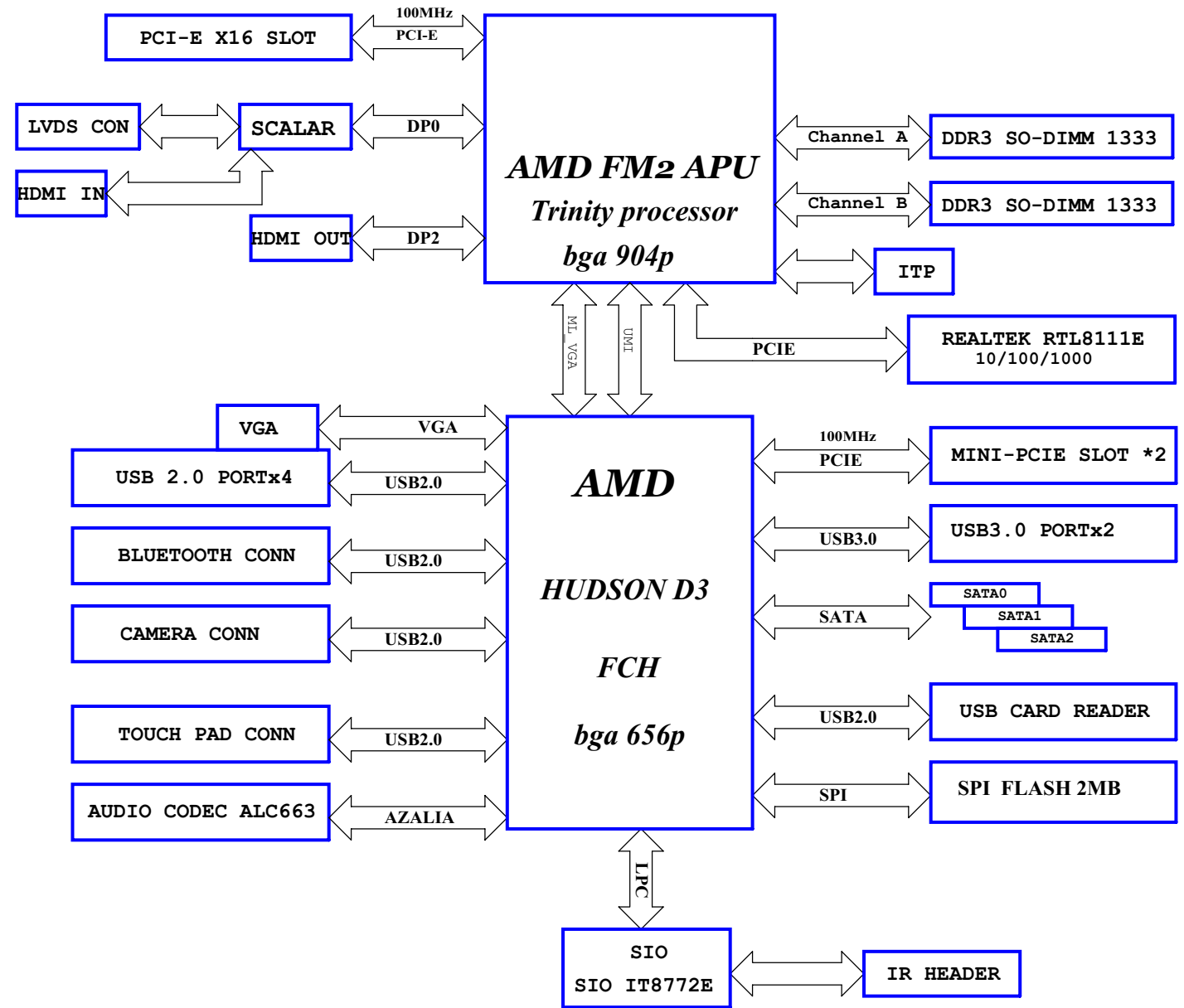
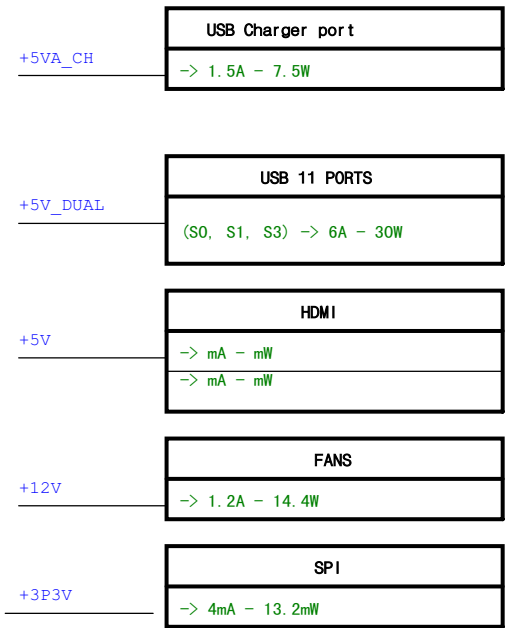
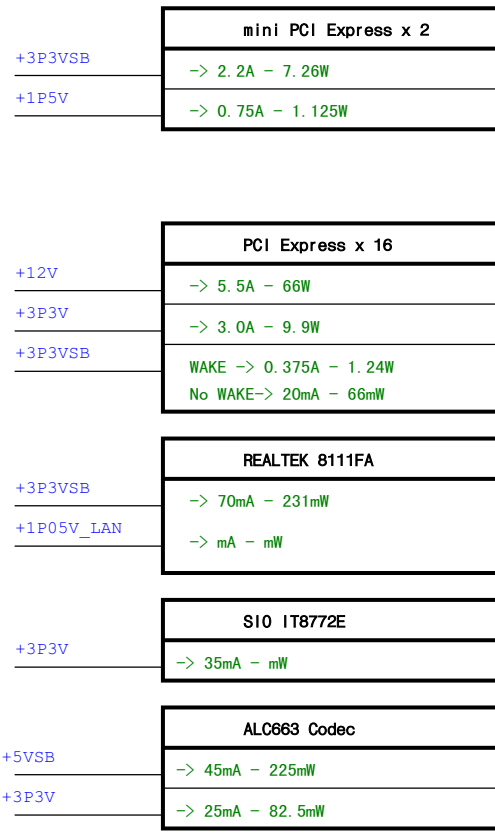
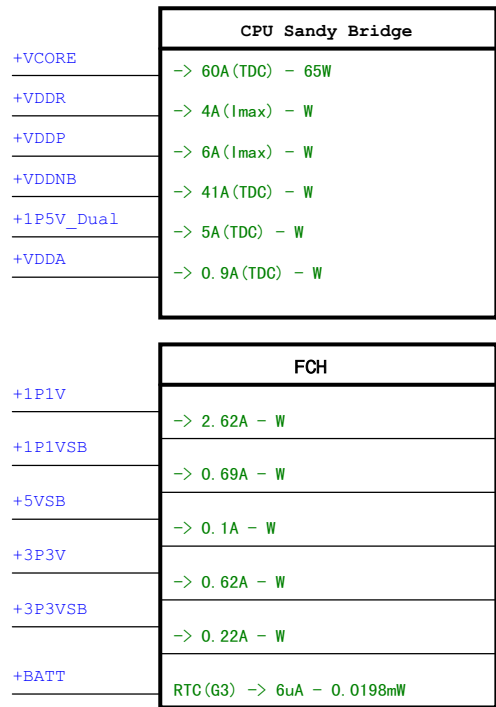


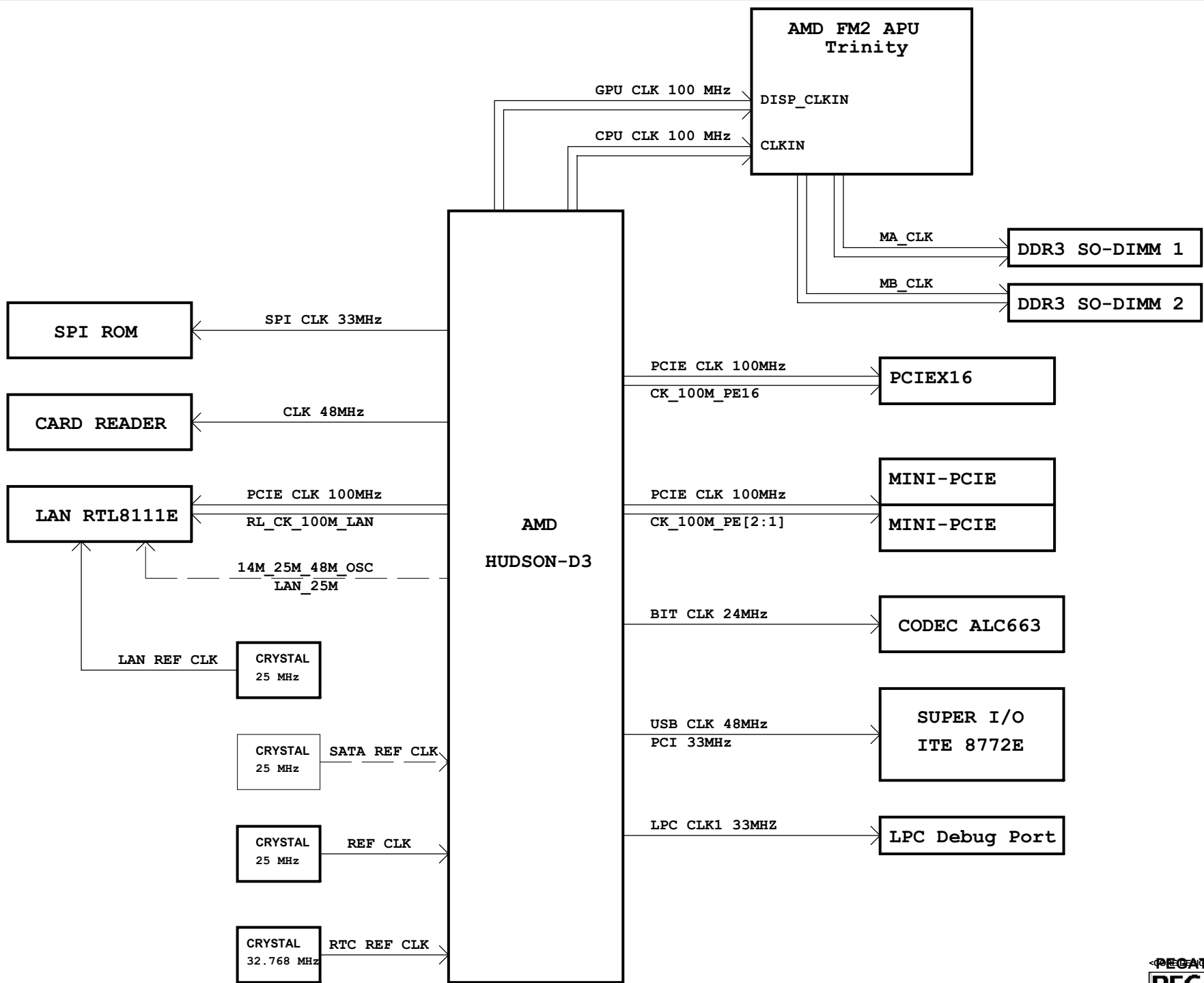
# AAHD3-VL

Rev: 1.01

PAGE	TITLE
01	BLOCK DIAGRAM
02	POWER DISTRIBUTION
03	CLOCKS DISTRIBUTION
04	POWER FLOW
05	XXXX
06	POWER SEQUENCE
07	CHANGE HISTORY
08~11	AMD FM1 SOCKET
12~13	DDR3 DIMM
15	TEMP SENSOR
16~20	FCH HUDSON-D3
21	SPI ROM&BOARD ID
22	PCI EXPRESS X16 SLOT
23	MINI-PCIE SLOT
24	MINI-PCIE SLOT
25	REALTEK RTL8111F
26	LAN JACK
27	REAR USB2.0 PORT
28	SIDE USB3.0 PORT
29	SIDE USB2.0 PORT
31	USB HEADER
32	USB Charger SLG5583
33	+5VA For Charger
34	REALTEK ALC663 AZALIA CODEC
35	AUDIO AMP
36	AUDIO CONNECTOR
37	AUDIO SW
38	SUPER I/O IT8772E
39	FRONT PANEL CIRCUIT
40	FAN CIRCUIT
41	INTEGRATED VGA PORT
42	IR / SPKR
43	RTC/COMS/SCREW
44	DEBUG HEADER
45~46	SCALAR STDP6038
47	I2S AUDIO DAC
48	LVDS CONNECTOR
50	HDMI CONN (OUT)
52	HDMI COMM(IN)
53	SATA CONN
54	CARD READER-AU6437GEF
56	19V OCP -SYS IN
57	+1P1VSB&+2P5V
58	+19V,+12V,+5V,+3P3V
59	+12VSB, +1P1V
60	+5VSB, +3P3VSB
61	+5V DUAL
62	+VTT DDR,EN
63	+1P5V DUAL, VDDR&VDDP
64	+1P2V, +1P5V
65	DISCHARGE
66	CURRENT SENSE
67	VCORE CONTROLLER
68~69	VCORE DRIVER
70	VDDNB
71	EMI CAPS





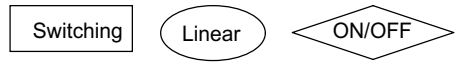
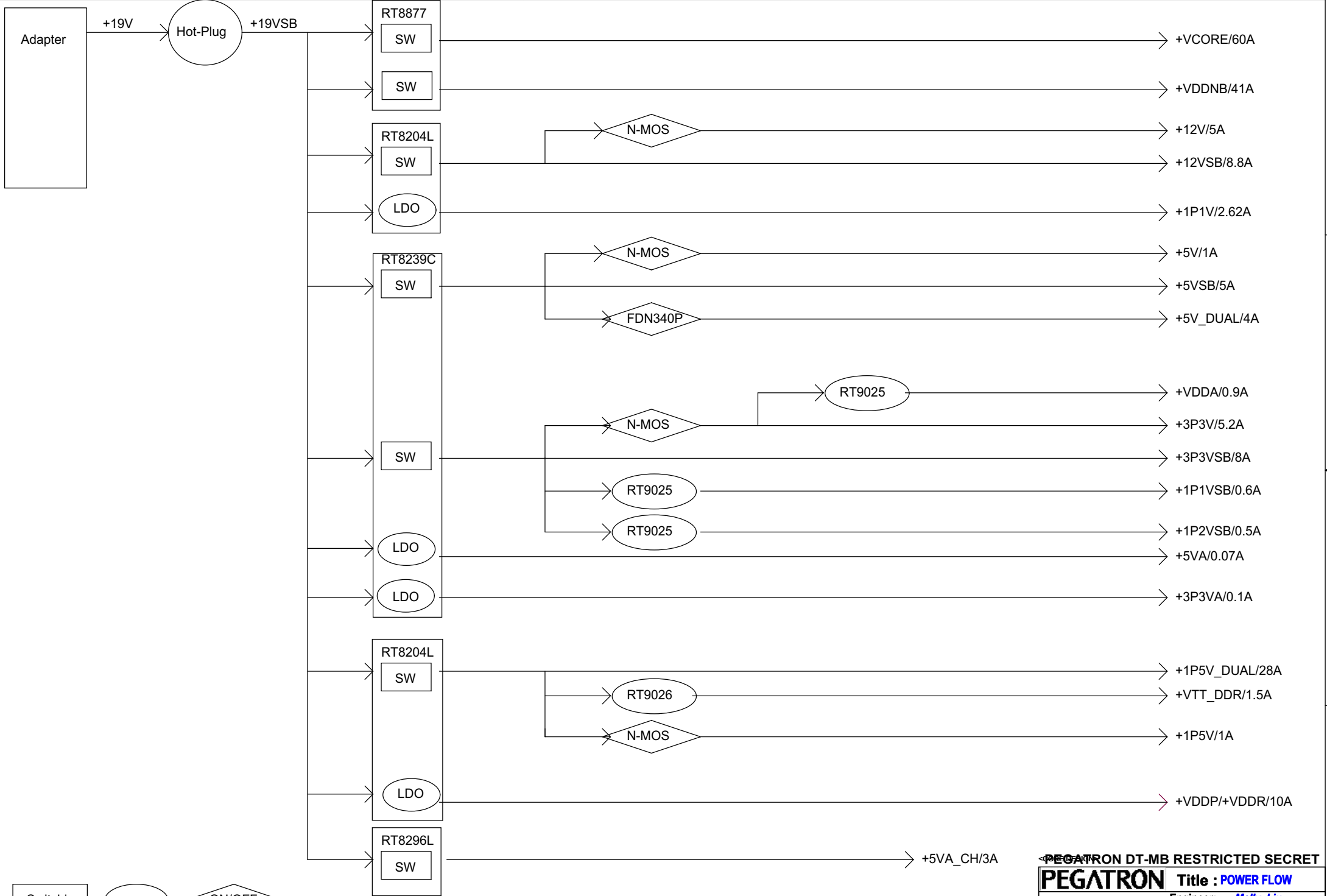


PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : CLCOK DISTRIBUTION

Pegatron Corp. Engineer: *Melly\_Liu*

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01



5

4

3

2

1

D

D

C

C

B

B

A

A

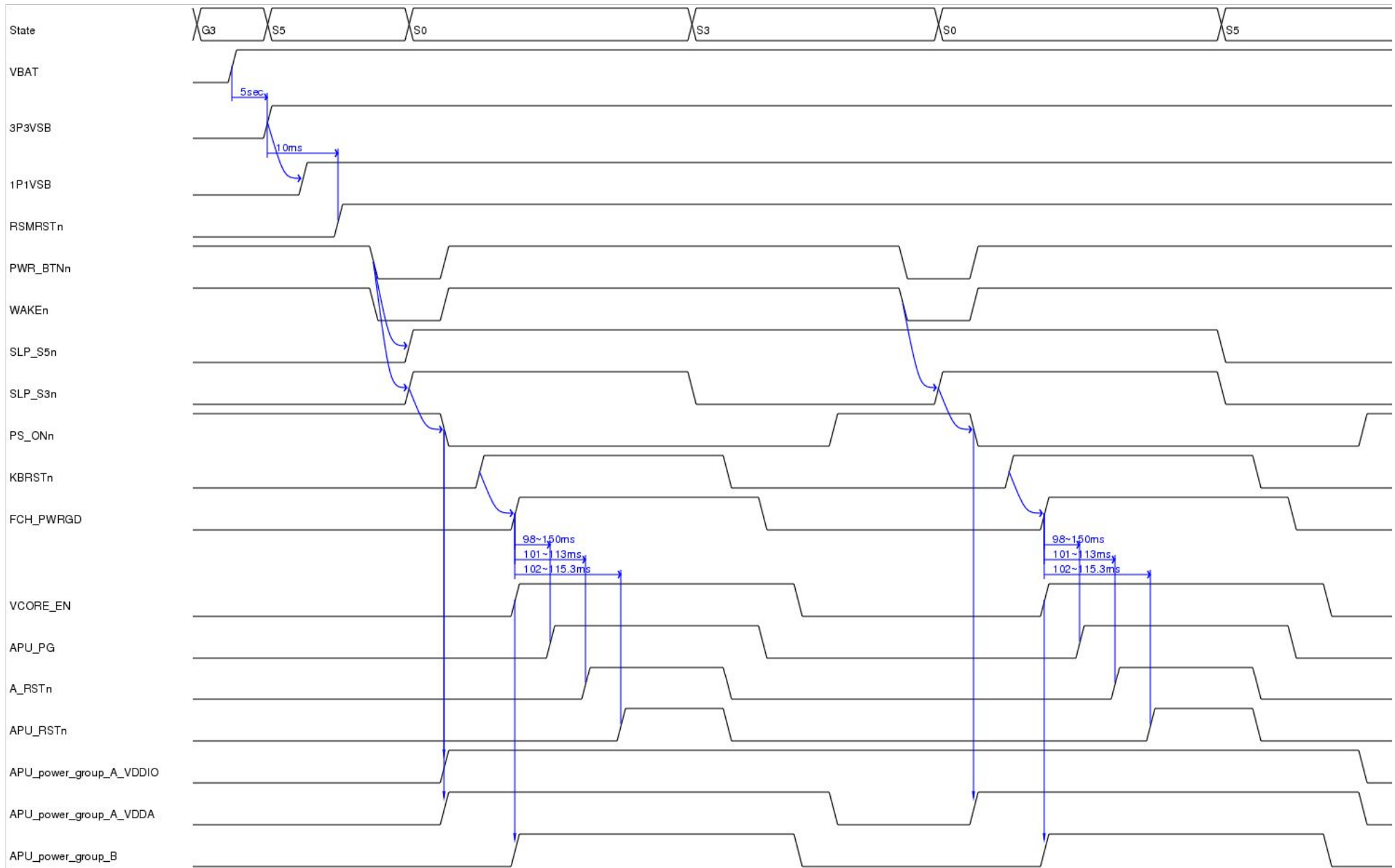
PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : SIGNAL&RESET MAP

Pegatron Corp. Engineer: *Melly\_Liu*

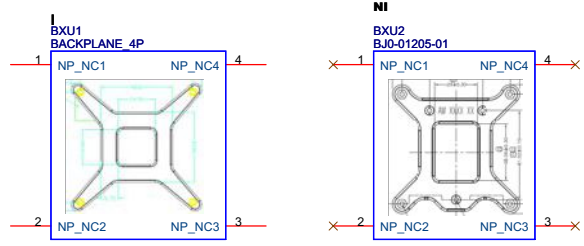
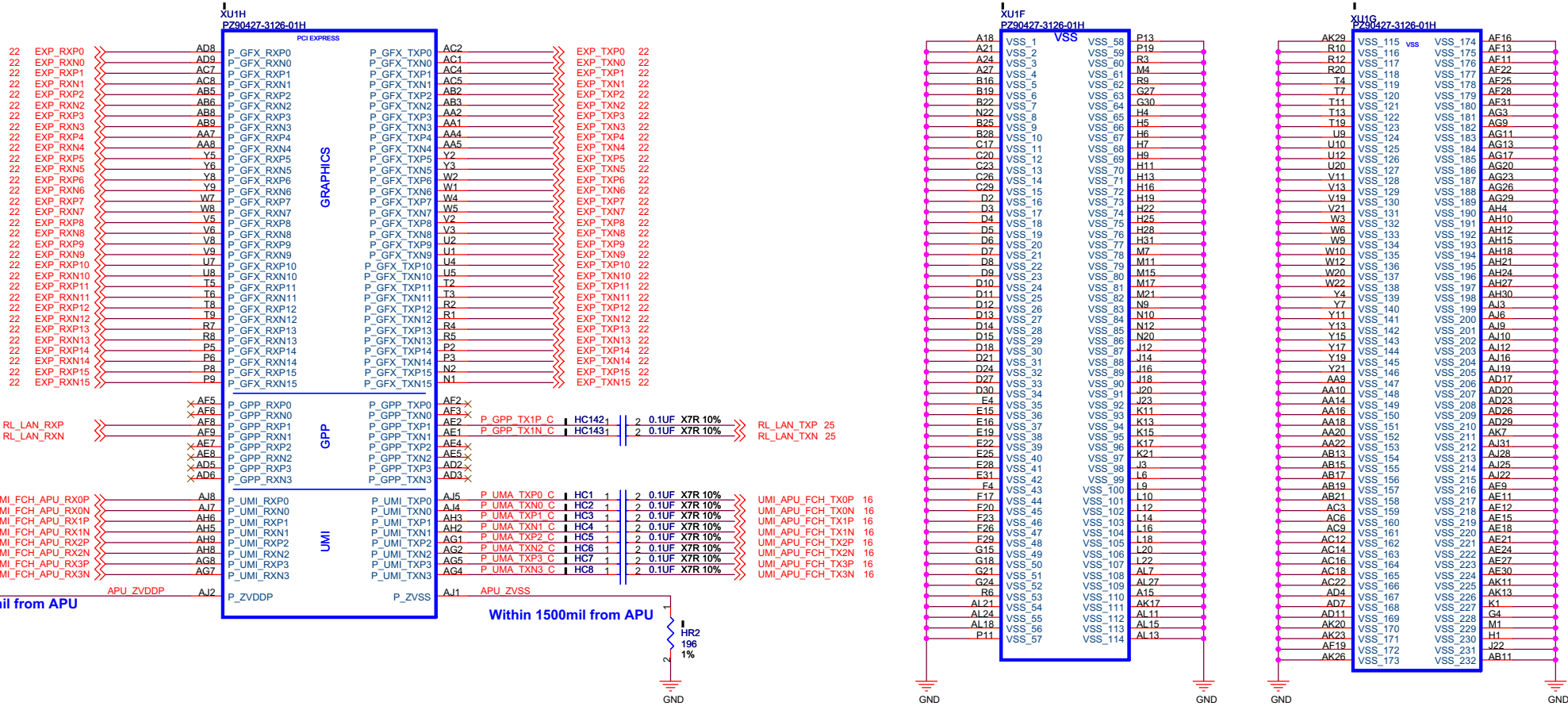
Size A3	Project Name <b>AAHD3-VL</b>	Rev 1.01
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Date: Monday, March 12, 2012 Sheet 5 of 71

