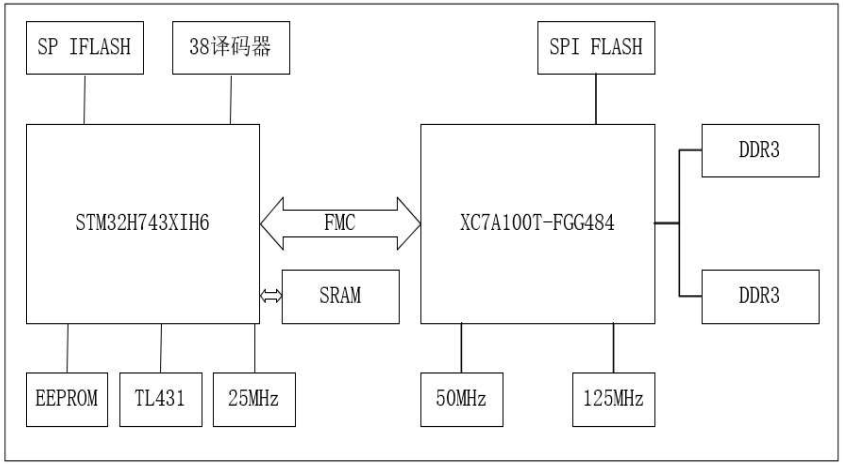
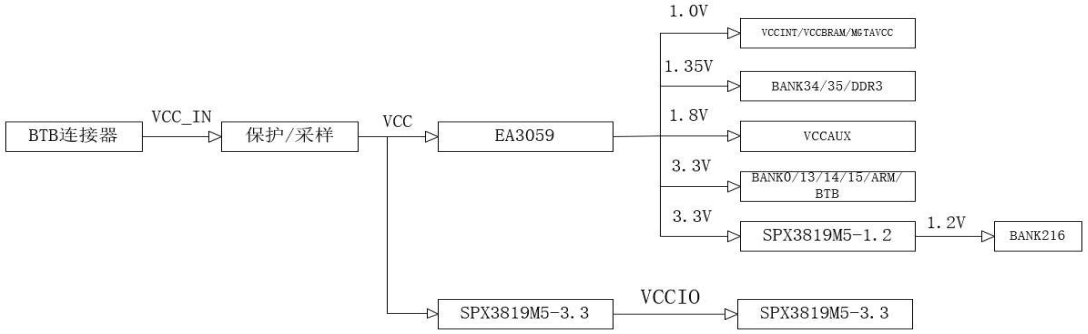
Block Diagram





REV	DATE	PAGES	DESCRIPTION
0.0.0	06/19/2024	ALL	Created

PAGES	DESCRIPTION
0	Title, Note, Block Diagram, Revision History
1	POWER
2	CLOCK
3	FPGA
4	ARM
5	SDRAM
6	DDR3
7	CONN
8	----------
9	----------
A	----------
B	----------
C	----------
D	----------
E	----------
F	----------
10	----------
11	----------
12	----------
13	----------

NOTES:

1.增加0R电阻;
2.FPGA晶振引脚调整到B13_L12N;
3.ARM的LDO供电引脚改为1.8V;

