

6

5

4

3

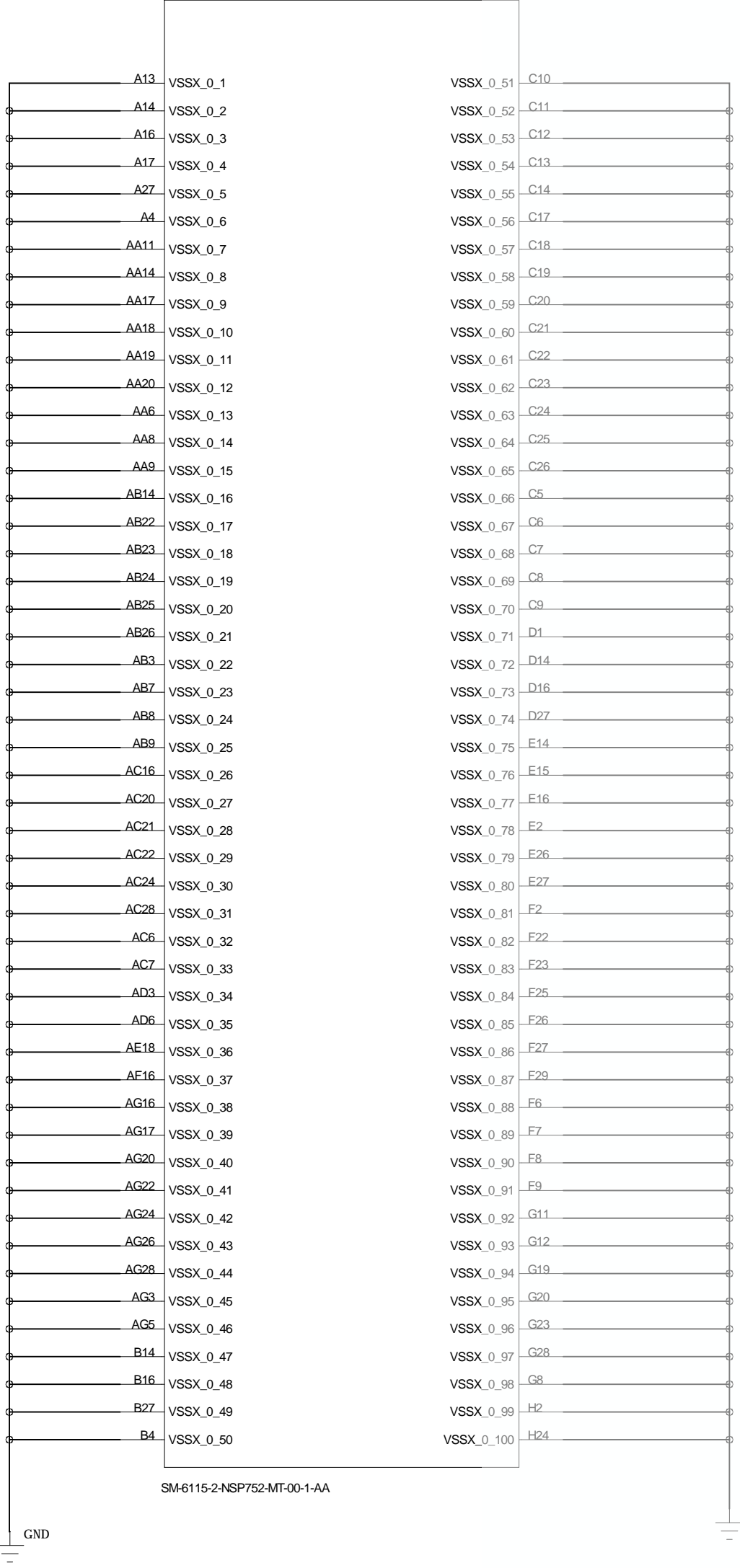
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1

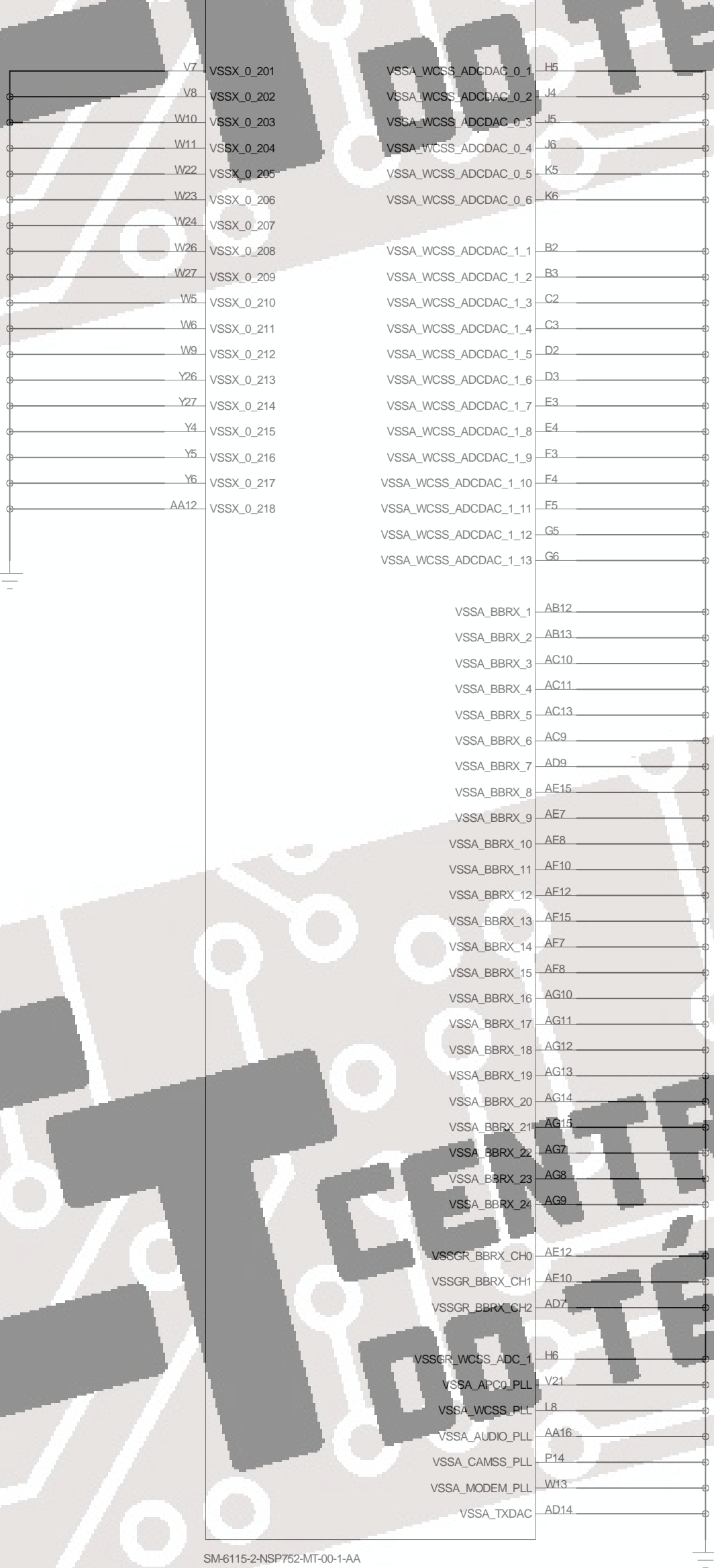
REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

A INITIAL RELEASE

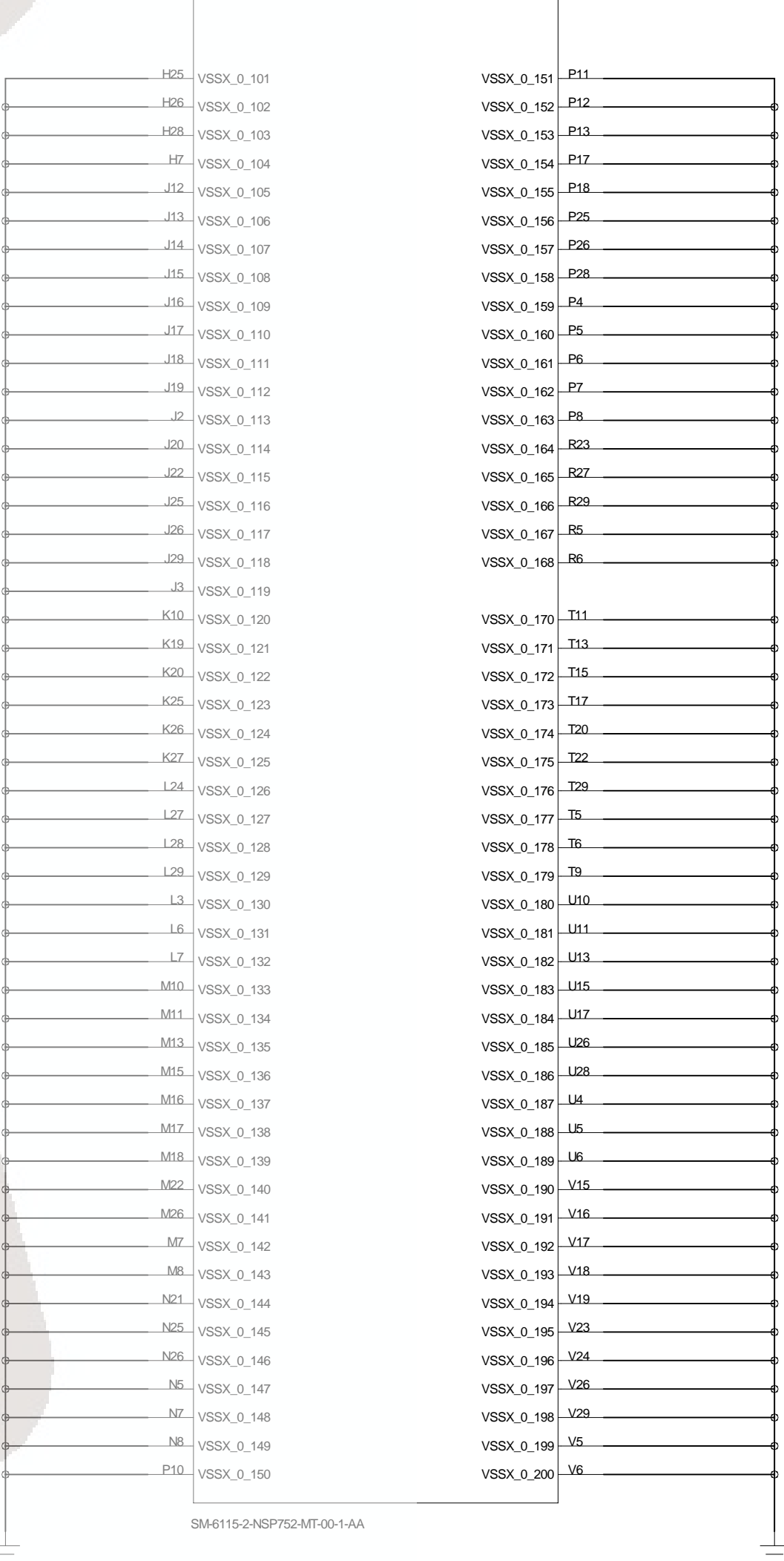
U1000-J



U1000-L



U1000-K



COMPANY: <Company Name>			
TITLE: SM6115			
DRAWN: Wentao.Zhong	DATED: 20200813	CODE: P550AE	SIZE: D
CHECKED: <Checked By>	DATED: <Checked Date>	DRAWING NO: P550AE	REV: V0.30
QUALITY CONTROL: <QC By>	DATED: <QC Date>	SHEET: 3 OF 45	
RELEASED: <Released By>	DATED: <Release Date>	SCALE: <Scale>	

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

D

C

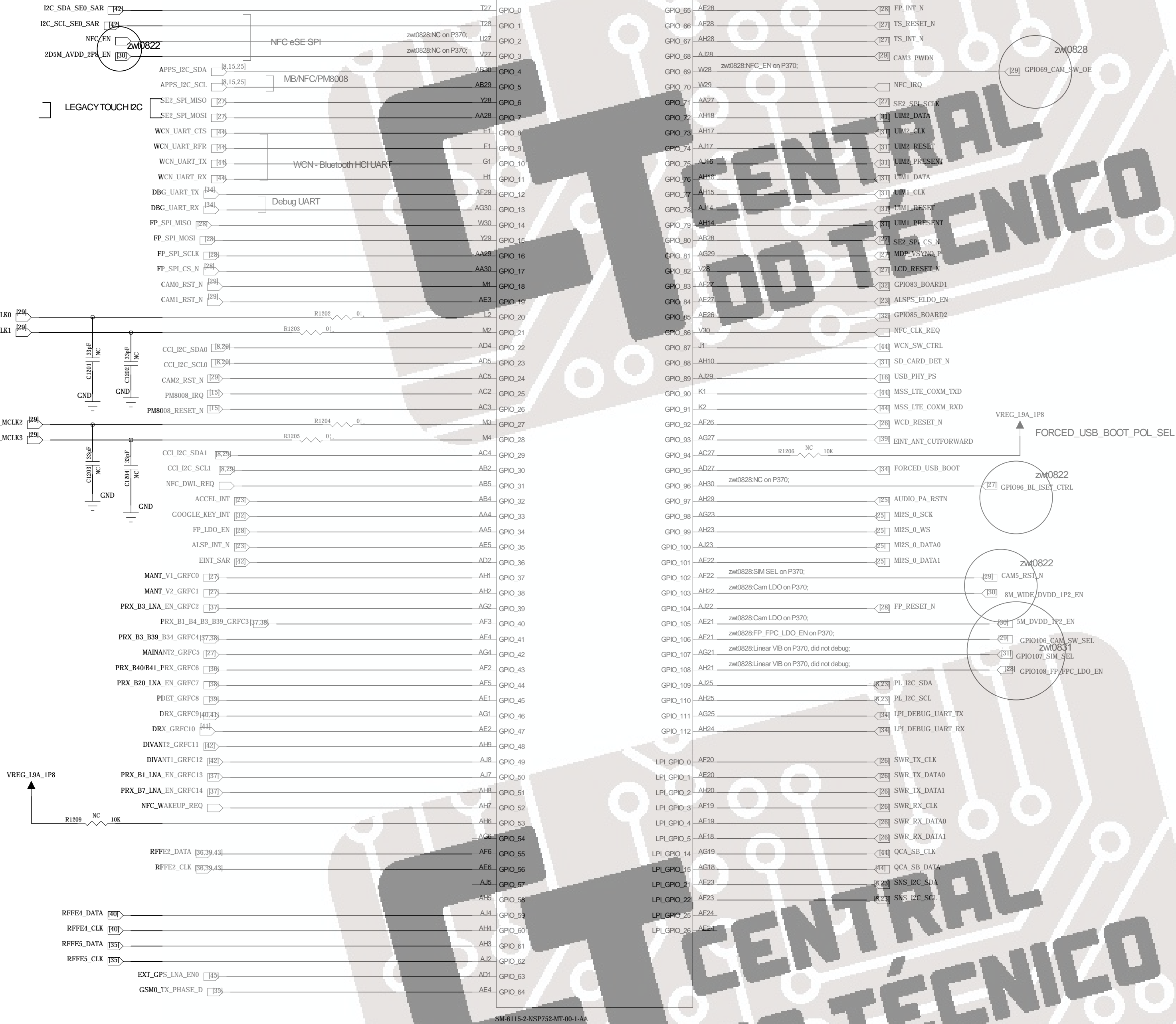
B

A

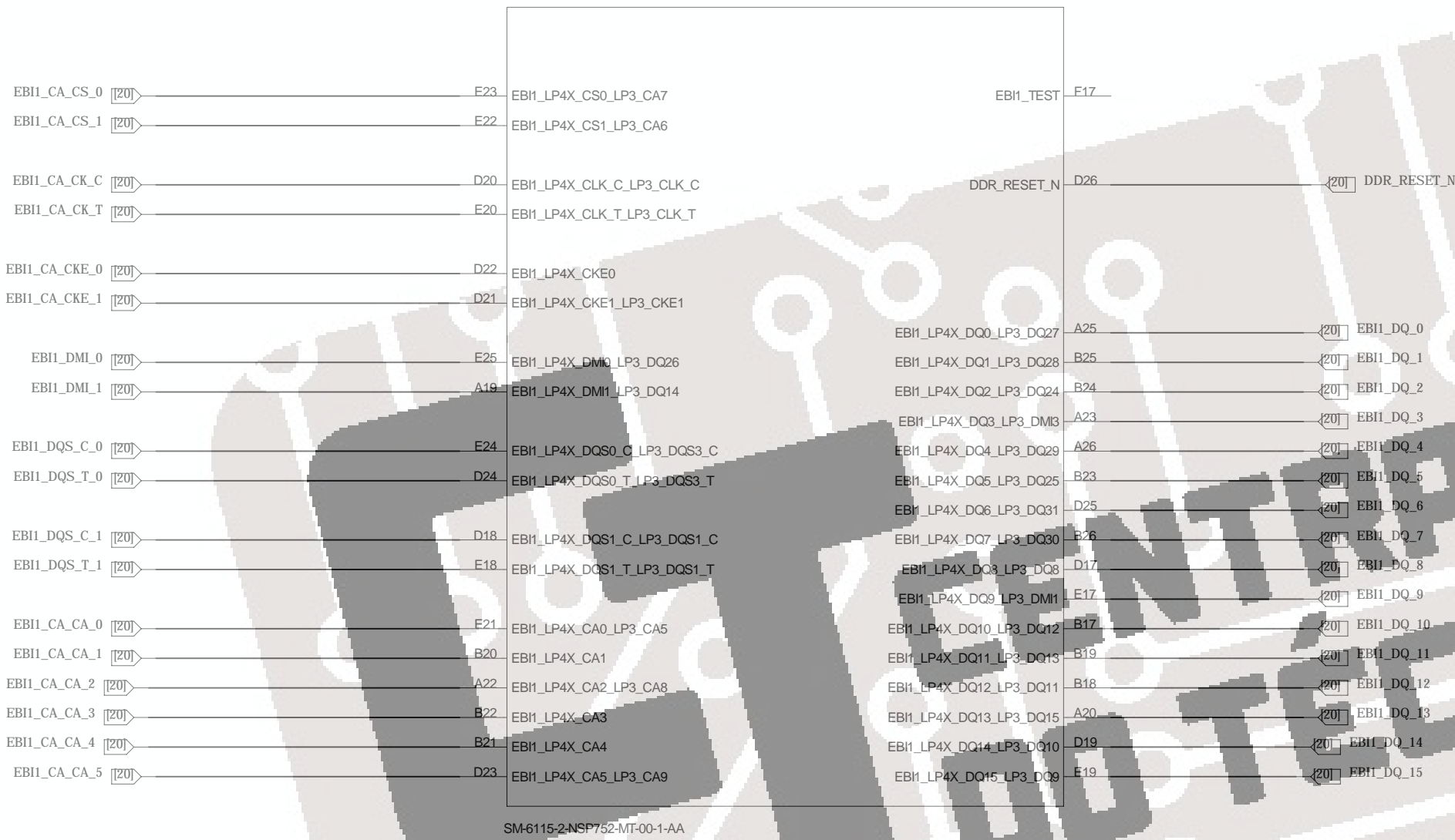
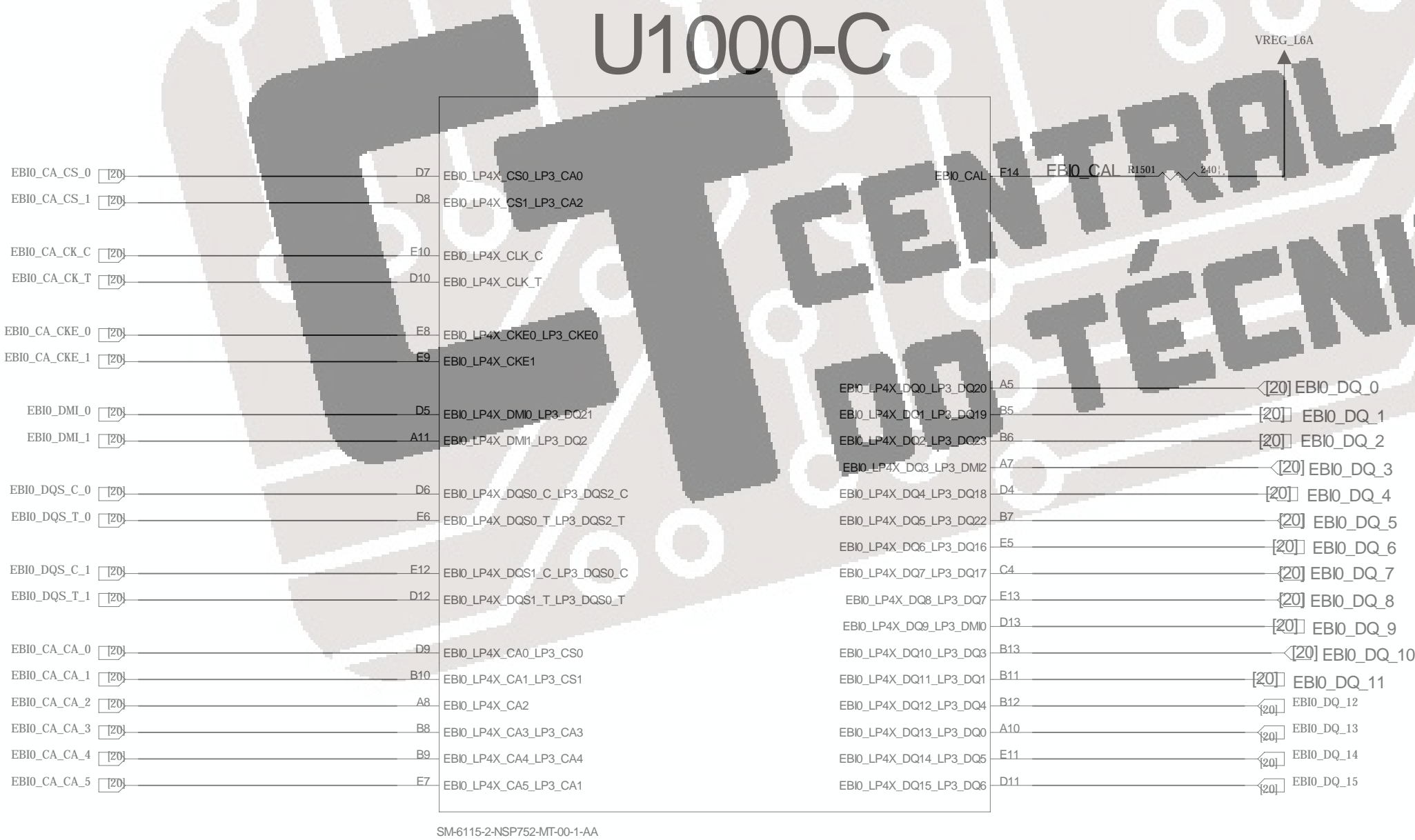
For Track-3
DNI R0608,R0610
INSTALL R0609

