

SOM-AM57xx-TM

SCHEMATIC PAGE

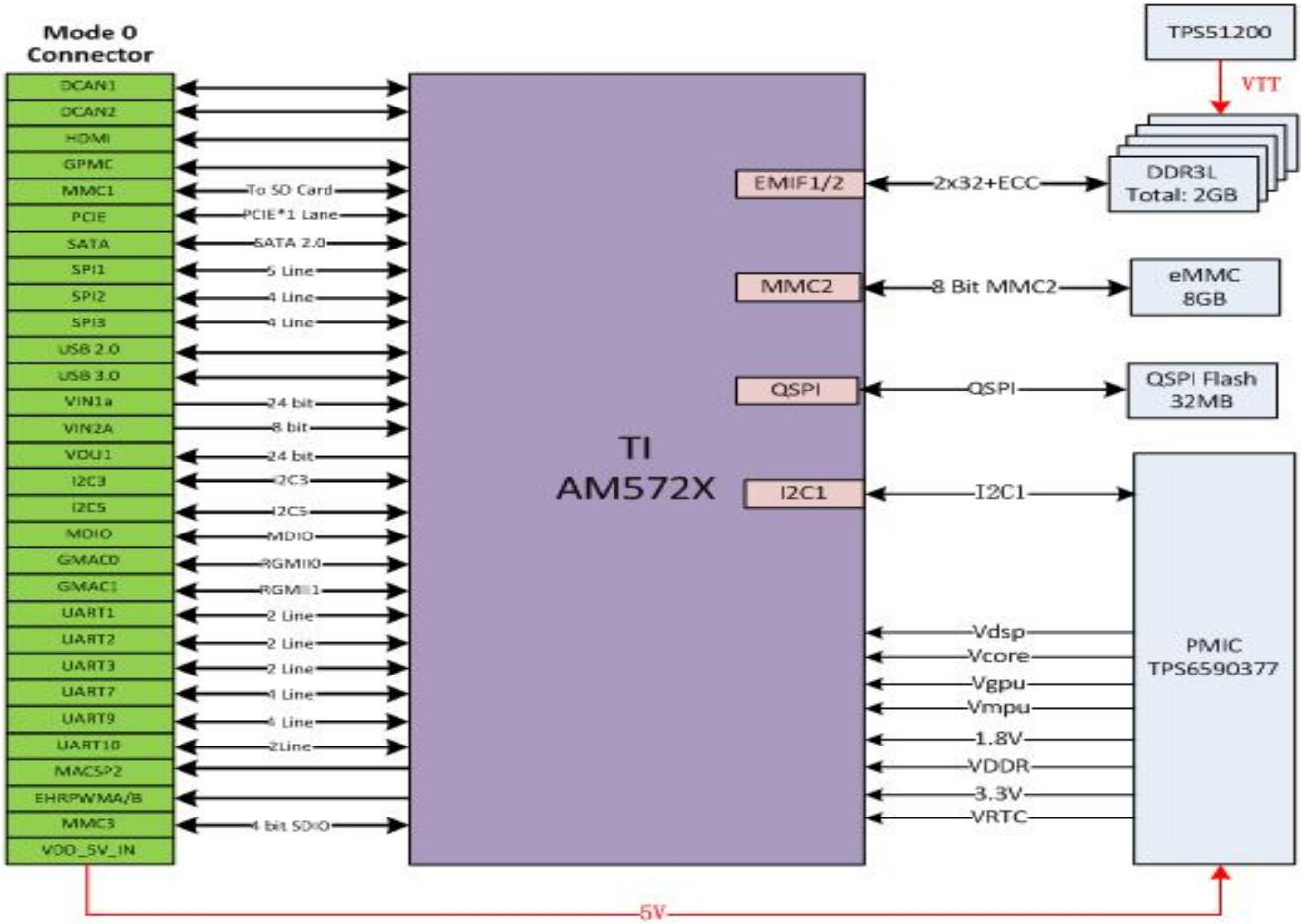
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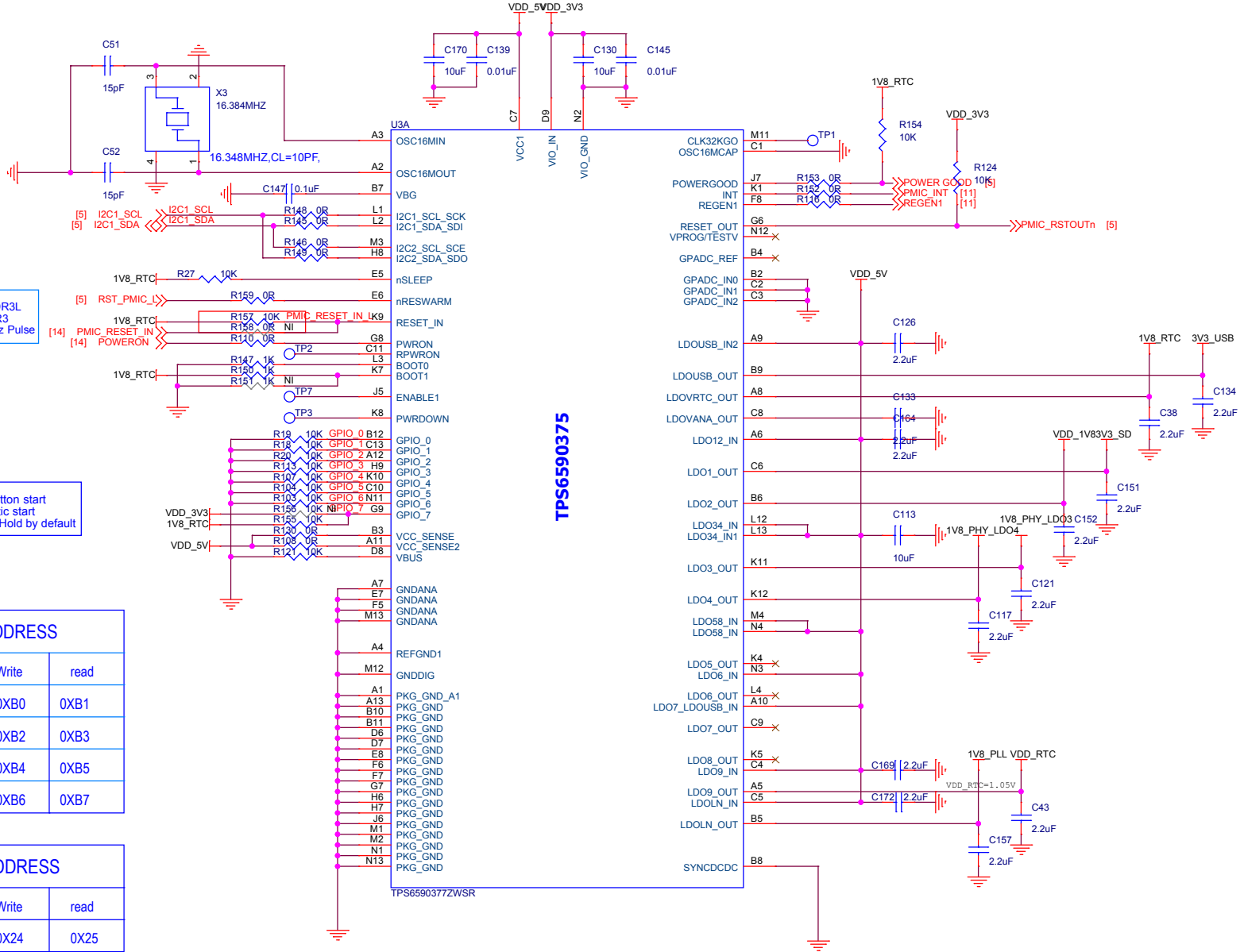
REVISION HISTORY

