

Blue Shark - II

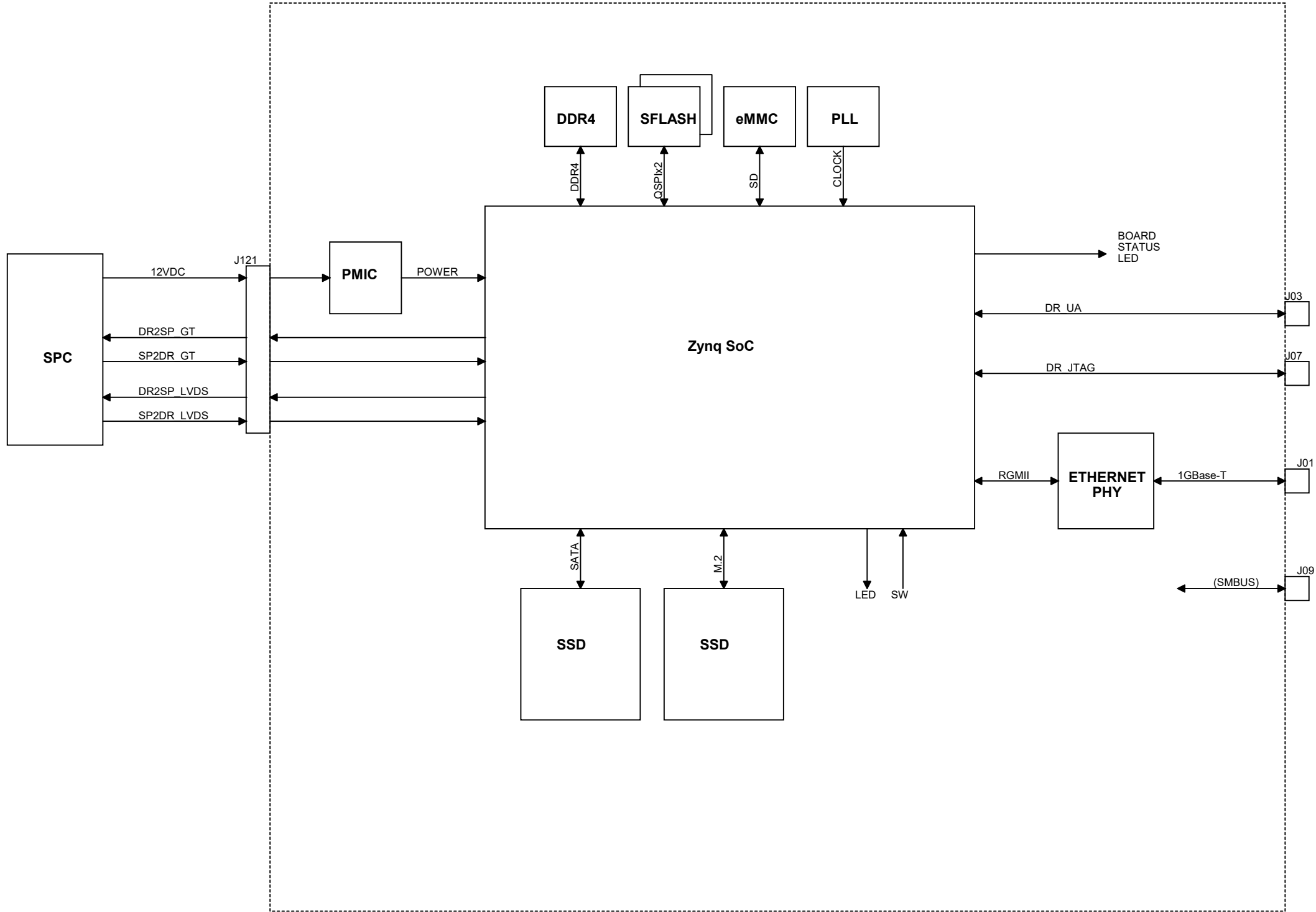
데이터기록모듈/전원공급모듈

(Data Recording Module / Power Supply Module)


Rev.	Date	Description	Page	Remark
0	2023.10.12	Initial design base on SPC		16Layers, t=2.4

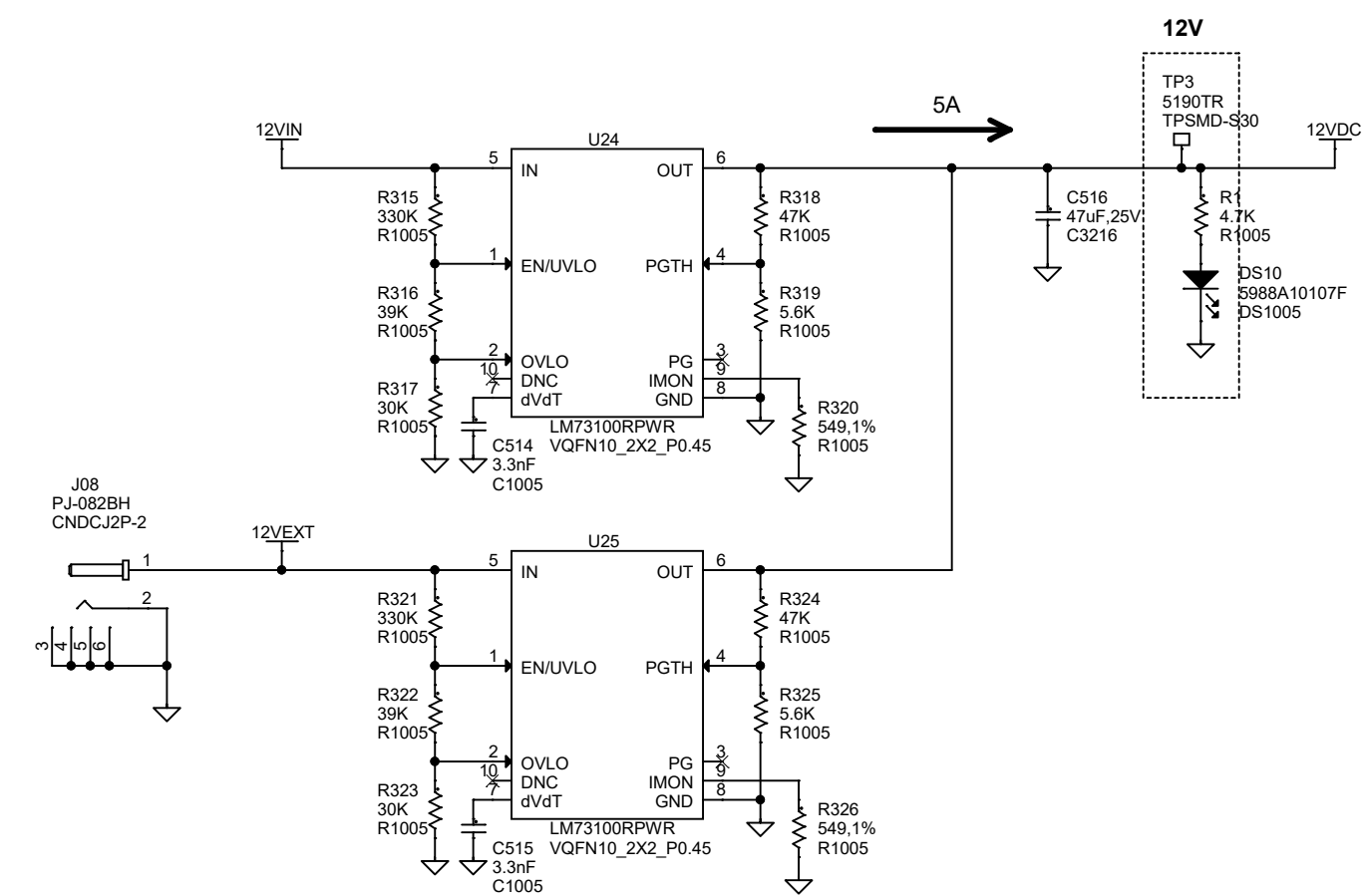
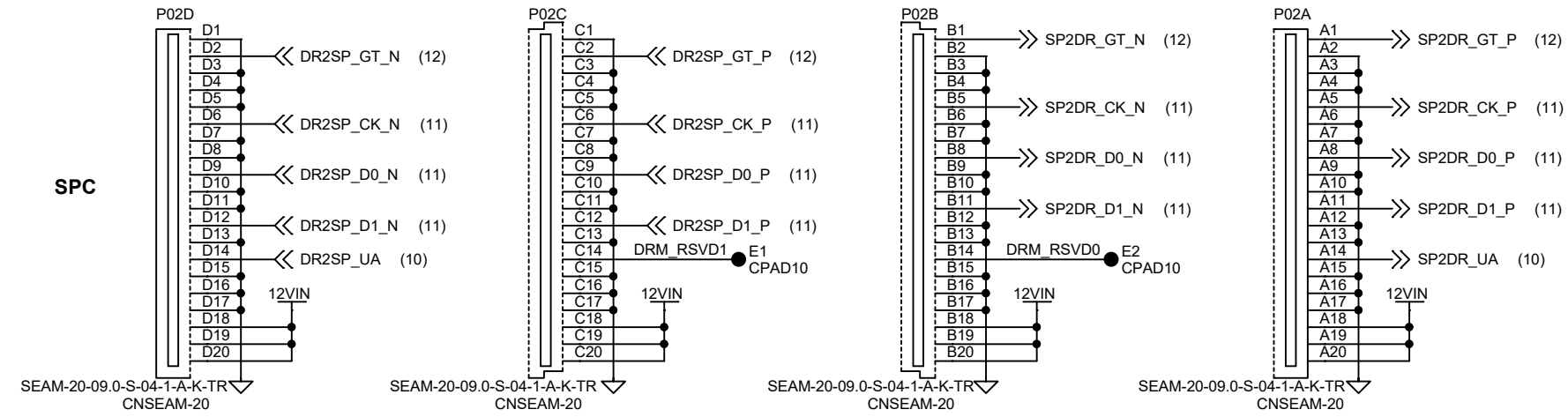
Todo

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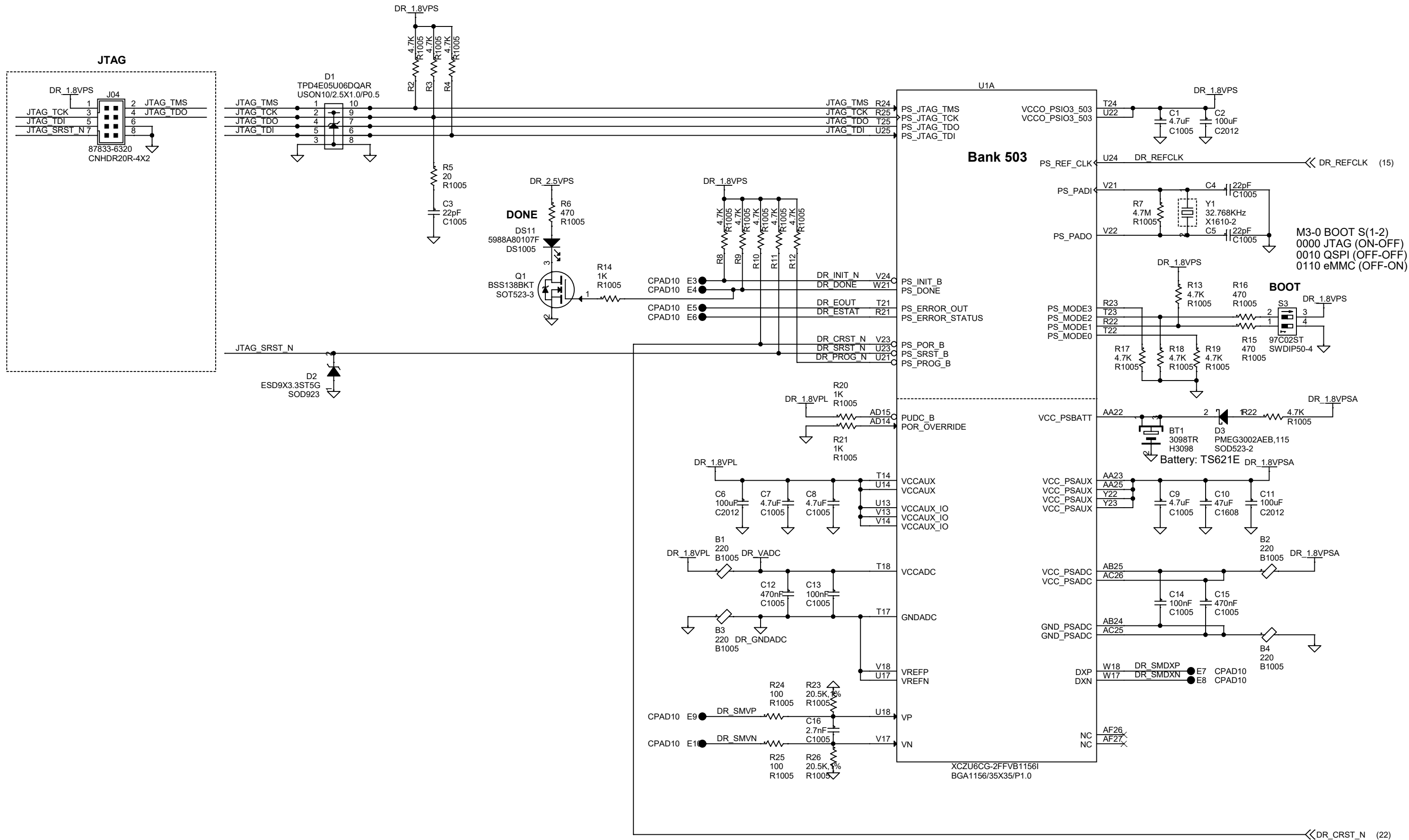