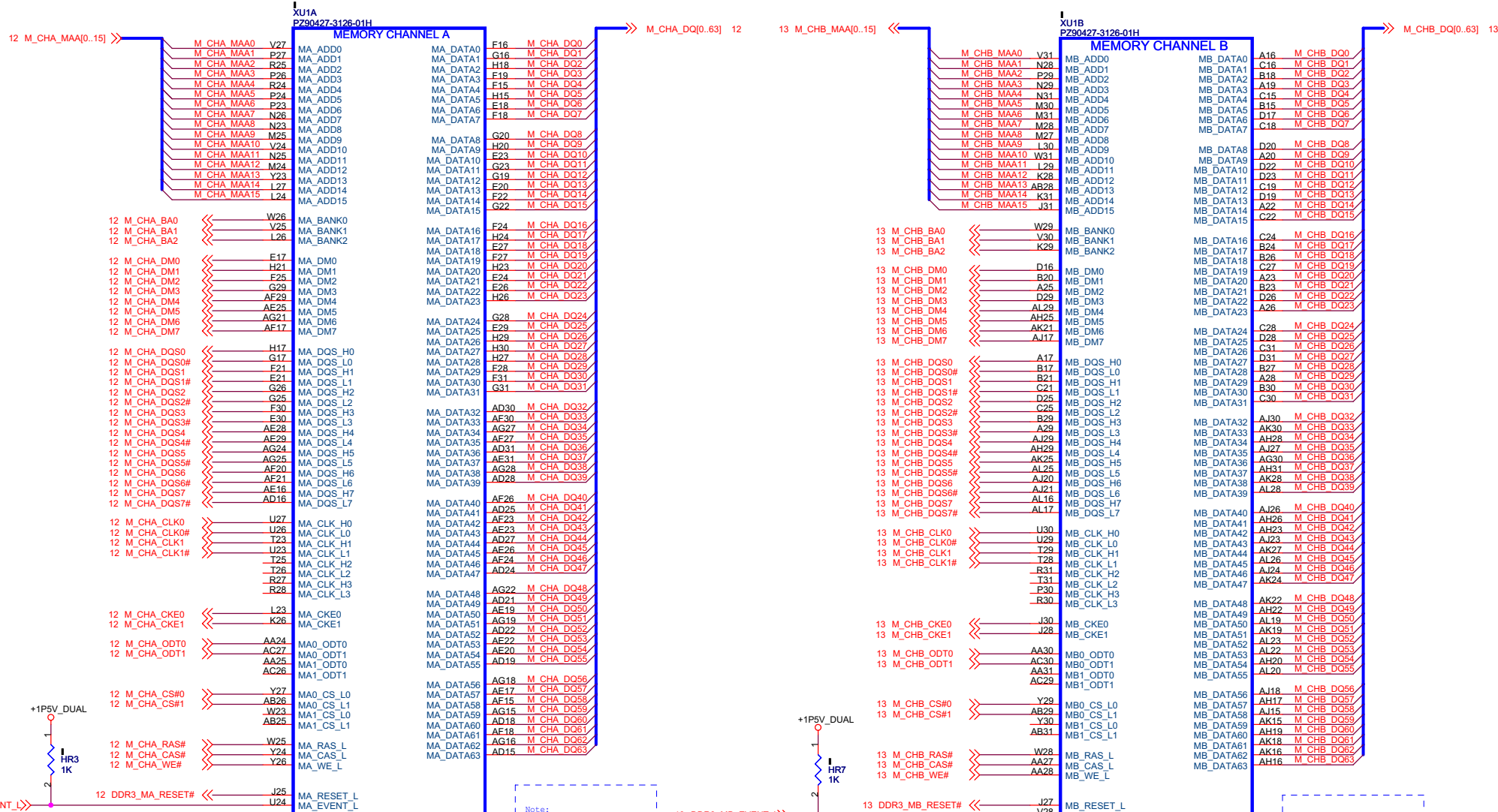


NOTE:  
 APU\_power\_group\_B --> VDDP, VDDR, VCORE, VDDNB



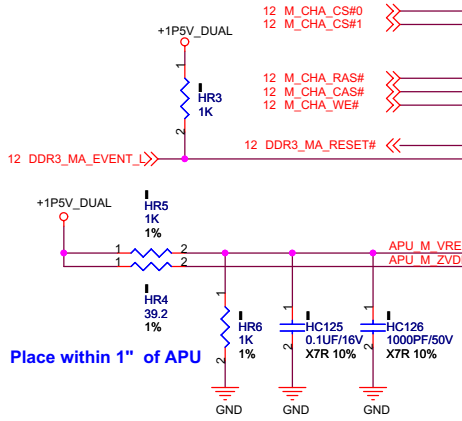






Note:  
Left unconnected according  
FMI schematic  
checklist(47758\_1\_00)

Note:  
Left unconnected according  
FMI schematic  
checklist(47758\_1\_00)

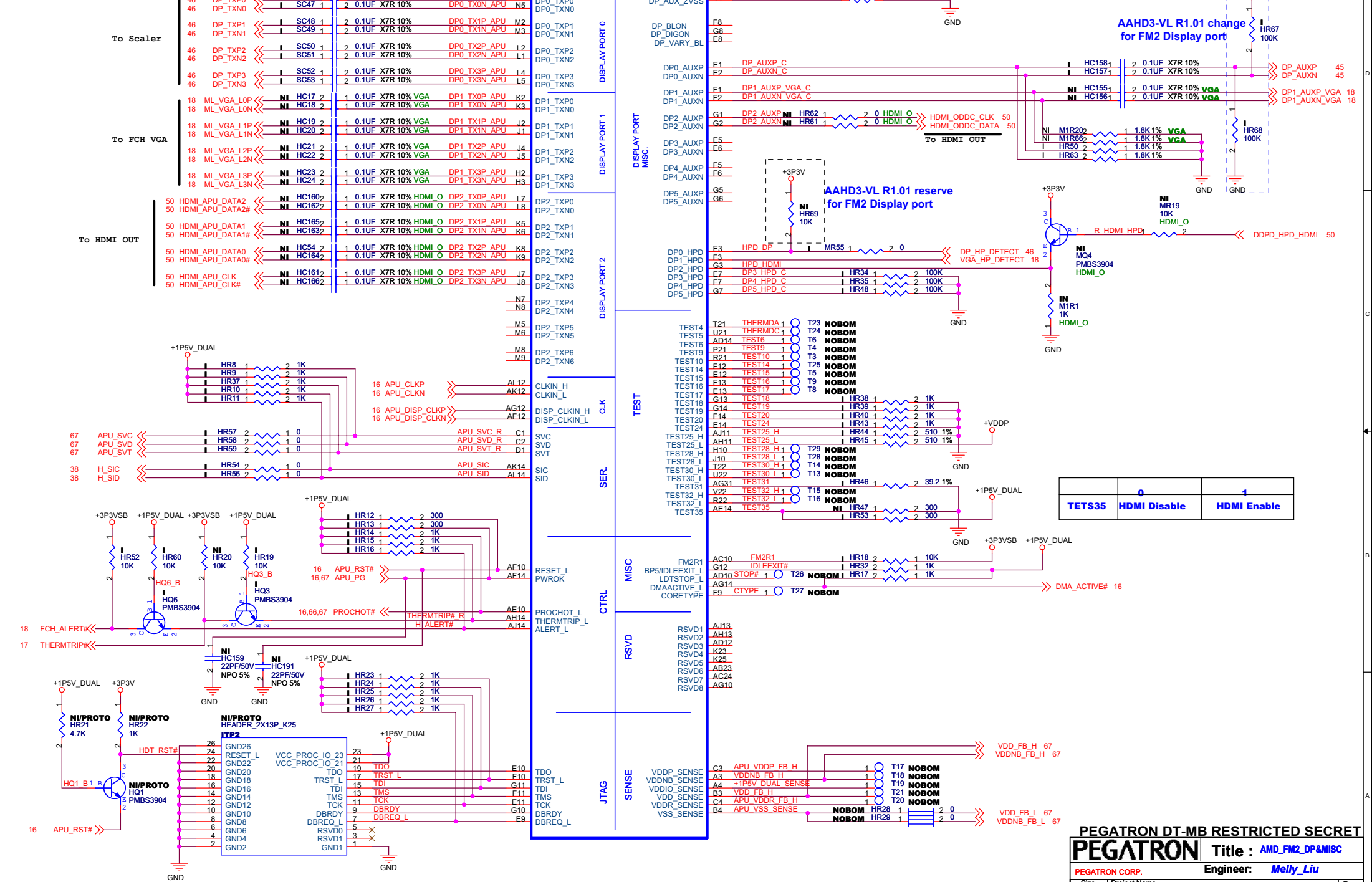


Place within 1" of APU

XU1C  
P290427-3126-01H

Place within 1500mil from APU

ANALOG/DISPLAY/MISC



AAHD3-VL R1.01 change for FM2 Display port

AAHD3-VL R1.01 reserve for FM2 Display port

TETS35	0	HDMI Disable	1	HDMI Enable
--------	---	--------------	---	-------------

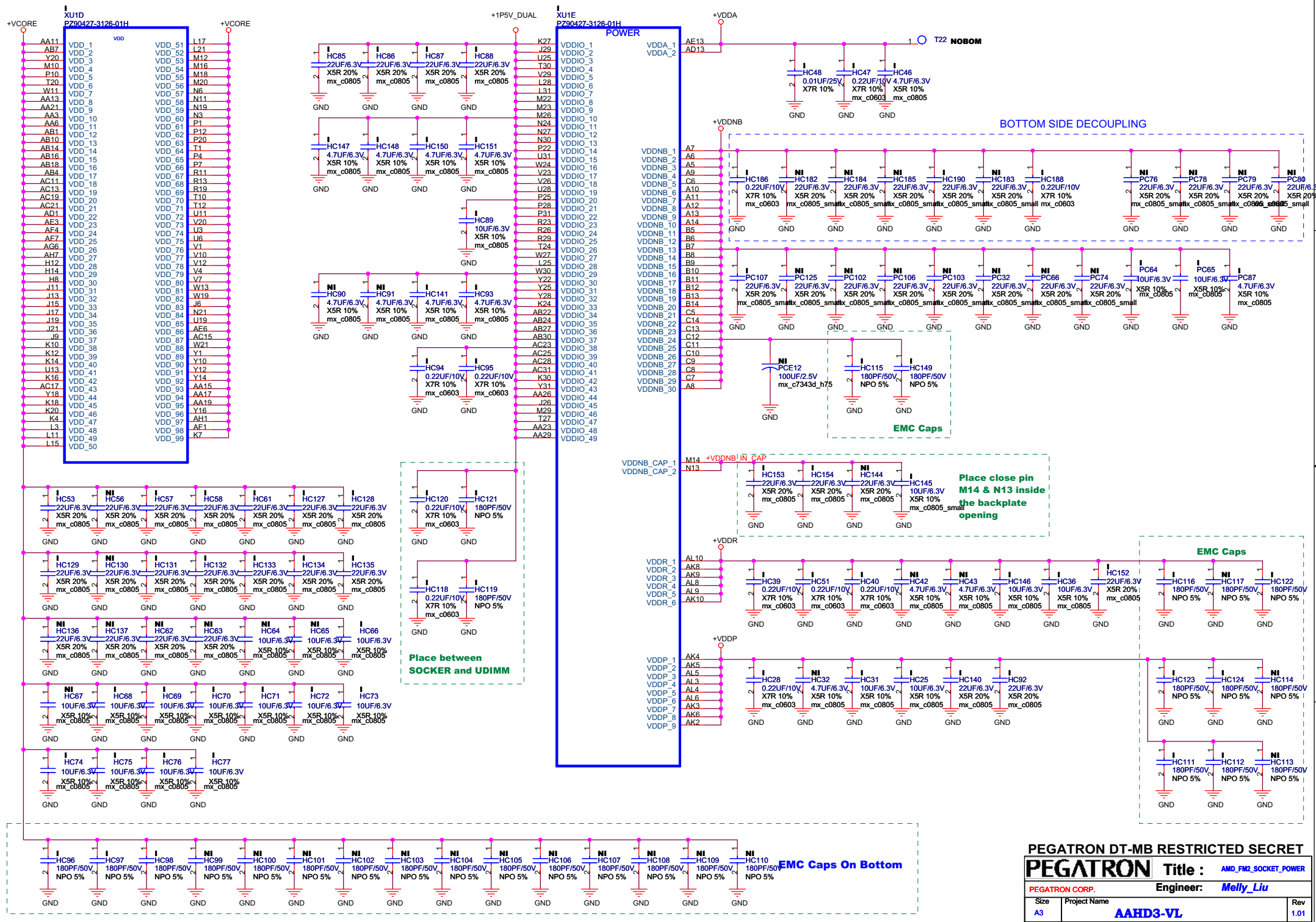
**PEGATRON DT-MB RESTRICTED SECRET**

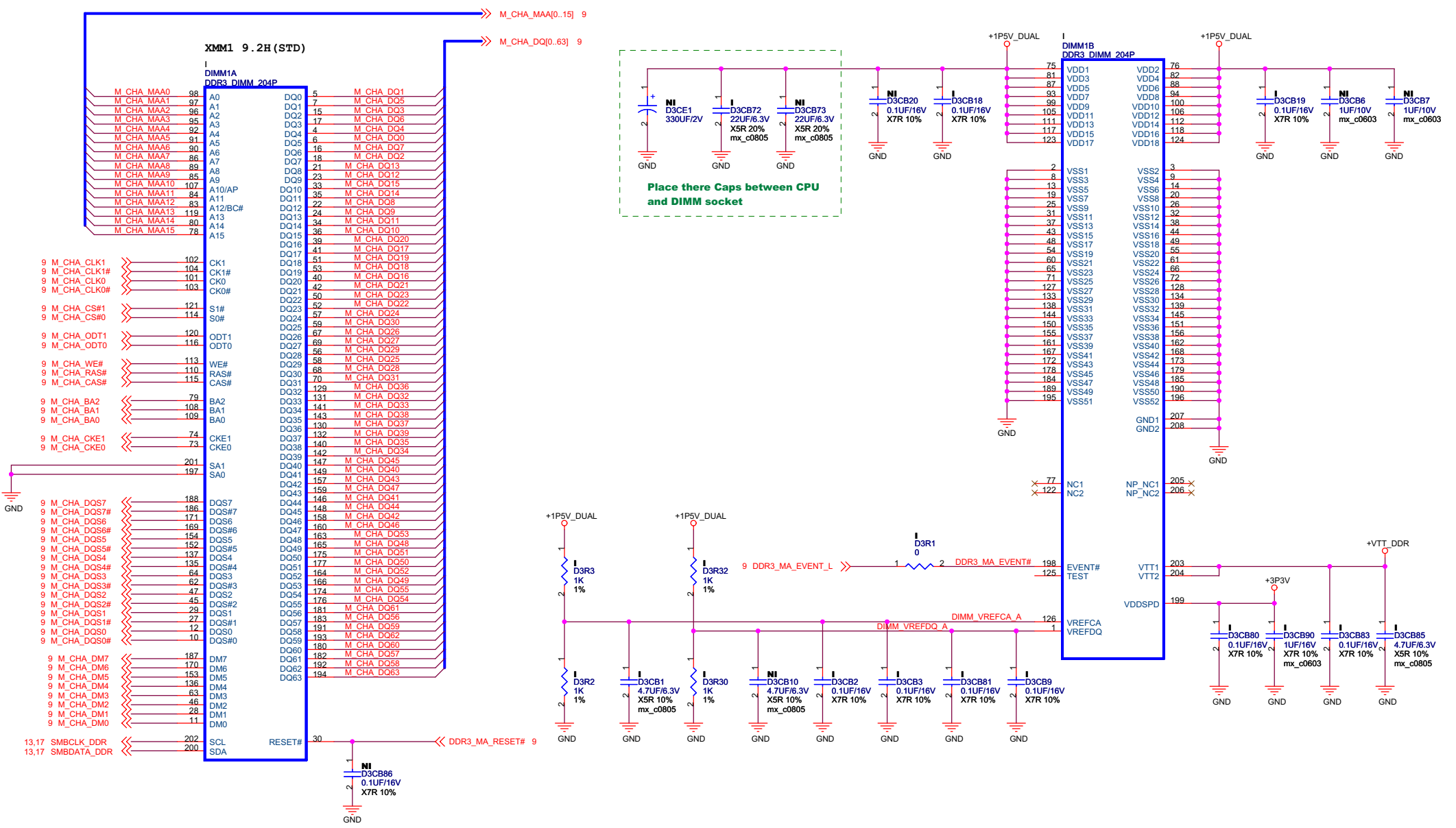
**PEGATRON** Title : AMD\_FM2\_DP&MISC

PEGATRON CORP. Engineer: Melly\_Liu

Size A3	Project Name AAHD3-VL	Rev 1.01
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Date: Monday, March 12, 2012 Sheet 10 of 71





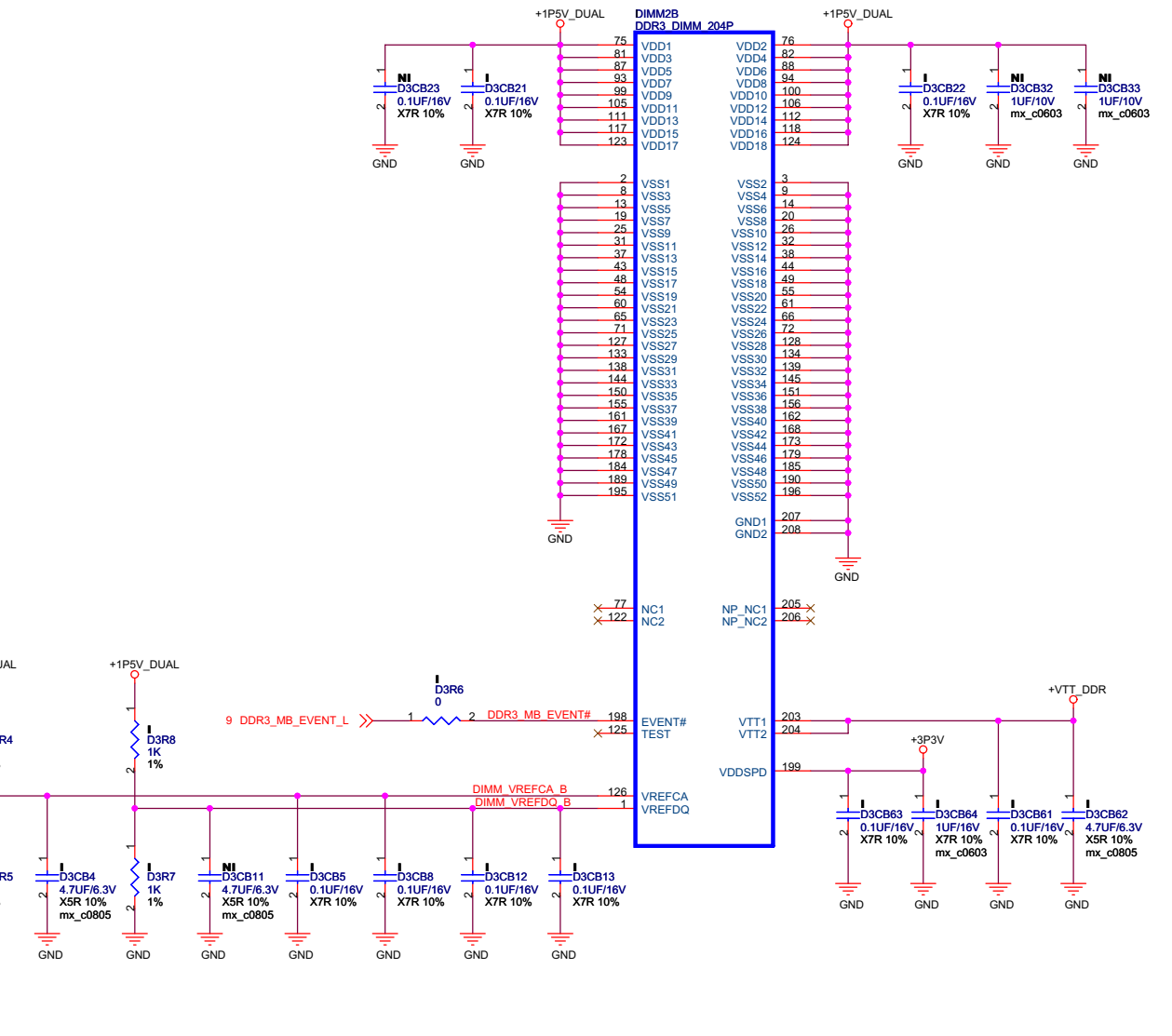
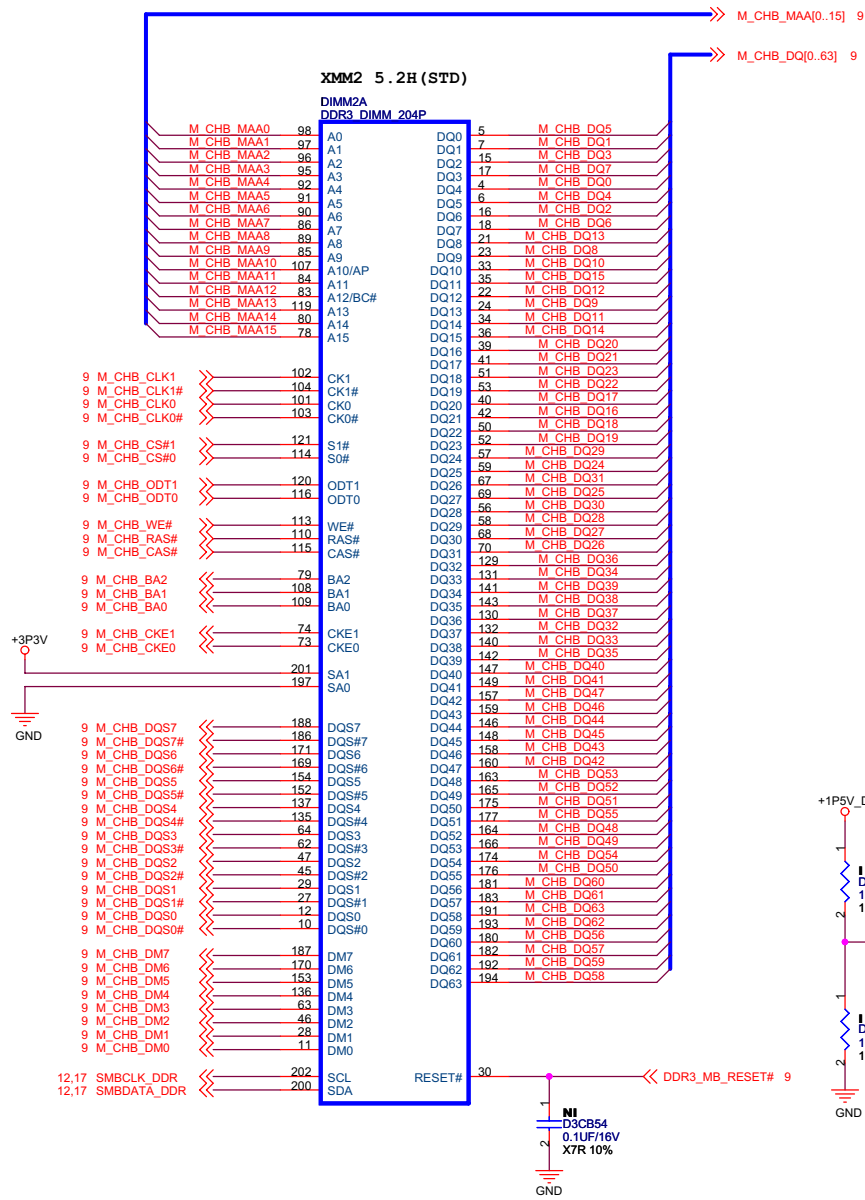
PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : DDR3 CHANNEL A

Pegatron Corp. Engineer: Melly\_Liu

Size	Project Name	Rev
A3	AAHD3-VL	1.01

Date: Monday, March 12, 2012 Sheet 12 of 71





PEGATRON DT-MB RESTRICTED SECRET

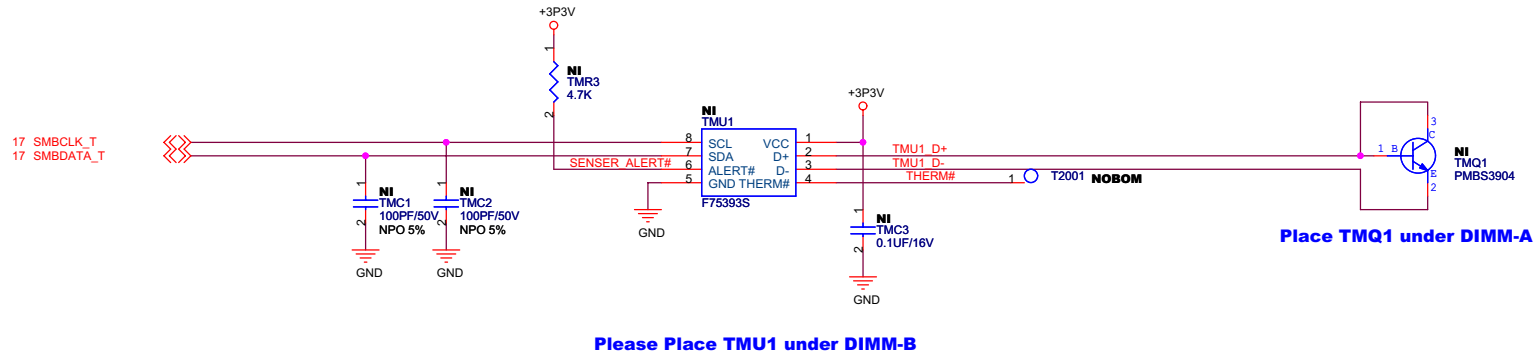
**PEGATRON** Title : **DDR3 TERMINATION**

