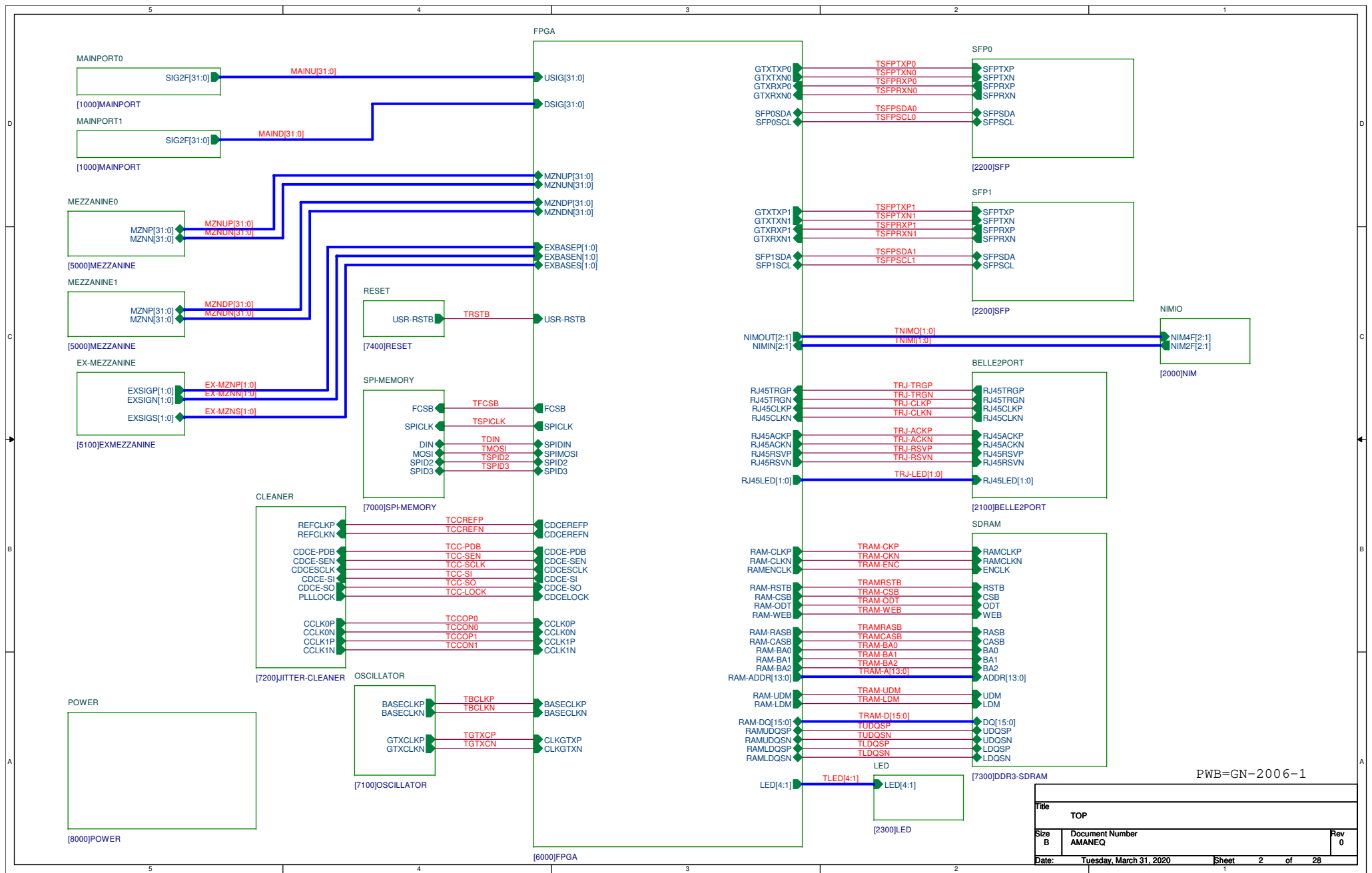


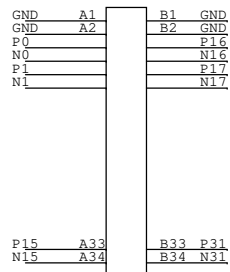
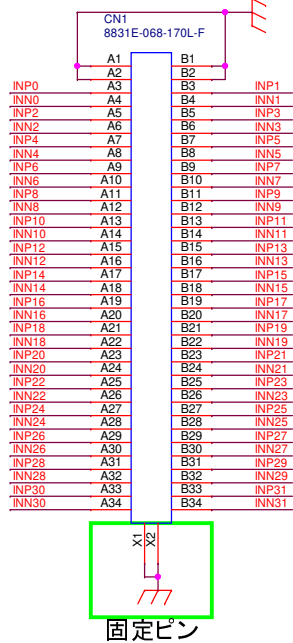
A main electronics for network oriented trigger-less data acquisition system (AMANEQ)

Rev 3.6
2020.03.31
R. Honda

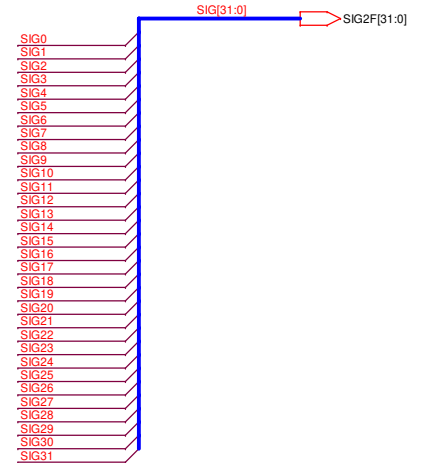
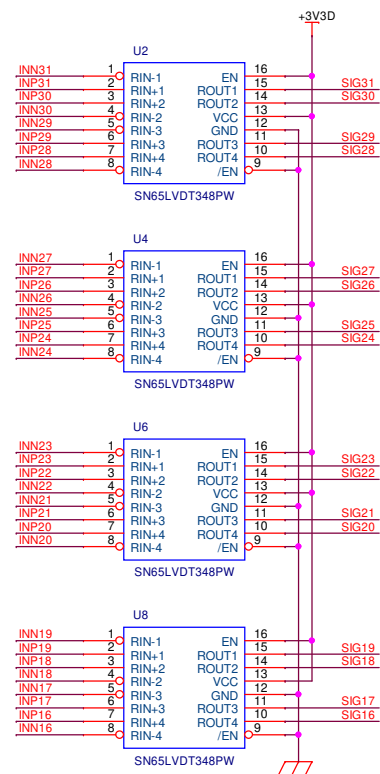
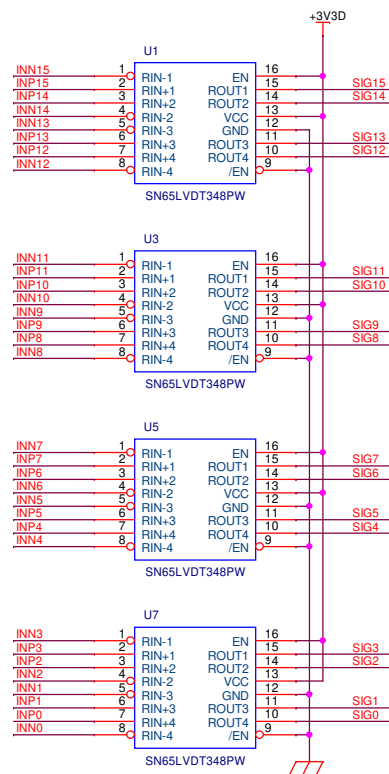
PWB=GN-2006-1

Title		
TITLE		
Size A	Document Number AMANEQ	Rev 0
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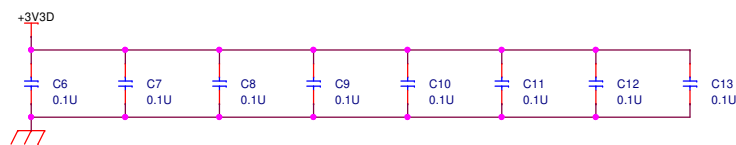
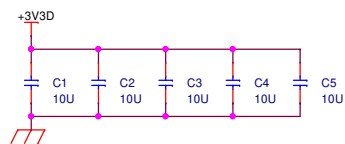




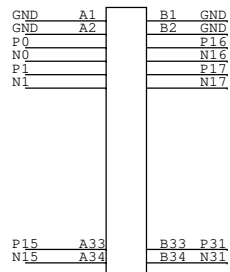
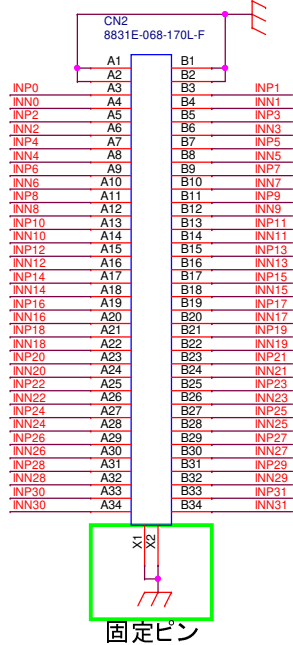
こうなるようにFPGAの
制約で入れ替える
(配線名でなく制約で行うこと)