<div><div></div><div><b>UJin Entek Co., Ltd.</b> 10 BaekJa-ro 156 Beon-gil, IDong-eup, Cheoln-gu YongIn-si, GyeonGi-do, 17126 South Korea Tel: +82 (31) 323-0661 Fax: +82 (31) 323-0660 <a href="http://www.ujinentek.co.kr">http://www.ujinentek.co.kr</a></div></div>			
Title DRM: Power Diagram			
<div>Designed HAN InCheol</div>	<div>Size A3</div>	<div>Document Number 717-U01543-00</div>	<div>Rev 0</div>
<div>Drawn HAN InCheol</div>	<div>Date Tuesday, November 14, 2023</div>	<div>Sheet 3</div>	<div>of 25</div>
<div>Approved &lt;Approved&gt;</div>			



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Designed	HAN InCheol	Title	DRM: SPC Interface
Drawn	HAN InCheol	Size	A3
Approved	<Approved>	Document Number	717-U01543-00
		Date	Tuesday, November 14, 2023
		Sheet	4 of 25
		Rev	0





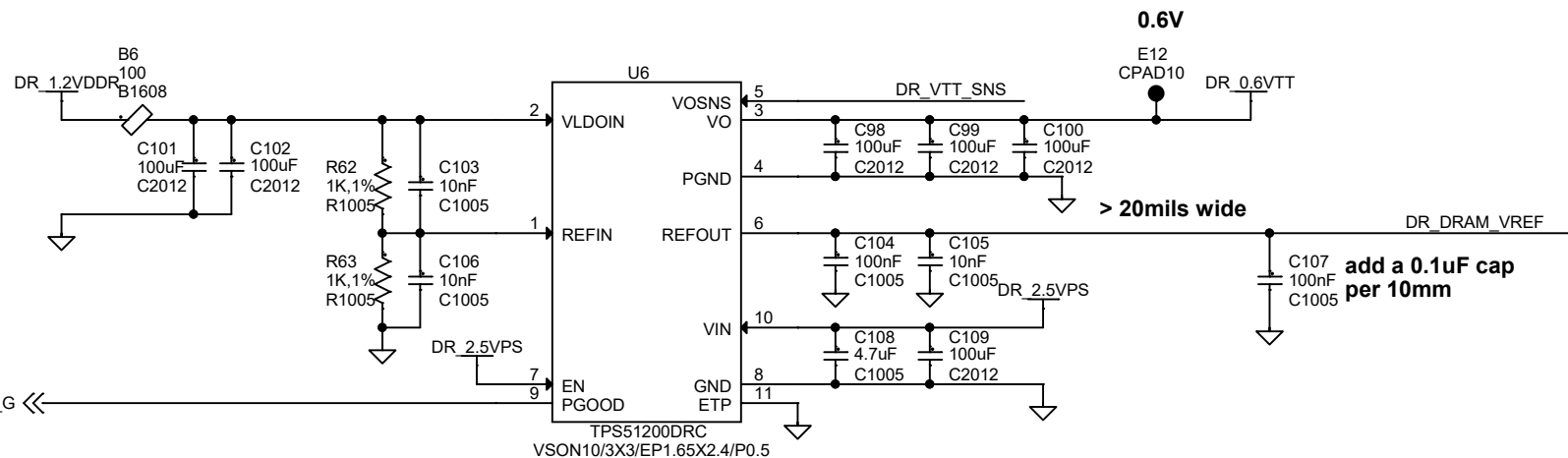
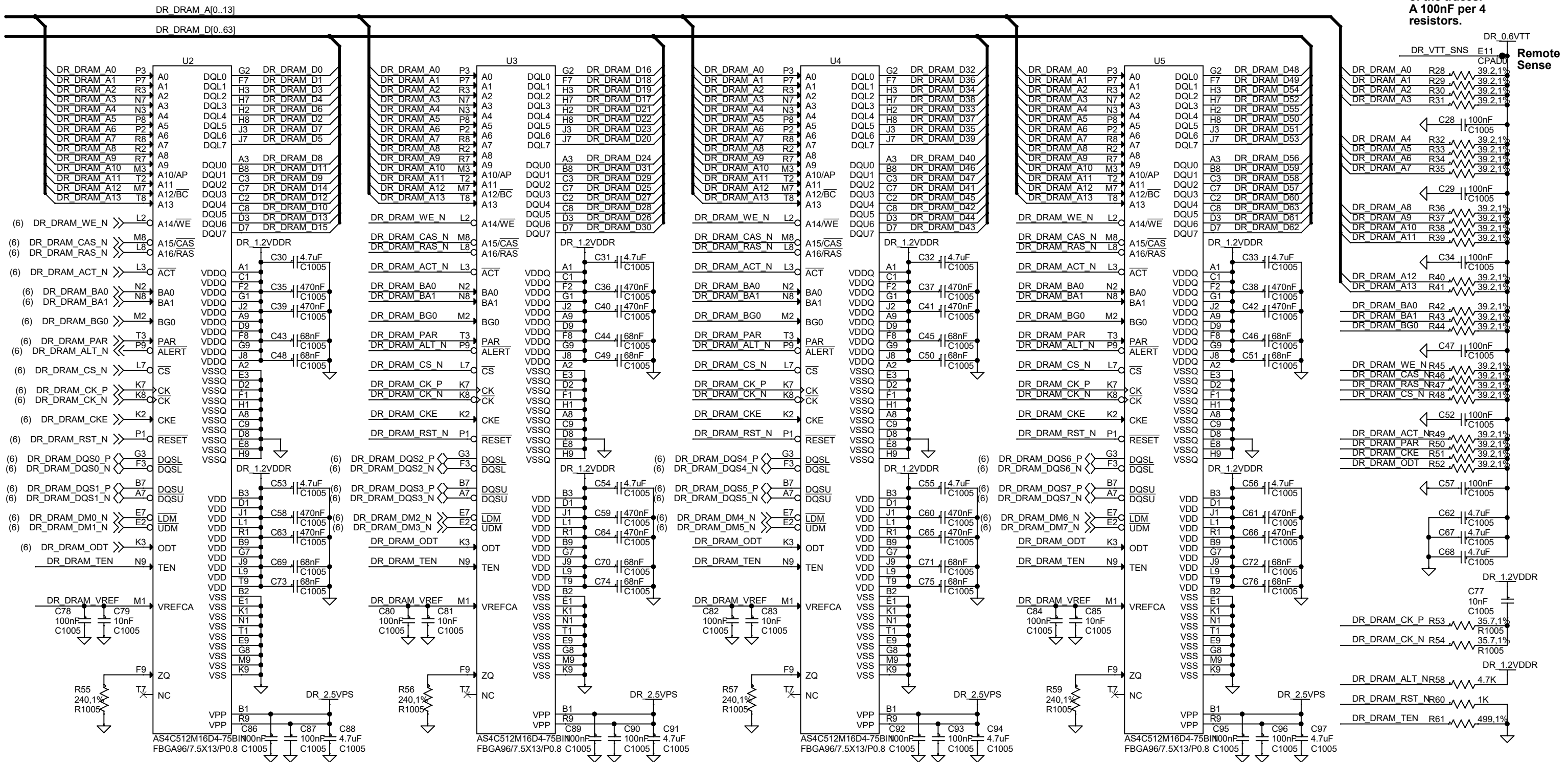


(6) DR\_DRAM\_A[0..13] >> DR\_DRAM\_A[0..13]  
(6) DR\_DRAM\_D[0..63] << DR\_DRAM\_D[0..63]

Fly-by topology

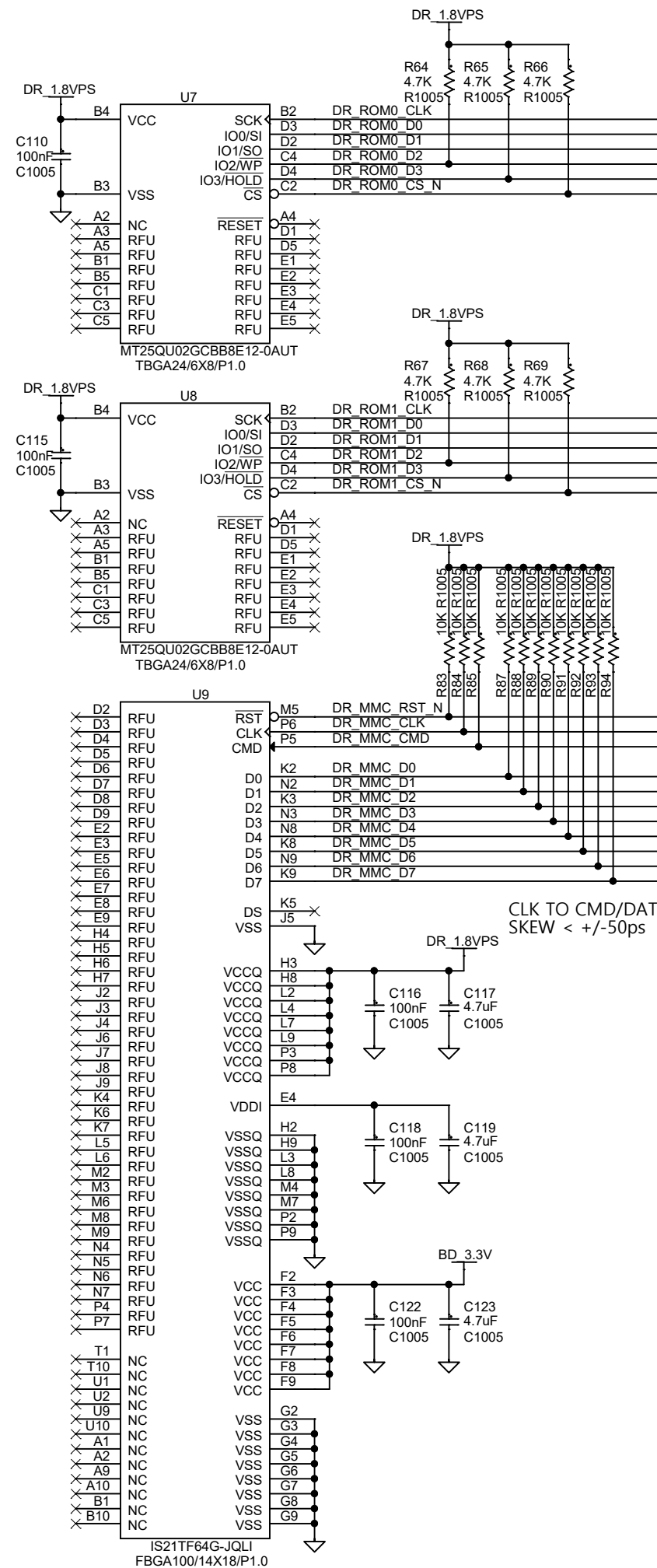
<----- < 0.5" ----->

Place at the end of the traces.  
A 100nF per 4 resistors.