Pegatron Corp. Engineer: *Melly\_Liu*

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

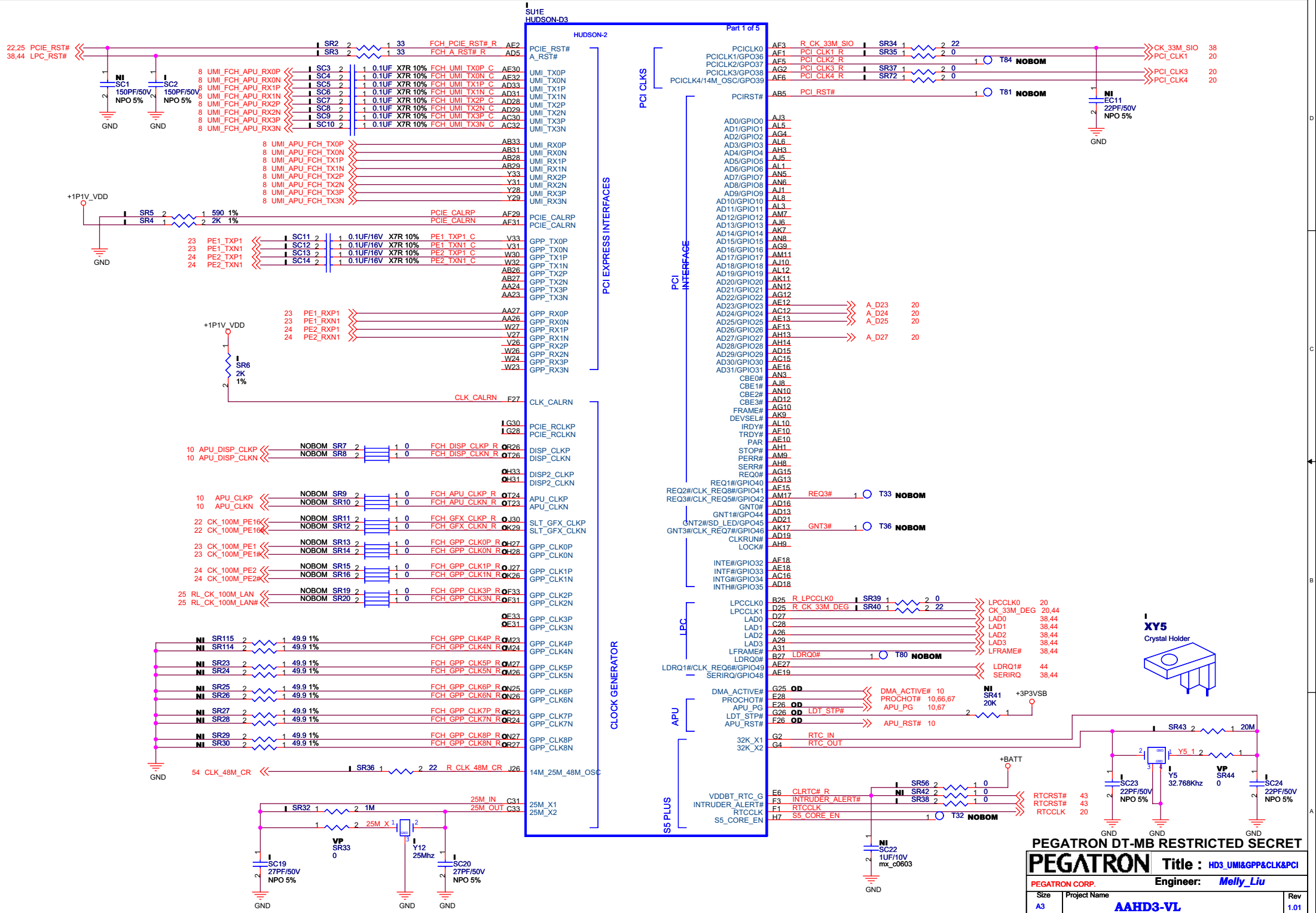
Date: *Monday, March 12, 2012* Sheet 14 of 71

# DDR3 Thermal Sensor



PEGATRON DT-MB RESTRICTED SECRET

<b>PEGATRON</b>		Title : <b>TEMP SENSOR</b>	
Pegatron Corp.		Engineer: <b>Melly_Liu</b>	
Size A3	Project Name <b>AAHD3-VL</b>	Date: Monday, March 12, 2012	Rev 1.01
Date: Monday, March 12, 2012		Sheet 15 of 71	



**PEGATRON DT-MB RESTRICTED SECRET**

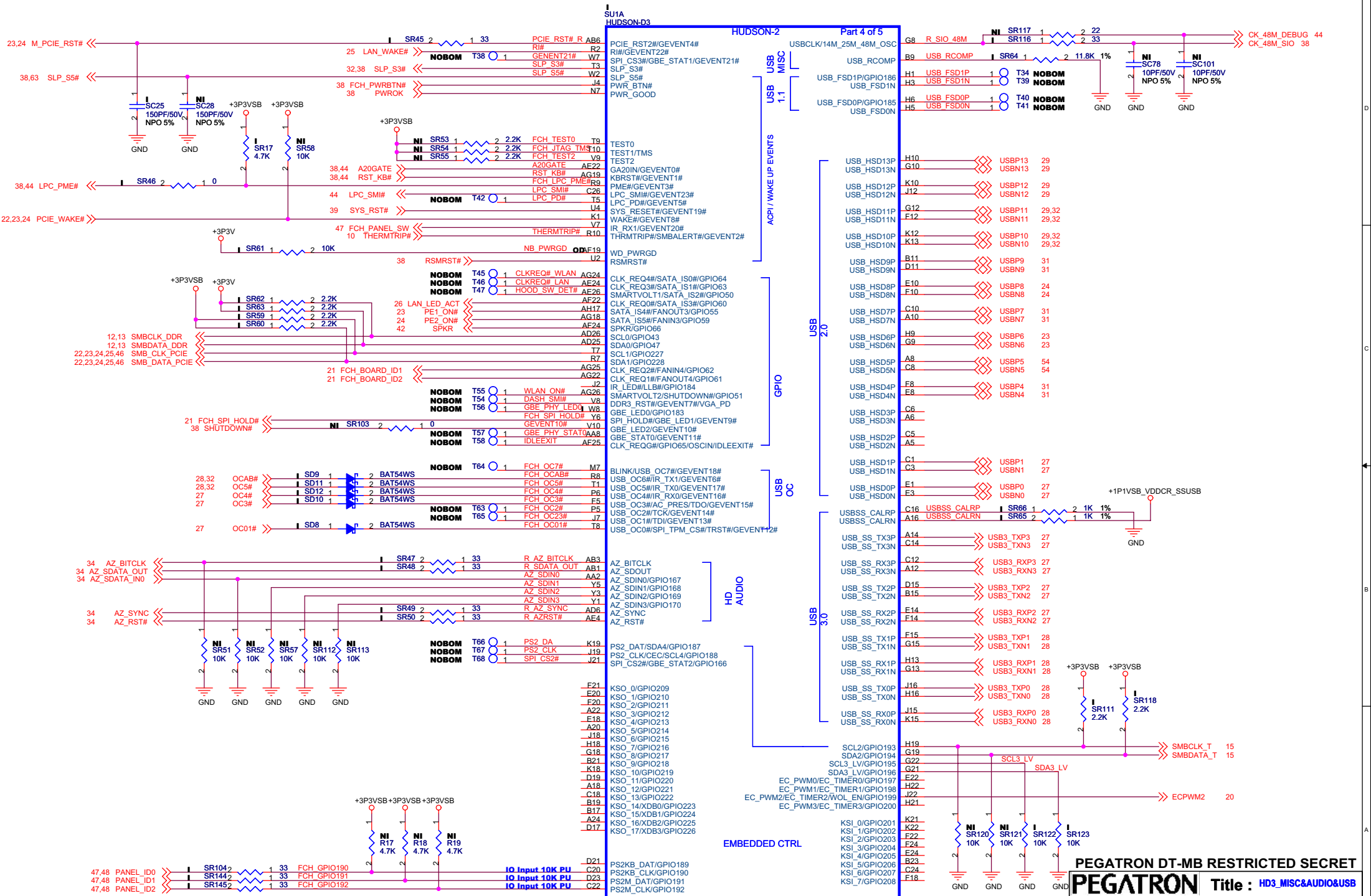
**PEGATRON** Title : HD3\_UMI&GPP&CLK&PCI

PEGATRON CORP. Engineer: *Melly\_Liu*

Size	Project Name	Rev
A3	AAHD3-VL	1.01

Date: Monday, March 12, 2012 Sheet 16 of 71





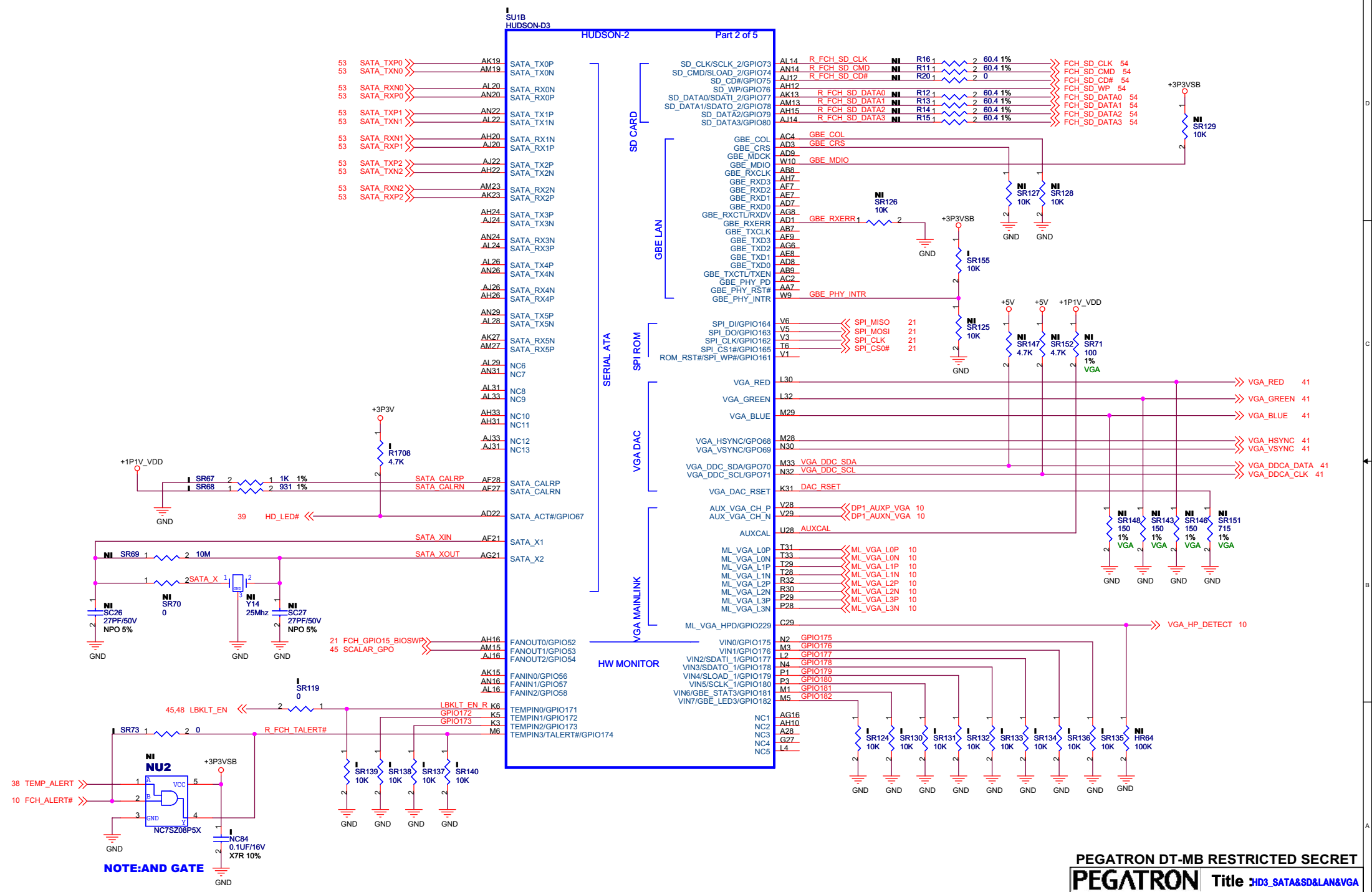
**PEGATRON DT-MB RESTRICTED SECRET**

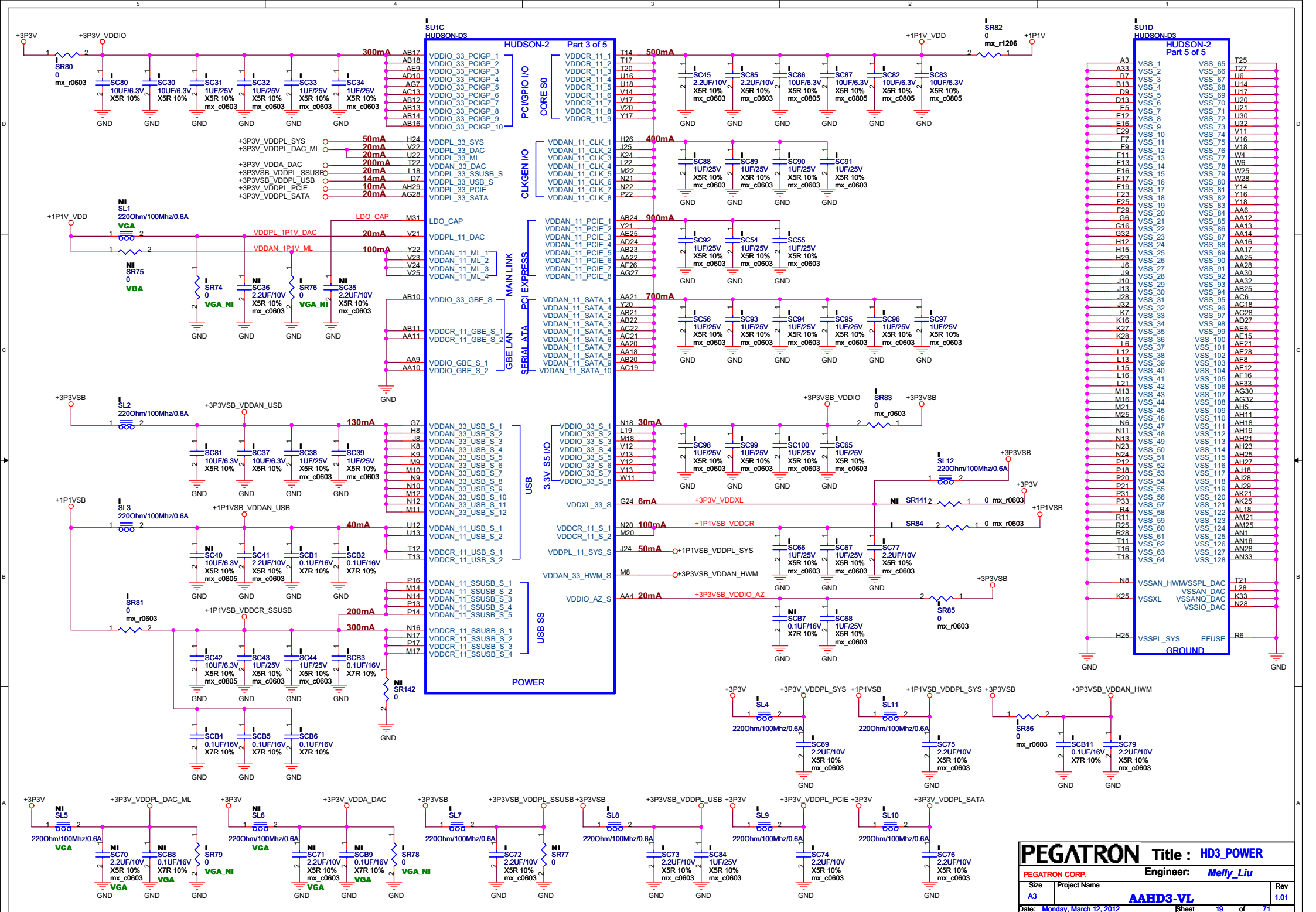
**PEGATRON** Title : **H03\_MISC&AUDIO&USB**

PEGATRON CORP. Engineer: **Melly\_Liu**

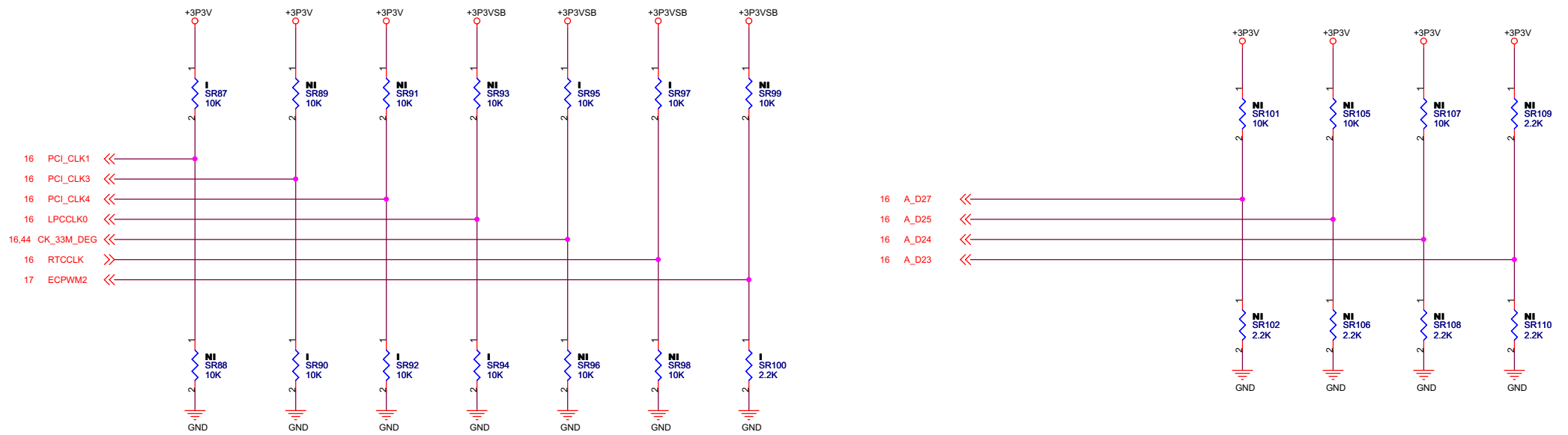
Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

Date: Monday, March 12, 2012 Sheet 17 of 71

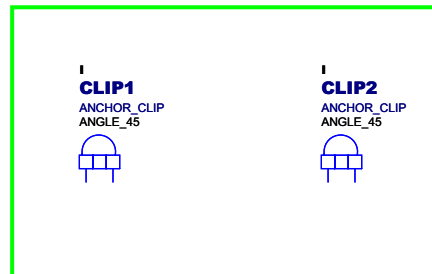
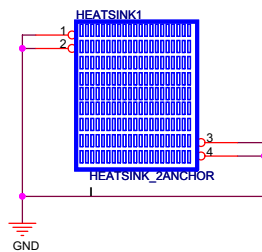




**PEGATRON** Title : HD3\_POWER  
 PEGATRON CORP. Engineer: Melly\_Liu  
 Size A3 Project Name  
 Date: Monday, March 12, 2012 **AAHD3-VL** Sheet 19 of 71 Rev 1.01



	EC_PWM2 ECPWM2	LPCCLK0 LPCCLK0	LPCCLK1 CK_33M_DEG	PCICLK1 PCI_CLK1	PCICLK3 PCI_CLK3	PCICLK4 PCI_CLK4	RTCCCLK RTCCCLK
<b>Pull High 1</b>	LPC ROM	ENABLE IMC	ENABLE INTERNAL CLOCK GENERATOR	ALLOW PCIE GEN2	ENABLE DEBUG MODE	INTER CLOCK REQUIRED SETTING	DISABLE S5+ MODE
<b>Pull low 0</b>	SPI ROM	DISABLE IMC	DISABLE INTERNAL CLOCK GENERATOR	FORCE PCIE GEN2	DISABLE DEBUG MODE	RESERVED	ENABLE S5+ MODE



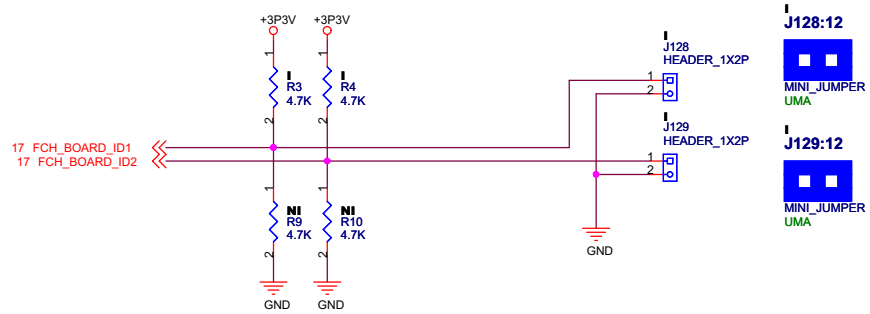
PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : FCH\_HudsonD3\_HWSTRAP

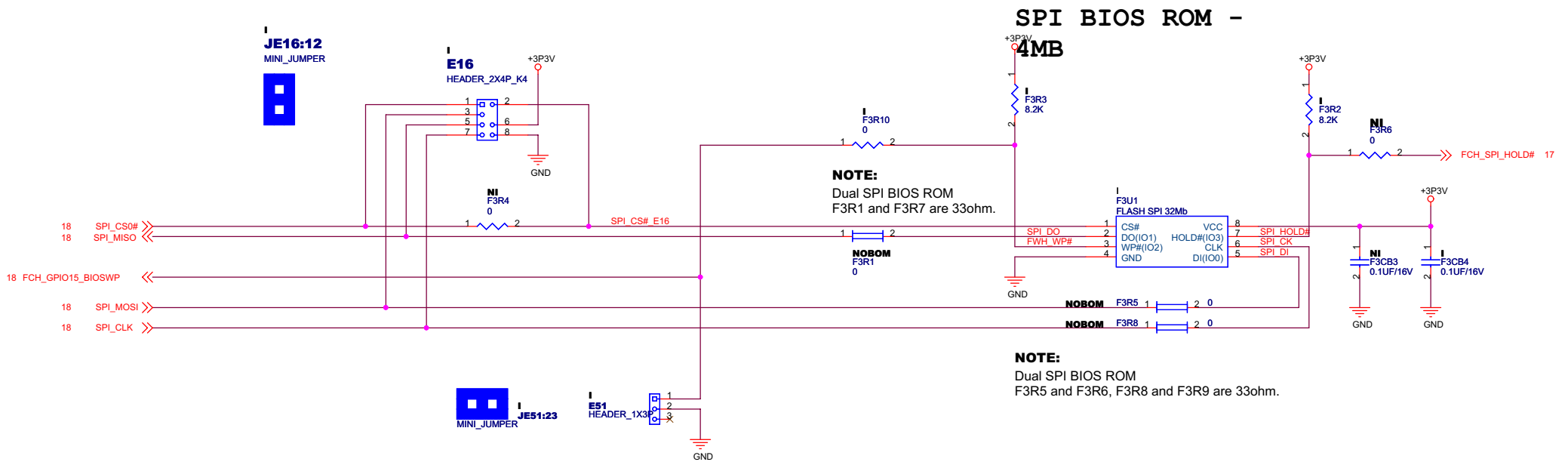
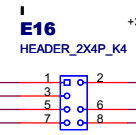
PEGATRON CORP. Engineer: *Melly\_Liu*

Size A3	Project Name <b>AAHD3-VL</b>	Rev 1.01
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Date: Monday, March 12, 2012 Sheet 20 of 71



