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A

Hi3516DDMEB VER.A

The digital media evaluate board for Hi3516D

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The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 1 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	

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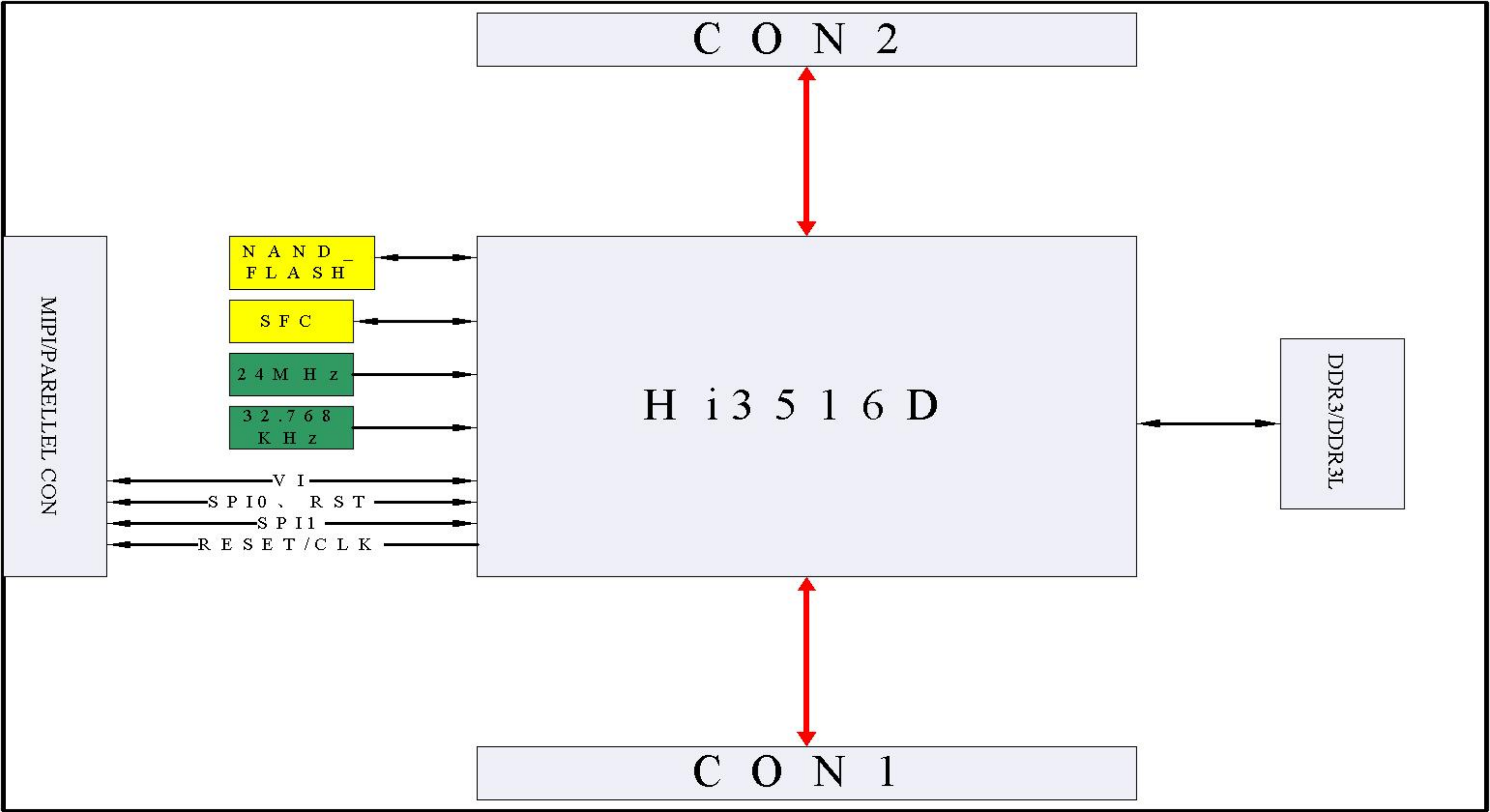
# Changing List

Ver.	Who	Date	Description
Ver.A	WangYonghao	2014-12-22	Initial
		2015-05-21	Change R1, R3, R4 from 220Kohm to 180Kohm.
		2016-07-30	1.Change R71,R94,R95,R99 from 0 to 150Kohm. 2.Change R90,R91,R92,R93 from NC to 499ohm. 3.Change R100,R101,R102,R103 from 576kohm to 12.7Kohm. 4.Change R36,R37,R38,R39 from 470kohm to 12.7Kohm.

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REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 2 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	