DATA	REVISION	DESCRIPTION
2017/8/4	REV 00	Initail Create

		http://www.embest-tech.com	
Title:		SOM_AM572x	
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Draw By:wangpeng	Date:Monday, October 16, 2017	Sheet: 1 of 15	

SOM-AM57xx-TM BLOCK Diagram





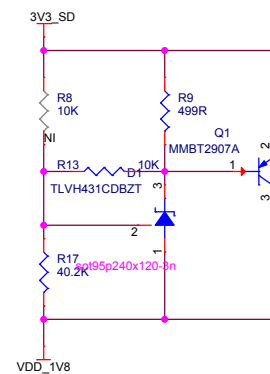
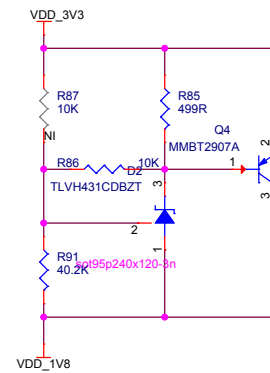
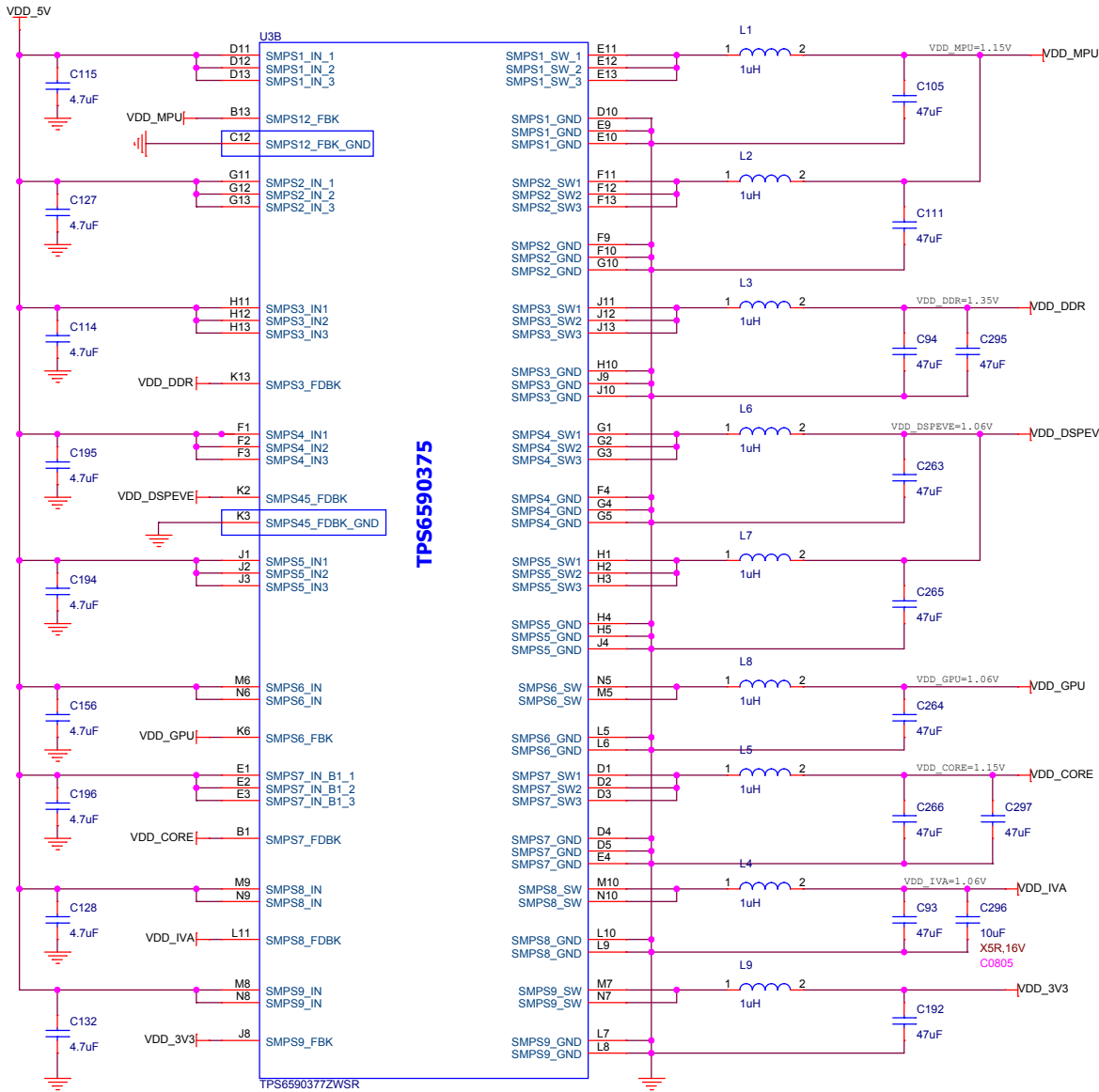
if BOOT0 = 0 SMPS=1.35V DDR3L
 if BOOT0 = 1 SMPS=1.5V DDR3
 if BOOT1=1=WarmReset PORz Pulse