B A列

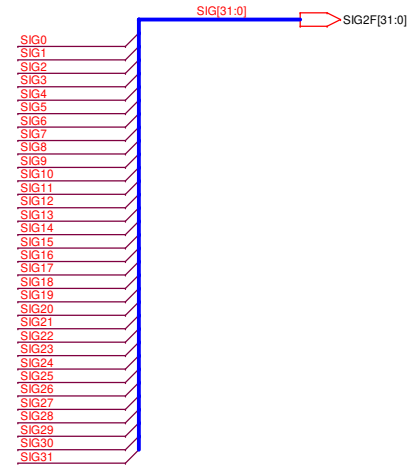
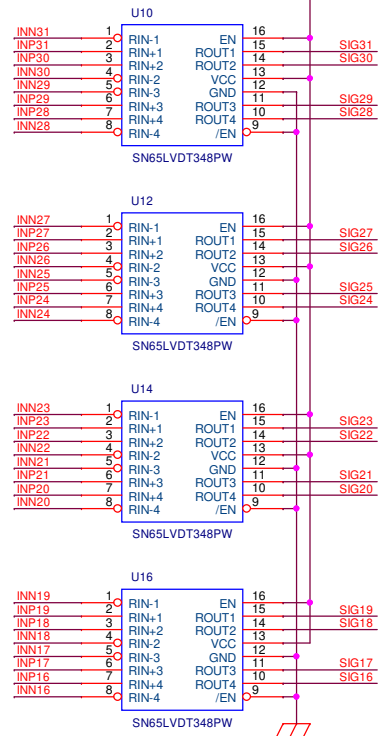
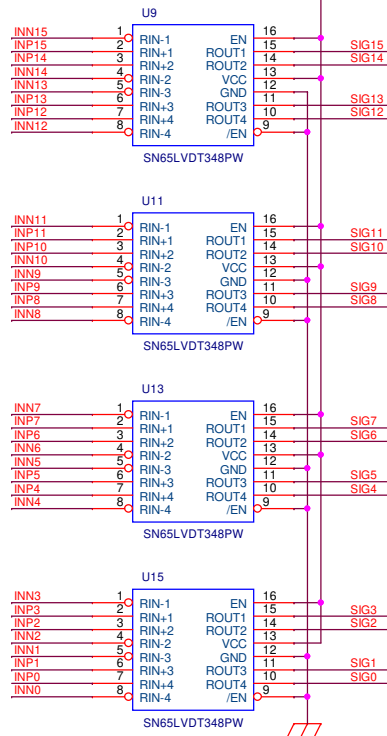
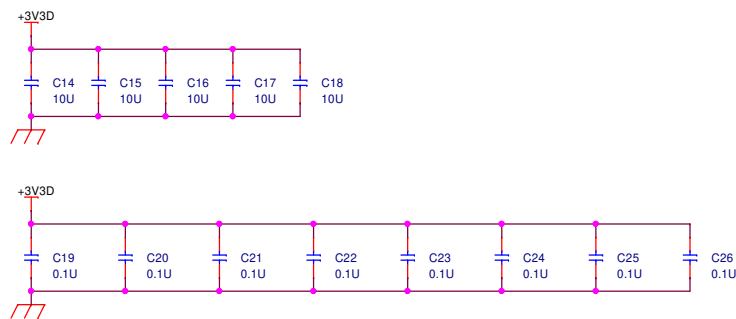


Title			
Main port			
Size	Document Number	Rev	
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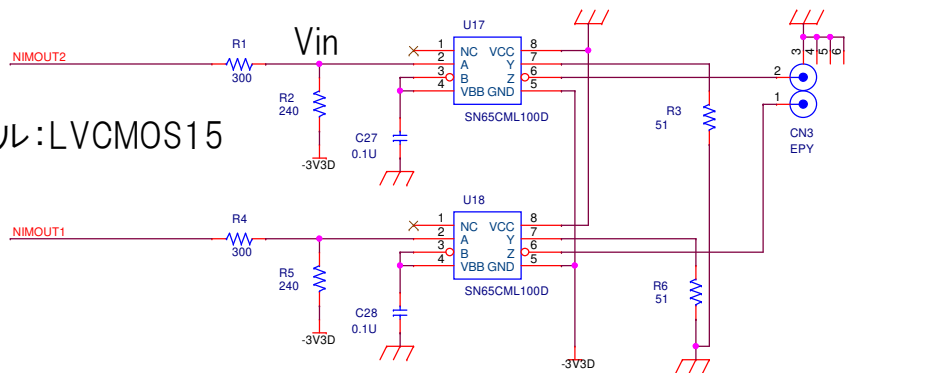
こうなるようにFPGAの
制約で入れ替える
(配線名でなく制約で行うこと)

B A列

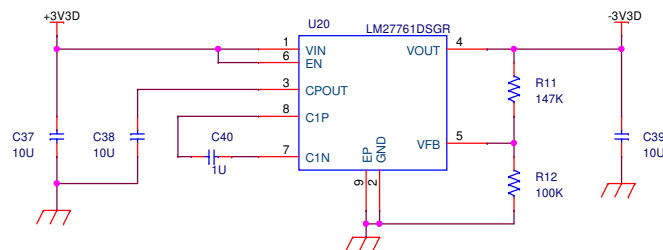
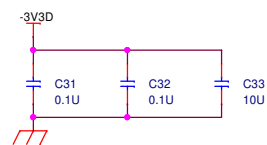
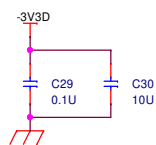


Title		Main port	
Size	Document Number	Rev	
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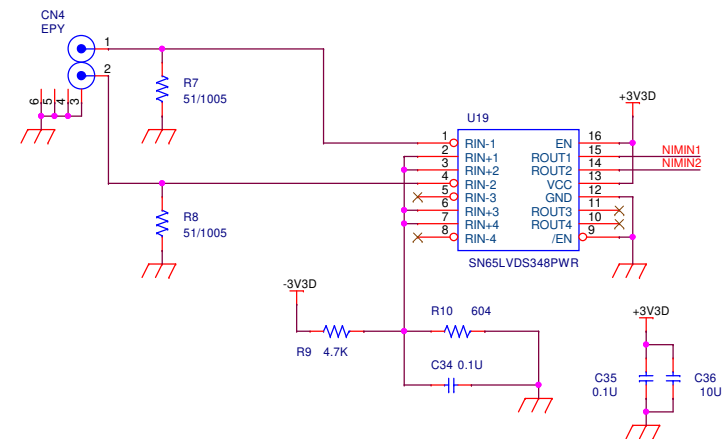
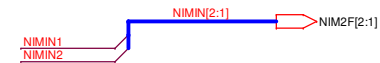
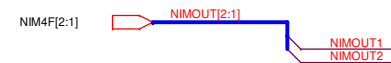
入力レベル:LVCMOS15



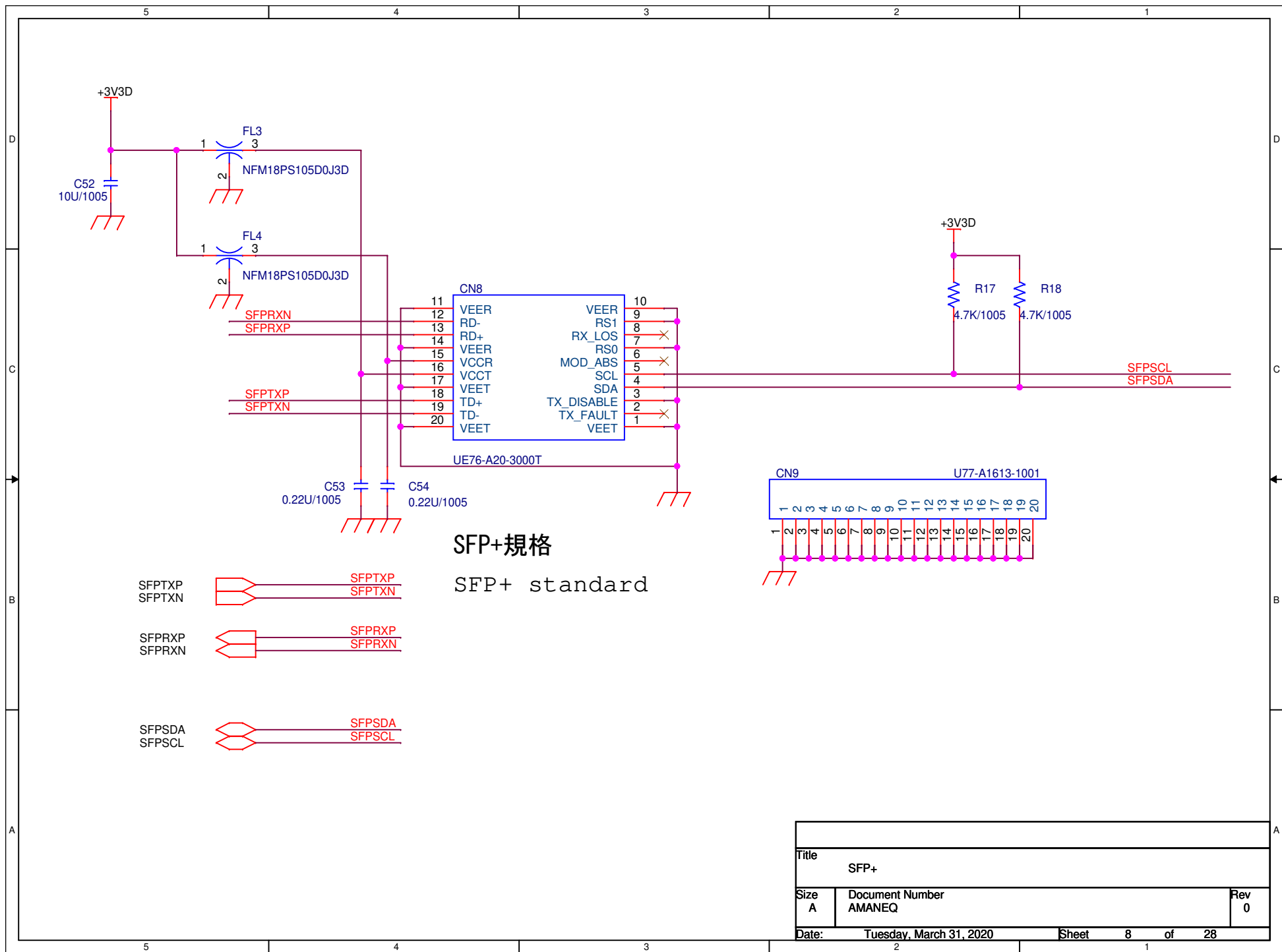
Vin: -1.00V @ High
Vin: -1.67V @ Low
VBB: -1.35V
電流: 8.3mA @ High