Engineer: ------

Engineer: ------

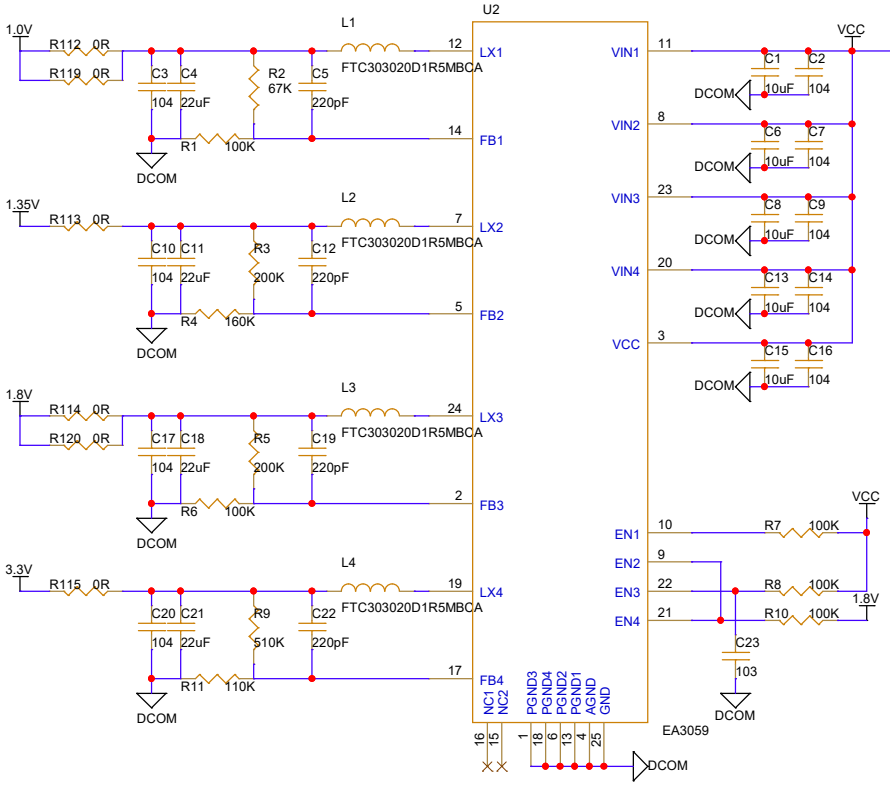
GINGKO TECHNOLOGY

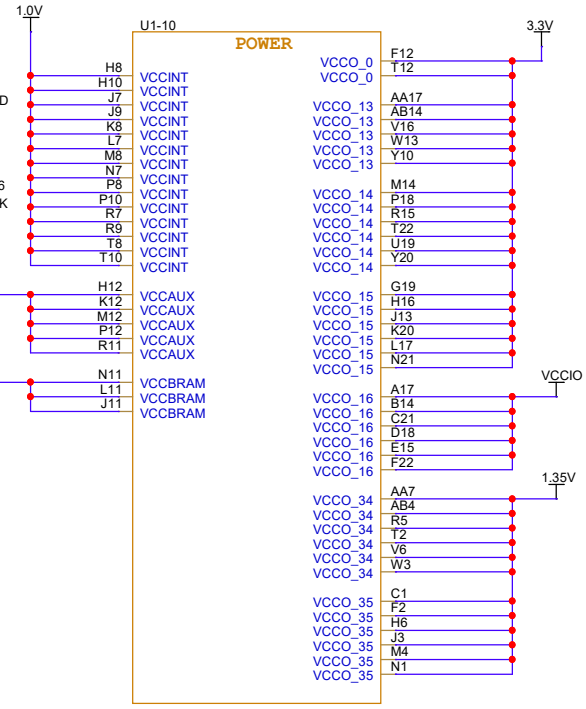
Title: GT7000

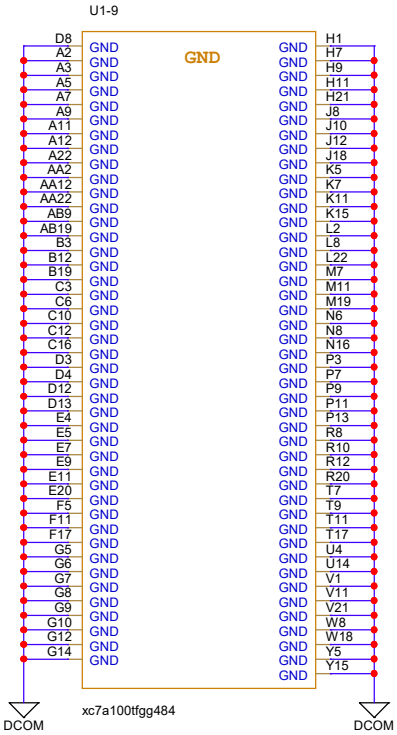
Size: B | Document Number: 0_Title | Rev: 0

