

MANAUS 10AD

A02 Build

2010.03.17

INVENTEC

TITLE
Manaus10AD

SIZE A3	CODE CS	DOC. NUMBER 1310A2357401	REV X01
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CHANGE by **Eddy, Chen** **17-Mar-2010**

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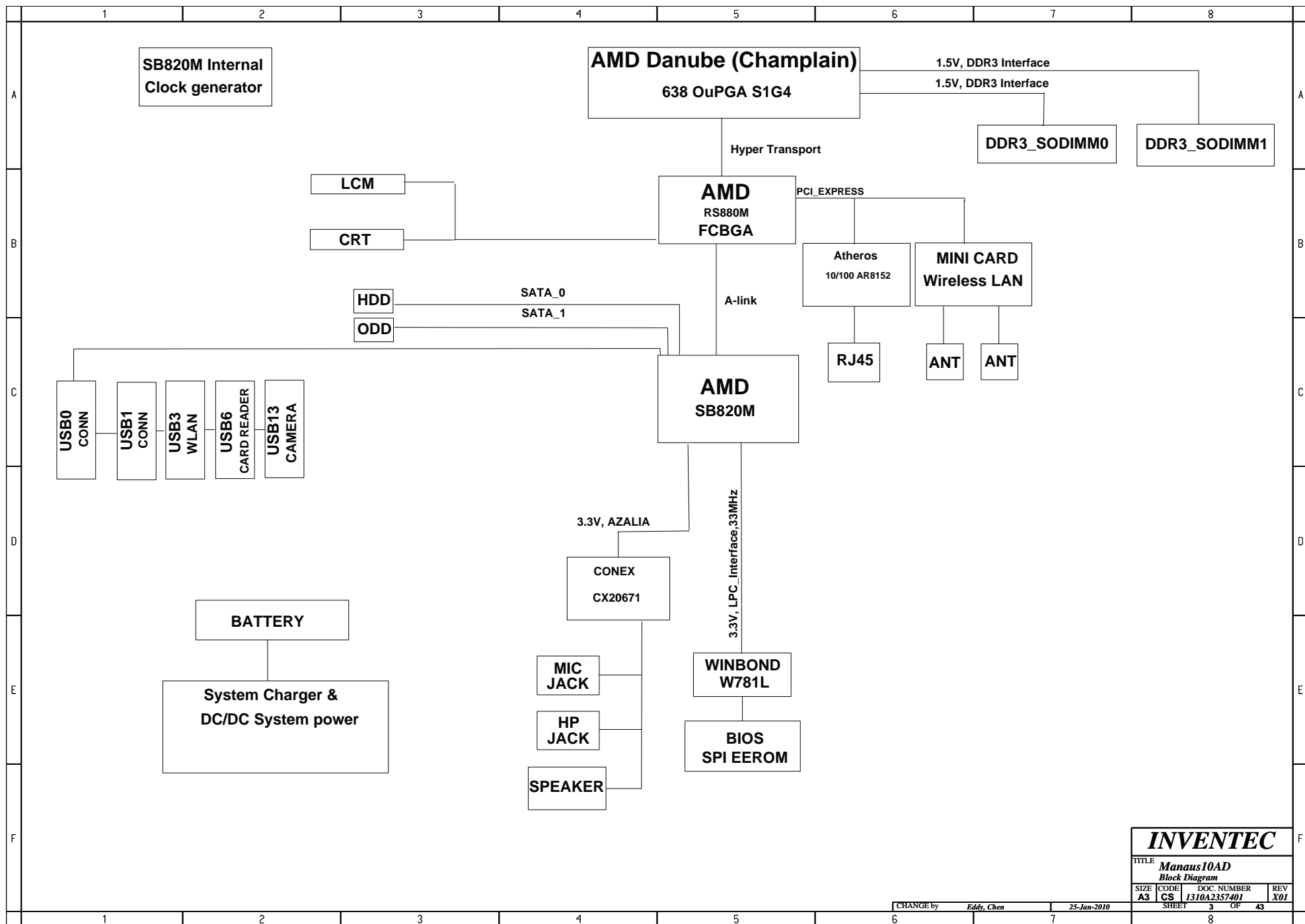
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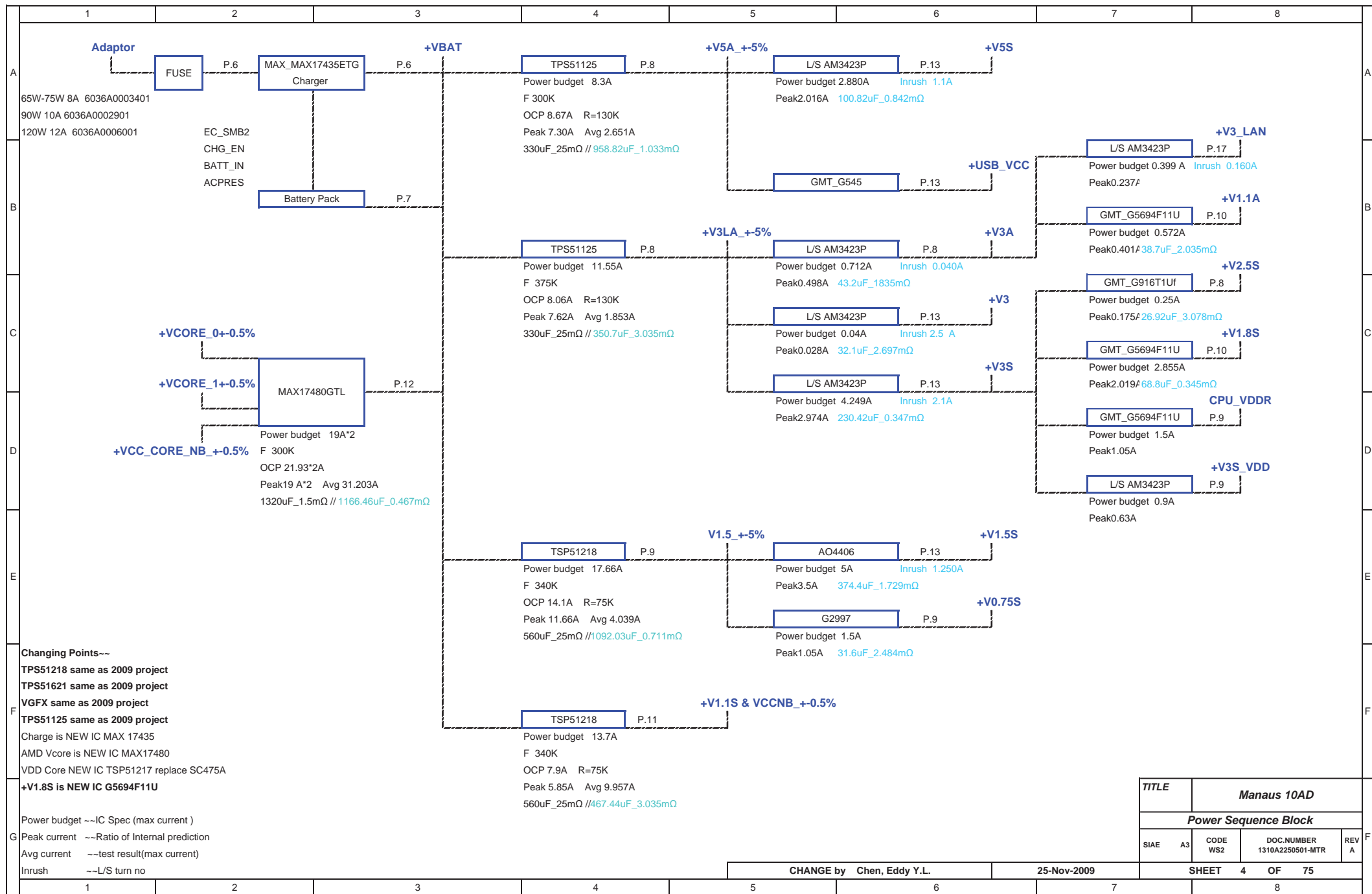
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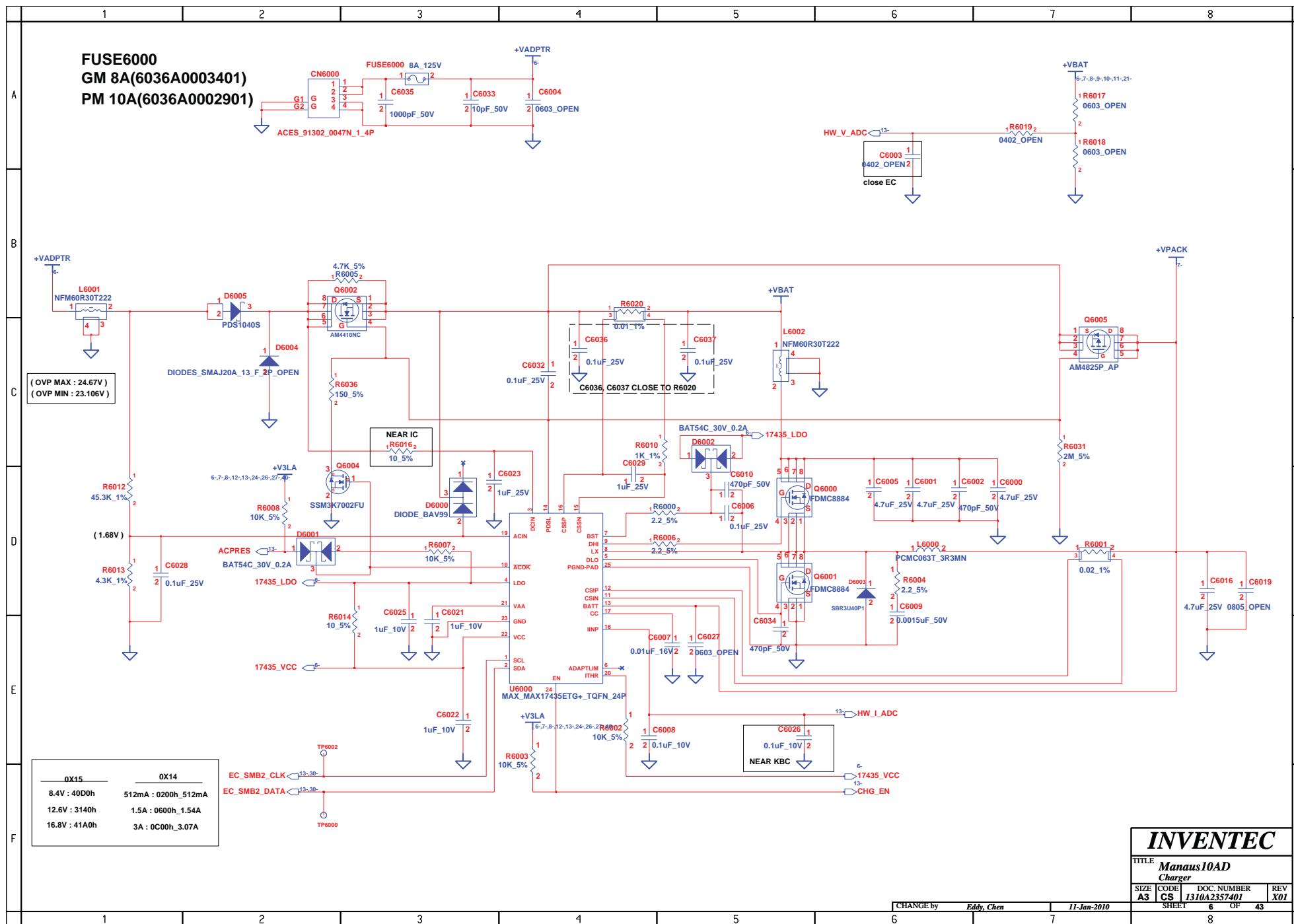
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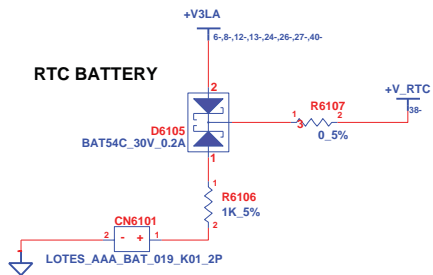
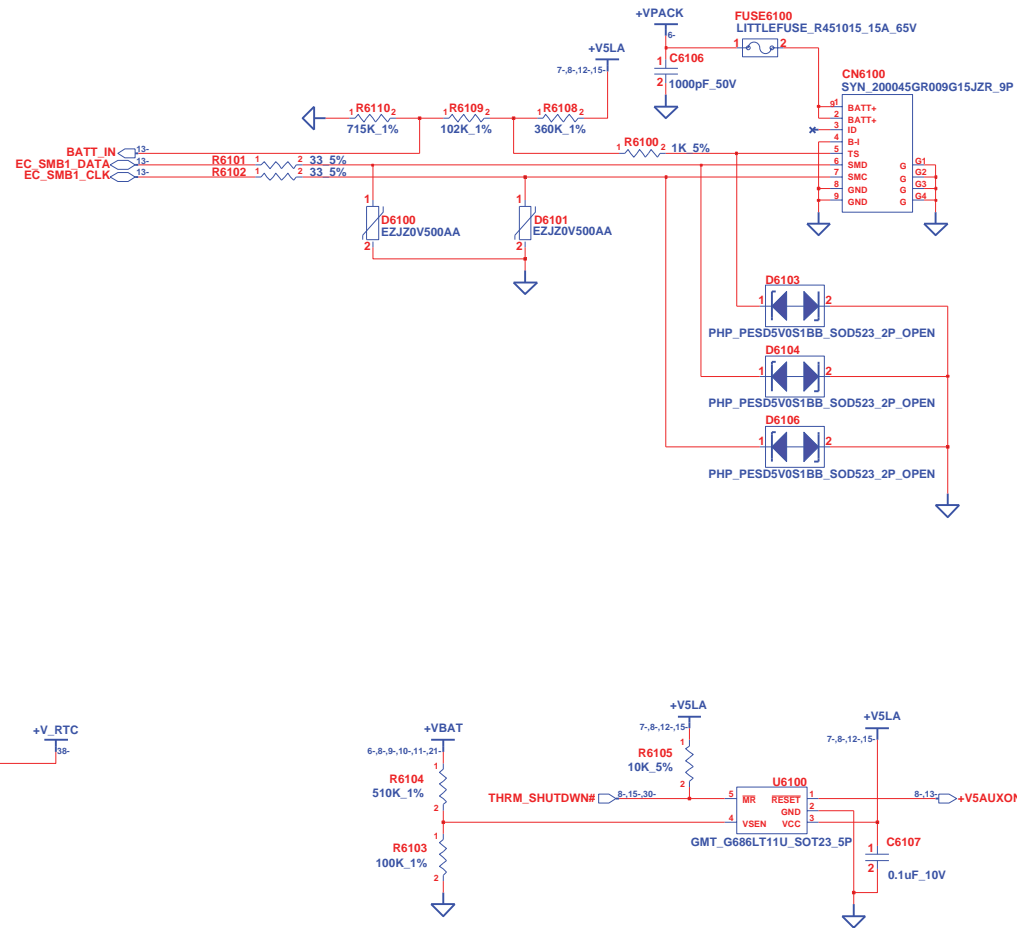
TITLE
Manaus10AD
PCB