EMMC/UMCP-SELECT

	UMCP	EMCP
R1209	10K	DNI

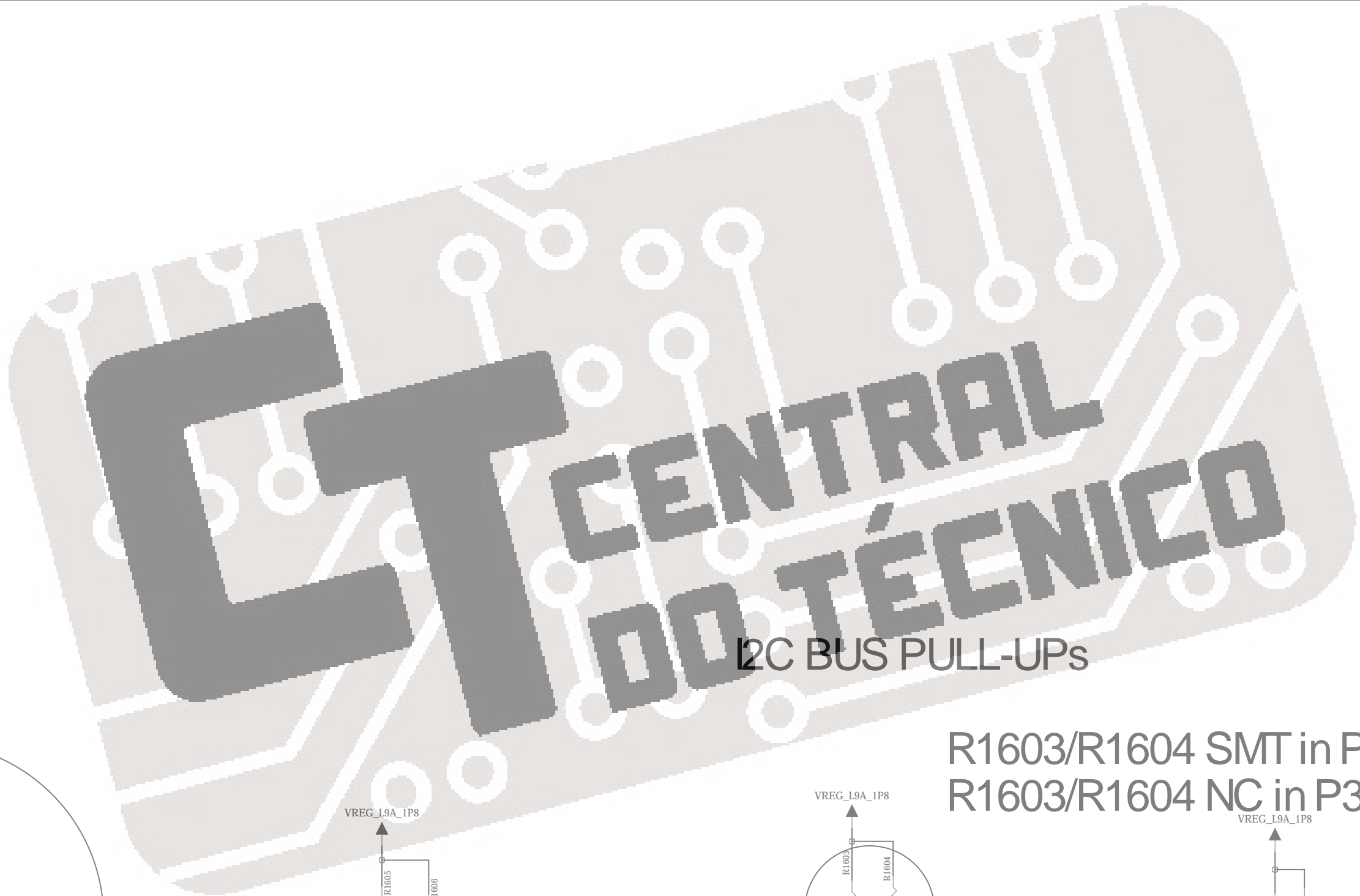


REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



DRAWN: Wentao.Zhong		DATED: 20200813		COMPANY: <Company Name>			
CHECKED: <Checked By>		DATED: <Checked Date>		TITLE: SM6115			
QUALITY CONTROL: <QC By>		DATED: <QC Date>		CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
RELEASED: <Released By>		DATED: <Release Date>		SCALE: <Scale>		SHEET: 7 OF 45	

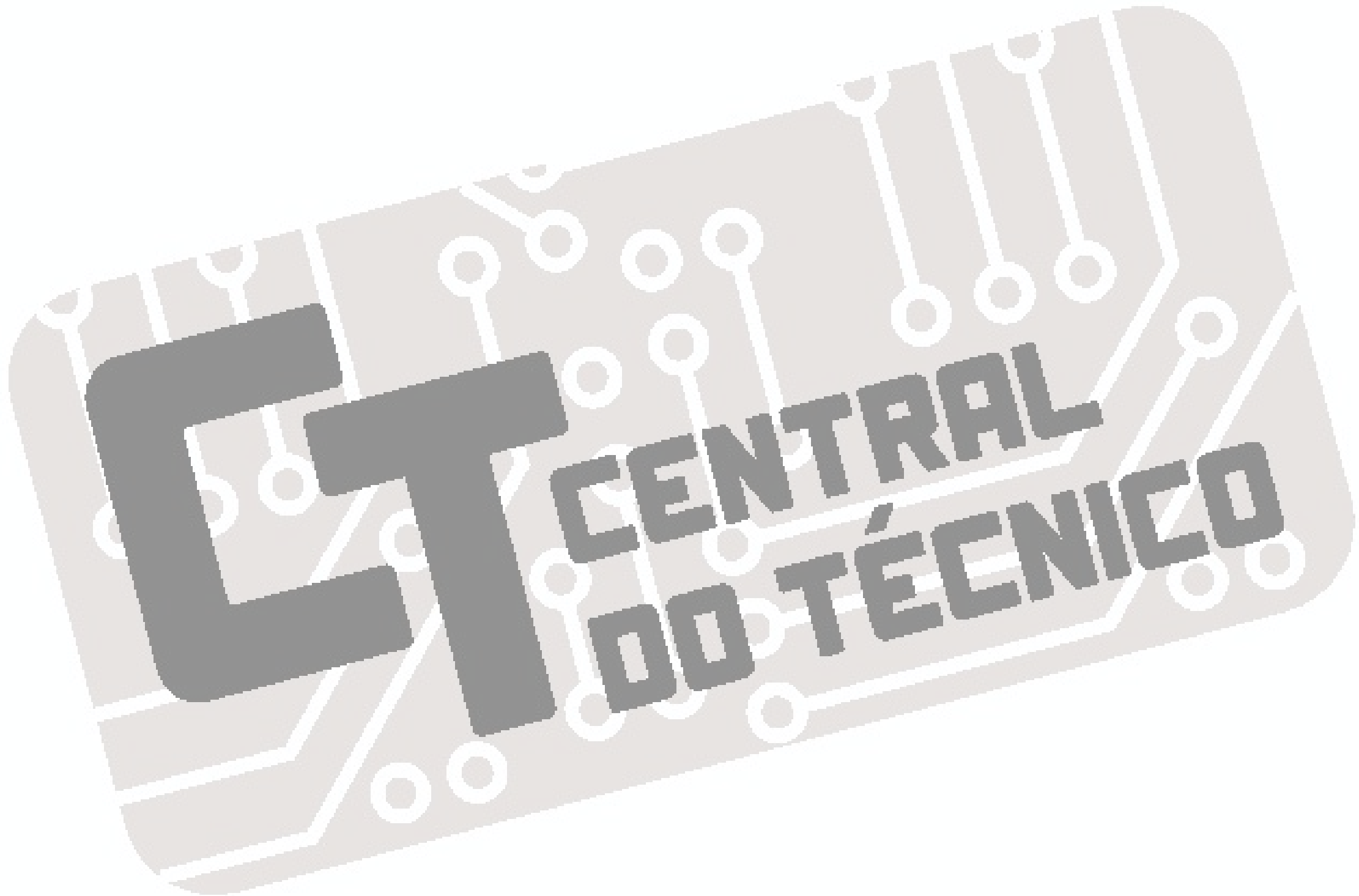
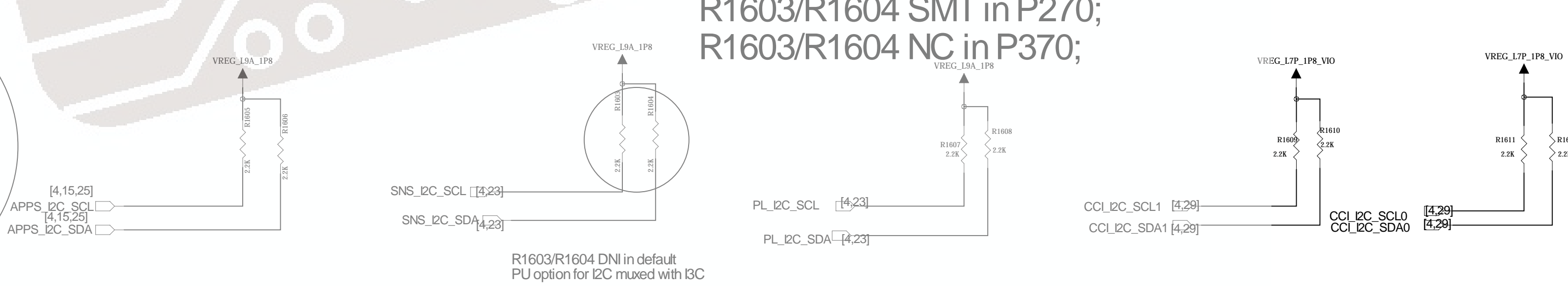
REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



I2C BUS PULL-UPS

R1603/R1604 SMT in P270;
R1603/R1604 NC in P370;

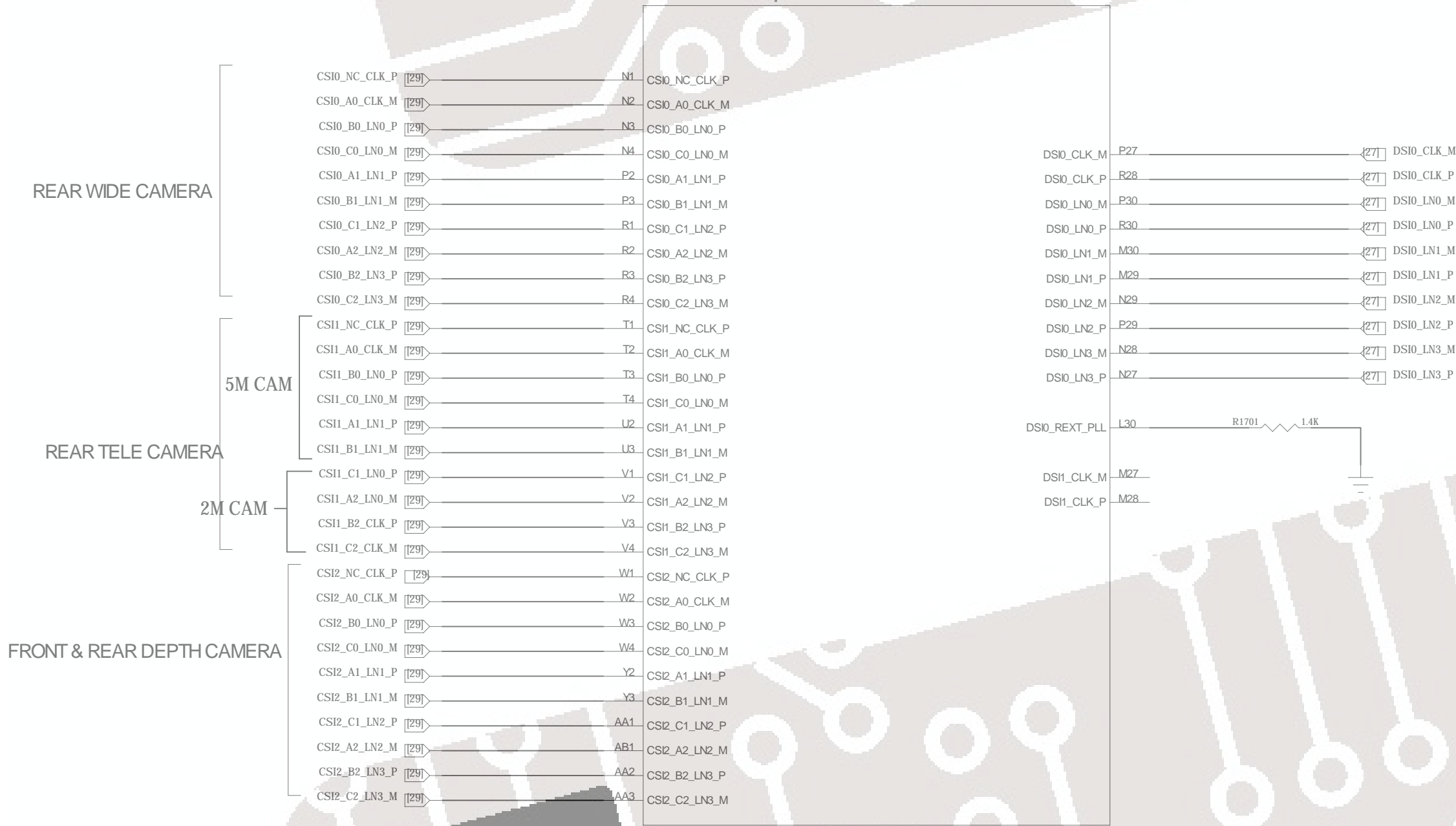
ZWT0818: NC if TP use SPI



COMPANY: <Company Name>			
TITLE: SM6115			
CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
SCALE: <Scale>		SHEET: 8 OF 45	

DRAWN: Wentao.Zhong	DATED: 20200813
CHECKED: <Checked By>	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: <Released By>	DATED: <Release Date>

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

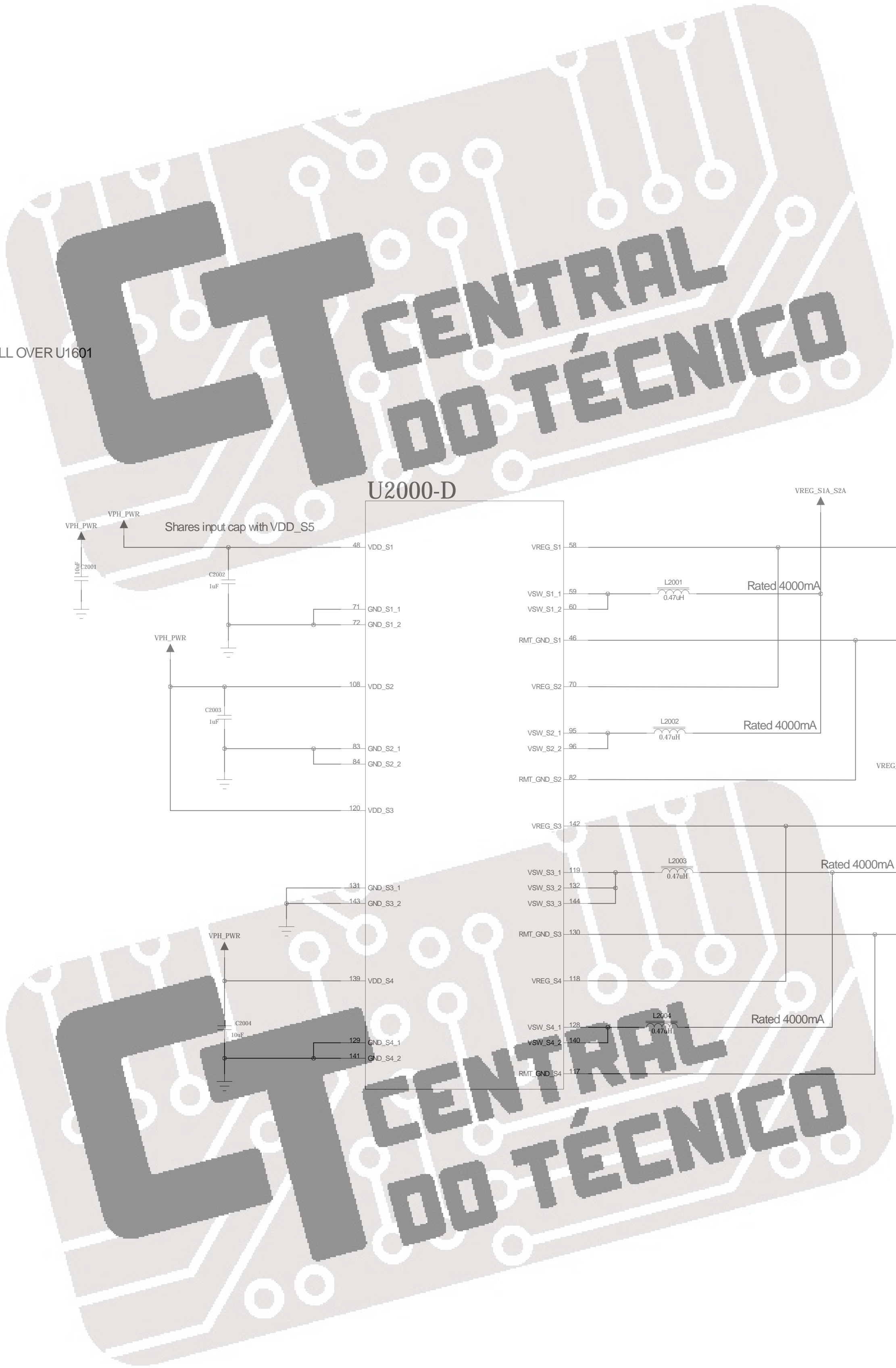


SDM670 EBIO

DRAWN: Wentao.Zhong		DATED: 20200813		COMPANY: <Company Name>			
CHECKED: <Checked By>		DATED: <Checked Date>		TITLE: SM6115			
QUALITY CONTROL: <QC By>		DATED: <QC Date>		CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
RELEASED: <Released By>		DATED: <Release Date>		SCALE: <Scale>			SHEET: 9 OF 45