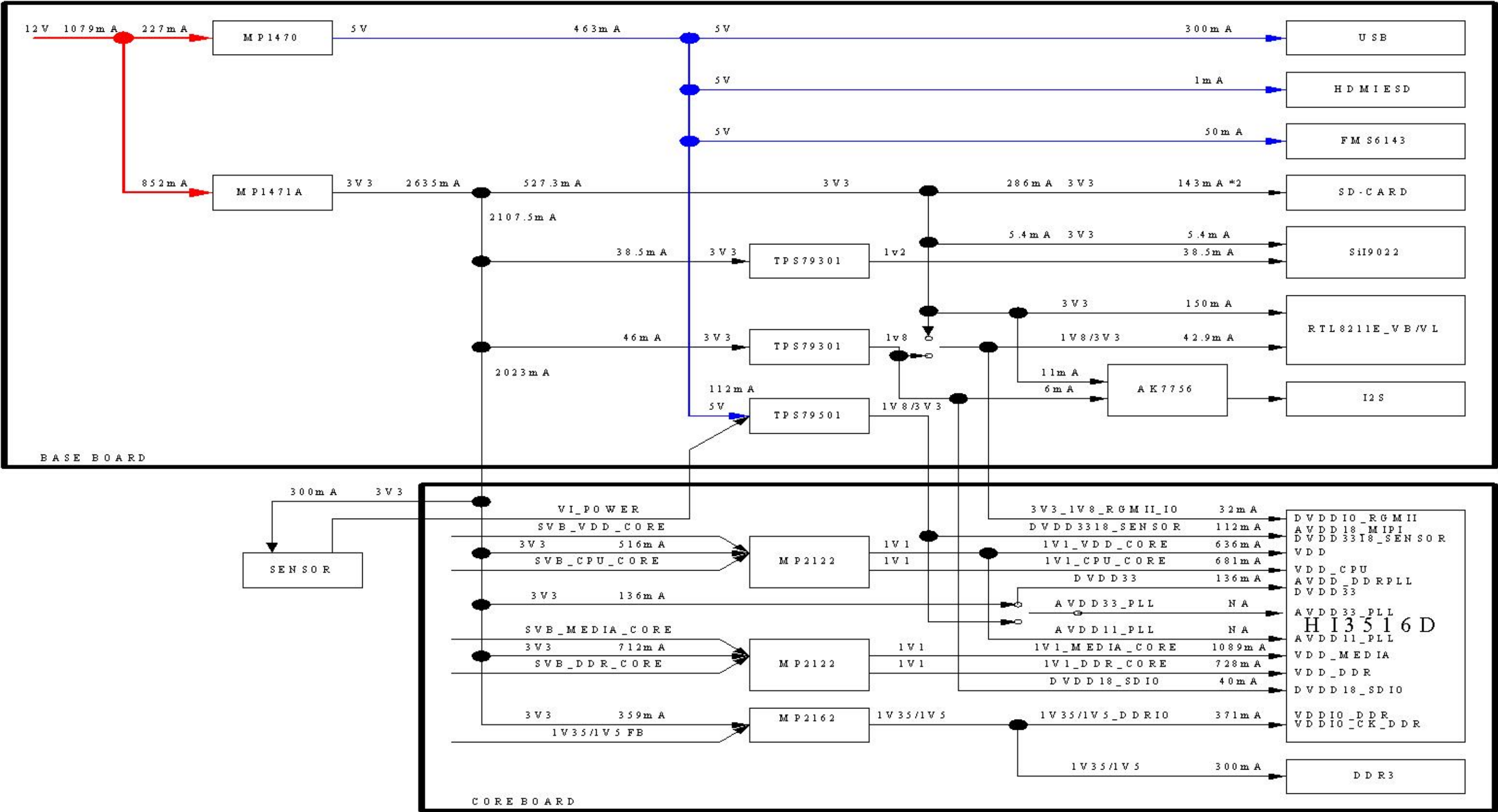
BLOCK DIAGRAM



The type and specification of the components refer to the BOM

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				ECA NO	DATE
DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 3 OF 15	
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POWER TREE



The currents are only for reference.

For details about the actual currents, see the related documents released by HiSilicon.

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DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 4 OF 15	
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## A