J129	J128	FUNCTION
0	0	
0	1	
1	0	
1	1	



**SPI BIOS ROM - 4MB**

**NOTE:**  
Dual SPI BIOS ROM  
F3R1 and F3R7 are 33ohm.

**NOTE:**  
Dual SPI BIOS ROM  
F3R5 and F3R6, F3R8 and F3R9 are 33ohm.

PEGATRON DT-MB RESTRICTED SECRET

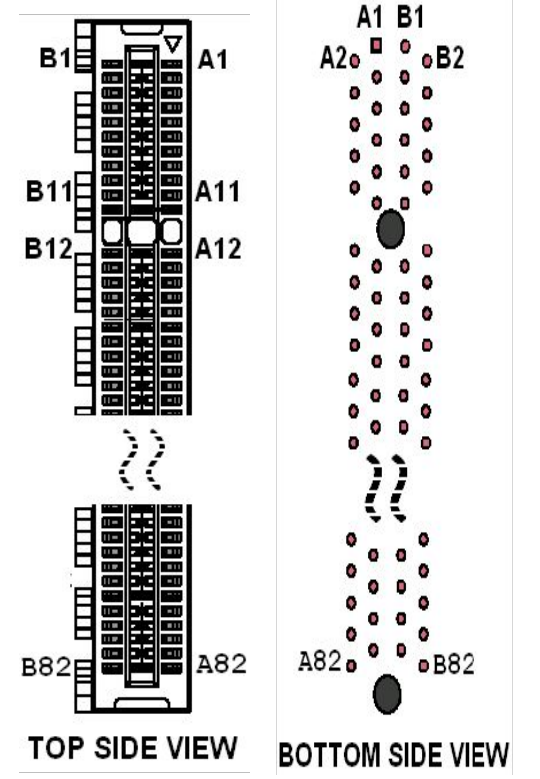
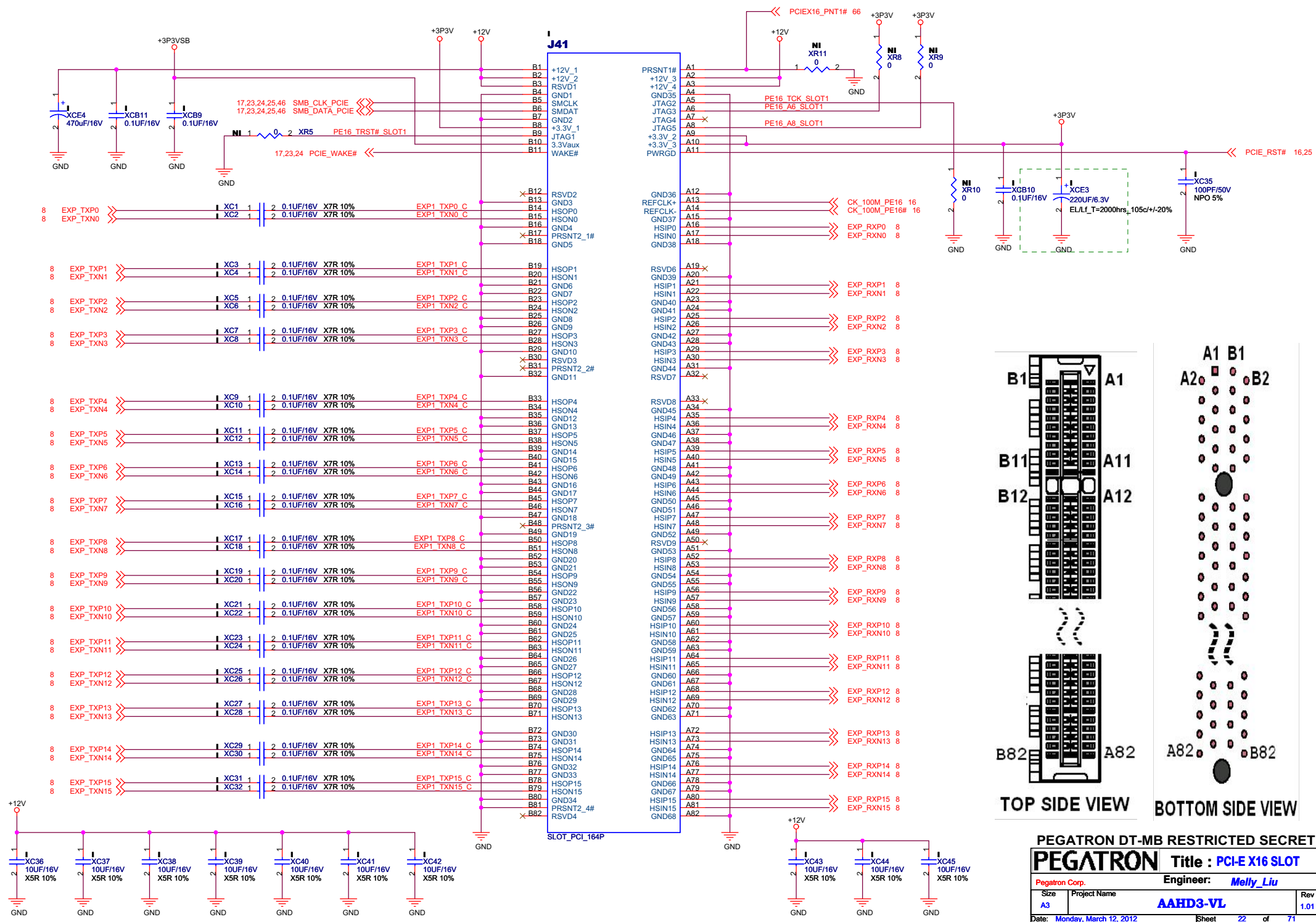
**PEGATRON** Title : SM BUS & SPI ROM

Pegatron Corp. Engineer: *Melly\_Liu*

Size	Project Name	Rev
A3	AAHD3-VL	1.01

Date: Monday, March 12, 2012 Sheet 21 of 71

# PCI EXPRESS X16 Graphics Card Slot



PEGATRON DT-MB RESTRICTED SECRET

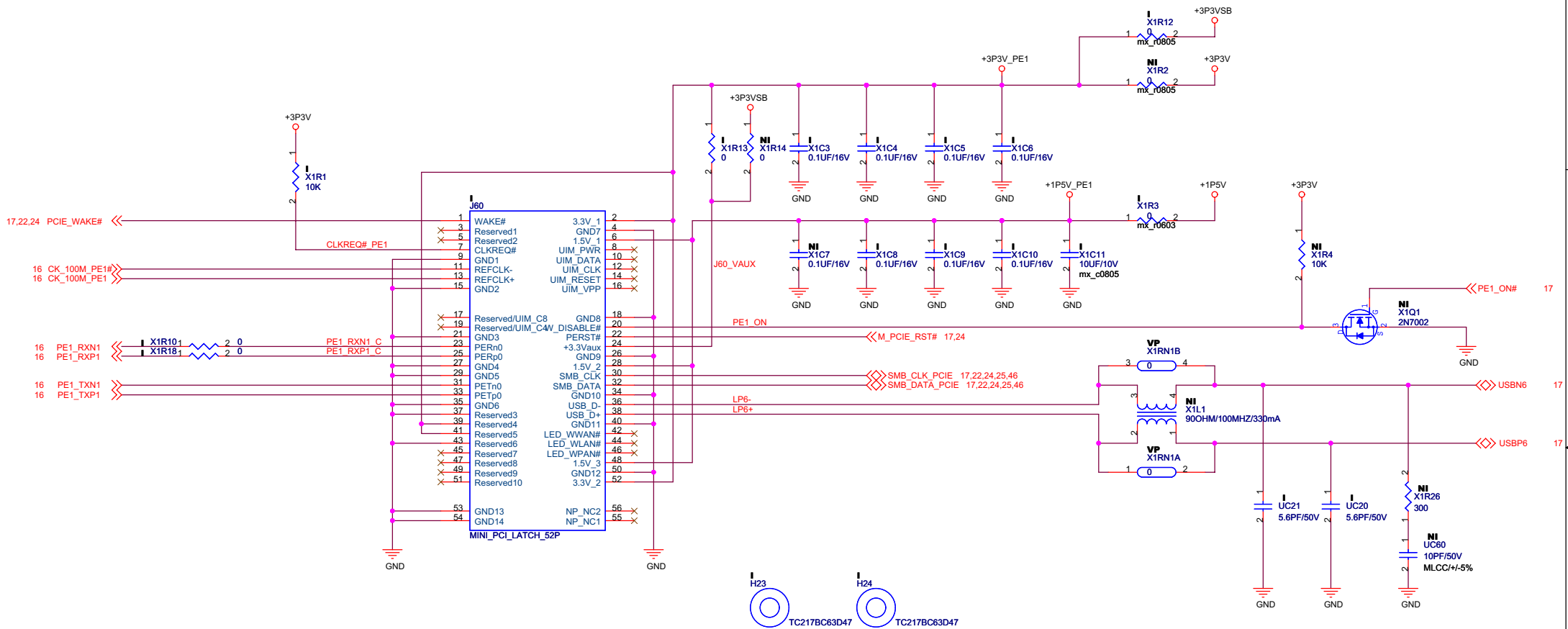
**PEGATRON** Title : **PCI-E X16 SLOT**

Pegatron Corp. Engineer: **Melly\_Liu**

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

Date: Monday, March 12, 2012 Sheet 22 of 71

# Mini-PCIE Slot (Half Card) for Wifi



PEGATRON DT-MB RESTRICTED SECRET

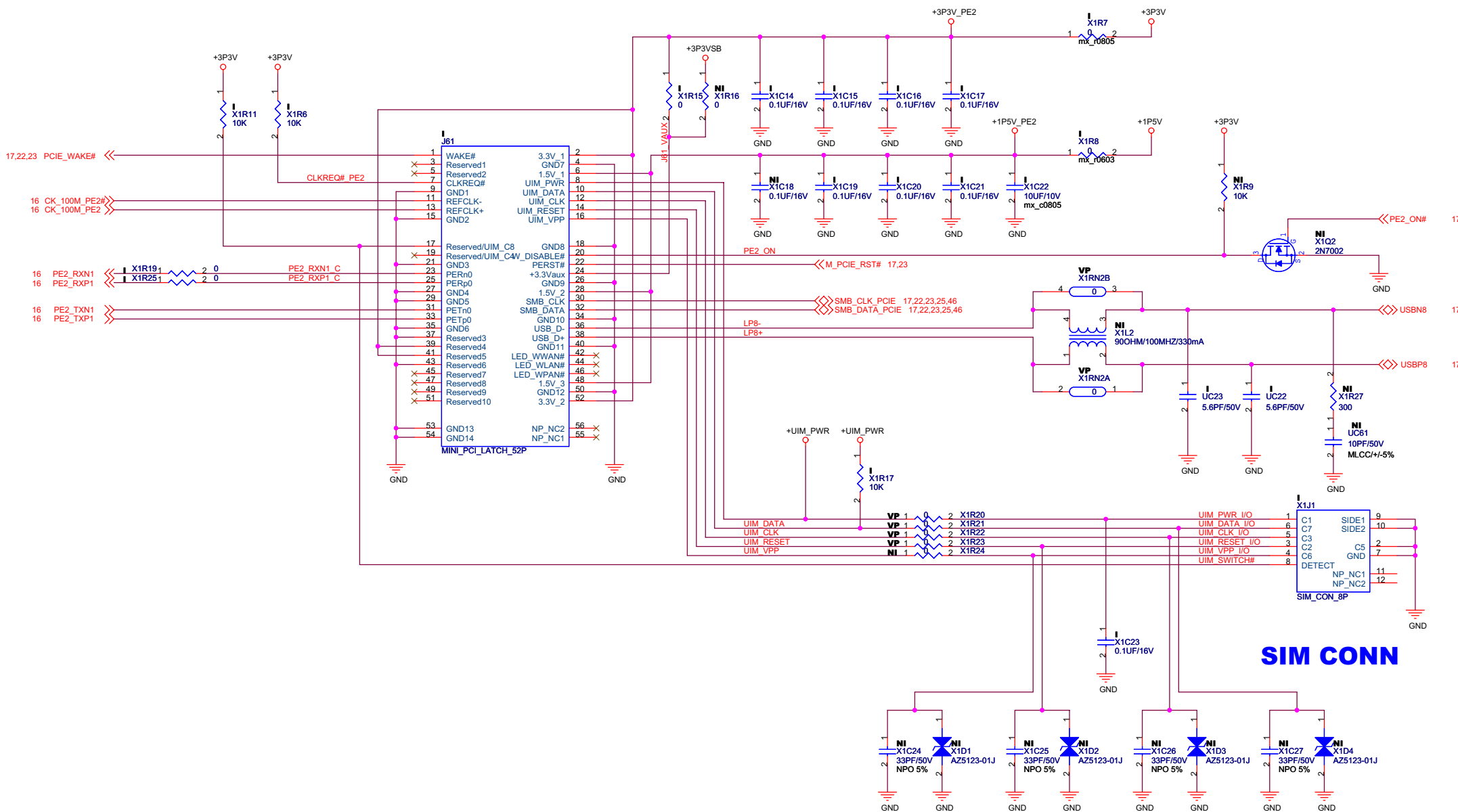
**PEGATRON** Title : MINI-PCIE SLOT-1

Pegatron Corp. Engineer: *Melly\_Liu*

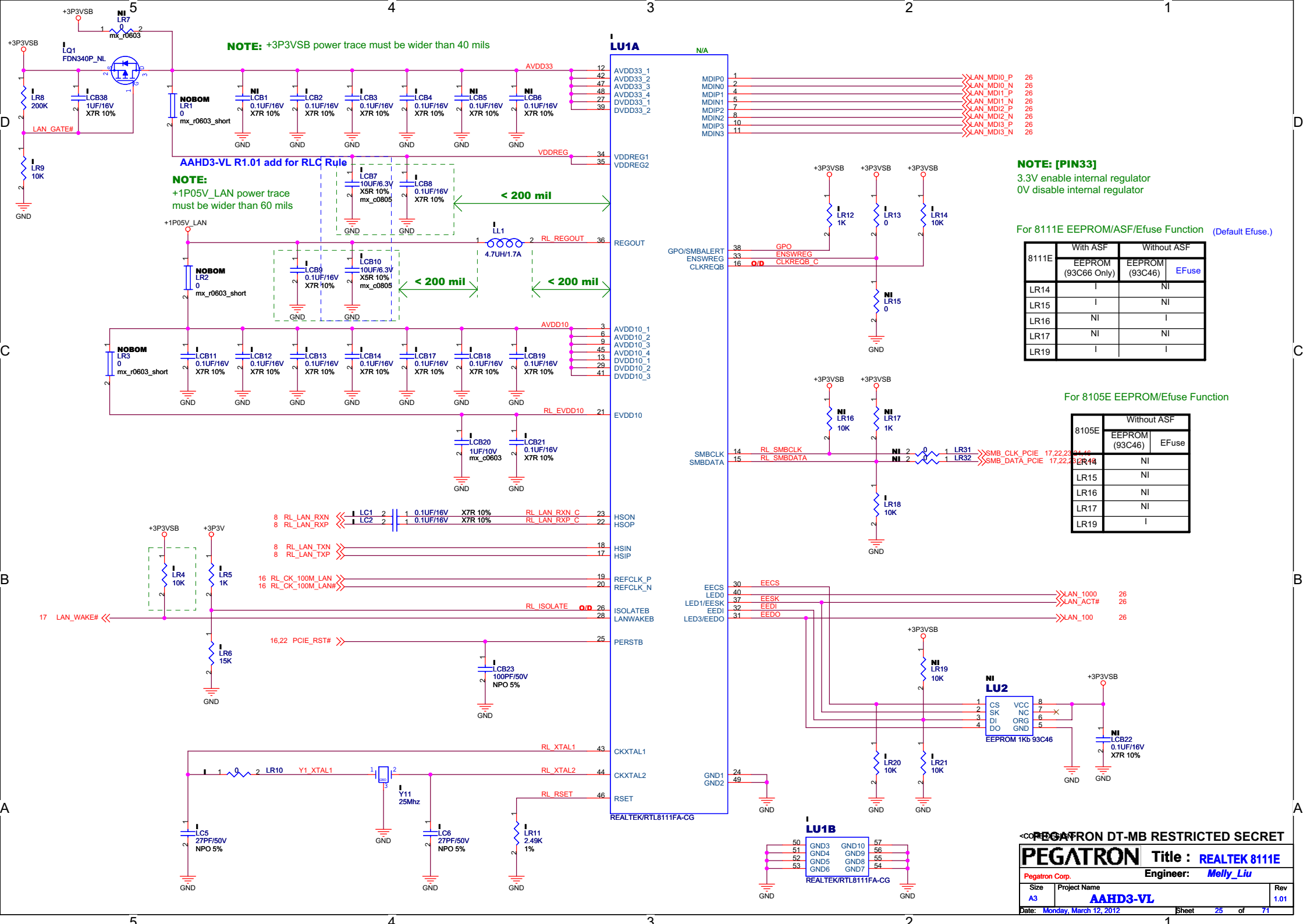
Size	Project Name	Rev
A3	AAHD3-VL	1.01

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# Mini-PCIE Slot (Full Card)







**NOTE:** +3P3VSB power trace must be wider than 40 mils

**AAHD3-VL R1.01 add for RLC Rule**

**NOTE:**  
+1P05V\_LAN power trace must be wider than 60 mils

<math>200\text{ mil}</math>

<math>200\text{ mil}</math>

**NOTE: [PIN33]**  
3.3V enable internal regulator  
0V disable internal regulator

For 8111E EEPROM/ASF/Efuse Function (Default Efuse.)

8111E	With ASF	Without ASF	
	EEPROM (93C66 Only)	EEPROM (93C46)	EFuse
LR14	I		NI
LR15	I		NI
LR16	NI	I	
LR17	NI	NI	
LR19	I	I	

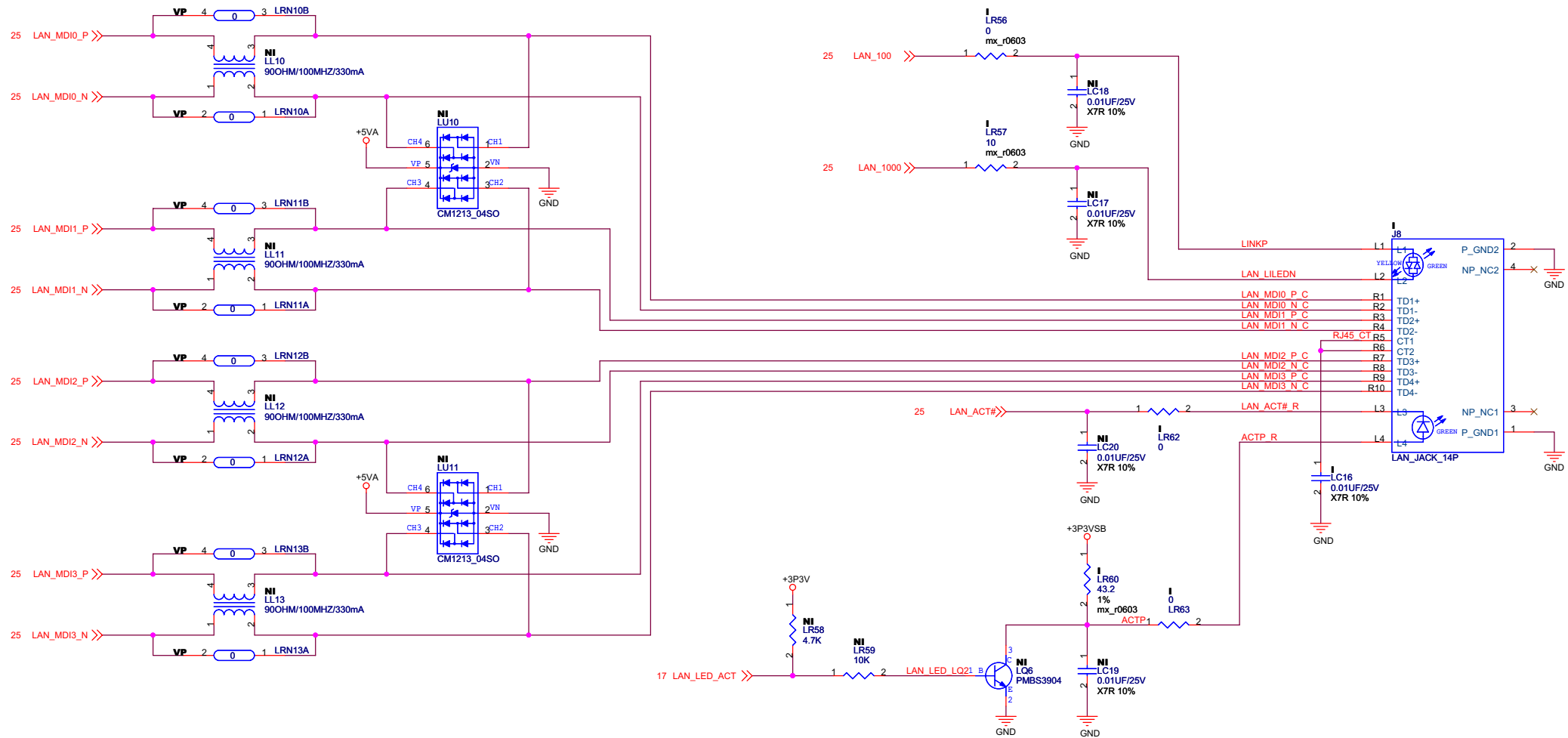
For 8105E EEPROM/Efuse Function

8105E	Without ASF	
	EEPROM (93C46)	EFuse
LR14	NI	
LR15	NI	
LR16	NI	
LR17	NI	
LR19	I	

REALTEK/RTL8111FA-CG

PEGATRON DT-MB RESTRICTED SECRET  
**PEGATRON** Title: REALTEK 8111E  
Pegatron Corp. Engineer: Melly\_Liu

Size	Project Name	Rev
A3	AAHD3-VL	1.01
Date:	Monday, March 12, 2012	Sheet 25 of 71

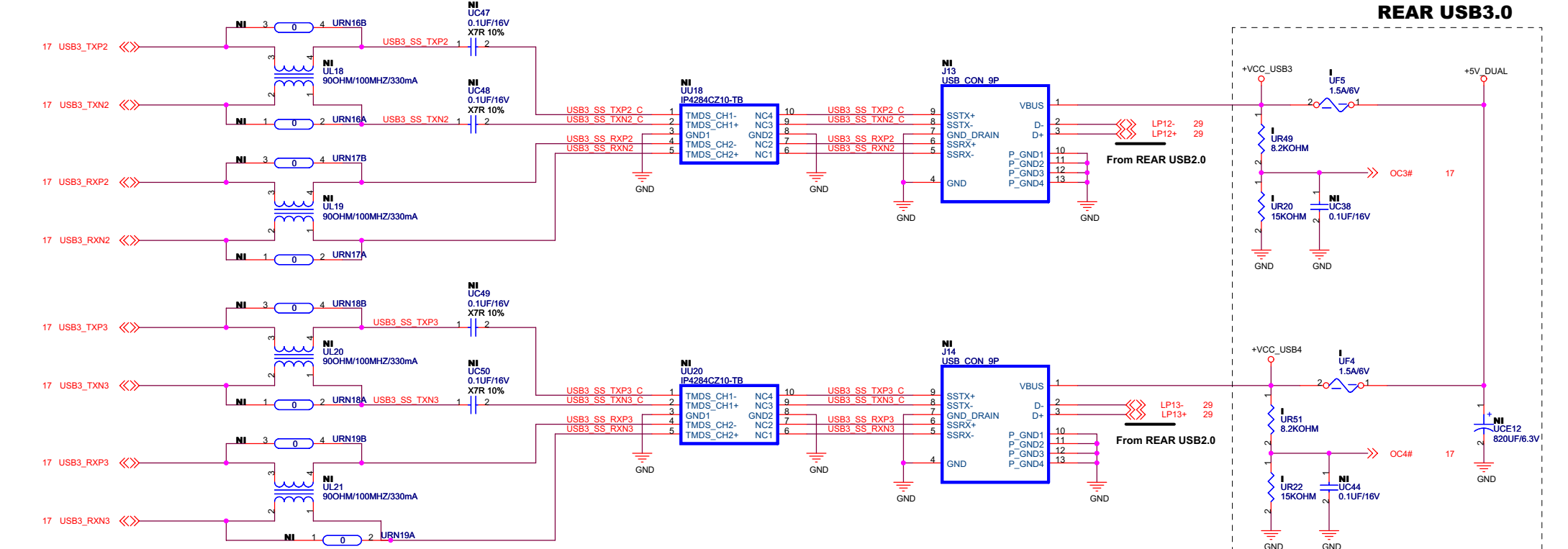
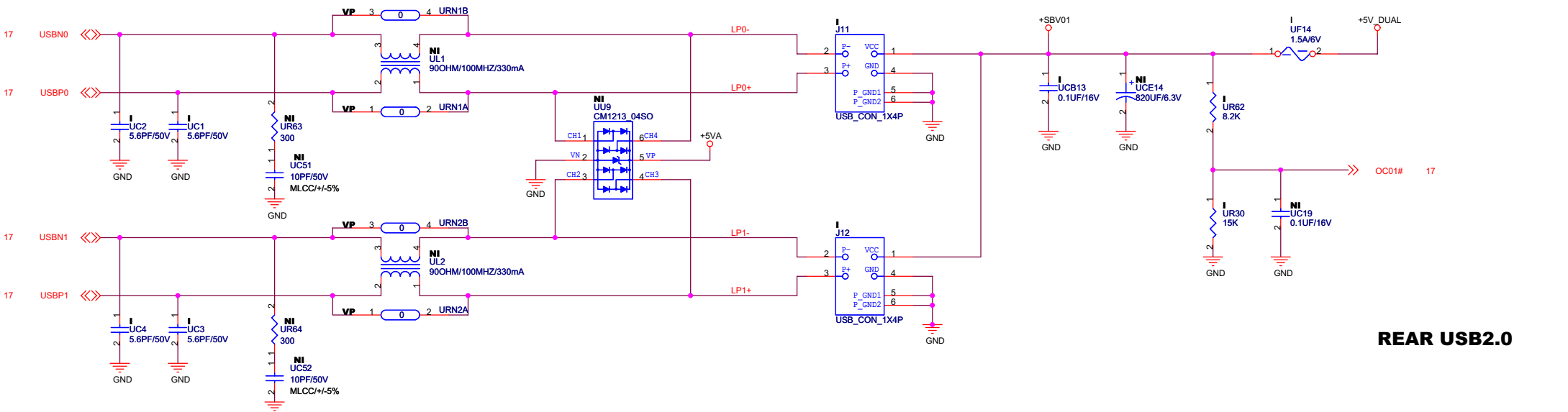


PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : LAN JACK

Pegatron Corp. Engineer: Melly\_Liu

Size	Project Name	Rev
A3	AAHD3-VL	1.01
Date: Monday, March 12, 2012	Sheet 26 of 71	