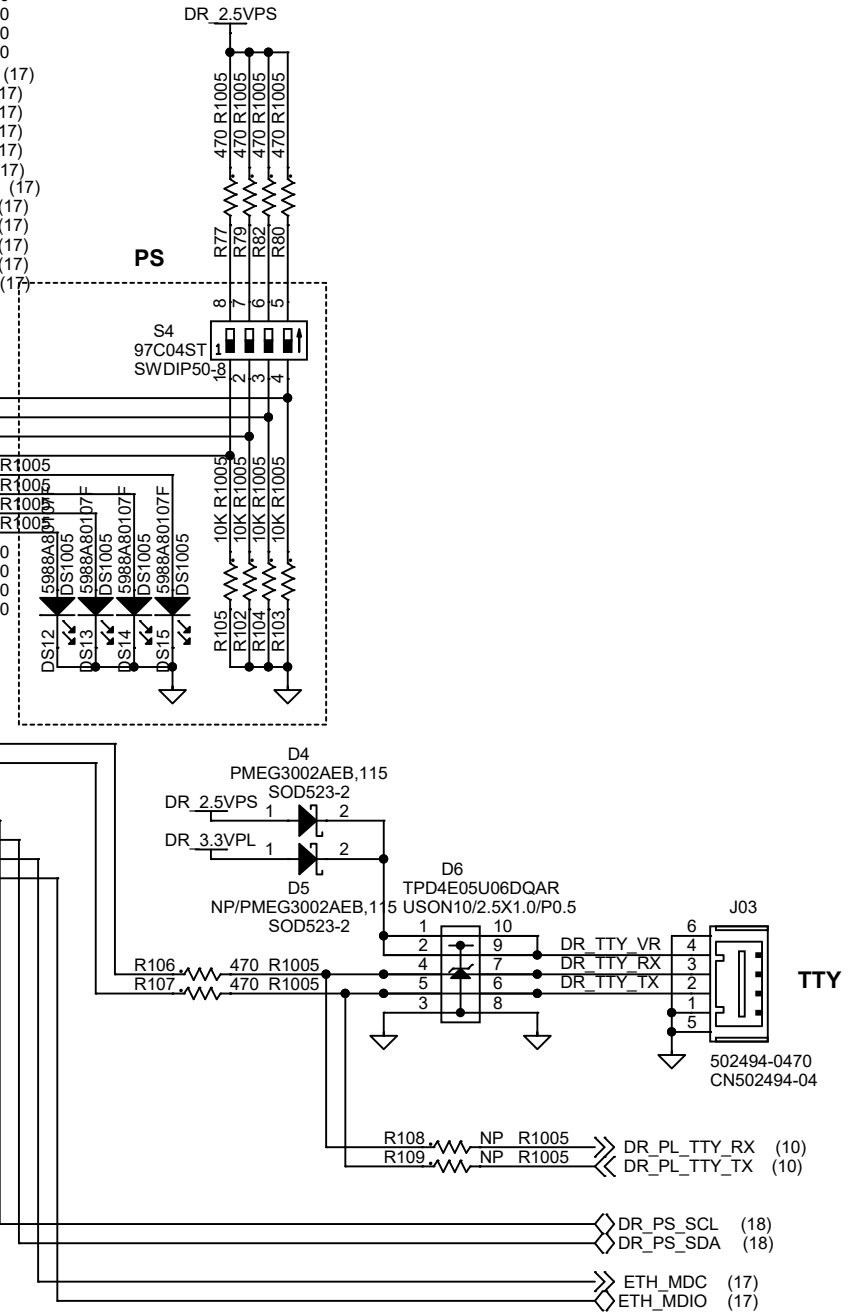
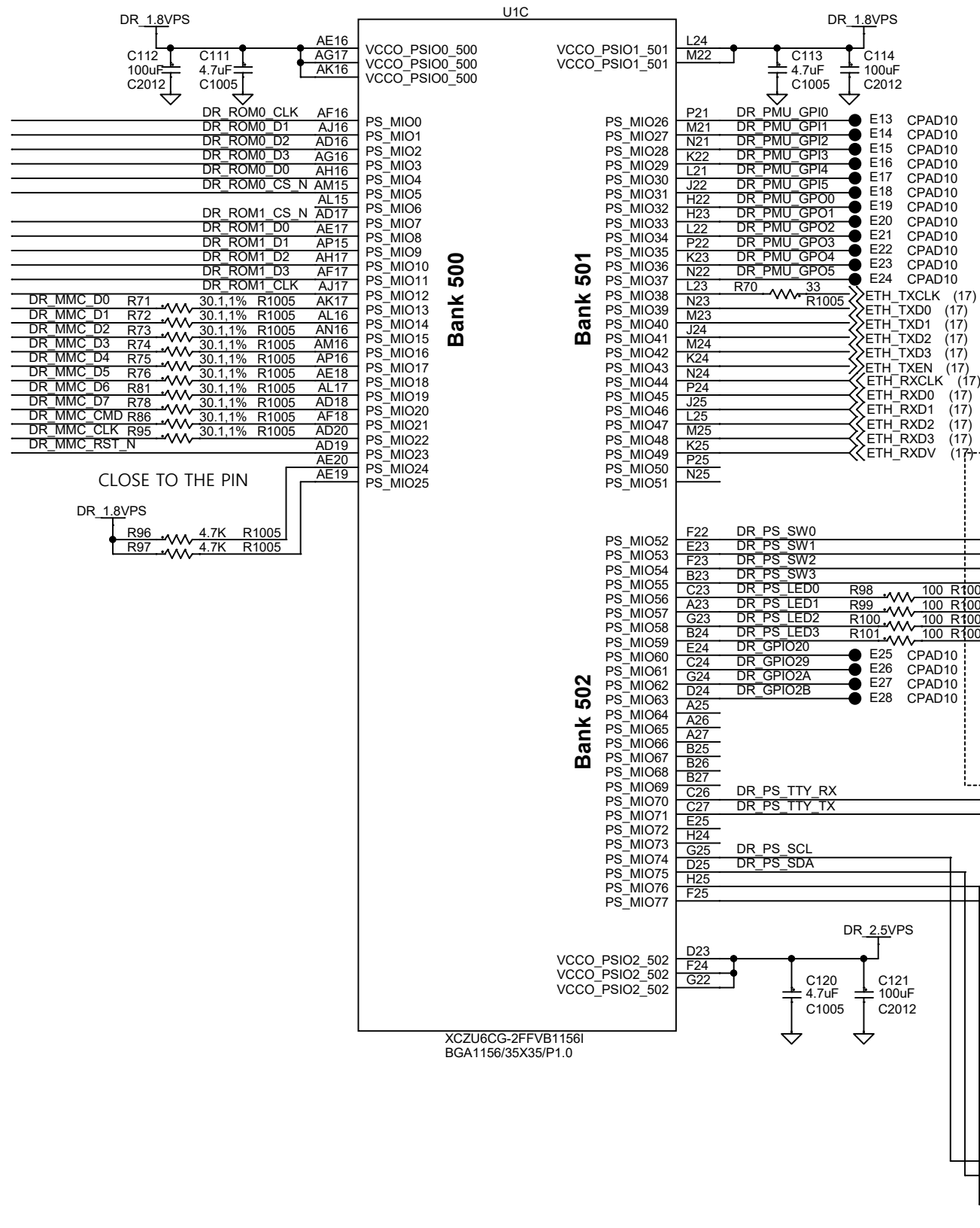


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Designed	HAN InChol	Title	DRM: DDR4 SDRAM
Drawn	HAN InChol	Size	A3
Approved	<Approved>	Document Number	717-U01543-00
		Date	Tuesday, November 14, 2023
		Sheet	7 of 25
		Rev	0

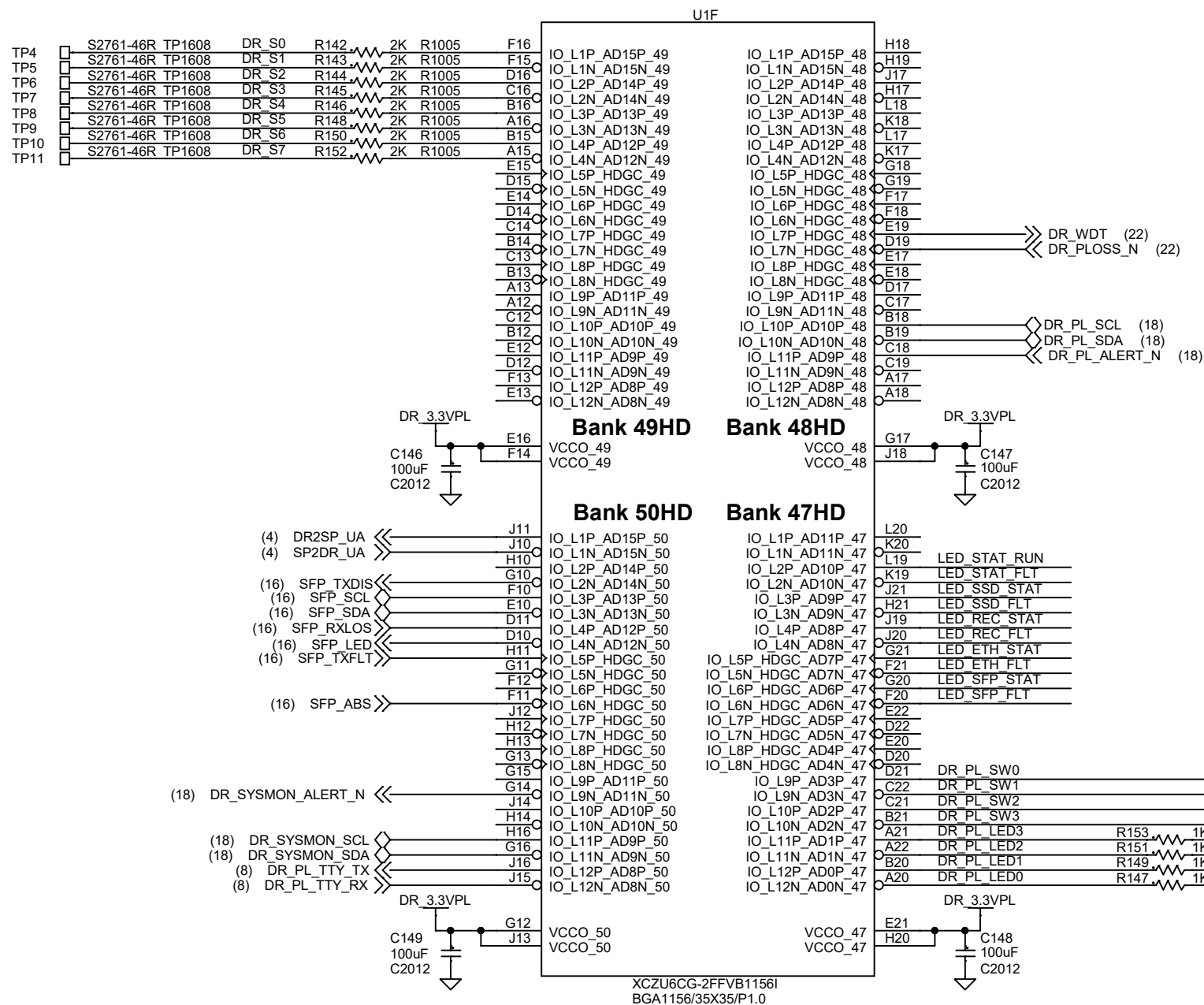
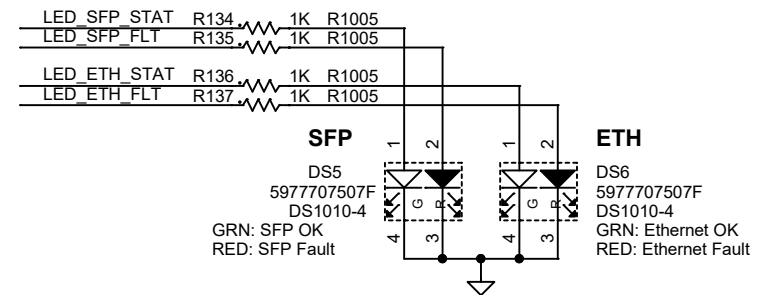
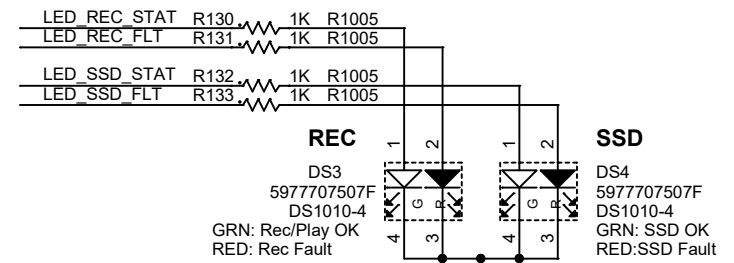
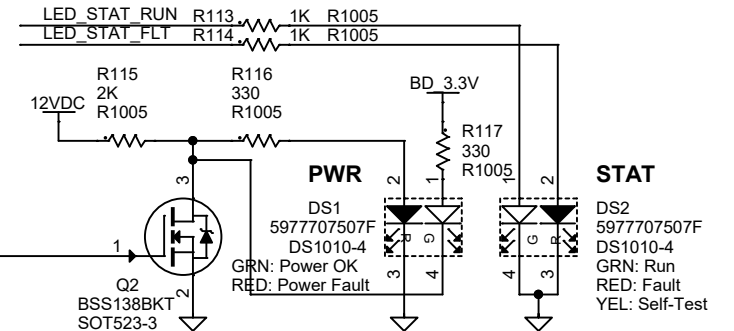
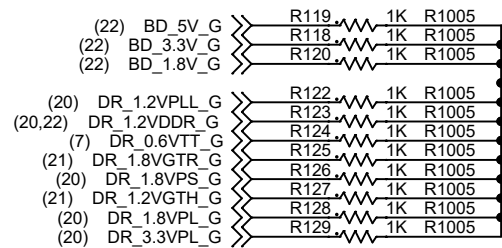
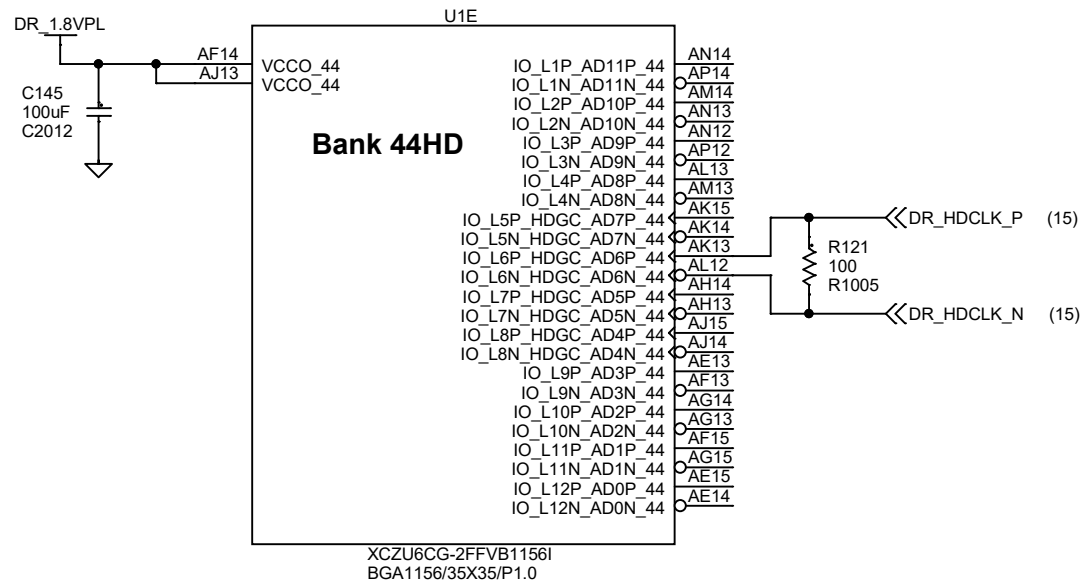