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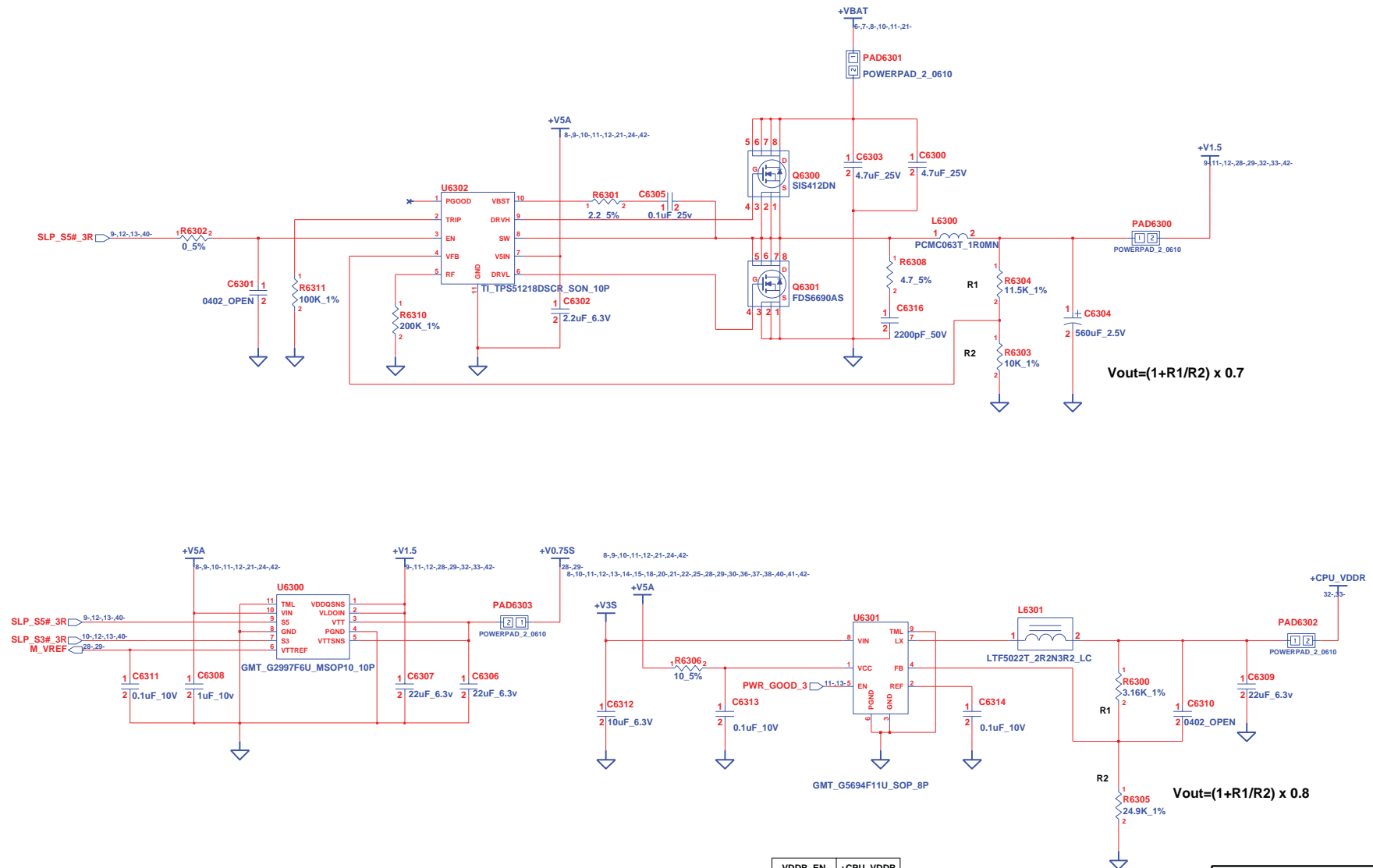




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Battery, Reset IC			
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+CPU_VDDR +V0.75 +V1.5



VDDR_EN	+CPU_VDDR
0	0.9V
1	1.05V

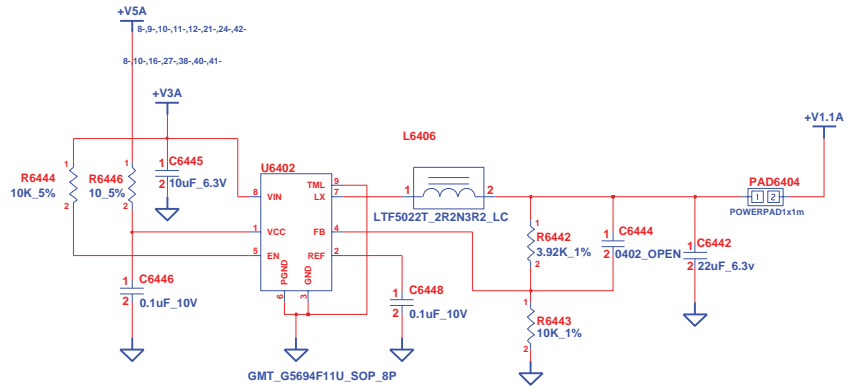
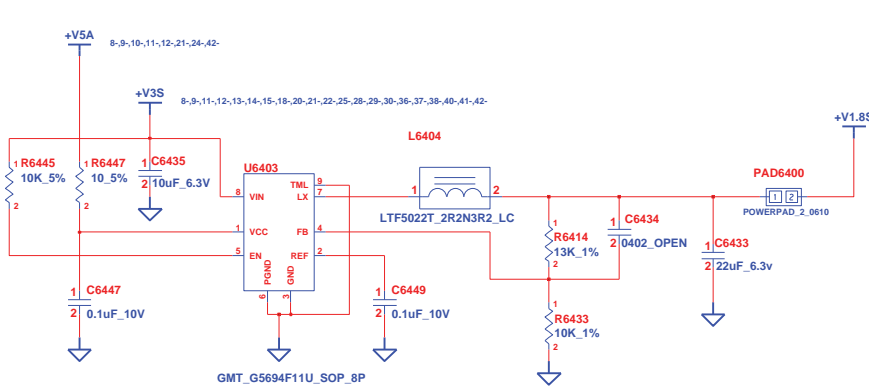
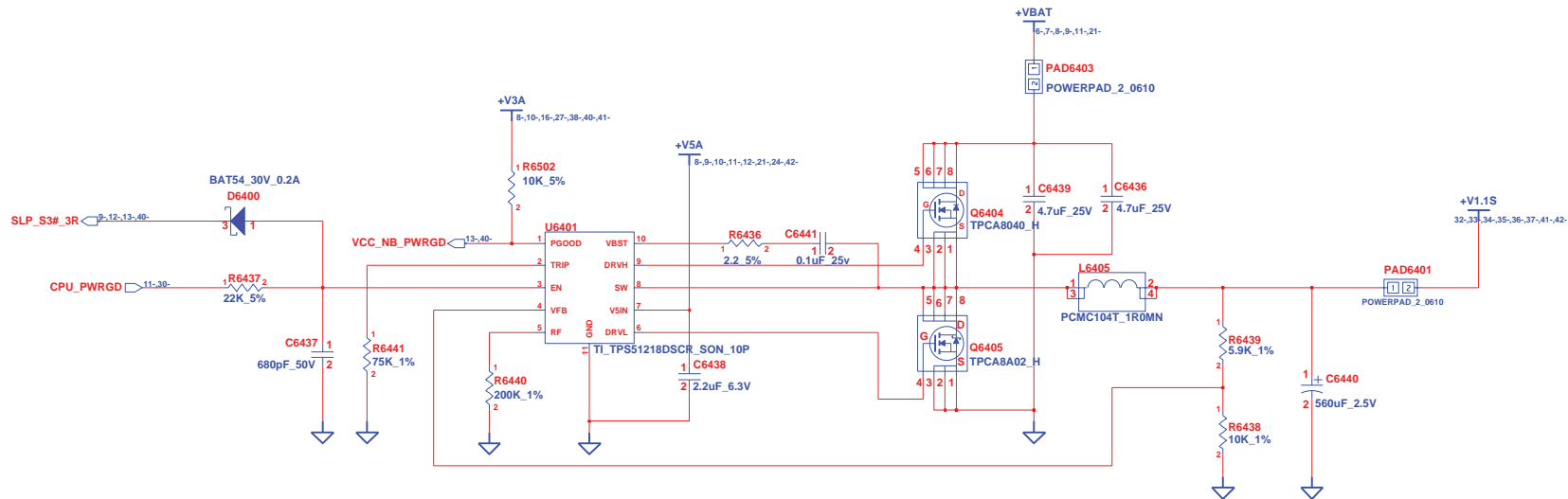
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+CPU_VDDR, +V0.75, +V1.5			
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+V1.1A +V1.1S +V1.8S