VDD_3V3 always on, pushbutton start
 1V8_RTC always on, automatic start
 GPIO7 is configured to PowerHold by default

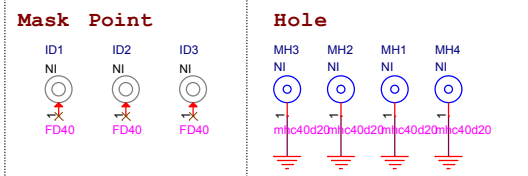
PMIC I2C1 ADDRESS		
I2C1	Write	read
Power registers	0XB0	0XB1
Interfaces and auxiliaries	0XB2	0XB3
Trimming and test	0XB4	0XB5
OTP	0XB6	0XB7

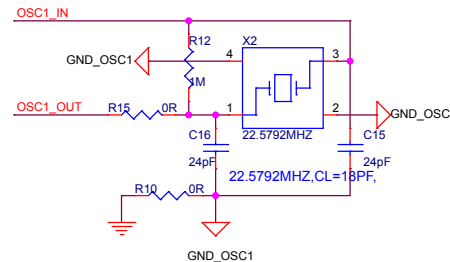
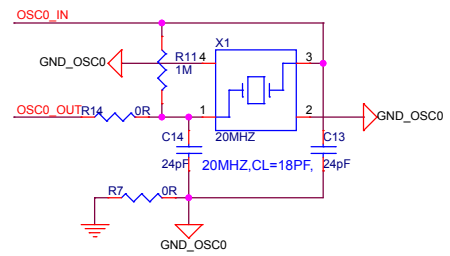
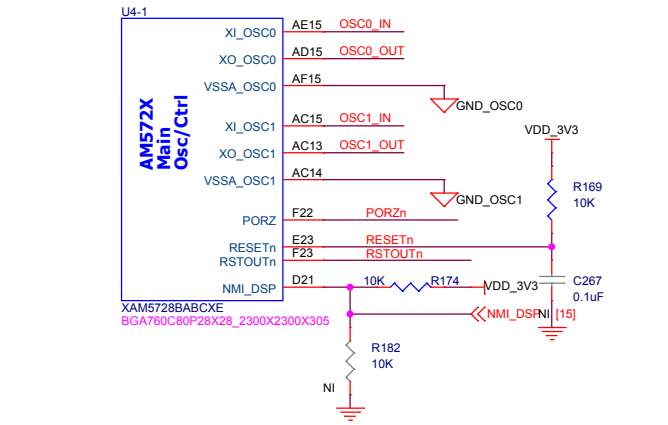
PMIC I2C2 ADDRESS		
I2C2	Write	read
DVS	0X24	0X25

TPS6590375

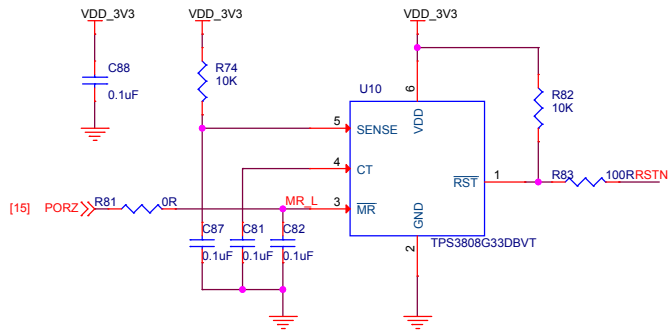
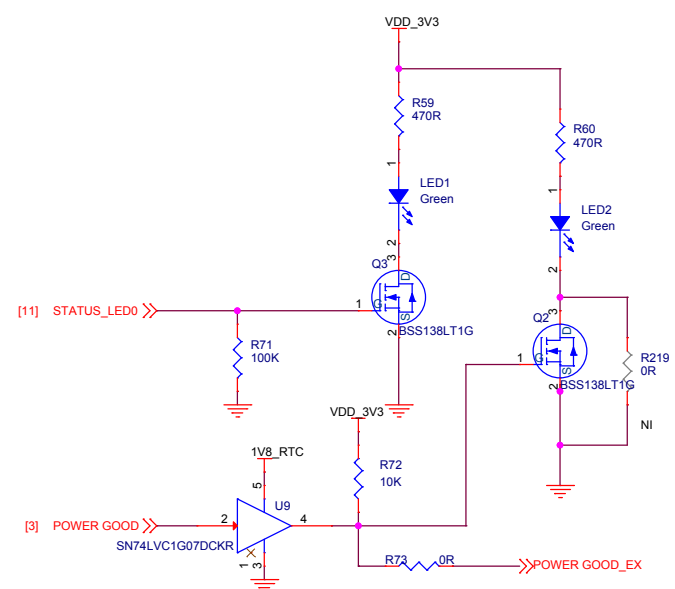
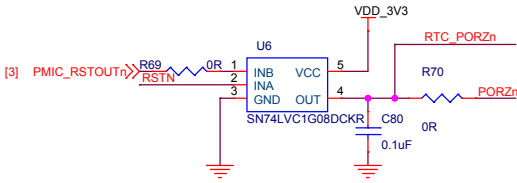


Clamp circuits add to guarantee the 3.3V supplies VDD_3V3 and 3V3_SD never drop below VDD_1V8 during uncontrolled shut-down



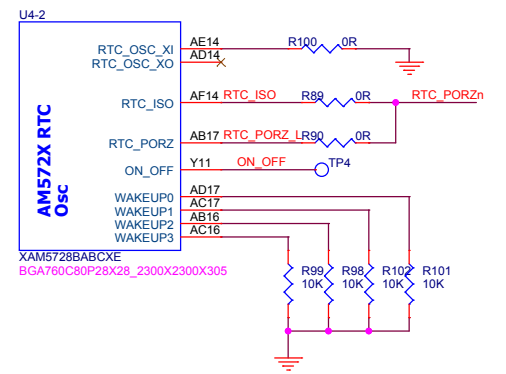
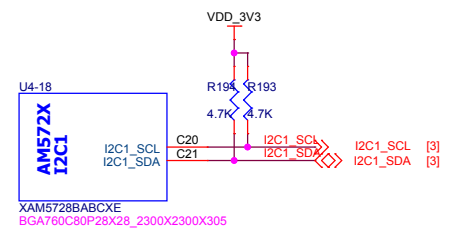
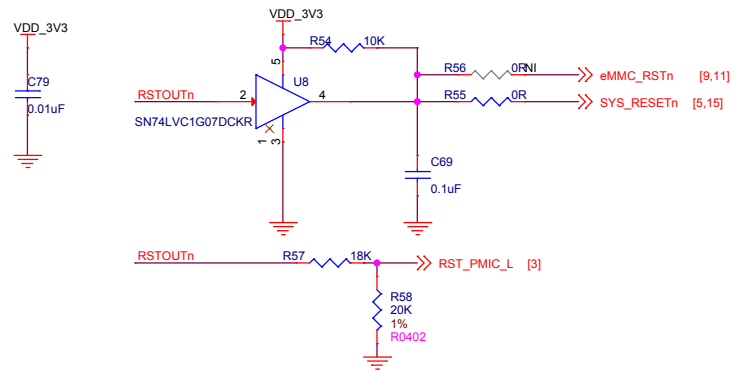