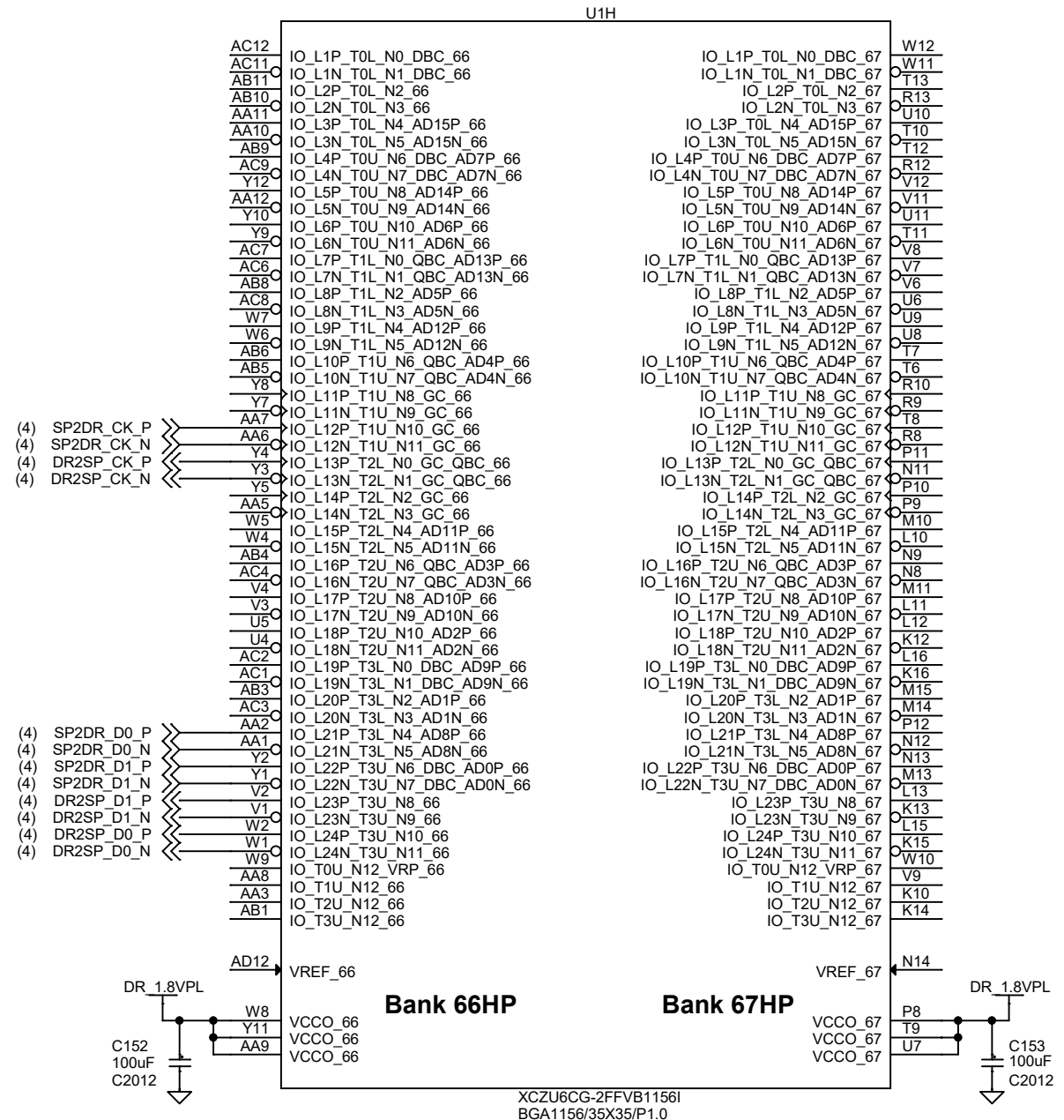
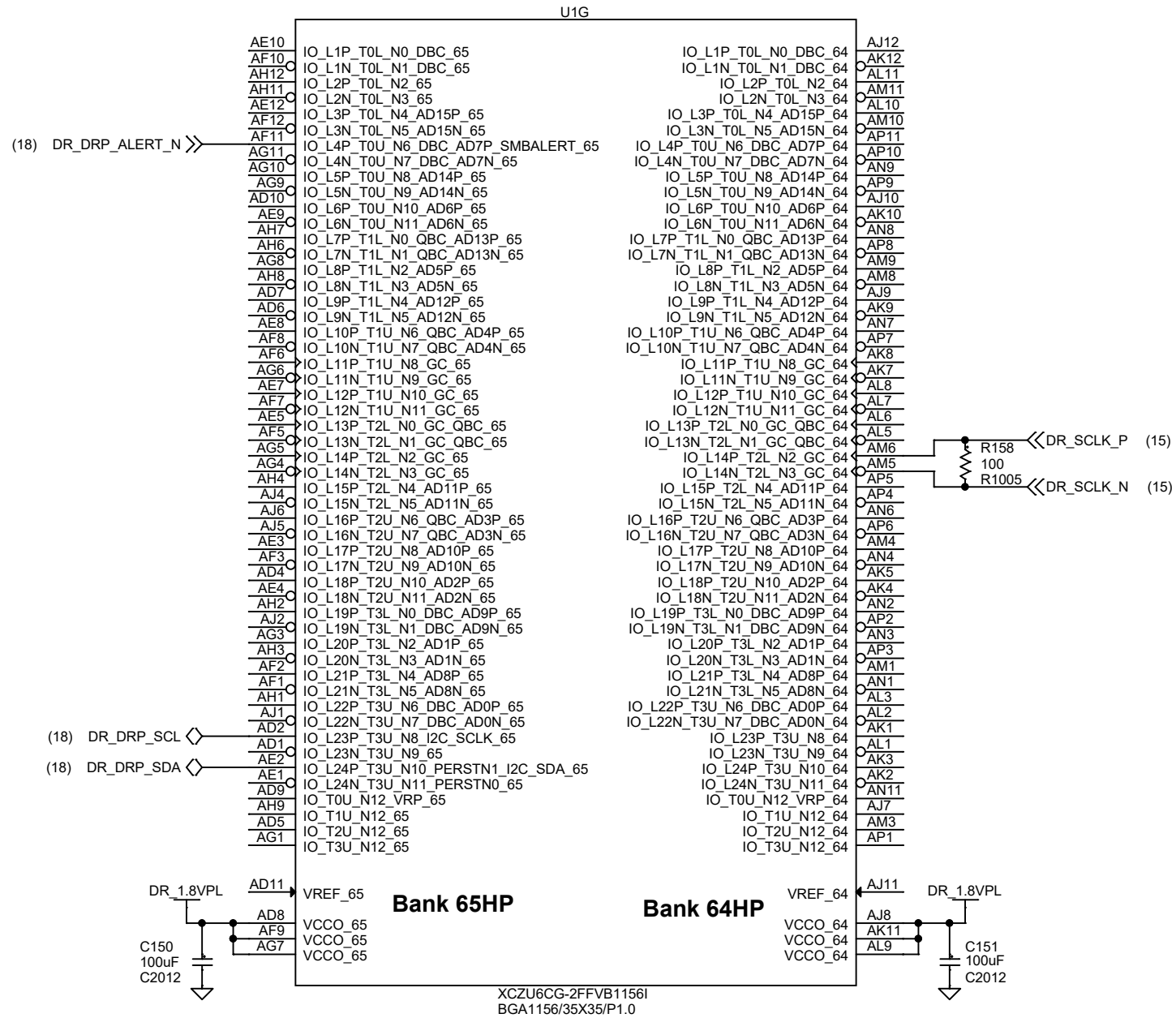
CLK TO CS/DATA  
SKEW < +/-50ps  
TRACE DELAY < 500ps