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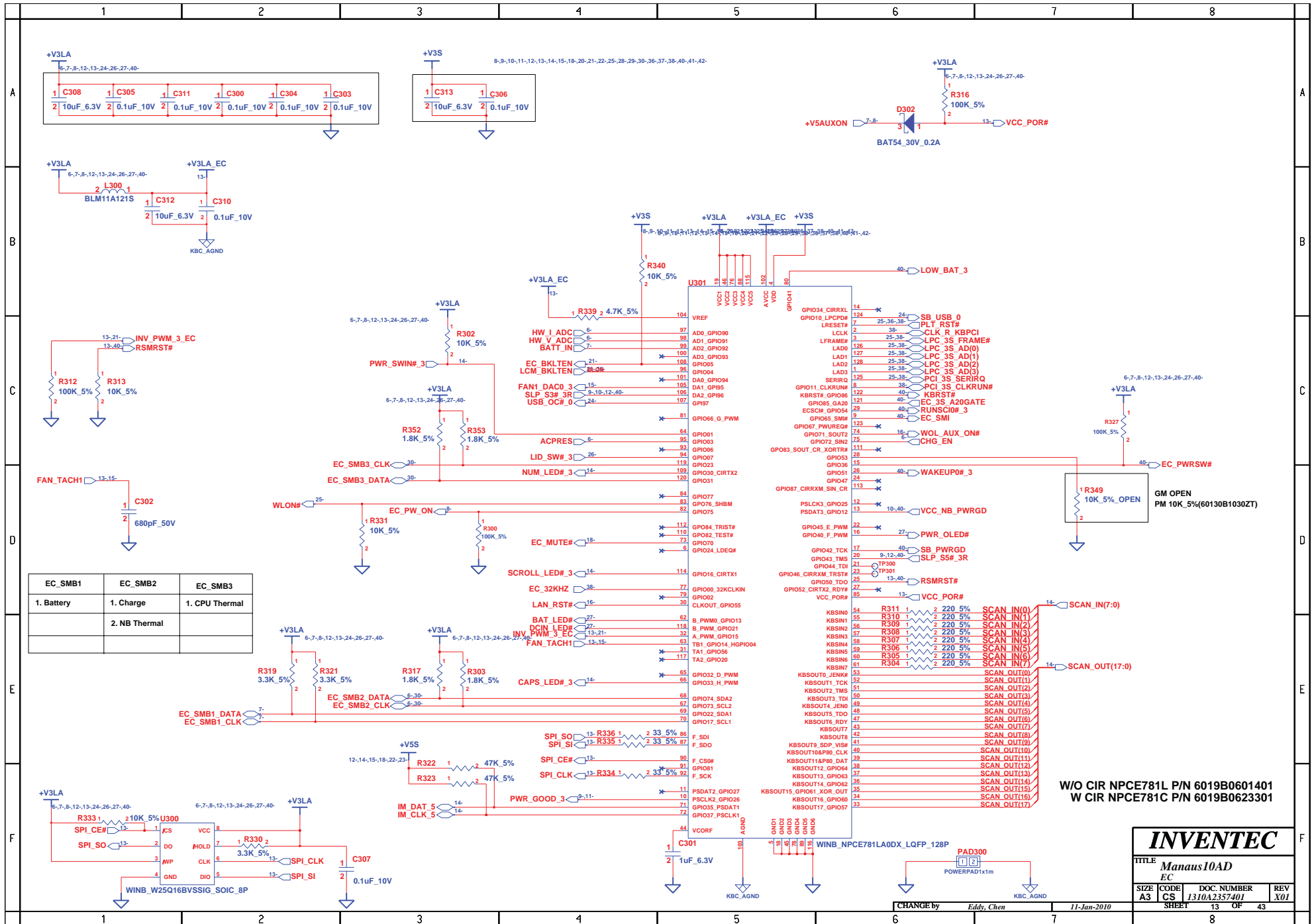
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+V1.1A, +V1.1S, +V1.8S

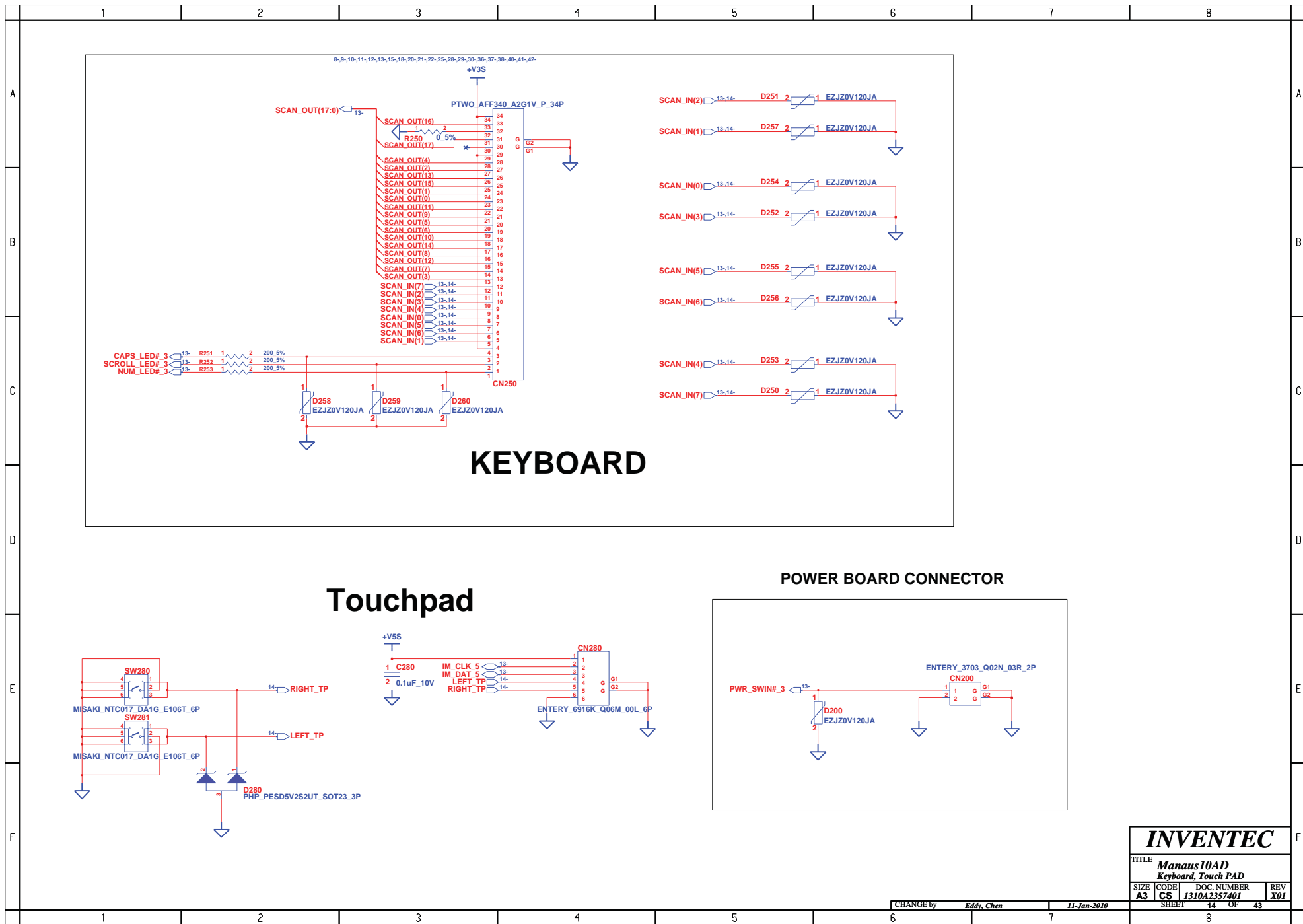
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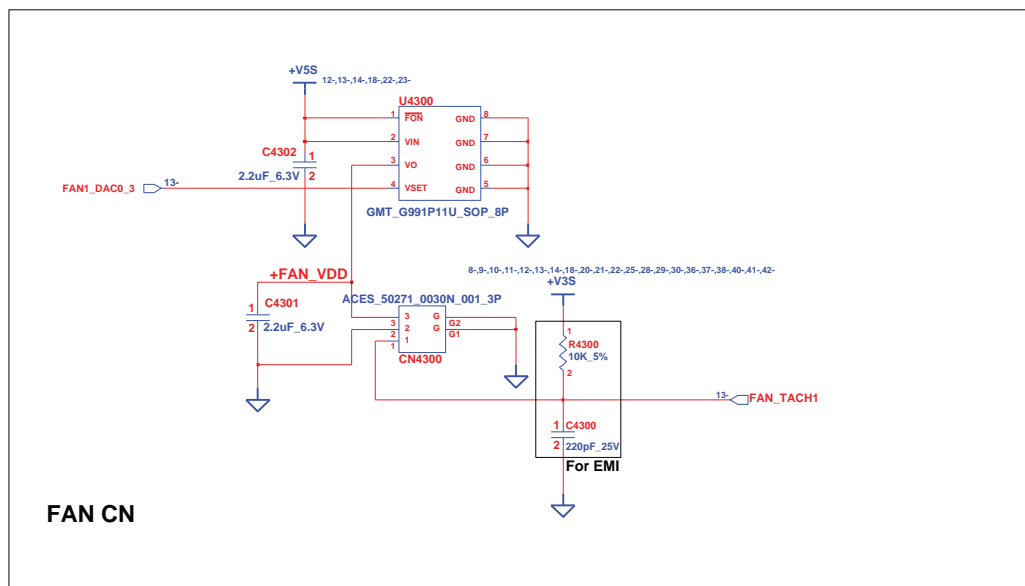
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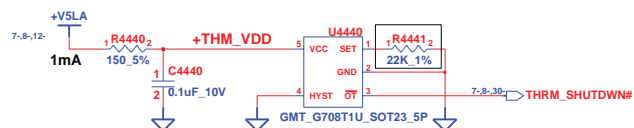