**PEGATRON DT-MB RESTRICTED SECRET**

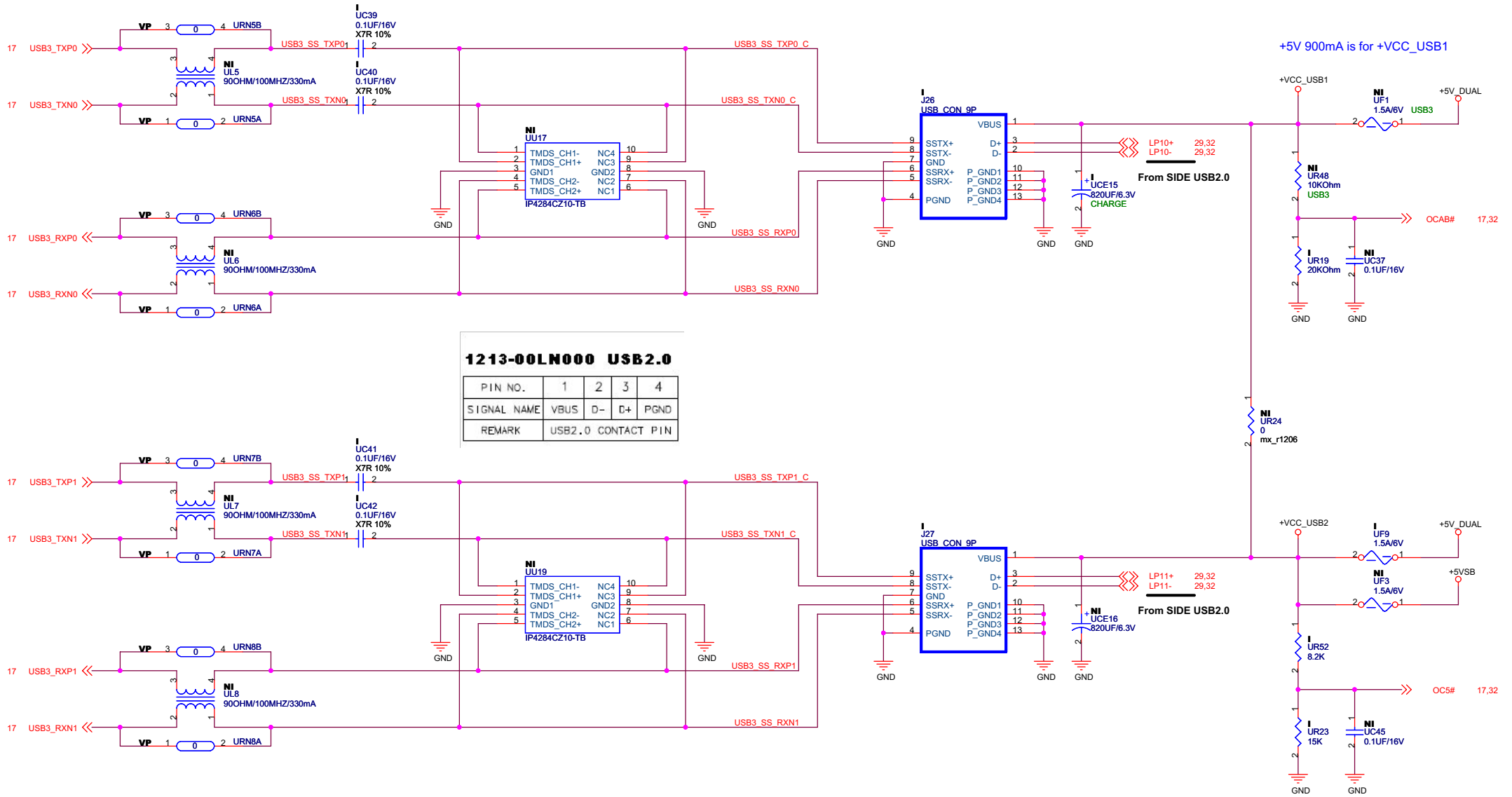
**PEGATRON** Title : REAR USB2.0 PORT

Pegatron Corp. Engineer: *Melly\_Liu*

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

Date: Monday, March 12, 2012 Sheet 27 of 71

# SIDE USB3.0



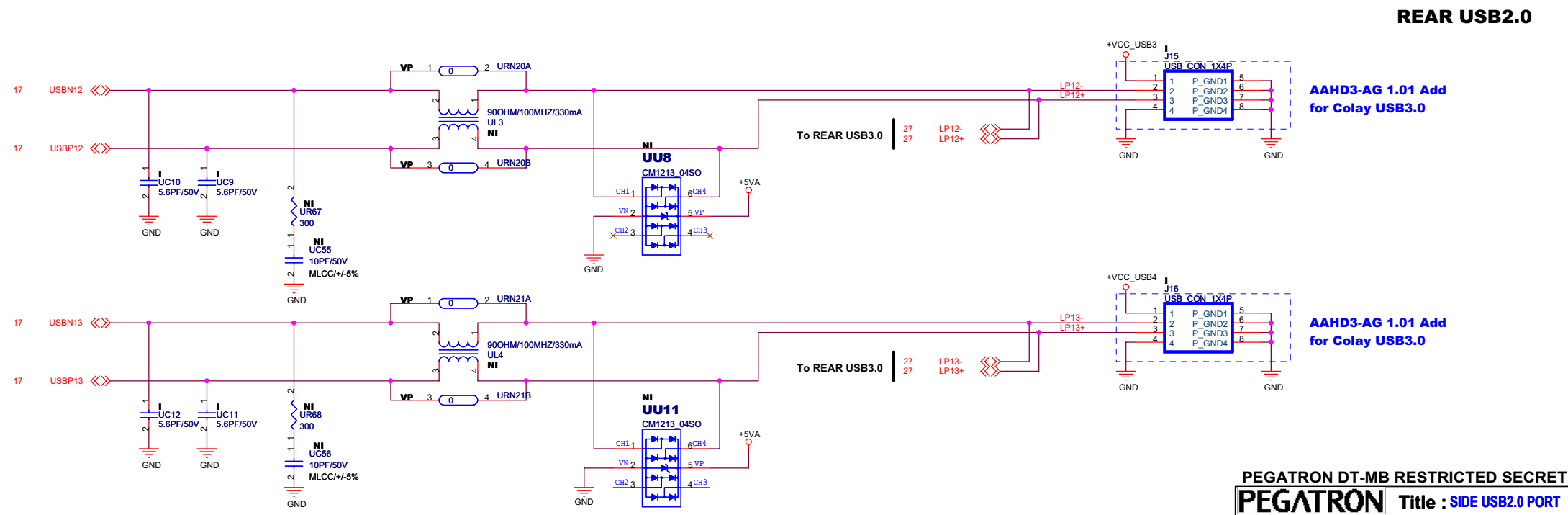
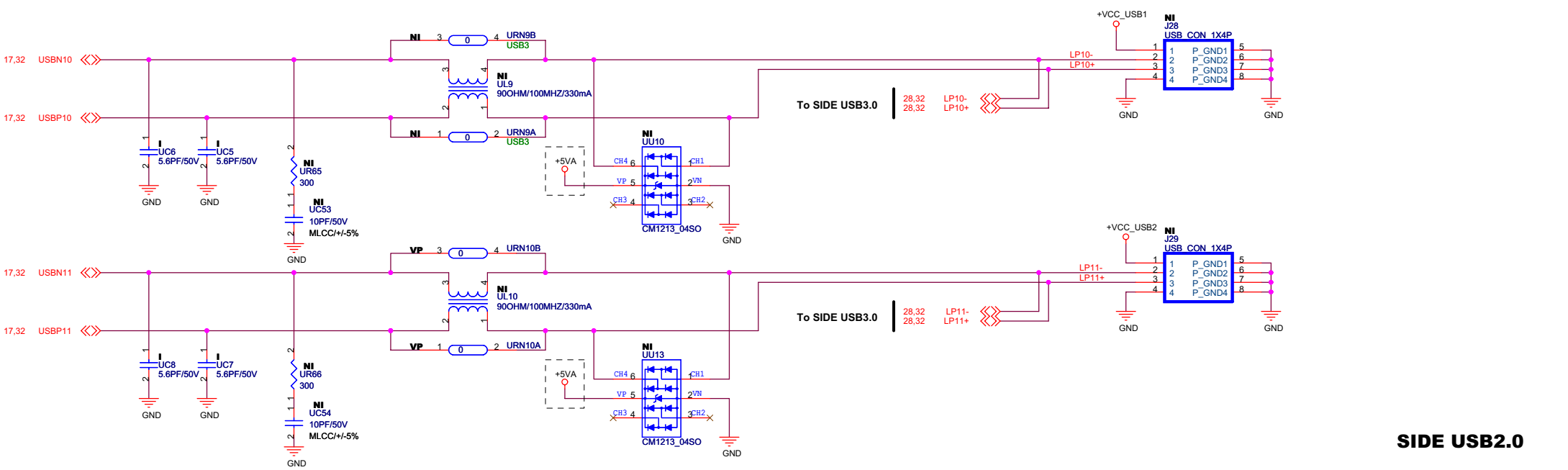
## 1213-00LN000 USB2.0

PIN NO.	1	2	3	4
SIGNAL NAME	VBUS	D-	D+	PGND
REMARK	USB2.0 CONTACT PIN			

REGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : **SIDE USB3.0 PORT**  
 Pegatron Corp. Engineer: **Melly\_Liu**

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01
Date:	Monday, March 12, 2012	Sheet 28 of 71



AAHD3-AG 1.01 Add for Colay USB3.0

AAHD3-AG 1.01 Add for Colay USB3.0

PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : SIDE USB2.0 PORT

Pegatron Corp. Engineer: *Melly\_Liu*

Size	Project Name	Rev
A3	AAHD3-VL	1.01



PEGATRON DT-MB RESTRICTED SECRET

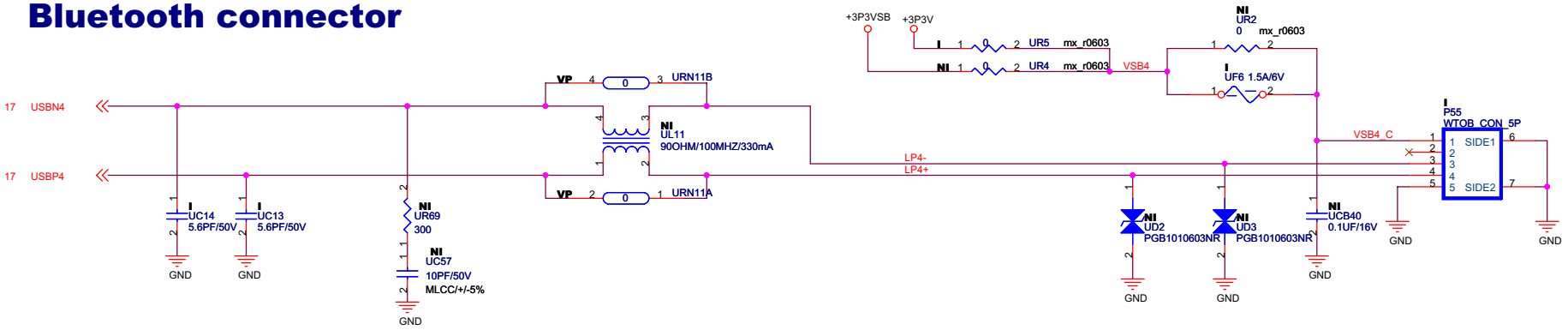
**PEGATRON** Title : USB PORT CONTROL

Pegatron Corp. Engineer: *Melly\_Liu*

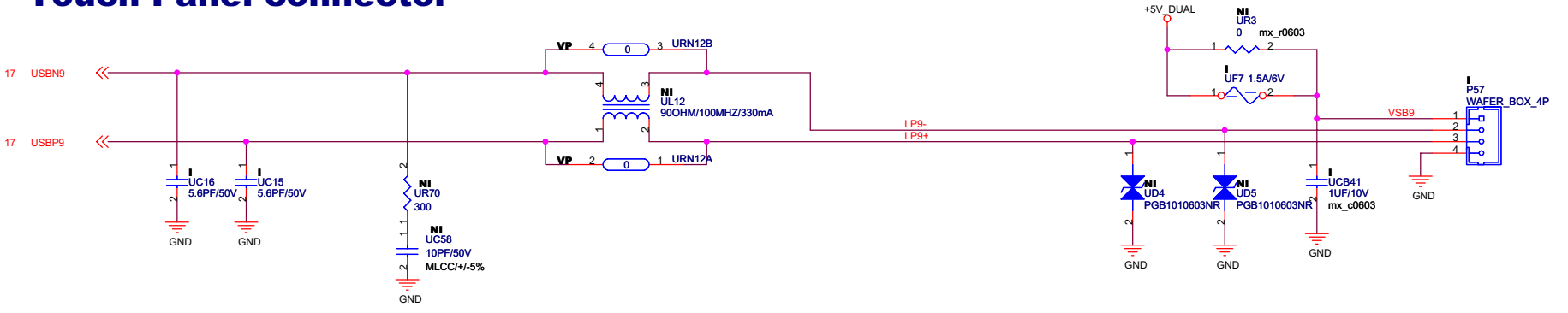
Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

Date: Monday, March 12, 2012 Sheet 30 of 71

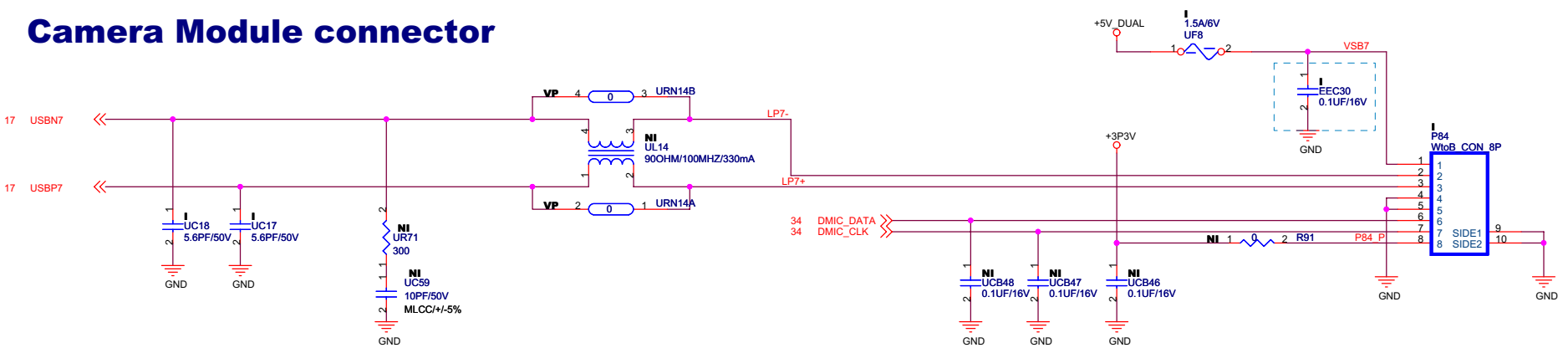
# Bluetooth connector



# Touch Panel connector



# Camera Module connector



PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : USB HEADER

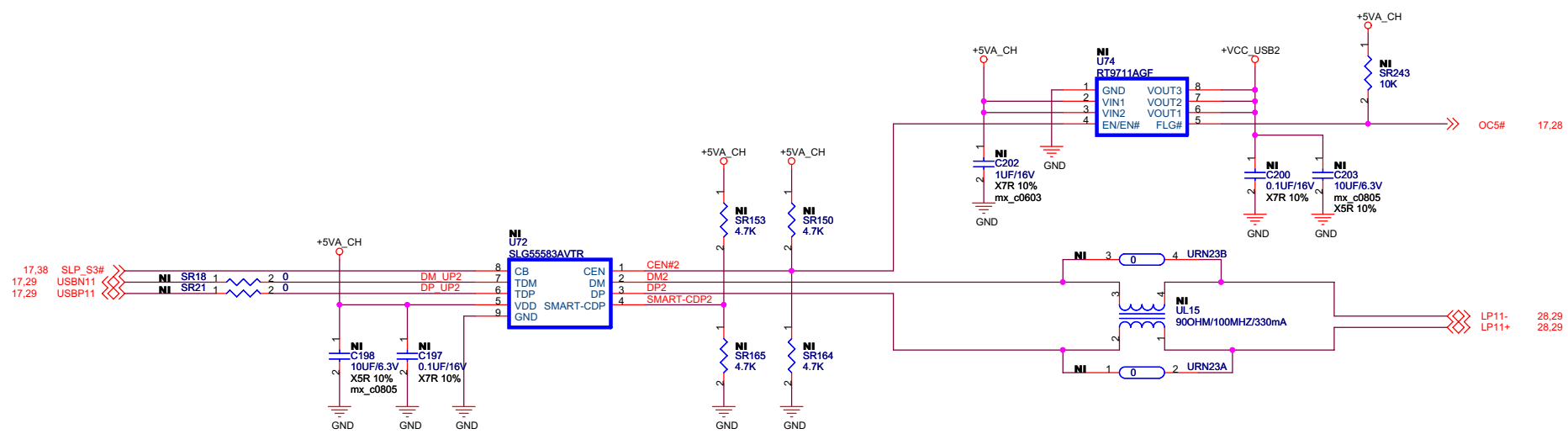
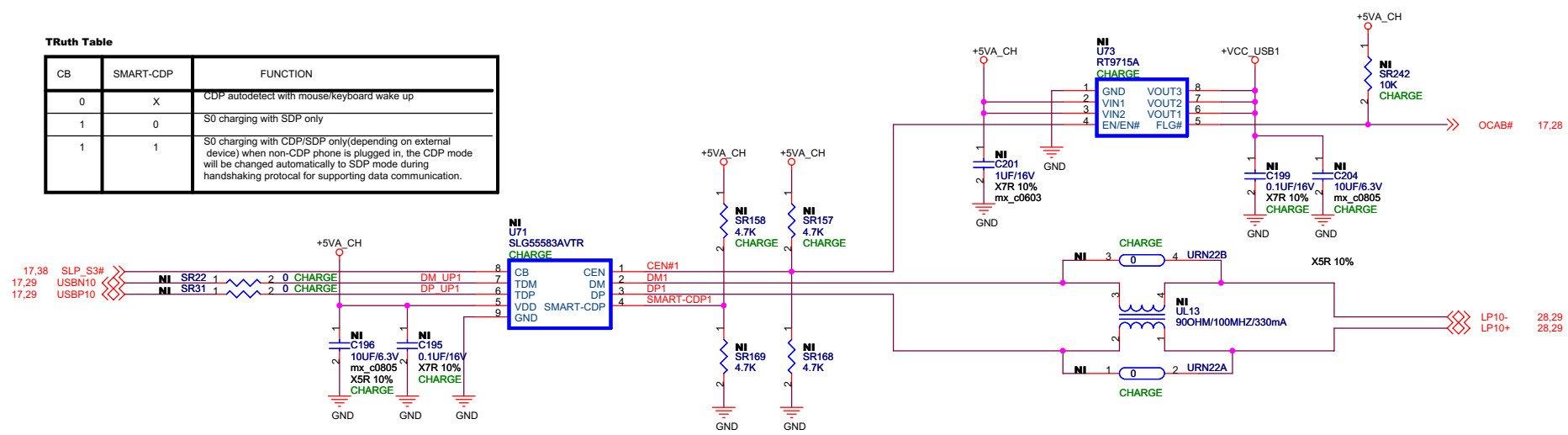
Pegatron Corp. Engineer: *Melly\_Liu*

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

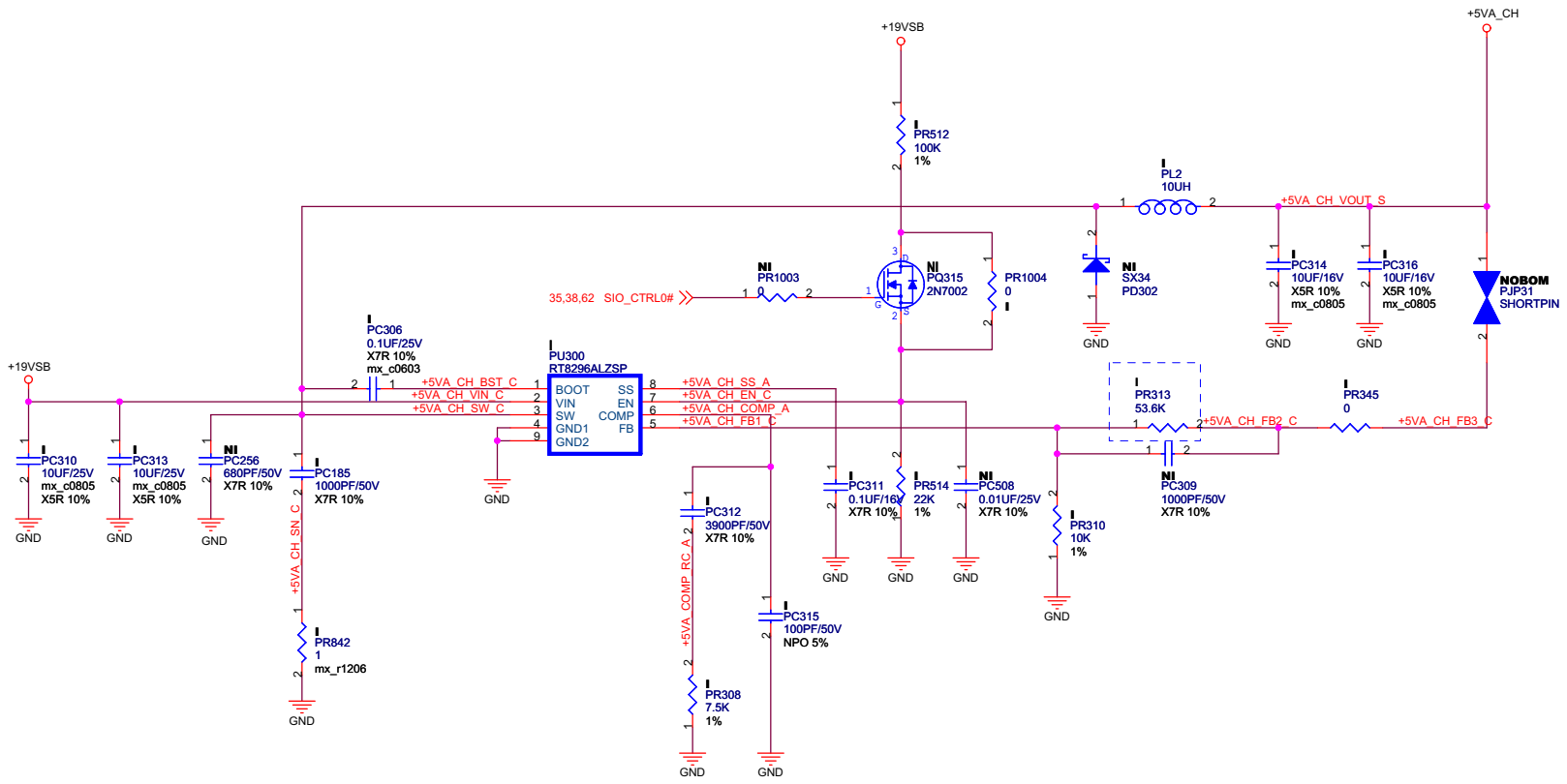
Date: Monday, March 12, 2012 Sheet 31 of 71

**TRuth Table**

CB	SMART-CDP	FUNCTION
0	X	CDP autodetect with mouse/keyboard wake up
1	0	S0 charging with SDP only
1	1	S0 charging with CDP/SDP only (depending on external device) when non-CDP phone is plugged in, the CDP mode will be changed automatically to SDP mode during handshaking protocol for supporting data communication.