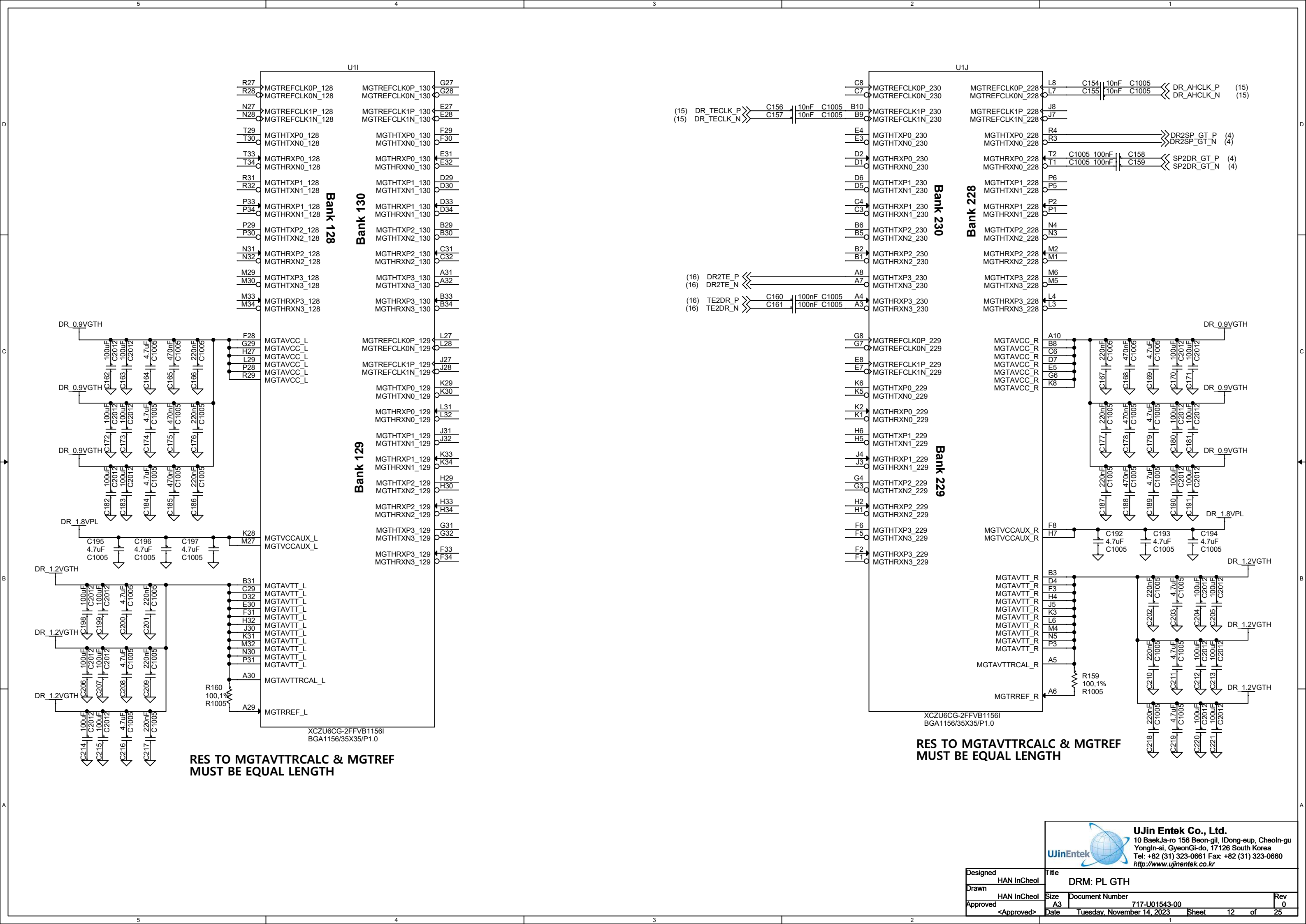








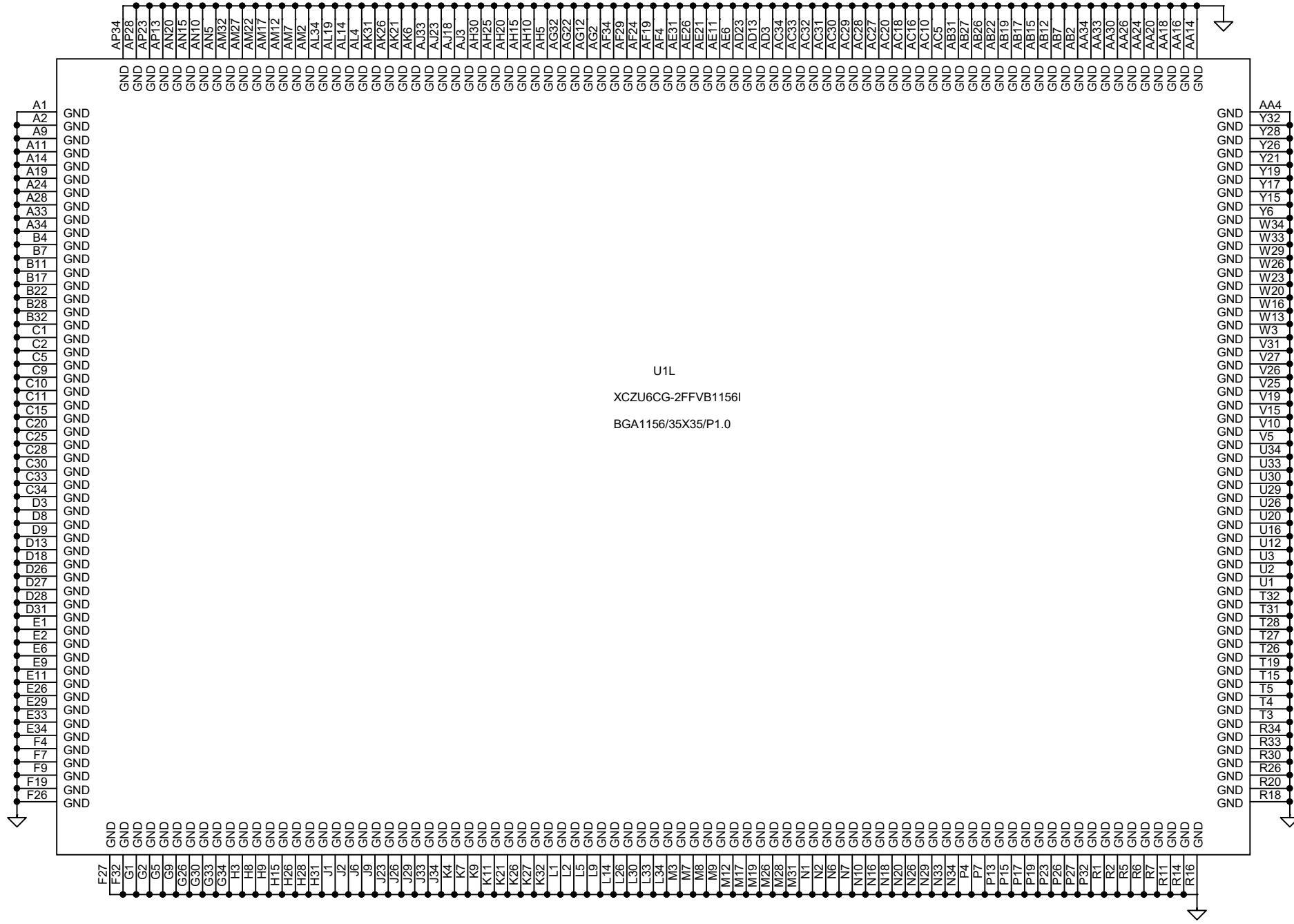








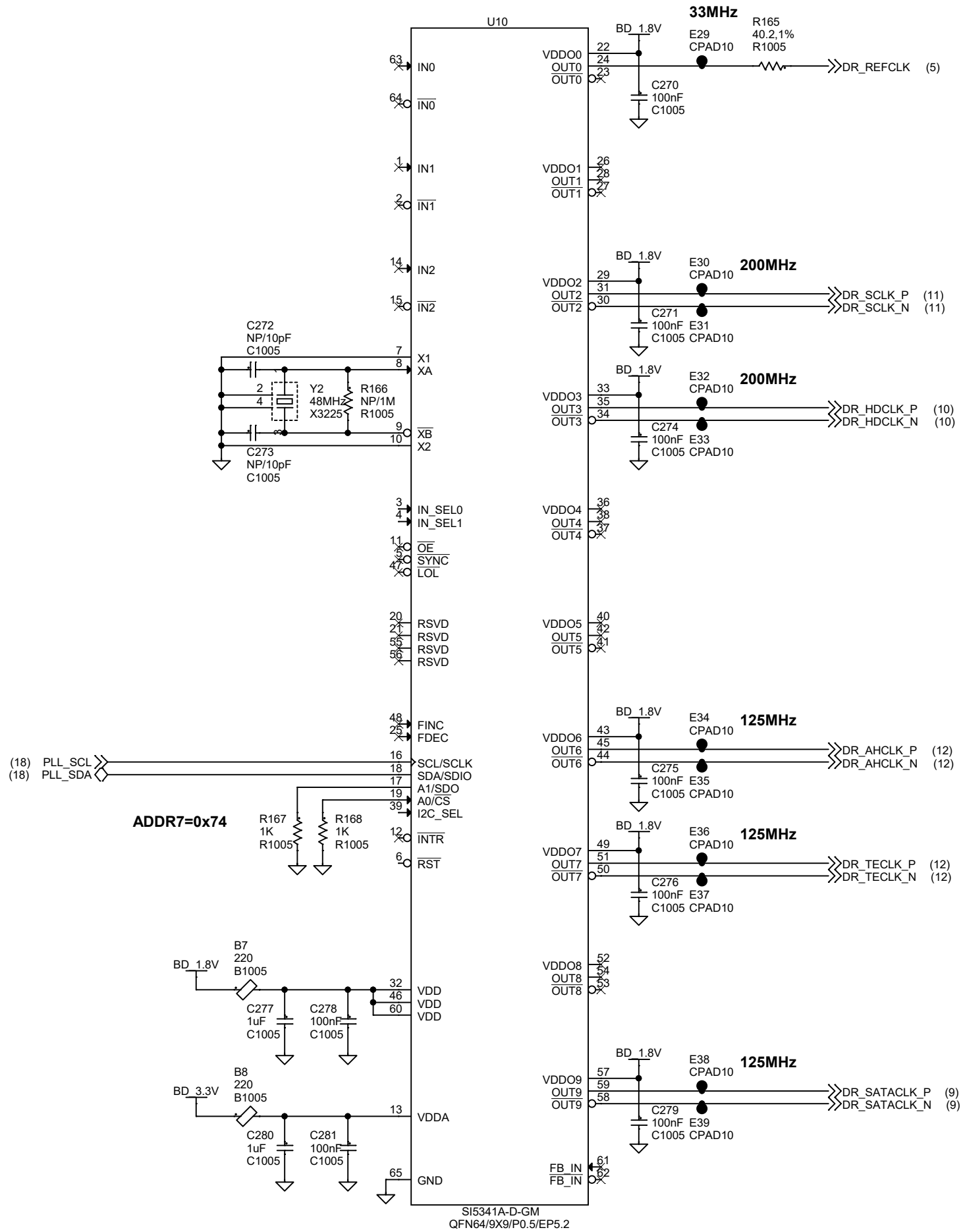




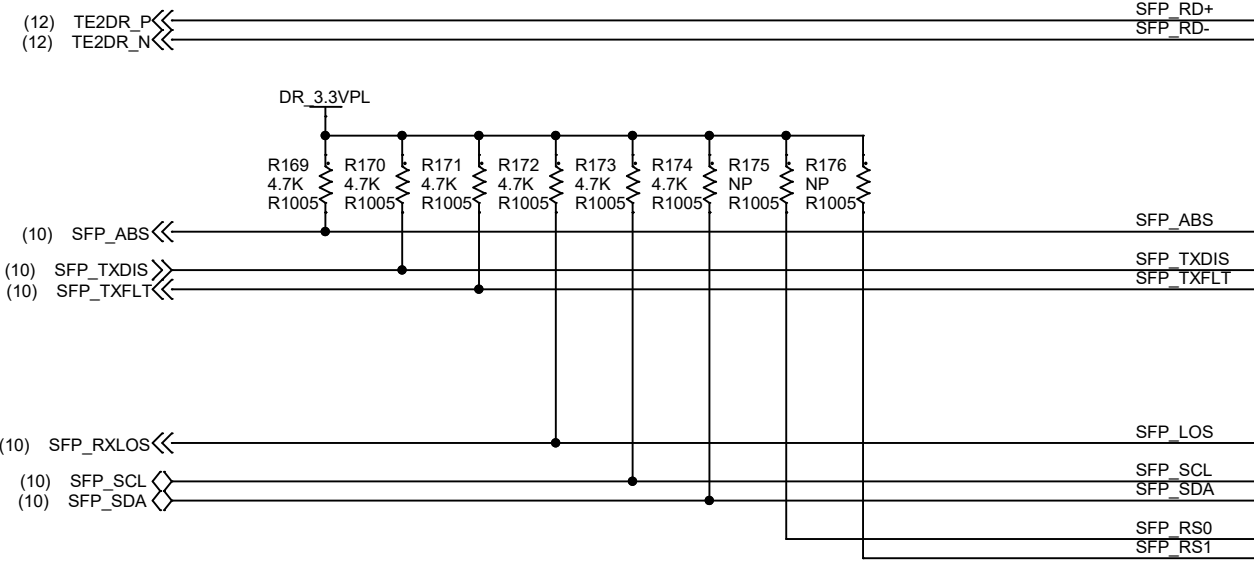
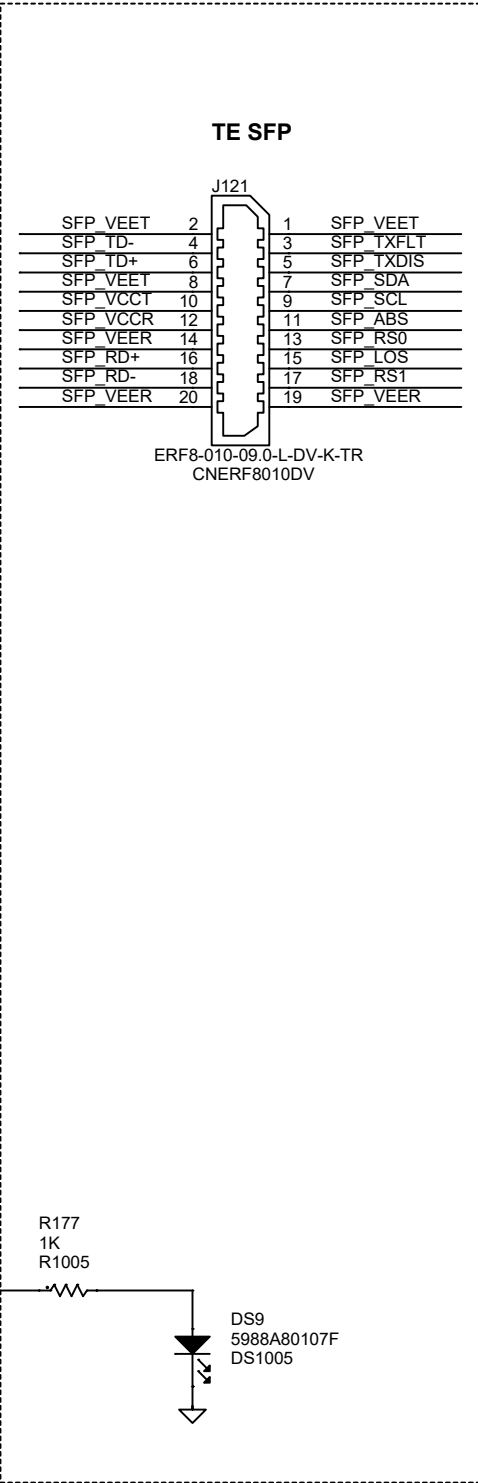
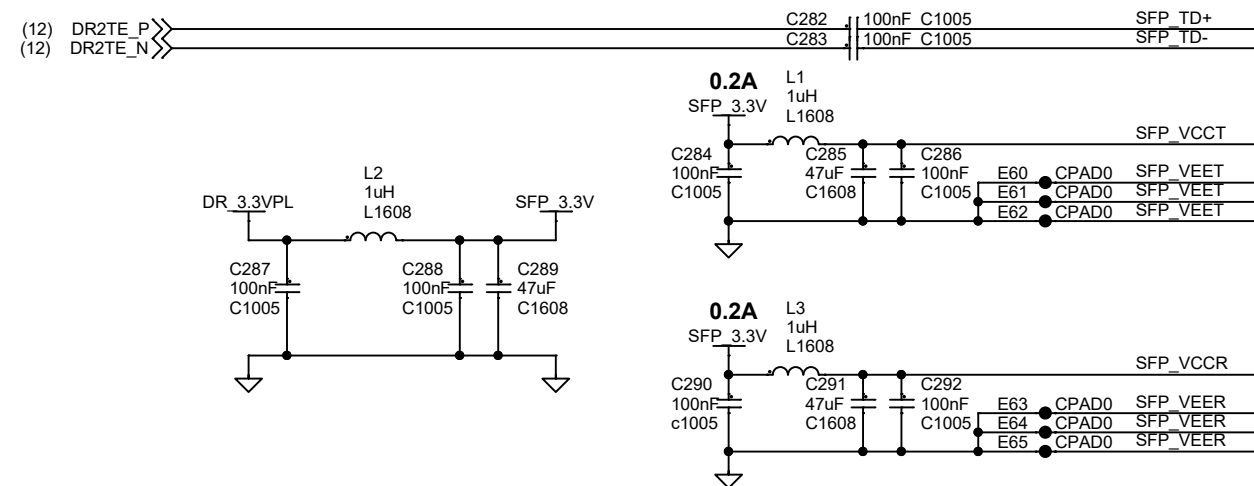


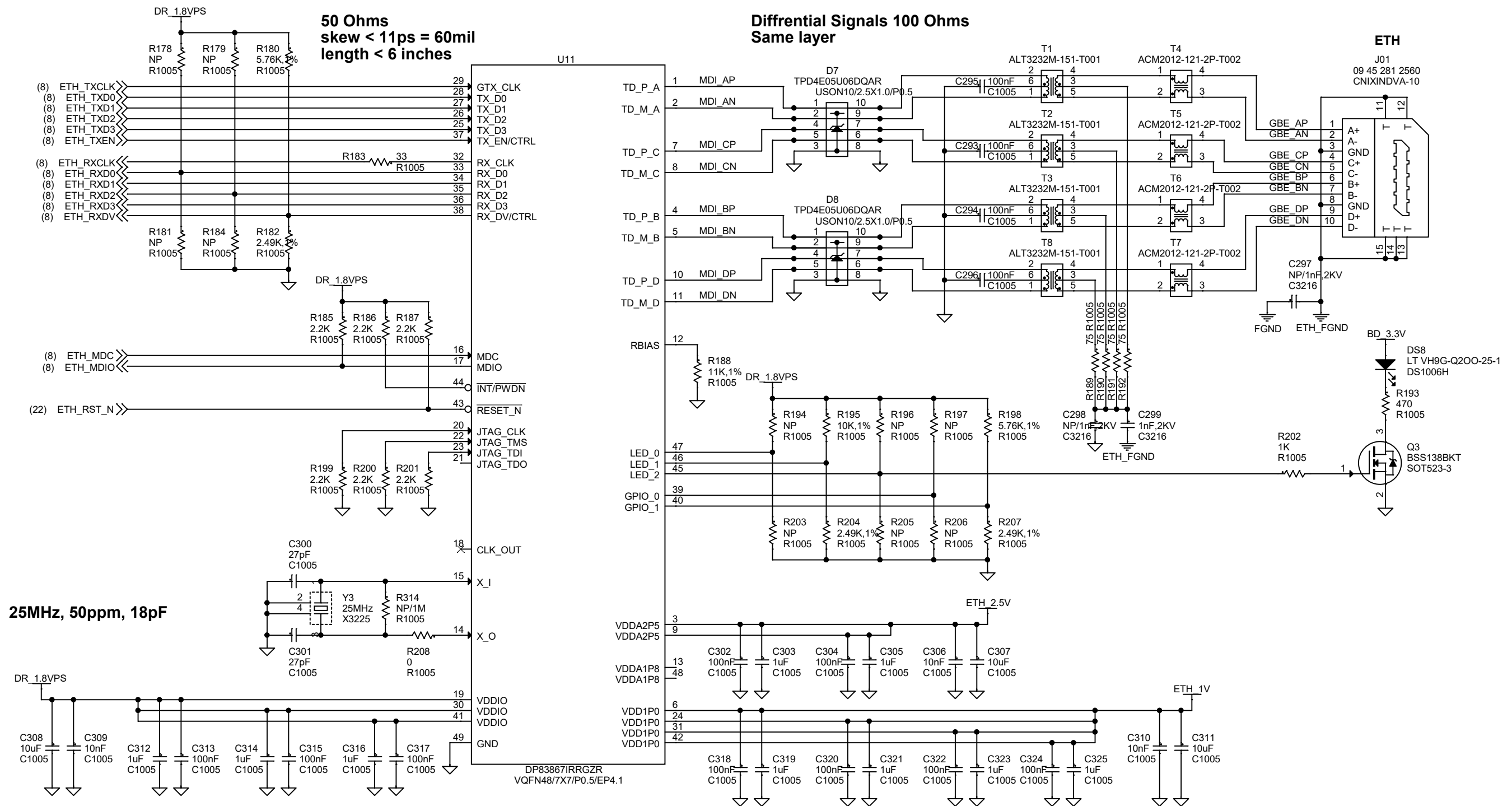
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Designed	HAN InCheol	Title		
Drawn	HAN InCheol	DRM: SoC Ground		
Approved	<Approved>	Size	Document Number	Rev
		A3	717-U01543-00	0
		Date	Tuesday, November 14, 2023	Sheet 14 of 25



Programmer: ClockBuilder Field Programmer Kit (CBPROG-DONGLE)





