Intel CMPC2011
ES10ISx Schematics Revision : A

MB PCB P/N : 15BFP8-010100

Power Rail

+VCC_CORE	Core voltage for Processor(off in S3-S5)
+VCC_GFX	GFX voltage for Processor(off in S3-S5)
+V0.75S	0.75V switched power rail(off in S3-S5)
+V1.05S	1.05V switched power rail (off in S3-S5)
+V1.5S	1.5V switched power rail (off in S3-S5)
+V1.5	1.5V power rail (off in S4-S5)
+V1.8S	1.8V switched power rail (off in S3-S5)
+V5S	5V switched power rail (off in S3-S5)
+V5	5V power rail (off in S4-S5)
+V5ALWAYS	5V always on power rail
+V3.3S	3.3V switched power rail (off in S3-S5)
+V3.3	3.3V power rail (off in S4-S5)
+V3.3ALWAYS	3.3V always on power rail

+V□□ALWAYS	Always on power rail
+V□□	Switched power rail (off in S4 - S5)
+V□□S *	Switched power rail (off in S3 - S5)

ECS ELITEGROUP

Project : ES10ISx

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	COVER PAGE	A

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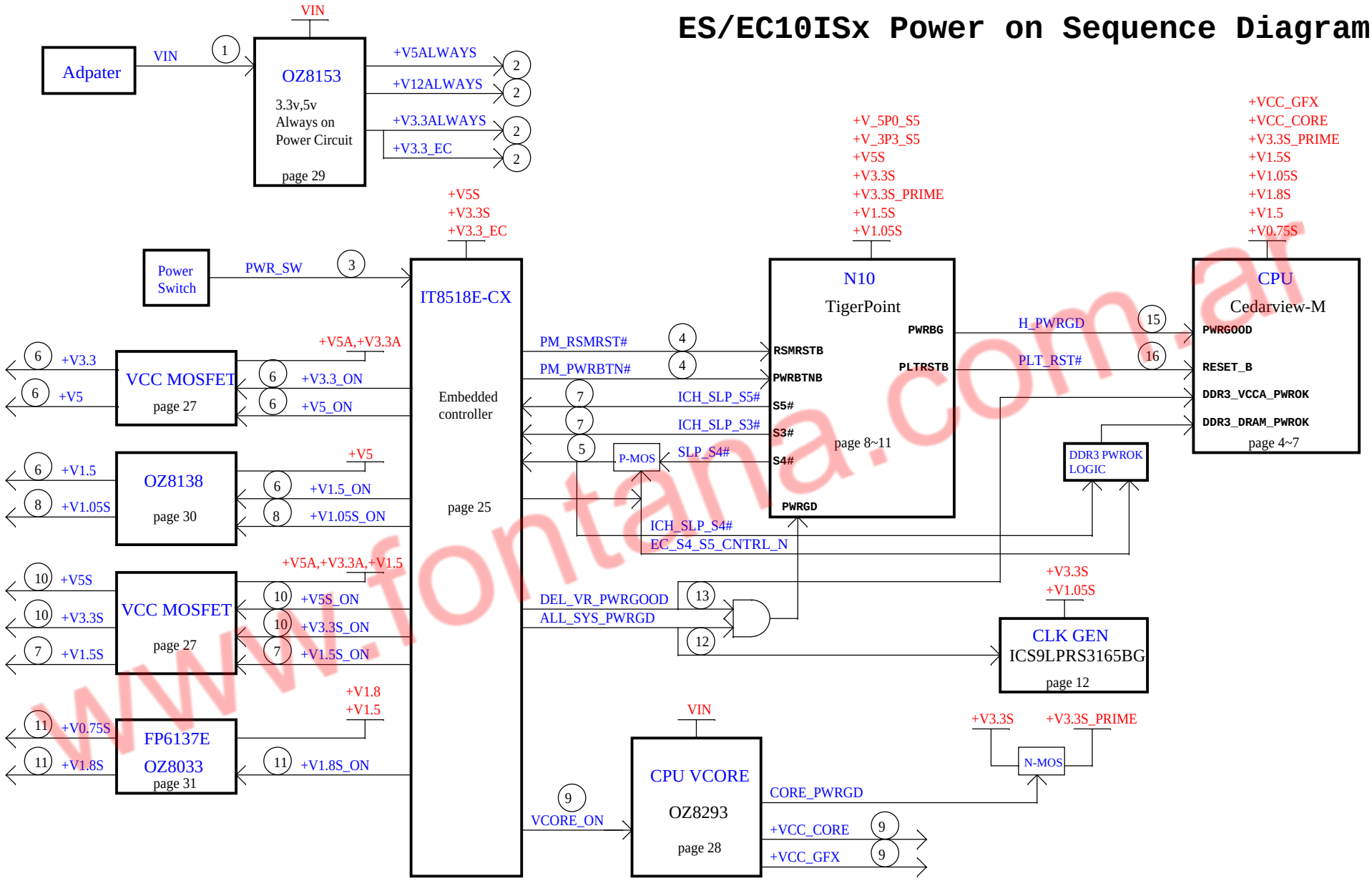
ES/EC10ISx Power on Sequence Diagram



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Project : ES10ISx

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	SEQUENCE DIAGRAM	A

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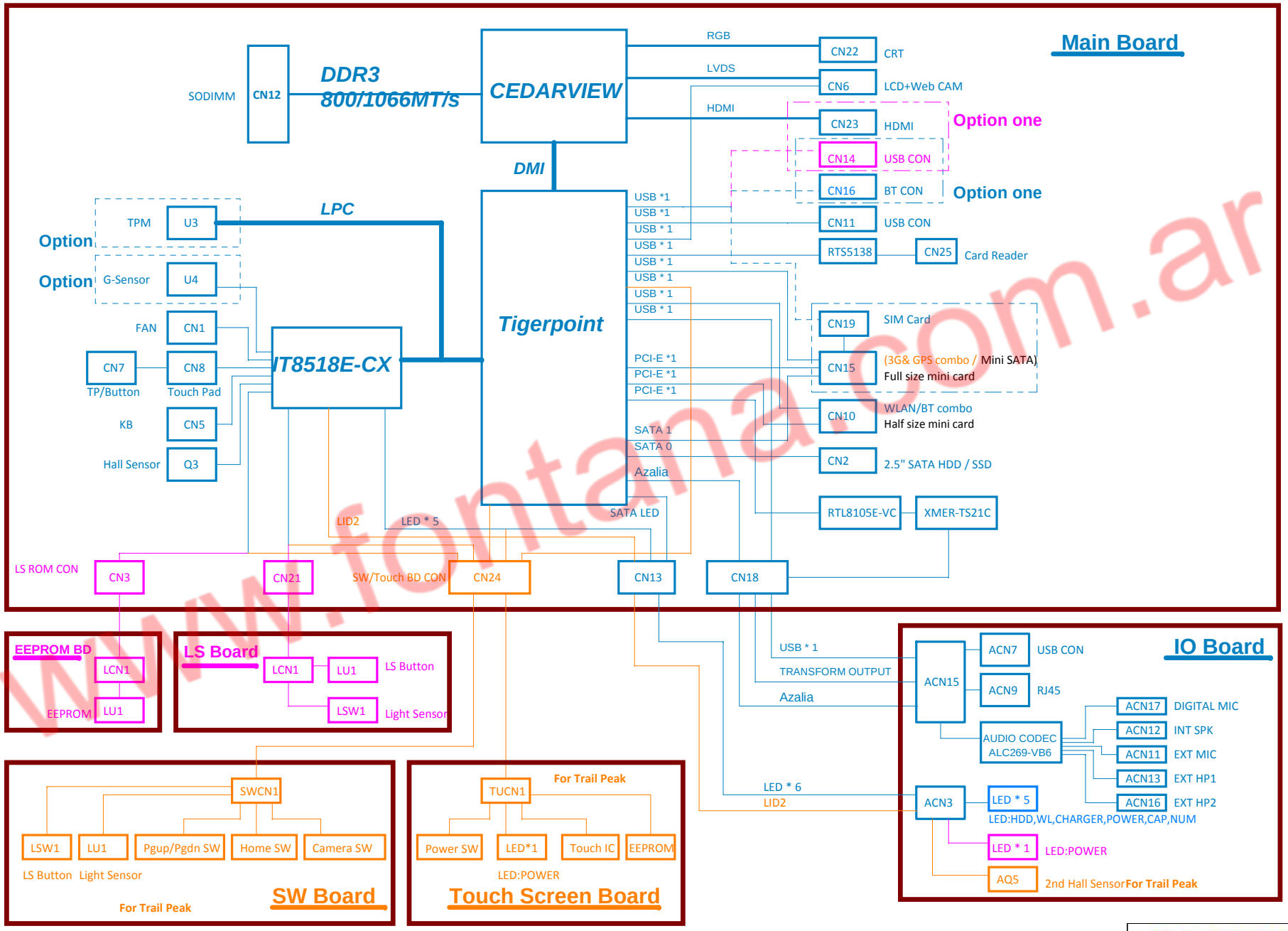
ES10/EC10 System Block Diagram



PCB1
PCB_MB_ES10ISX_REV:A

ECS ELITEGROUP
Project : ES10ISx
Size | Document Number: SYSTEM BLOCK DIAGRAM | Rev A
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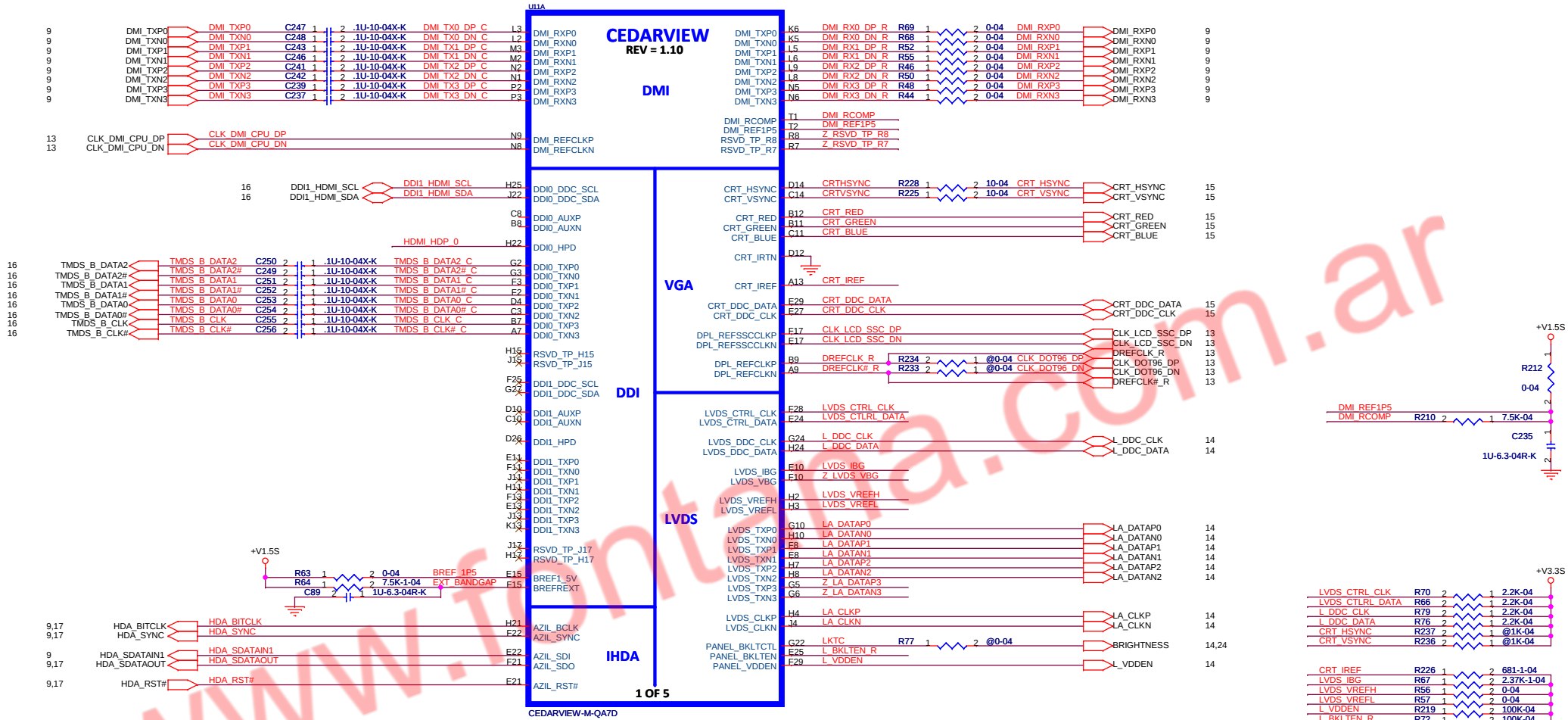

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Project : ES10ISx

Size	Document Number	Rev
	CPU CEDARVIEW-1/4	A

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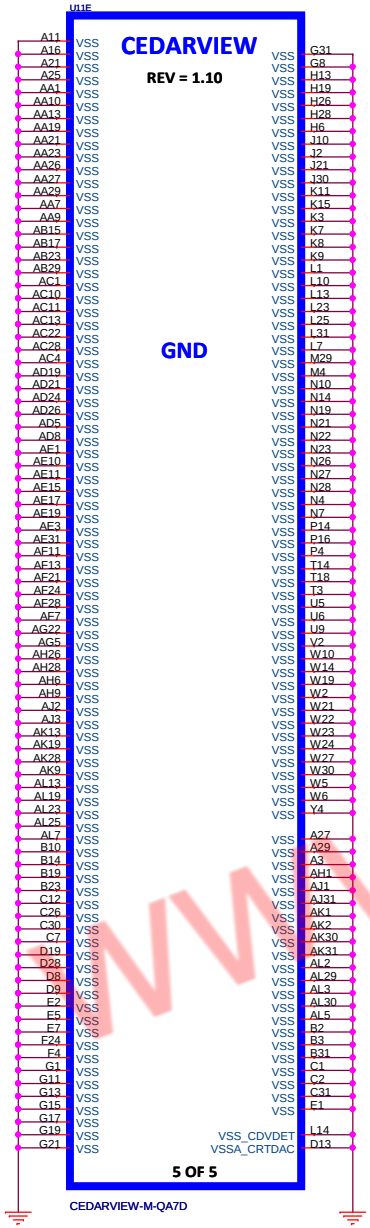

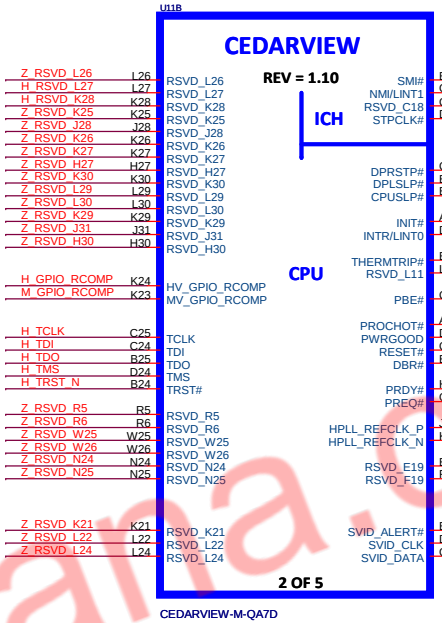

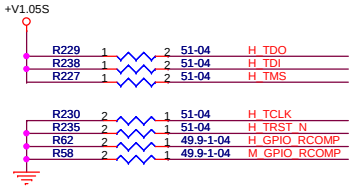

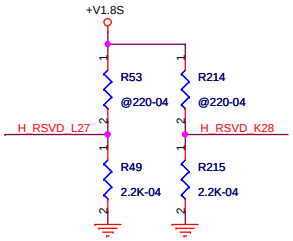

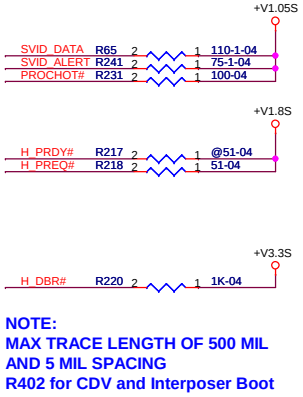

NOTE:
MAX TRACE LENGTH OF 500 MIL AND 5 MIL SPACING
R402 for CDV and Interposer Boot