Date: Thursday, November 07, 2024 | Sheet 1 of 8

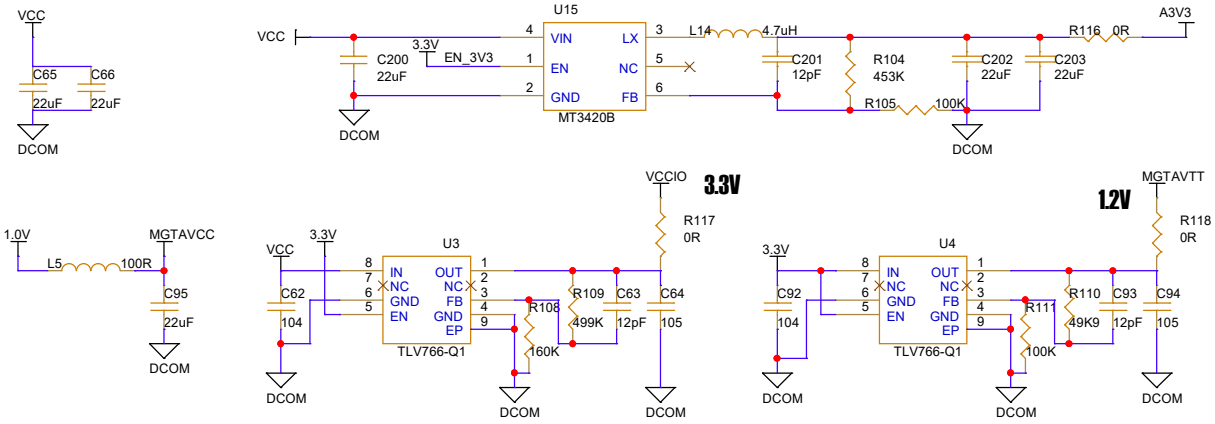
Vout=0.6*R1/R2+0.6

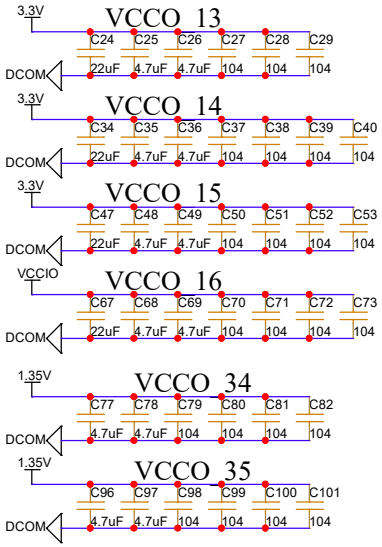


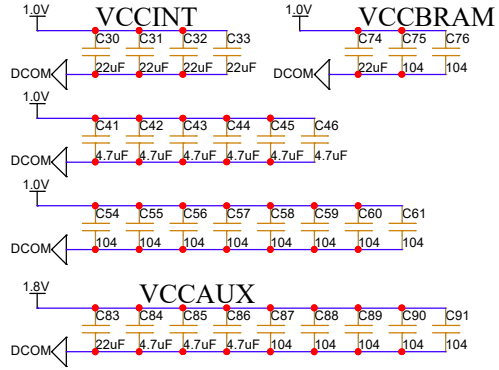




Power On Sequnce:
1.0V -> 1.8V -> 1.35V & 3.3V -> VCCIO

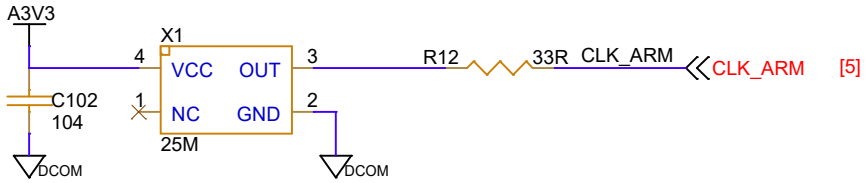




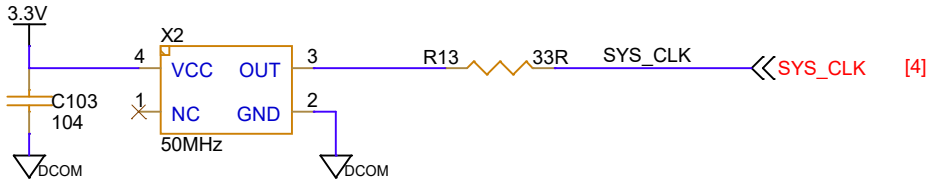


GINGKO TECHNOLOGY		
Title: GT7000		
Size: B	Document Number: 1_POWER	Rev: 0
Date: Thursday, November 07, 2024	Sheet 2 of 8	