出力電位: -3.0V

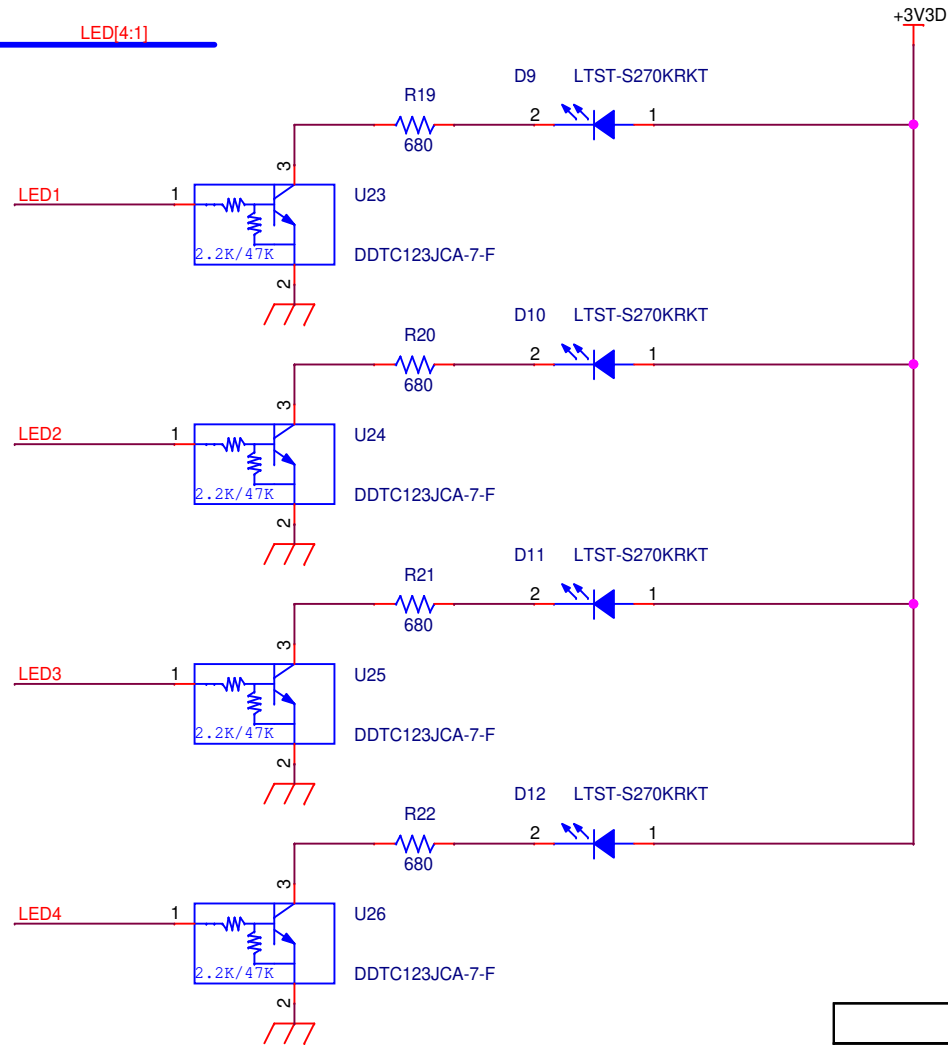


Title			
NIM			
Size	Document Number		
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			0
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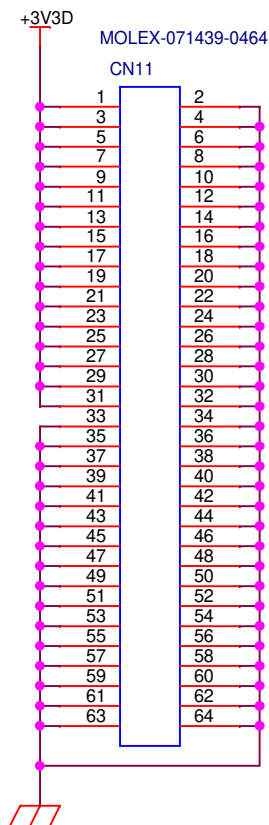
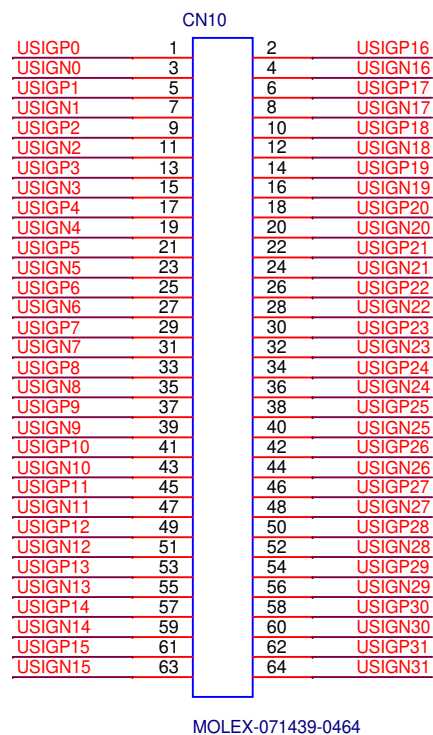
LED[4:1]

LED[4:1]



Title		
LED		
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差動信号
特性インピーダンス: 100 ohm

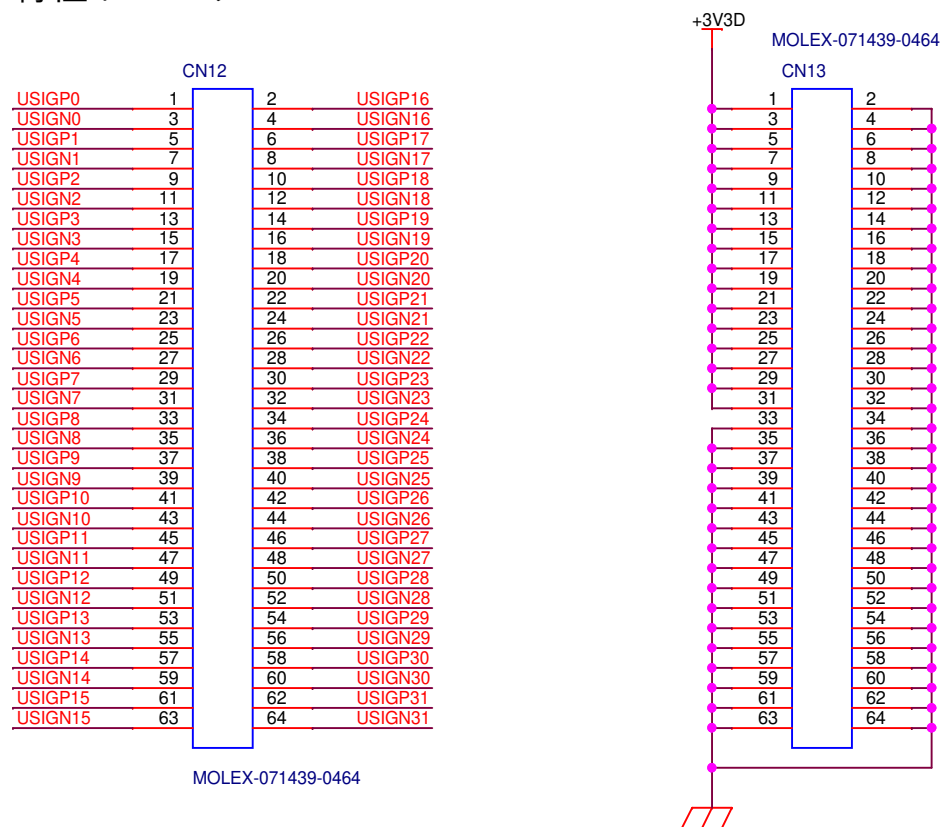


USIGP[31:0] MZNP[31:0]