DC/DC 3V3->1V1\_MEDIA\_CORE 2Amax

$$T_{\text{delay}} = 0.452RC = 0.452 * 180k * 1u = 81.36ms$$

DC/DC 3V3->1V1\_MEDIA\_CORE 2Amax

$$T_{\text{delay}} = 0.452RC = 0.452 * 243k * 1u = 99.44ms$$



DC/DC 3V3->1V1\_CPU\_CORE 2Amax

$$T_{\text{delay}} = 0.452RC = 0.452 * 180k * 1\mu = 81.36ms$$

## DC/DC 3V3->1V1\_DDR\_CORE 2Amax

$$T_{\text{delay}} = 0.452RC = 0.452 * 180k * 1u = 81.36ms$$



DC/DC 3V3->1V5\_1V35\_DDRIO 2Amax

$$T_{\text{delay}} = 0.452RC = 0.452 * 100k * 1\mu = 45.20ms$$

$$V_{out1} = 0.6 * [(150k+120k)/120k] = 1.35V$$

$$V_{out2} = 0.6 * [(150k + 100k) / 100k] = 1.5V$$

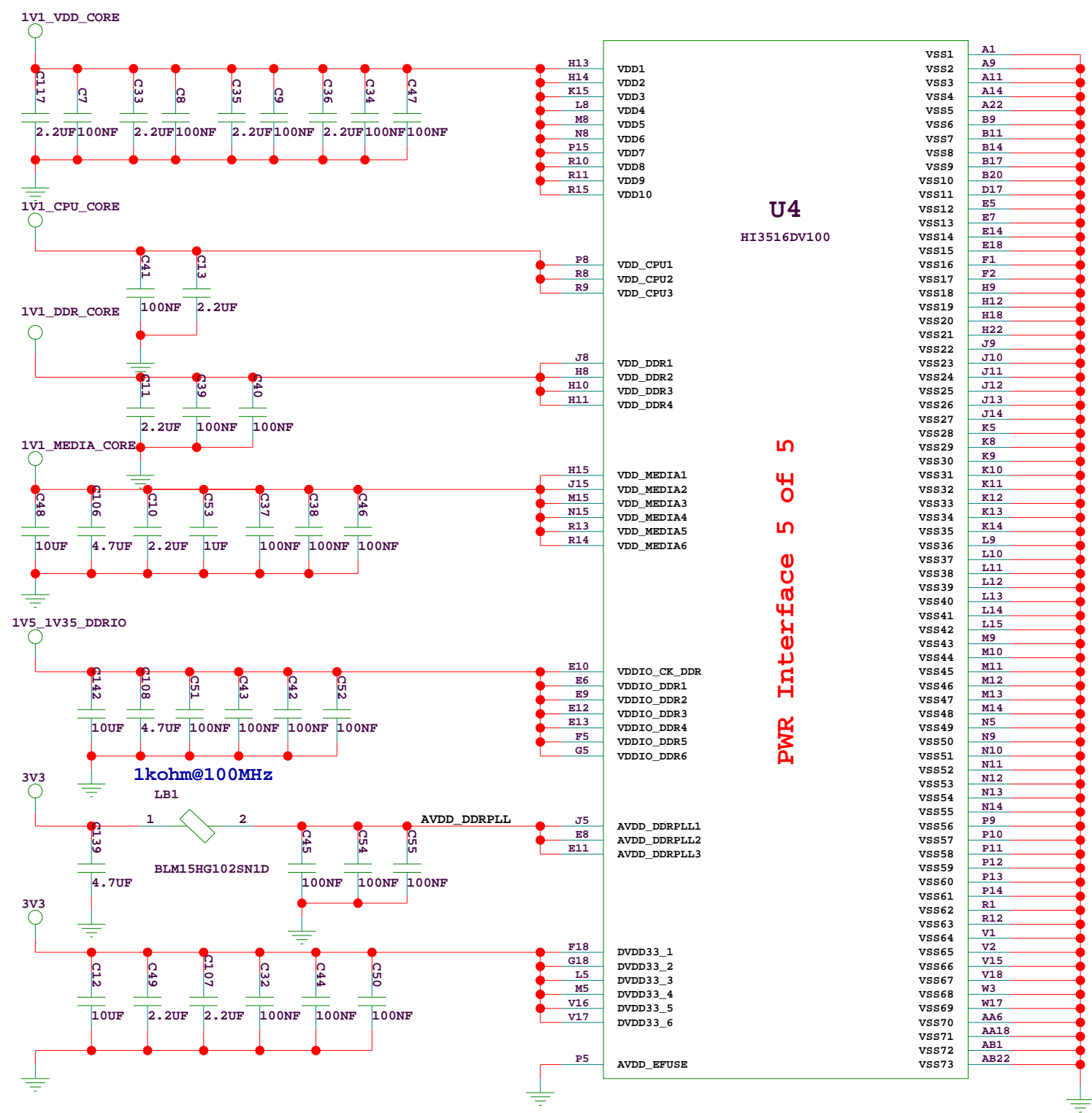
## B



The type and specification of the components refer to the BOM

D

Power of Hi3516D

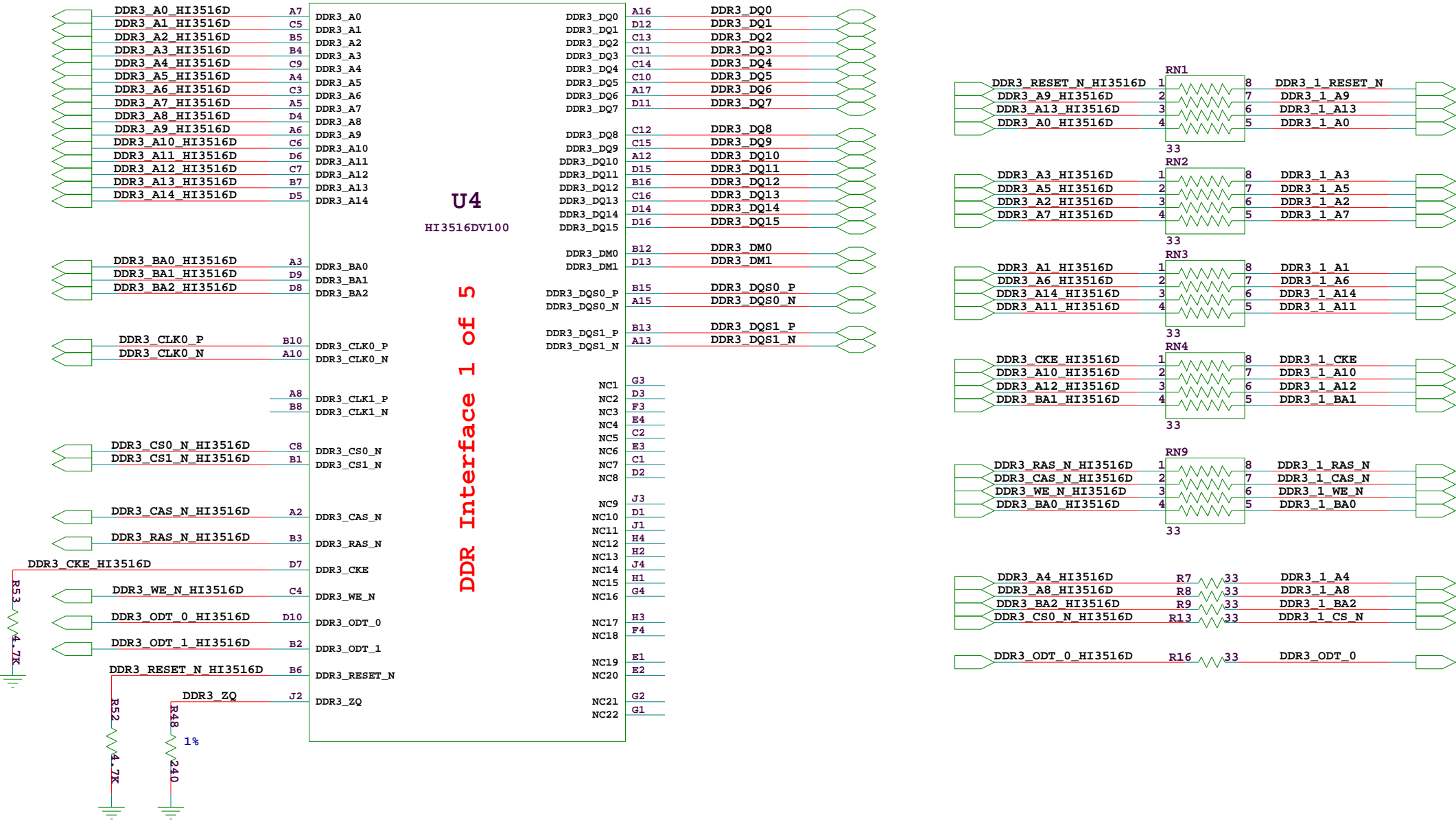


U4  
HI3516DV100  
PWR Interface 5 of 5

The type and specification of the components refer to the BOM

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				ECA NO	DATE
DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 6 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	