ARM



FPGA-SYS



GINGKO TECHNOLOGY		
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Size: A	Document Number: 2_CLK	Rev: 0
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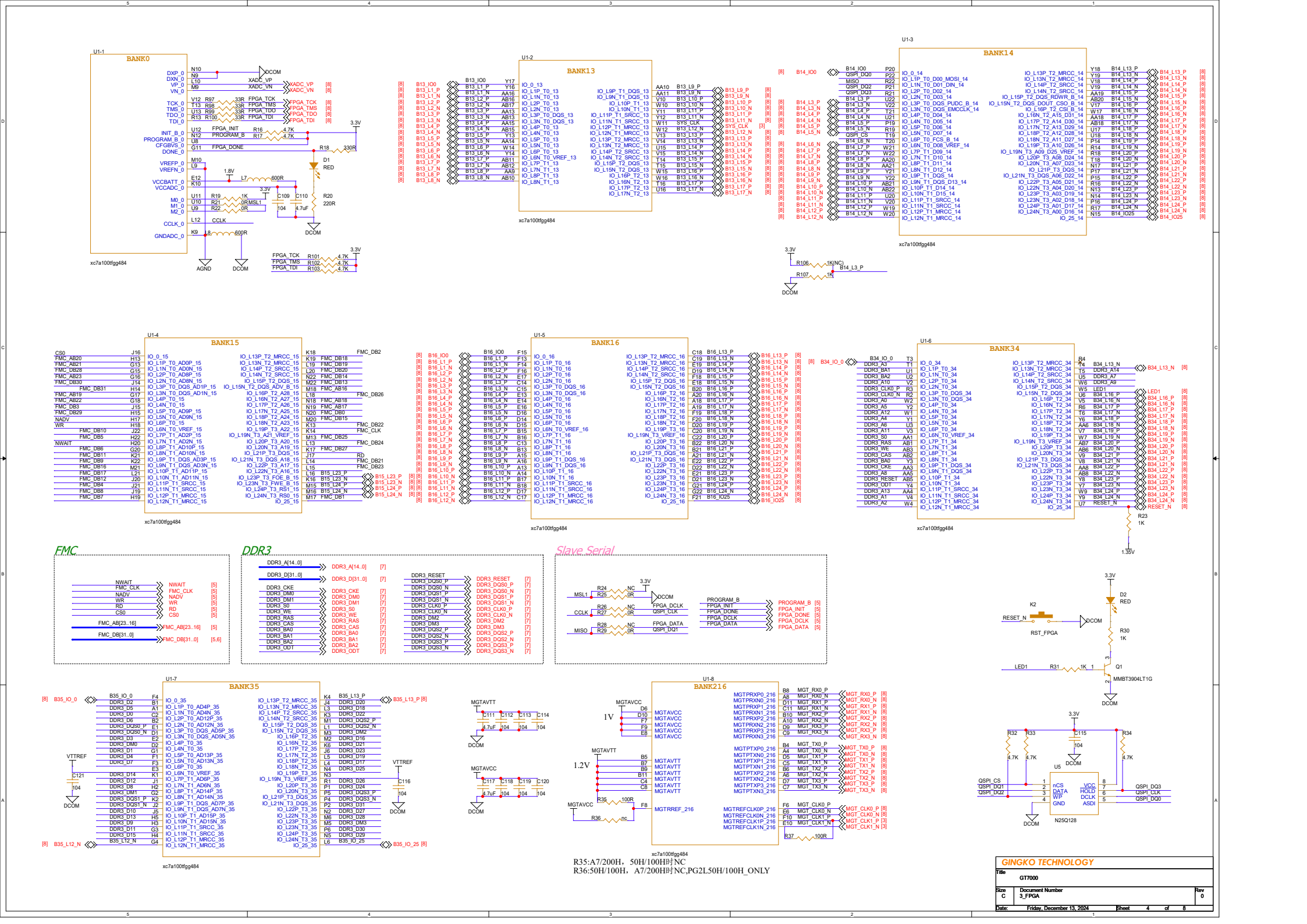
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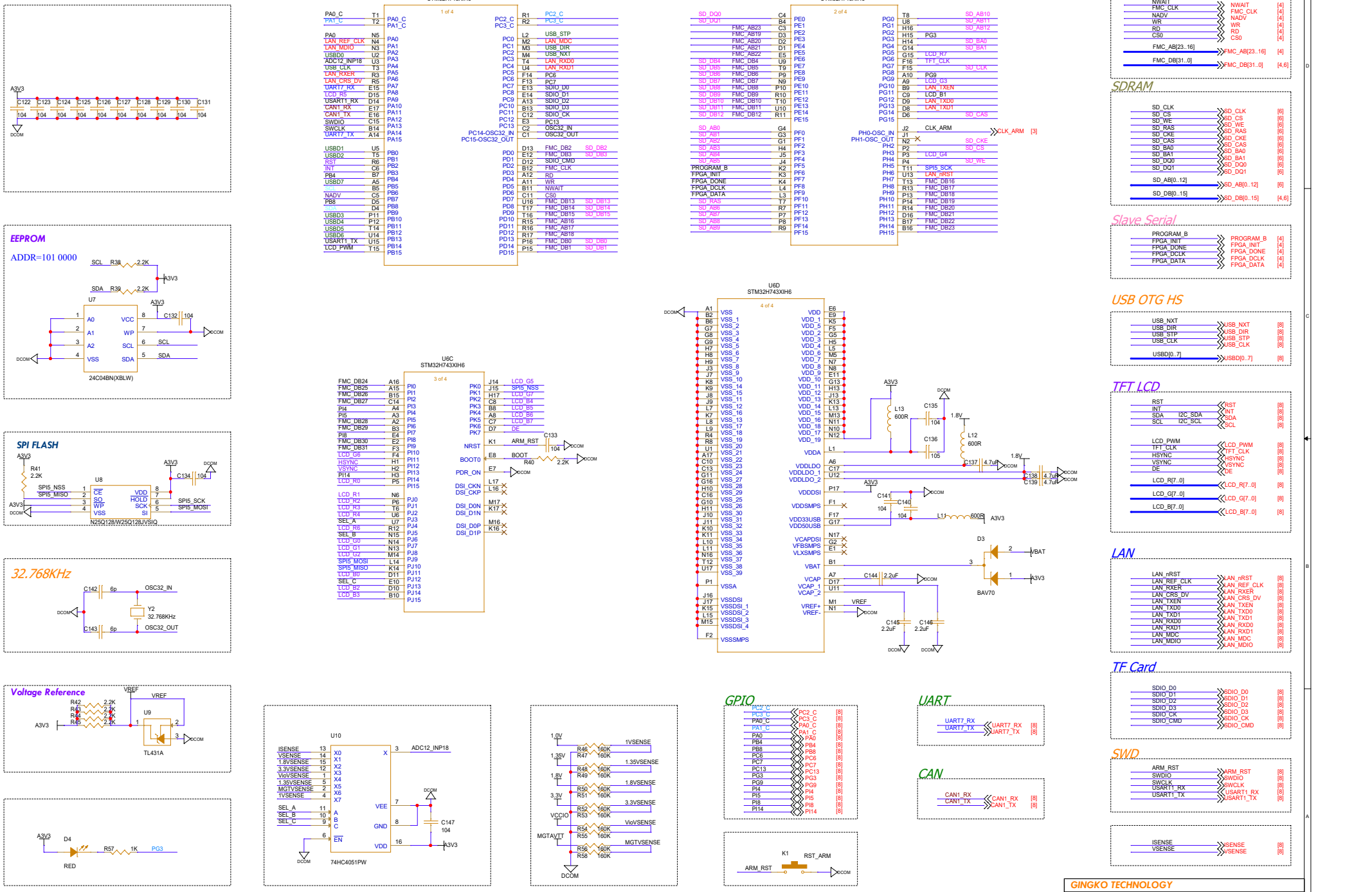
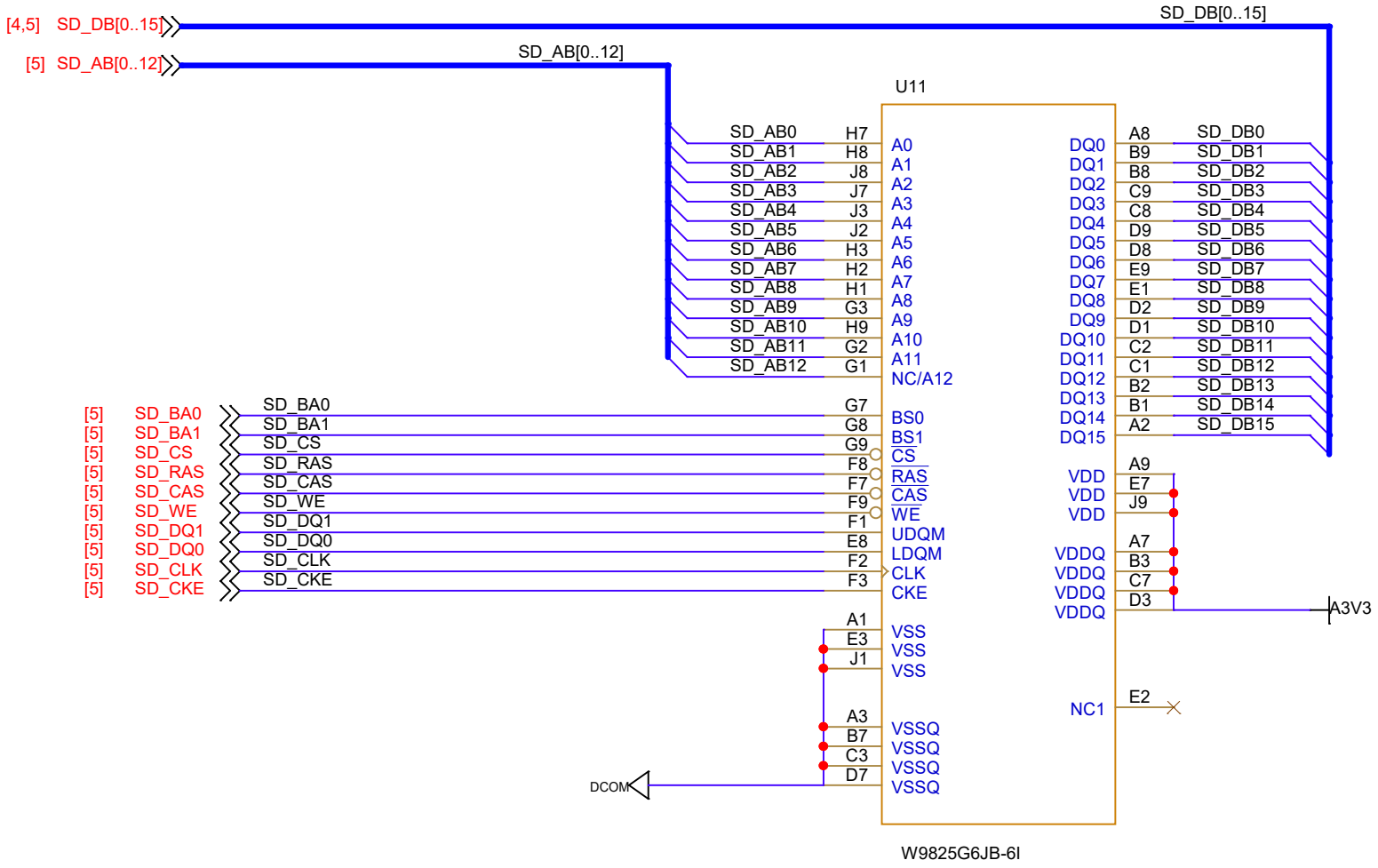
BANK0
xc7a100tfgg484
U1-2
BANK13
xc7a100tfgg484
U1-3
BANK14
xc7a100tfgg484
U1-4
BANK15
xc7a100tfgg484
U1-5
BANK16
xc7a100tfgg484
U1-6
BANK34
xc7a100tfgg484
FMC
DDR3
Slave Serial
U1-7
BANK35
xc7a100tfgg484
U1-8
BANK216
xc7a100tfgg484
R35:A7/200H，50H/100H时NC
R36:50H/100H，A7/200H时NC,PG2L50H/100H_ONLY
GINGKO TECHNOLOGY
Title
GT7000
Size C
Document Number 3_FPGA
Rev 0
Date: Friday, December 13, 2024
Sheet 4 of 8


