N	PPVCC_1	GND_1	AM625_CH1_LVDS_A0P
AM625_CH1_LVDS_A1N	TXL0#	TXL0	AM625_CH1_LVDS_A1P
AM625_CH1_LVDS_A2N	TXL1#	TXL1	AM625_CH1_LVDS_A2P
AM625_CH1_LVDS_A3N	TXL2#	TXL2	AM625_CH1_LVDS_A3P
LVDS_I2C_SDA	TXL3#	TXL3	LVDS_I2C_CLK
	SDATA	SCLK	
TP137	TXU0#	TXU0	EXT_MCU_PA8_GPIO — R526 0ohm, MCU_PA8_GPIO — MCU_PA8_GPIO [21]
TP138	TXU1#	TXU1	EXT_MCU_PC13_GPIO — R578 0ohm, MCU_PC13_GPIO — MCU_PC13_GPIO [21]
TP139	TXU2#	TXU2	EXT_MCU_PC14_GPIO — R579 0ohm, MCU_PC14_GPIO — MCU_PC14_GPIO [21]
TP140	TXU3#	TXU3	EXT_MCU_PC15_GPIO — R580 0ohm, MCU_PC15_GPIO — MCU_PC15_GPIO [21]
TP141	PPVCC_2	GND_2	TP142
	TXUCLK#	TXUCLK	

CH1_P

H1 H2 H3 H4

P/S：1654030005

D25 AZ5123-01H.R7G — EXT_MCU_PC13_GPIO

D28 AZ5123-01H.R7G — EXT_MCU_PC14_GPIO

D31 AZ5123-01H.R7G — EXT_MCU_PC15_GPIO

D66 AZ5123-01H.R7G — EXT_MCU_PA8_GPIO

LVDS_VCC_BKLT — LVDS_VCC_BKLT — FS2 452003MRL — 125V;3A — LVDS_BKLT

CN6(2-3)
2.0mm 200-72-PBGB03

P/S：165330010E

CN6
3*1P 220-96-03GB01

BKLT_CTRL_VR
LVDS_BKLT_SEL
LVDS_BKLT_CTL

P/S：165300310G

CN7
5P 721-94-05TWR9

R313 5% 0 R0603

LVDS_BL_PWM — R314 0ohm,

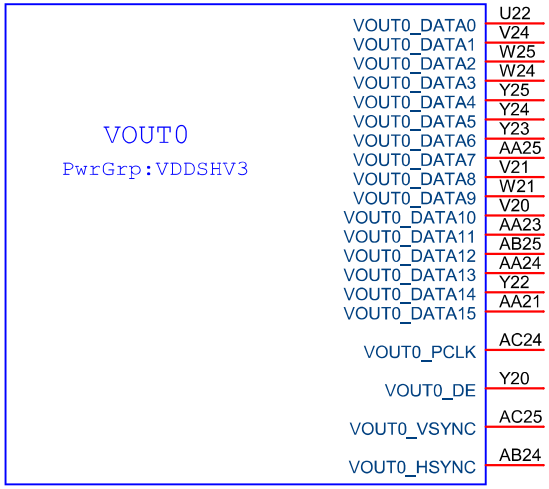
LVDS_EN

P/S：1655305130

LVDS BKLT Control Selection		
P1-2	VR Mode	
P2-3	PWM Mode	Default

U9N
425P AM6254ATCGGAALW

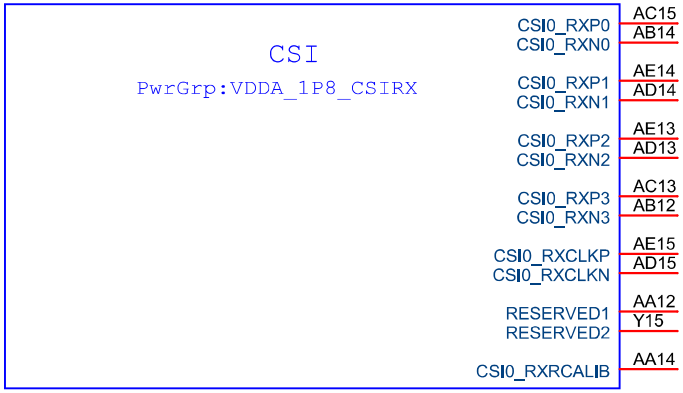
AM625 DPI



VDDSHV3	1.8V

U9K
425P AM6254ATCGGAALW

AM625 CSI



VDDA_1P8_CSIRX	1.8V