25MHz, 50ppm, 18pF

50 Ohms  
skew < 11ps = 60mil  
length < 6 inches

Differential Signals 100 Ohms  
Same layer

ETH

J01  
09 45 281 2560  
CNIXINDVA-10

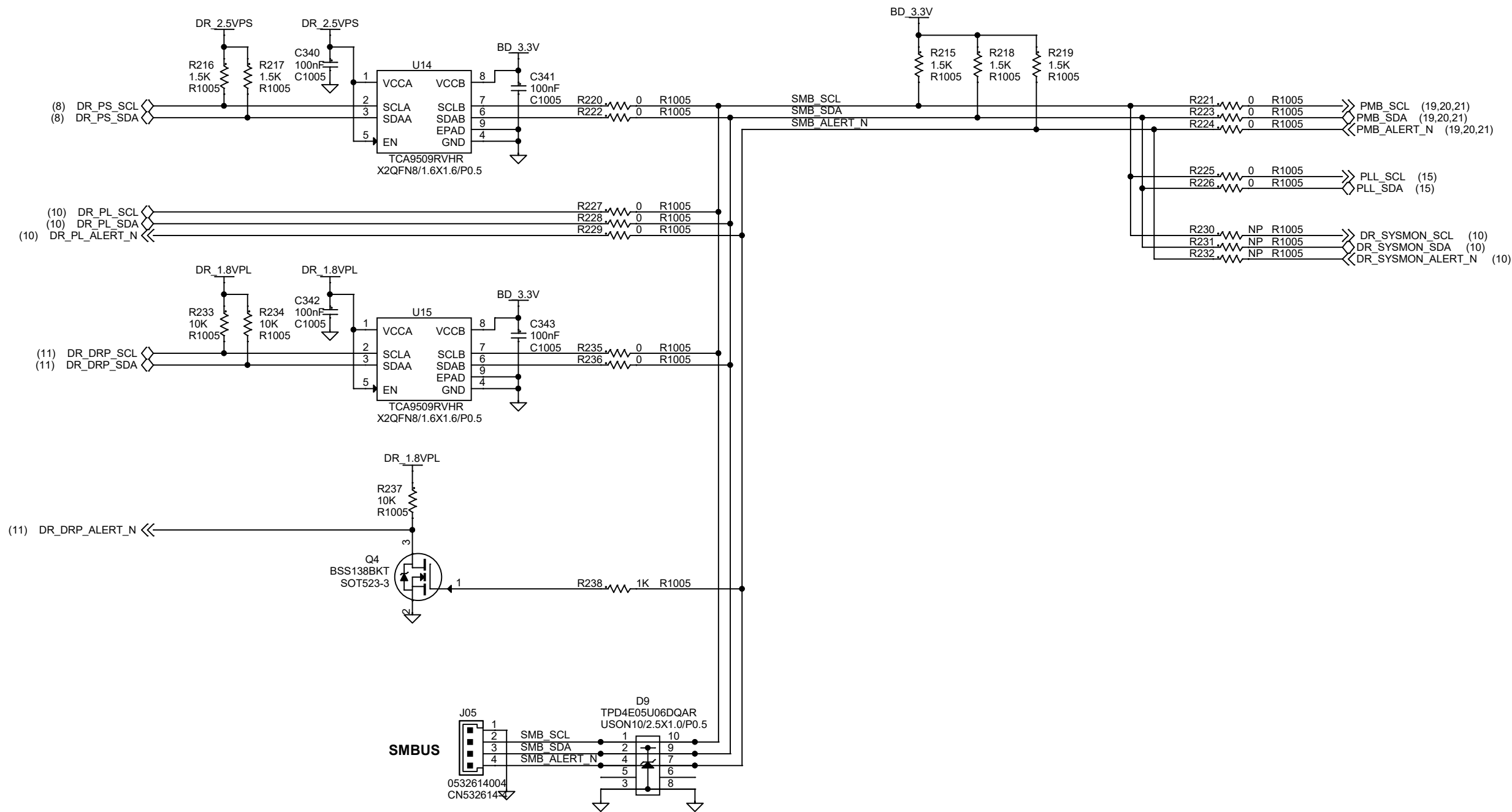
DS8  
LT VH9G-Q200-25-1  
DS1006H

Q3  
BSS138BKT  
SOT523-3



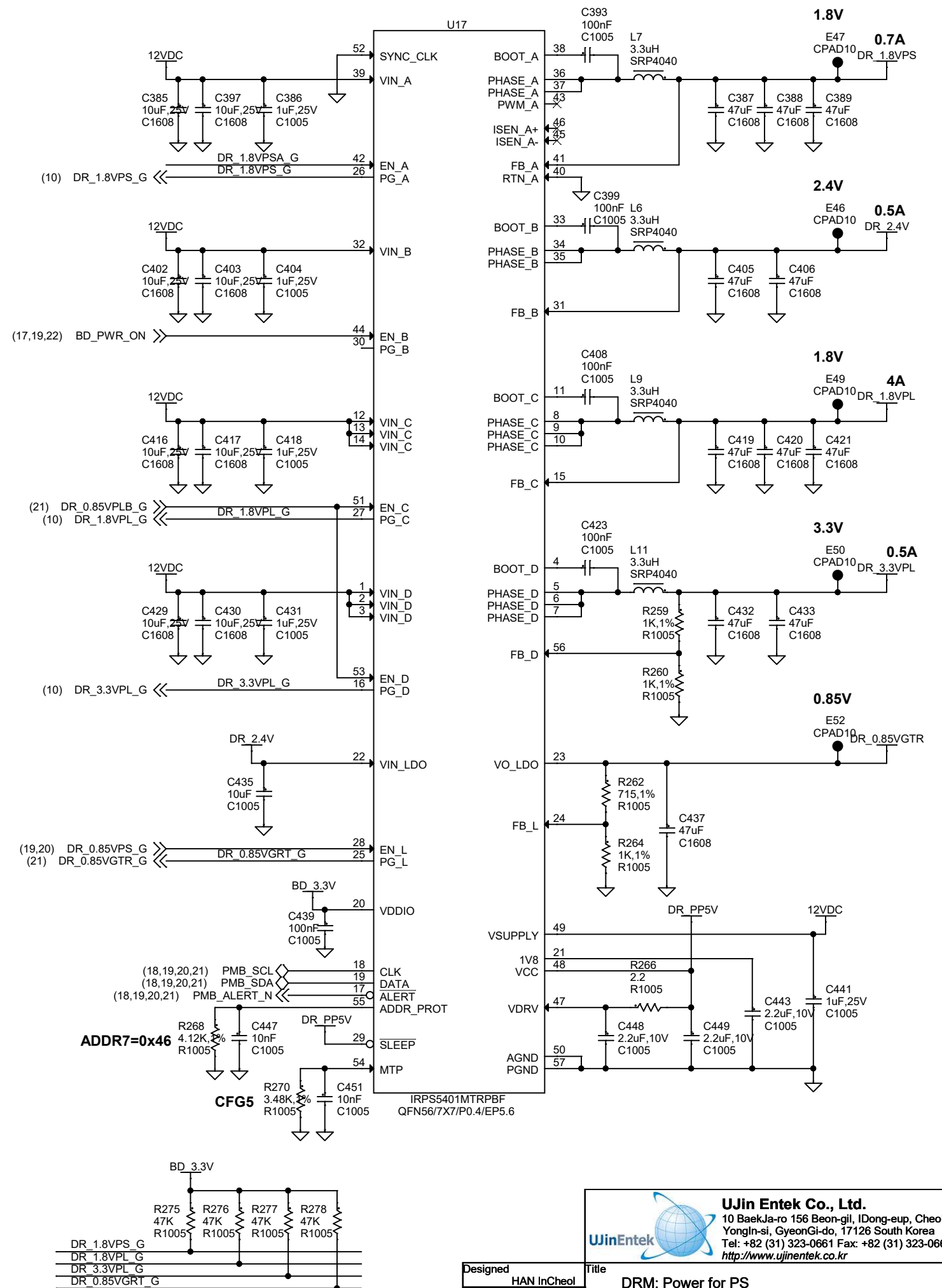
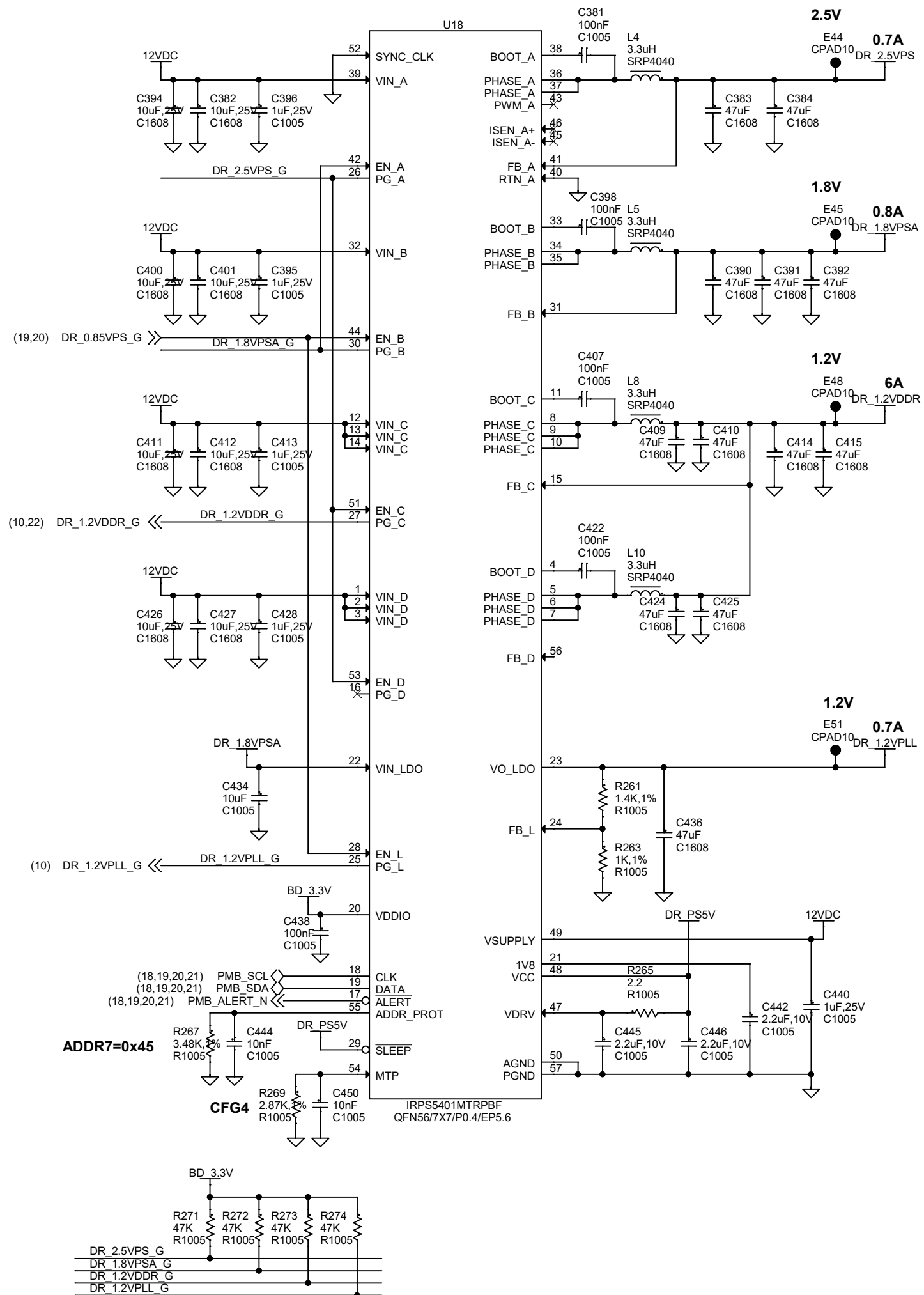
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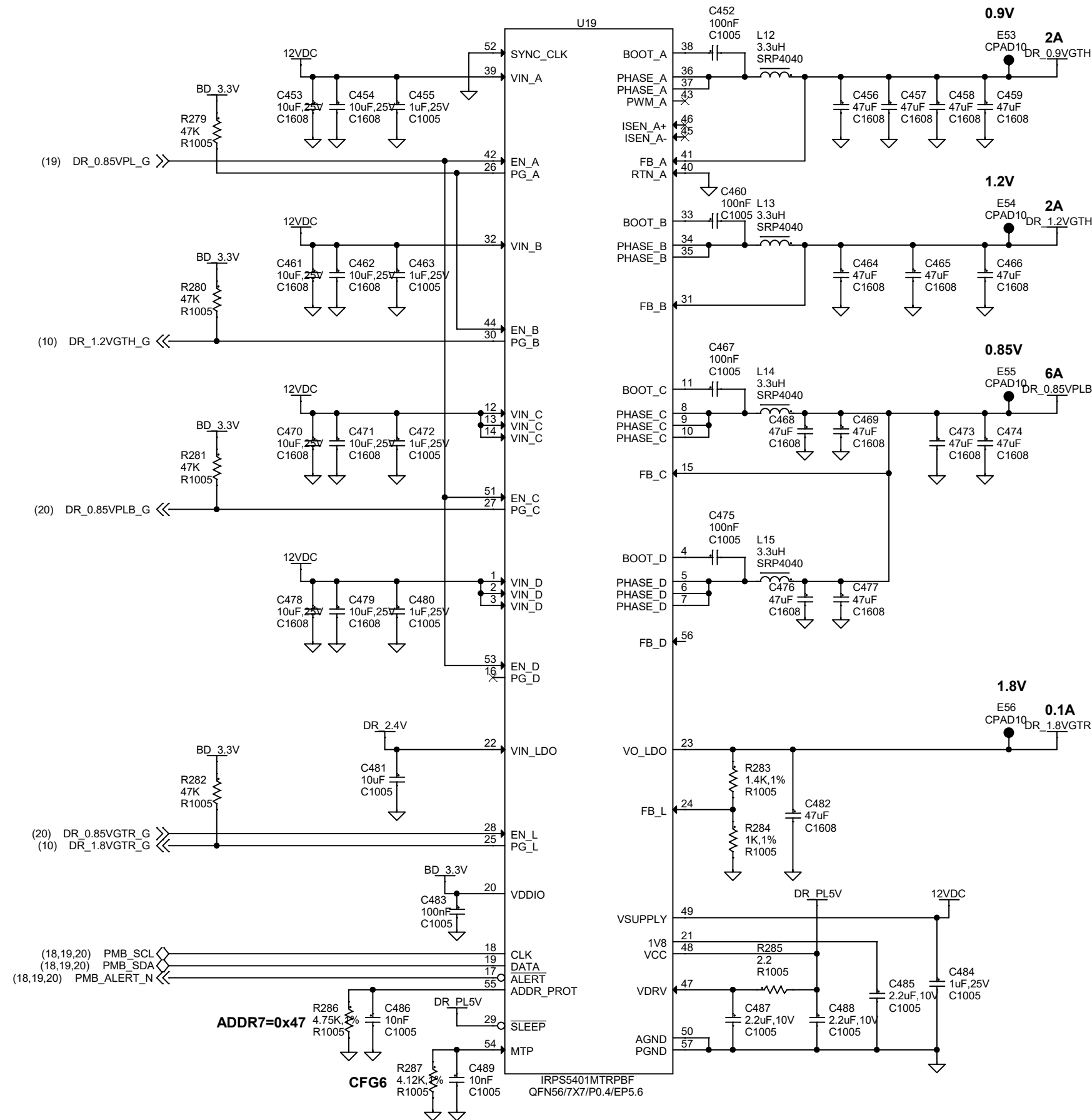
Designed	HAN InCheol	Title	DRM: Ethernet Interface
Drawn	HAN InCheol	Size	A3
Approved	<Approved>	Document Number	717-U01543-00
		Date	Tuesday, November 14, 2023
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		Rev	0