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Keyboard, Touch PAD			
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Board Thermal Sensor

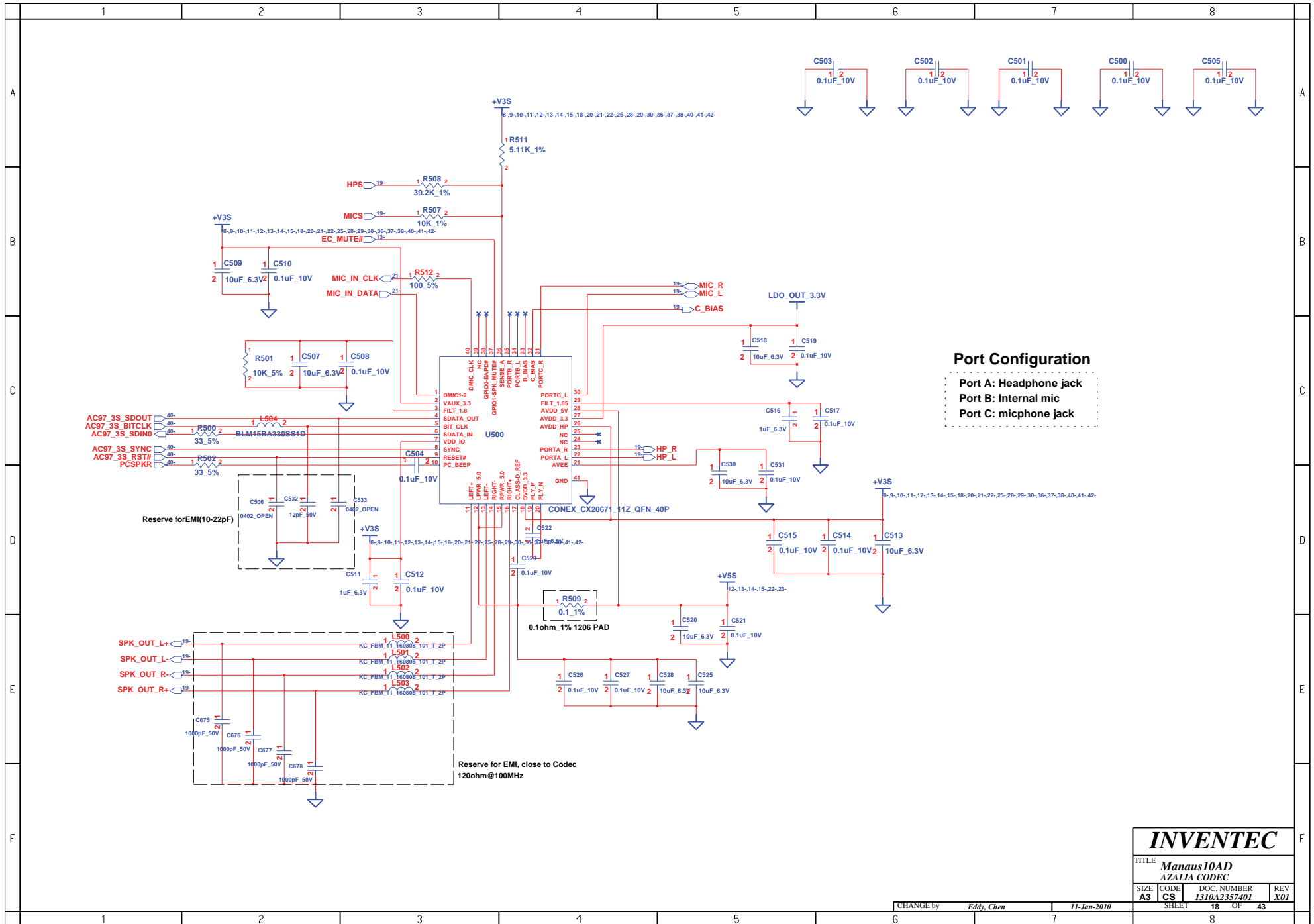


Thermal shutdown at 90 C° +/- 3 C° from 60 C° to 100 C°

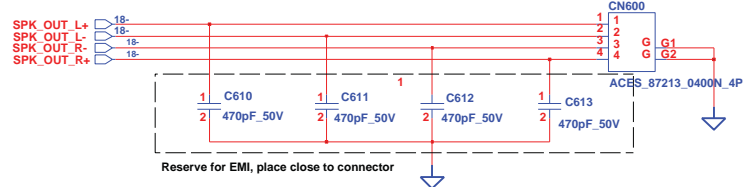
$$RSET = 0.0012 * T^2 - 0.9308 * T + 96.147$$

Hysteresis is 30C

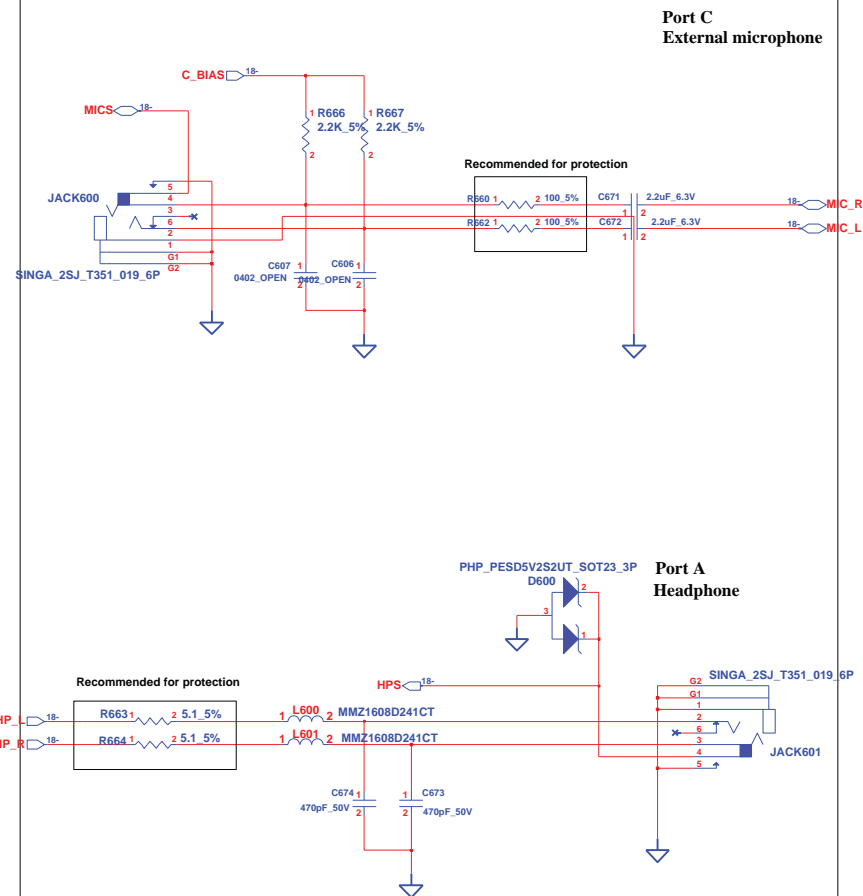
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FAN, Thermal controller			
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INTERNAL SPEAKERS



AUDIO JACKS



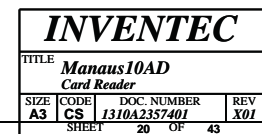
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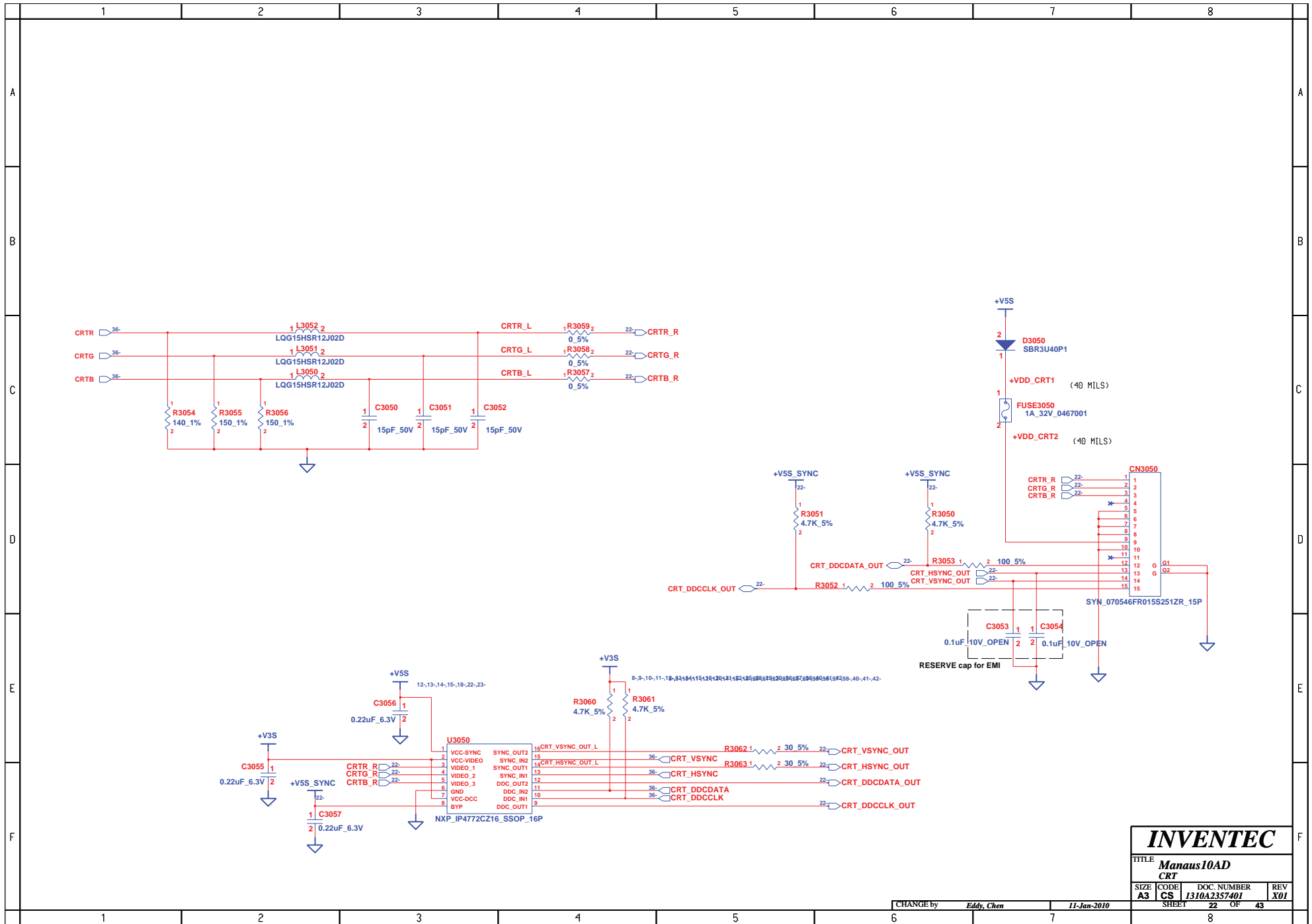
TITLE
Manaus10AD
MIC & SPEAKER