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Project : ES10ISx

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	CPU CEDARVIEW-2/4	A
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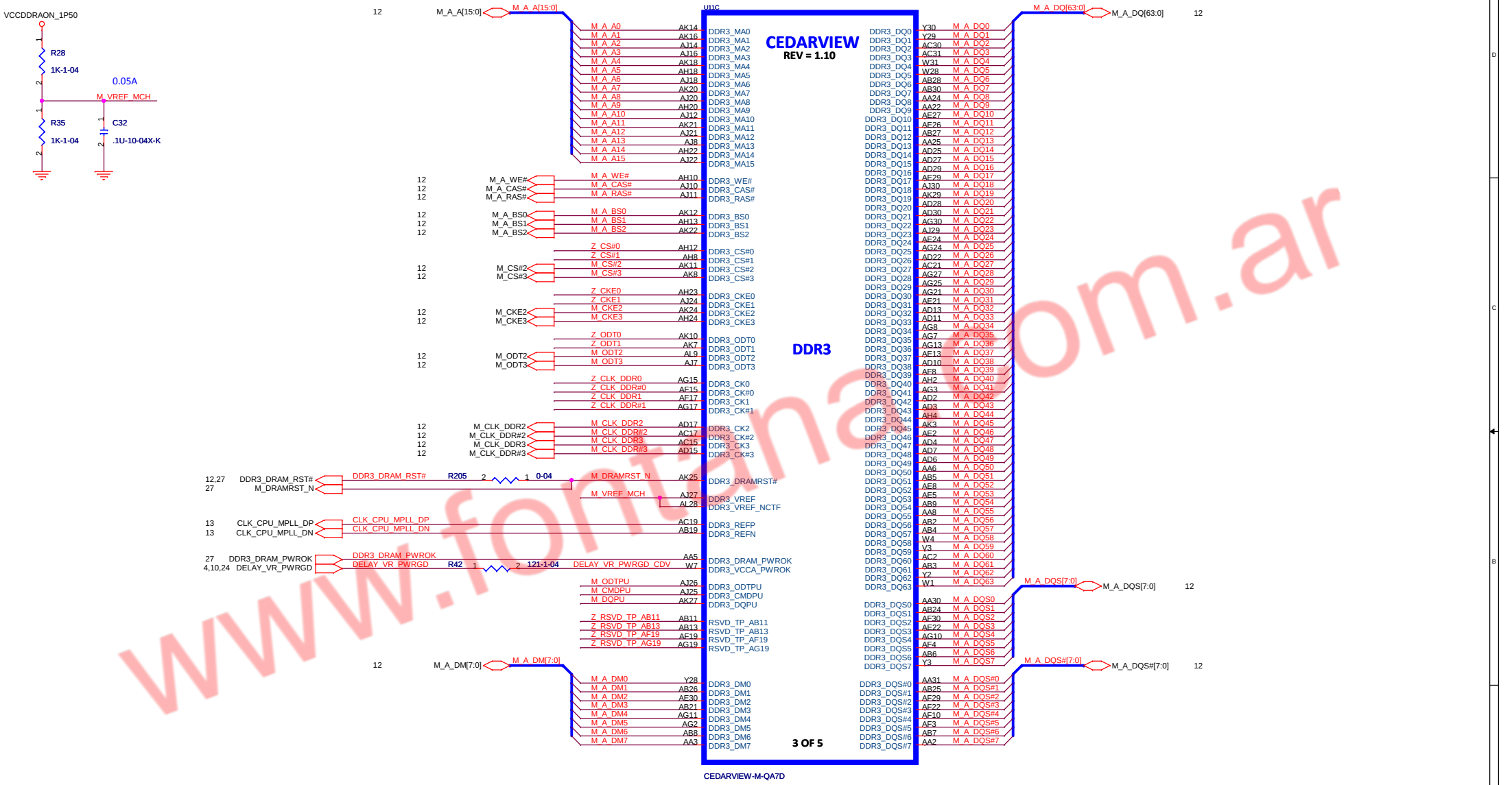
NOTE:
PLACE TWO 1K OHM CLOSE TO CPU PINS ON M_VREF
PLACE O.1UF CLOSE TO CPU



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Size	Document Number	Rev
	CPU CEDARVIEW-3/4	A

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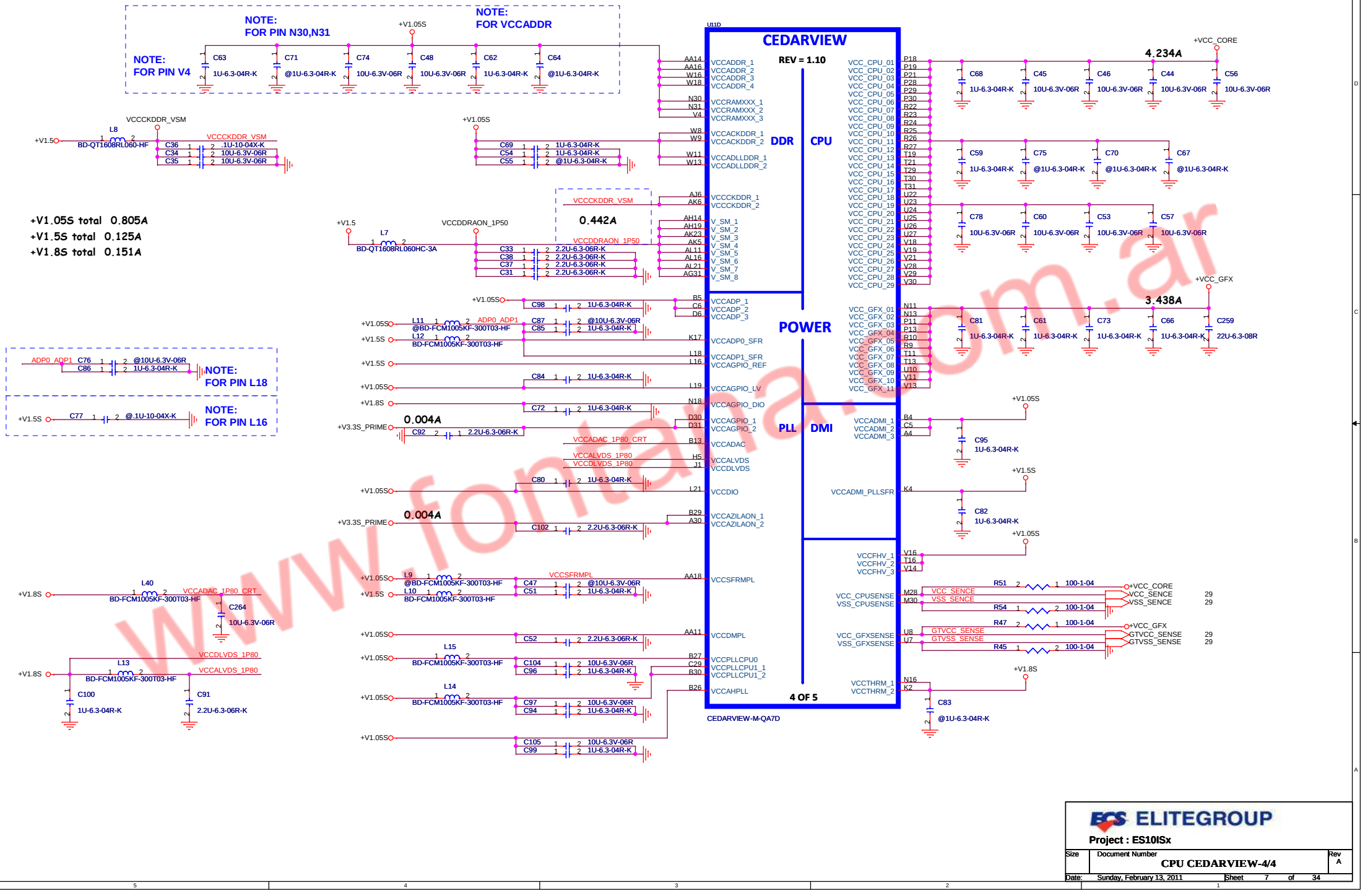

ELITEGROUP			
Project : ES10ISx			
Size	Document Number		Rev A
	CPU CEDARVIEW-4/4		
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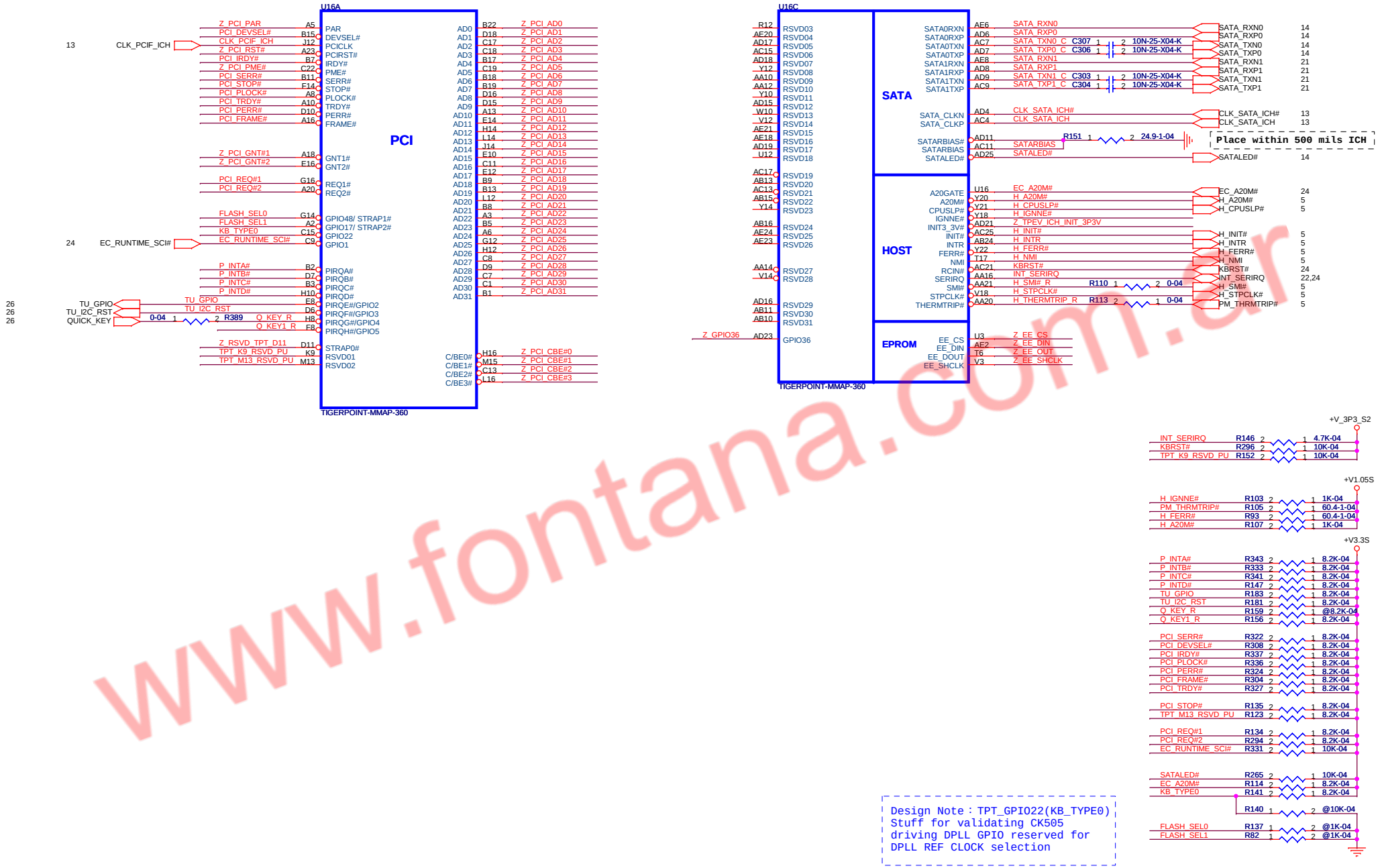
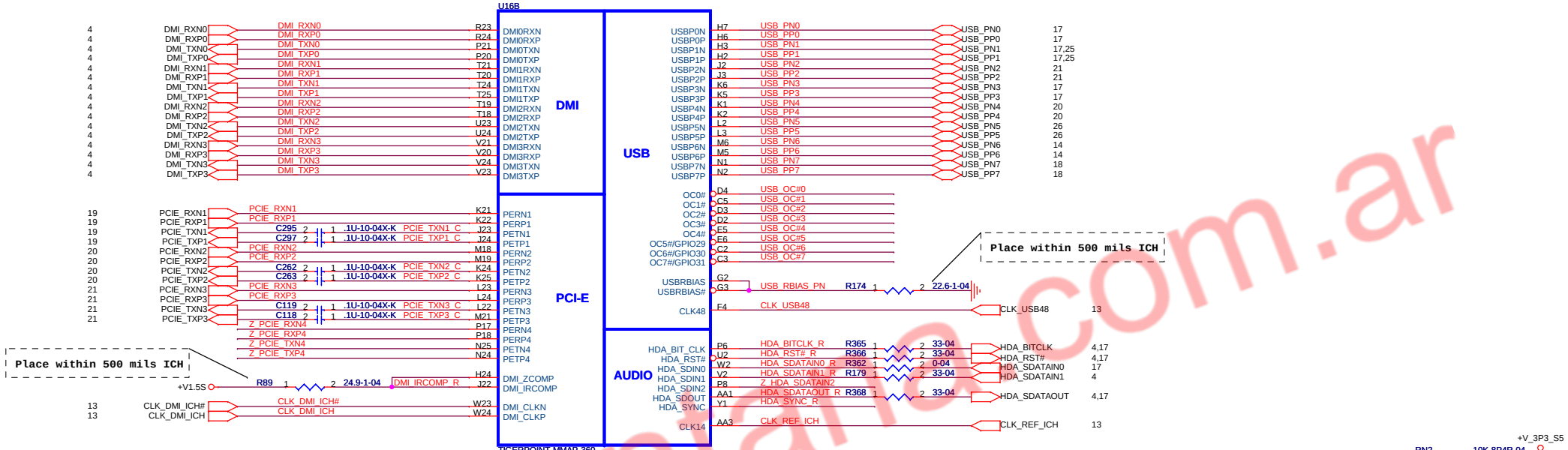
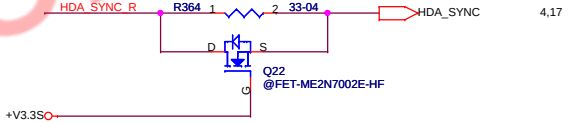


USB	0	1	2	3	4	5	6	7
DEVICE	INT USB0	INTUSB1 SIM/BT	3G CARD	IO USB3	WLAN CARD	I2C	WEB CAM	CARD READER

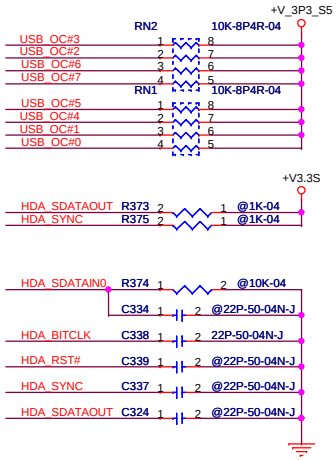


PCI-E	1	2	3	4
DEVICE	LAN	WLAN	3G	N/A



HDA_SDATAOUT	PCI Express port config bit 1
HDA_SYNC	PCI Express port config bit 0