REVISION RECORD			
LTR	ECO NO.	APPROVED	DATE

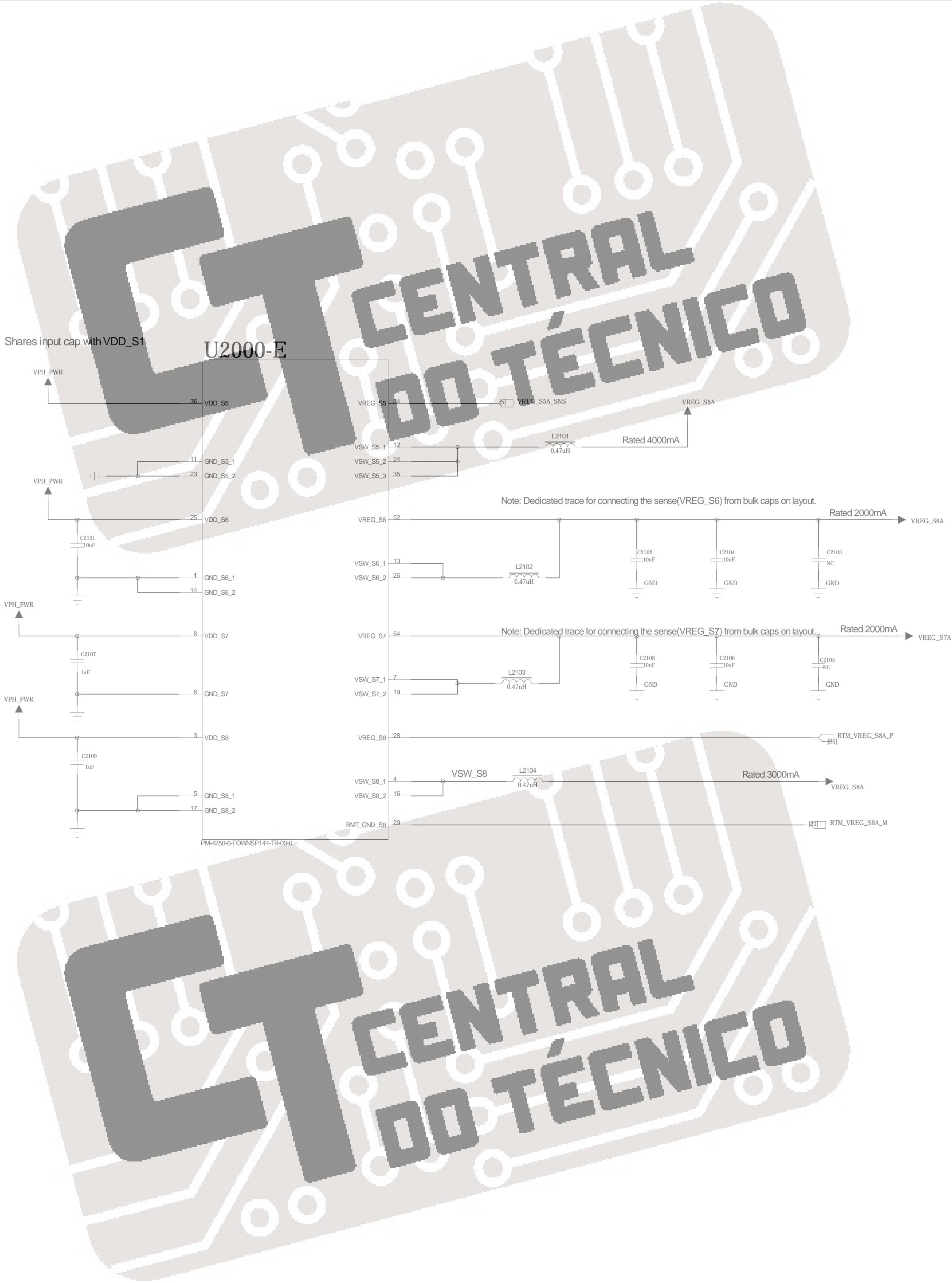
VPH_PWR BULK CAPS. DISTRIBUTE THESE ALL OVER U1601



COMPANY: <Company Name>			
TITLE: SM6115			
CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
SCALE: <Scale>		SHEET: 11 OF 45	

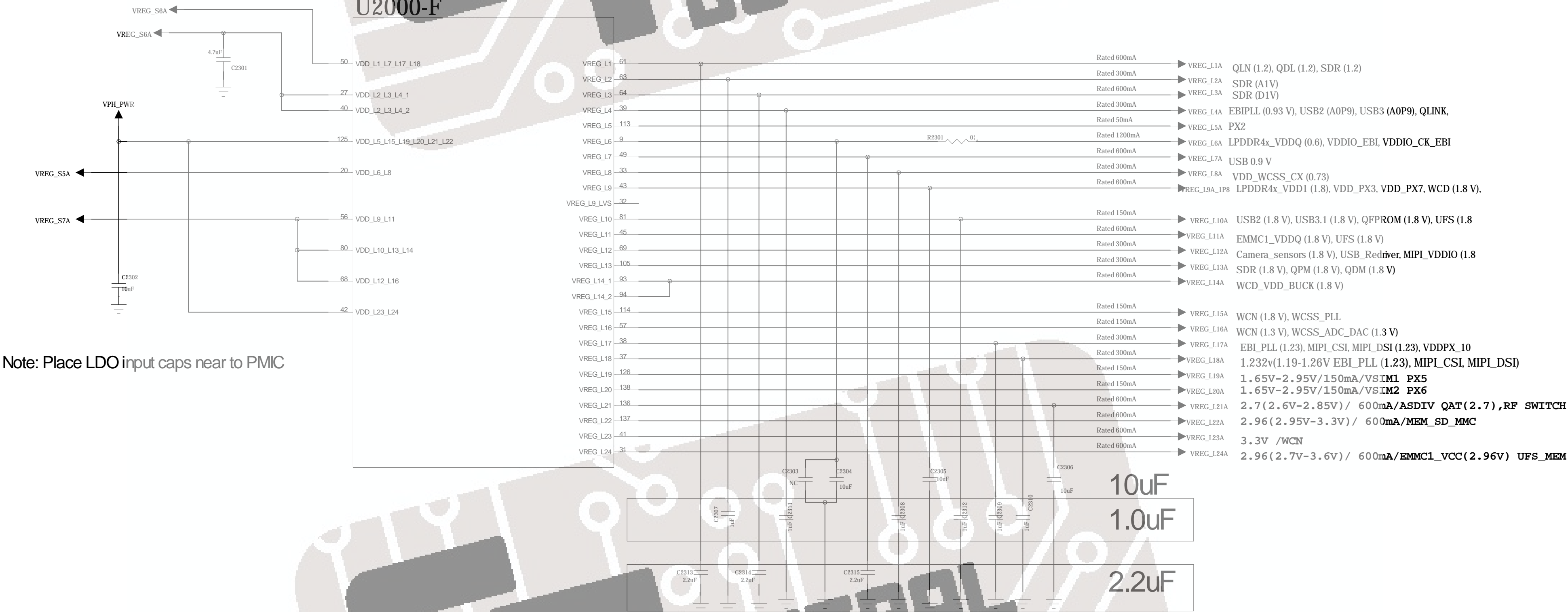
DRAWN: Wentao.Zhong	DATED: 20200813
CHECKED: <Checked By>	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: <Released By>	DATED: <Release Date>

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



DRAWN: Wentao.Zhong		DATED: 20200813		COMPANY: <Company Name>			
CHECKED: <Checked By>		DATED: <Checked Date>		TITLE: SM6115			
QUALITY CONTROL: <QC By>		DATED: <QC Date>		CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
RELEASED: <Released By>		DATED: <Release Date>		SCALE: <Scale>		SHEET: 12 OF 45	

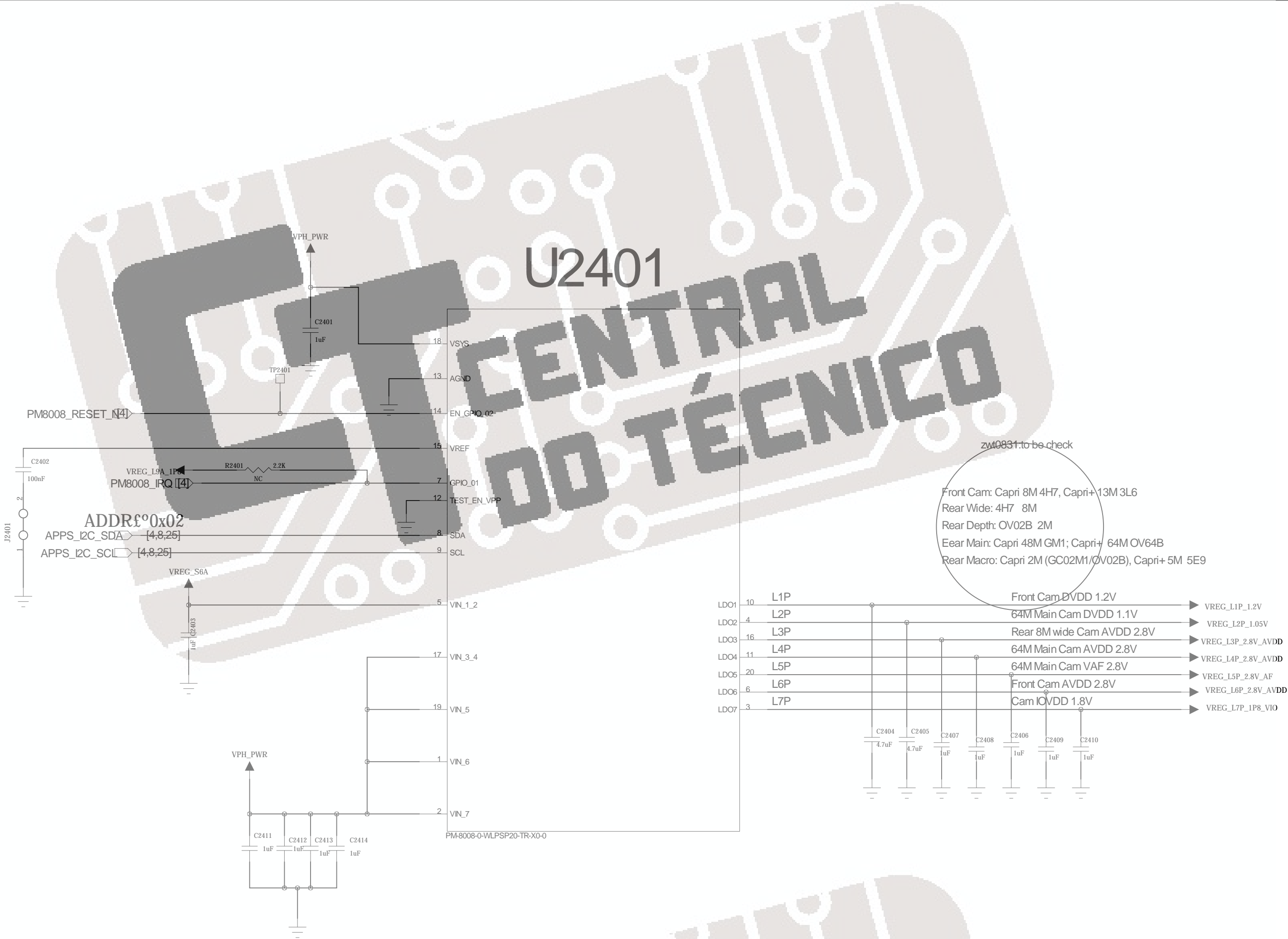
REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



PM670 CHARGER

DRAWN: Wentao.Zhong		DATED: 20200813		COMPANY: <Company Name>			
CHECKED: <Checked By>		DATED: <Checked Date>		TITLE: SM6115			
QUALITY CONTROL: <QC By>		DATED: <QC Date>		CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
RELEASED: <Released By>		DATED: <Release Date>		SCALE: <Scale>		SHEET: 14OF 45	

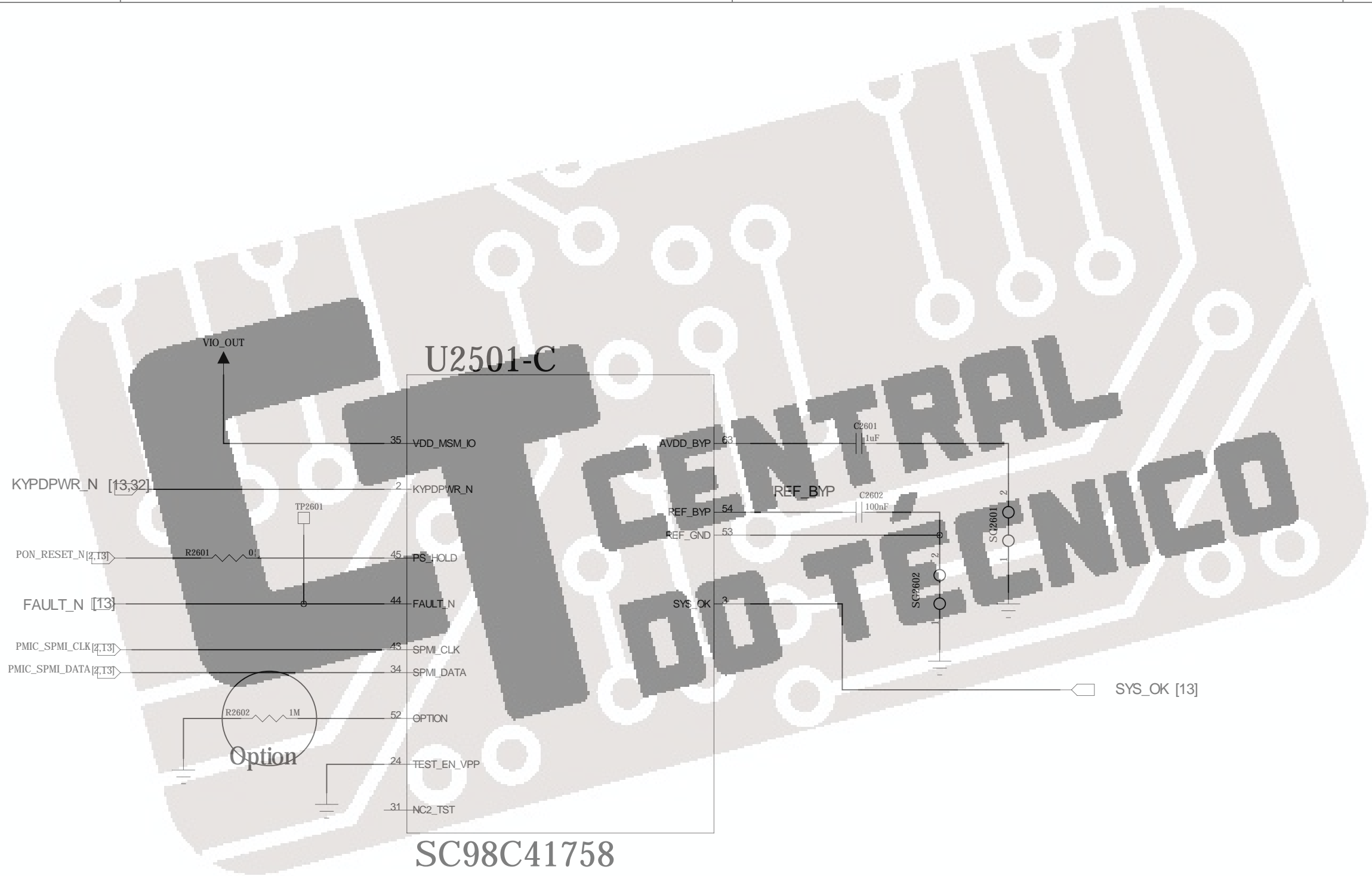
REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



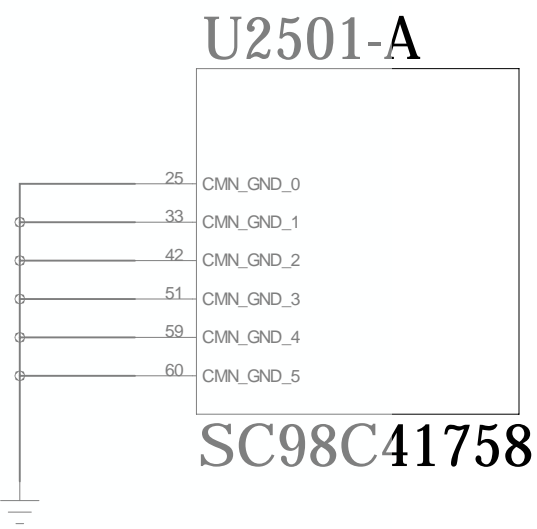
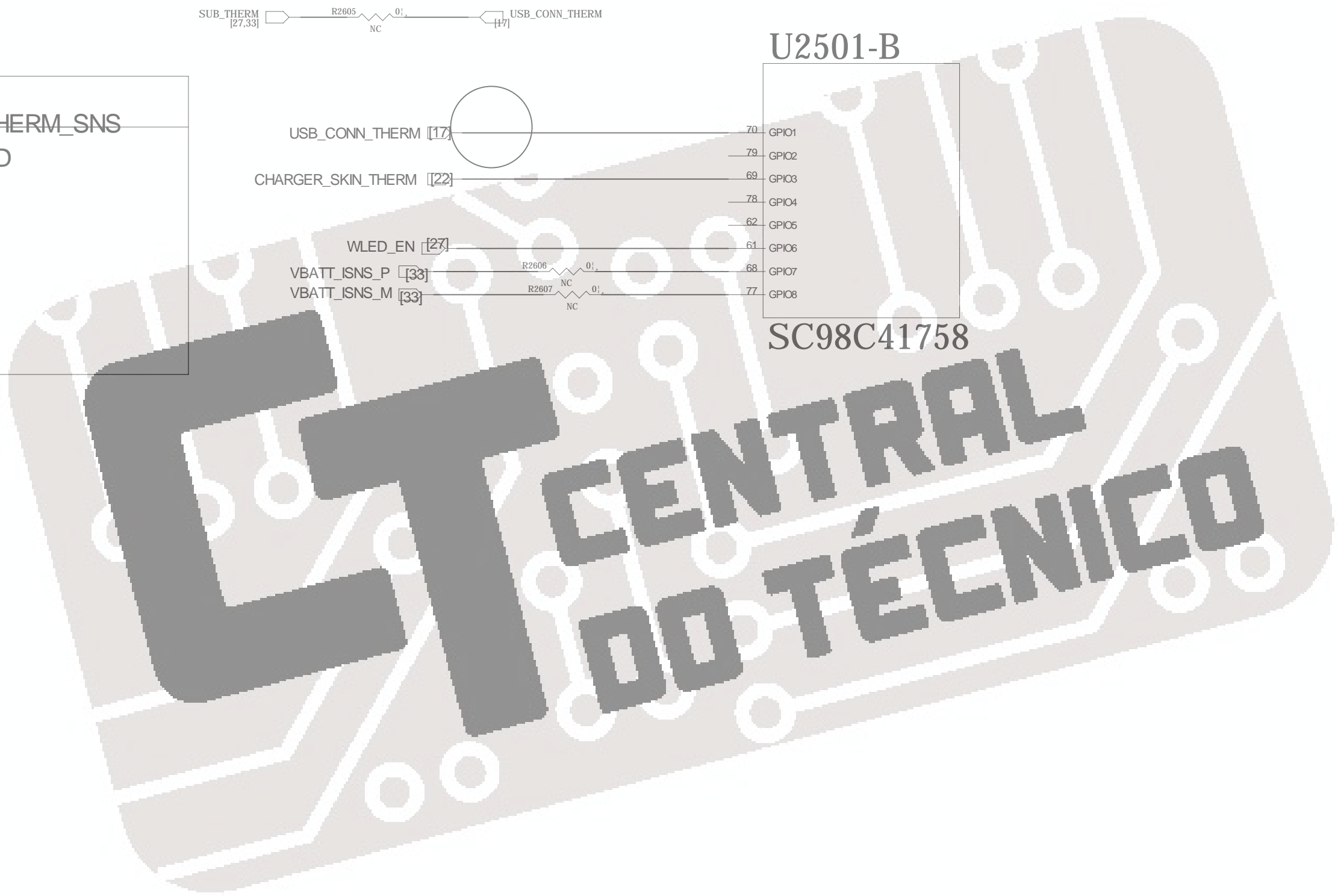
Vin Group	Source	Vin	IpK (mA)	Pin #	Child LDOs
VIN1_2	S6A	1.35	1200	5	LDO1, LDO2
VIN3_4	VPHVREG_BOB	3.80	600	17	LDO3, LDO4
VIN5	VPHVREG_BOB	3.80	300	19	LDO5
VIN6	VPHVREG_BOB	3.80	300	1	LDO6
VIN7	VPHVREG_BOB	3.80	300	2	LDO7

DRAWN: Wentao.Zhong		DATED: 20200813		COMPANY: <Company Name>			
CHECKED: <Checked By>		DATED: <Checked Date>		TITLE: SM6115			
QUALITY CONTROL: <QC By>		DATED: <QC Date>		CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
RELEASED: <Released By>		DATED: <Release Date>		SCALE: <Scale> SHEET: 15 OF 45			