DDR of Hi3516D

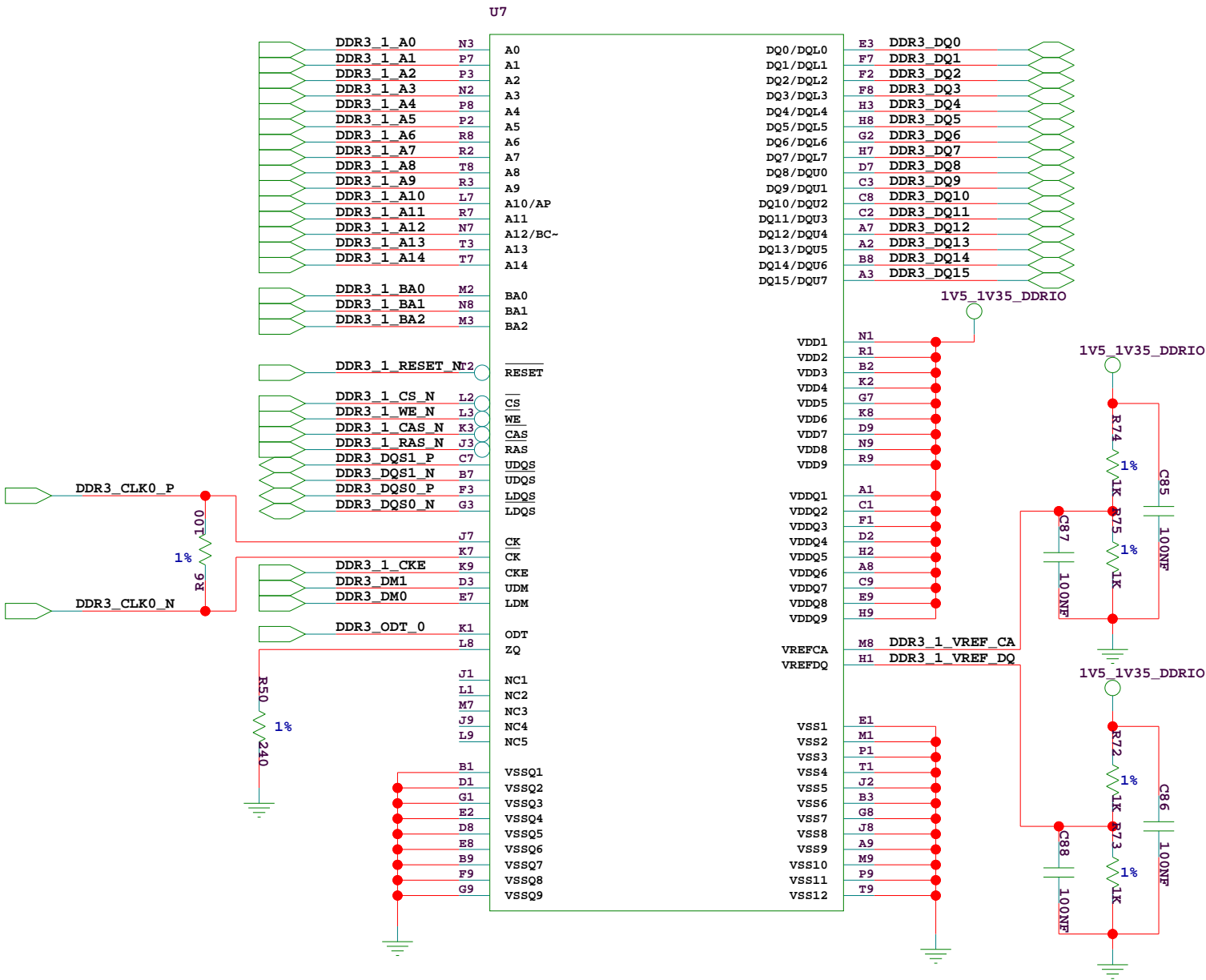


The type and specification of the components refer to the BOM

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		VER	PART_NUMBER	SHEET 7 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	



DDR

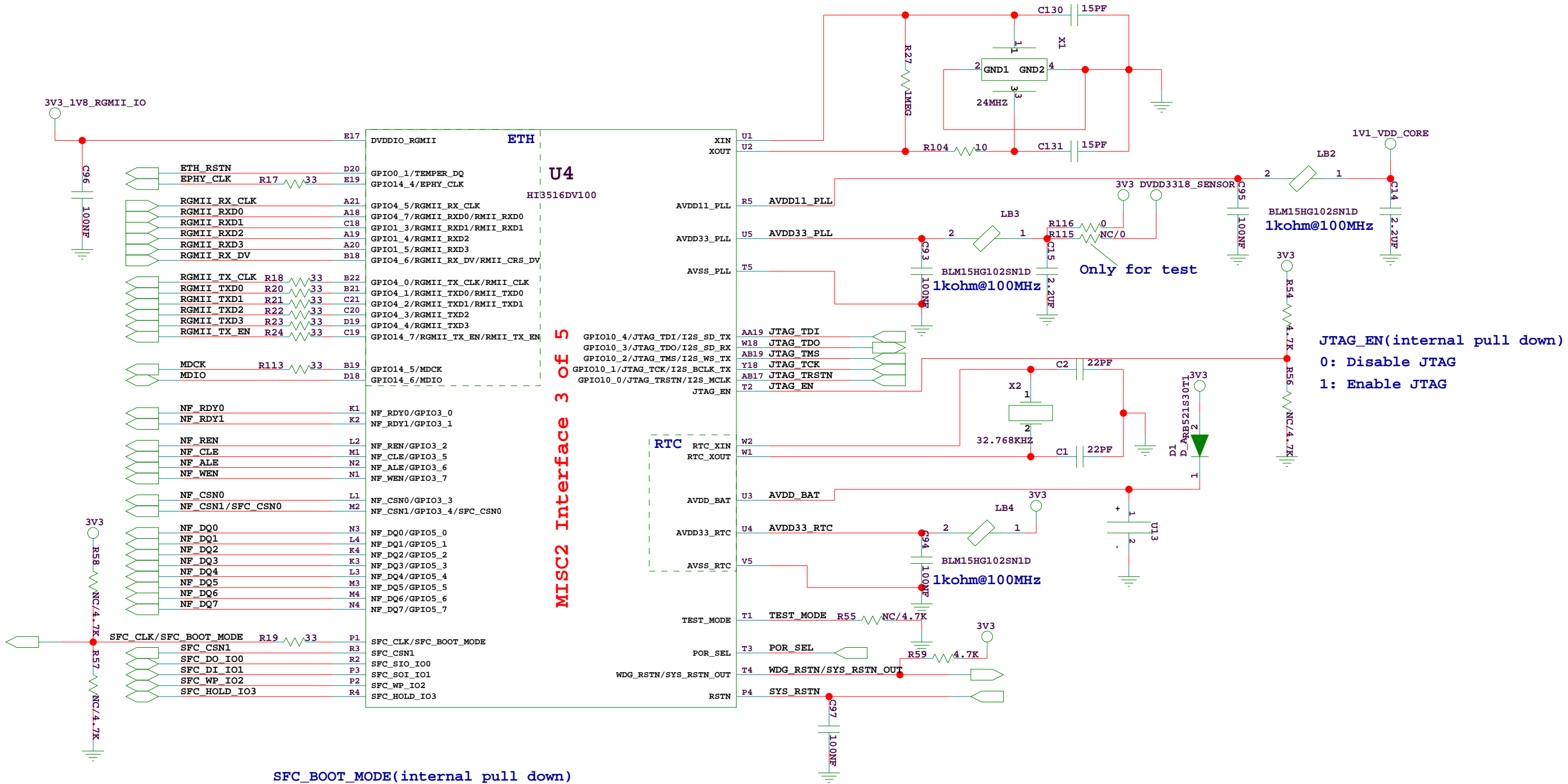


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		VER	PART_NUMBER	SHEET 8 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	