Audio	VA	VB
R364	V	X
Q22	X	V



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	SB TIGERPOINT 2/4	A

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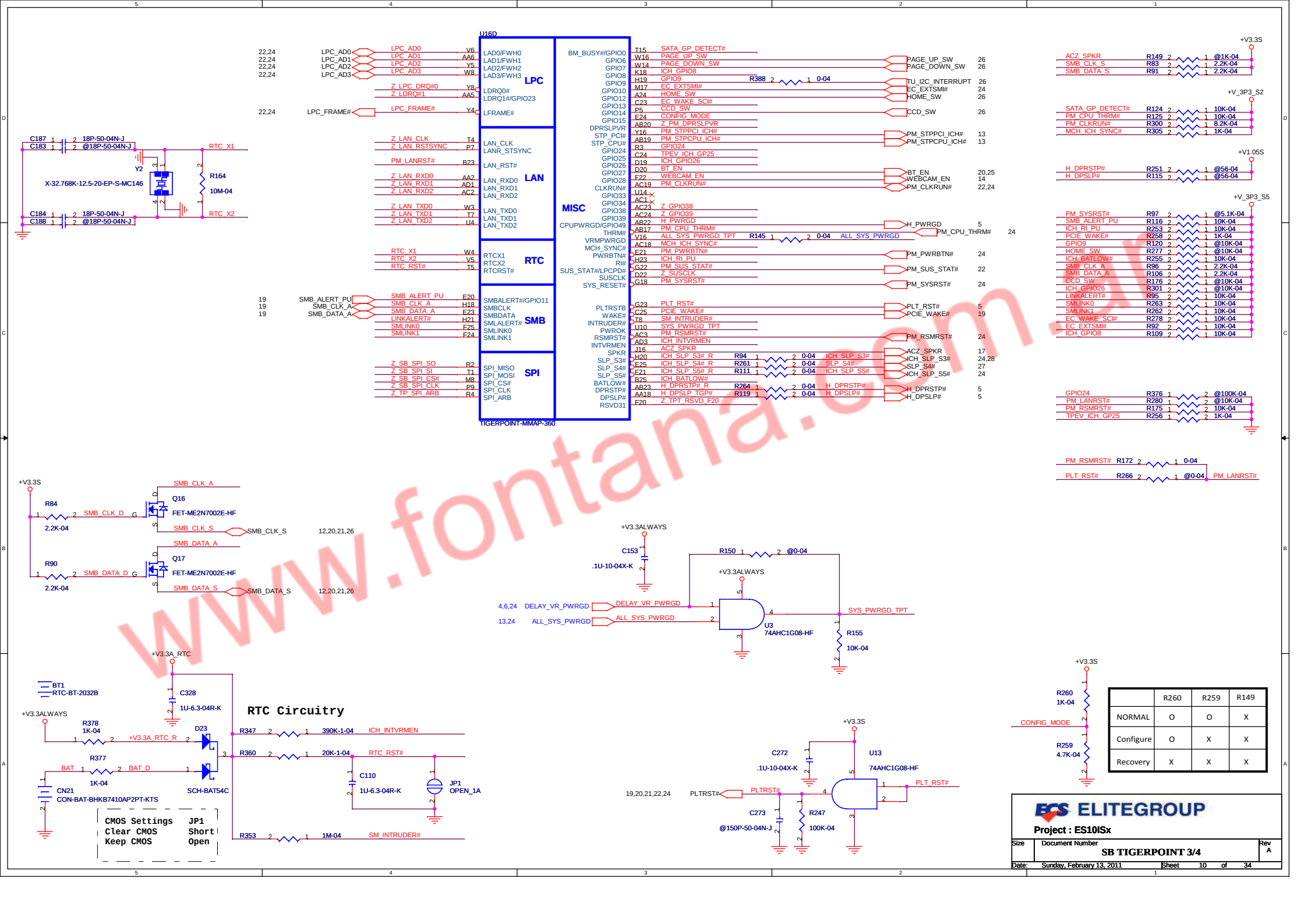

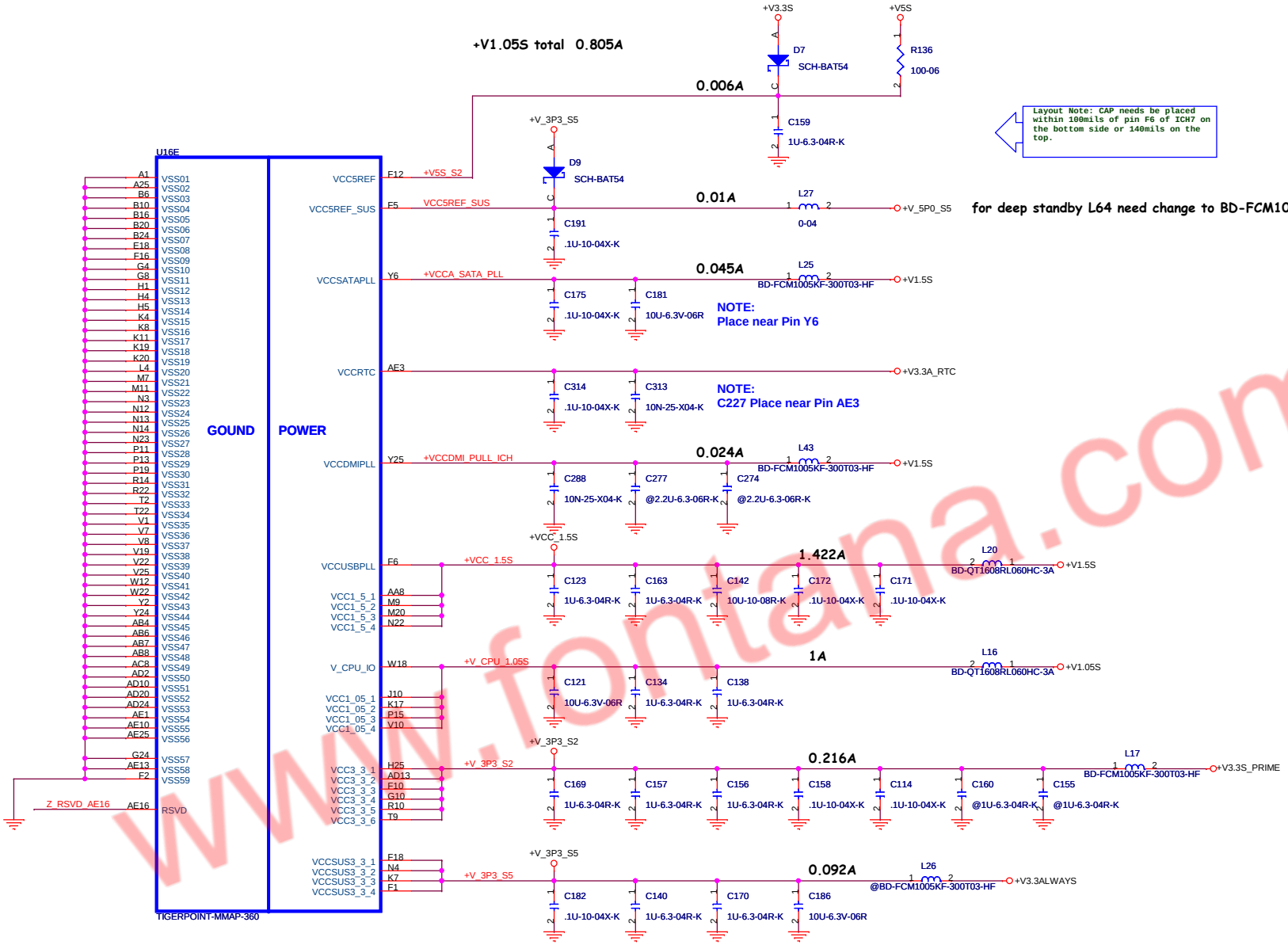

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Project : ES10ISx

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	SB TIGERPOINT 4/4	A

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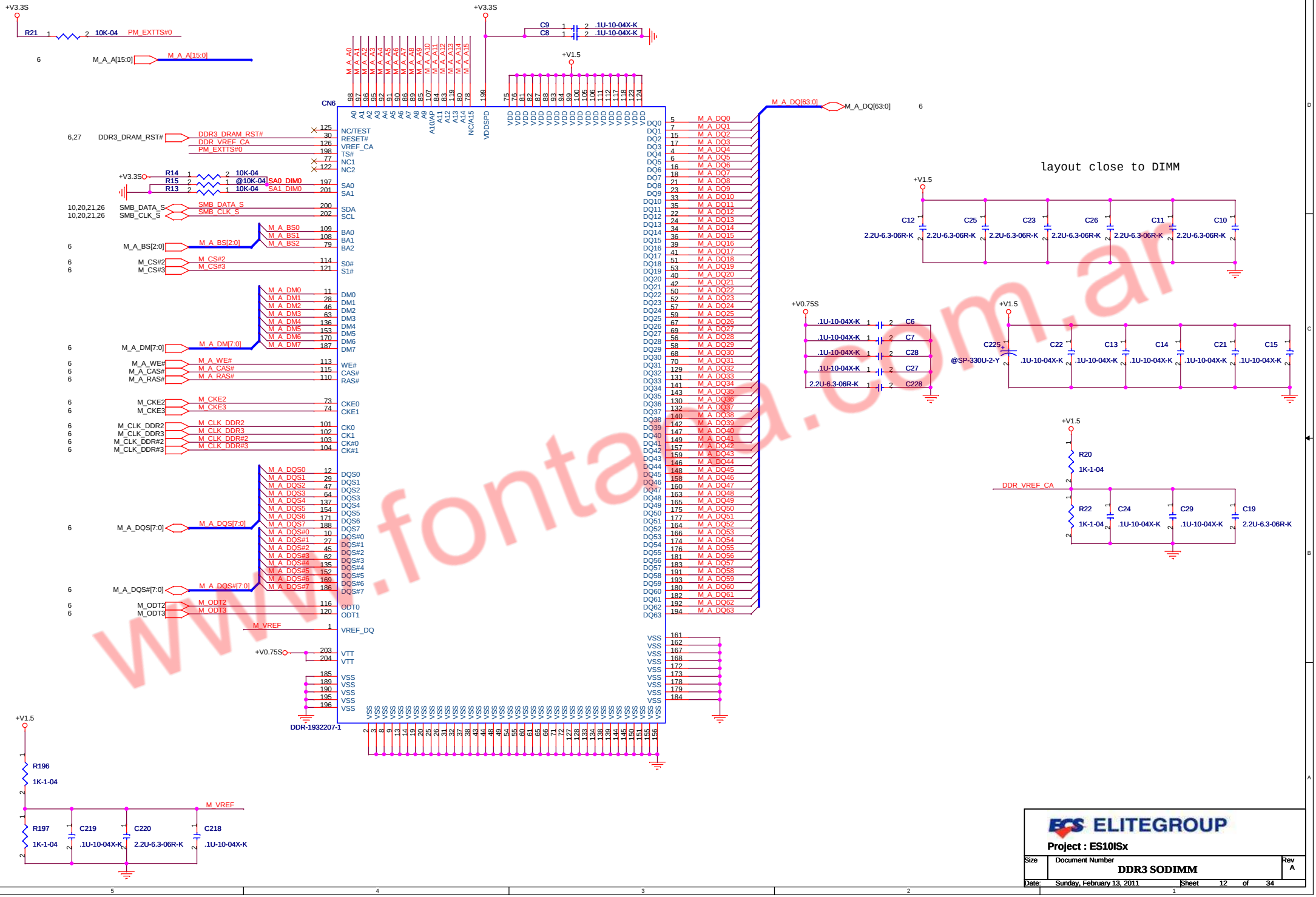

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	DDR3 SODIMM	A

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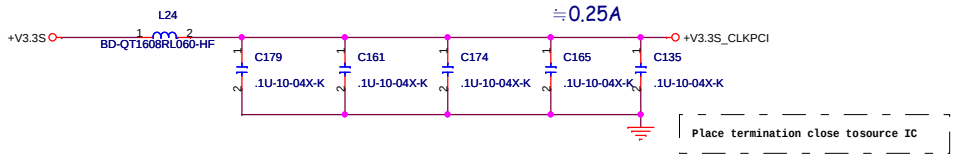
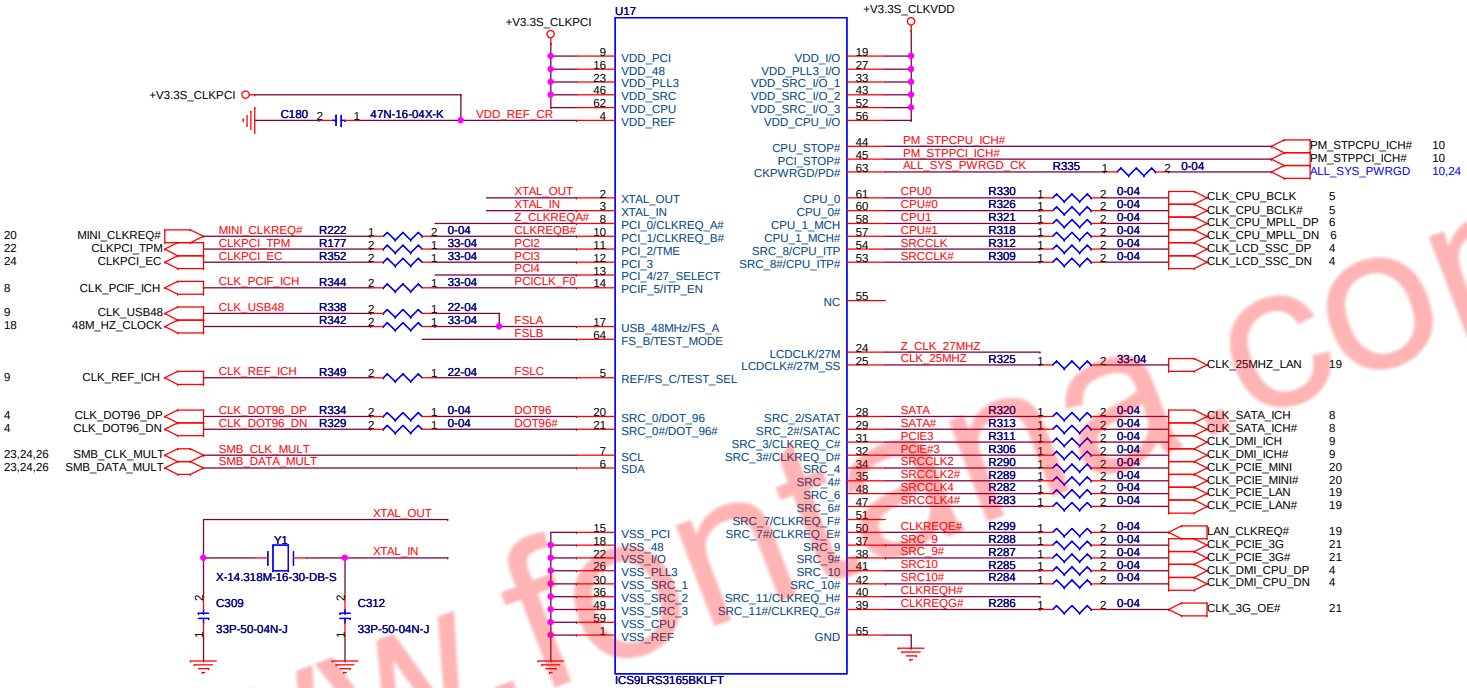
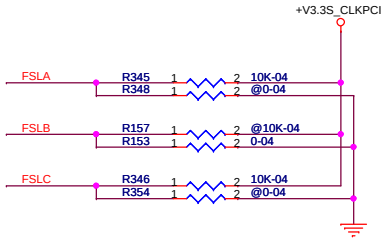
CLOCK GEN

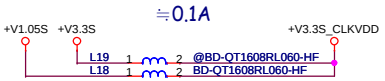


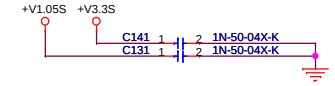


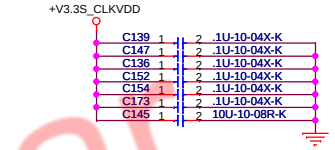


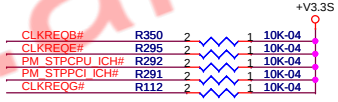
FSLC BSEL2	FSLB BSEL1	FSLA BSEL0	CPU	SRC	PCI
L	L	H	133MHz	100MHz	33MHz
L	H	L	200MHz	100MHz	33MHz
L	H	H	166MHz	100MHz	33MHz
H	L	H	100MHz	100MHz	33MHz
H	H	L	400MHz	100MHz	33MHz
H	L	L	333MHz	100MHz	33MHz
H	H	H	CPU SEL	100MHz	33MHz