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

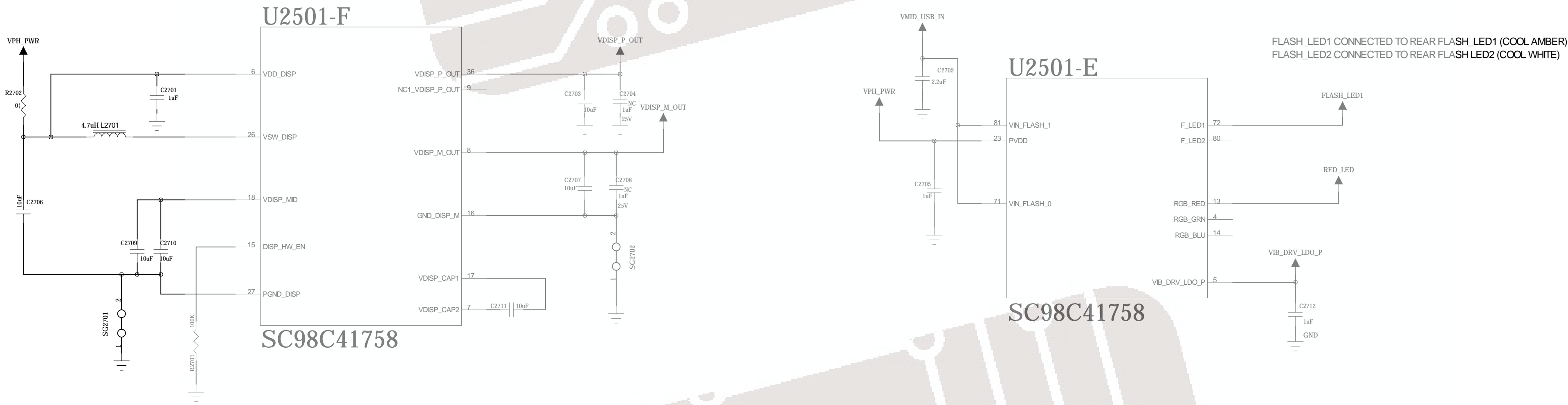


GPIO#	GPIO Function
GPIO1 (LV)	TypeC_CONN_THERM_SNS
GPIO2 (MV)	SMB_EN/HRLED
GPIO3_AMUX	SKIN_THERM
GPIO4 (LV)	NC
GPIO5_AMUX (MV)	NC
GPIO6 (LV)	WLED_EN
GPIO7_AMUX (LV)	SMB_VCHG_P
GPIO8_AMUX (LV)	SMB_VHG_M



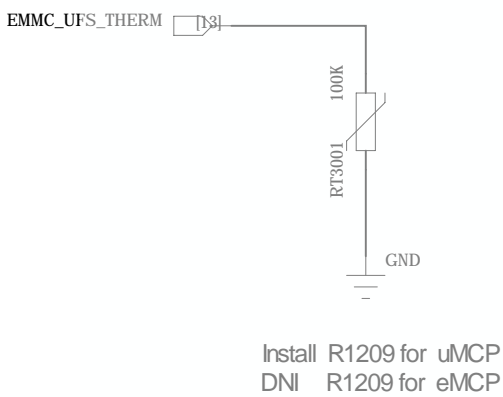
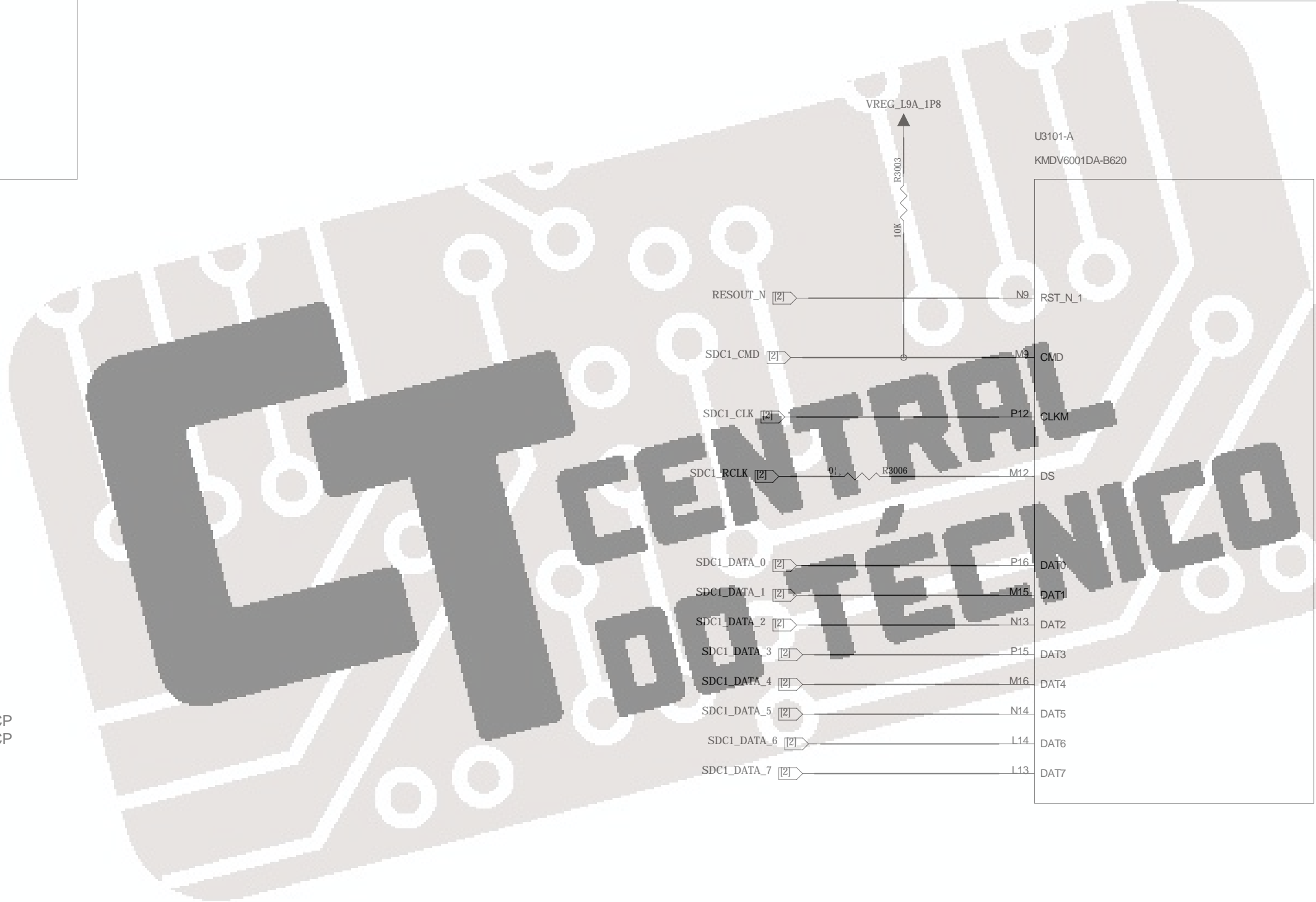
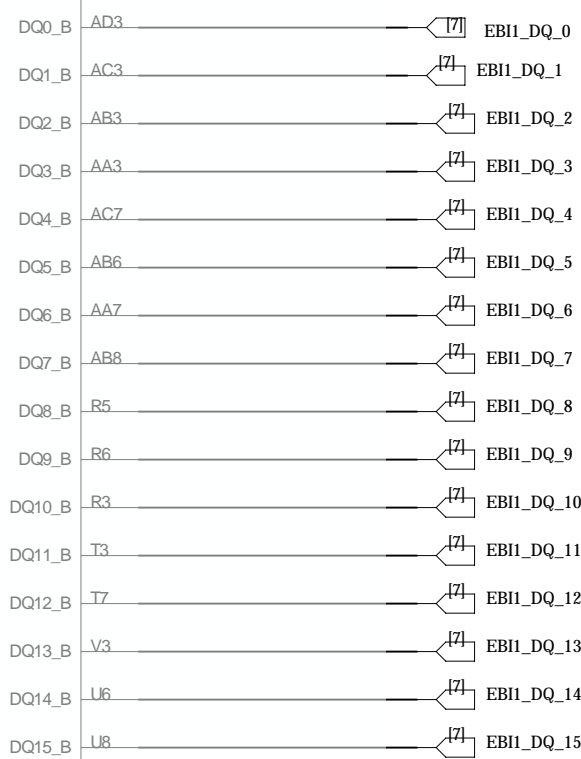
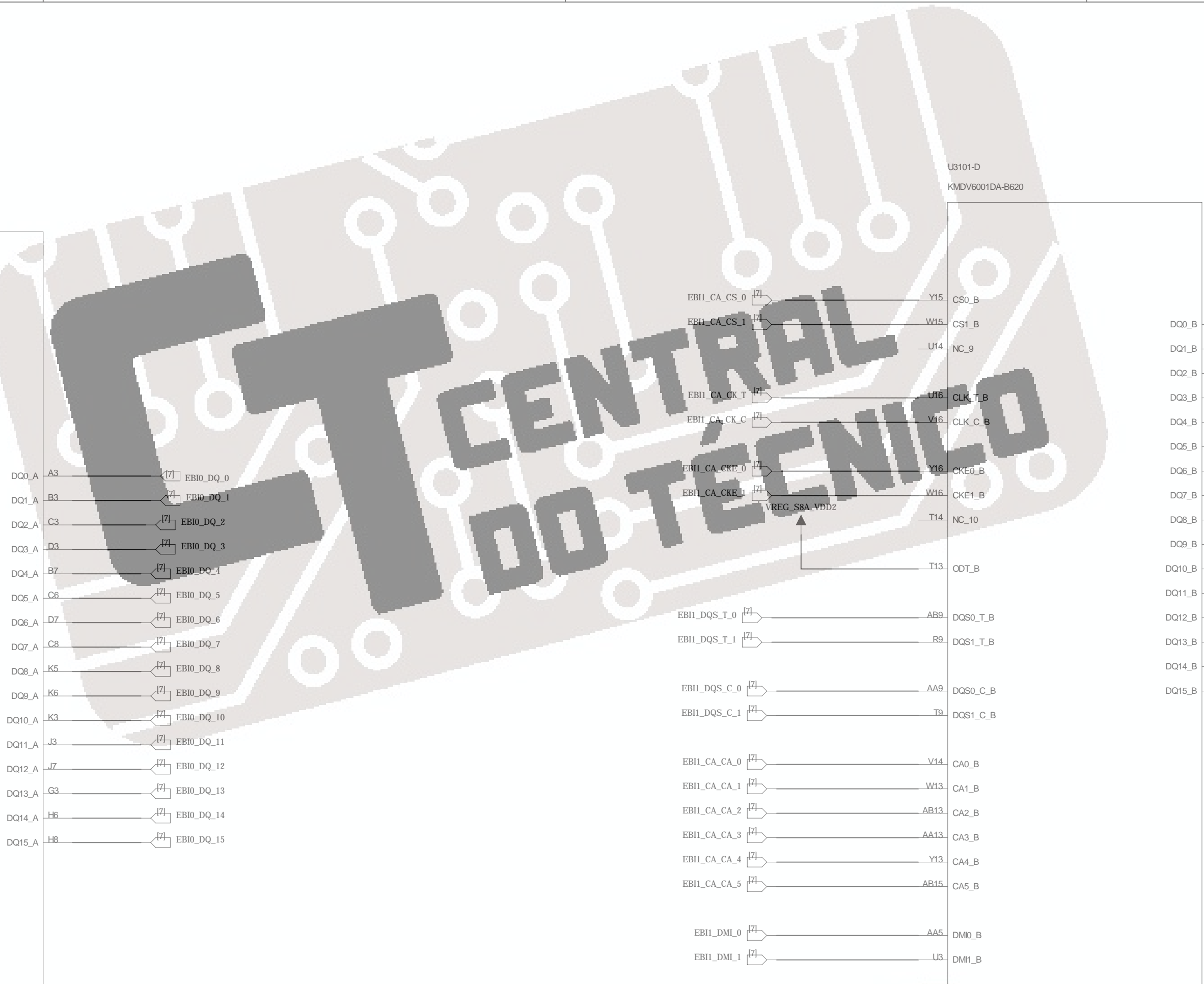
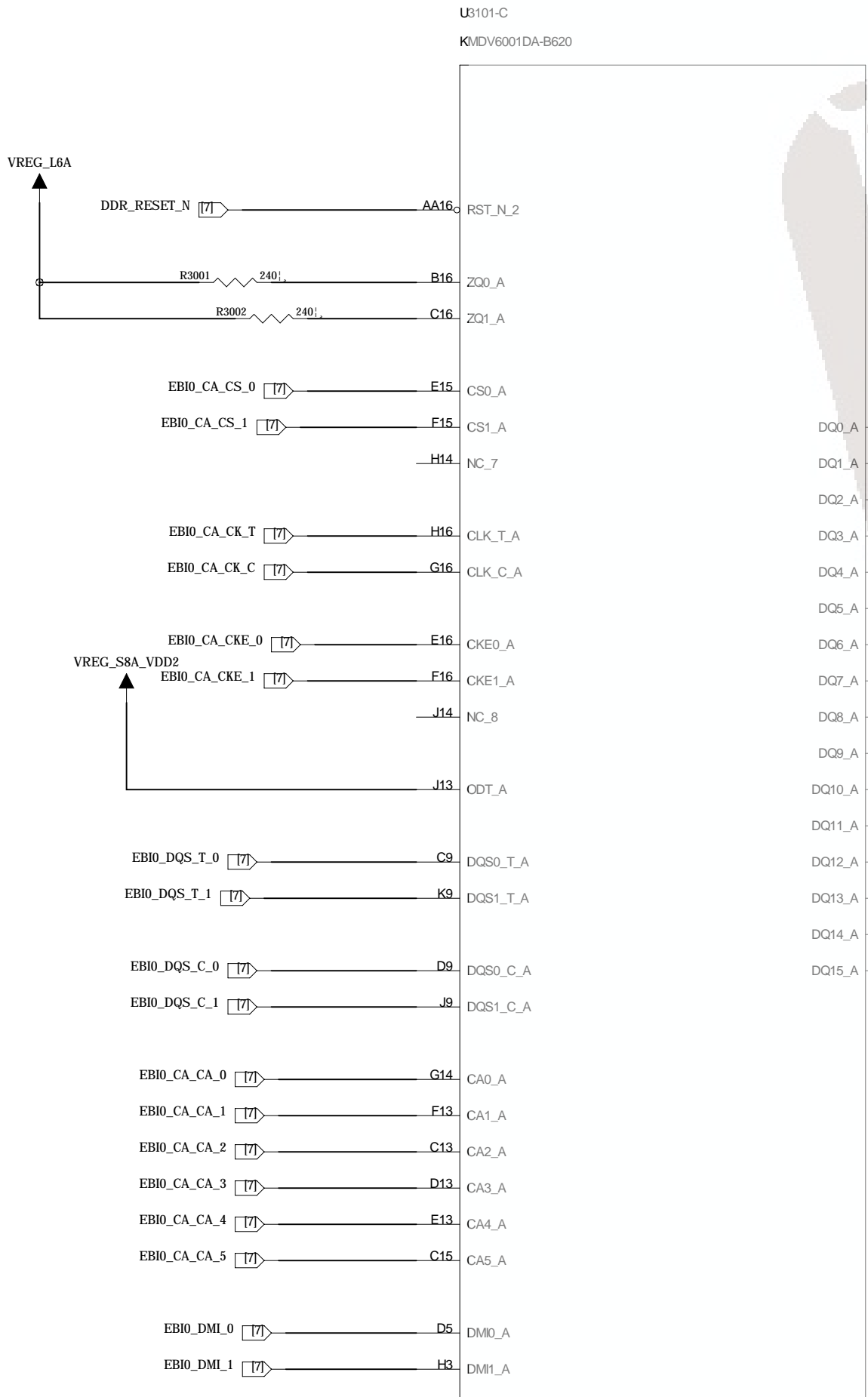
COMPANY: <Company Name>			
TITLE: SM6115			
DRAWN: Wentao.Zhong	DATED: 20200813		
CHECKED: <Checked By>	DATED: <Checked Date>	CODE: P550AE	SIZE: D
QUALITY CONTROL: <QC By>	DATED: <QC Date>	DRAWING NO: P550AE	REV: V0.30
RELEASED: <Released By>	DATED: <Release Date>	SCALE: <Scale>	
			SHEET: 17OF 45

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



DRAWN: Wentao.Zhong		DATED: 20200813		COMPANY: <Company Name>			
CHECKED: <Checked By>		DATED: <Checked Date>		TITLE: SM6115			
QUALITY CONTROL: <QC By>		DATED: <QC Date>		CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
RELEASED: <Released By>		DATED: <Release Date>		SCALE: <Scale>		SHEET: 18OF 45	

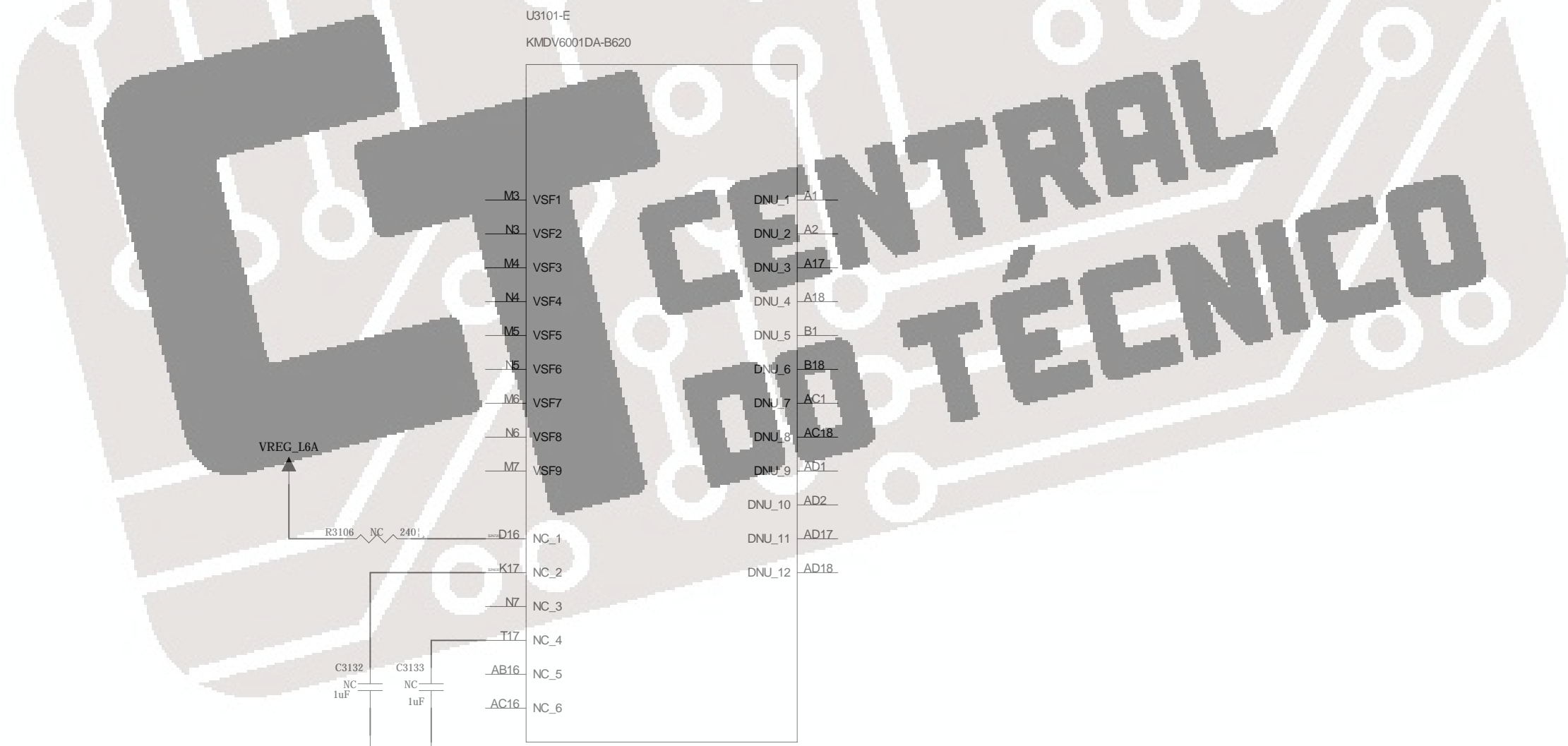
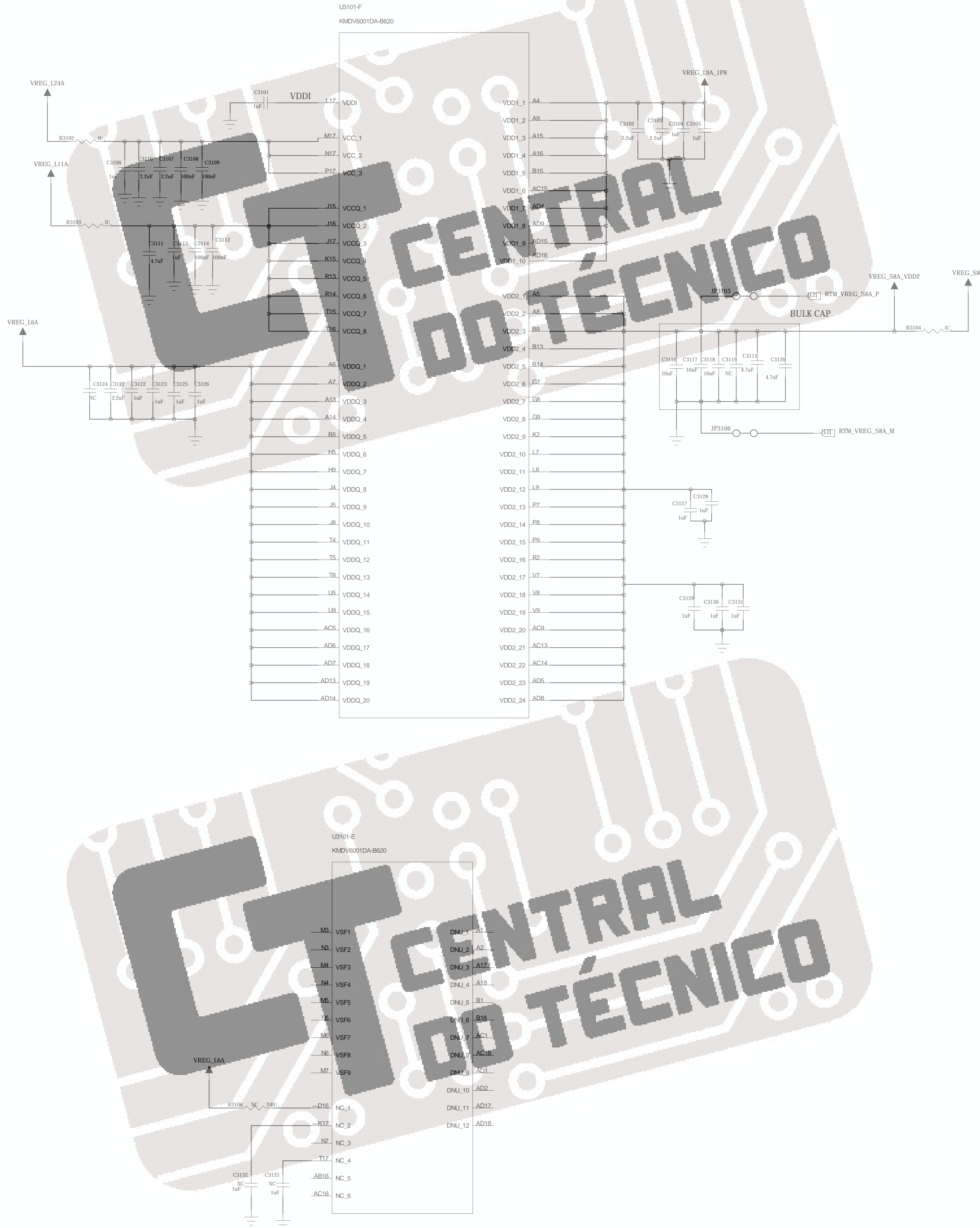
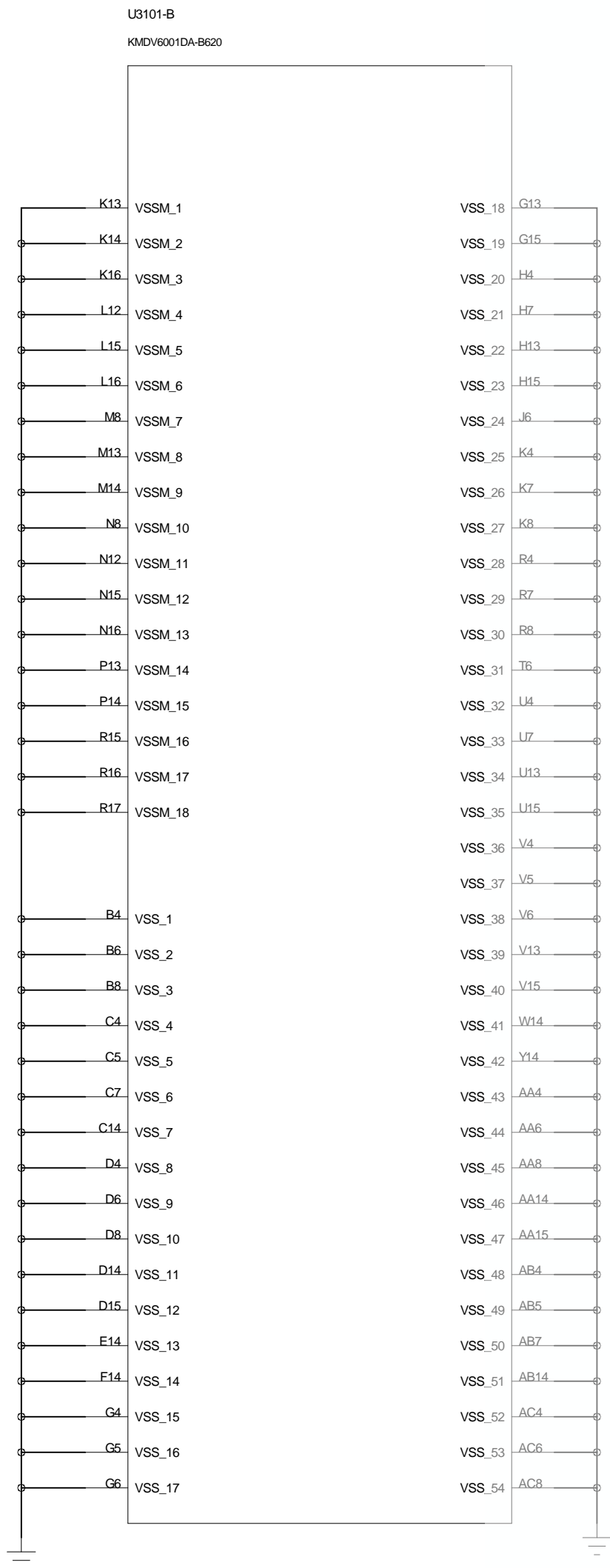
REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