U6A
STM32H743XIH6
1 of 4
U6B
STM32H743XIH6
2 of 4
U6C
STM32H743XIH6
3 of 4
U6D
STM32H743XIH6
4 of 4
FMC
SDRAM
Slave Serial
USB OTG HS
TFT LCD
LAN
TF Card
SWD
EEPROM
ADDR=101 0000
24C04BN(XBLW)
SPI FLASH
N25Q128W25Q128JVSIQ
32.768KHz
Voltage Reference
TL431A
74HC4051PW
GPIO
UART
CAN
GINGKO TECHNOLOGY
Title
GT7000
Size C
Document Number 4_ARM
Rev 0
Date: Tuesday, October 29, 2024
Sheet 5 of 8



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Size: A	Document Number: 5_SDRAM	Rev: 0
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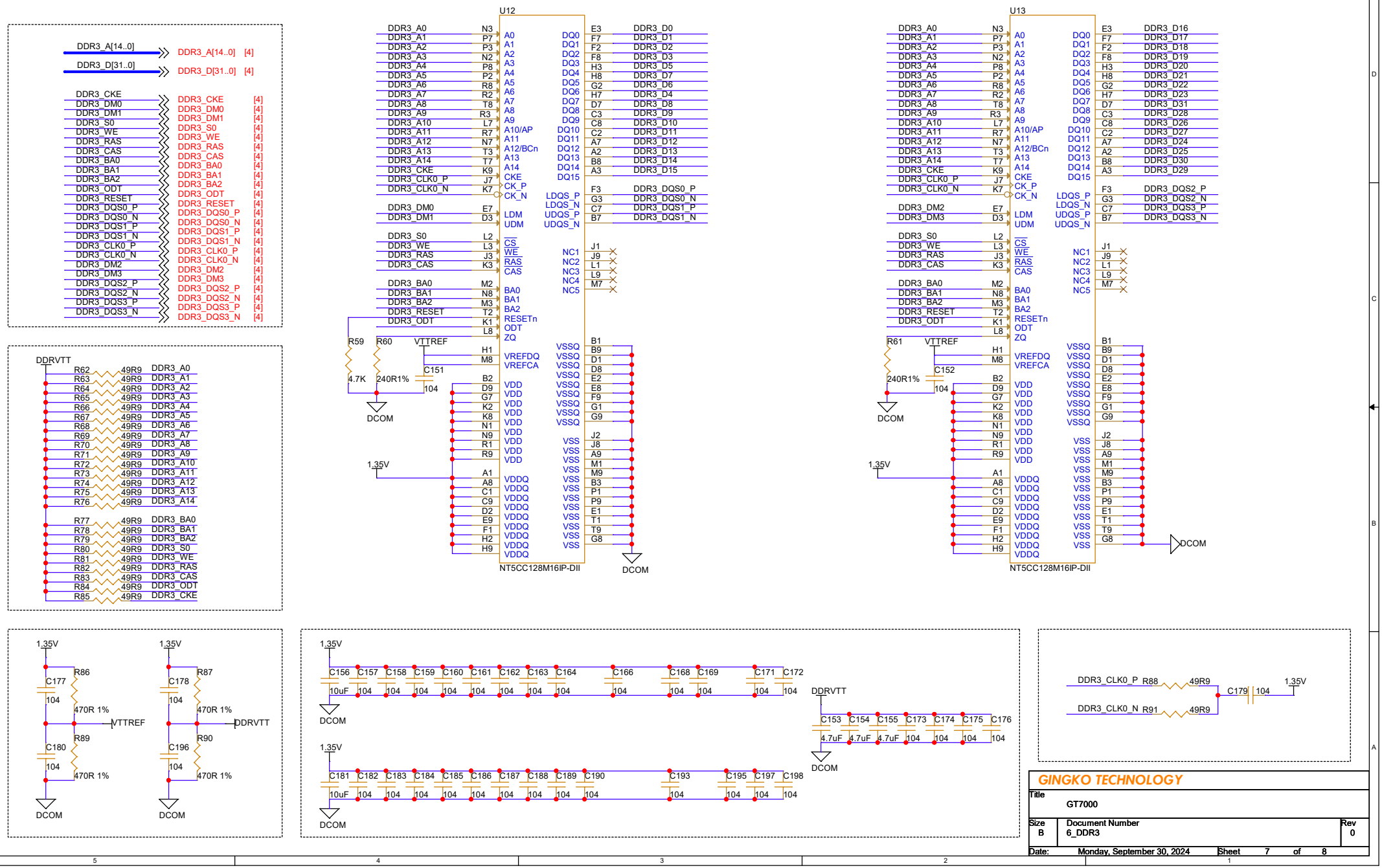
DDR3_A[14..0]
DDR3_A[14..0] [4]
DDR3_D[31..0]
DDR3_D[31..0] [4]
DDR3_CKE
DDR3_DM0
DDR3_DM1
DDR3_S0
DDR3_WE
DDR3_RAS
DDR3_CAS
DDR3_BA0
DDR3_BA1
DDR3_BA2
DDR3_ODT
DDR3_RESET
DDR3_DQS0_P
DDR3_DQS0_N
DDR3_DQS1_P
DDR3_DQS1_N
DDR3_CLK0_P
DDR3_CLK0_N
DDR3_DM2
DDR3_DM3
DDR3_DQS2_P
DDR3_DQS2_N
DDR3_DQS3_P
DDR3_DQS3_N
U12
U13
NT5CC128M16IP-DII
DDR3_A0
DDR3_A1
DDR3_A2
DDR3_A3
DDR3_A4
DDR3_A5
DDR3_A6