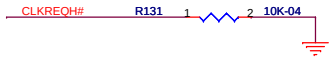
PS : CRB SETUP CPU Frequency 100MHz

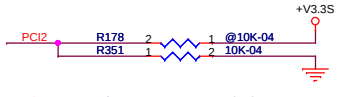


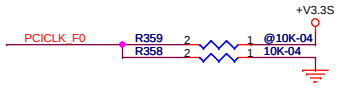




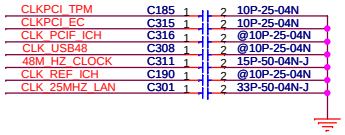








Reserve for EMI



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	CLOCK GENERATOR	A

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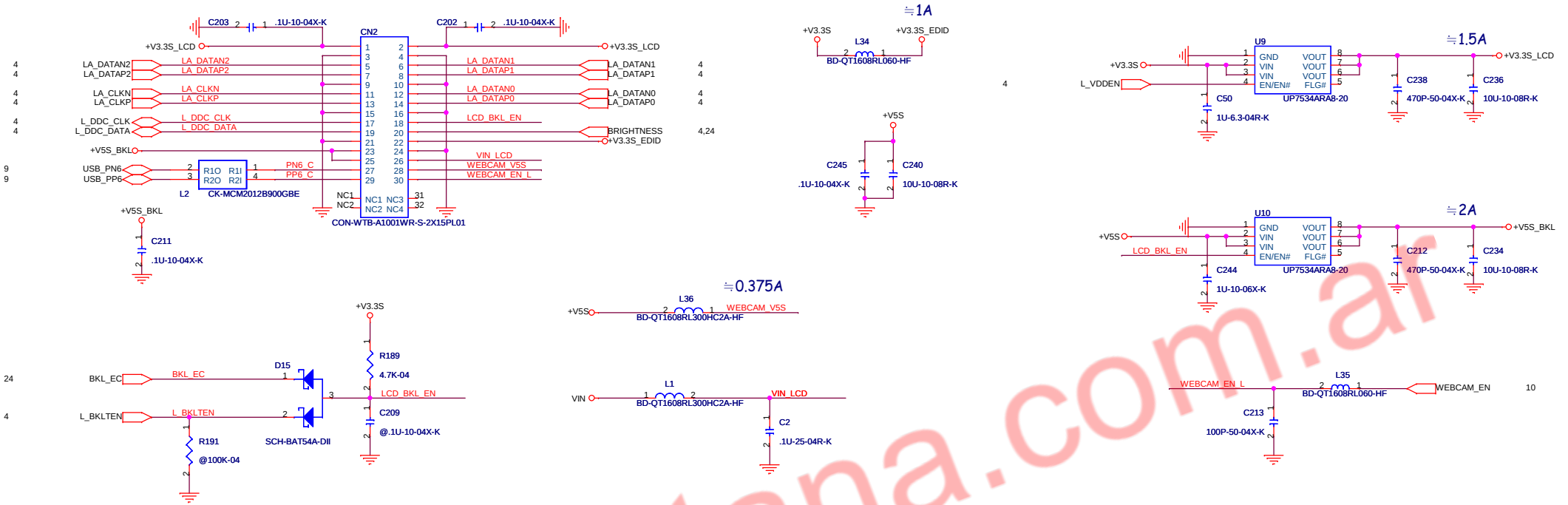
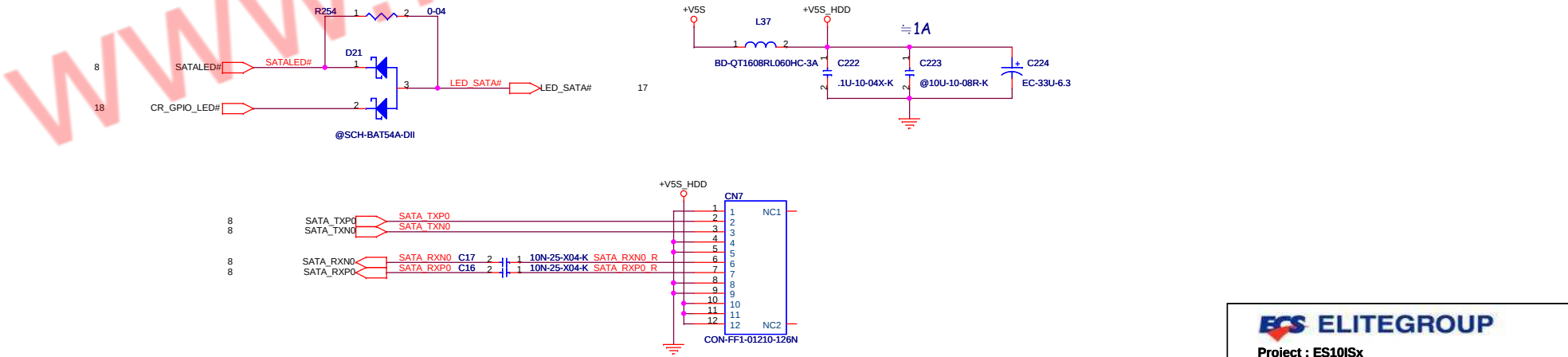
LCD+WEB 30 PIN CON



SATA HDD



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Size	Document Number	Rev
	LCD /WEB CAM / SATA	A

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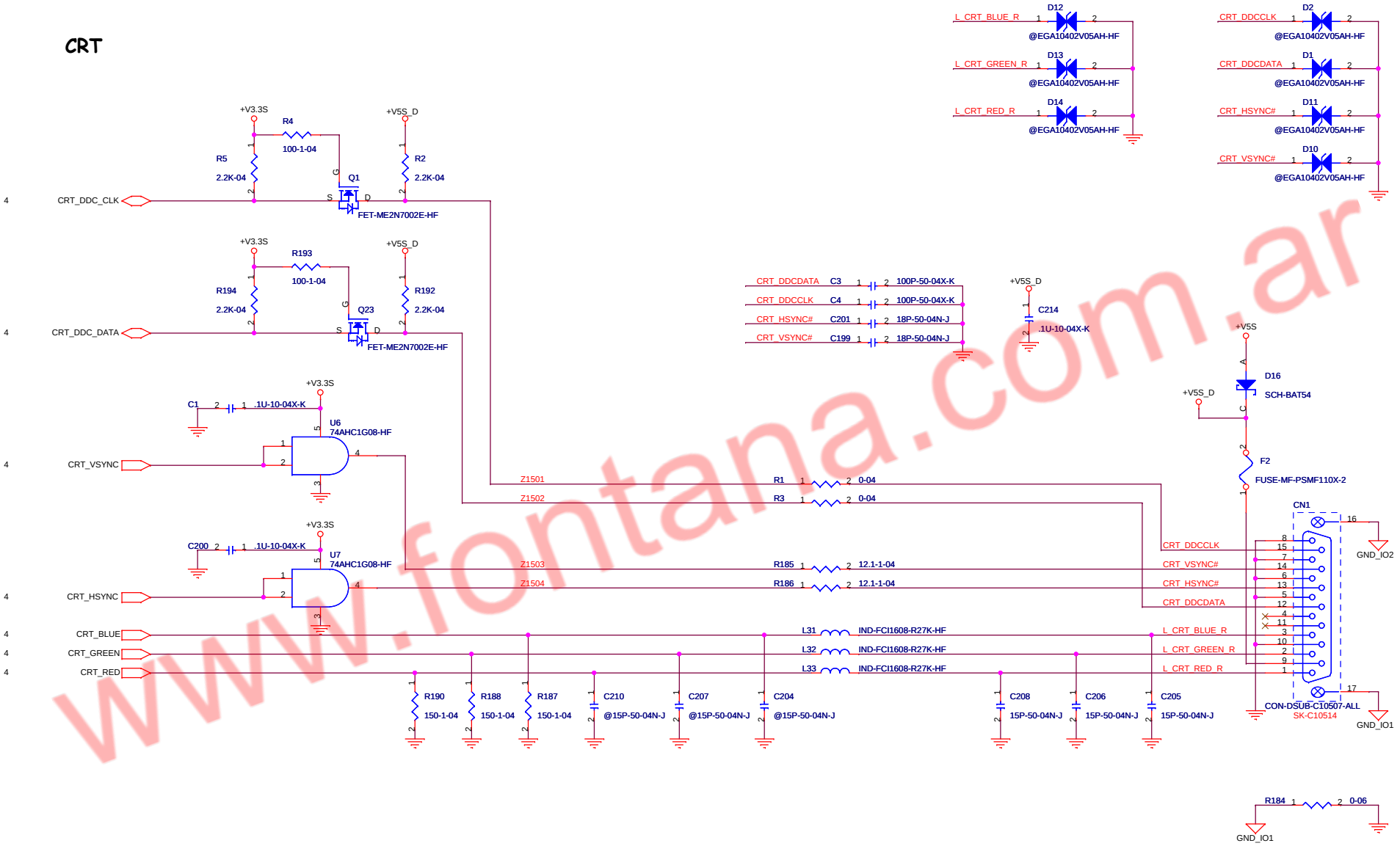
CRT



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	CRT CON	A

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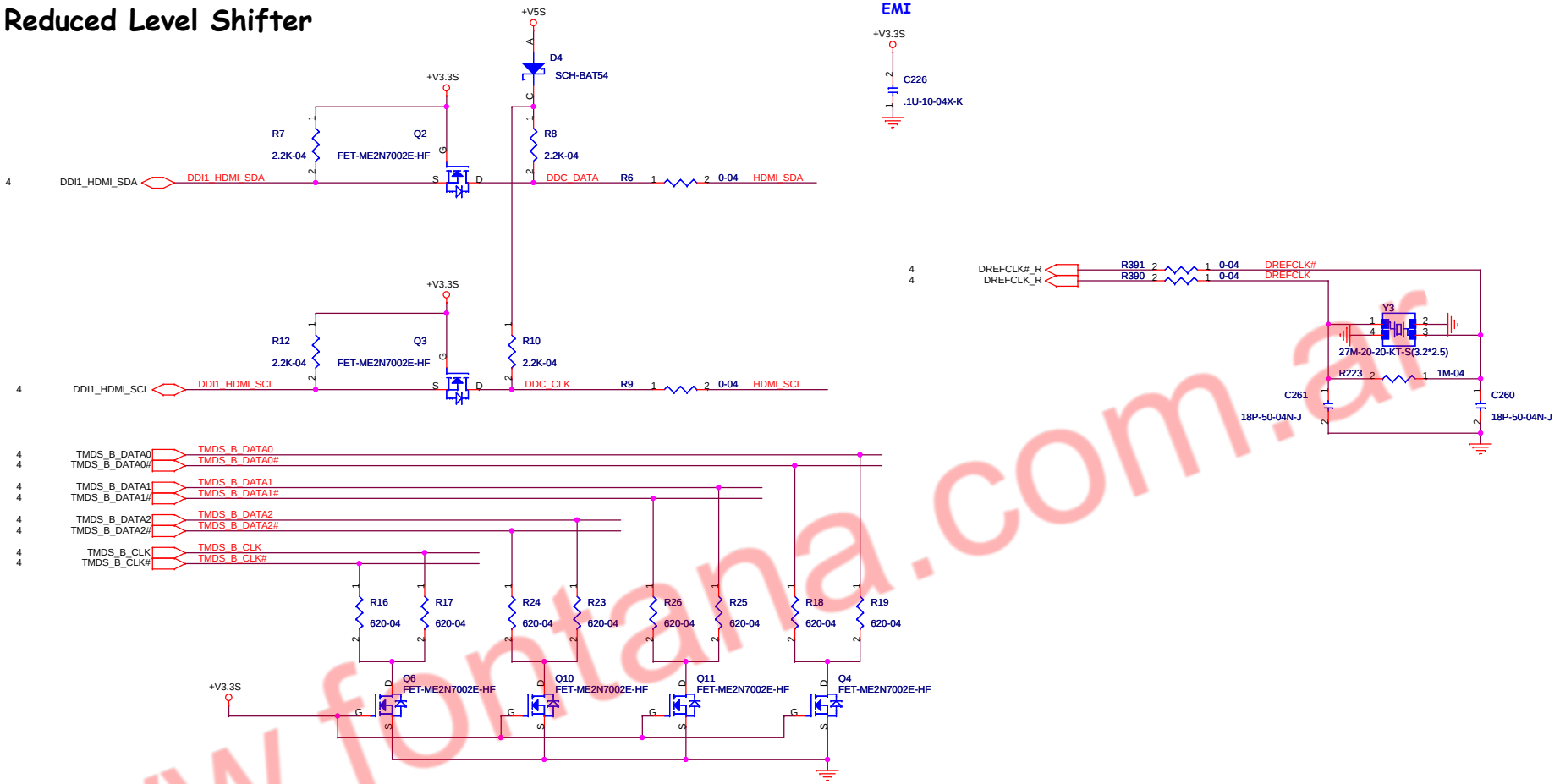
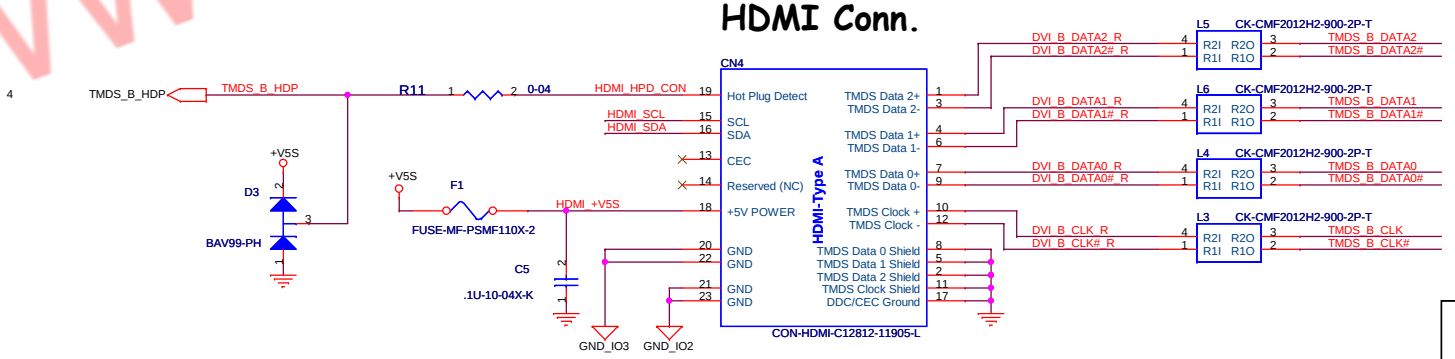
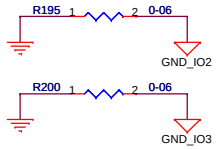
HDMI Cost Reduced Level Shifter



HDMI Conn.