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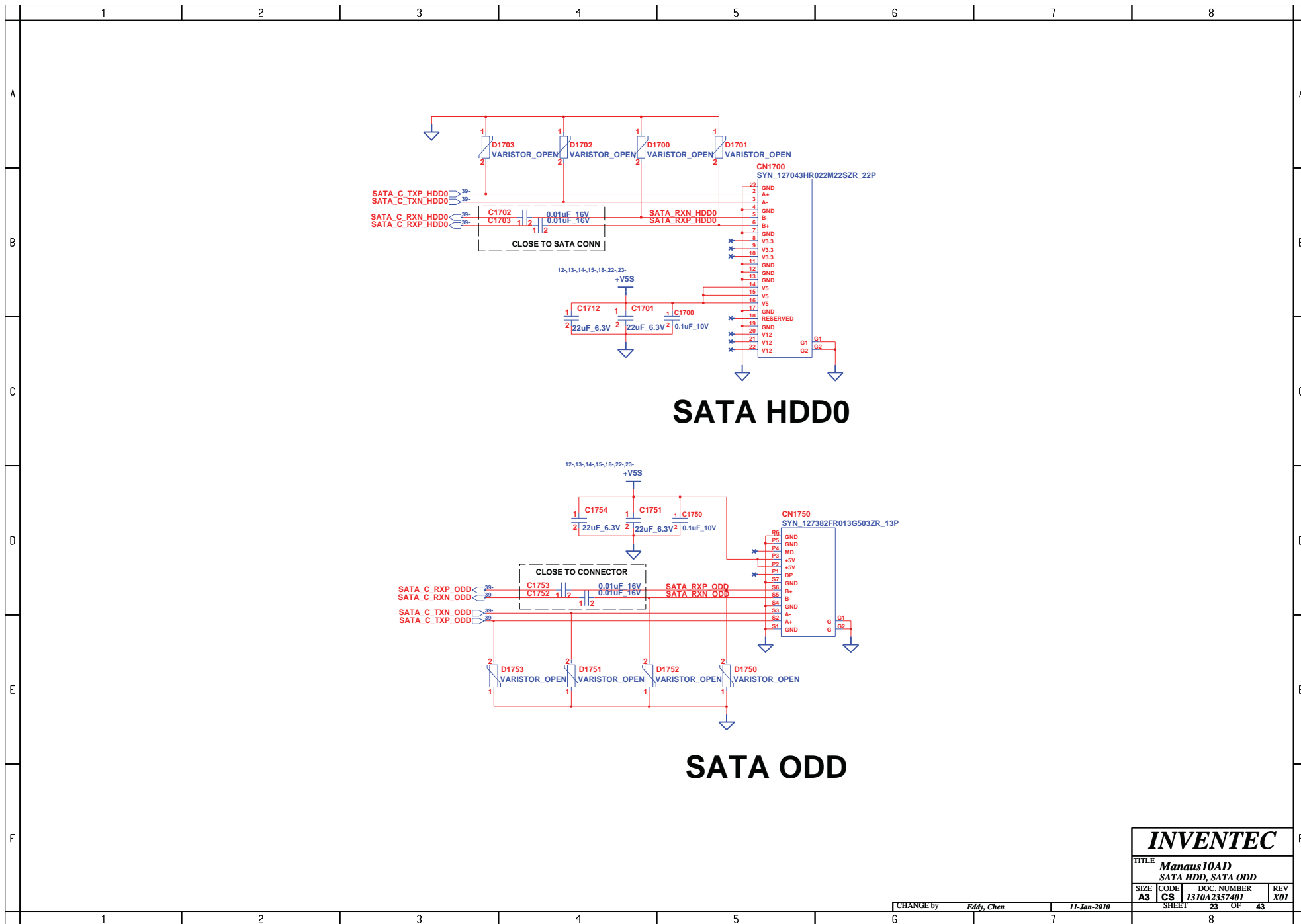


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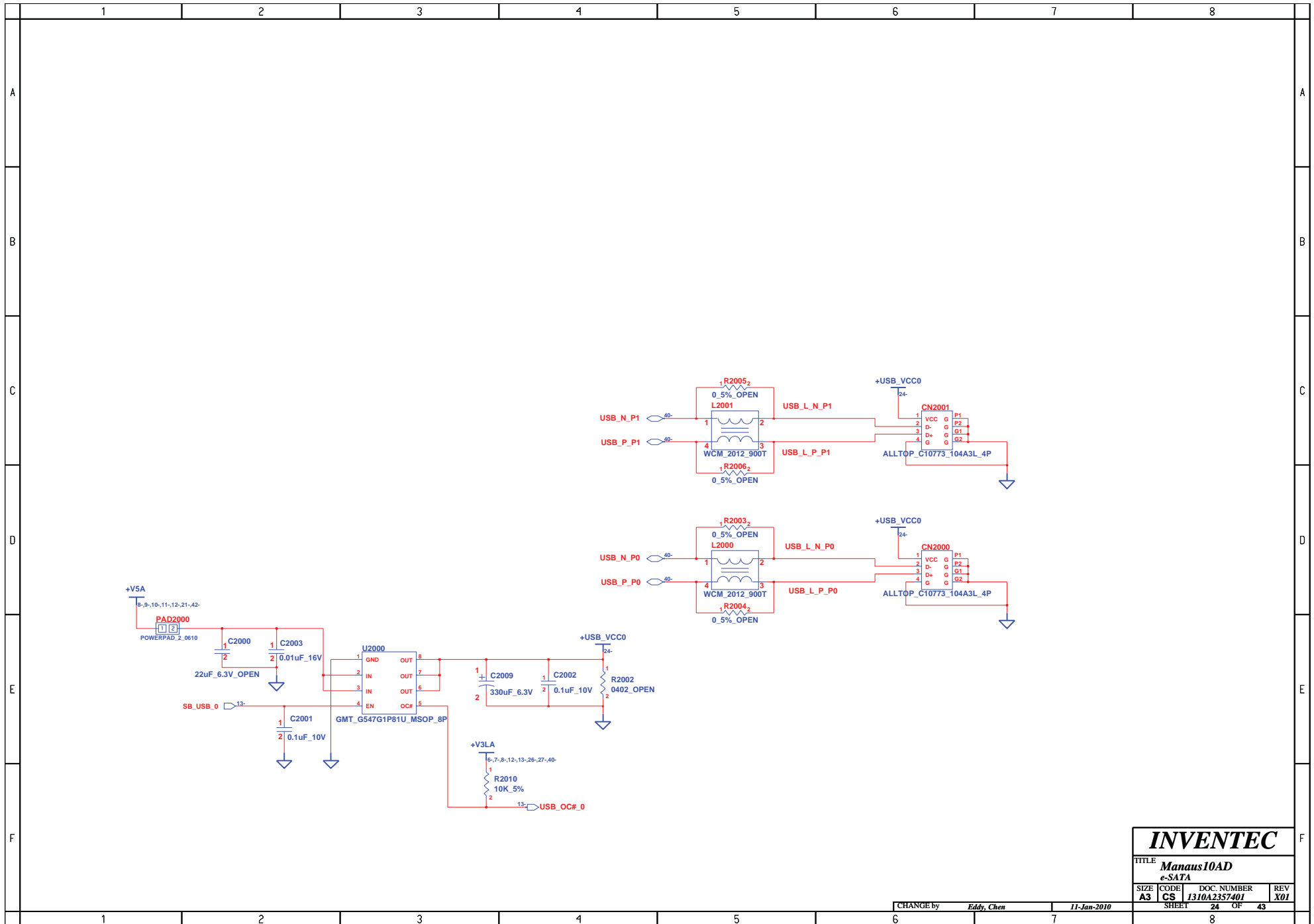
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SATA HDD, SATA ODD			
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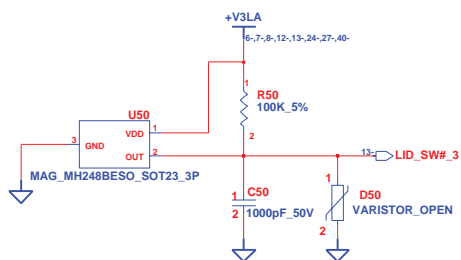


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e-SATA			
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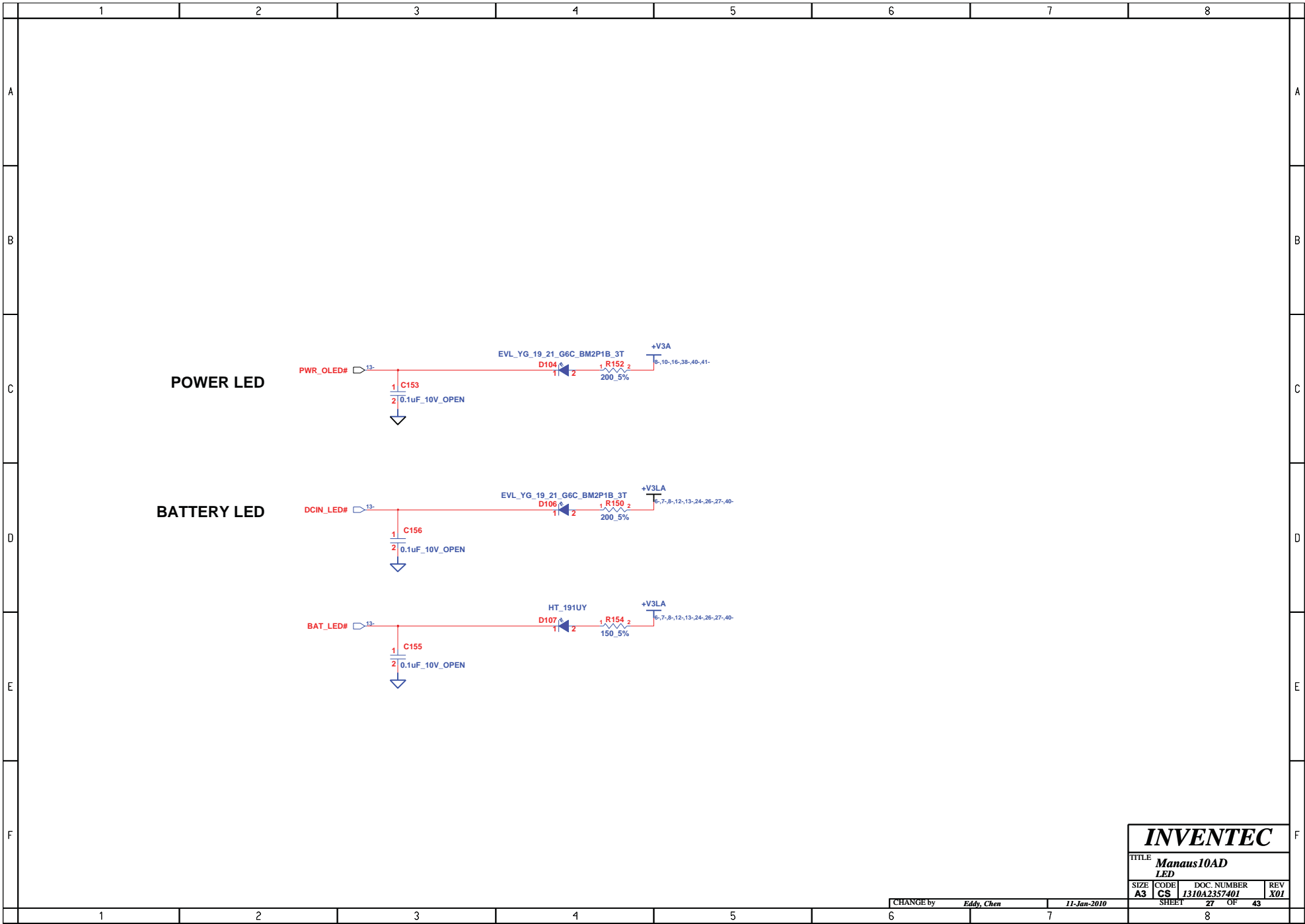
HALL SENSOR