USIGN[31:0] MZNN[31:0]

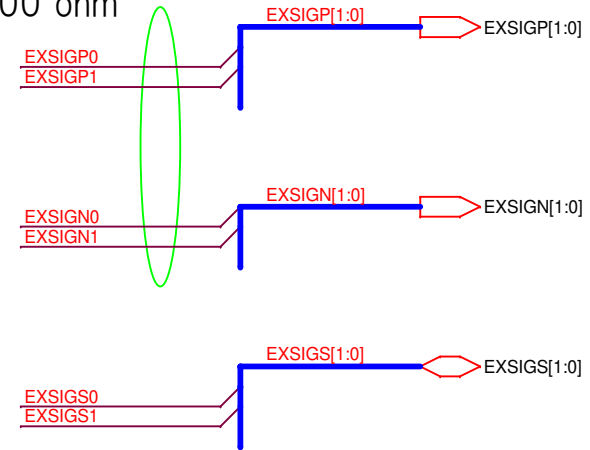
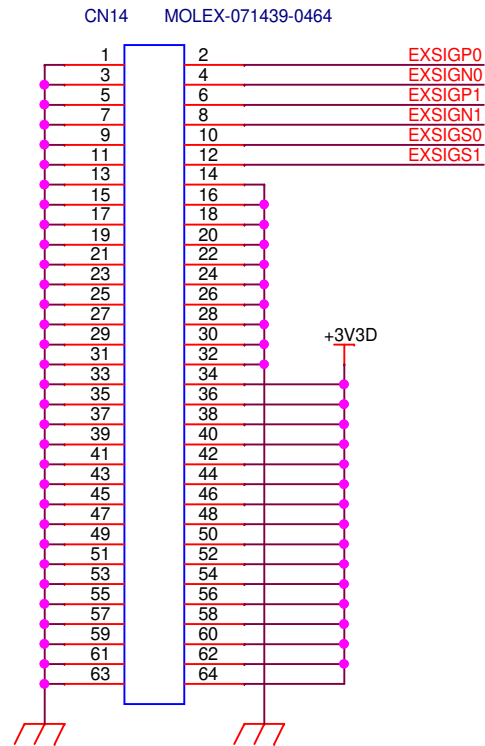
Title		
MEZZANINE BASE		
Size	Document Number	Rev
A	AMANEQ	0
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差動信号
特性インピーダンス: 100 ohm

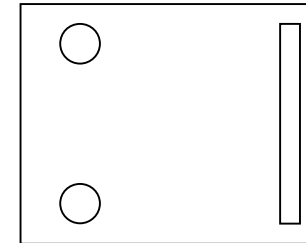


Title		
MEZZANINE BASE		
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A	AMANEQ	0
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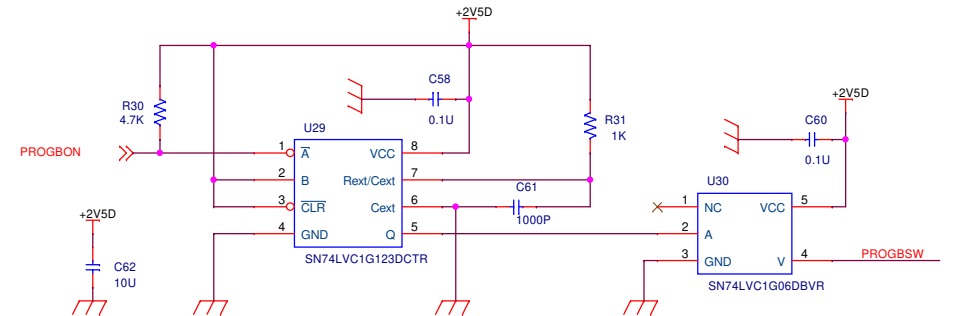
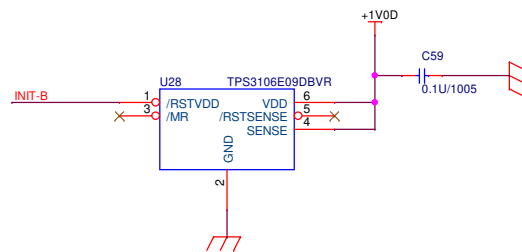
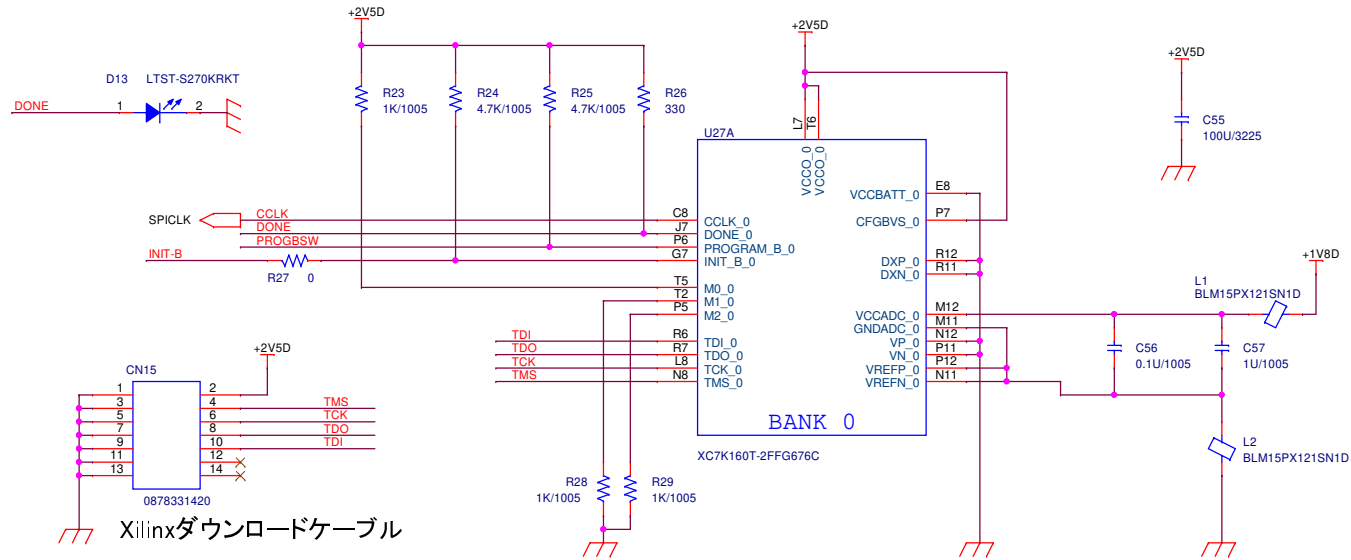
差動信号
特性インピーダンス: 100 ohm



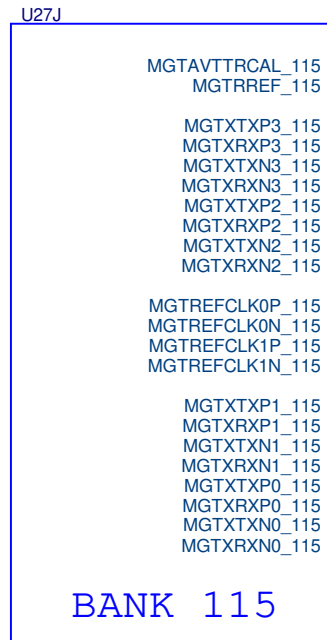
小型メザニン



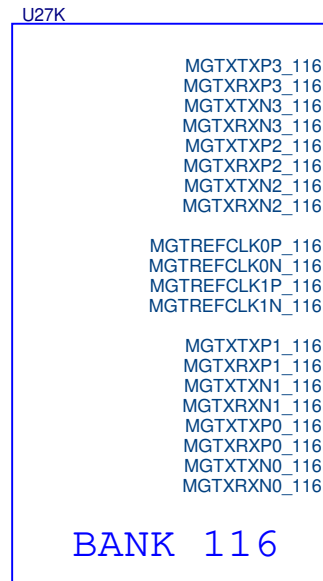
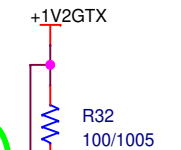
Title		
EXTRA BASE		
Size	Document Number	Rev
A	AMANEQ	0
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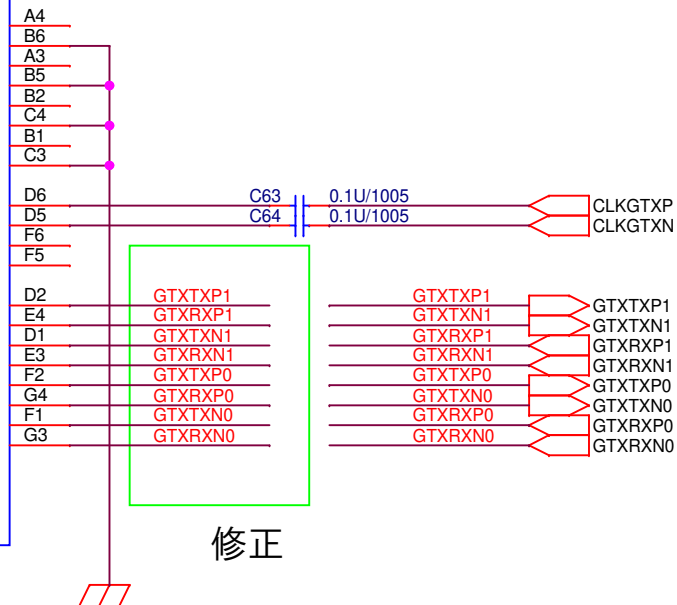
Title		
BANK0		
Size	Document Number	Rev
B	AMANEQ	0
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XC7K160T-2FFG676C