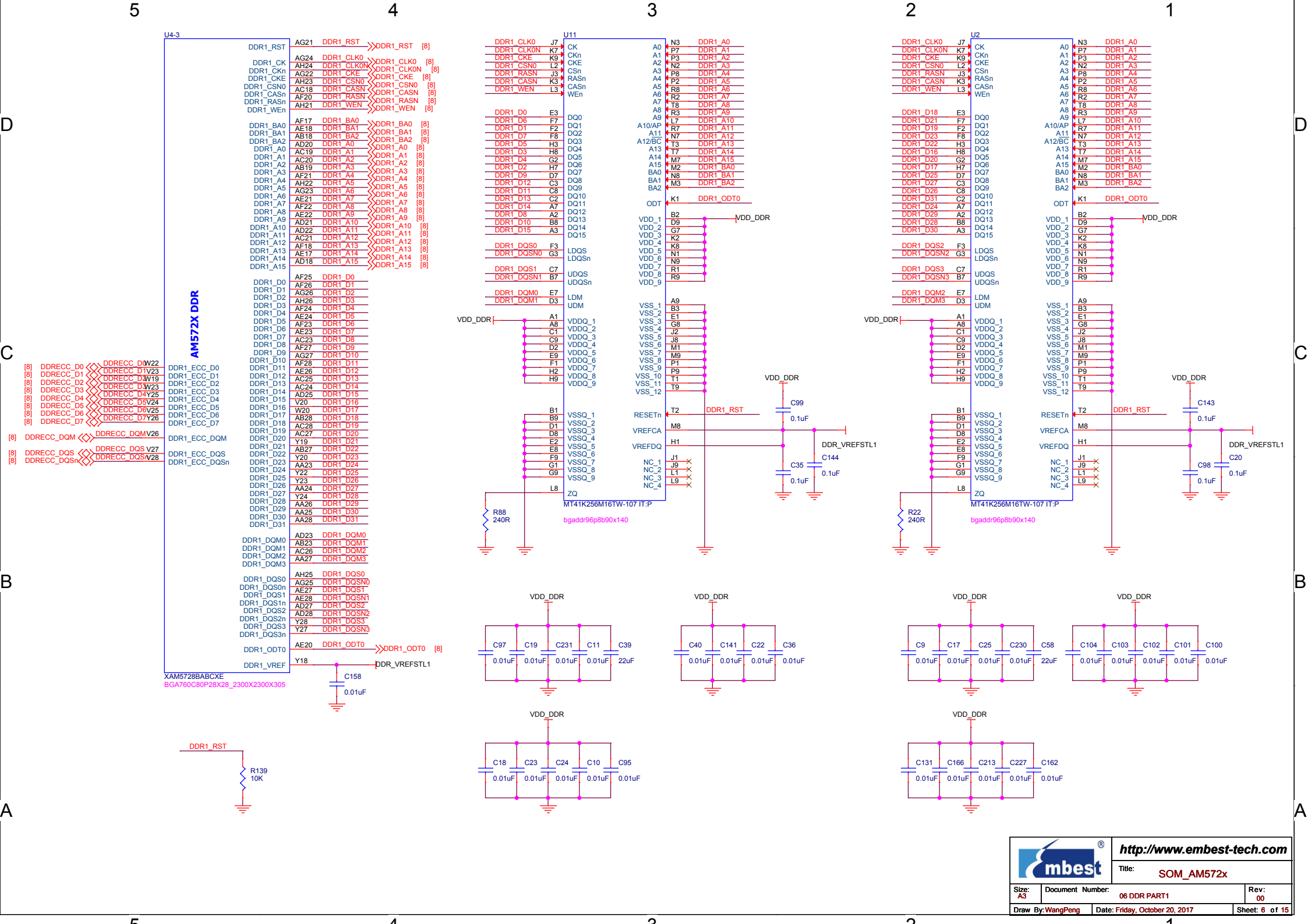
RTC

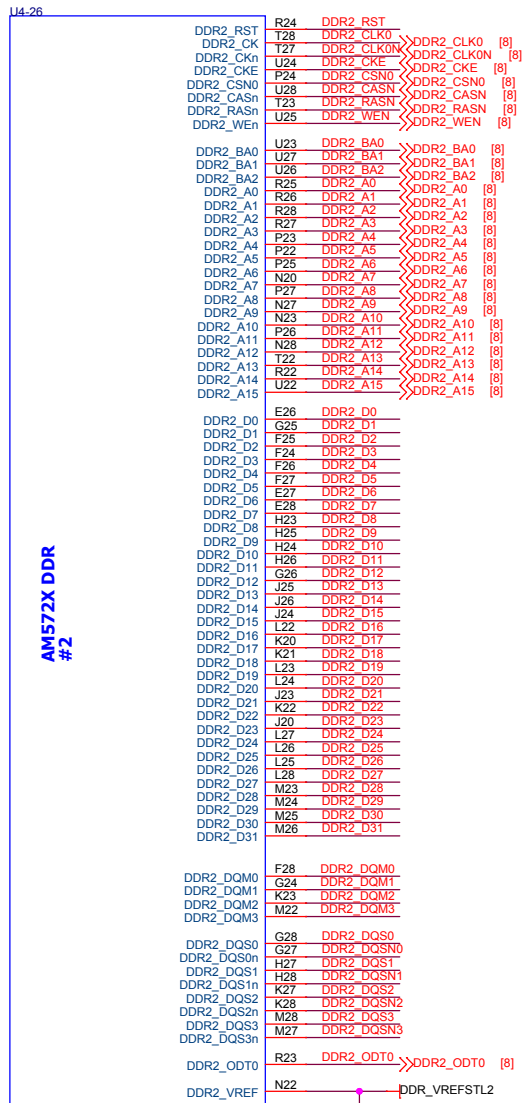


$$\text{Delay (S)} = \text{CT (nF)} / 175 + 0.5 \times 0.001 \text{ (s)} = 0.57\text{S}$$