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HALL SENSOR			
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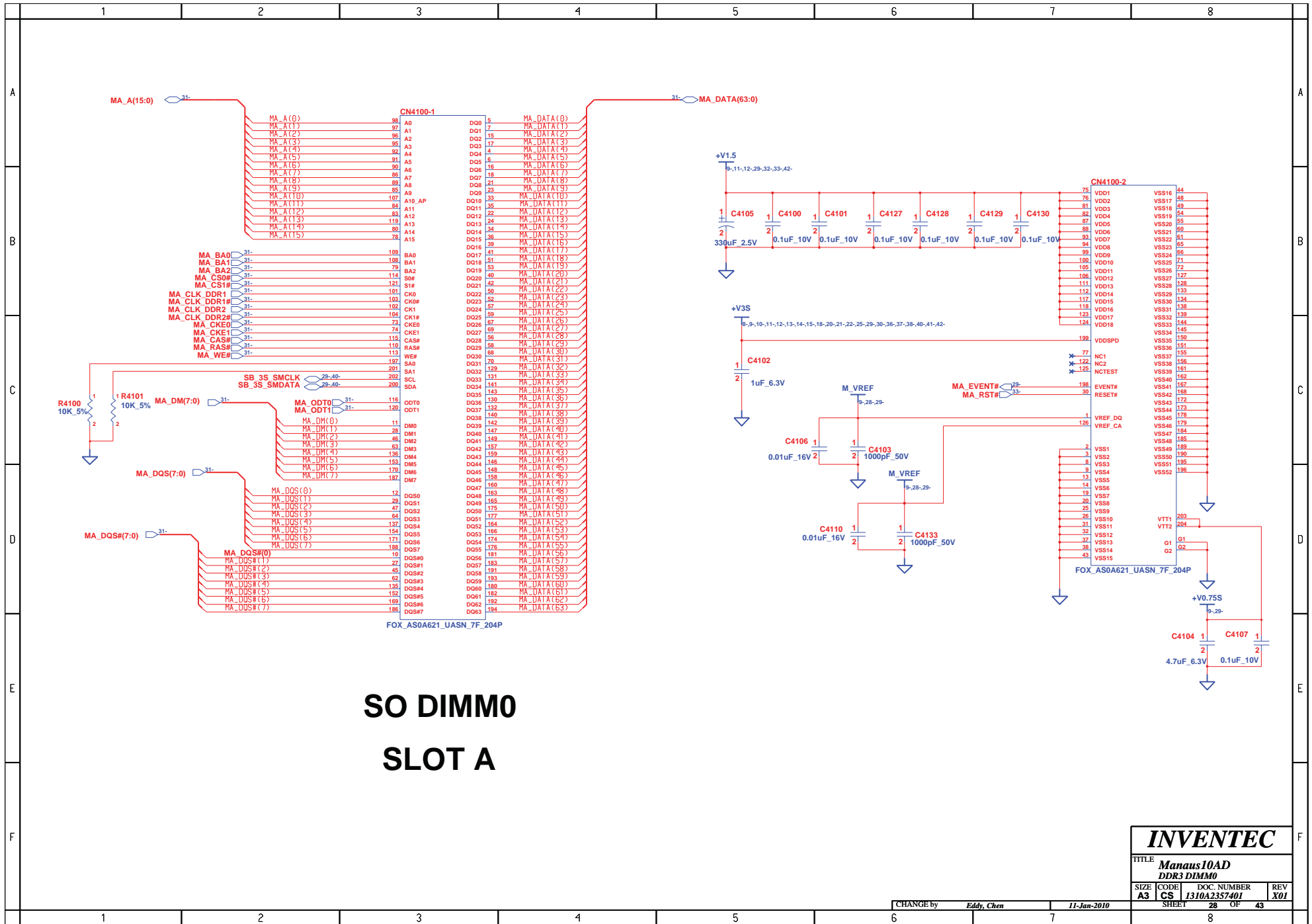


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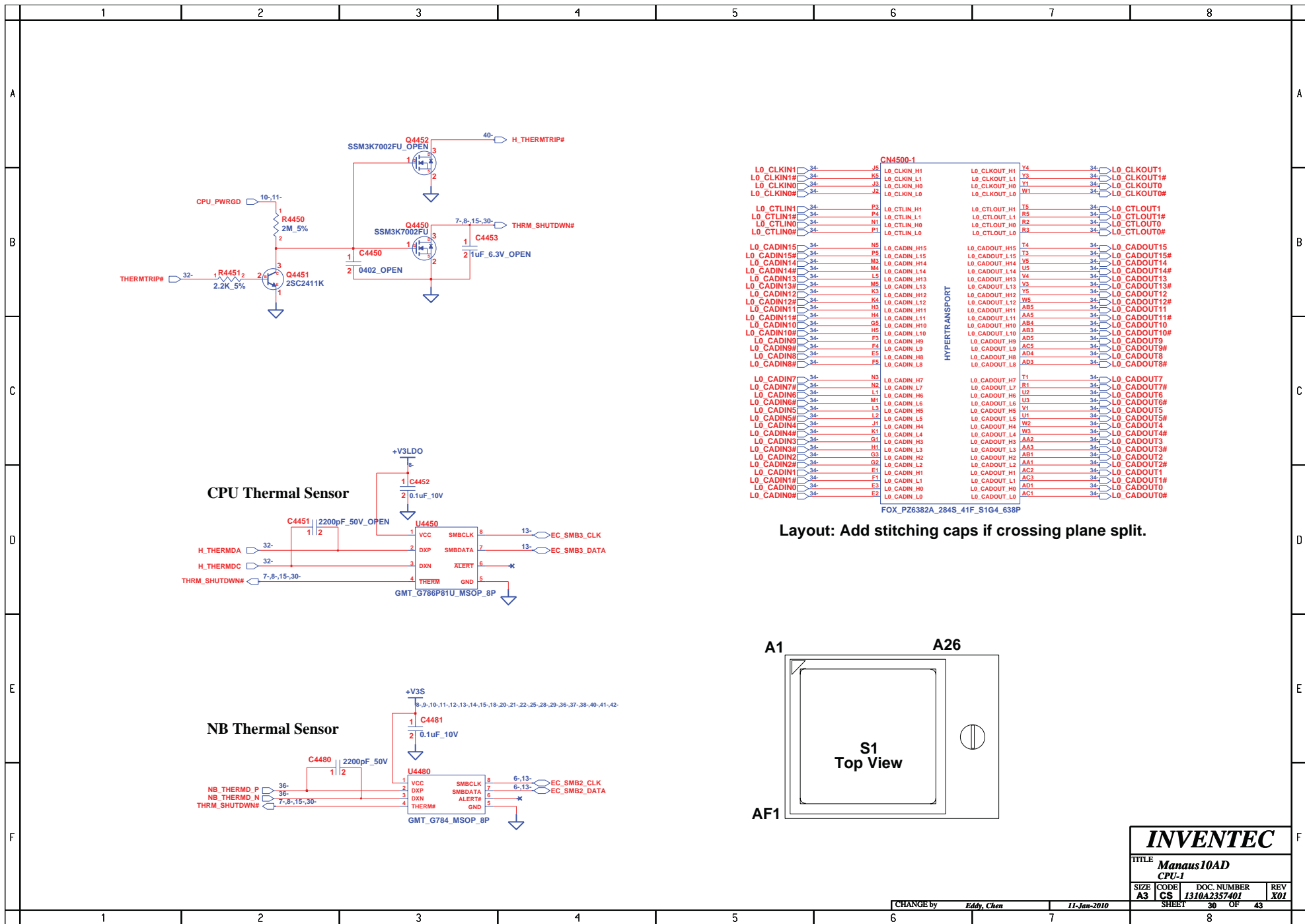
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**Manaus10AD
LED**