DRAWN: Wentao.Zhong	DATED: 20200813
CHECKED: <Checked By>	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: <Released By>	DATED: <Release Date>

COMPANY: <Company Name>			
TITLE: SM6115			
CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
SCALE: <Scale>		SHEET: 20OF 45	

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



DRAWN: Wentao.Zhong	DATED: 20200813
CHECKED: <Checked By>	DATED: <Checked Date>
QUALITY CONTROL: <QC By>	DATED: <QC Date>
RELEASED: <Released By>	DATED: <Release Date>

COMPANY: <Company Name>			
TITLE: SM6115			
CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
SCALE: <Scale>			SHEET: 21 OF 45

6

5

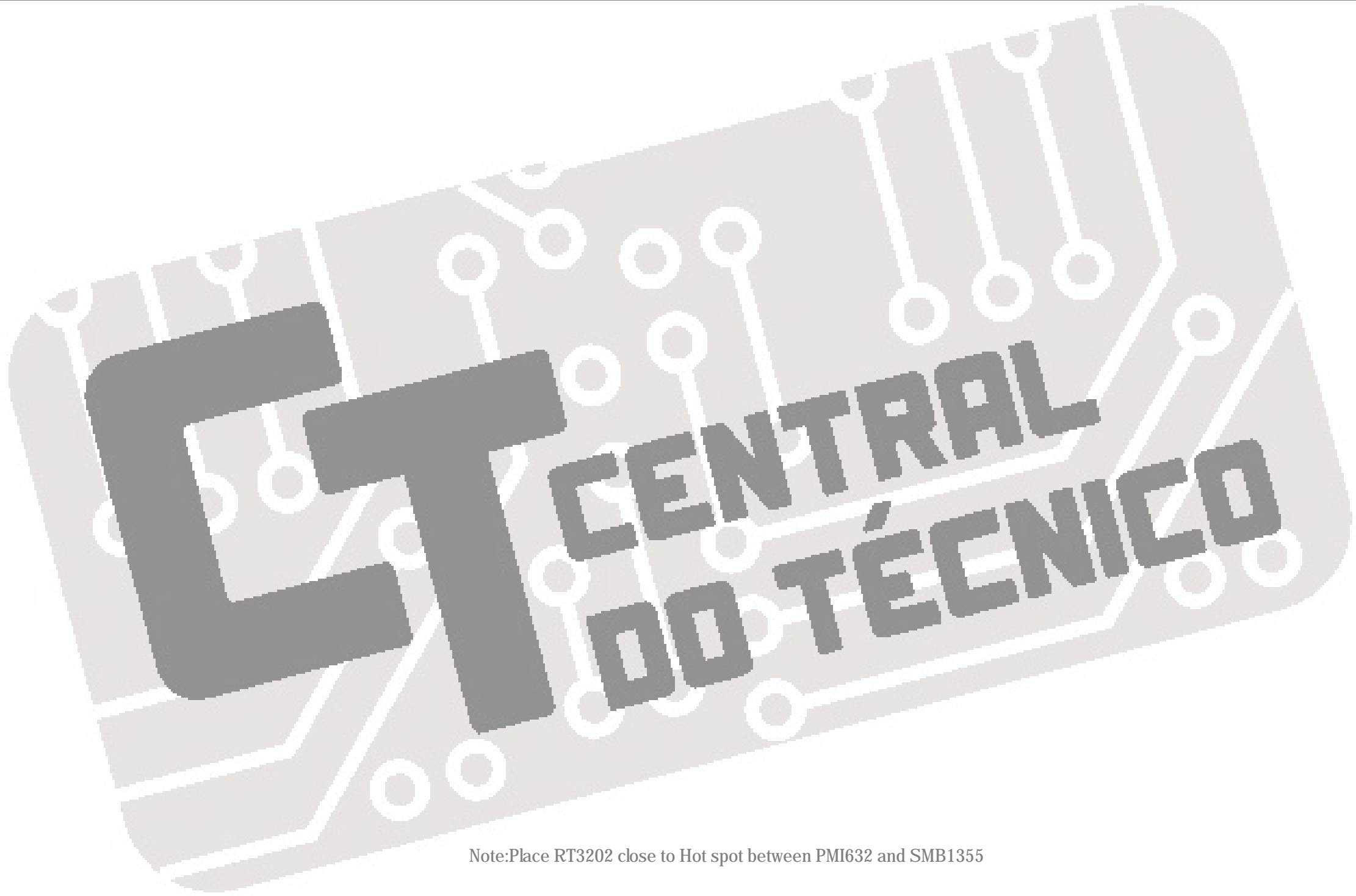
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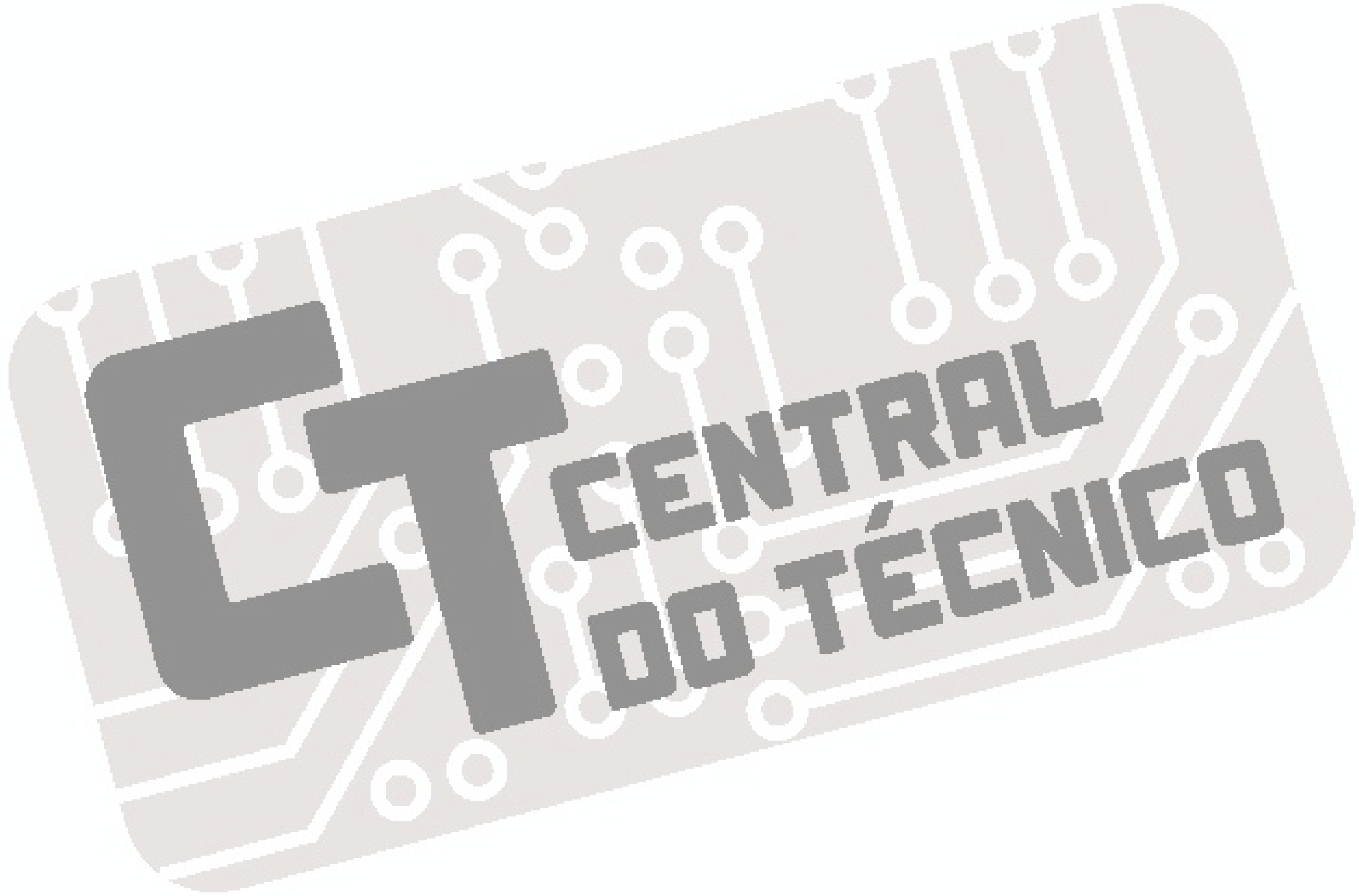
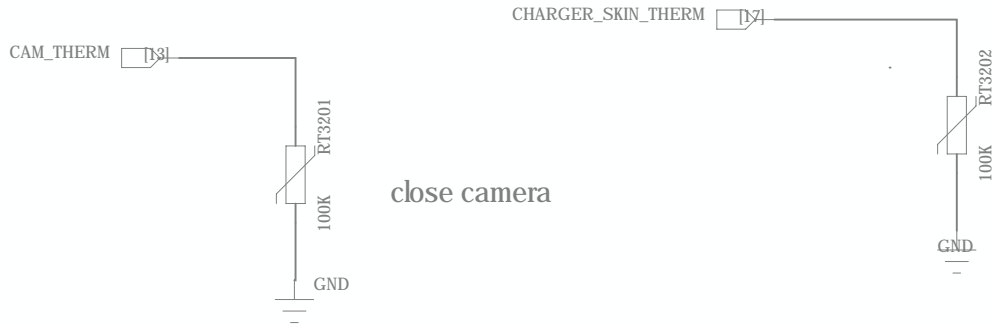
2

1

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



Note:Place RT3202 close to Hot spot between PM1632 and SMB1355



DRAWN: Wentao.Zhong		DATED: 20200813		COMPANY: <Company Name>			
CHECKED: <Checked By>		DATED: <Checked Date>		TITLE: SM6115			
QUALITY CONTROL: <QC By>		DATED: <QC Date>		CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
RELEASED: <Released By>		DATED: <Release Date>		SCALE: <Scale>		SHEET: 22OF 45	

6

5

4

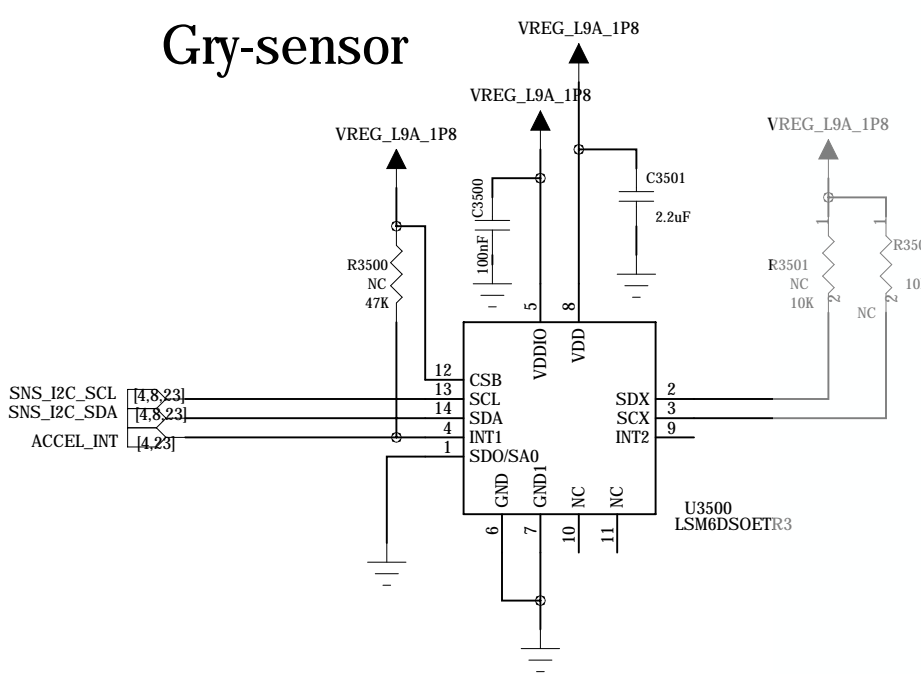
3

2

1

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

QMC6308	0x2C//58H(W)/59(R)
AKM09918	0x0C



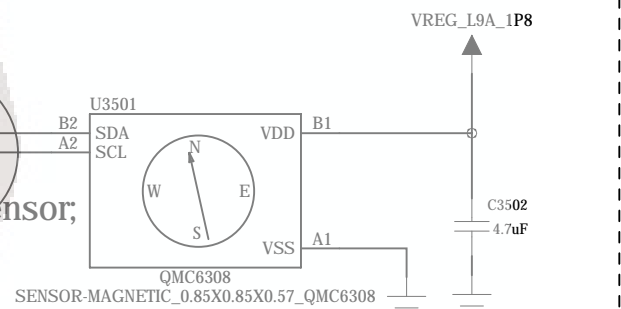
ICM-42605	b110100X
LSM6DS0ETR3	0xD4(R) 0XD5(W)

Note: 77-1

For debugging

Note: 77-6

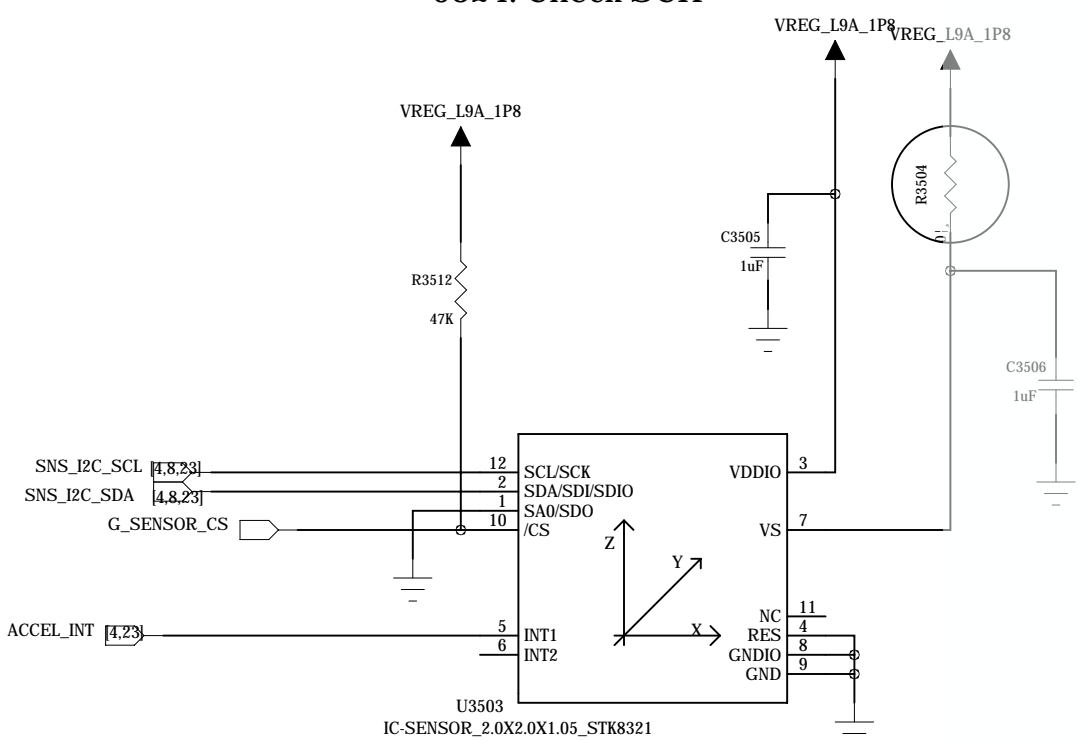
zwt0831: near P/L sensor;



Proximity Sensor charge

	I2C addr
STK33562	0X46
MN78911D	0X41

0824: Check SCH



Note: 77-4

SMT=MN78911

Optional

G+Gyro Sensor

Schematic design notice of "77_PERI_SENSORS_MEMs_ALS/PS" page.

[M sensor] Keep a minimum distance of 15mm from power ICs / PCB traces of more than 100mA / magnet component. Check HW design notice for more detail

[A+G] For optimized GPS performance, please check HW design notice for Sensor selection guide

[A+G] MUST use SPI for optimized sensor hub performance

DO NOT USE I2C

[A+G] Suggest choose sensor support FIFO watermark interrupt otherwise we cannot support Hifi-sensor, daydream VR. And Sensor-location accuracy will become worse.