XC7K160T-2FFG676C



Title		
BANK115_116		
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A	AMANEQ	0
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SPID3
SPID2
SPIDIN
SPIMOSI
FCSB

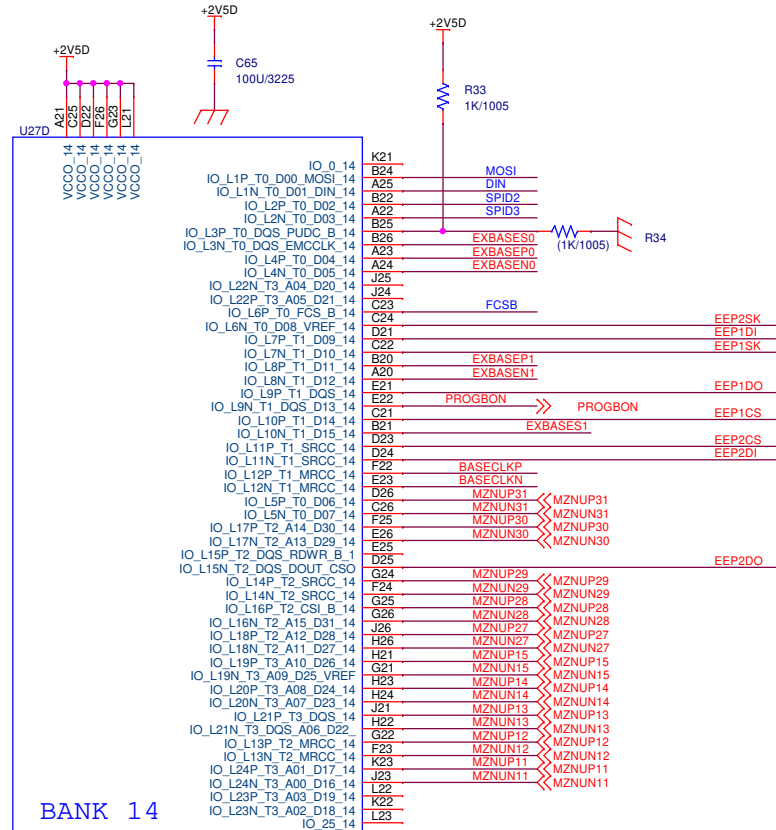
BASECLKP
BASECLKN

BASECLKP
BASECLKN

EXBASEP[1:0]
EXBASEN[1:0]

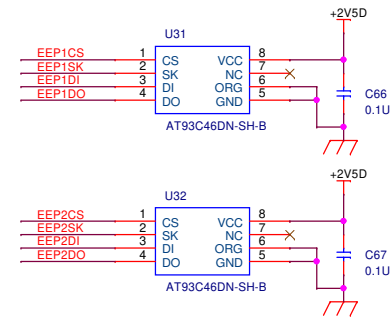
EXBASES[1:0]

差動信号
特性インピーダンス: 100 ohm



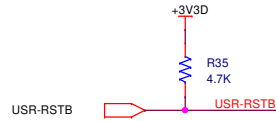
BANK 14

XC7K160T-2FFG676C



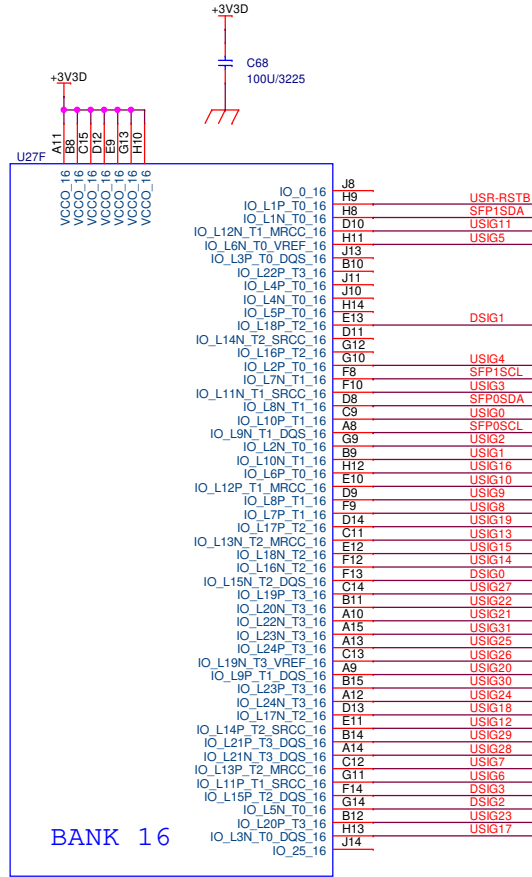
Title			
BANK14_15			
Size	Document Number	Rev	
B	AMANEQ	0	
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USIG[31:0]
DSIG[31:0]