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Size	Document Number	Rev
	HDMI	A

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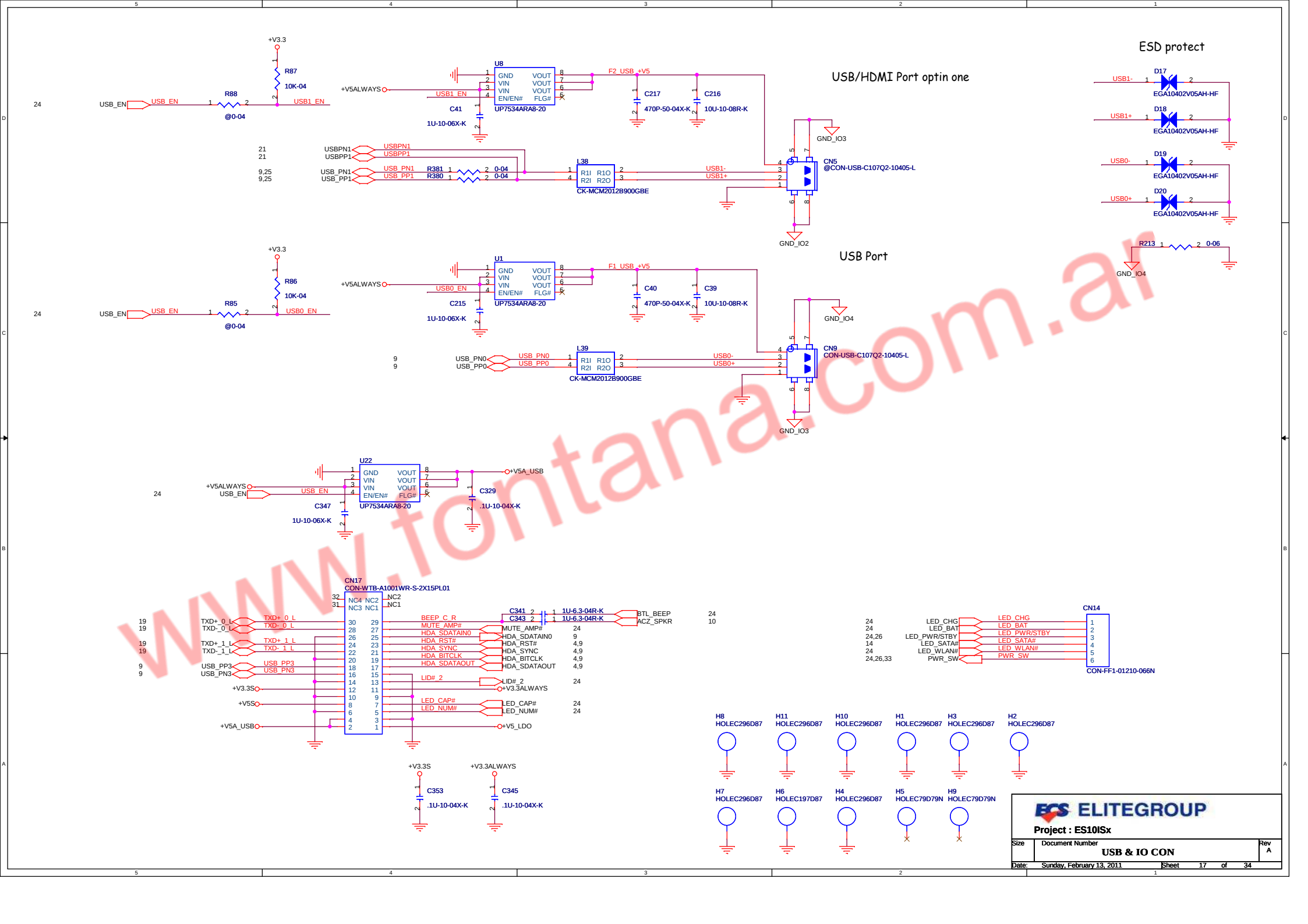

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Size	Document Number	Rev
	USB & IO CON	A

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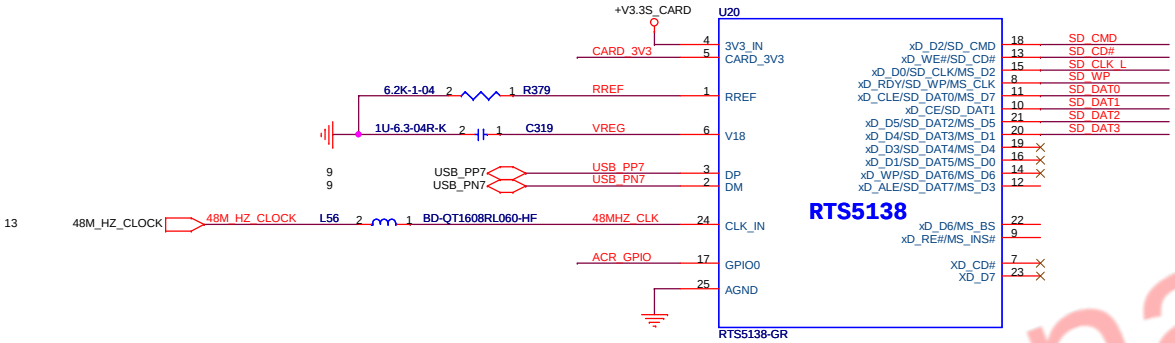
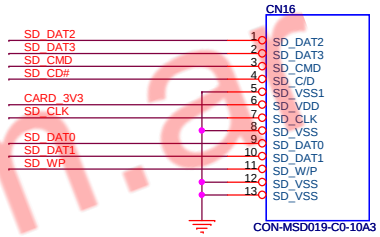
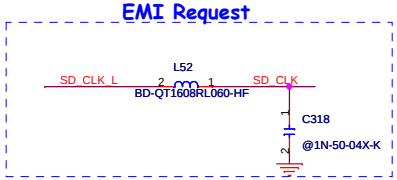
CARD READER

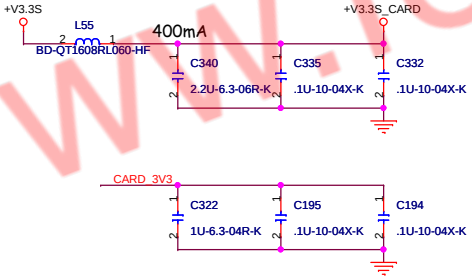
1. SD/MMC Card: 250mA

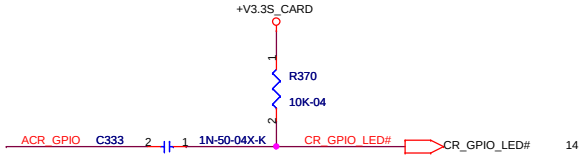




EMI Request







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Project : ES10ISx

Size	Document Number	Rev
	CARD READER RST-5138	A
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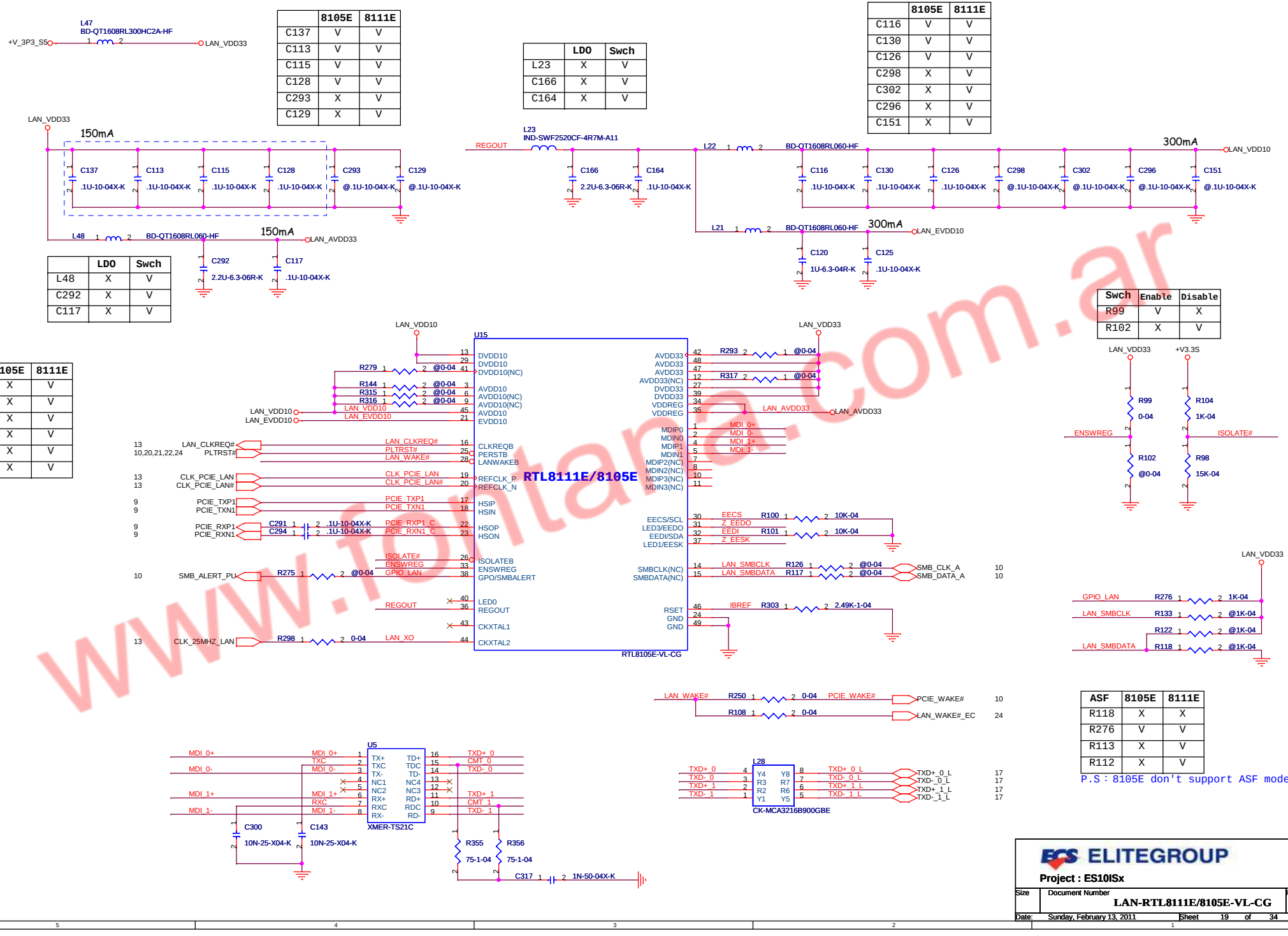
LAN



	8105E	8111E
C137	V	V
C113	V	V
C115	V	V
C128	V	V
C293	X	V
C129	X	V

	LDO	Swch
L23	X	V
C166	X	V
C164	X	V

	8105E	8111E
C116	V	V
C130	V	V
C126	V	V
C298	X	V
C302	X	V
C296	X	V
C151	X	V

	LDO	Swch
L48	X	V
C292	X	V
C117	X	V

	8105E	8111E
R279	X	V
R315	X	V
R144	X	V
R316	X	V
R293	X	V
R317	X	V

Swch	Enable	Disable
R99	V	X
R102	X	V

ASF	8105E	8111E
R118	X	X
R276	V	V
R113	X	V
R112	X	V

P.S : 8105E don't support ASF mode

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	LAN-RTL8111E/8105E-VL-CG	A

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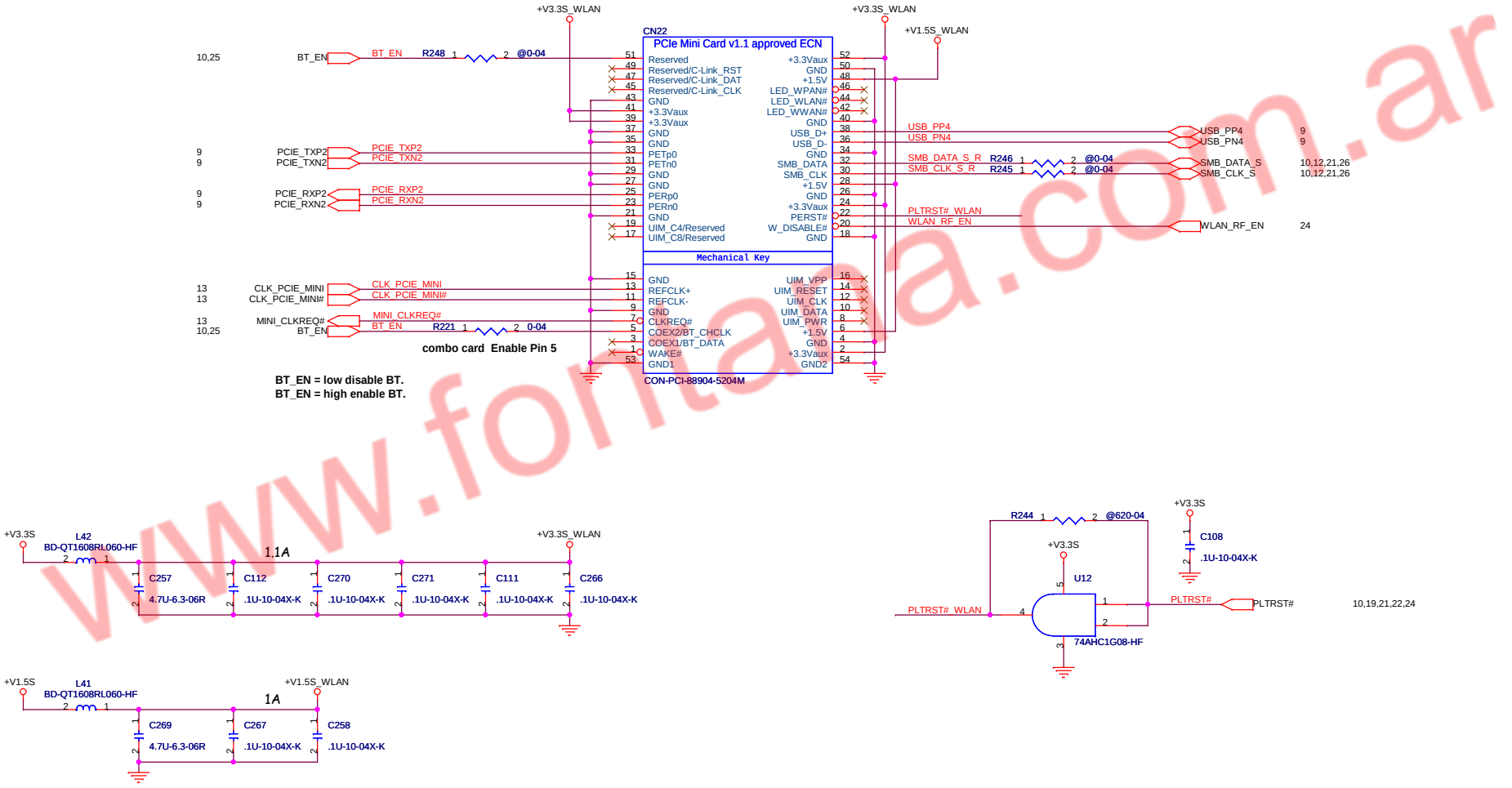
Mini Card



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Size	Document Number	Rev
	WIRELESS CON	A

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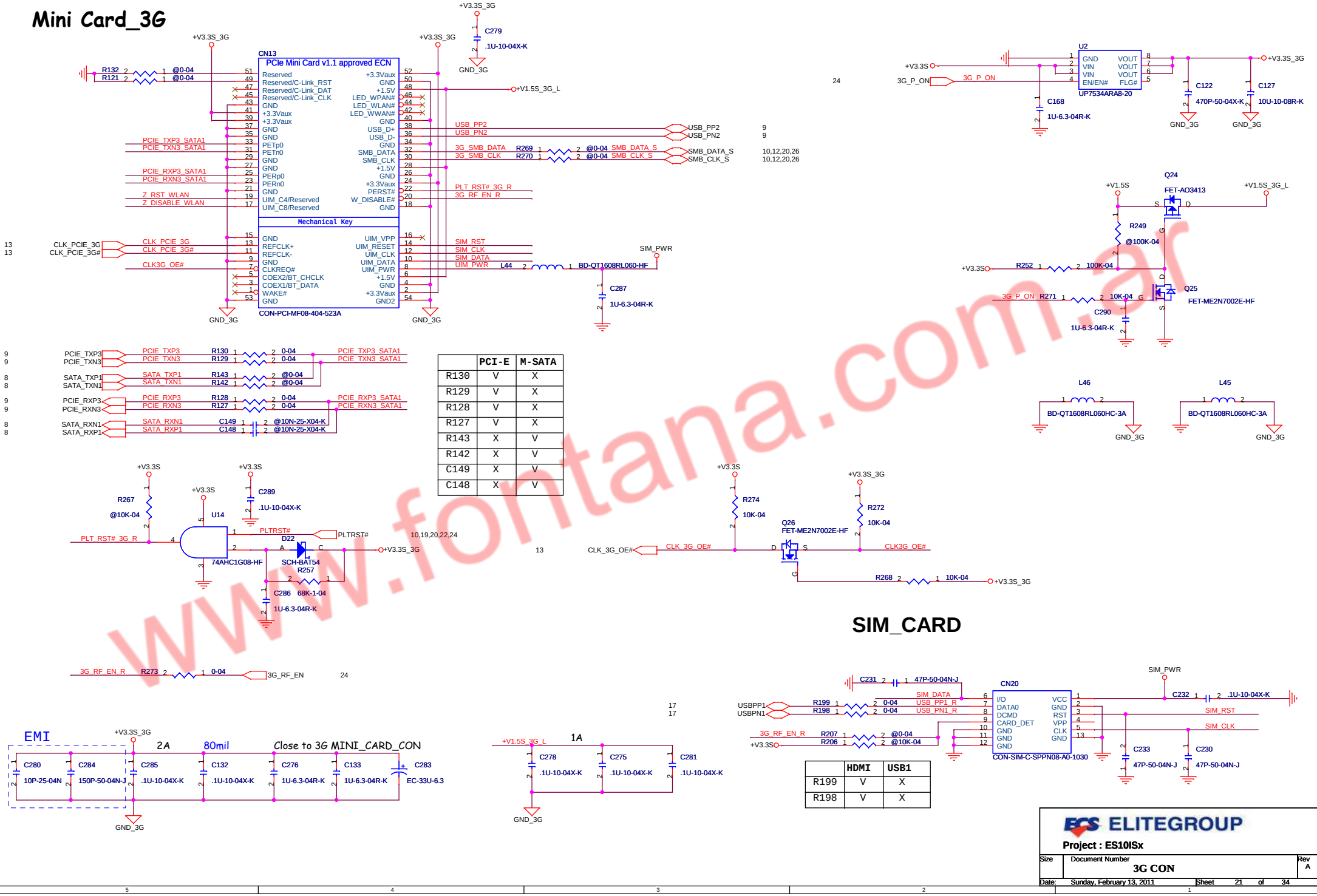
Mini Card_3G