[Baro] Reserve Baro sensor for LPPe feautre (Must for North America Operator / NA SKU)

DO NOT share Sensor hub I2C to other non-SCP device

Interrupt pin of MEMS sensor must be assign to ball EINT[12:0]

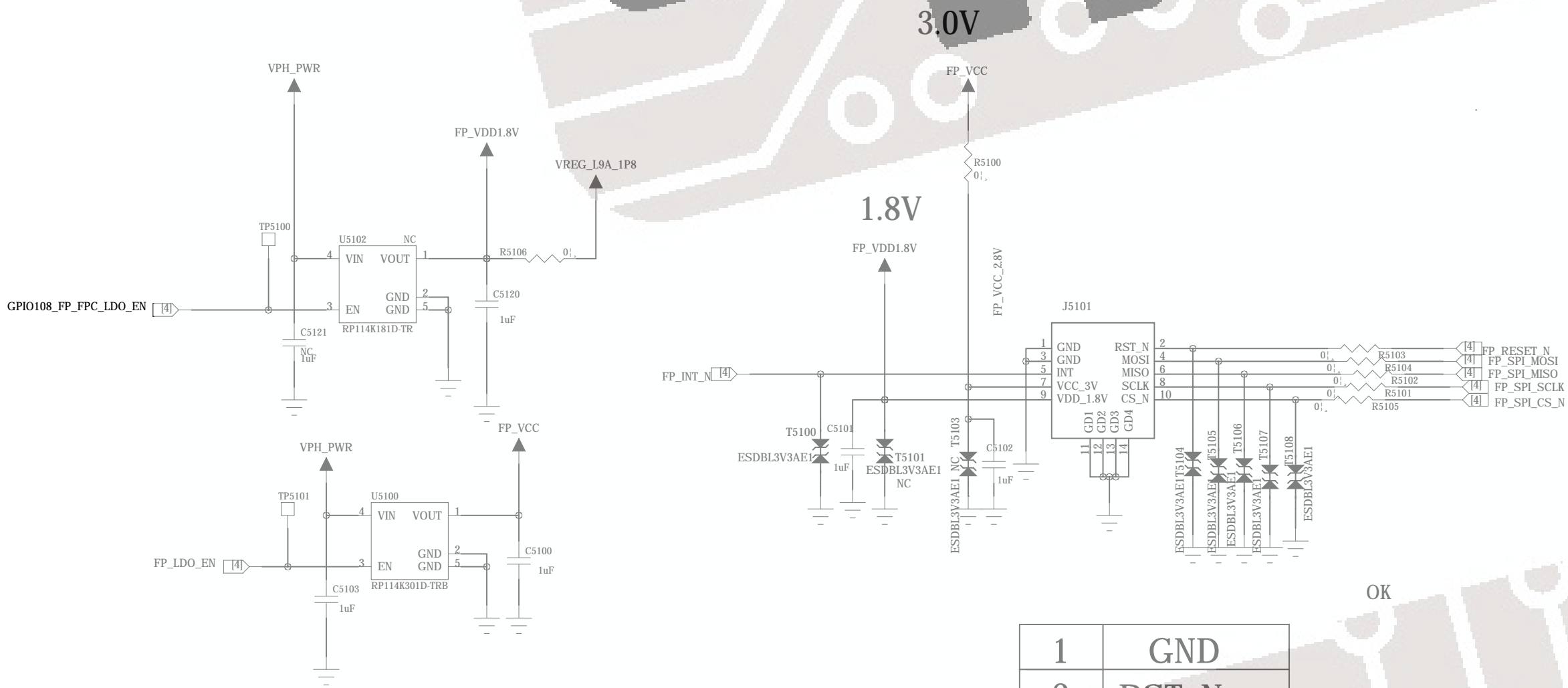
COMPANY:		<Company Name>			
TITLE:		SM6115			
CODE:	SIZE:	DRAWING NO:		REV:	
P550AE	D	P550AE		V0.30	
SCALE: <Scale>			SHEET: 23OF 45		

REVISION RECORD			
LTR	ECO NO.	APPROVED	DATE



		COMPANY: <Company Name>			
		TITLE: SM6115			
DRAWN: Wentao.Zhong	DATED: 20200813				
CHECKED: <Checked By>	DATED: <Checked Date>	CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
QUALITY CONTROL: <QC By>	DATED: <QC Date>				
RELEASED: <Released By>	DATED: <Release Date>				
SCALE: <Scale>				SHEET: 24OF 45	

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



1	GND
2	RST_N
3	GND
4	MOSI
5	INT
6	MISO
7	VCC:2V8/3.0V/3.3V GF3658:VCC ¹ Ⓜ 2.8V/3.0V/3.3V
8	SCLK
9	DVDD1V8 FPC1520A:DVDD 1.8V
10	CS_N

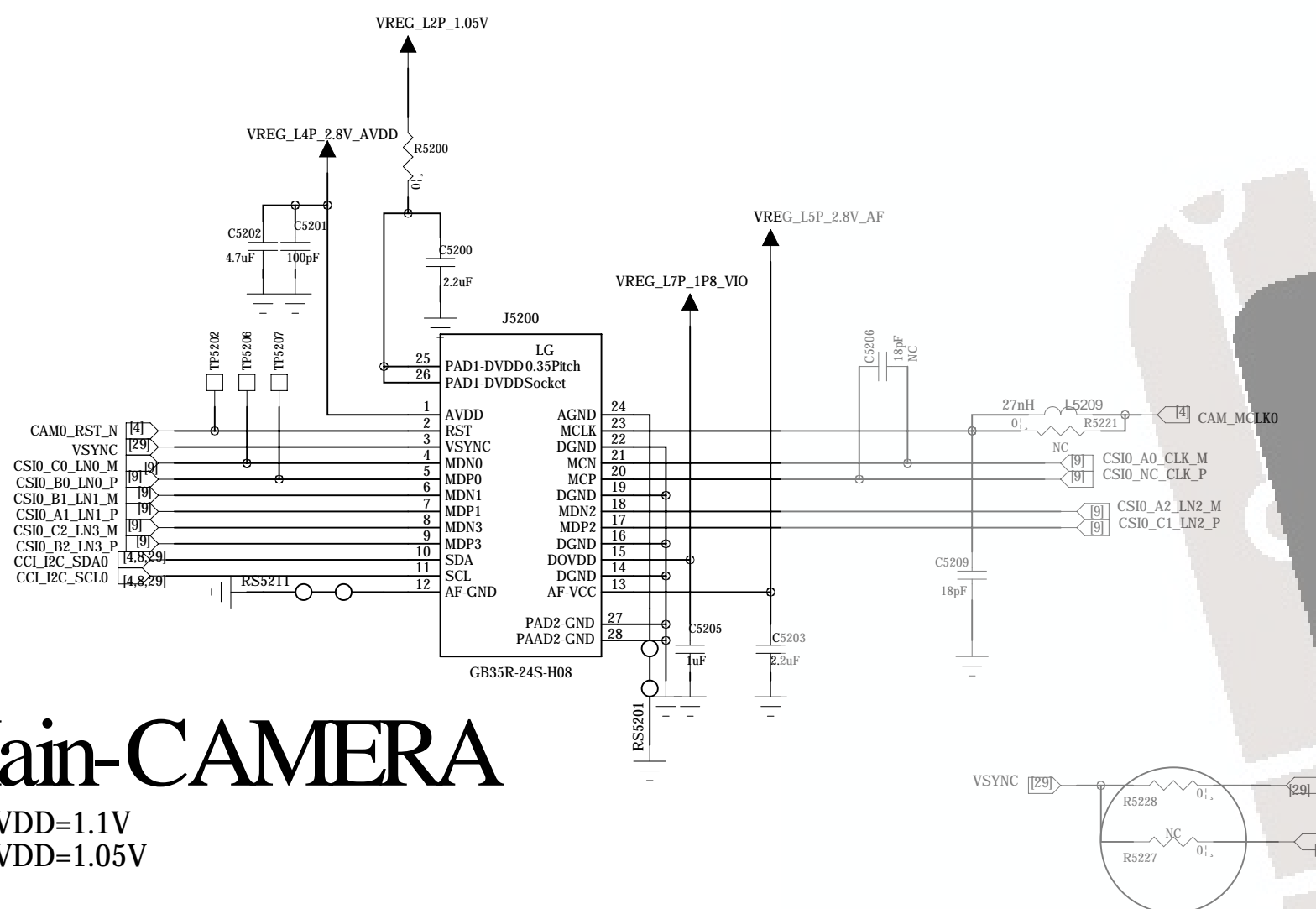
		COMPANY: 			
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REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

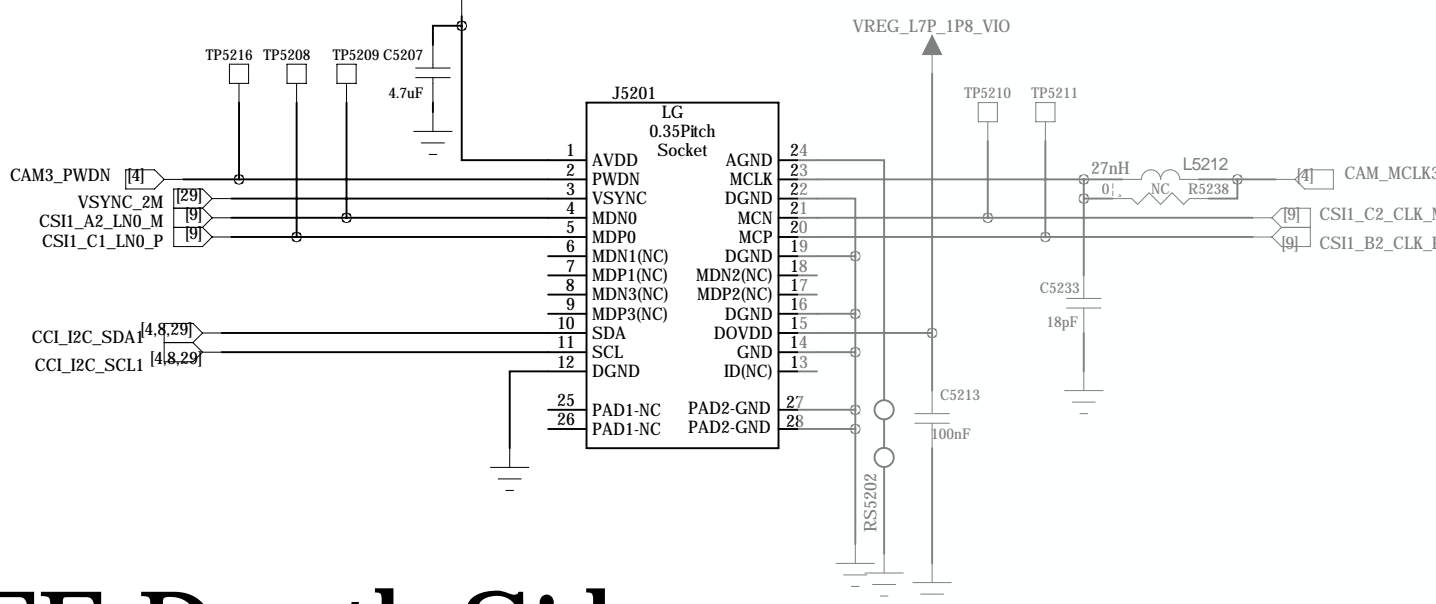
				DOVDD	ID	ADDR	driveradd	epram
S5K5E9YX04(5MAF)	2.7-3.0V/20ma	1.05-1.15V/139.9ma	1.7-1.9V/2ma	NC	0X5A(W),0X5B(R)	0X18(W),0X19(R)	0XB0(W),0XB1(R)	
S5K4H7YX03-FGX9 8M-FRONT	2.7-2.9V/30ma	1.14V-1.26V/97ma	1.7-1.9V	1.8V	0X20(W),0X21(R)			
S5K5E9YX04(5MAF)	2.8V	1.2V	1.7-1.9V/2ma	NC	0X20(W),0X21(R)	0X18(W),0X19(R)	0XA4(W),0XA5(R)	
S5K4H7YX03-FGX9(8M)	2.7-2.9V/30ma	1.14V-1.26V/97ma	1.7-1.9V	NC	0X5A(W),0X5B(R)			
OV02A10(2M)	2.7-3.0V/20ma	NC	1.7-3.0V/10ma	GND	0X7A(W),0X7B(R)		0XA0(W),0XA1(R)	

Main-CAMERA

64M:DVDD=1.1V
48M:DVDD=1.05V



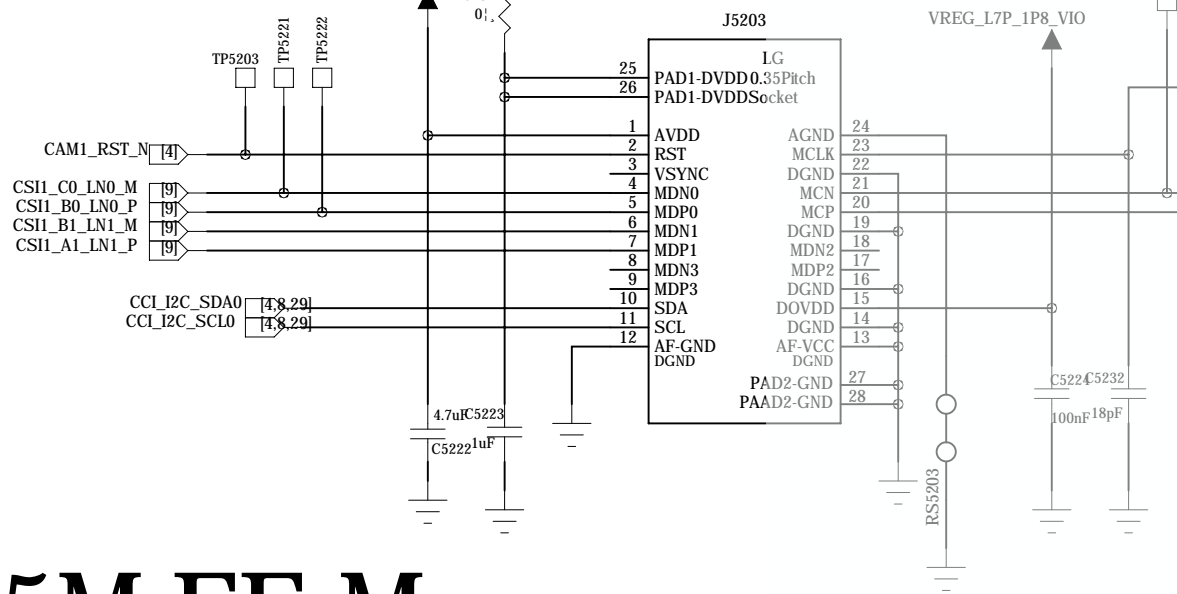
ELDO



2M FF-Depth Side

ELDO

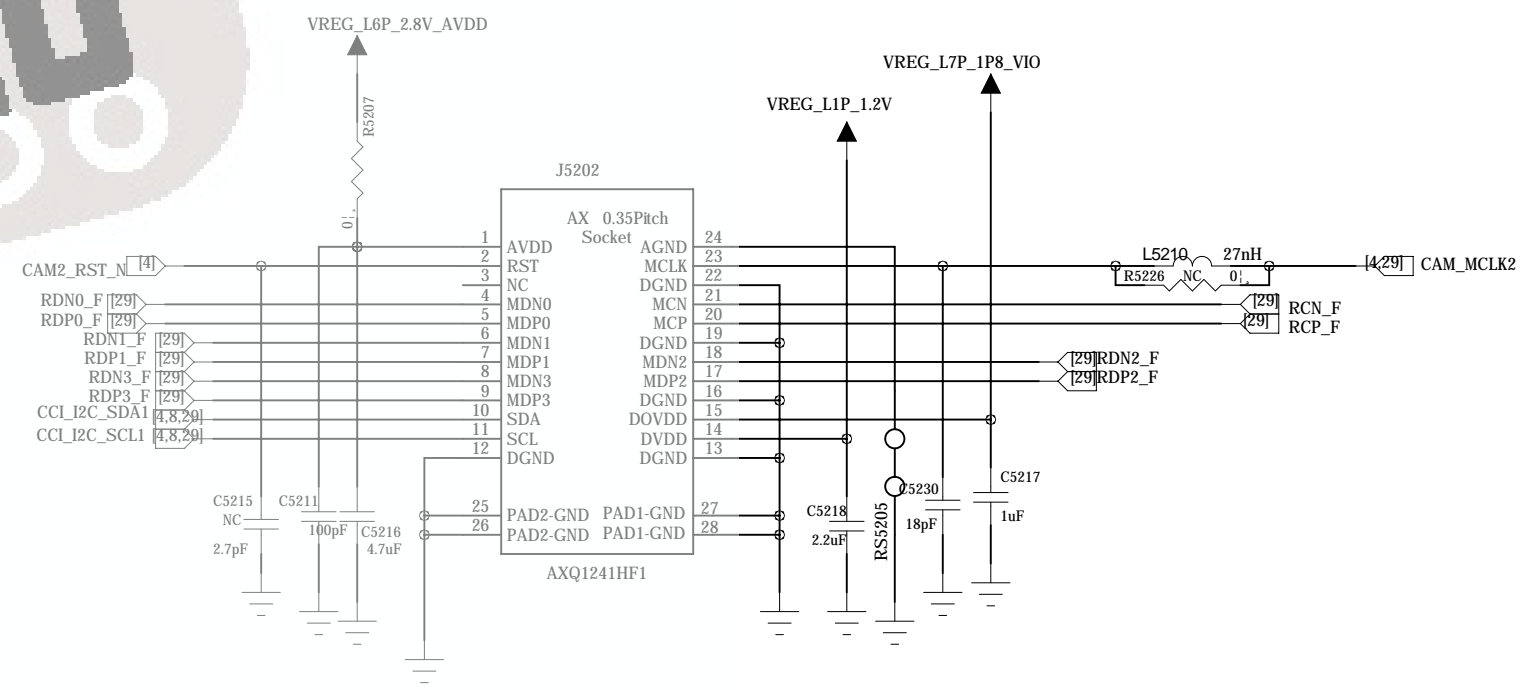
Capri (2M): NC LDO&R5201/C5223;
Capri+(5M): With LDO&R5201/C5223;