Sys of Hi3516D



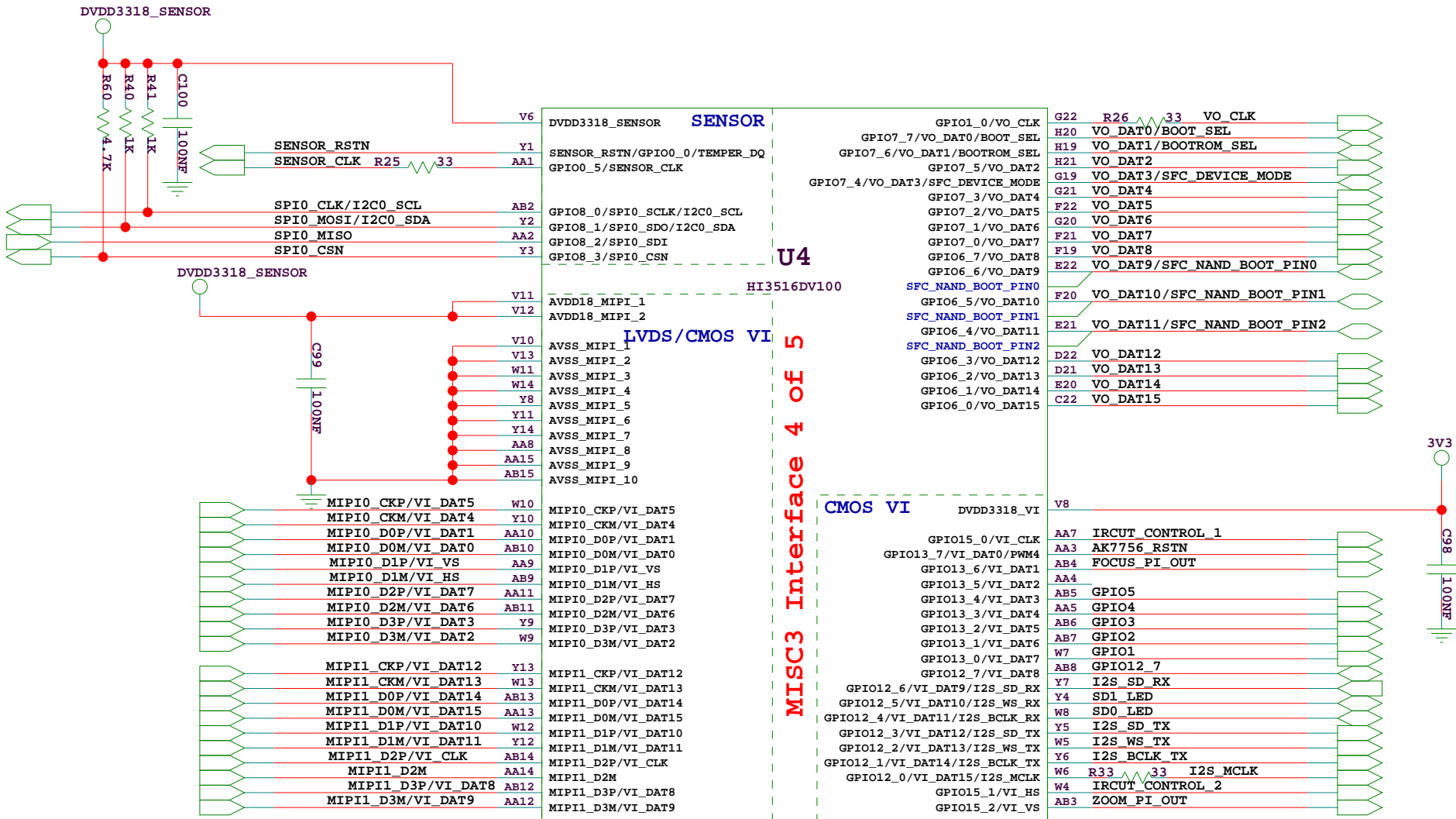
SFC_BOOT_MODE(internal pull down)	
SFC_DEVICE_MODE=0:	SPI NOR FLASH boot address mode
	0: 3byte address boot mode
	1: 4byte address boot mode
SFC_DEVICE_MODE=1:	SPI NAND FLASH boot mode
	0: 1 wire boot mode
	1: 4 wire boot mode

For other configuration information please refer to the page 7 of HI3516APERB\_VER\_B\_SCH.

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DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
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		VER	PART_NUMBER	SHEET 9 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	

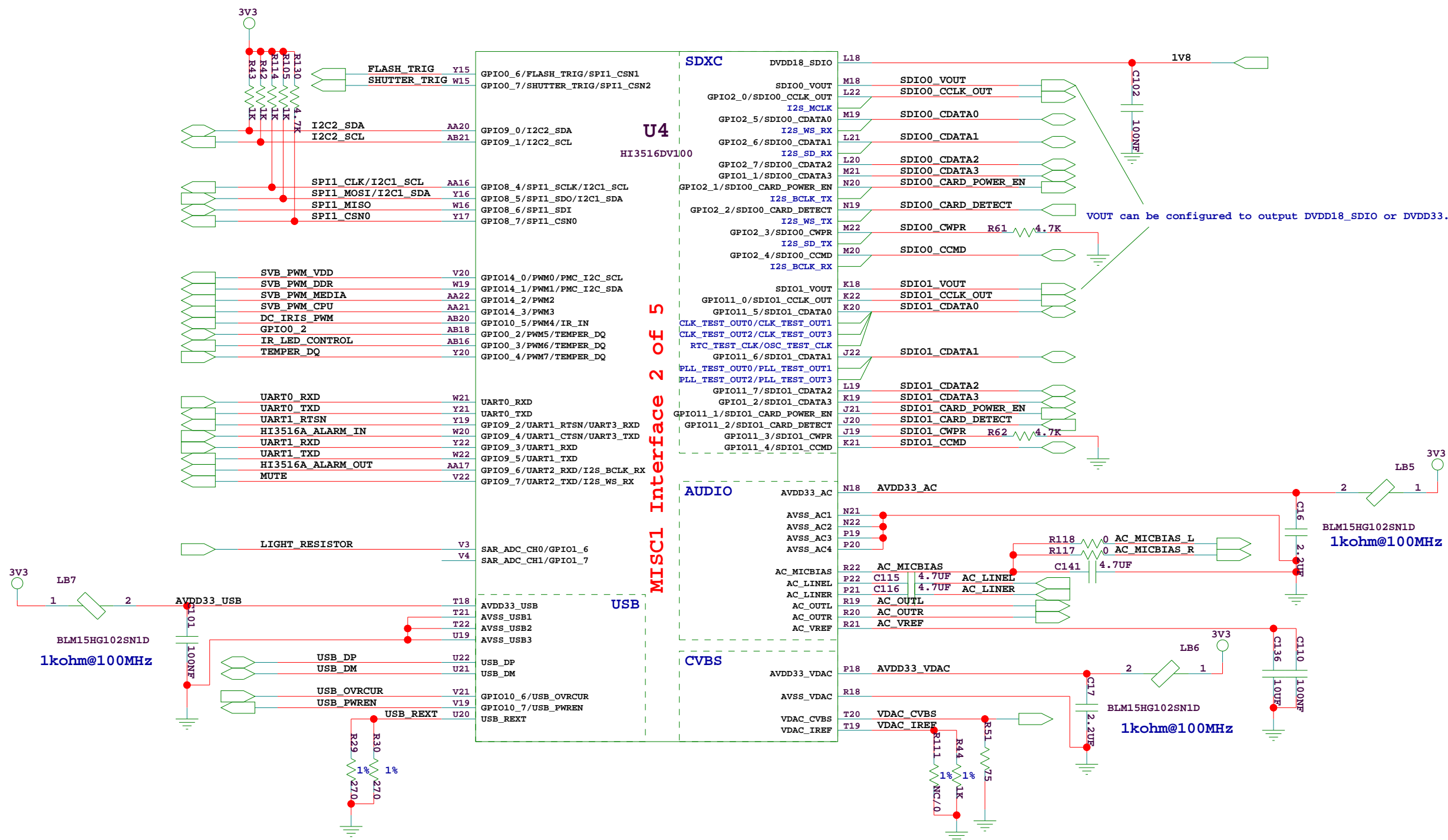
VIVO of Hi3516D



The type and specification of the components refer to the BOM

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DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 10 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	