	PCI-E	M-SATA
R130	V	X
R129	V	X
R128	V	X
R127	V	X
R143	X	V
R142	X	V
C149	X	V
C148	X	V

SIM_CARD

	HDMI	USB1
R199	V	X
R198	V	X

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	3G CON	A

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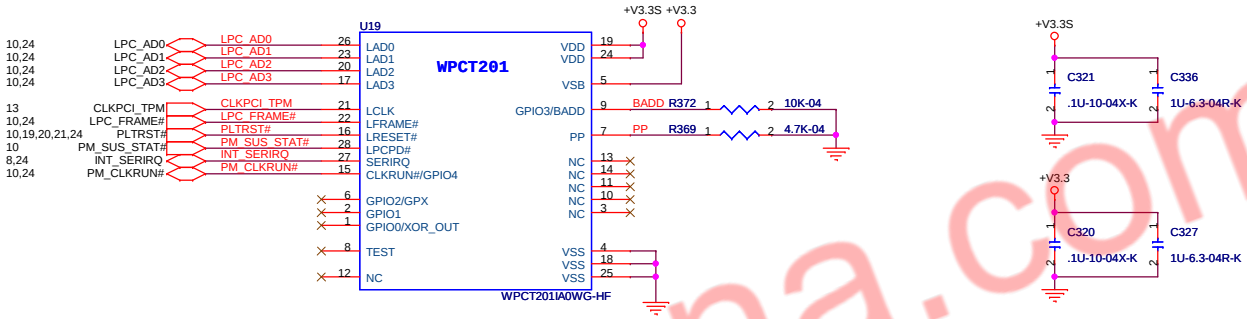
TPM



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	TPM	A

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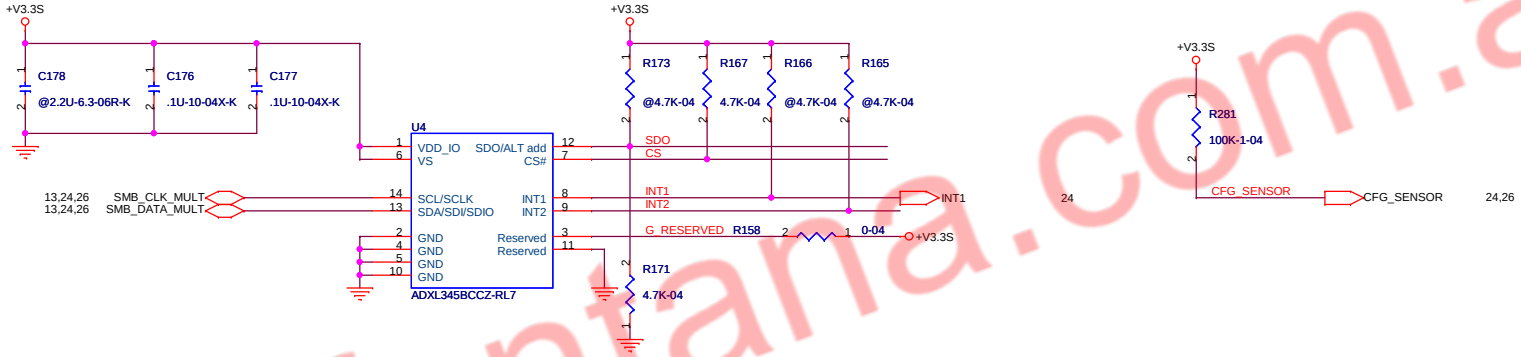
G-Sensor



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	G-SENSOR	A

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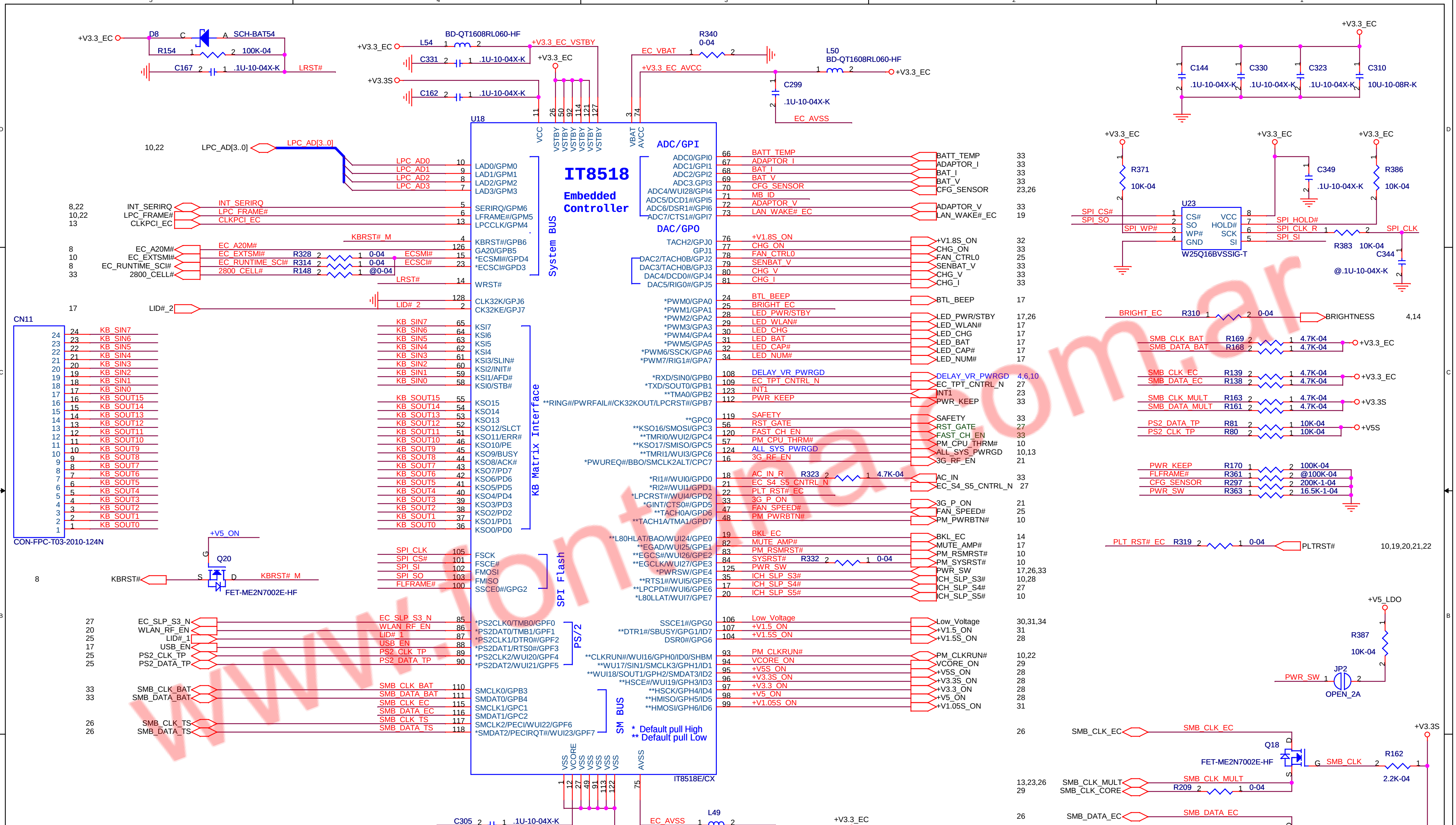

ES/EC10 Configure Sensor

Configure	W/O Light Sensor & G-Sensor	L-Sen Only	L-Sen + G-Sen	G-Sen Only
Voltage	0 V	0.825 V	1.65 V	2.2 V
R281	@	@	V	V
R297	V	V	V	V

ES/EC10 M/B revsion ID----

MB rev. ID	Rev.A	Rev.A W/O TPM	Rev.B	Rev.B W/O TPM	Rev.C	Rev.C W/O TPM
MB_ID	0V	0.55V	1.05V	1.48V	1.98V	2.56V
R302	@	10K	10K	10K	10K	10K
R307	1.5K	2K	4.7K	8.2K	12K	34.8K

ECS ELITEGROUP

Project : ES10ISx

Size	Document Number	Rev
	ES10ISX_MB_BD_REV_A IT8518E-CX	A

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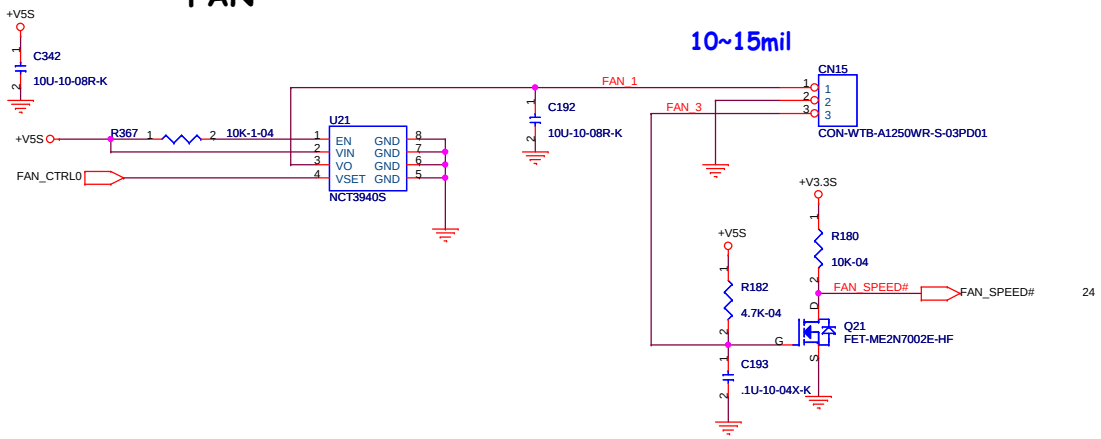
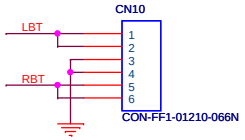
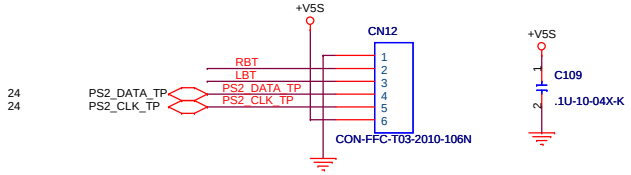
FAN



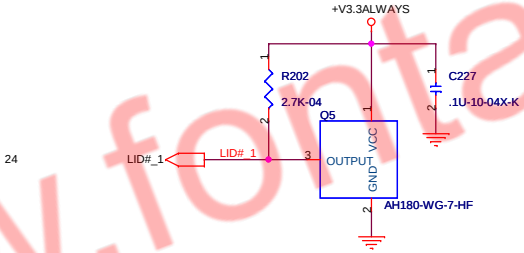
Touch PAD Button



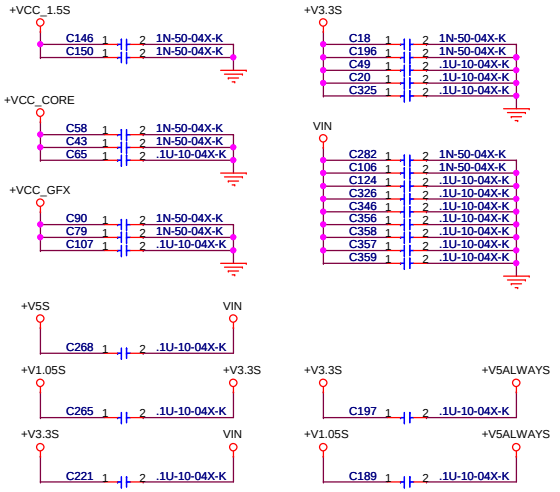
Touch PAD



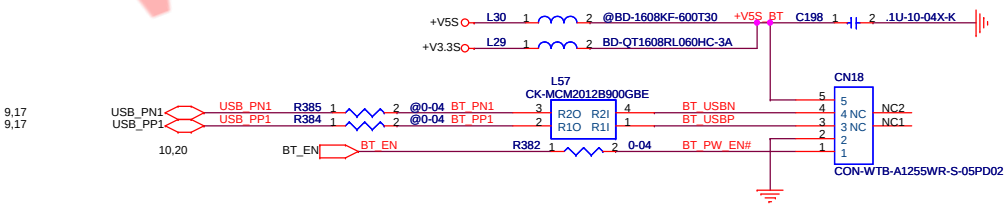
HALL Sensor



EMI Request



Option Bluetooth



BT_EN = low disable BT.
BT_EN = high enable BT.

ELITEGROUP

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	FAN/TP/TP-B /BTH/LID/ EMI	A

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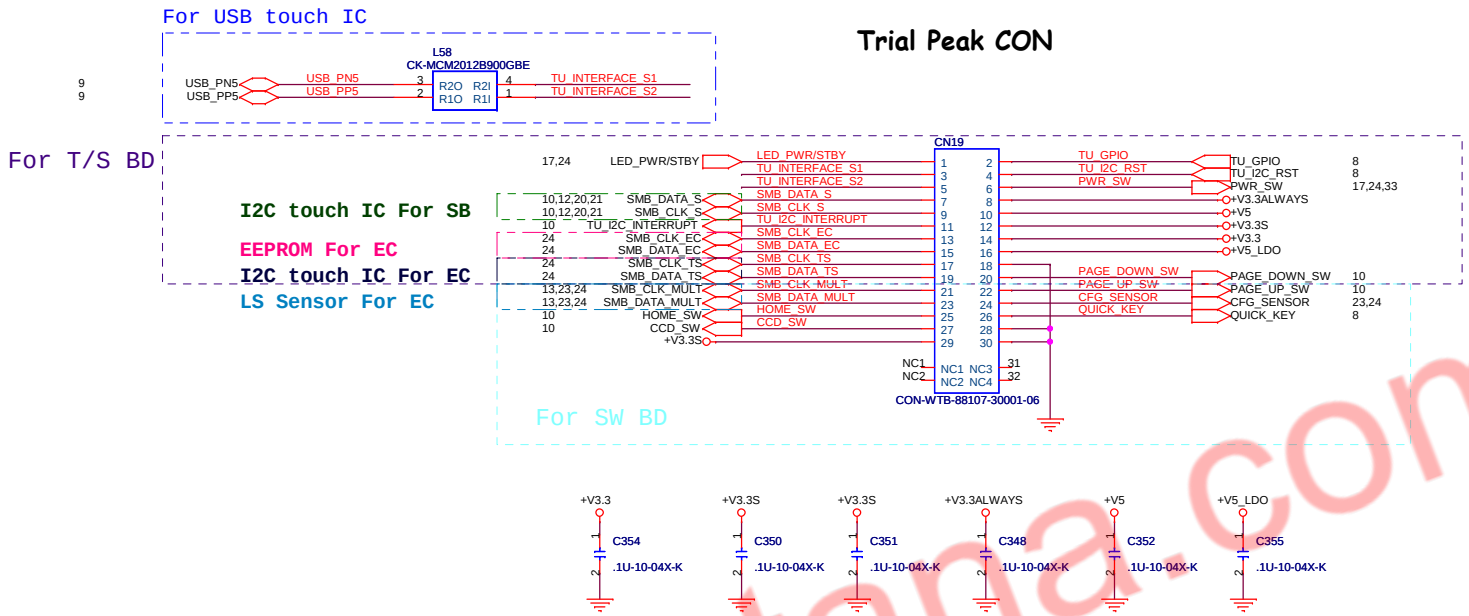
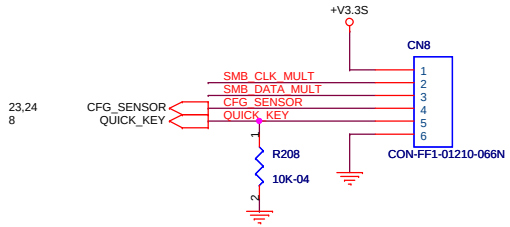