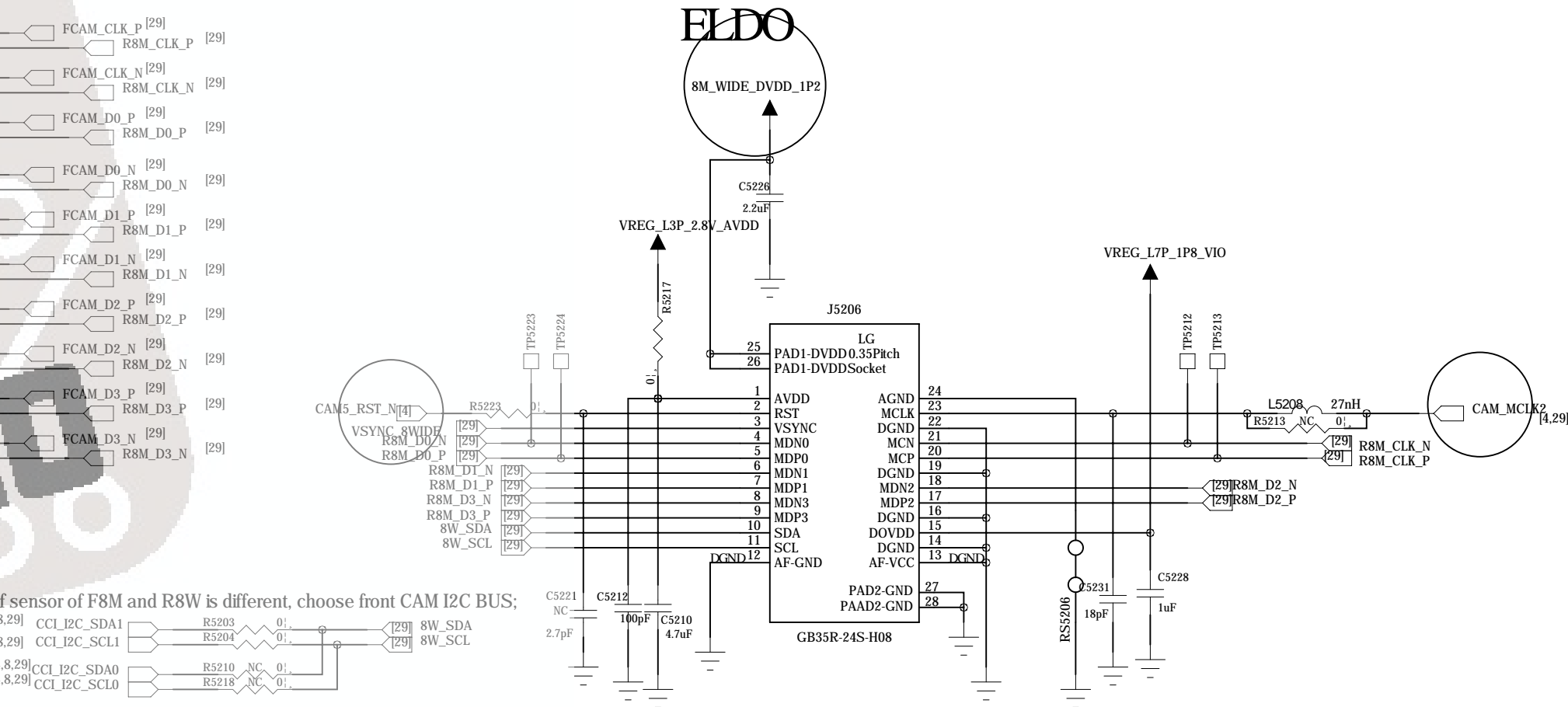
2M&5M FF-Macro

2M/5M MICRO CAM

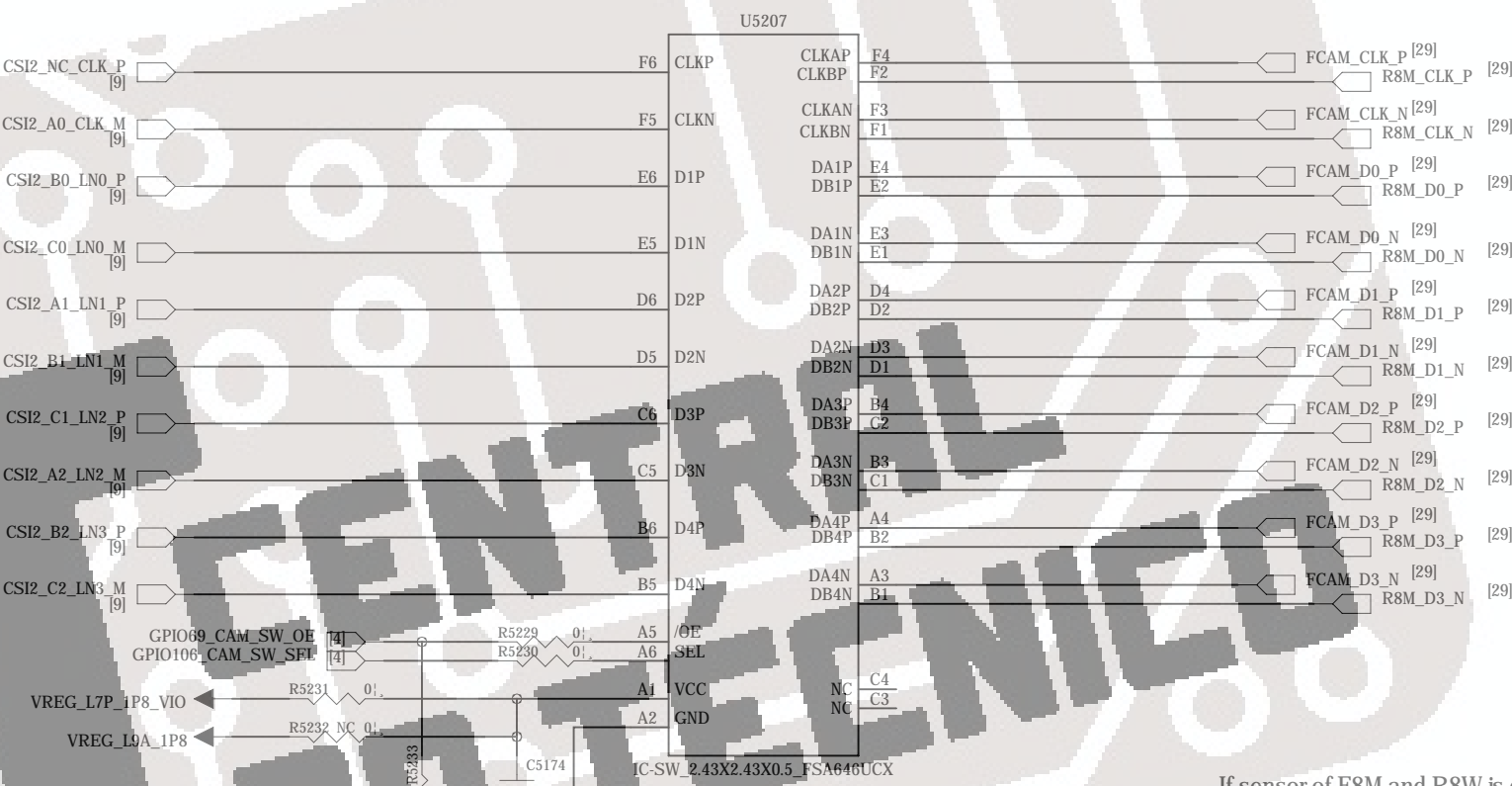
Front-CAM-8M



ELDO



8M FF_Wide



If sensor of F8M and R8W is different, choose front CAM I2C BUS:
4.8.2.9 CCL_I2C_SDA1
4.8.2.9 CCL_I2C_SCL1
4.8.2.9 CCL_I2C_SDA0
4.8.2.9 CCL_I2C_SCL0

COMPANY: <Company Name>			
TITLE: SM6115			
DRAWN: Wentao.Zhong	DATED: 20200813	CODE: P550AE	
CHECKED: <Checked By>	DATED: <Checked Date>	SIZE: D	DRAWING NO: P550AE
QUALITY CONTROL: <QC By>	DATED: <QC Date>	REV: V0.30	
RELEASED: <Released By>	DATED: <Release Date>	SCALE: <Scale>	
SHEET: 29OF			45

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

Front 8M

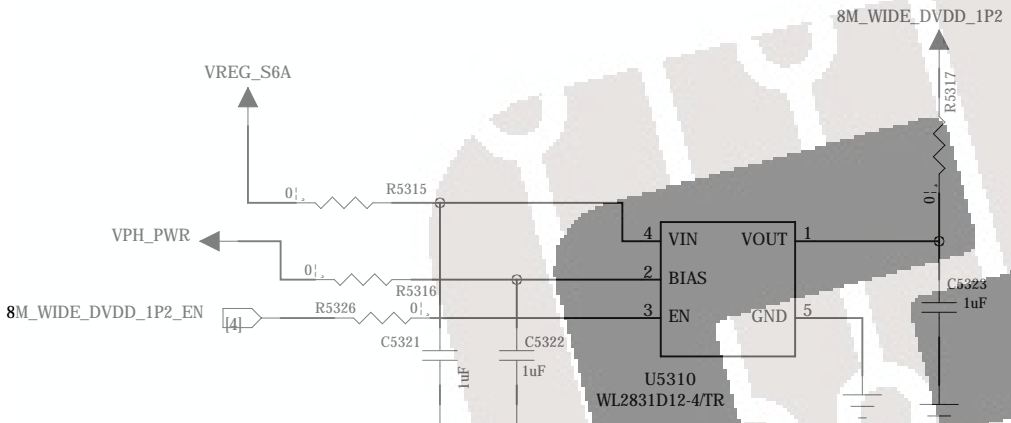
8M Wide

Main 48M

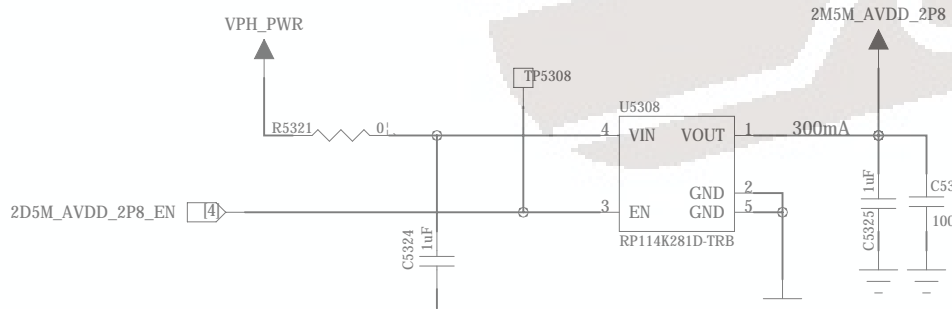
2M Depth

5M Macro

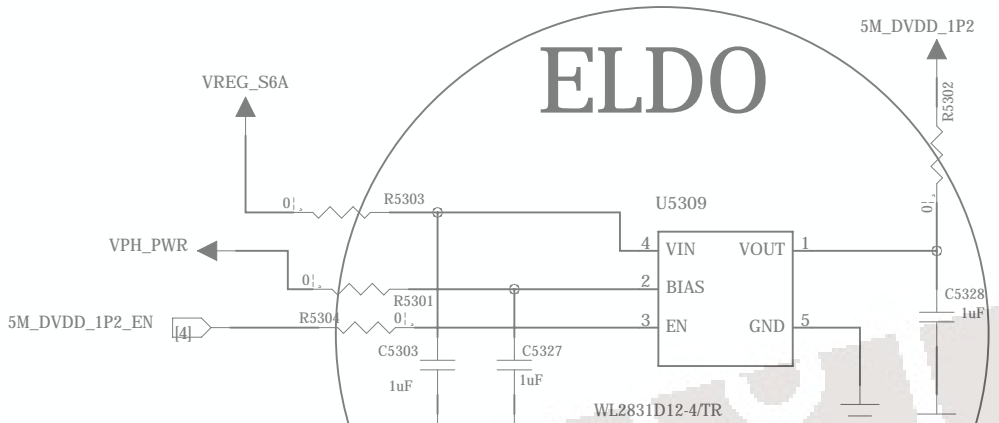
LED



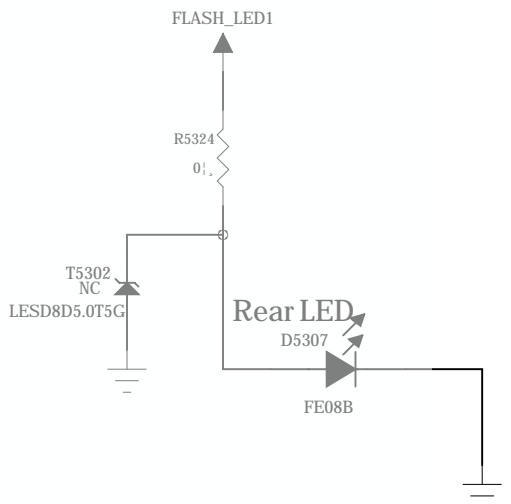
8M Wide DVDD 1.2v



5M&2D CAM AVDD 2.8v



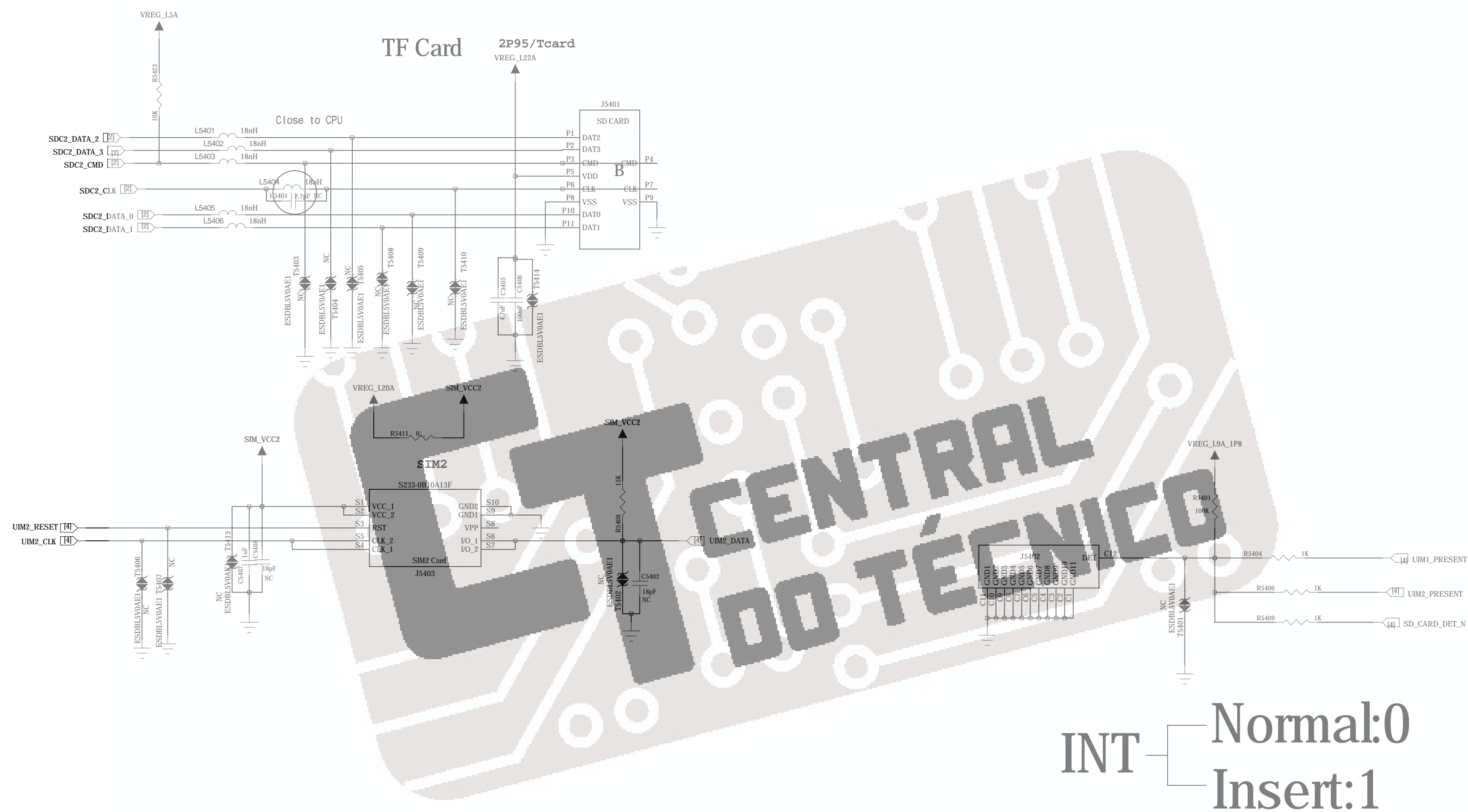
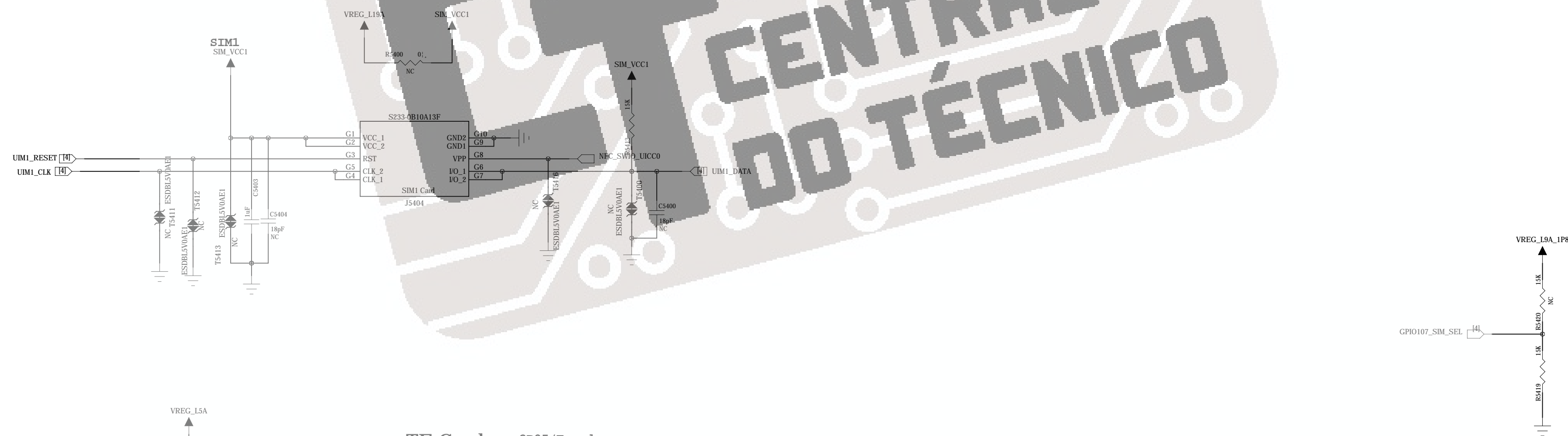
5M Macro DVDD 1.2v




SM0115

DRAWN: Wentao.Zhong		DATED: 20200813					
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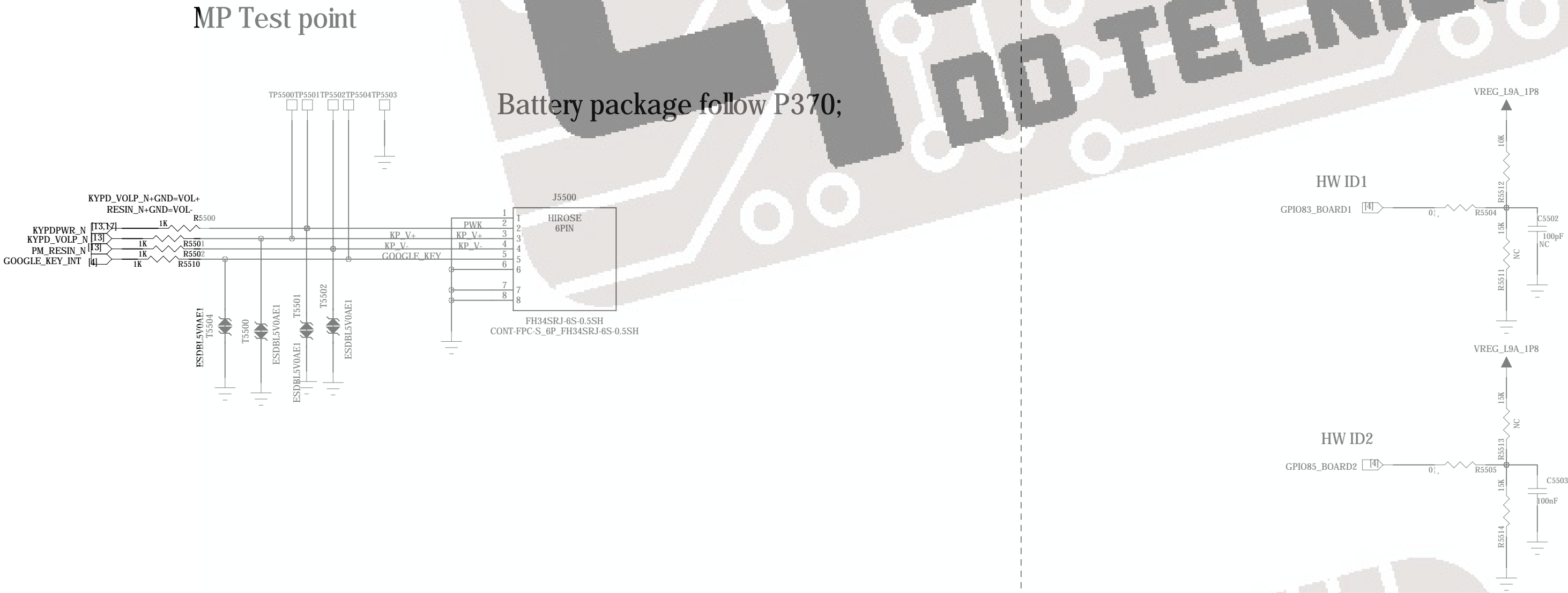
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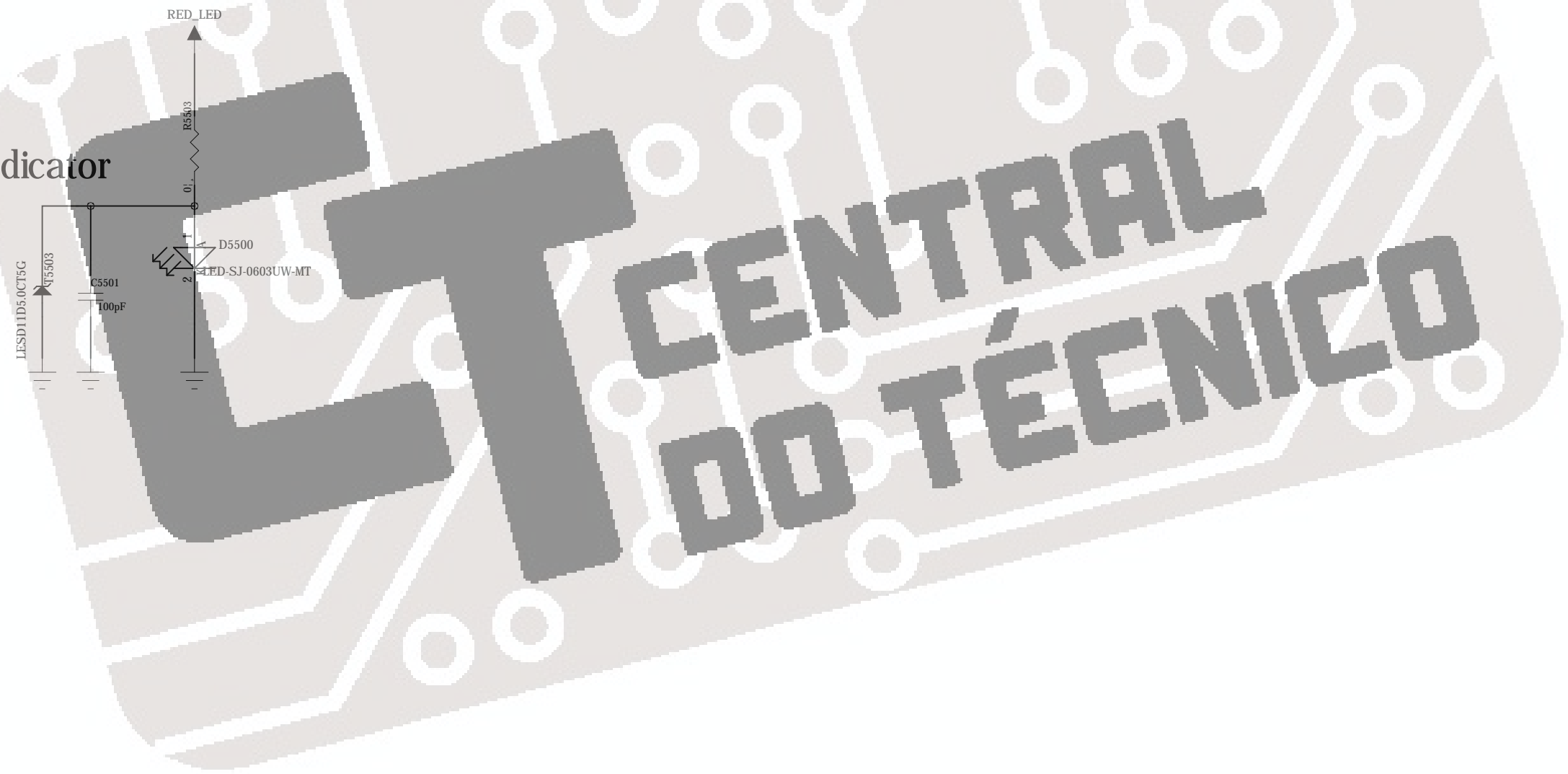
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REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