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CPU-1

SIZE	CODE	DOC. NUMBER	REV
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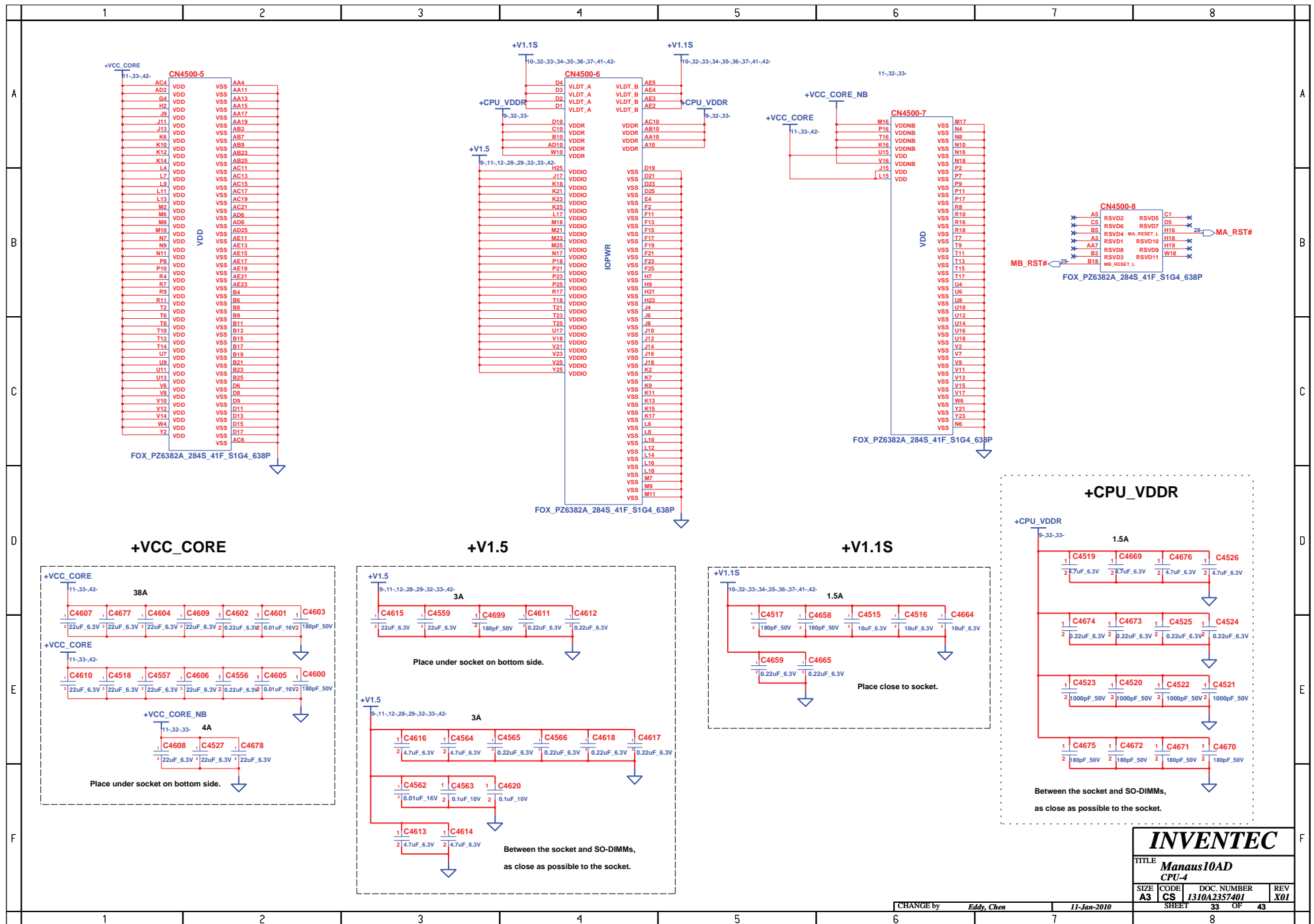
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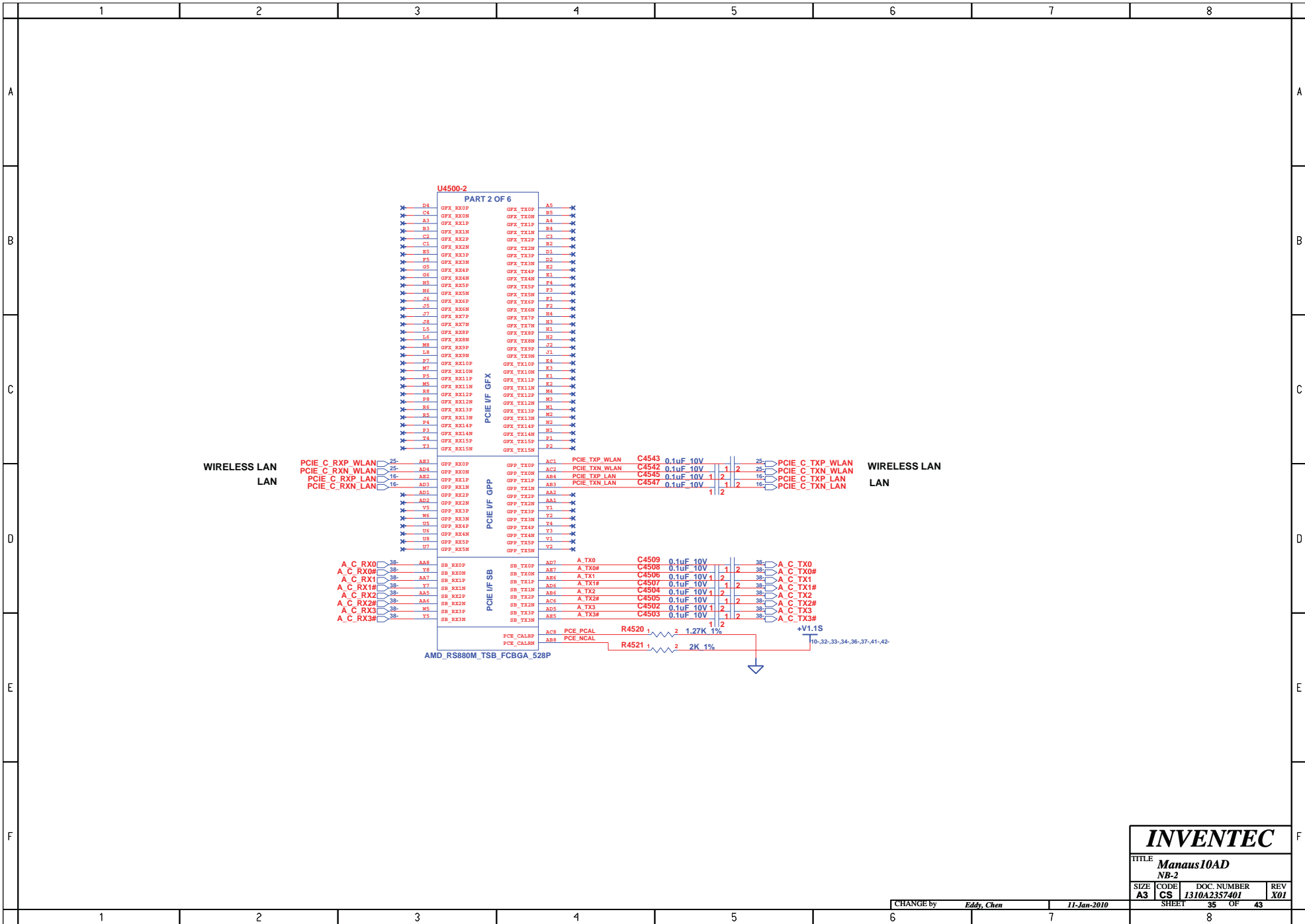
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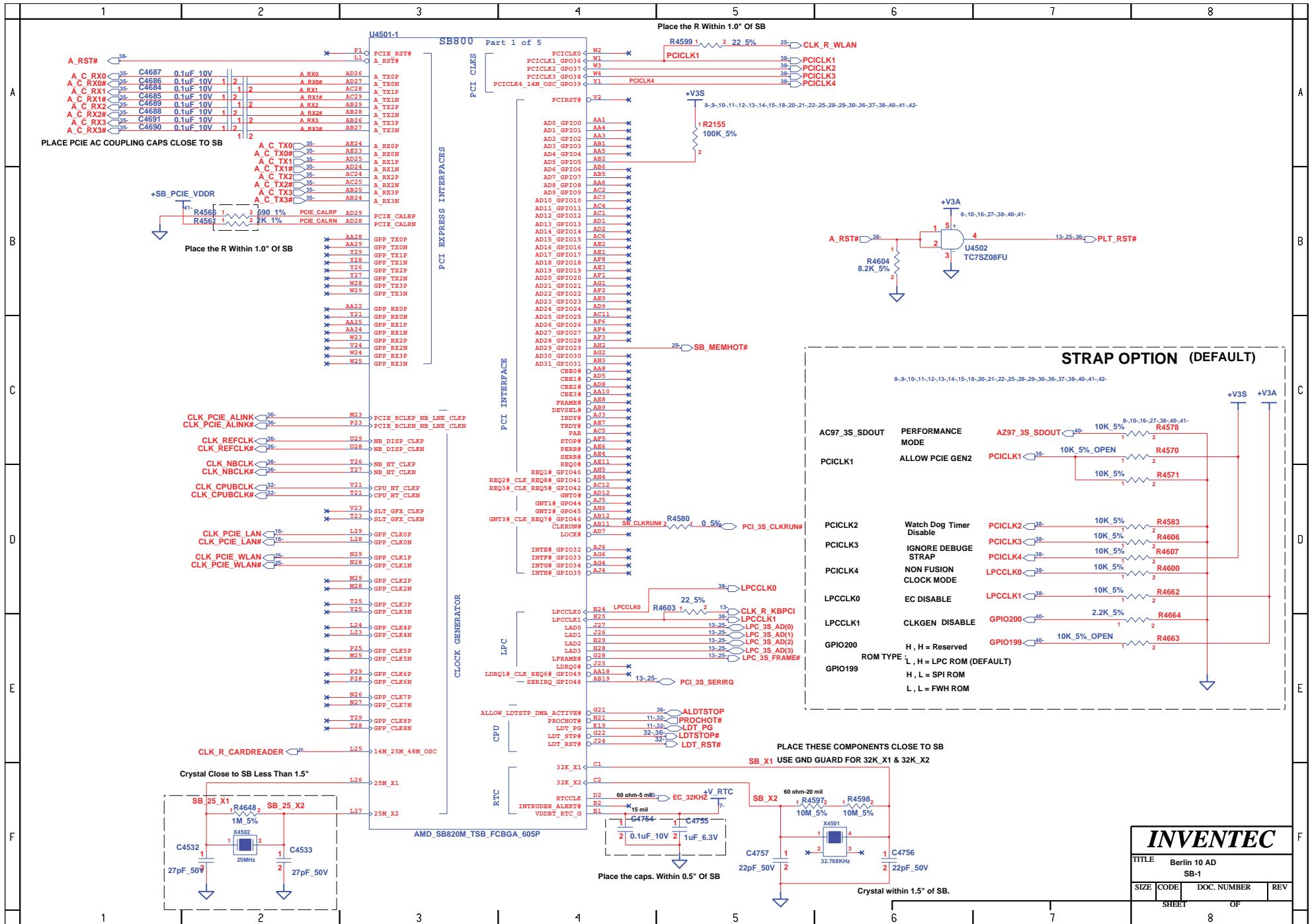