DDR3_A7
DDR3_A8
DDR3_A9
DDR3_A10
DDR3_A11
DDR3_A12
DDR3_A13
DDR3_A14
DDR3_CKE
DDR3_CLK0_P
DDR3_CLK0_N
DDR3_DM0
DDR3_DM1
DDR3_S0
DDR3_WE
DDR3_RAS
DDR3_CAS
DDR3_BA0
DDR3_BA1
DDR3_BA2
DDR3_RESET
DDR3_ODT
R59
R60
VTTREF
4.7K
240R1%
C151
104
DCOM
1.35V
R61
C152
DDRVTT
49R9
R62
R63
R64
R65
R66
R67
R68
R69
R70
R71
R72
R73
R74
R75
R76
R77
R78
R79
R80
R81
R82
R83
R84
R85
R86
R87
R88
R89
R90
R91
C177
C178
C179
C180
C196
470R 1%
C153
C154
C155
C156
C157
C158
C159
C160
C161
C162
C163
C164
C166
C168
C169
C171
C172
C173
C174
C175
C176
C181
C182
C183
C184
C185
C186
C187
C188
C189
C190
C193
C195
C197
C198
10uF
4.7uF
GINGKO TECHNOLOGY
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Size
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Document Number
6_DDR3
Rev
0
Date:
Monday, September 30, 2024
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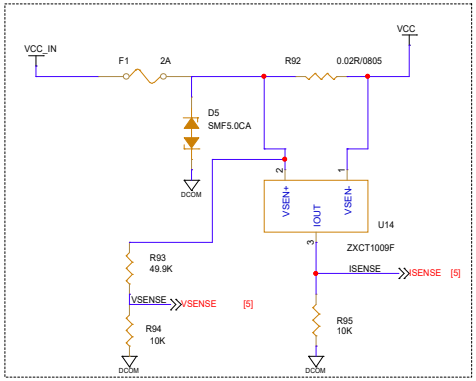
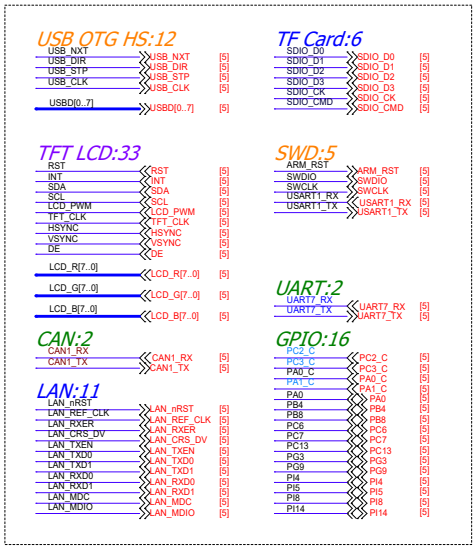
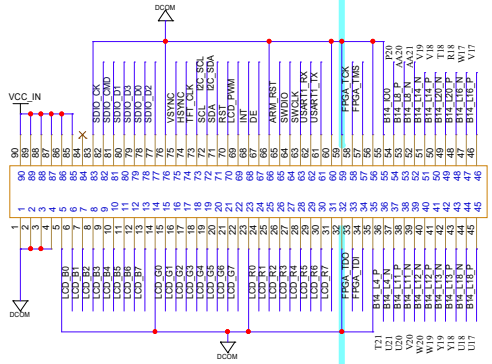