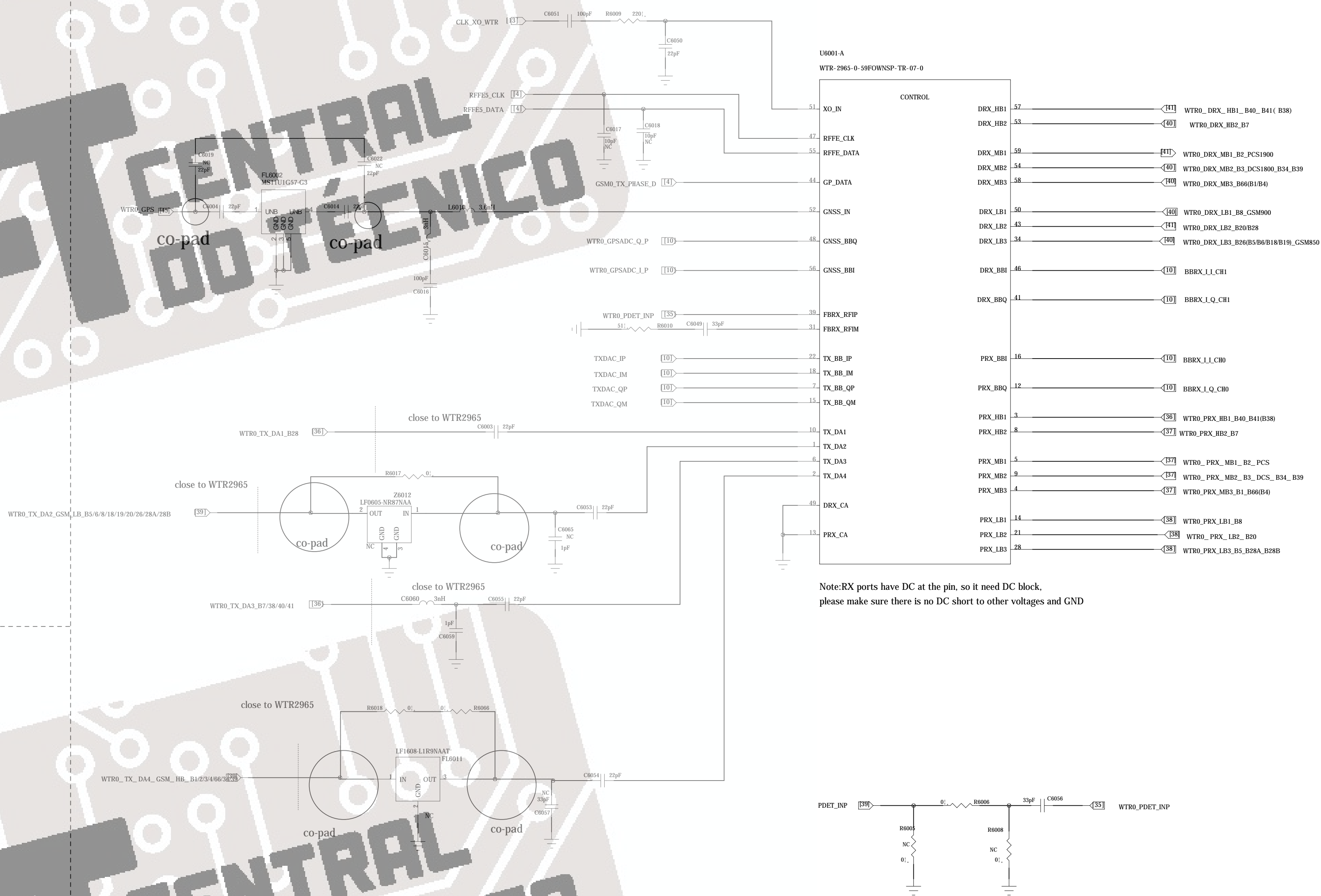
Charge Indicator



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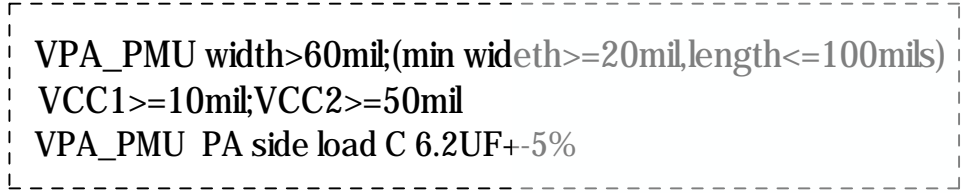
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RELEASED: <Released By>		DATED: <Release Date>		P550AE	D	P550AE	V0.30
SCALE: <Scale>						SHEET: 35 OF 45	

Power input



Note:RX ports have DC at the pin, so it need DC block,
please make sure there is no DC short to other voltages and GND

DRAWN: Wentao.Zhong		DATED: 20200813		SM0115			
CHECKED: <Checked By>	DATED: <Checked Date>	CODE: P550AE	SIZE: D	DRAWING NO: P550AE		REV: V0.30	
QUALITY CONTROL: <QC By>	DATED: <QC Date>						
RELEASED: <Released By>	DATED: <Release Date>	SCALE: <Scale>			SHEET: 36OF 45		



REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:

B1 TRX

B66(B4) TRX

B2 TRX

B3 TRX

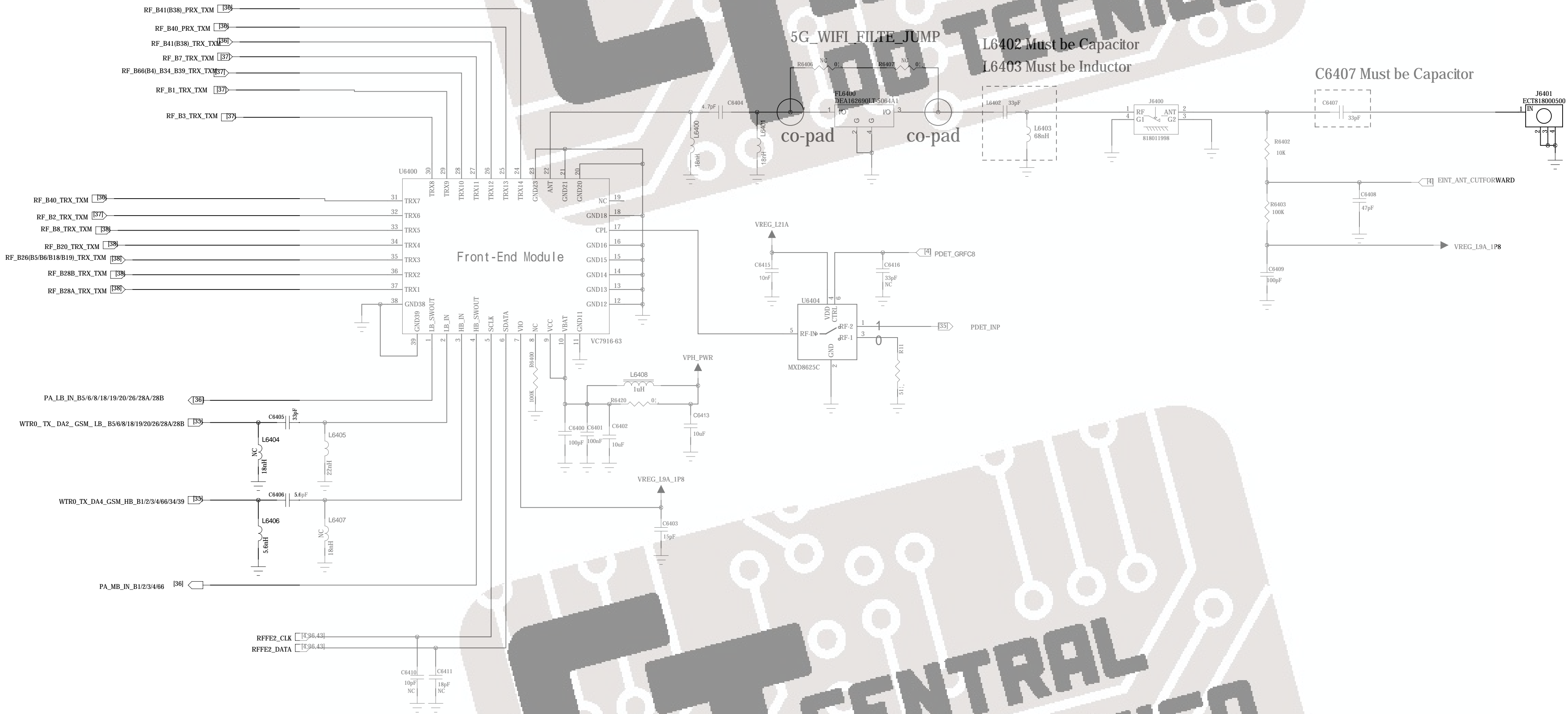
B34 PRX
B39 PRX

B7 TRX

DRAWN: Wentao.Zhong	DATED: 20200813
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RELEASED: <Released By>	DATED: <Release Date>

COMPANY: <Company Name>			
TITLE: SM6115			
CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
SCALE: <Scale>			SHEET: 37 OF 45

REVISION RECORD			
LTR	ECO NO.	APPROVED	DATE

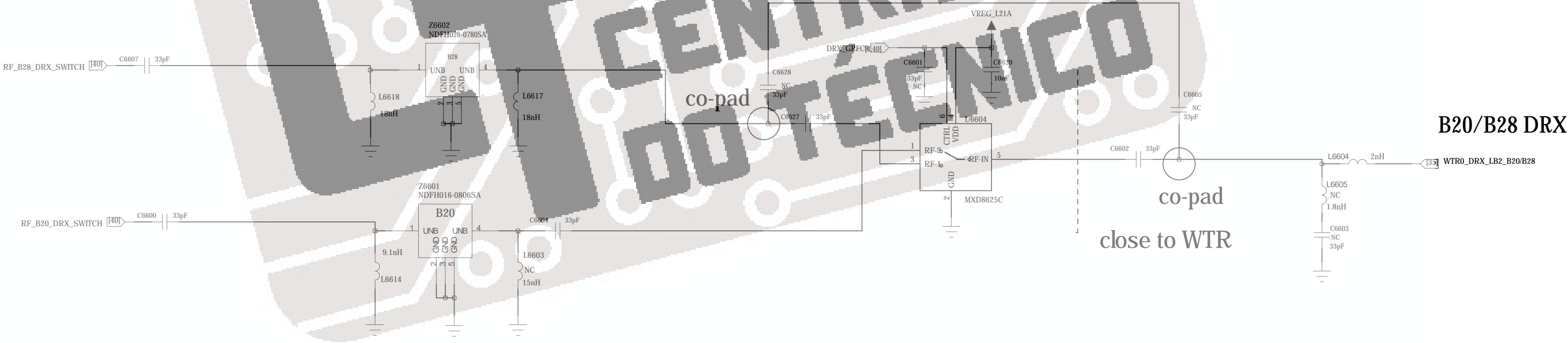


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P550AE	D	P550AE	V0.30
SCALE: <Scale>			SHEET: 39OF 45

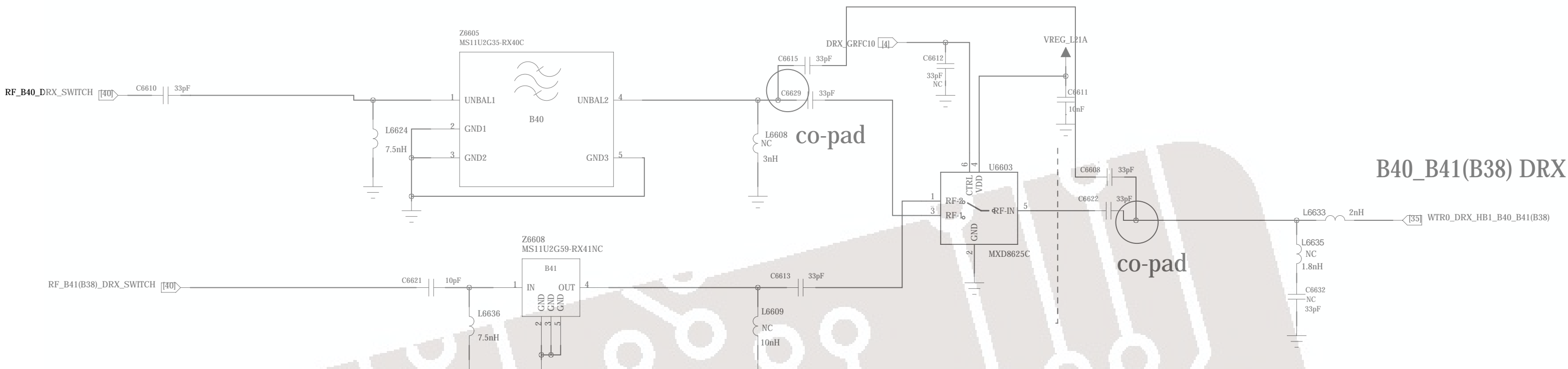
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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

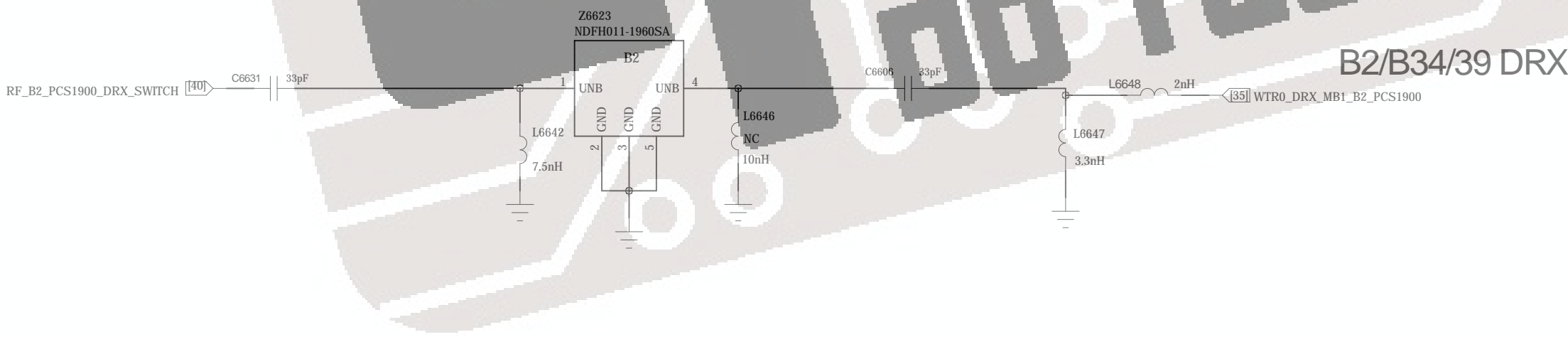
B20/B28 DRX



B40_B41(B38) DRX



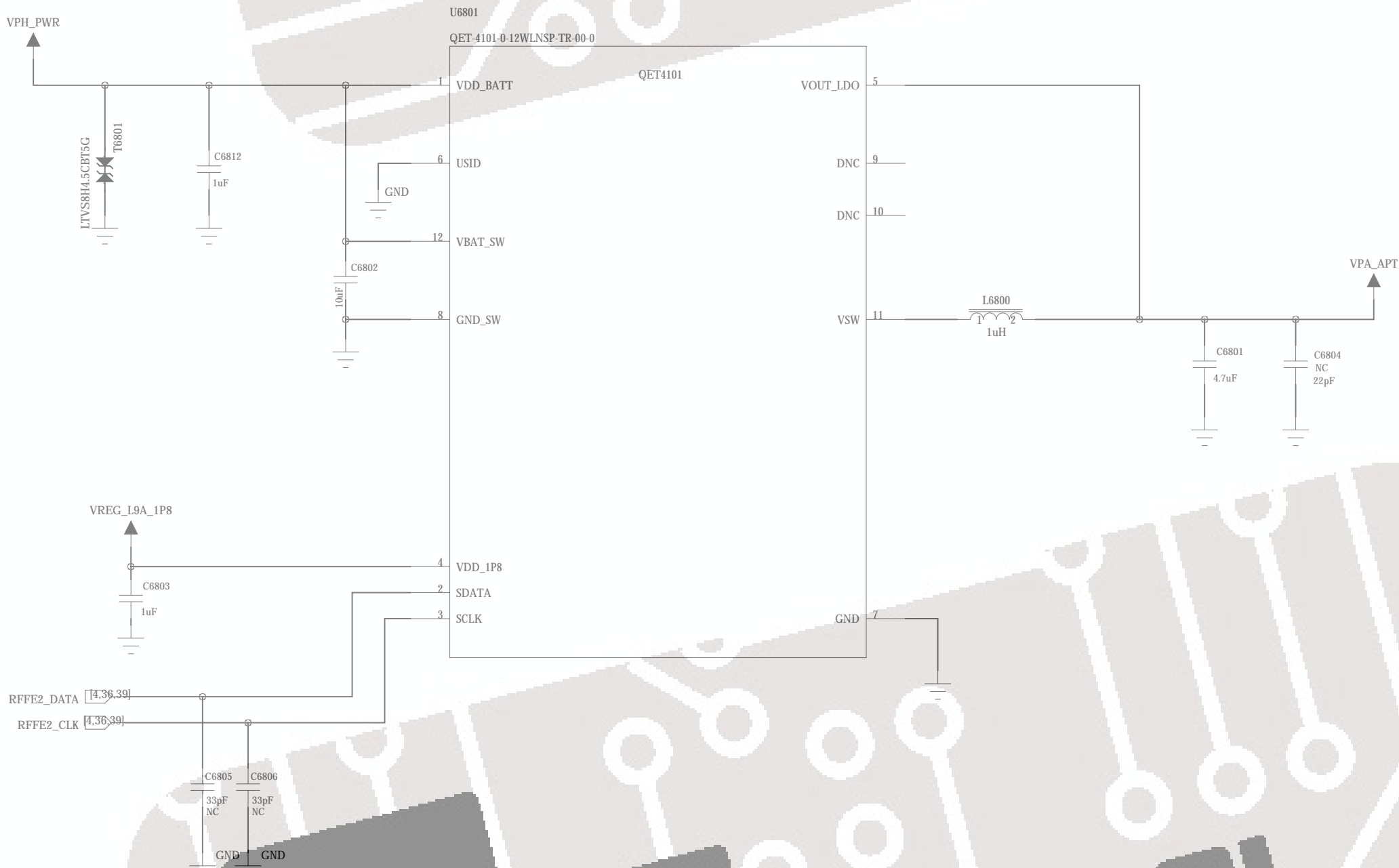
B2 DRX



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COMPANY: <Company Name>			
TITLE: RF_PWR_ET_APT			
CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
SCALE: <Scale>			SHEET: 41OF 45

REVISION RECORD			
LTR	ECO NO.	APPROVED:	DATE:



COMPANY: <Company Name>			
TITLE: SM6115			
CODE: P550AE	SIZE: D	DRAWING NO: P550AE	REV: V0.30
SCALE: <Scale>		SHEET: 43OF 45	

DRAWN: Wentao.Zhong	DATED: 20200813
CHECKED: <Checked By>	DATED: <Checked Date>
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