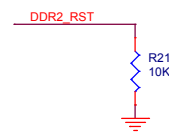
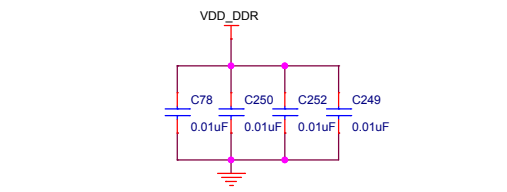
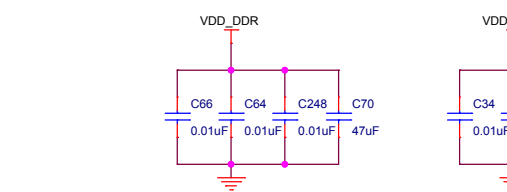
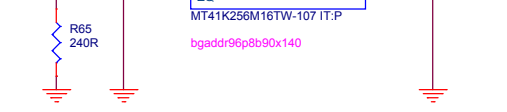
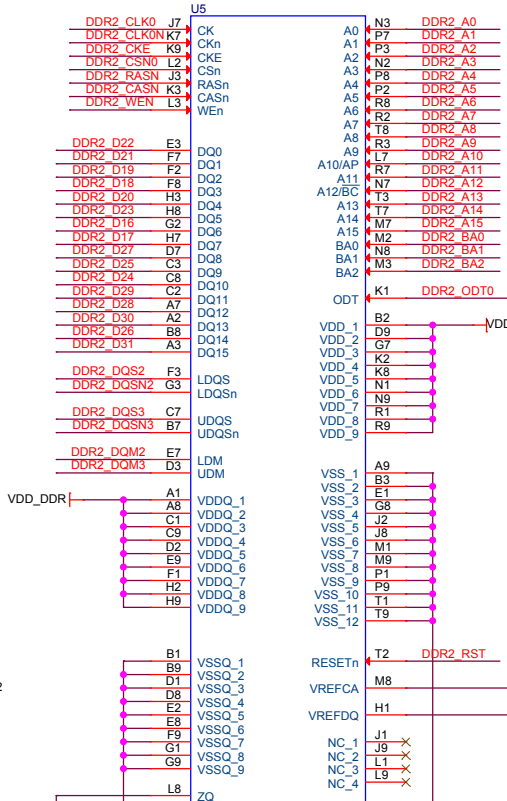
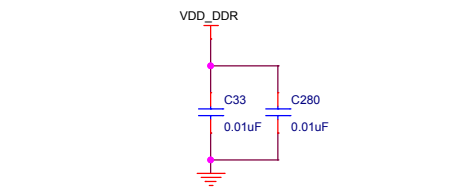
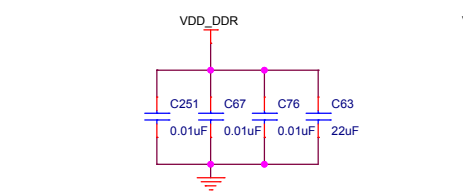
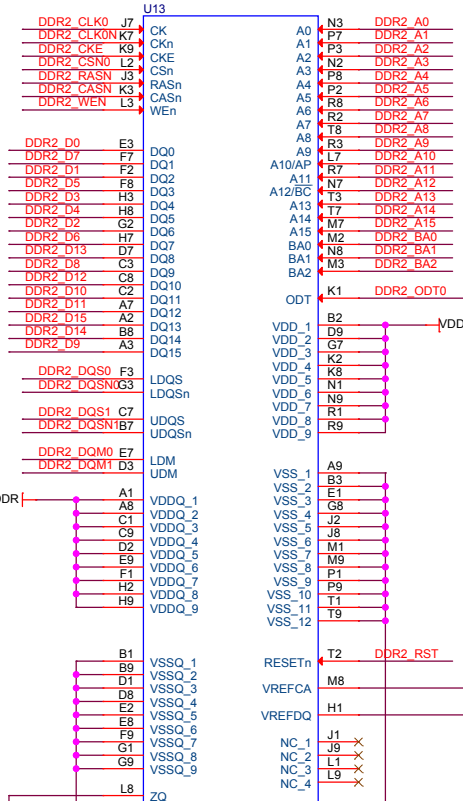
$$\text{VDD} = 1.7\text{V} - 6.5\text{V} (-40^\circ \text{C} < \text{TJ} < +125^\circ \text{C})$$







AM572X #2

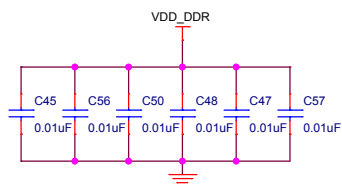
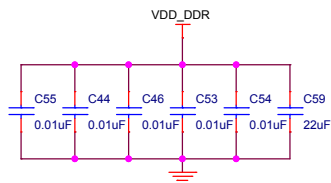
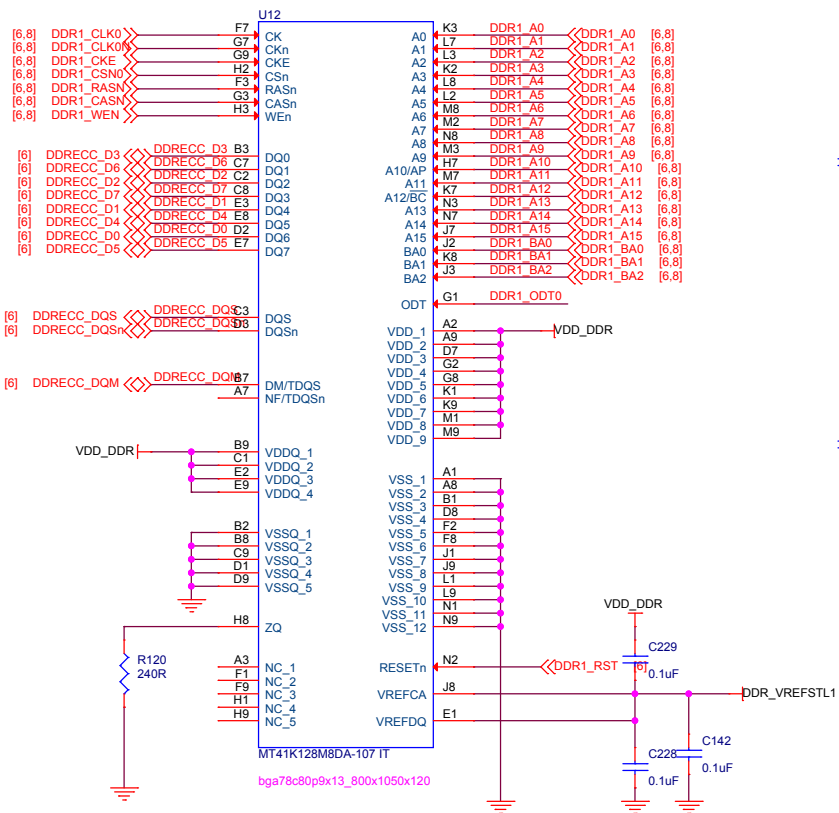