注意：3.3V为输出电源



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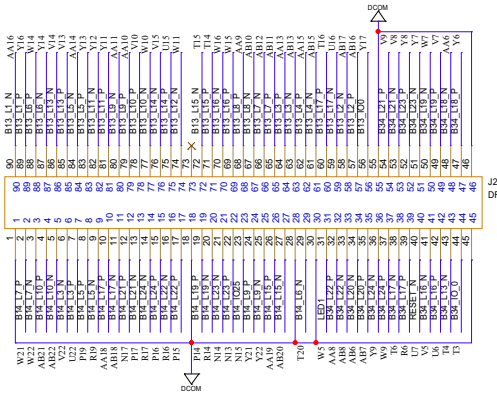
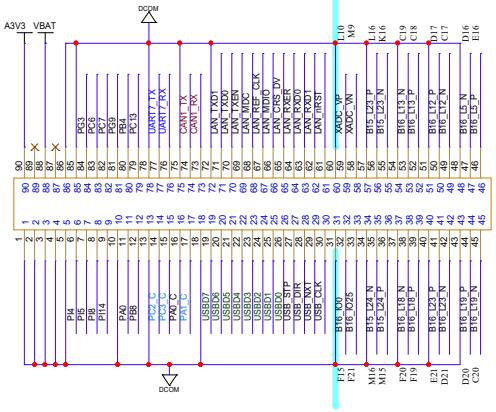


上右

ARM

FPGA

注意：PC ?_C与PC ?不可同时使用



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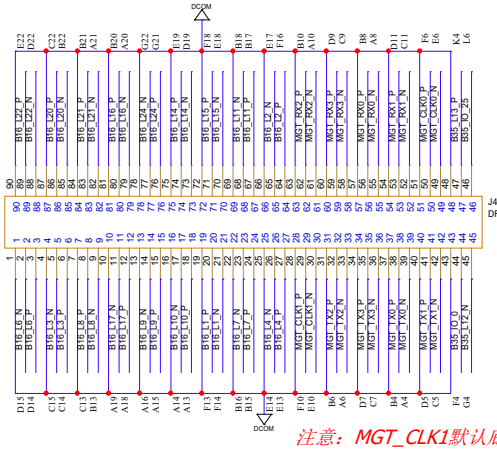
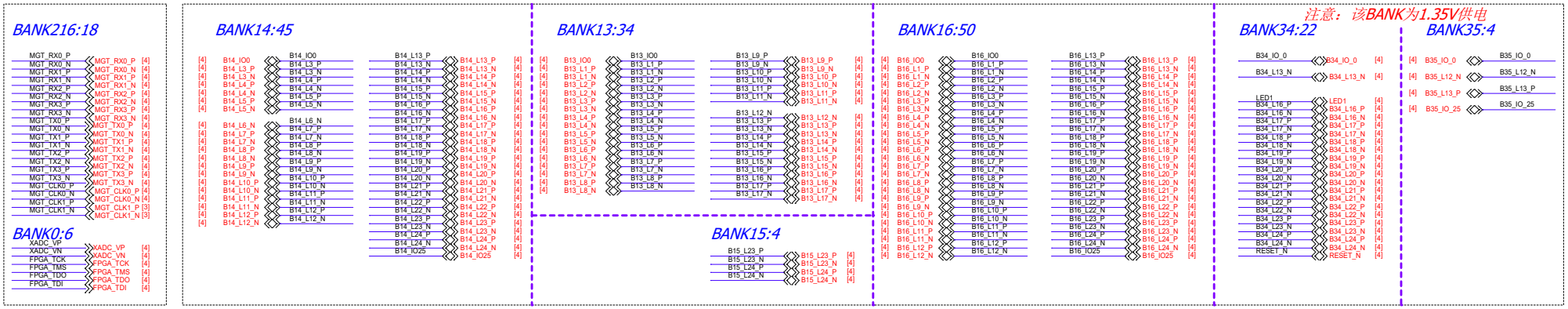


下右

注意：MGT_CLK1默认底板不可用

注意：该BANK为1.35V供电



GINGKO TECHNOLOGY		
Title: GT7000		
Size: C	Document Number: 7_CONN	Rev: 0
Date: Friday, December 13, 2024	Sheet 8 of 8	