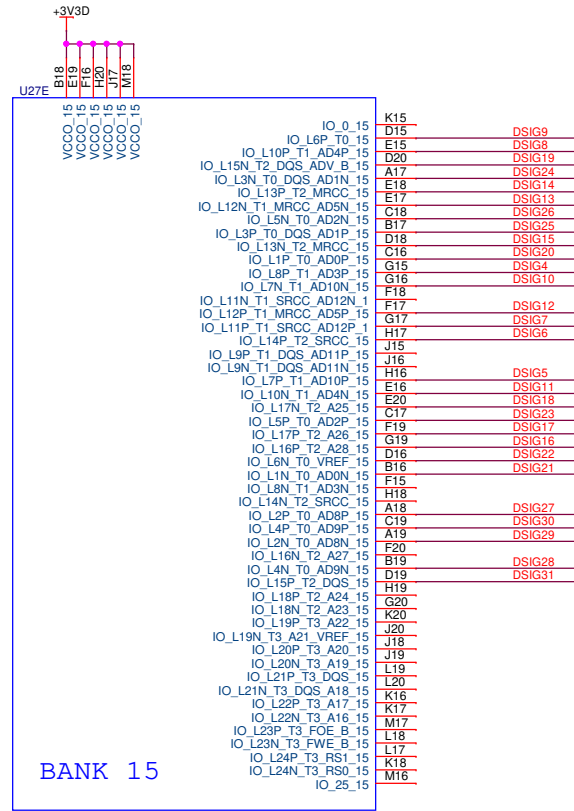


SFP0SCL
SFP0SDA

SFP1SCL
SFP1SDA

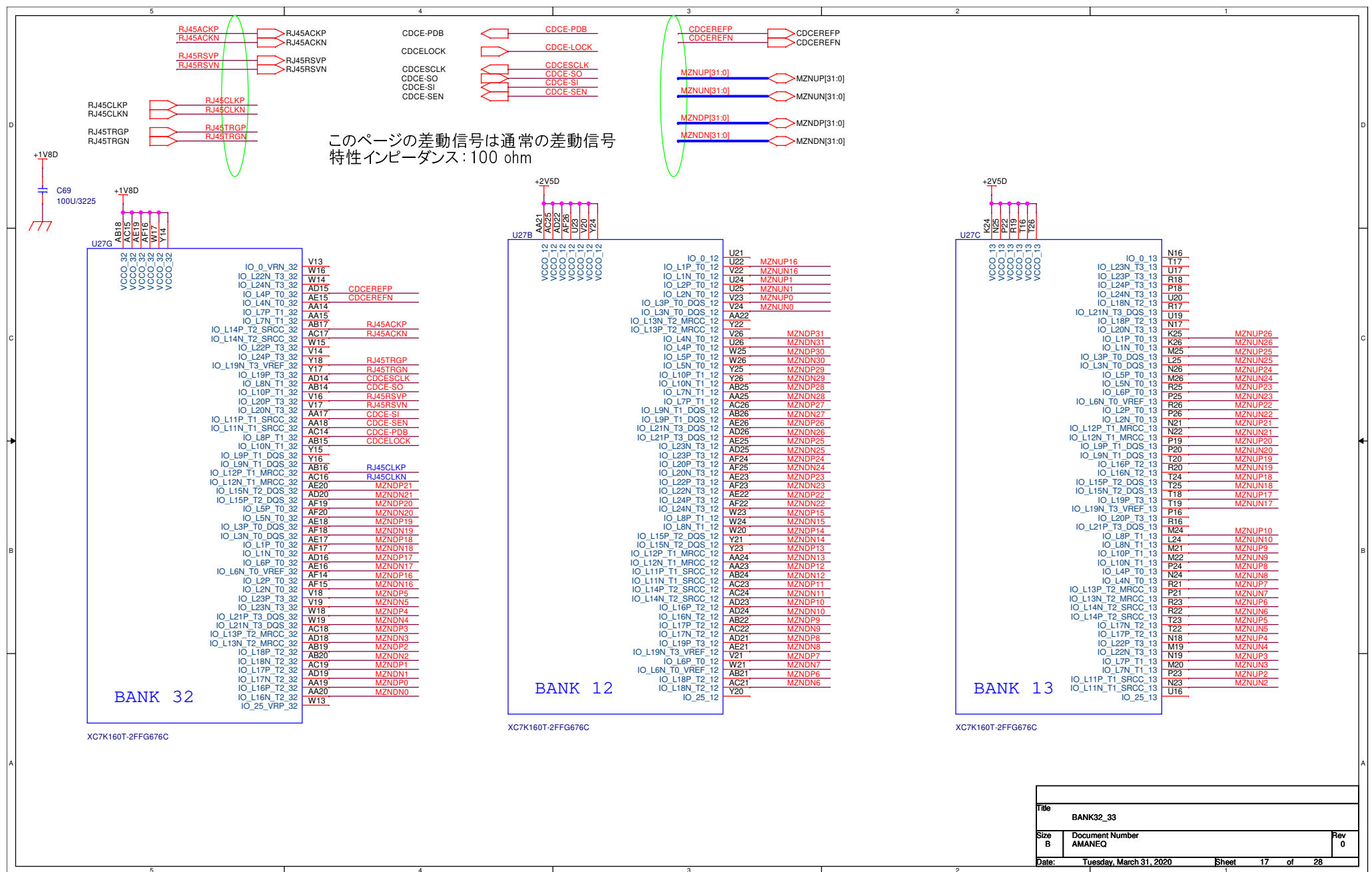


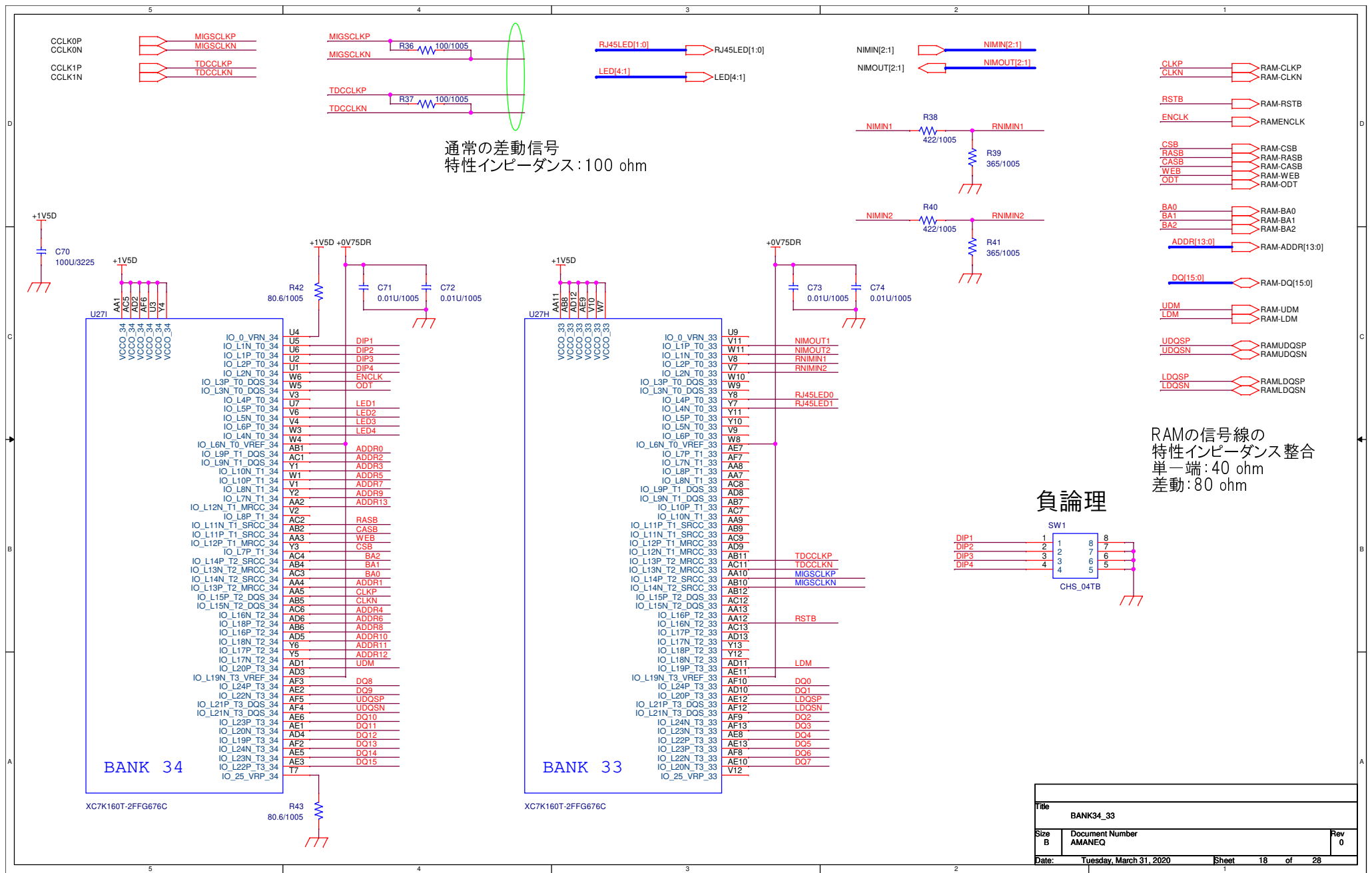
XC7K160T-2FFG676C

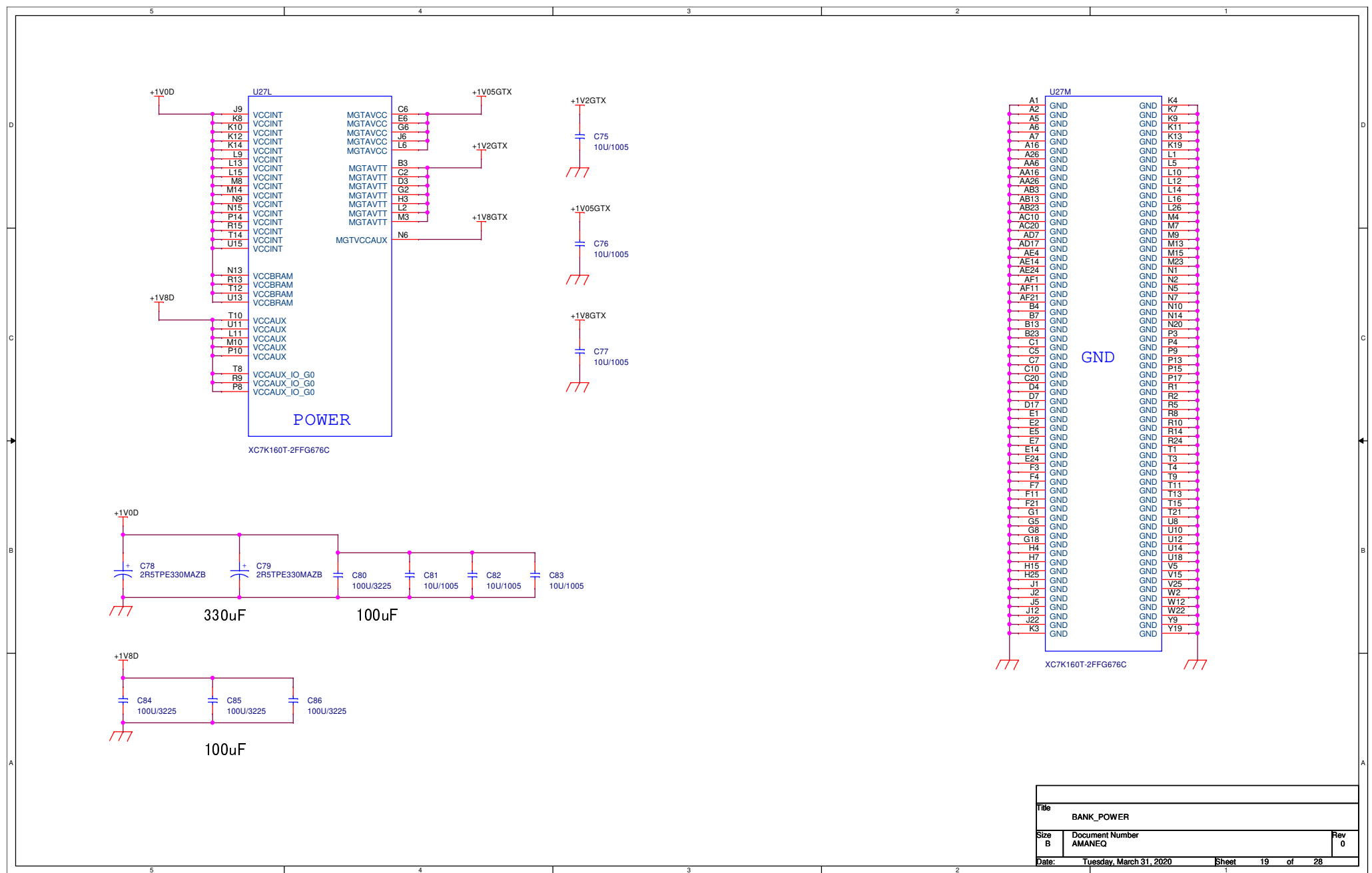


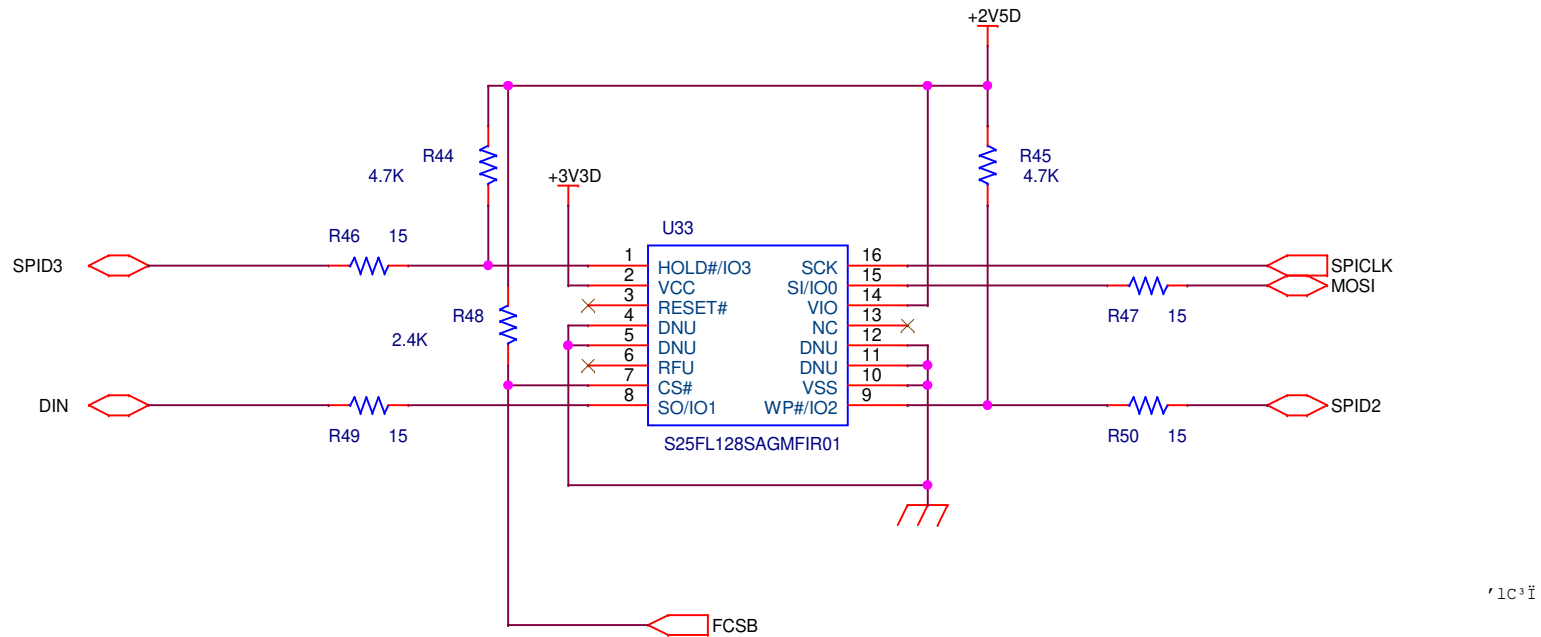
XC7K160T-2FFG676C

Title			
BANK16			
Size	Document Number	Rev	
B	AMANEQ	0	