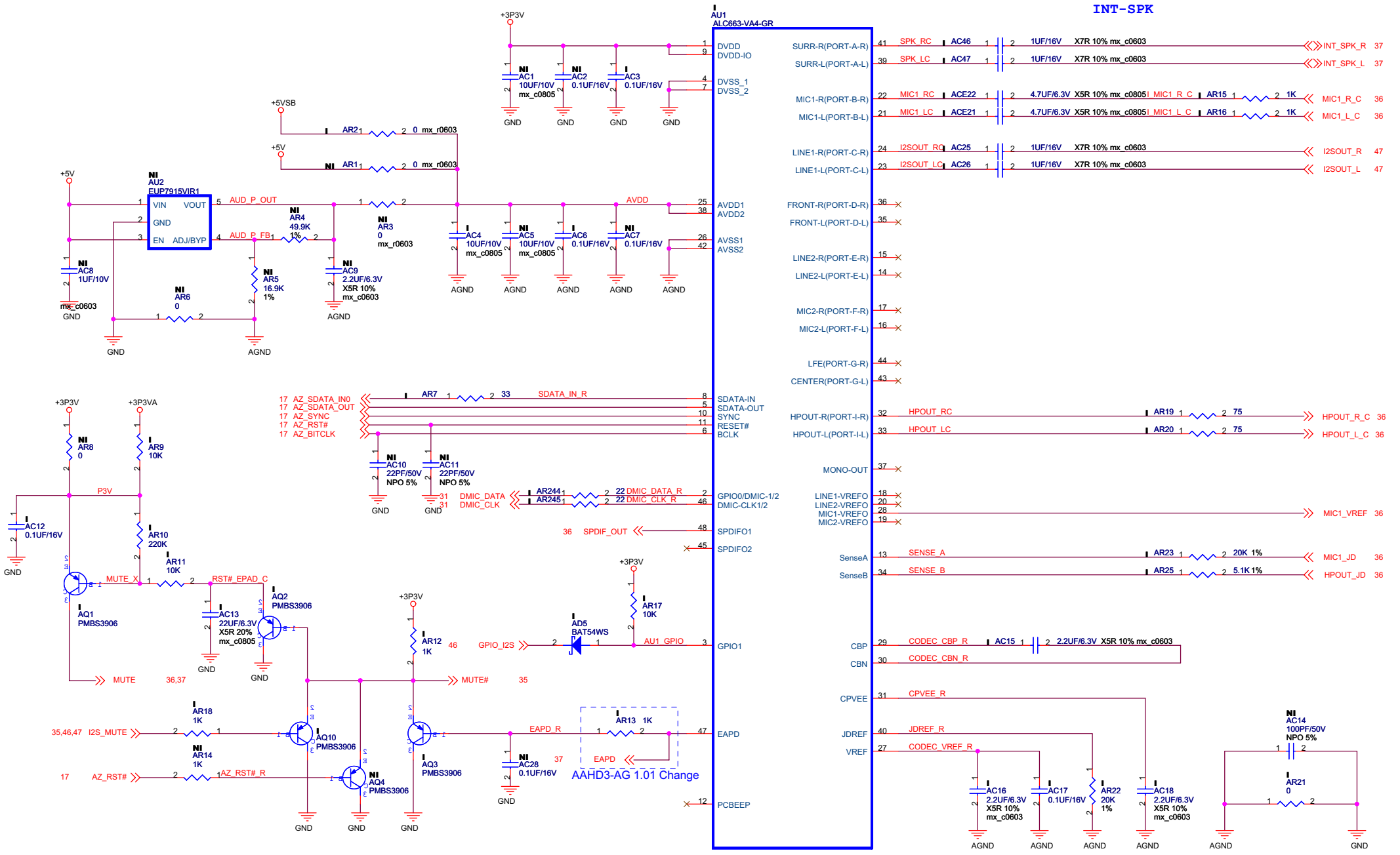




<Variant Name>

<b>PEGATRON</b>		Title : <b>+5VA_CH</b>	
PEGATRON COMPUTER INC		Engineer: <b>Melly_Liu</b>	
Size	Project Name		Rev
A3	<b>AAHD3-VL</b>		1.01
Date: Monday, March 12, 2012		Sheet	33 of 71

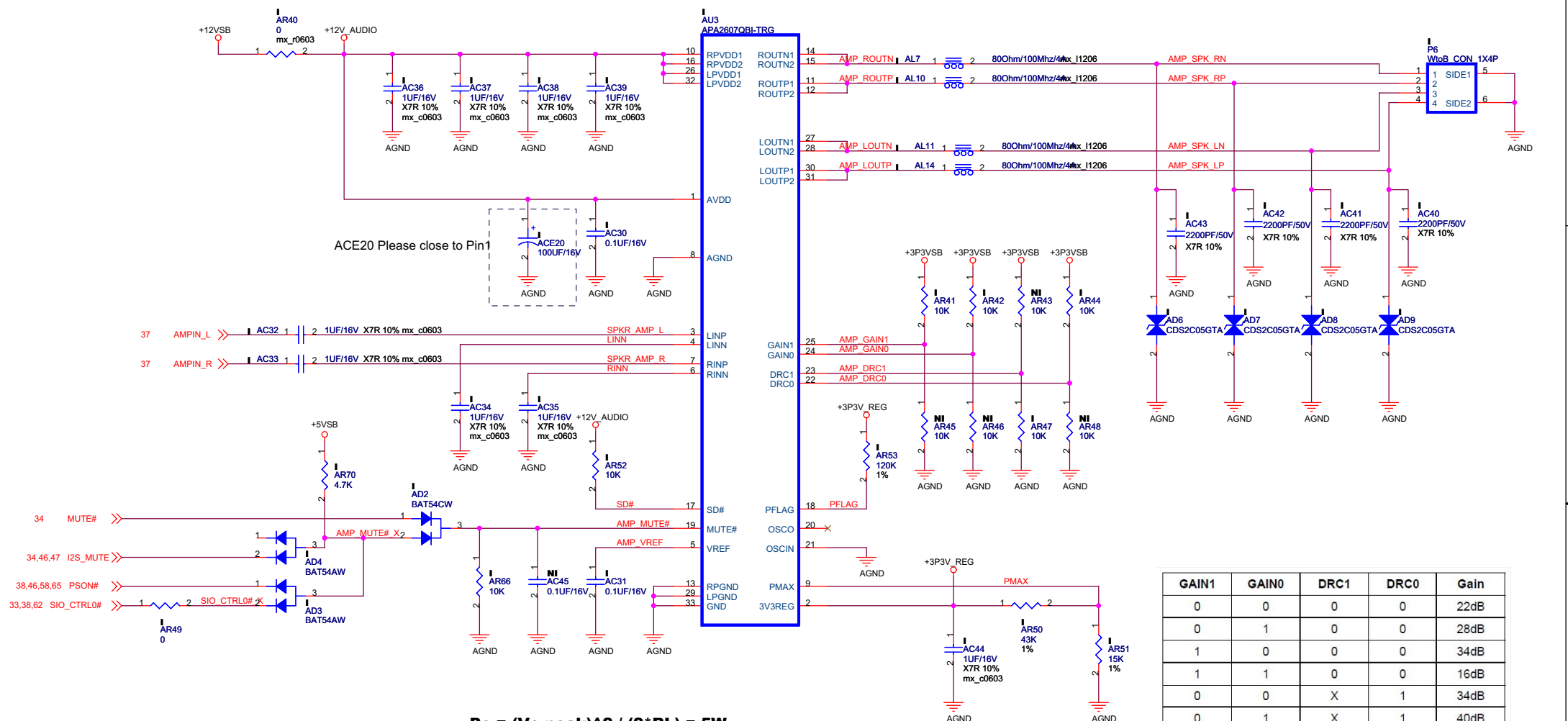
INT-SPK



PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : ALC663 CODEC  
 Pegatron Corp. Engineer: Melly\_Liu

Size	Project Name	Rev
A3	AAHD3-VL	1.01
Date: Monday, March 12, 2012	Sheet 34 of 71	

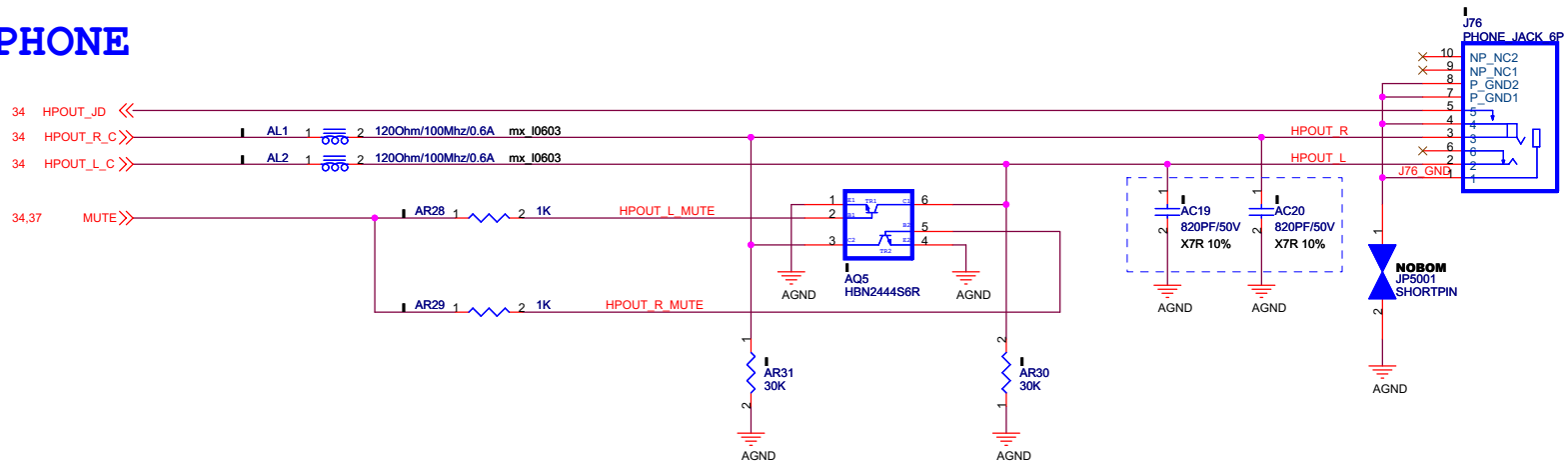


ACE20 Please close to Pin1

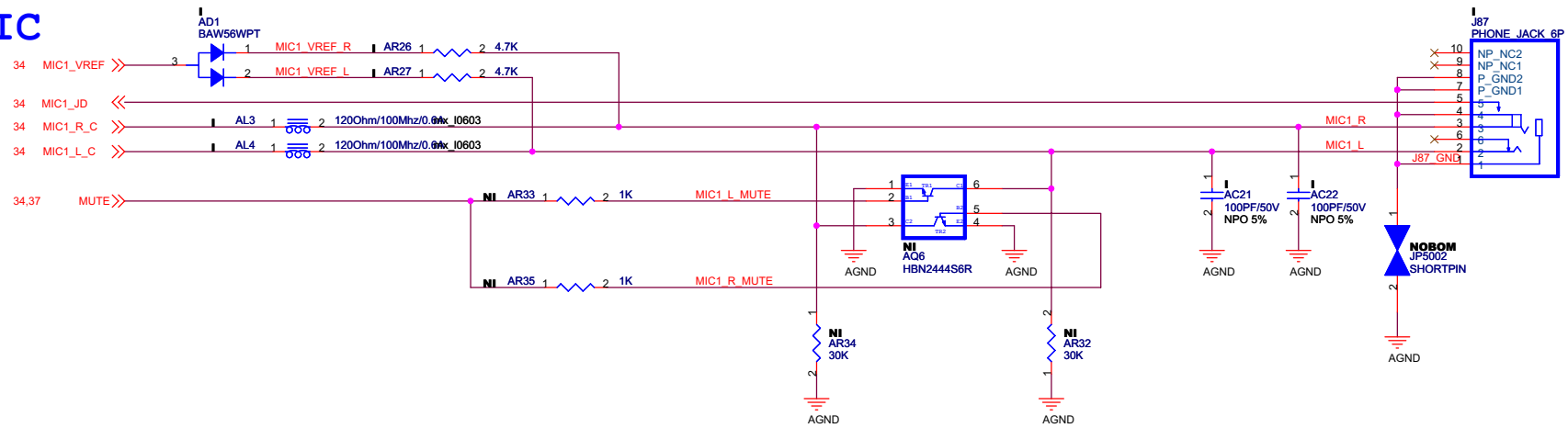
$P_o = (V_o,peak)^2 / (2 * R_L) = 5W$   
 $\rightarrow V_o,peak = 8.945V$   
 $V_o,peak = (1.65 * V_{pmax}) * 11.23$   
 $\rightarrow V_{pmax} = 0.853V$   
 $V_{pmax} = 0.853V$   
 $\rightarrow V_o,peak = (1.65 * V_{pmax}) * 11.23 = 8.95V$   
 $\rightarrow P_o = (V_o,peak)^2 / (2 * R_L) = 5.006W$

GAIN1	GAIN0	DRC1	DRC0	Gain
0	0	0	0	22dB
0	1	0	0	28dB
1	0	0	0	34dB
1	1	0	0	16dB
0	0	X	1	34dB
0	1	X	1	40dB
1	0	X	1	46dB
1	1	X	1	28dB
0	0	1	X	34dB
0	1	1	X	40dB
1	0	1	X	46dB
1	1	1	X	28dB

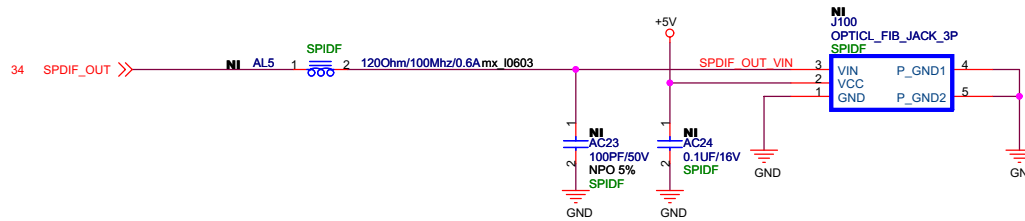
# HEADPHONE



# MIC

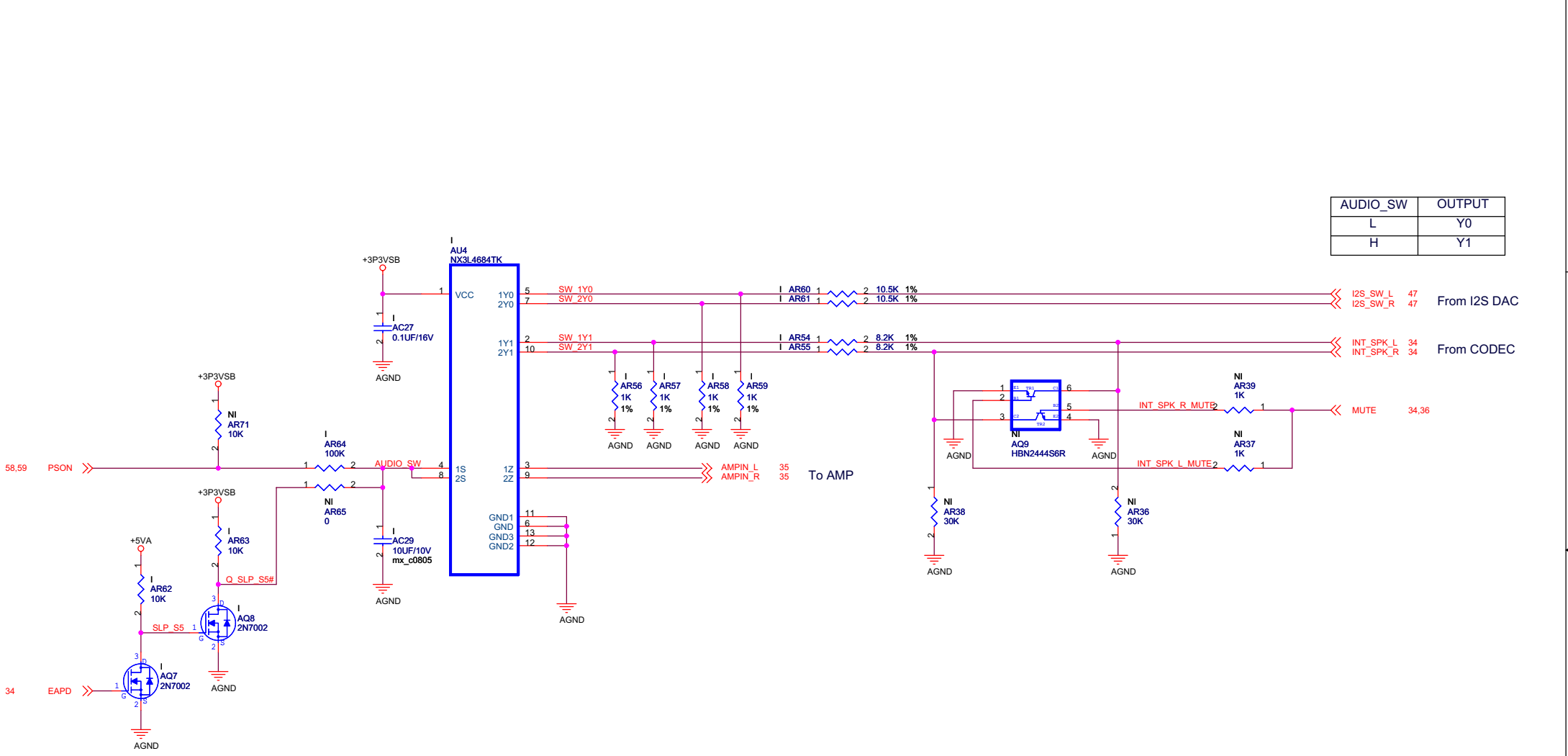


# SPDIF OUT



PEGATRON DT-MB RESTRICTED SECRET

<b>PEGATRON</b>		Title : <b>AUDIO CONN</b>	
Pegatron Corp.		Engineer: <b>Melly_Liu</b>	
Size A3	Project Name <b>AAHD3-VL</b>	Rev 1.01	
Date: <b>Monday, March 12, 2012</b>	Sheet <b>36</b> of <b>71</b>		



AUDIO_SW	OUTPUT
L	Y0
H	Y1

I2S\_SW\_L 47  
I2S\_SW\_R 47 From I2S DAC

INT\_SPK\_L 34  
INT\_SPK\_R 34 From CODEC

MUTE 34.36

To AMP

PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : AUDIO SW

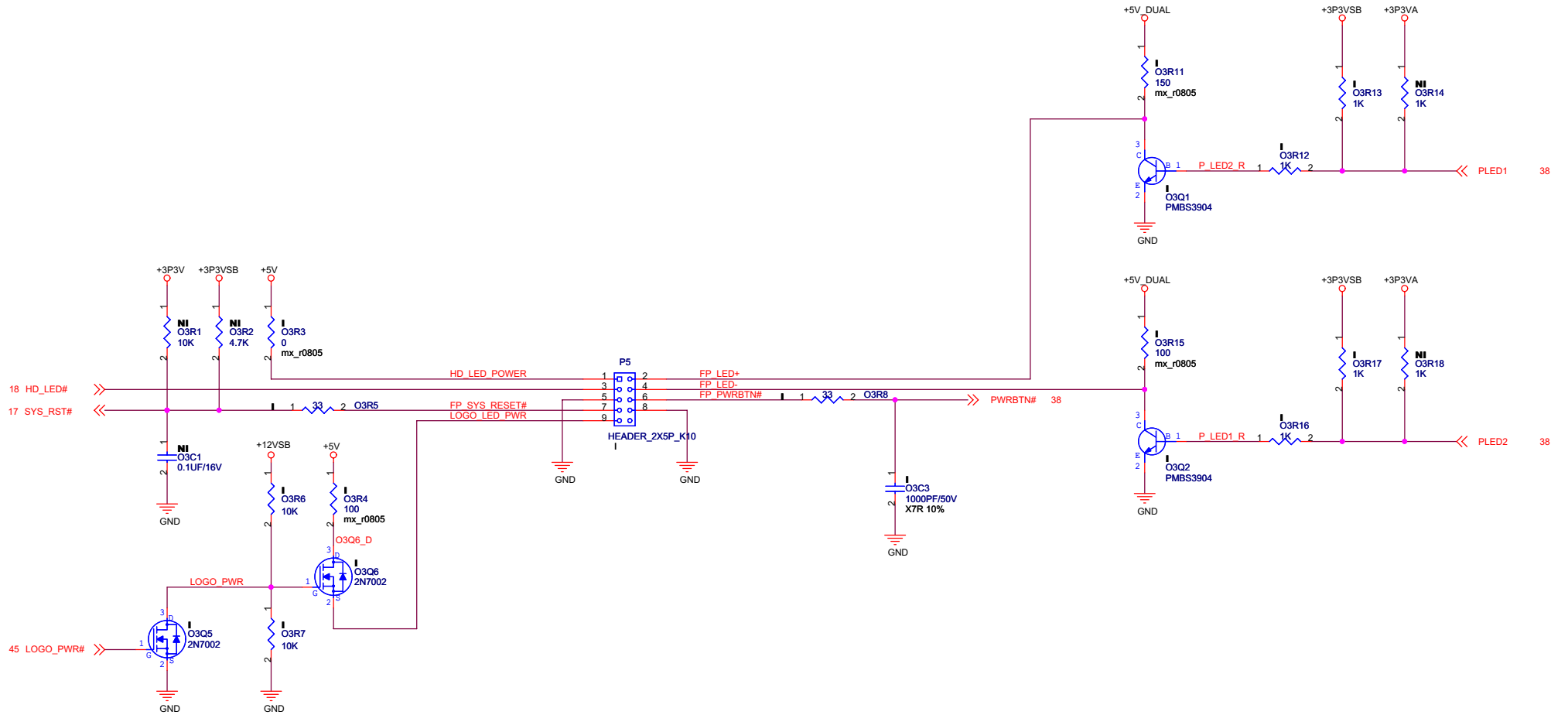
Pegatron Corp. Engineer: Melly\_Liu

Size	Project Name	Rev
A3	AAHD3-VL	1.01

Date: Monday, March 12, 2012 Sheet 37 of 71



# FRONT PANEL / LED CIRCUITRY



PEGATRON DT-MB RESTRICTED SECRET

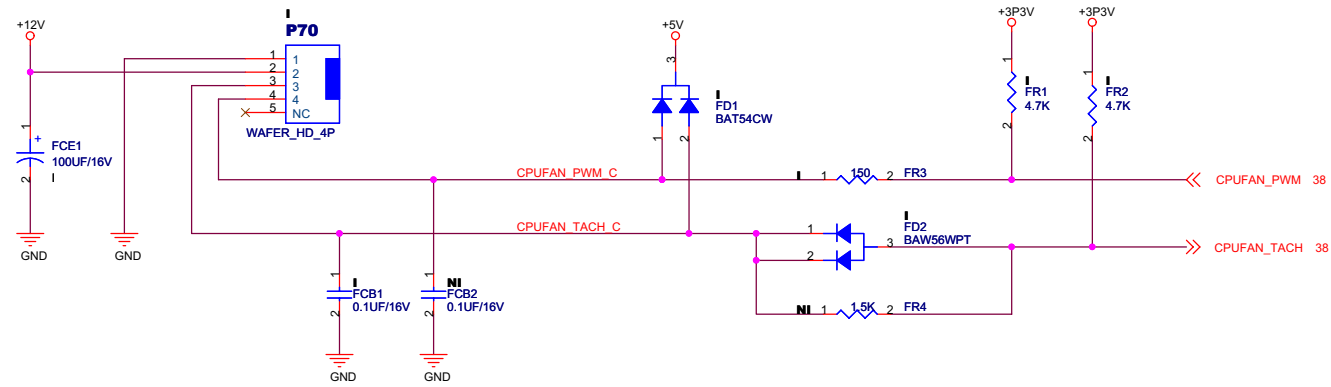
**PEGATRON** Title : FRONT PANEL

Pegatron Corp. Engineer: *Melly\_Liu*

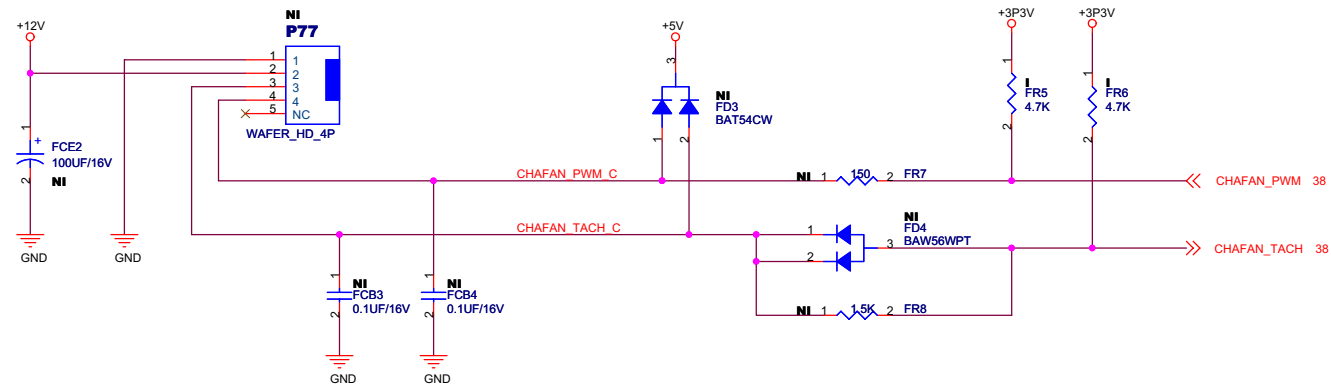
Size	Project Name	Rev
A3	AAHD3-VL	1.01

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# CPU FAN CONNECTOR



# SYS FAN CONNECTOR



PEGATRON DT-MB RESTRICTED SECRET

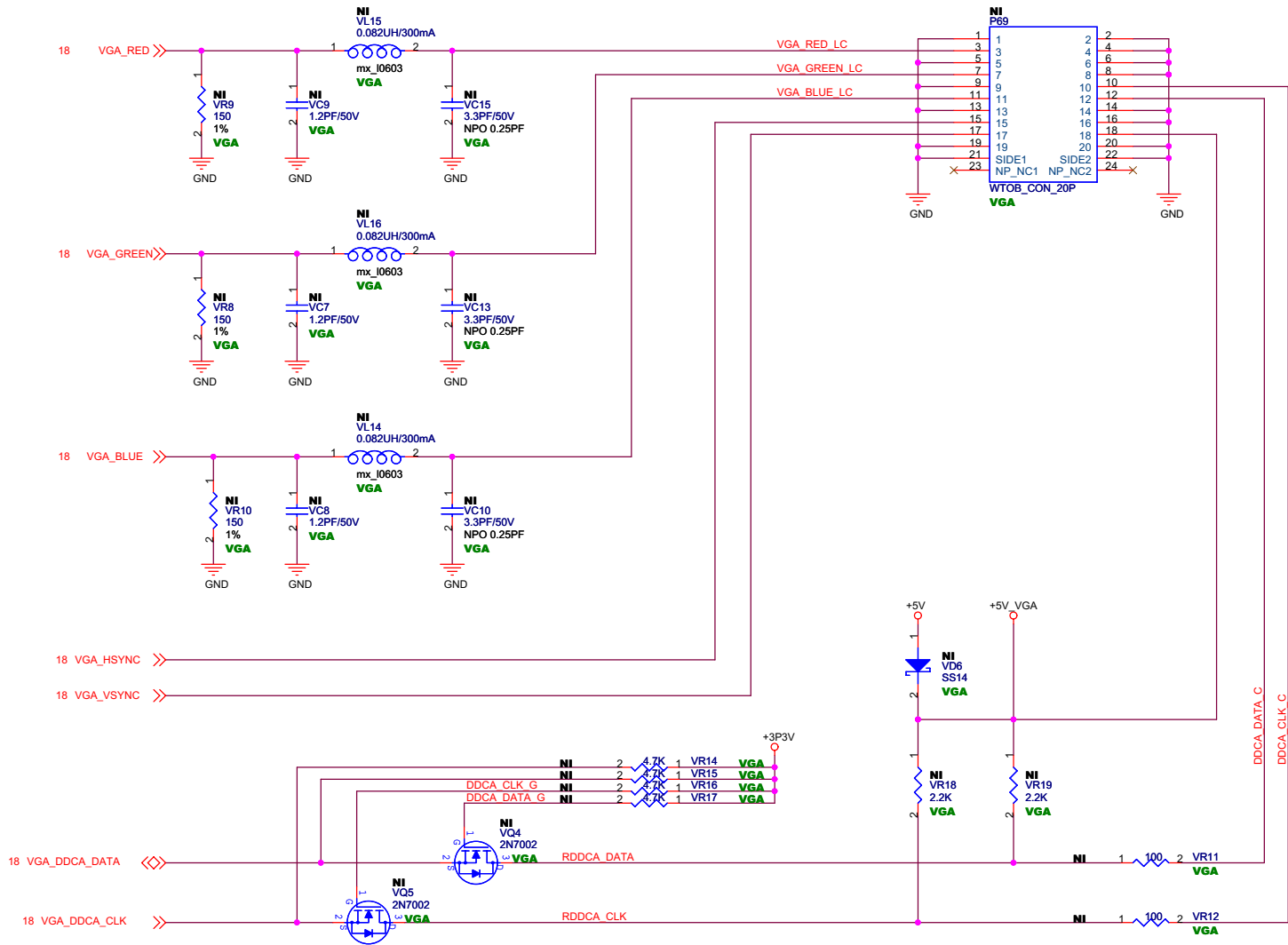
**PEGATRON** Title : FAN CIRCUIT

Pegatron Corp. Engineer: *Melly\_Liu*

Size	Project Name	Rev
A3	AAHD3-VL	1.01

Date: Monday, March 12, 2012 Sheet 40 of 71





PEGATRON DT-MB RESTRICTED SECRET

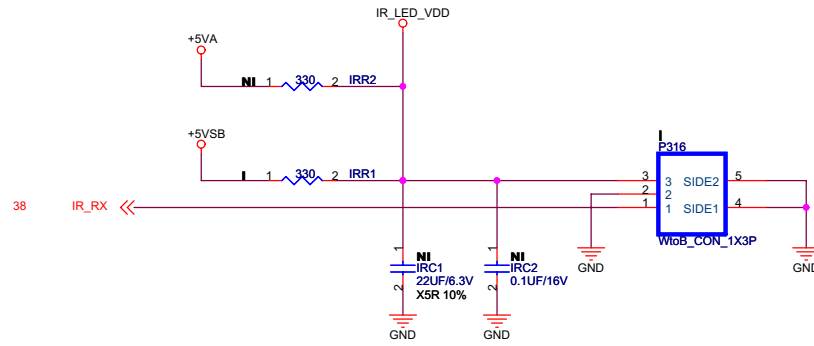
**PEGATRON** Title : **VGA PORT**

Pegatron Corp. Engineer: **Melly\_Liu**

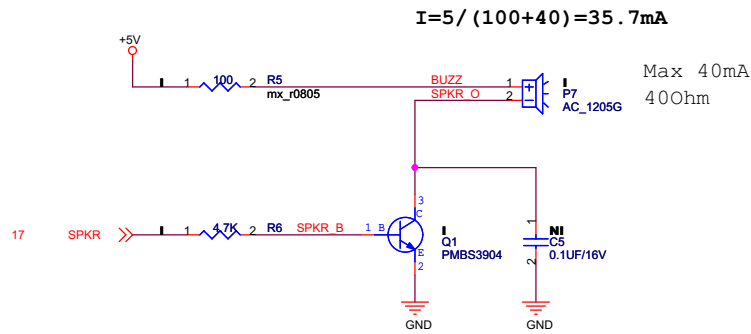
Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