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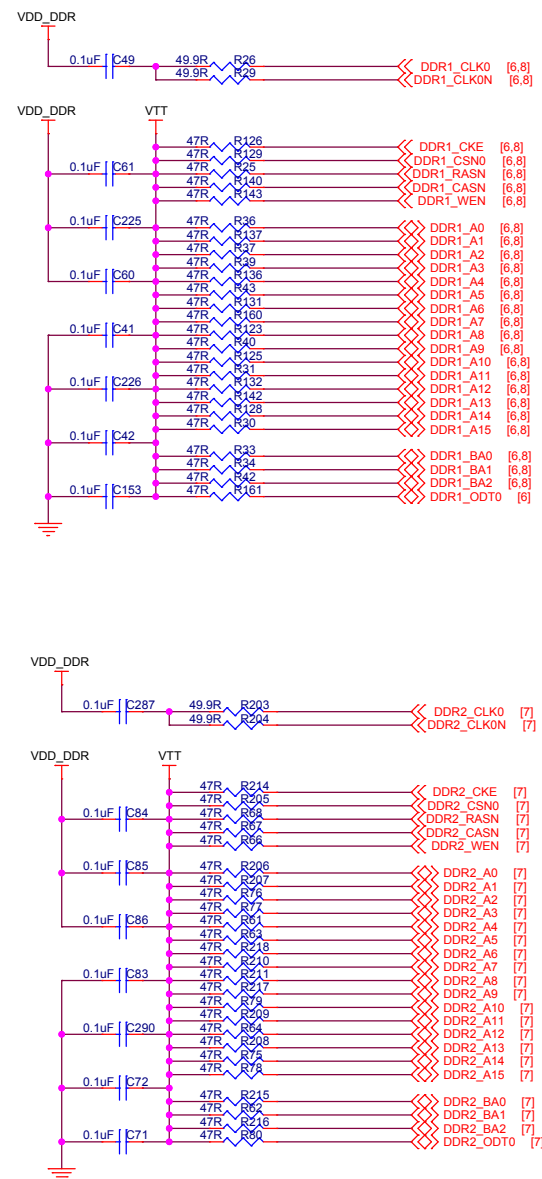
Title: **SOM_AM572x**

Size: A3	Document Number: 07 DDR PART2	Rev: 00
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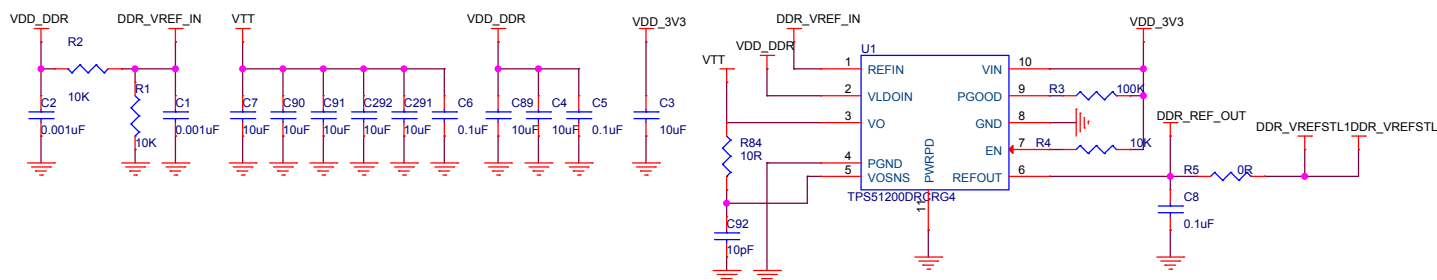
ECC