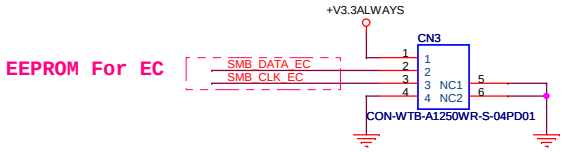
EC10 VS ES10 different

Item	For Trail Peak	For Stone Point
CN19	V	X
CN8	X	V
CN3	X	V

Configure Sensor/Quick Key CON



EEPROM CON



ELITEGROUP

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	Trial Peak CON/QKEY /EEPROM	A

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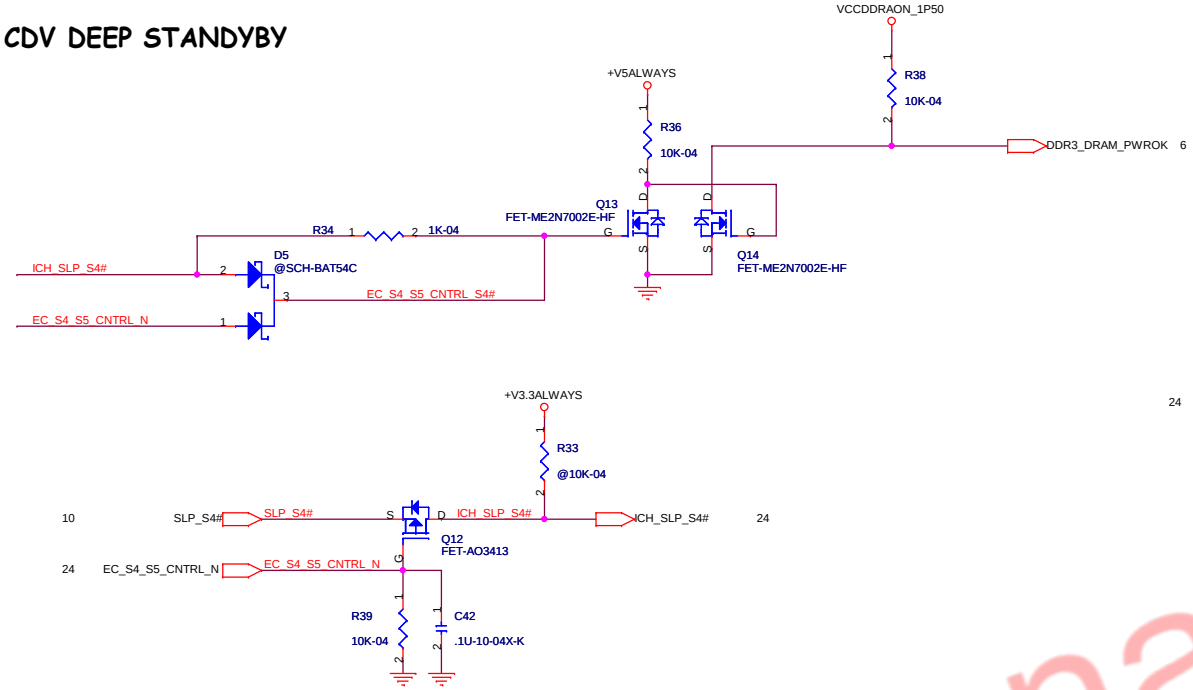
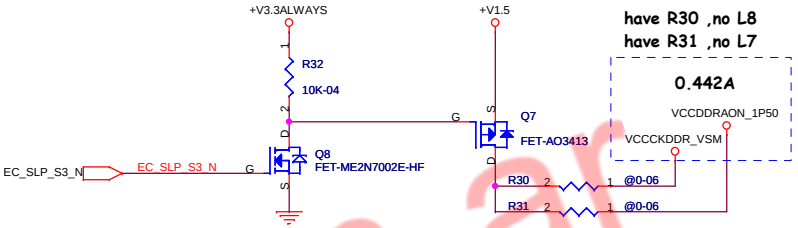
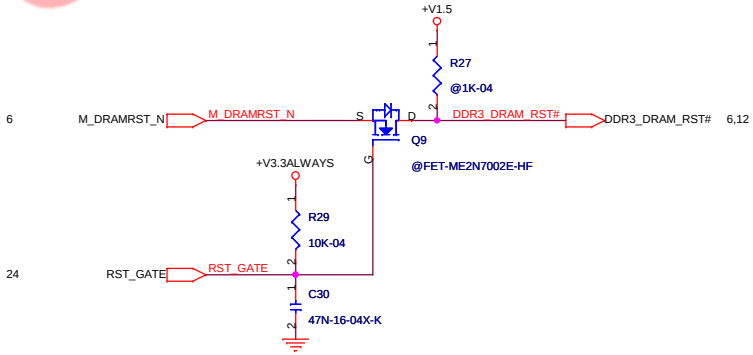
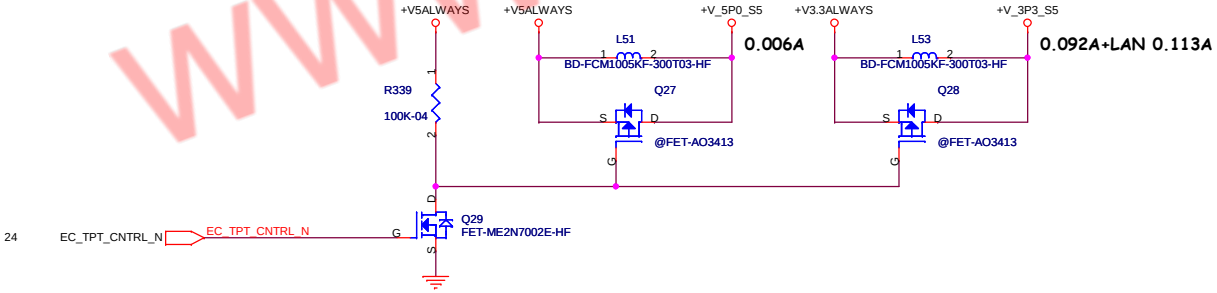
CDV DEEP STANDYBY







ICH DEEP STANDY BY



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Size	Document Number	Rev
	DEEP STANDBY	A

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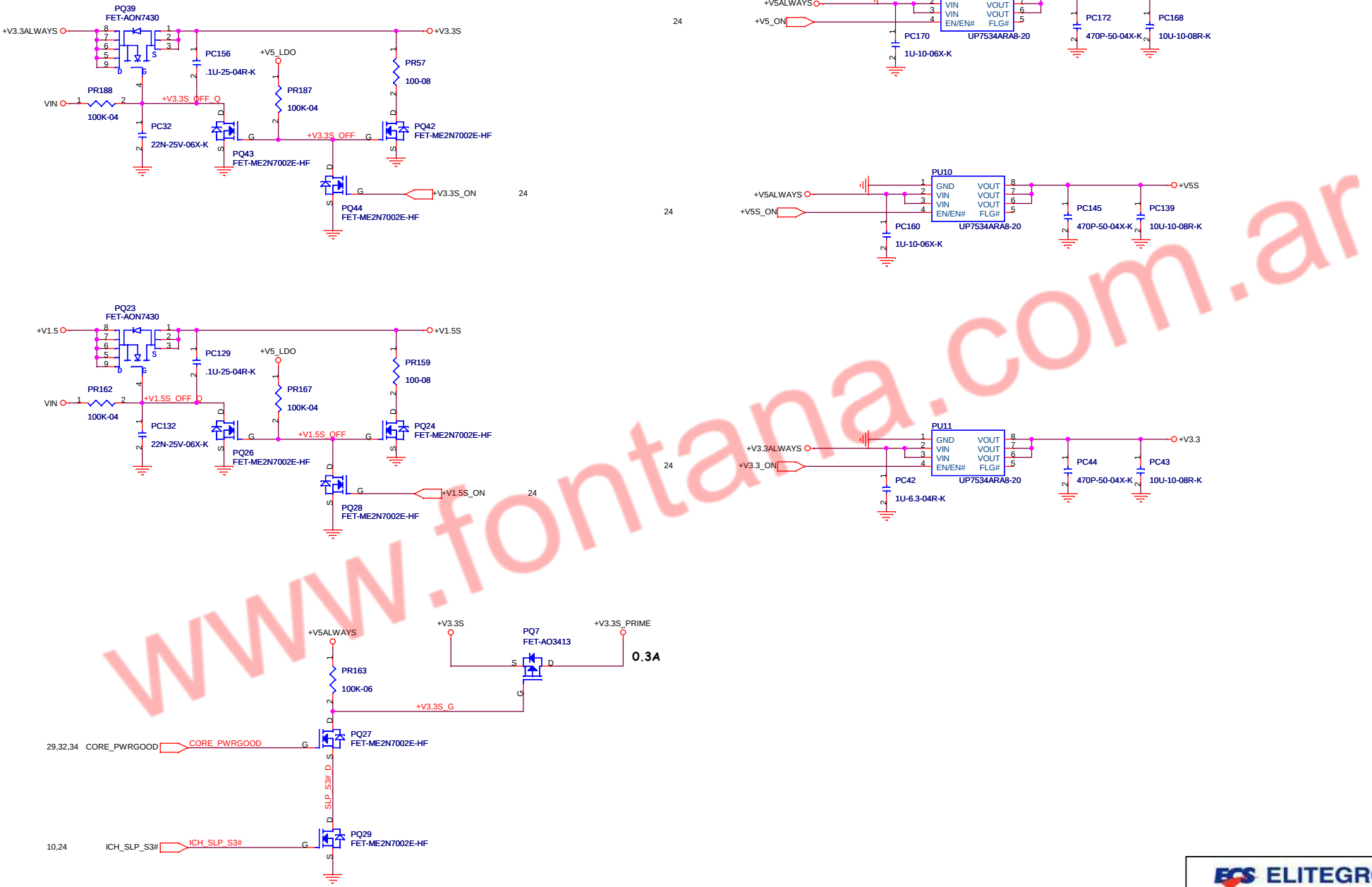

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Project : ES10ISx

Size	Document Number	Rev
	VCC MOSFET	A

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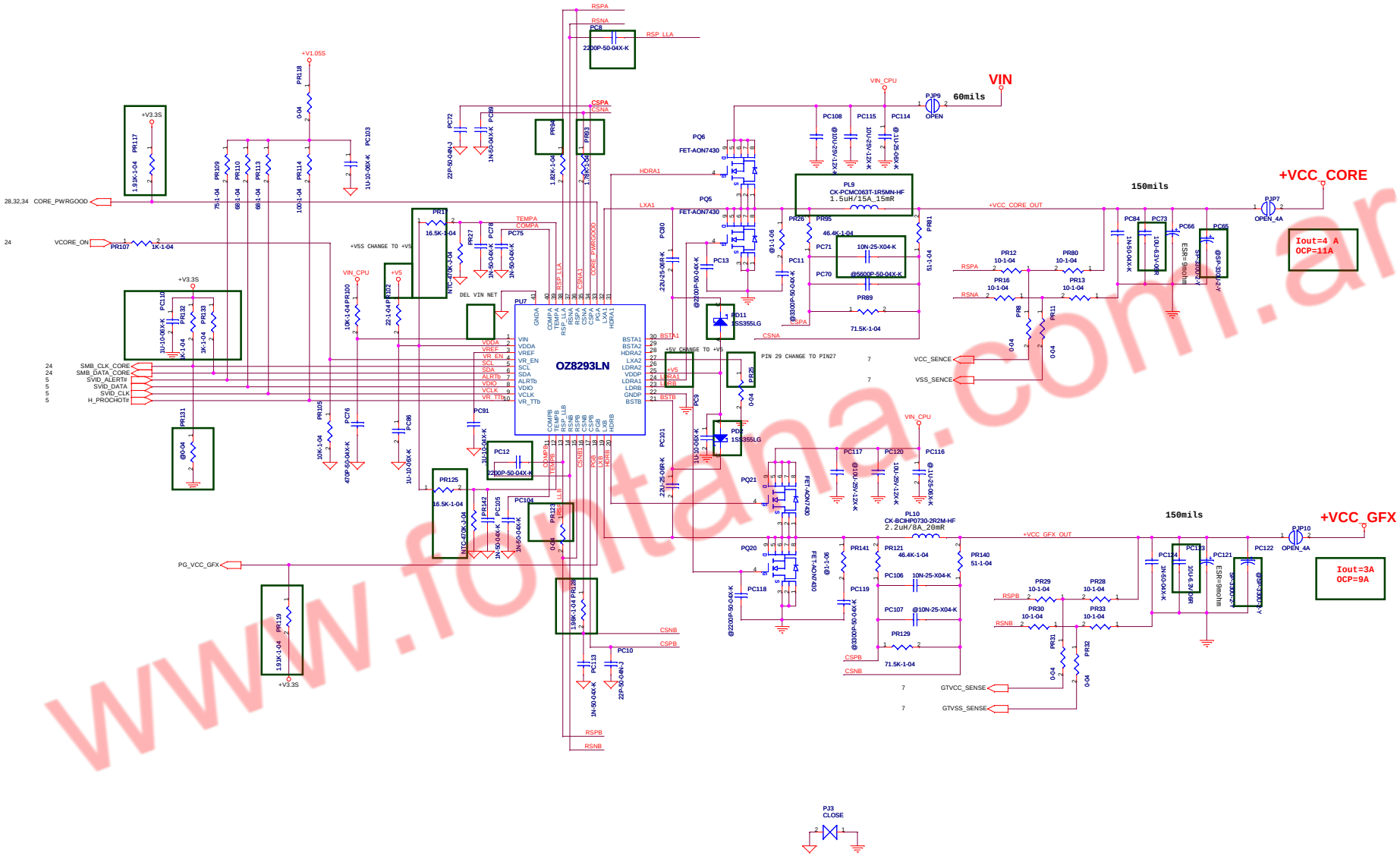