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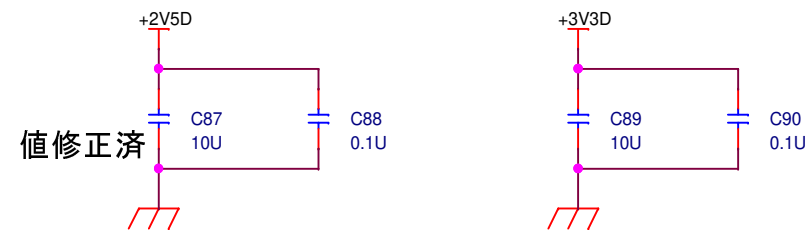




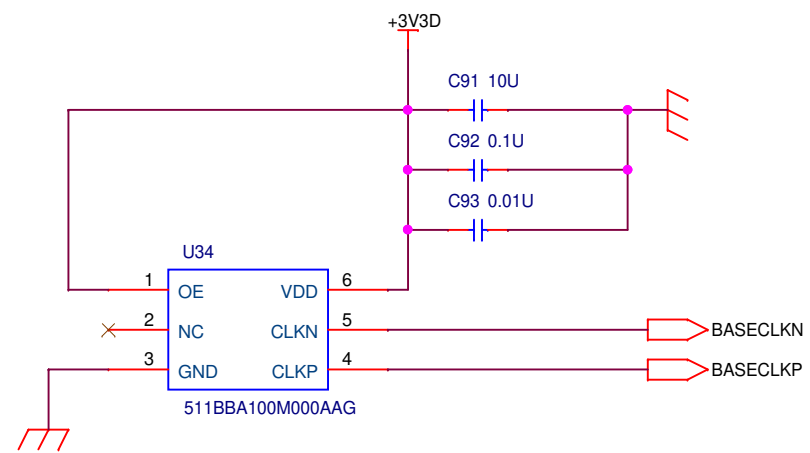




16-SOICでもVIO無い製品もあるので
ICだけ別注する場合注意すること

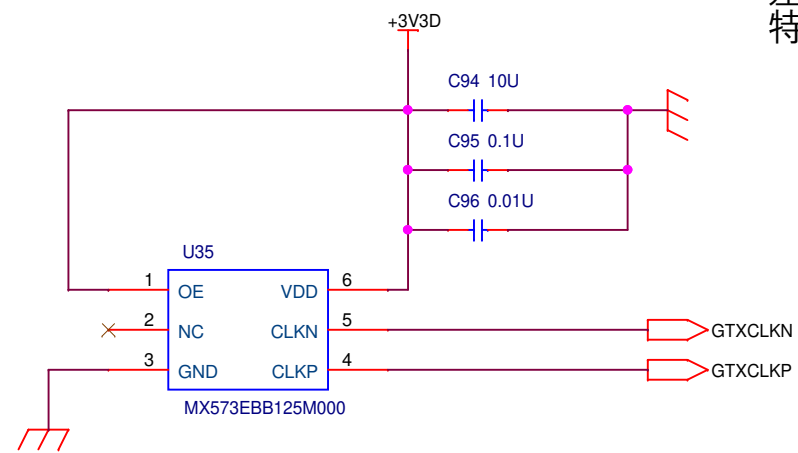


Title		
SPI MEMORY		
Size	Document Number	Rev
A	AMANEQ	0
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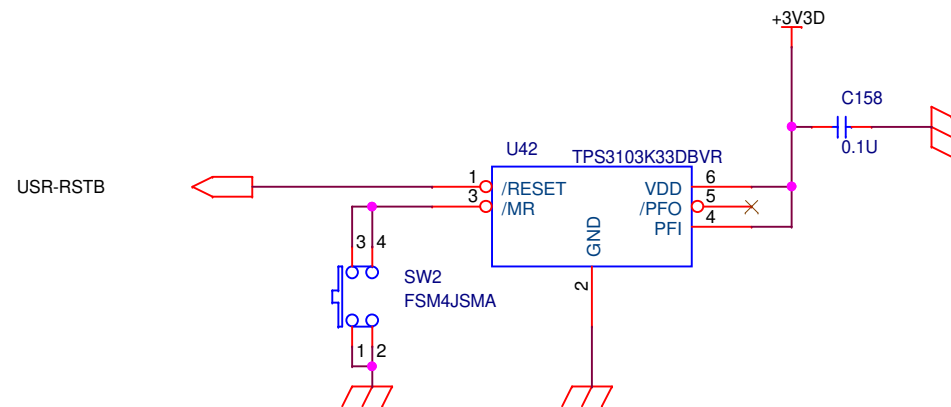
Freq: 100MHz