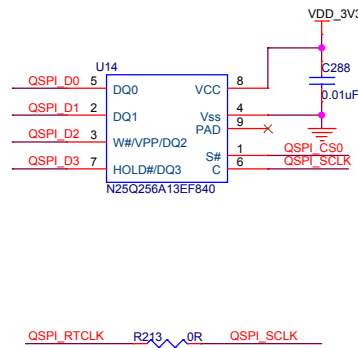
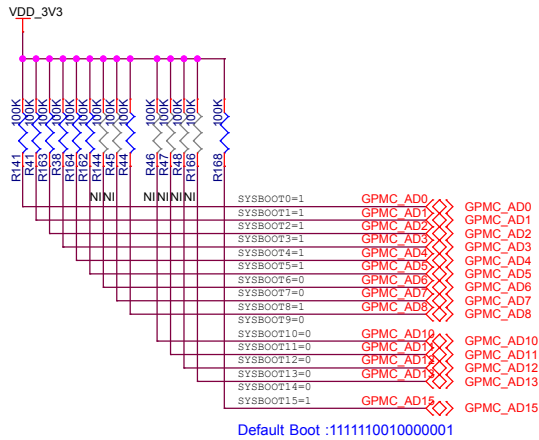
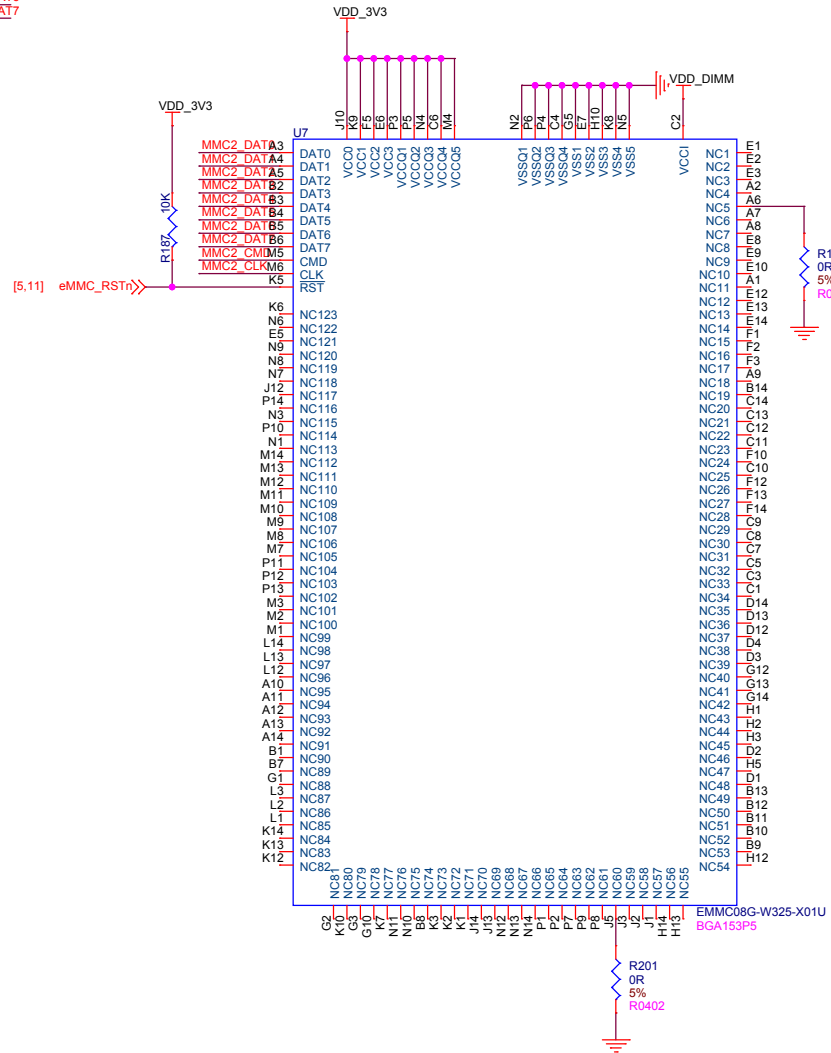
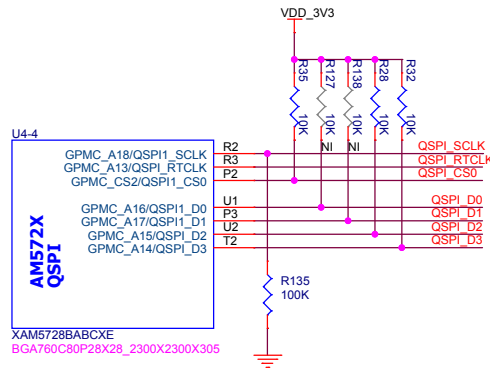
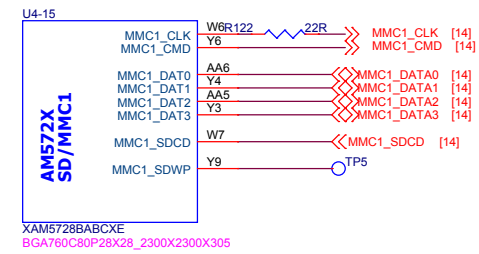
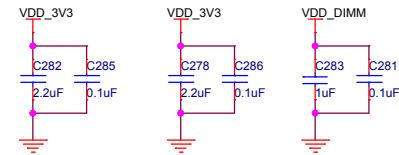
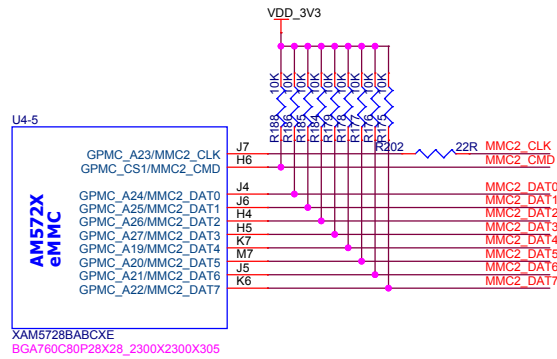
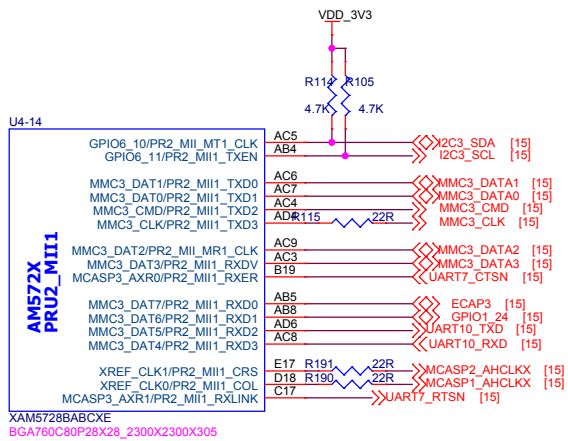