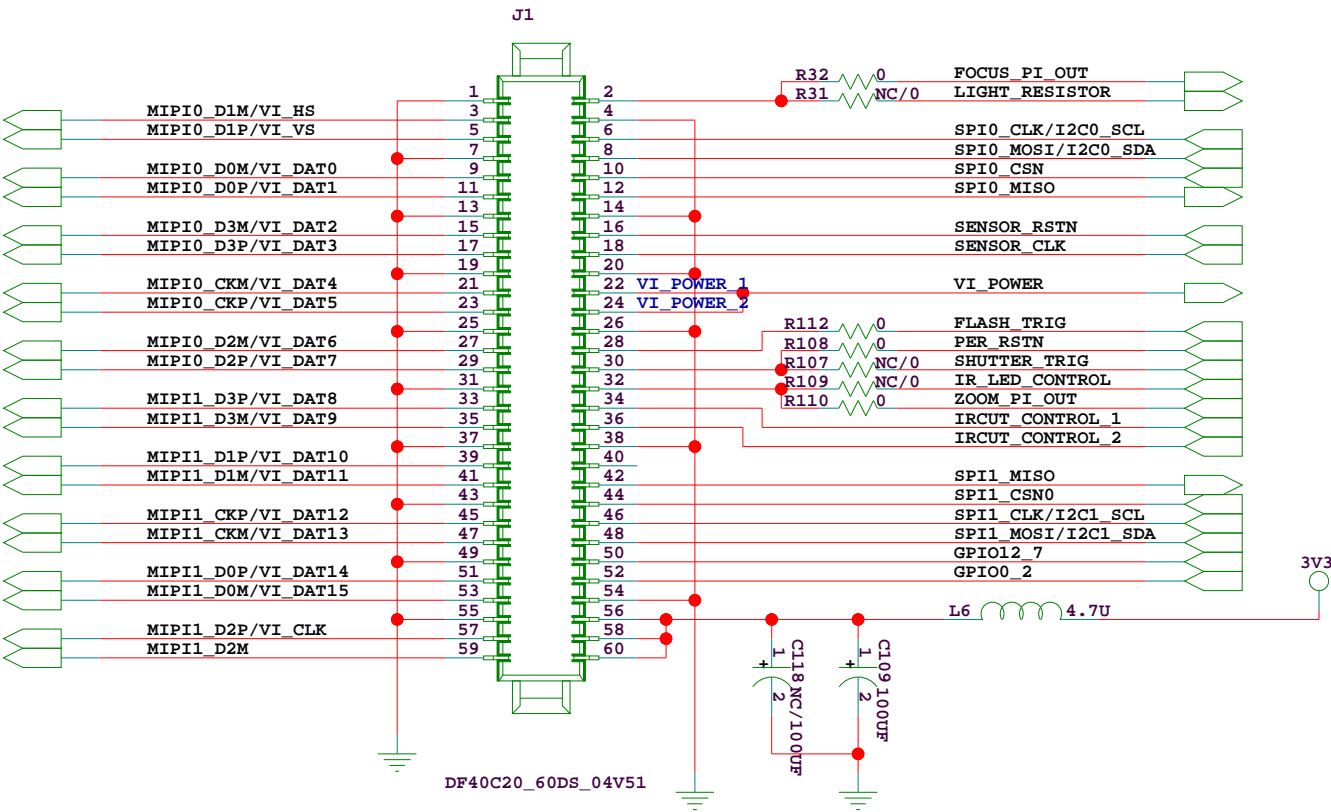
Peripheral of Hi3516D



The type and specification of the components refer to the BOM

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				ECA NO	DATE
DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 11 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	