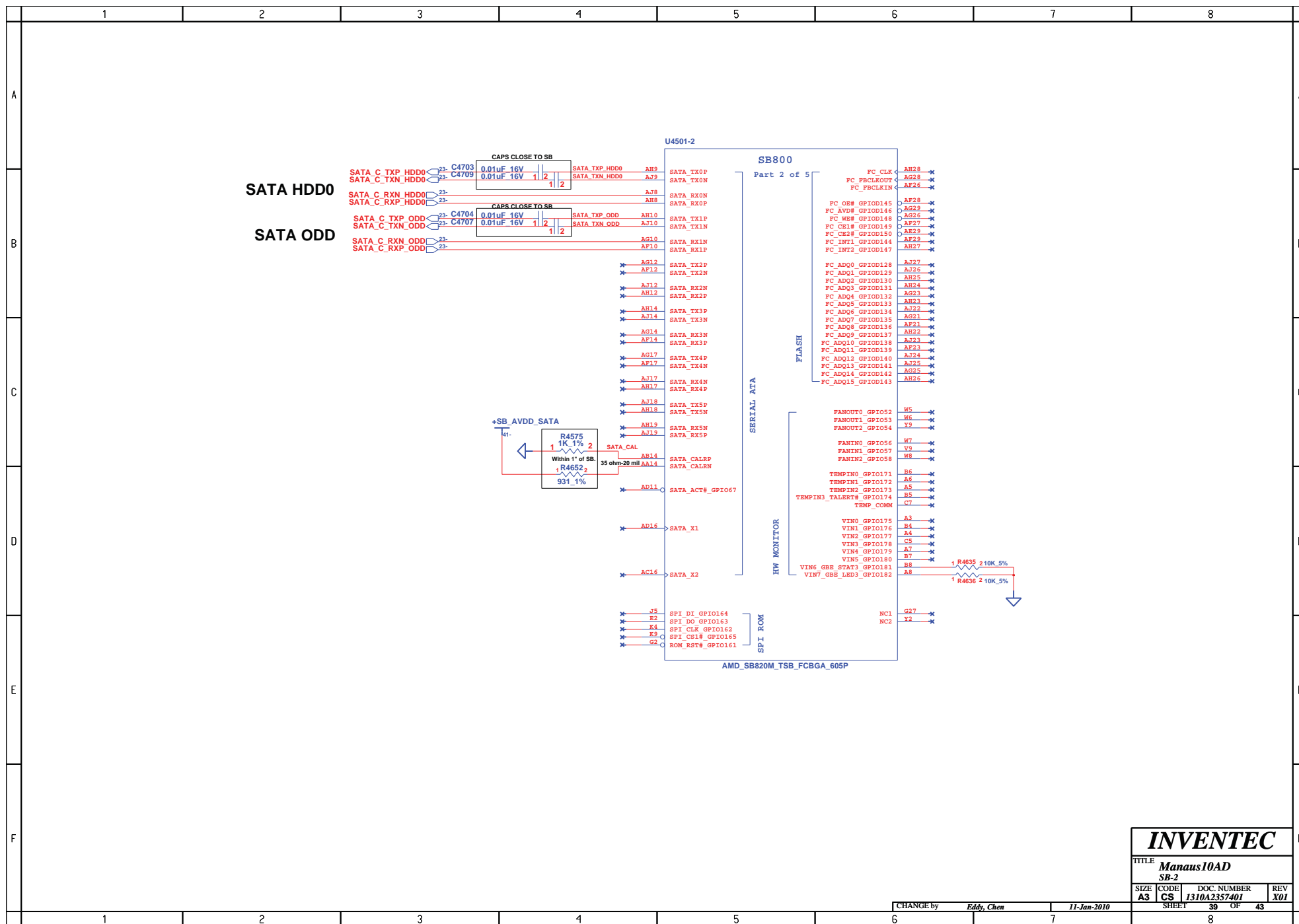
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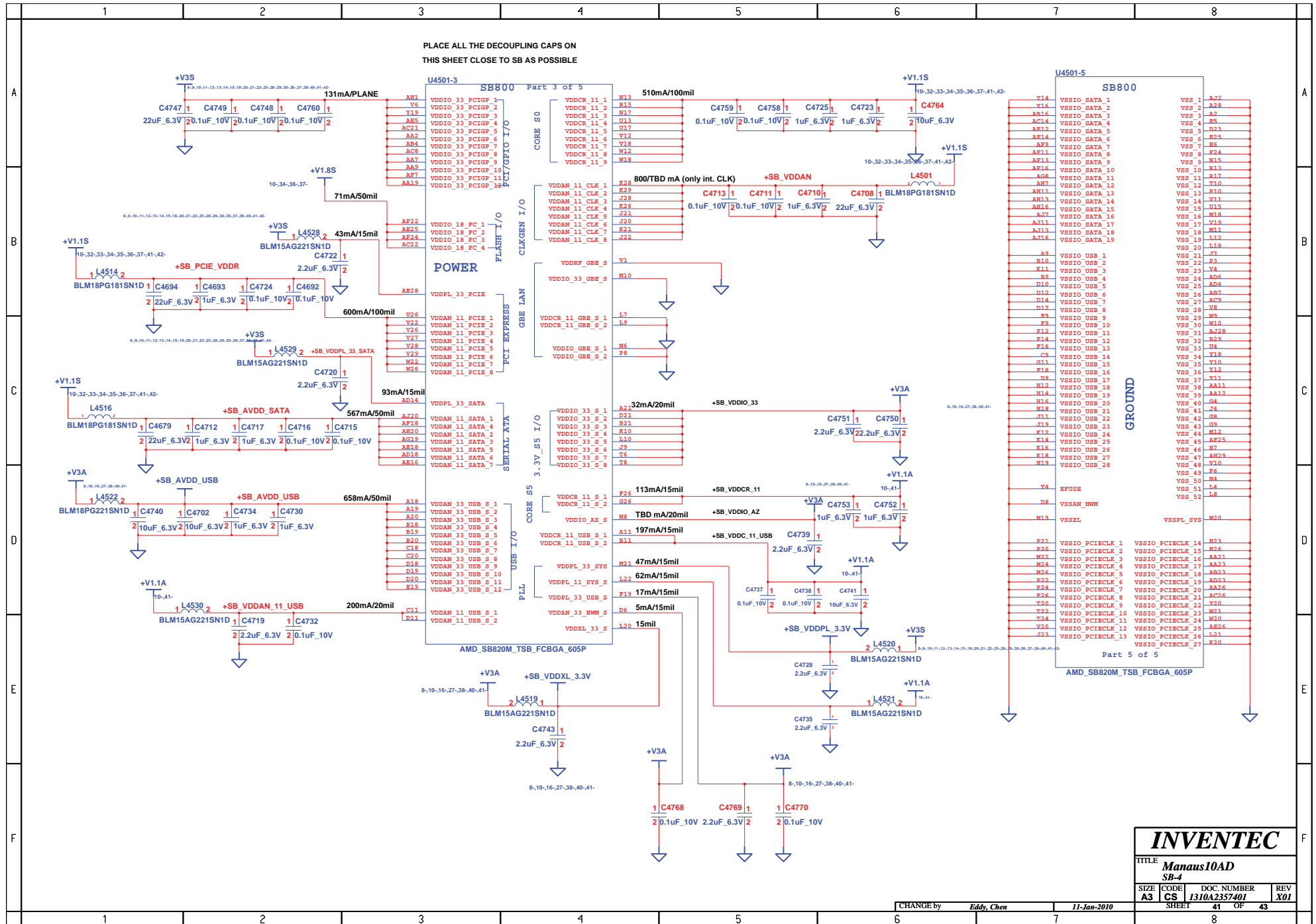
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EMI

The diagram illustrates the EMI filter components and their connections to various power rails. The components are represented by red boxes with their part numbers and values. The connections are shown as lines with labels indicating the power rails and the specific pins of the components.

Components and their values:

- C7500: 0.1uF_10V
- C7501: 0.1uF_10V
- C7502: 0.1uF_10V
- C7503: 0.1uF_10V
- C7504: 0.1uF_10V
- C7505: 0.1uF_10V
- C7506: 0.1uF_10V
- C7507: 0.1uF_10V
- C7508: 0.1uF_10V
- C7509: 0.1uF_10V
- C7510: 0.1uF_10V
- C7511: 0.1uF_10V
- C7517: 0.1uF_10V
- C7518: 0.1uF_10V
- C7519: 0.1uF_10V
- C7520: 0.1uF_10V
- C7521: 0.1uF_10V
- C7522: 0.1uF_10V
- C7523: 0.1uF_10V
- C7524: 0.1uF_10V
- C7525: 0.1uF_10V
- C7526: 0.1uF_10V
- C7527: 1000pF_50V
- C7528: 1000pF_50V
- C7529: 1000pF_50V

Power Rails and Connections:

- +V3S:** Connected to C7500, C7501, C7502, C7503, C7504, C7505, C7506, C7507, C7508, C7509, C7510, C7511, C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529.
- +VCC_CORE:** Connected to C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529.
- +V1.1S:** Connected to C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529.
- +V1.5:** Connected to C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529.
- +V5A:** Connected to C7502, C7503, C7504, C7505, C7506, C7507, C7508, C7509, C7510, C7511, C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529.

Legend:

Symbol	Description
	Capacitor
	Power Rail

Table 1: Component Values

Component	Value
C7500	0.1uF_10V
C7501	0.1uF_10V
C7502	0.1uF_10V
C7503	0.1uF_10V
C7504	0.1uF_10V
C7505	0.1uF_10V
C7506	0.1uF_10V
C7507	0.1uF_10V
C7508	0.1uF_10V
C7509	0.1uF_10V
C7510	0.1uF_10V
C7511	0.1uF_10V
C7517	0.1uF_10V
C7518	0.1uF_10V
C7519	0.1uF_10V
C7520	0.1uF_10V
C7521	0.1uF_10V
C7522	0.1uF_10V
C7523	0.1uF_10V
C7524	0.1uF_10V
C7525	0.1uF_10V
C7526	0.1uF_10V
C7527	1000pF_50V
C7528	1000pF_50V
C7529	1000pF_50V

Table 2: Power Rail Connections

Power Rail	Connected Components
+V3S	C7500, C7501, C7502, C7503, C7504, C7505, C7506, C7507, C7508, C7509, C7510, C7511, C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529
+VCC_CORE	C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529
+V1.1S	C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529
+V1.5	C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529
+V5A	C7502, C7503, C7504, C7505, C7506, C7507, C7508, C7509, C7510, C7511, C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529

Table 3: Component Values

Component	Value
C7500	0.1uF_10V
C7501	0.1uF_10V
C7502	0.1uF_10V
C7503	0.1uF_10V
C7504	0.1uF_10V
C7505	0.1uF_10V
C7506	0.1uF_10V
C7507	0.1uF_10V
C7508	0.1uF_10V
C7509	0.1uF_10V
C7510	0.1uF_10V
C7511	0.1uF_10V
C7517	0.1uF_10V
C7518	0.1uF_10V
C7519	0.1uF_10V
C7520	0.1uF_10V
C7521	0.1uF_10V
C7522	0.1uF_10V
C7523	0.1uF_10V
C7524	0.1uF_10V
C7525	0.1uF_10V
C7526	0.1uF_10V
C7527	1000pF_50V
C7528	1000pF_50V
C7529	1000pF_50V

Table 4: Power Rail Connections

Power Rail	Connected Components
+V3S	C7500, C7501, C7502, C7503, C7504, C7505, C7506, C7507, C7508, C7509, C7510, C7511, C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529
+VCC_CORE	C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529
+V1.1S	C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529
+V1.5	C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529
+V5A	C7502, C7503, C7504, C7505, C7506, C7507, C7508, C7509, C7510, C7511, C7517, C7518, C7519, C7520, C7521, C7522, C7523, C7524, C7525, C7526, C7527, C7528, C7529

Table 5: Component Values

Component	Value
C7500	0

POWER BUTTON

SW9000

G1 2

G2 4

FOX_1BT002_0021L_4P

GND_BTN

1 2

C9000

1000pF_50V

1 1

PAD9000

SMDPAD_1P_40X120

1 1

PAD9001

SMDPAD_1P_40X120

2 1

D9000

PHP_PESD5V2S2UT_SOT23_3P

GND_BTN

GND_BTN

S9000

SCREW540_700_NP_1P

S9001

SCREW540_700_NP_1P

GND_BTN

FIX9001

FIX9002

FIX9003

FIX9004

FIX9005

FIX9006

FIX_MASK

FIX_MASK

FIX_MASK

FIX_MASK

FIX_MASK

FIX_MASK

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CHANGE by Eddy, Chen 16-Mar-2010

INVENTEC			
TITLE			
Manaus10AD			
Pick Button Board			
SIZE	CODE	DOC. NUMBER	REV
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TITLE	<i>Manaus10AD</i> Pick Button Board
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