Date: Monday, March 12, 2012 Sheet 41 of 71

# IR LED

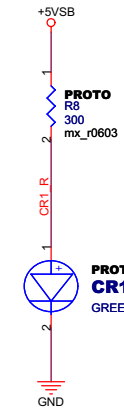
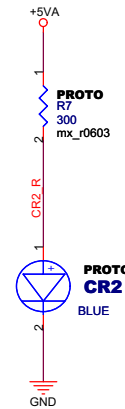


# SPEAKER



+5VA : BLUE

+5VSB : GREEN



PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : IR / SPKR

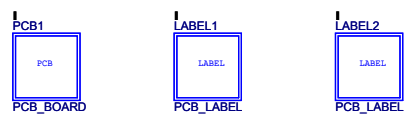
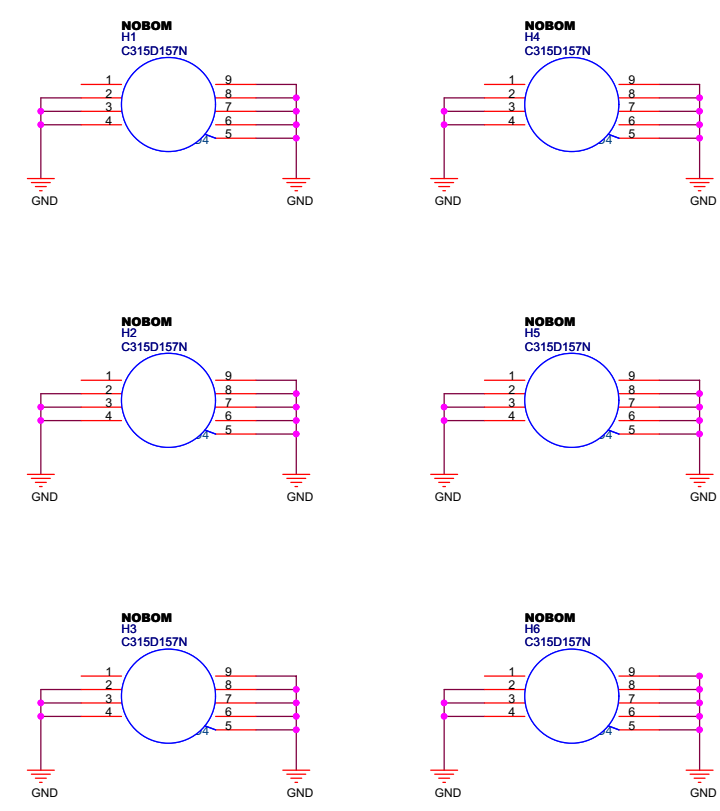
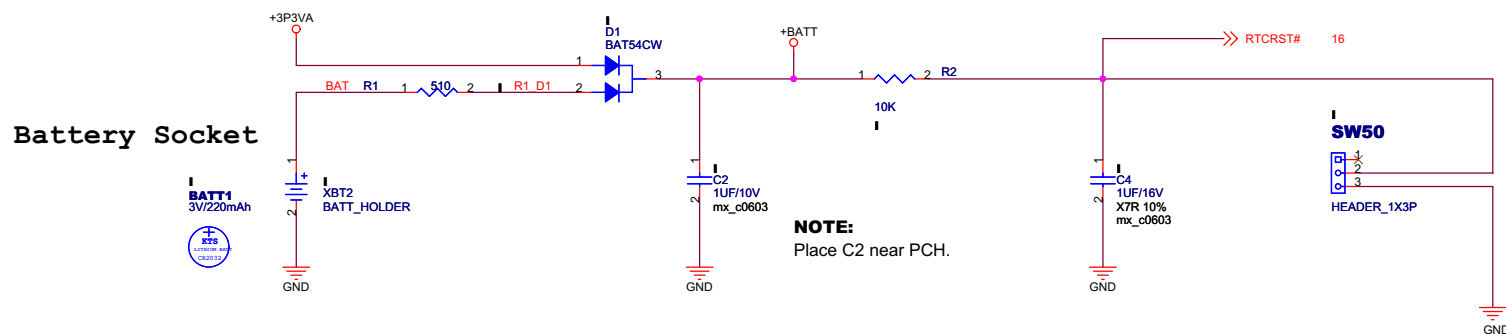
Engineer: Melly\_Liu

Size	Project Name	Rev
A3	AAHD3-VL	1.01

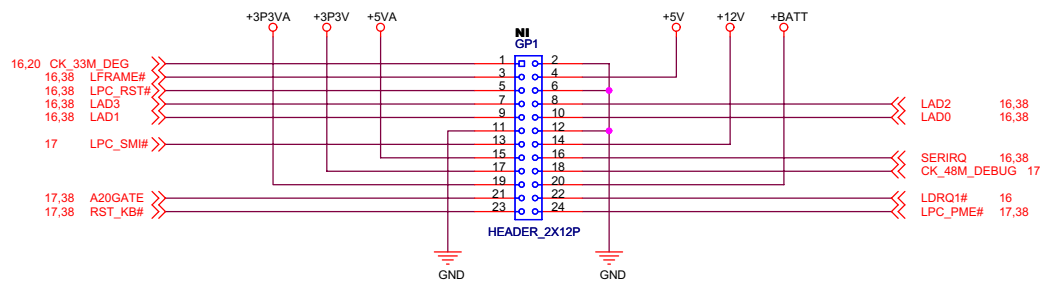
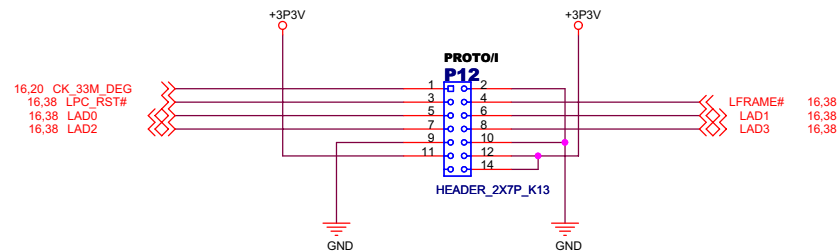
Date: Monday, March 12, 2012 Sheet 42 of 71

# External RTC Circuitry

# CLEAR CMOS



# LPC DEBUG

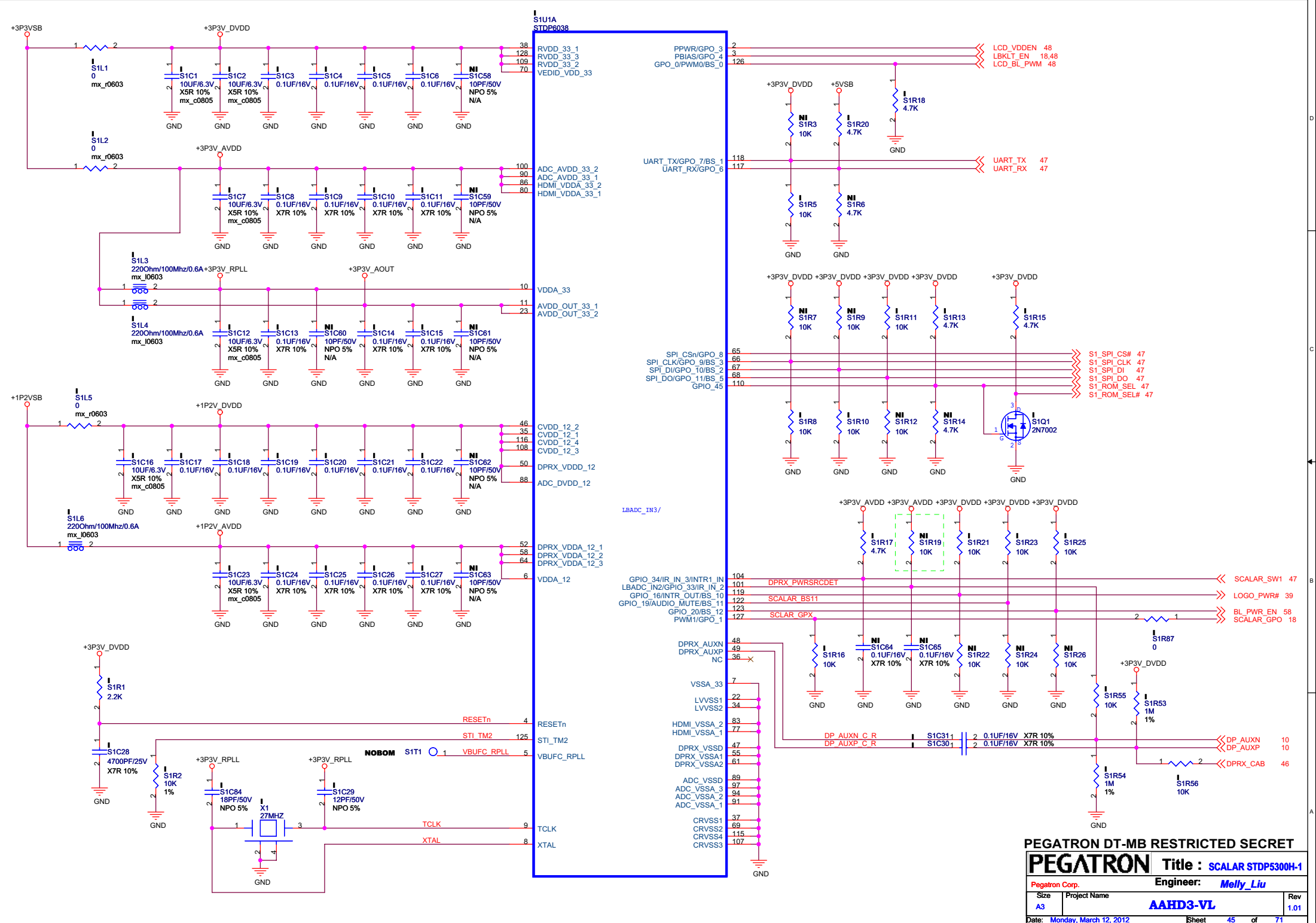


PEGATRON DT-MB RESTRICTED SECRET

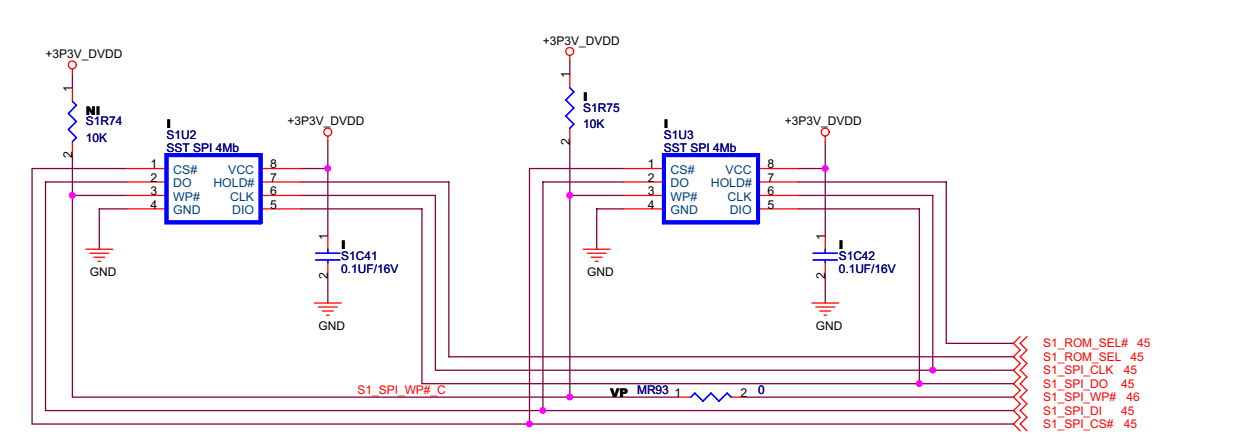
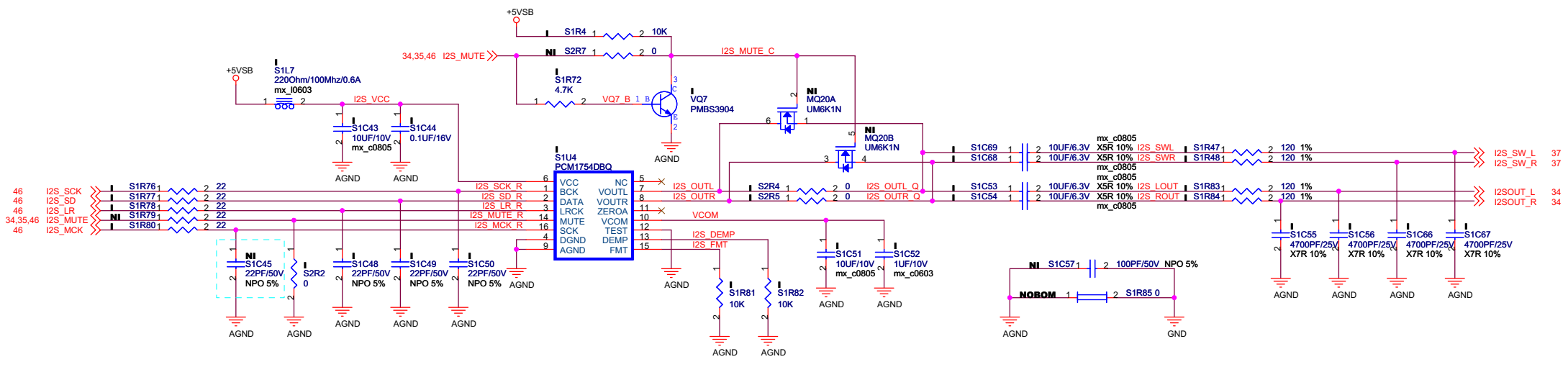
**PEGATRON** Title : **DEBUG HEADER**

Pegatron Corp. Engineer: *Melly\_Liu*

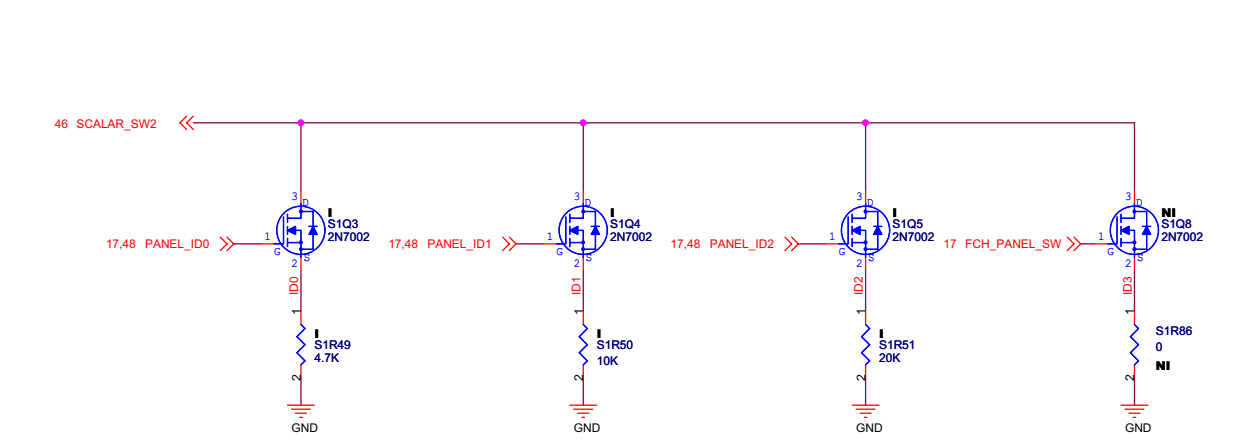
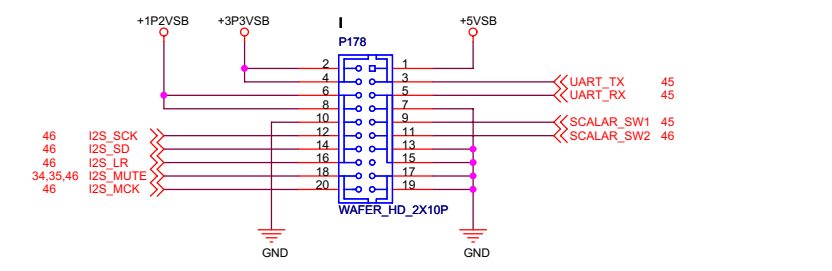
Size A3	Project Name <b>AAHD3-VL</b>	Rev 1.01
Date: Monday, March 12, 2012	Sheet 44 of 71	