Sensor Connector

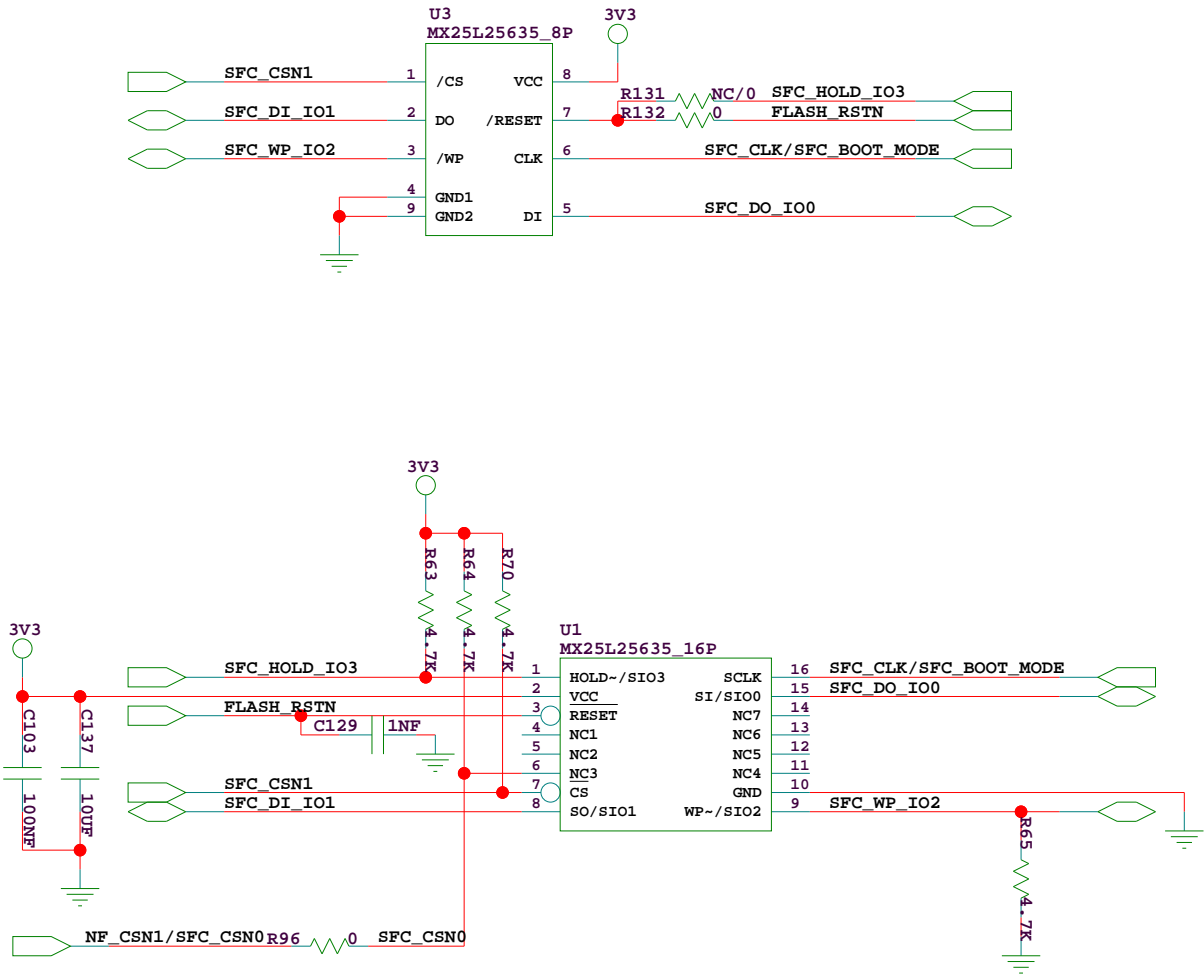


The type and specification of the components refer to the BOM

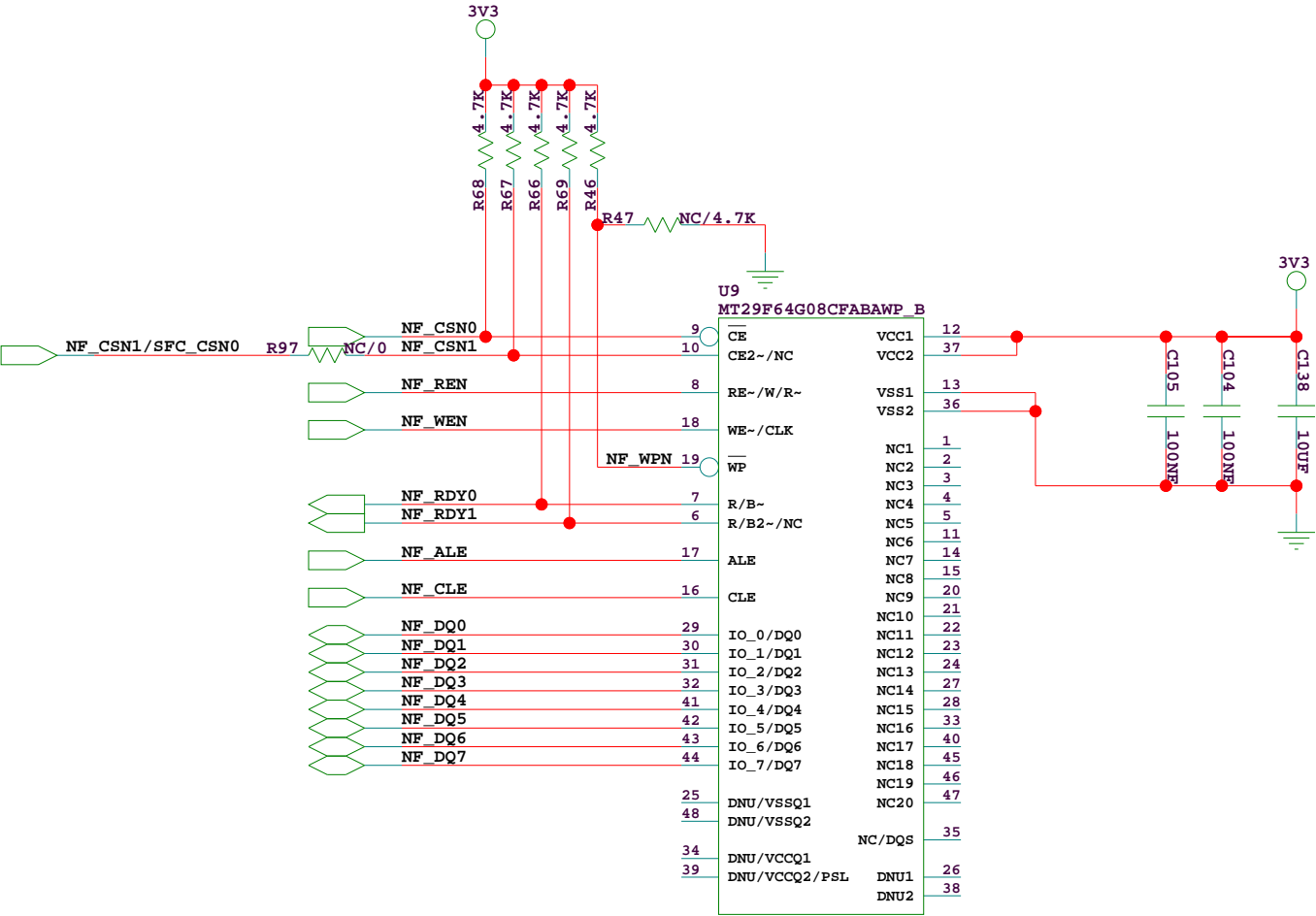
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				ECA NO	DATE
DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 12 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	

FLASH

SPI FLASH(BOOT FROM CSN1)