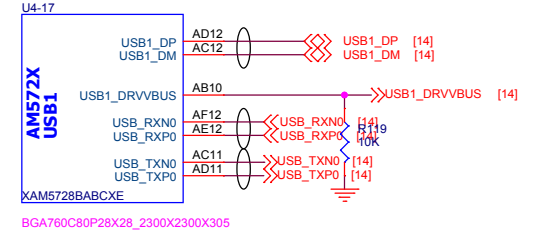
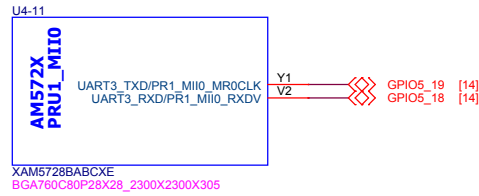
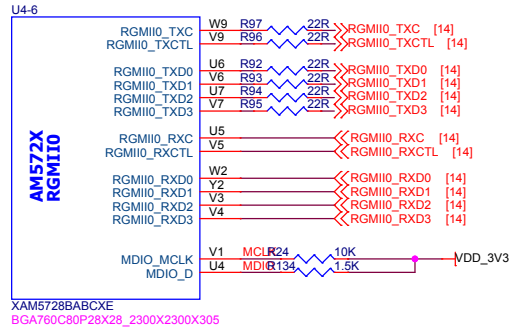
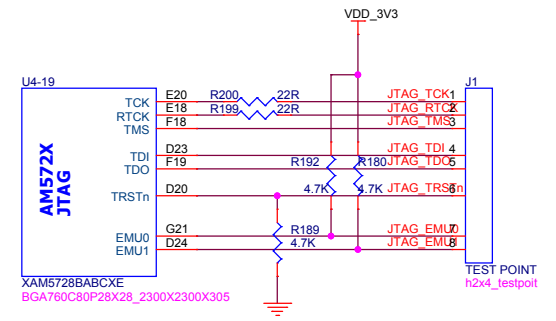
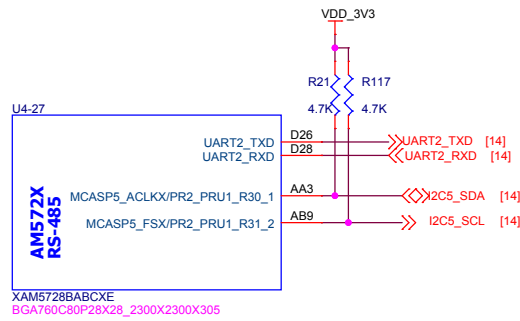
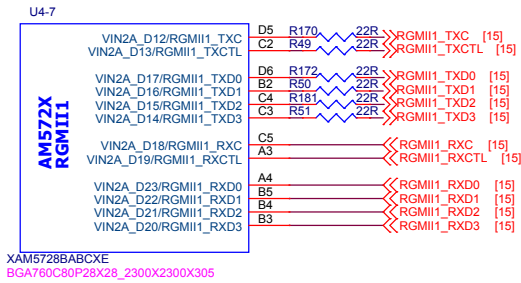
VTT



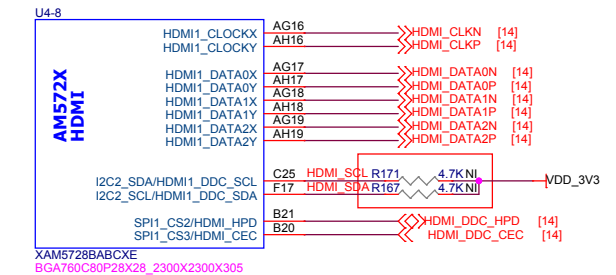
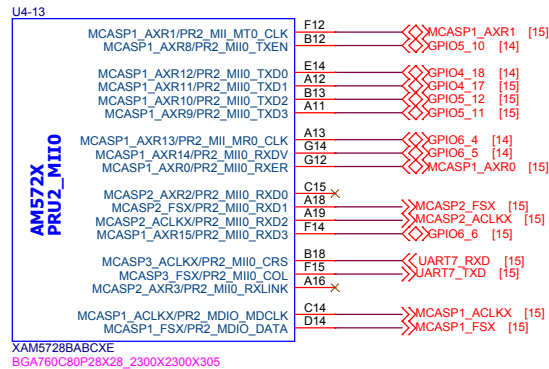
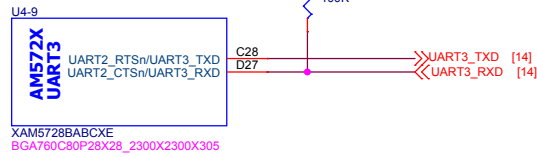
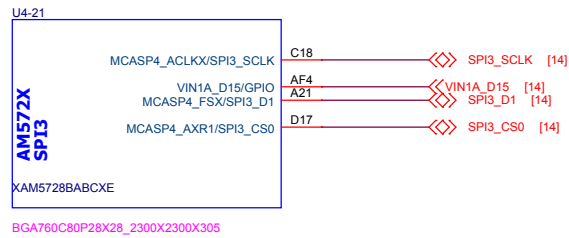
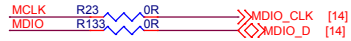
VTT SUPPLY



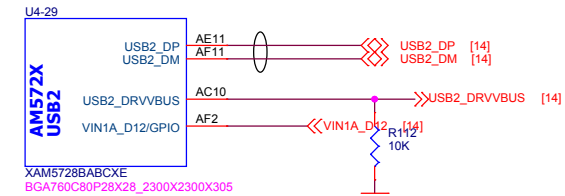




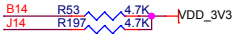
USB2.0 DP or DM pair differential impedance:90Ω ± 10 %
 USB2.0 DP or DM pair common mode impedance:45Ω ± 10 %
 USB3.0 RX or TX pair differential impedance:90Ω ± 7 %
 USB3.0 (SuperSpeed) Tracelength (Total):3500 mil



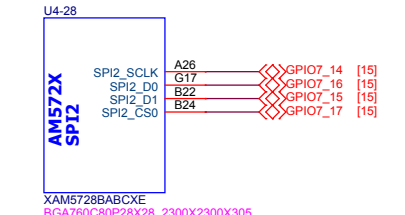
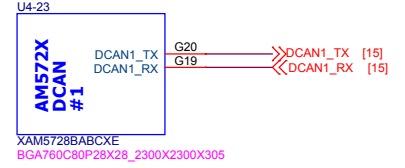
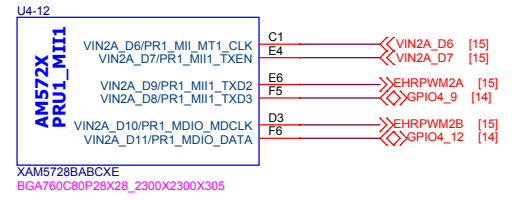
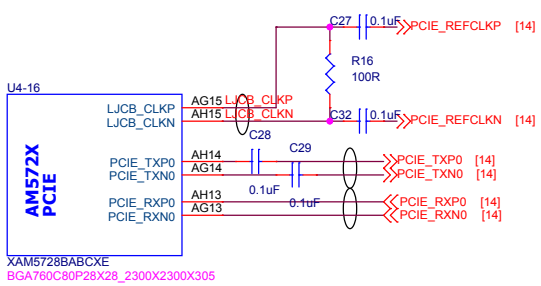
If the basic board has the pull up resistance,
 The HDMI I2C pull up resistance needn't to be connected.



SATA RX or TX pair differential impedance: 100Ω ± 5 %
SATA trancelength total: 3050 mil



PCI-Express RX /TX pair differential impedance: 100Ω ± 0 %
PCI-Express RX or TX trace single-ended impedance: 60Ω ± 15 %
PCI-Express (PCIe) Trancelength (Total): 4700 m il



XAM5728BABCXE
BGA760C80P28X28_2300X2300X305