差動信号
特性インピーダンス: 100 ohm



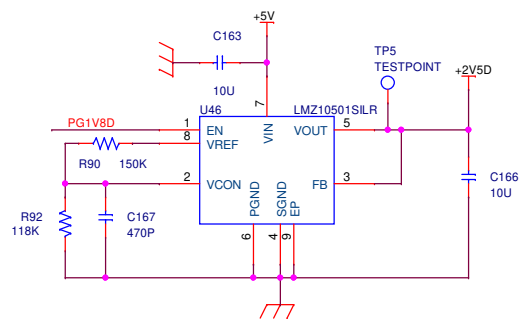
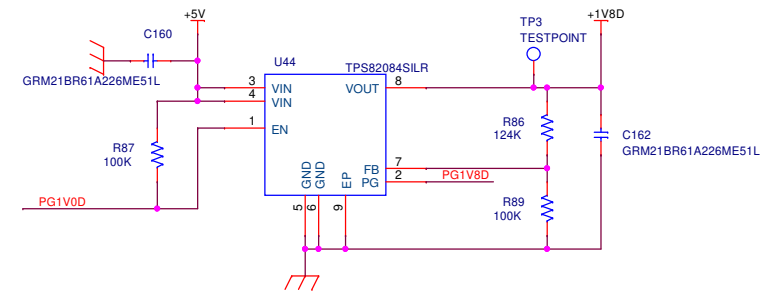
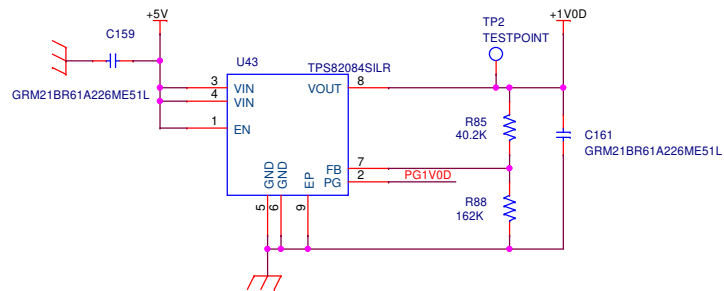
Freq: 125MHz

Title		
CLOCK		
Size	Document Number	Rev
A	AMANEQ	0
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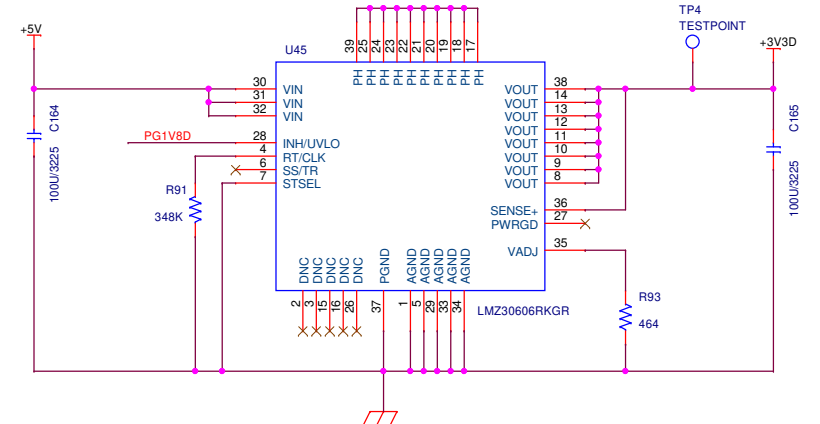


Hardware reset

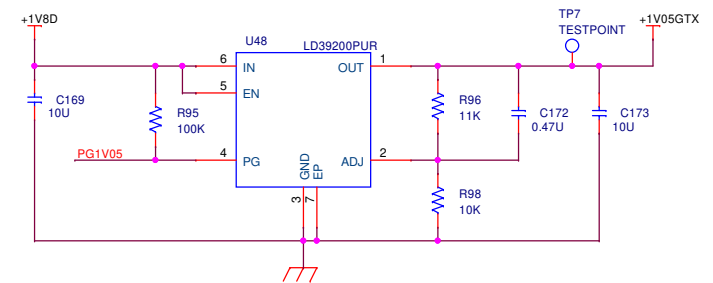
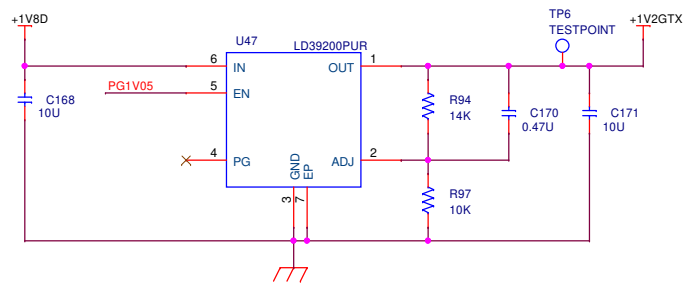
Title		
RESET		
Size	Document Number	Rev
A	AMANEQ	0
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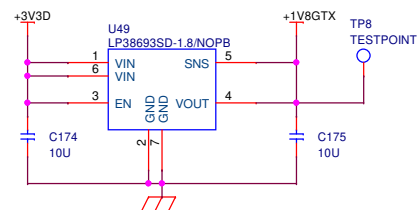
PHピンは放熱用途なので
専用のランドパターンに接続



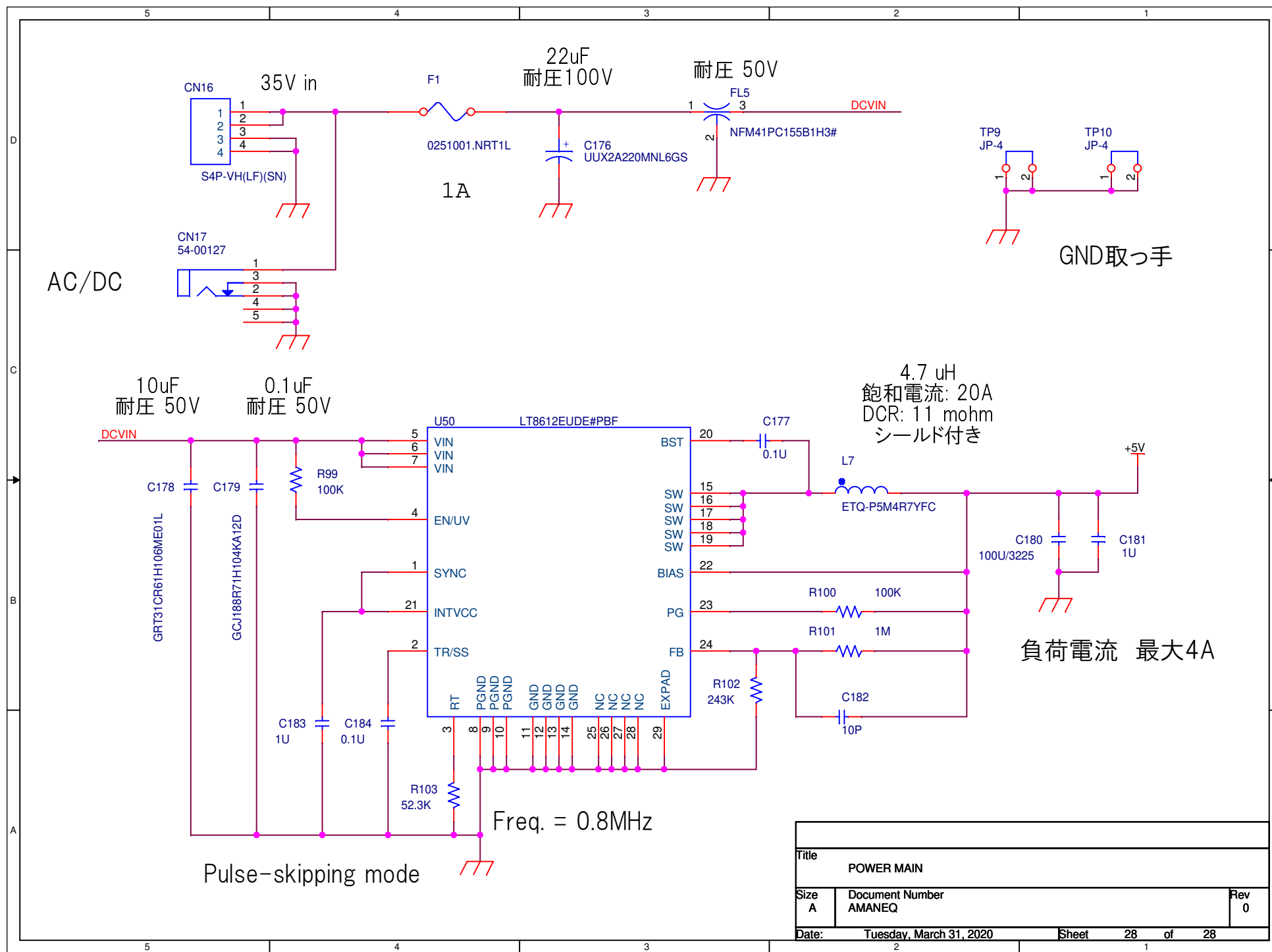
Title		
POWER-FPGA		
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GTXバンク用電源
FPGAの近くに配置



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POWER-GTX		
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Title		
POWER MAIN		
Size	Document Number	Rev
A	AMANEQ	0
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