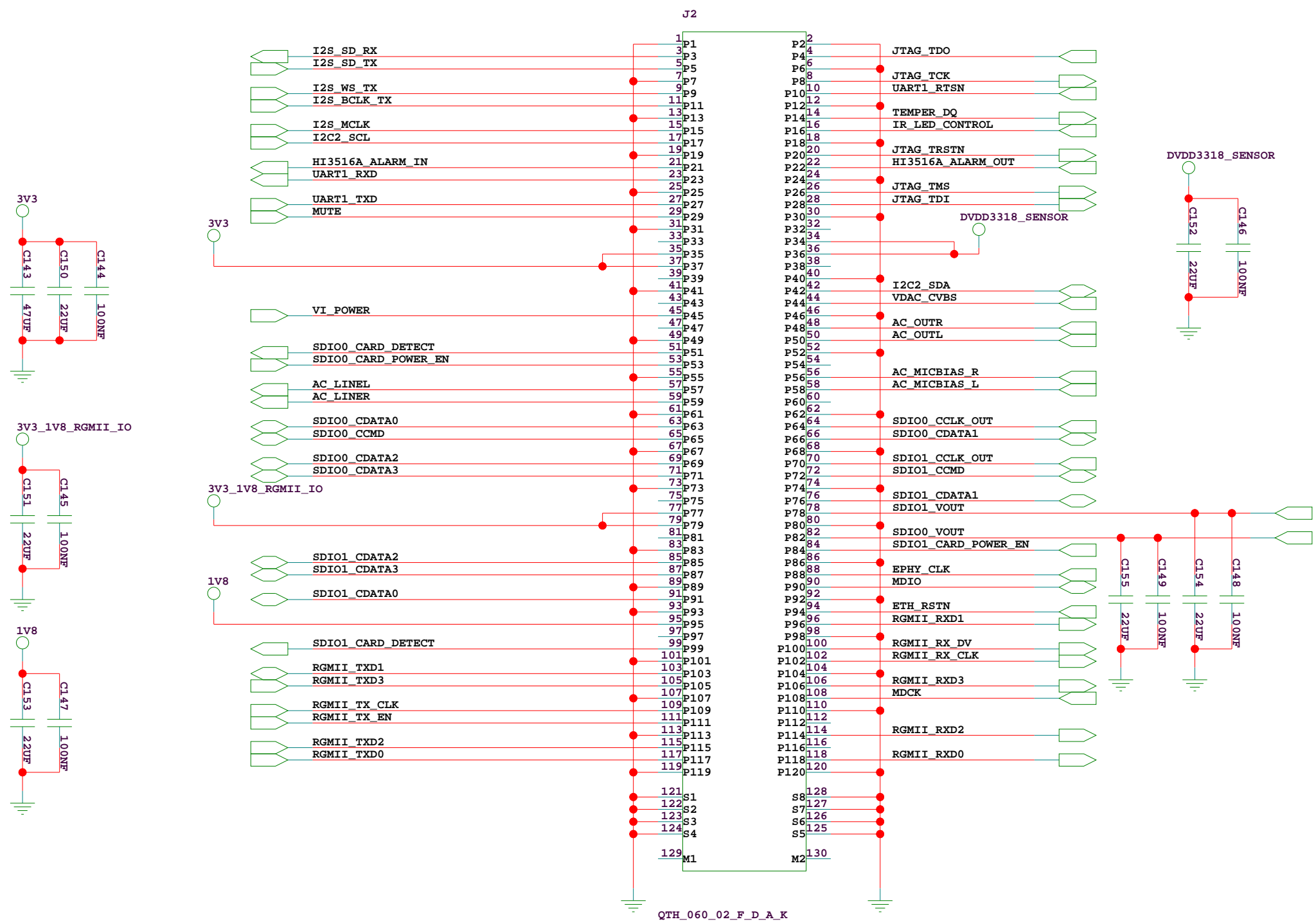
ONFI NAND FLASH(BOOT FROM CSN0)



The type and specification of the components refer to the BOM

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				ECA NO	DATE
DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 13 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	

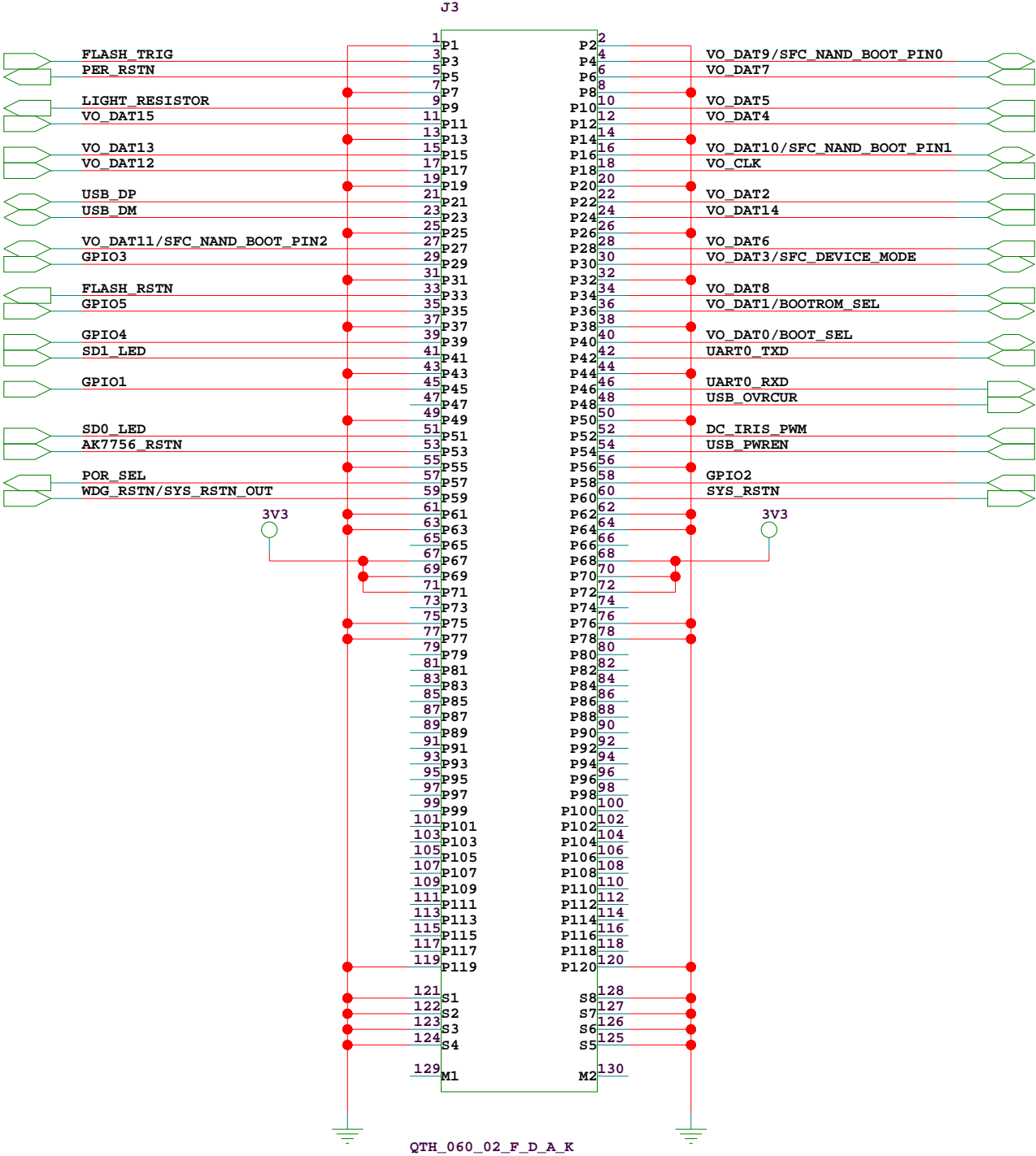
CONNECTOR TO PERB J16



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 14 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	

CONNECTOR TO PERB J17



The type and specification of the components refer to the BOM

				NA	
				ECA NO	DATE
DESIGNED	WANGYONGHAO 206908	HI3516DDMEB_VA		00001234	
REVIEWED	LISI XXXXX				
		VER	PART_NUMBER	SHEET 15 OF 15	
		A	03030001	HUAWEI TECH CO.,LTD.	