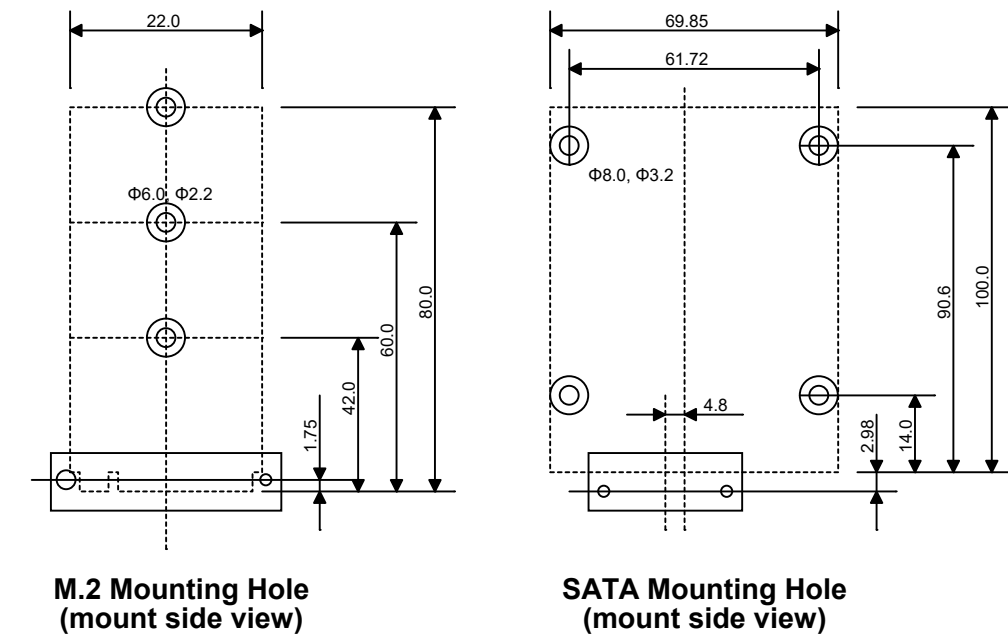
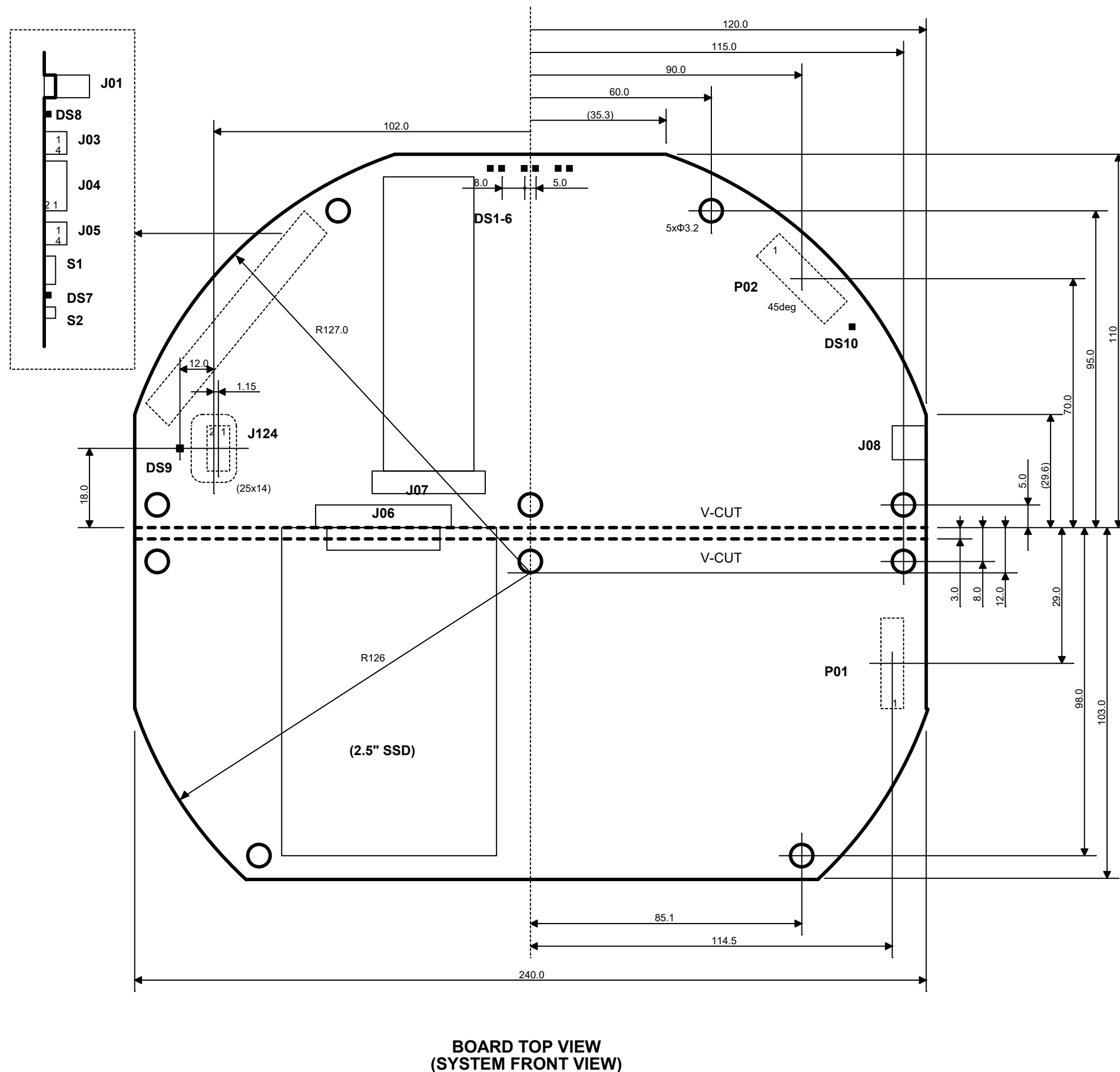
Programmer: USB005



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Designed	HAN InCheol	Title	DRM: Power for PL
Drawn	HAN InCheol	Size	A3
Approved	<Approved>	Document Number	717-U01543-00
		Date	Tuesday, November 14, 2023
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Note:

1.  $t = 2.4\text{mm}$
2. Layers : 16
3. Top 면에 Silk로 CCA 표기

## 데이터기록모듈

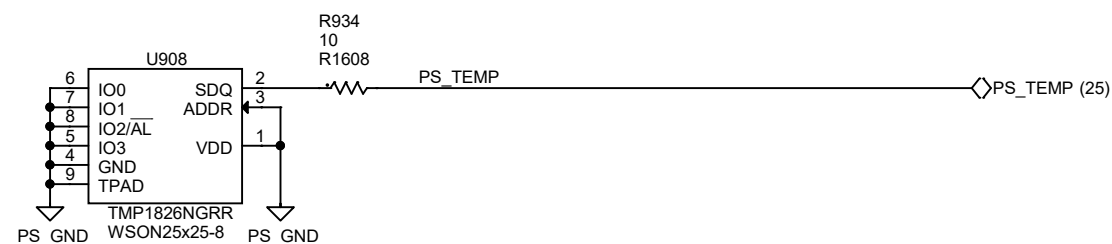
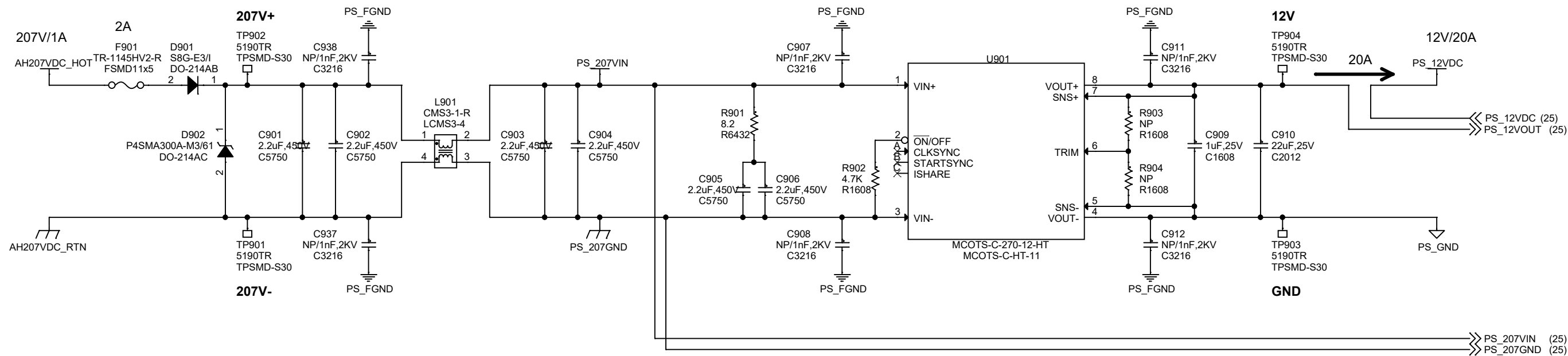
CCA : 717-U01543-00

**S/N :** XXXXXXXXXX (15mm x 4mm)  
(Lot 번호를 위한 빈 줄)

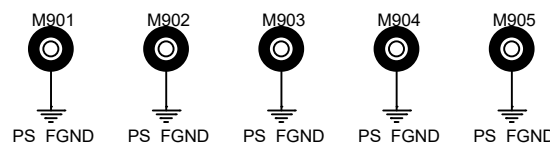
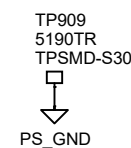
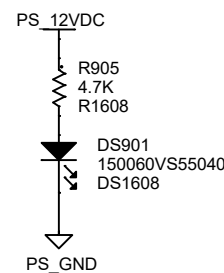
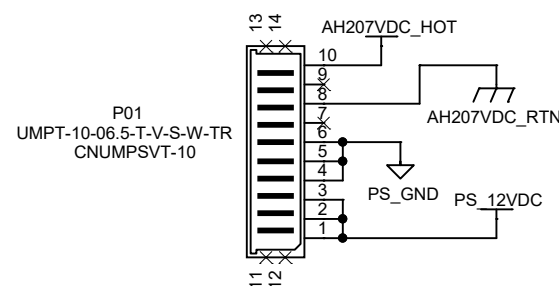
- #### 4. Bottom 면에 PCB P/N을 동박으로 표기

**PCB : 717-P01544-00**





PLACE CLOSE TO THE DC-DC



- Note:
1. t = 2.4mm
  2. Layers : 16면 중 6면 사용
  3. Top 면에 Silk로 CCA 표기

전원공급모듈  
**CCA : 717-U01545-00**  
**S/N :** (15mm x 4mm)  
**(Lot 번호를 위한 빈 줄)**

4. Bottom 면에 PCB P/N을 동박으로 표기
- PCB : 717-P01546-00**

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Designed	HAN InCheol	Title	Power Supply Module
Drawn	HAN InCheol	Size	A3
Approved	<Approved>	Document Number	717-U01545-00
		Date	Tuesday, November 14, 2023
		Sheet	24 of 25
		Rev	0