ELITEGROUP

Project : ES10ISx

Size	Document Number	Rev
	CPU_CORE/VCC_GFX_NB	A

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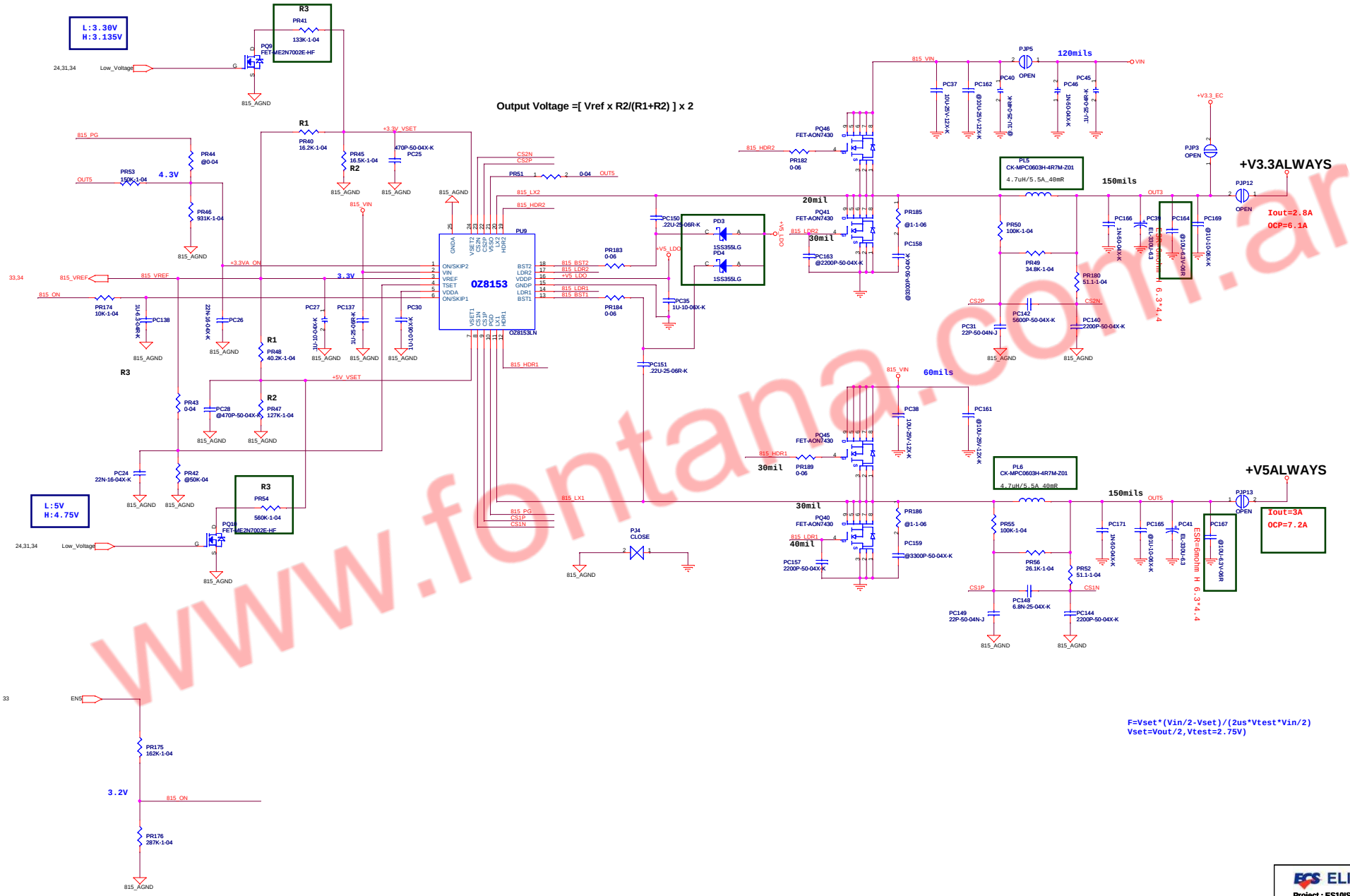

ELITEGROUP

Project : ES10ISx

Size	Document Number	Rev
	+V3.3 / +V5 (OZ8153)	A

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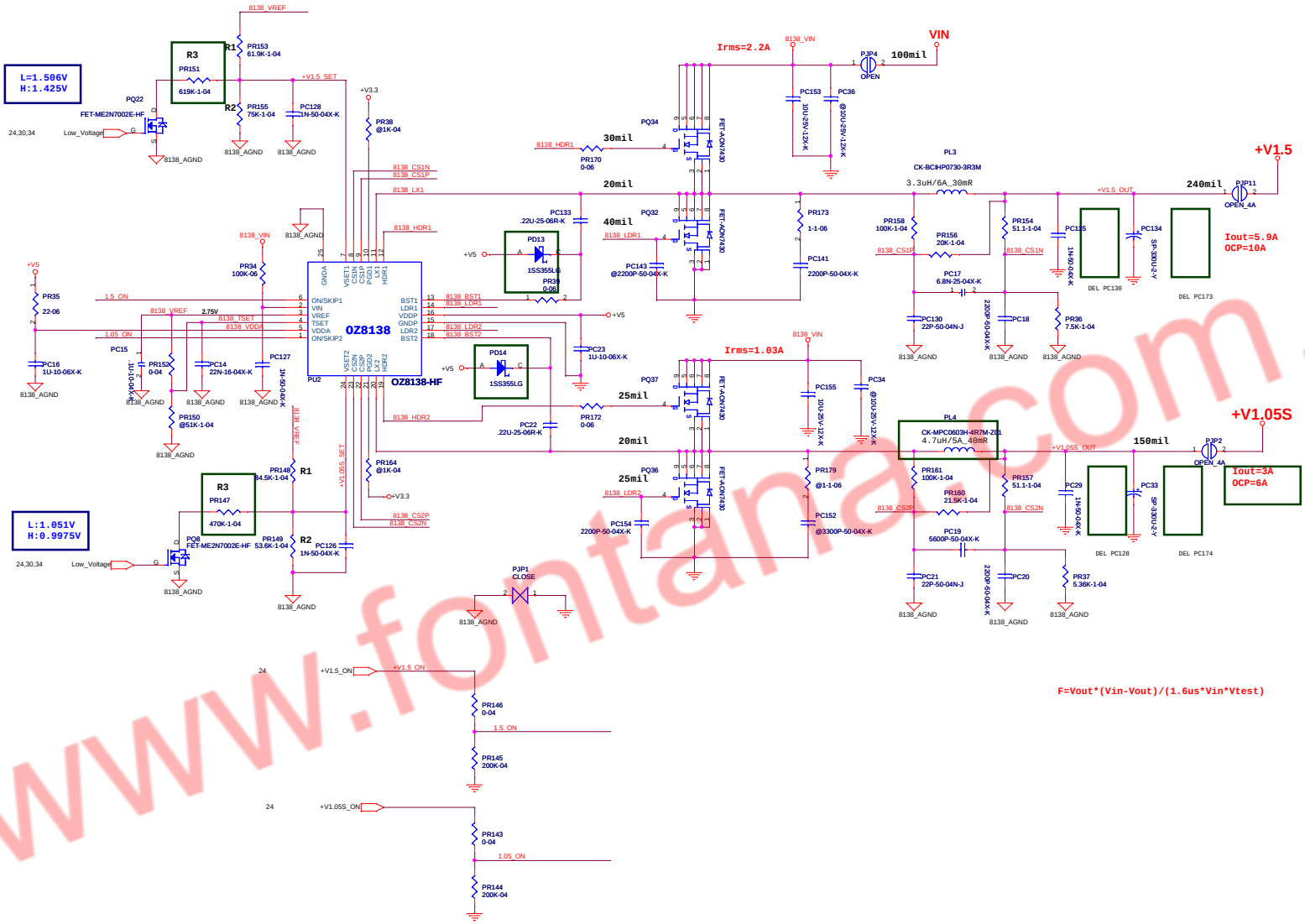

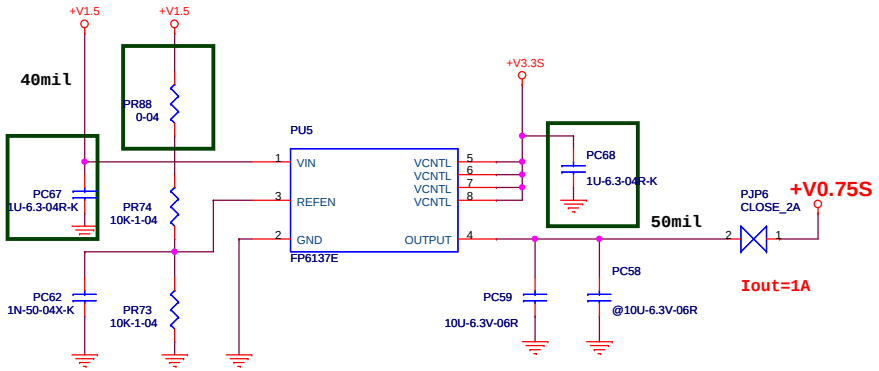

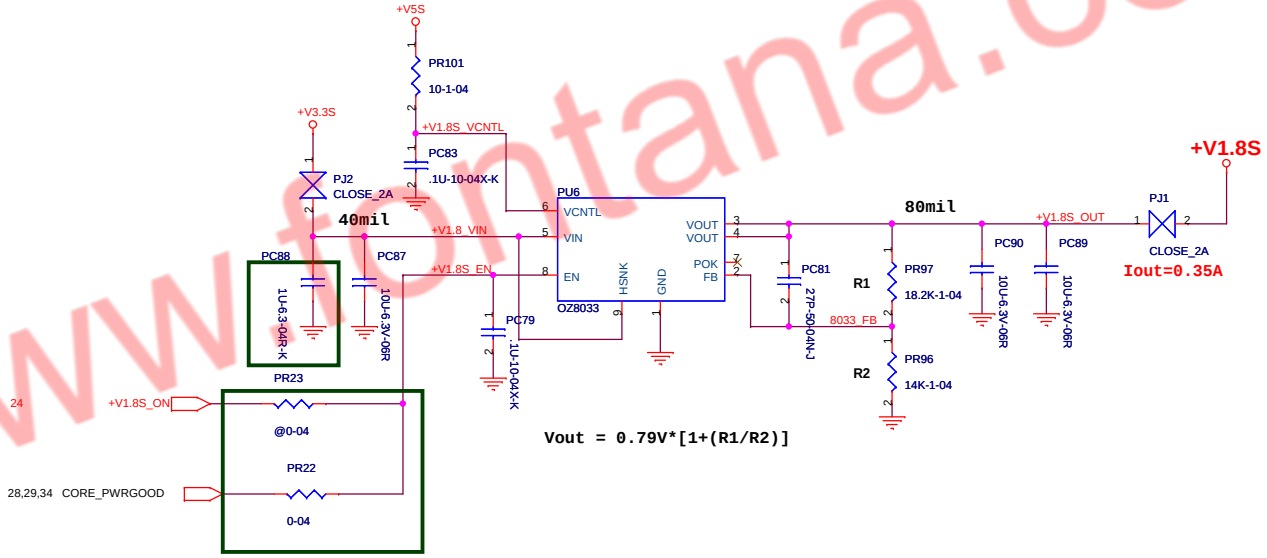

ELITEGROUP

Project : ES10ISx

Size	Document Number	Rev
	+V1.8S /+V0.75S	A

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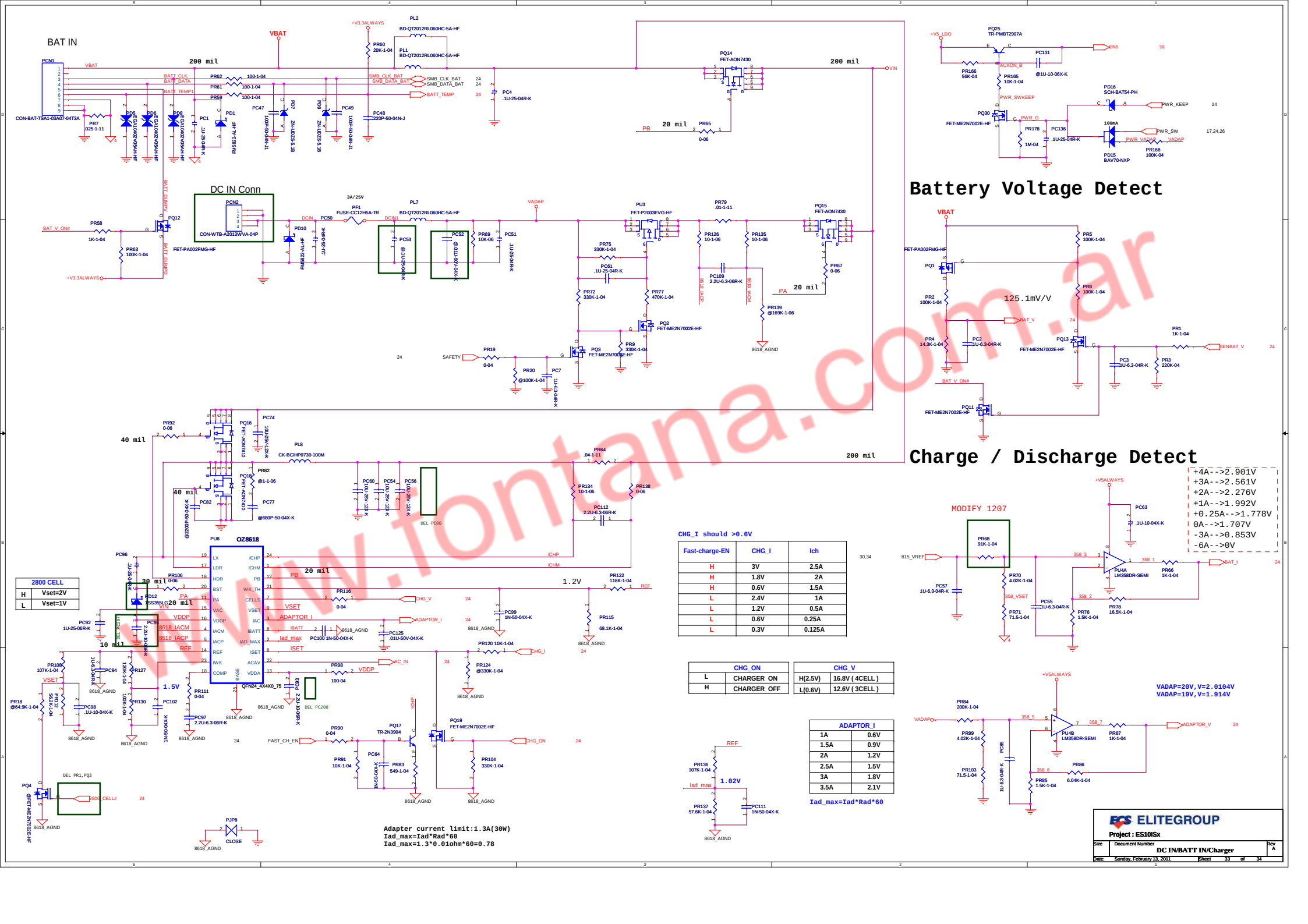
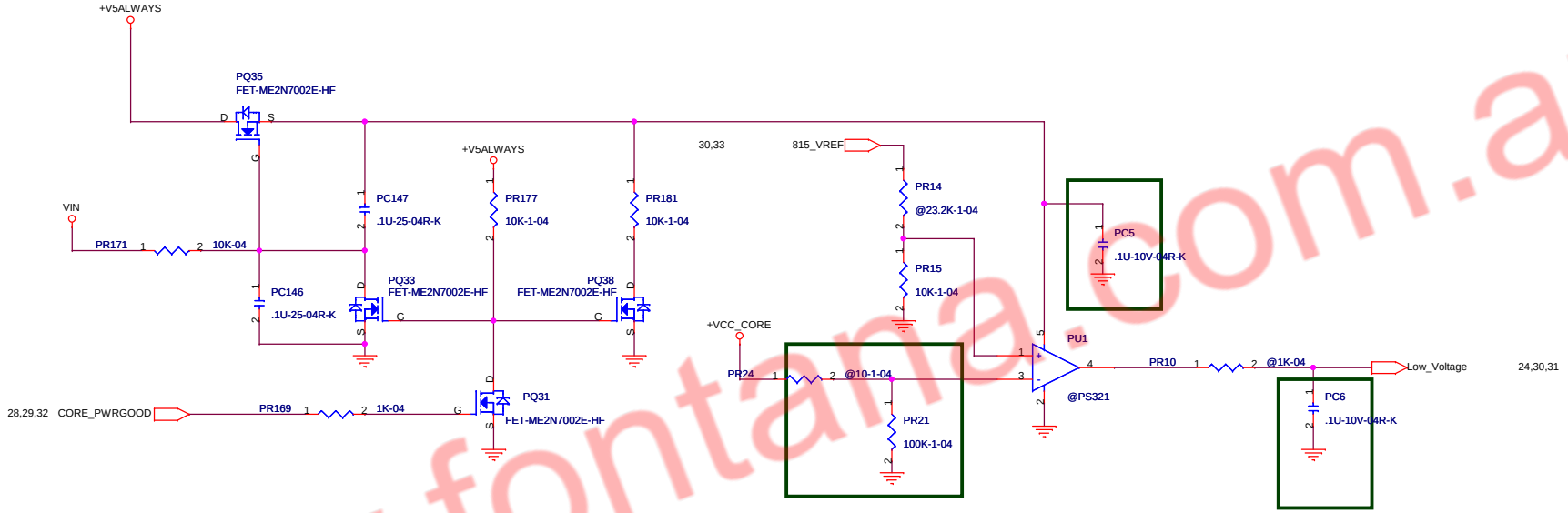


Power_P-State



ELITEGROUP

Project : ES10ISx

Size	Document Number	Rev
	Power_P-State	A

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