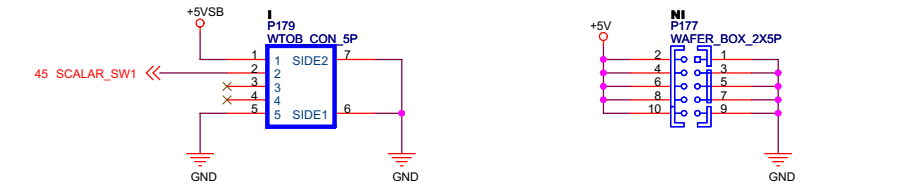


### 3D Scaler

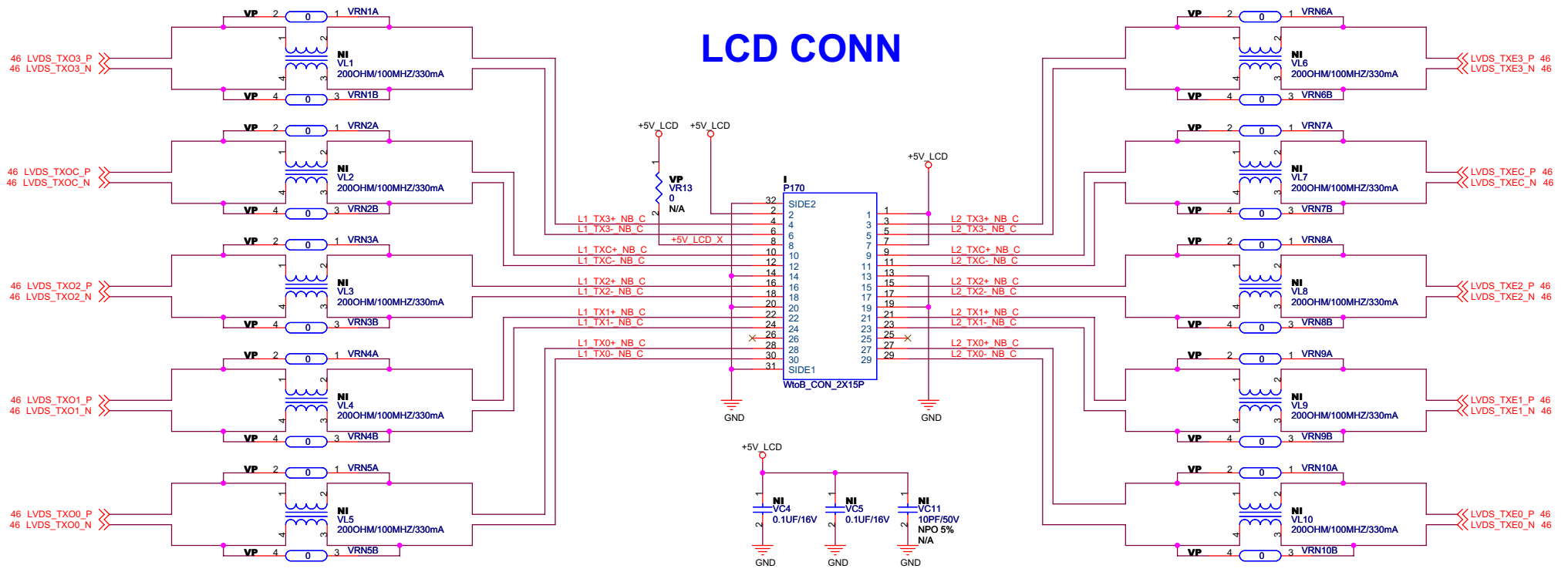


### KEYPAD

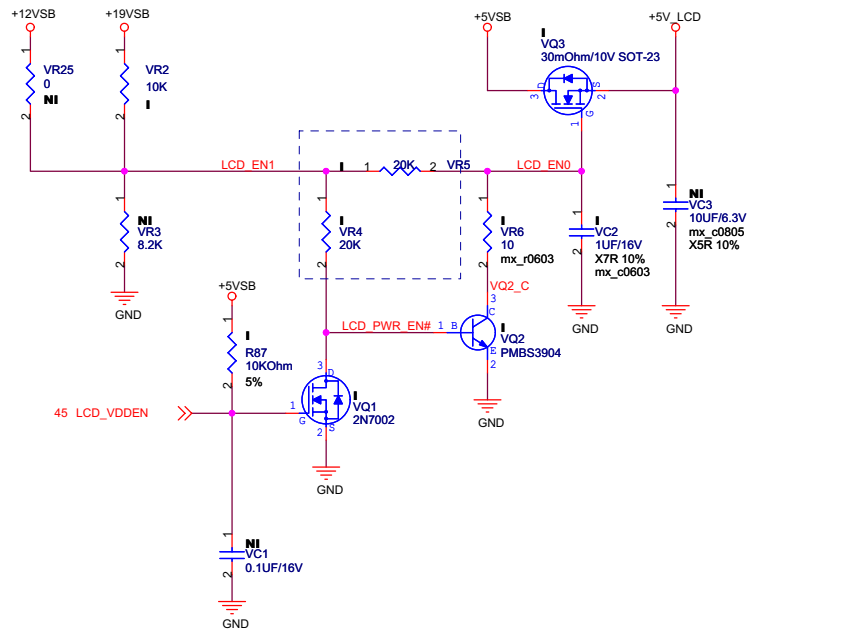
### 3D PANEL



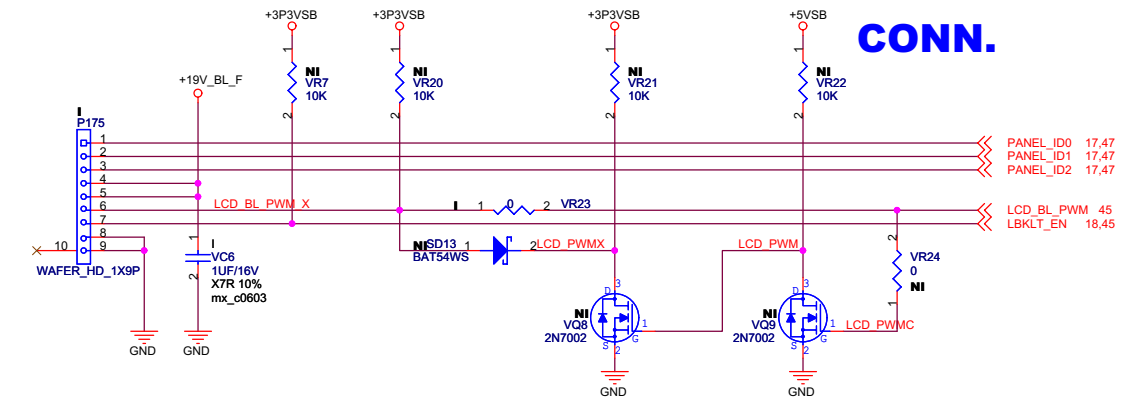
# LCD CONN



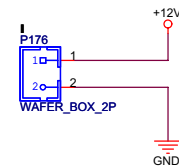
# LCD ON/OFF



# CONVERTER CONN.



# TOUCH

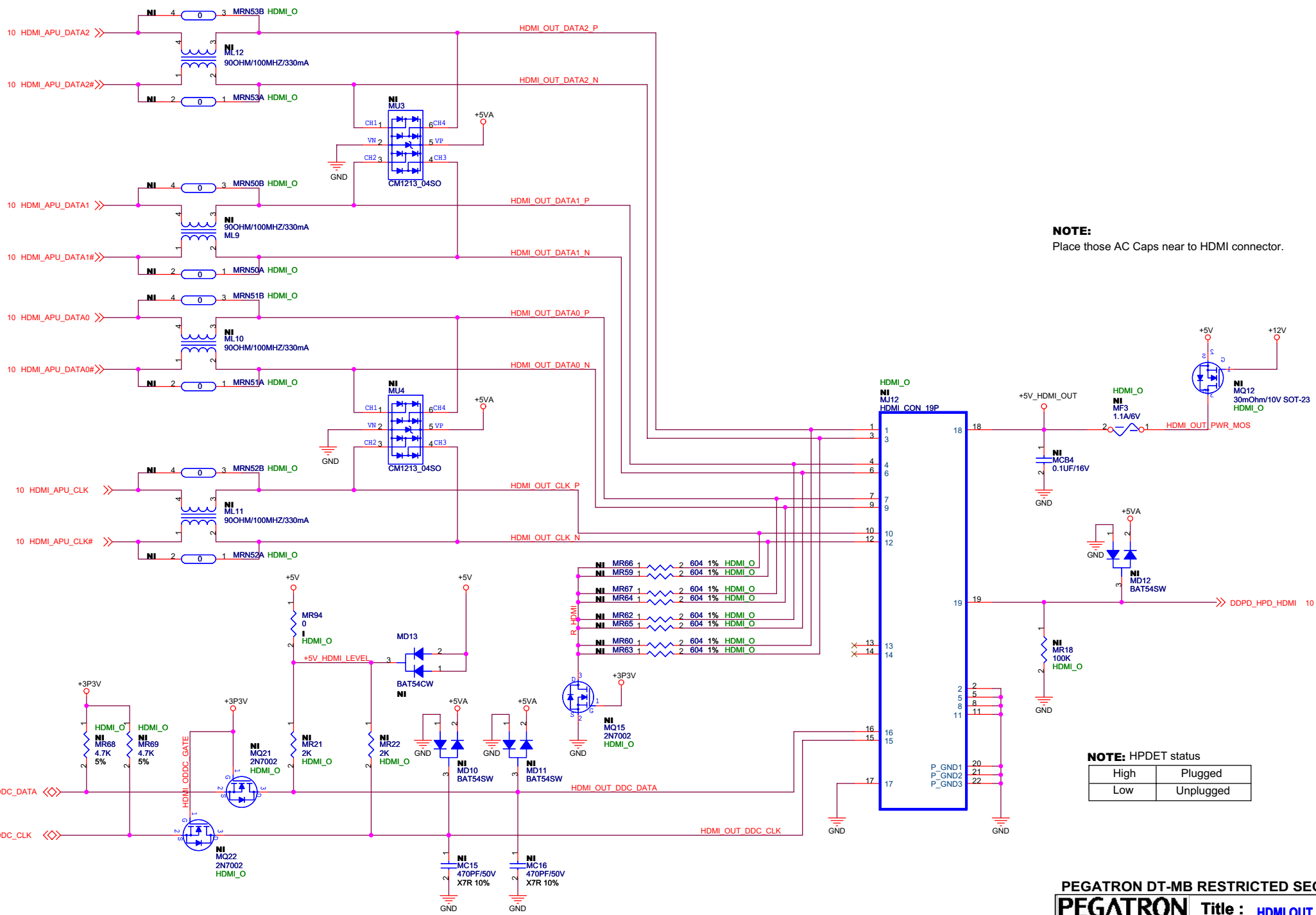






PEGATRON DT-MB RESTRICTED SECRET

<b>PEGATRON</b>		Title :	<b>xxx</b>
Pegatron Corp.		Engineer:	<b>Melly_Liu</b>
Size	Project Name		Rev
A3	<b>AAHD3-VL</b>		1.01
Date: Monday, March 12, 2012		Sheet	49 of 71



**NOTE:**  
Place those AC Caps near to HDMI connector.

**NOTE:** HPDET status

High	Plugged
Low	Unplugged

PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : **HDMI OUT**  
Pegatron Corp. Engineer: **Melly\_Liu**

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01
Date: Monday, March 12, 2012	Sheet 50 of 71	



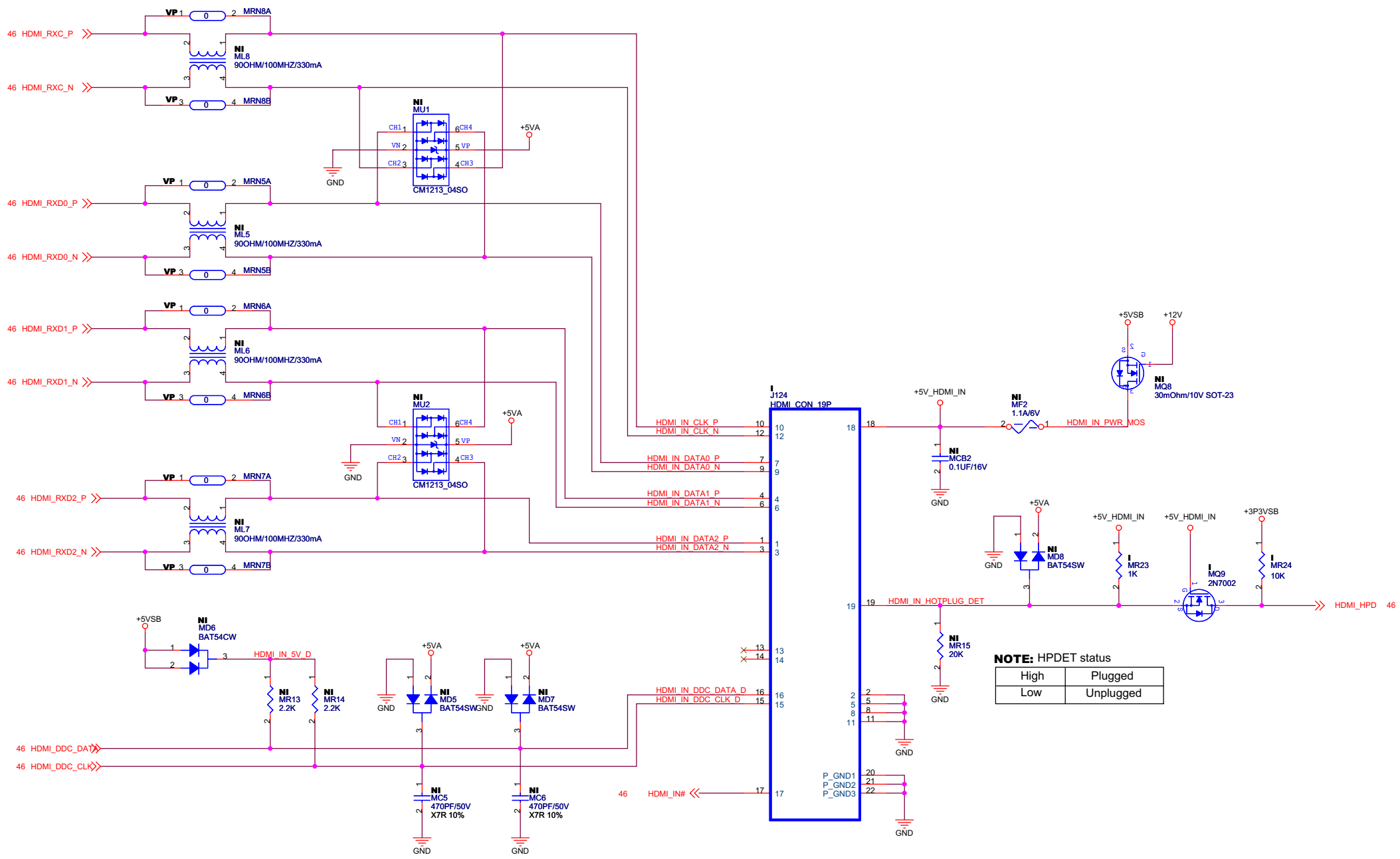
PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : **XXXX**

Pegatron Corp. Engineer: **Melly\_Liu**

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

Date: **Monday, March 12, 2012** Sheet **51** of **71**



PEGATRON DT-MB RESTRICTED SECRET

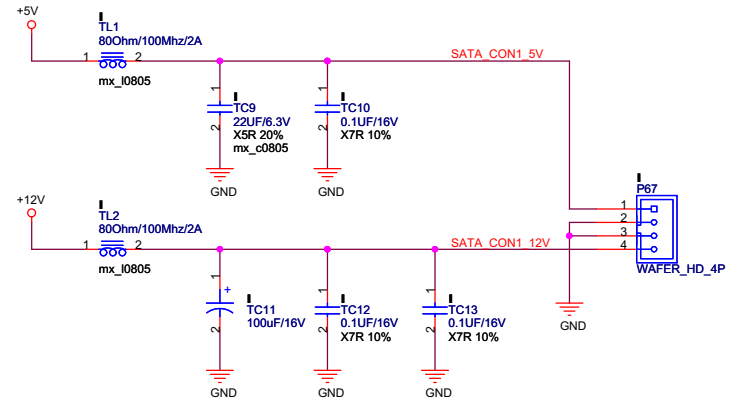
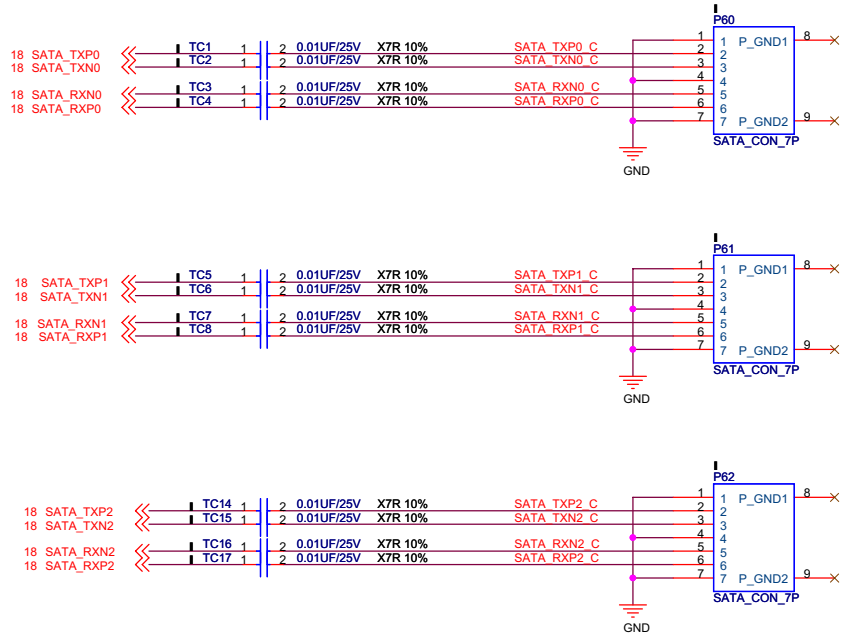
**PEGATRON** Title : HDMI-IN CONN

Pegatron Corp. Engineer: *Melly\_Liu*

Size	Project Name	Rev
A3	AAHD3-VL	1.01

Date: Monday, March 12, 2012 Sheet 52 of 71

# SATA CONNECTOR



PEGATRON DT-MB RESTRICTED SECRET

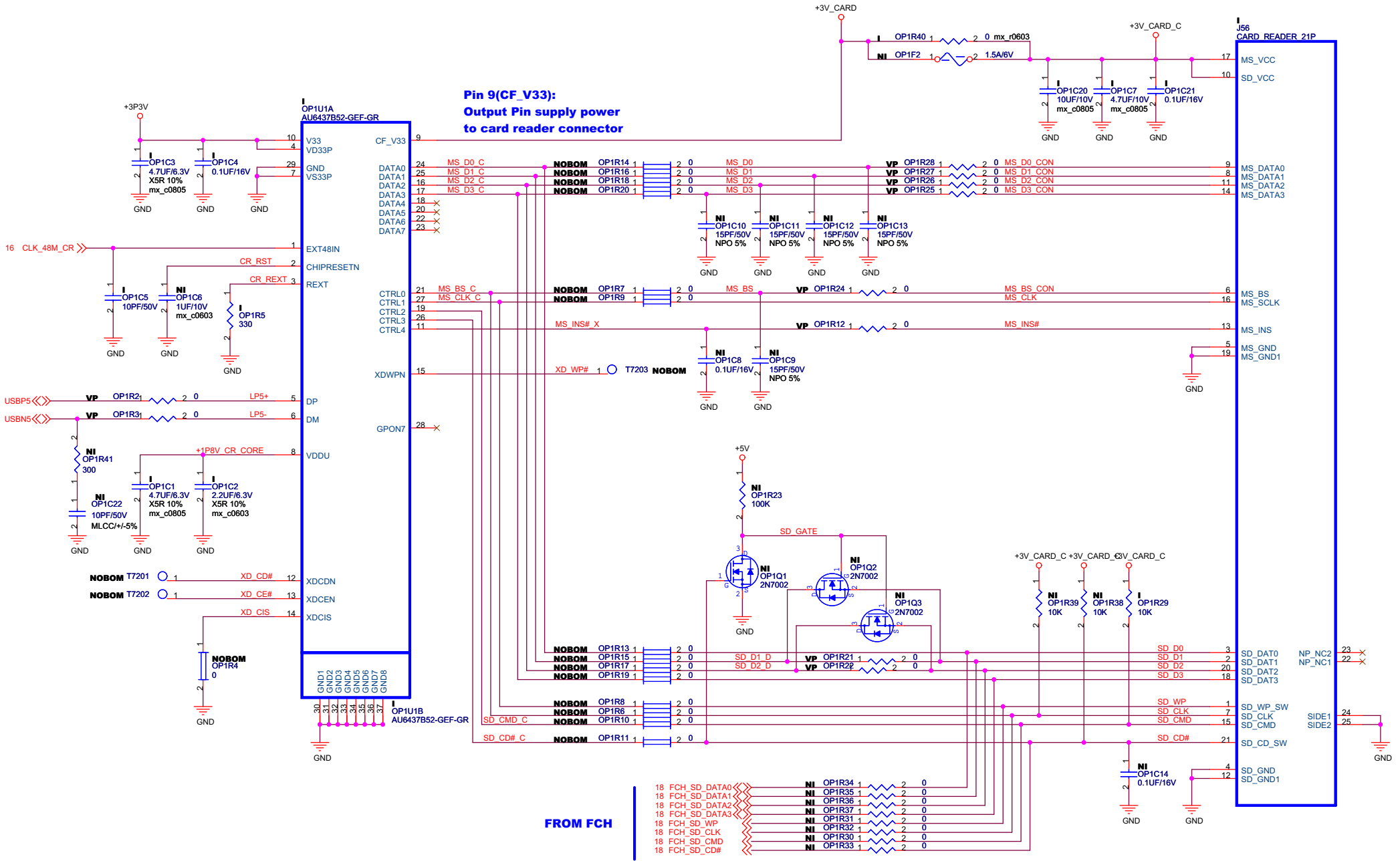
**PEGATRON** Title : SATA CONNECTOR

Pegatron Corp. Engineer: Melly\_Liu

Size	Project Name	Rev
A3	AAHD3-VL	1.01

Date: Monday, March 12, 2012 Sheet 53 of 71

**Pin 9(CF\_V33):  
Output Pin supply power  
to card reader connector**



- FROM FCH**
- 18 FCH\_SD\_DATA0 <> NI OP1R34 1 2 0
  - 18 FCH\_SD\_DATA1 <> NI OP1R35 1 2 0
  - 18 FCH\_SD\_DATA2 <> NI OP1R36 1 2 0
  - 18 FCH\_SD\_DATA3 <> NI OP1R37 1 2 0
  - 18 FCH\_SD\_WP <> NI OP1R31 1 2 0
  - 18 FCH\_SD\_CLK <> NI OP1R32 1 2 0
  - 18 FCH\_SD\_CMD <> NI OP1R30 1 2 0
  - 18 FCH\_SD\_CD# <> NI OP1R33 1 2 0

5

4

3

2

1

D

D

C

C

B

B

A

A

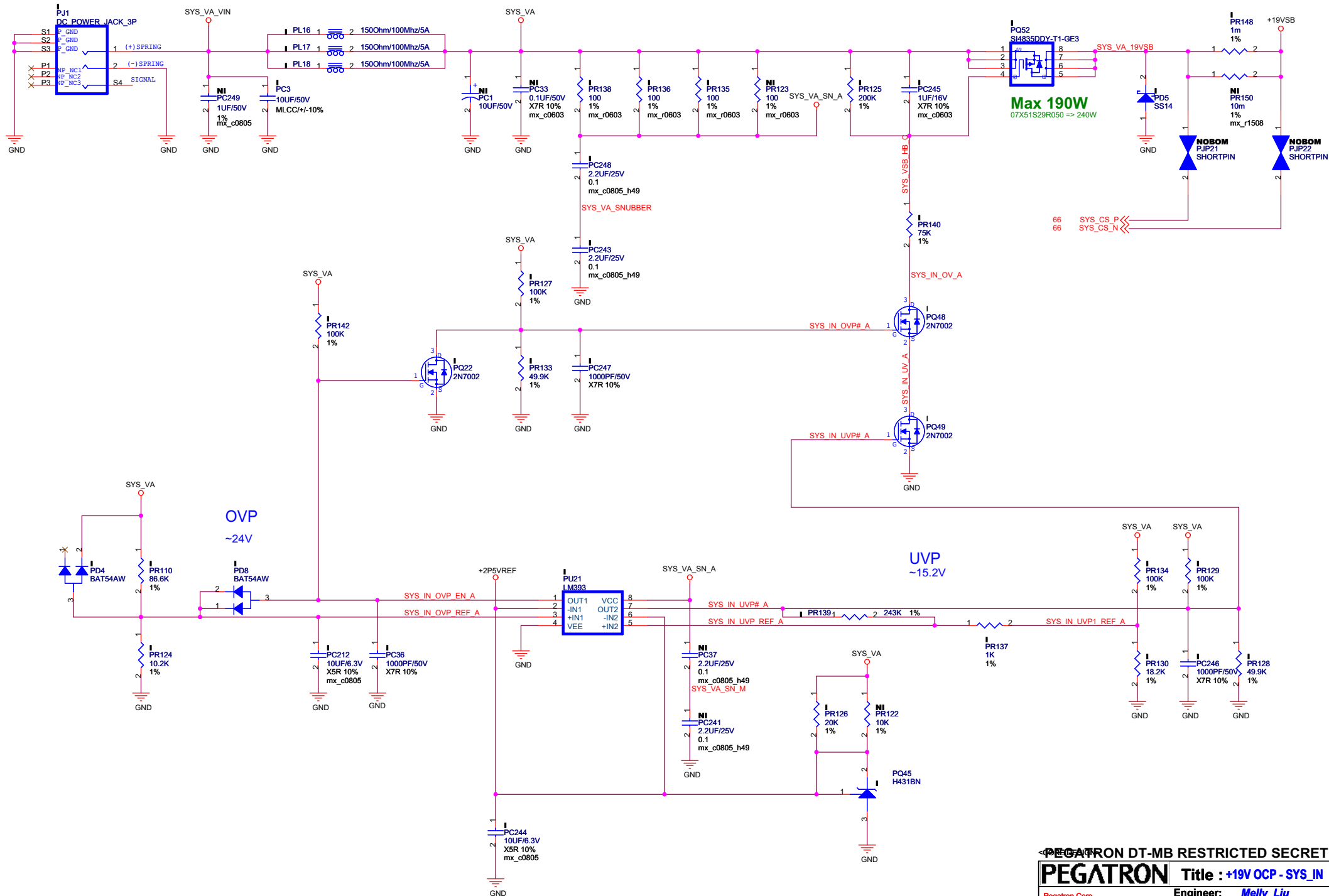
~~SECRET~~ PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : **XXX**

Pegatron Corp. Engineer: **Melly\_Liu**

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

Date: Monday, March 12, 2012 Sheet 55 of 71



PEGATRON DT-MB RESTRICTED SECRET

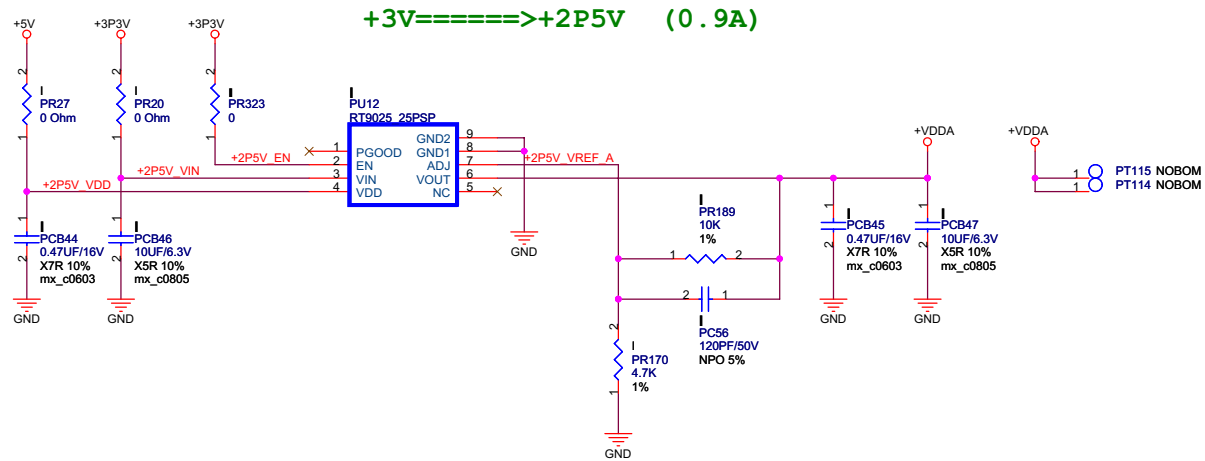
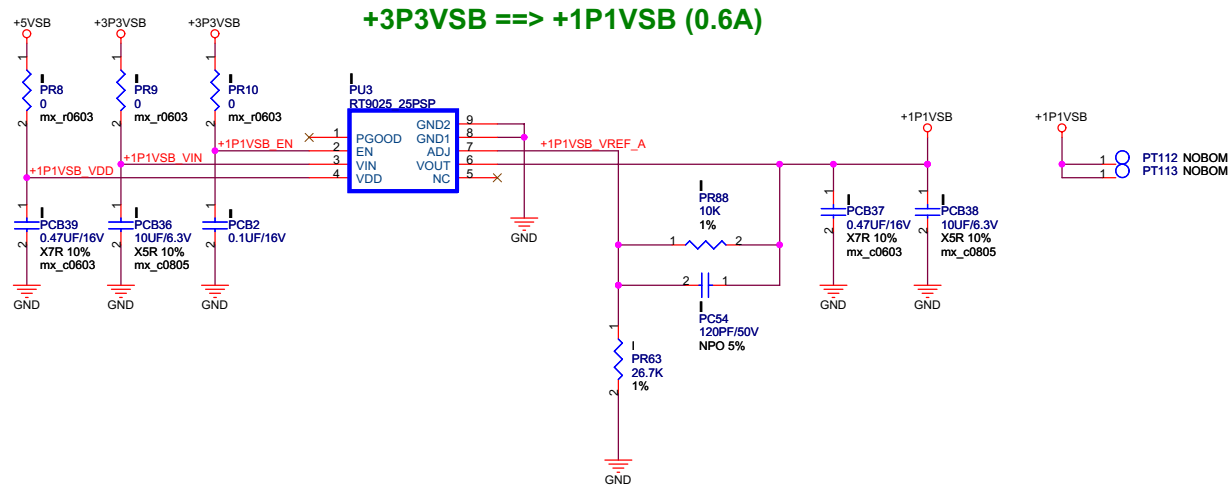
**PEGATRON** Title : +19V OCP - SYS\_IN

Pegatron Corp. Engineer: *Melly\_Liu*

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

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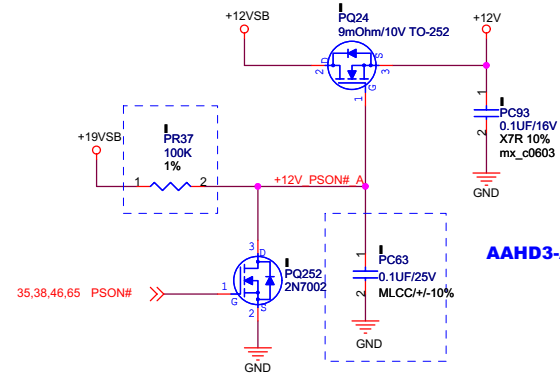
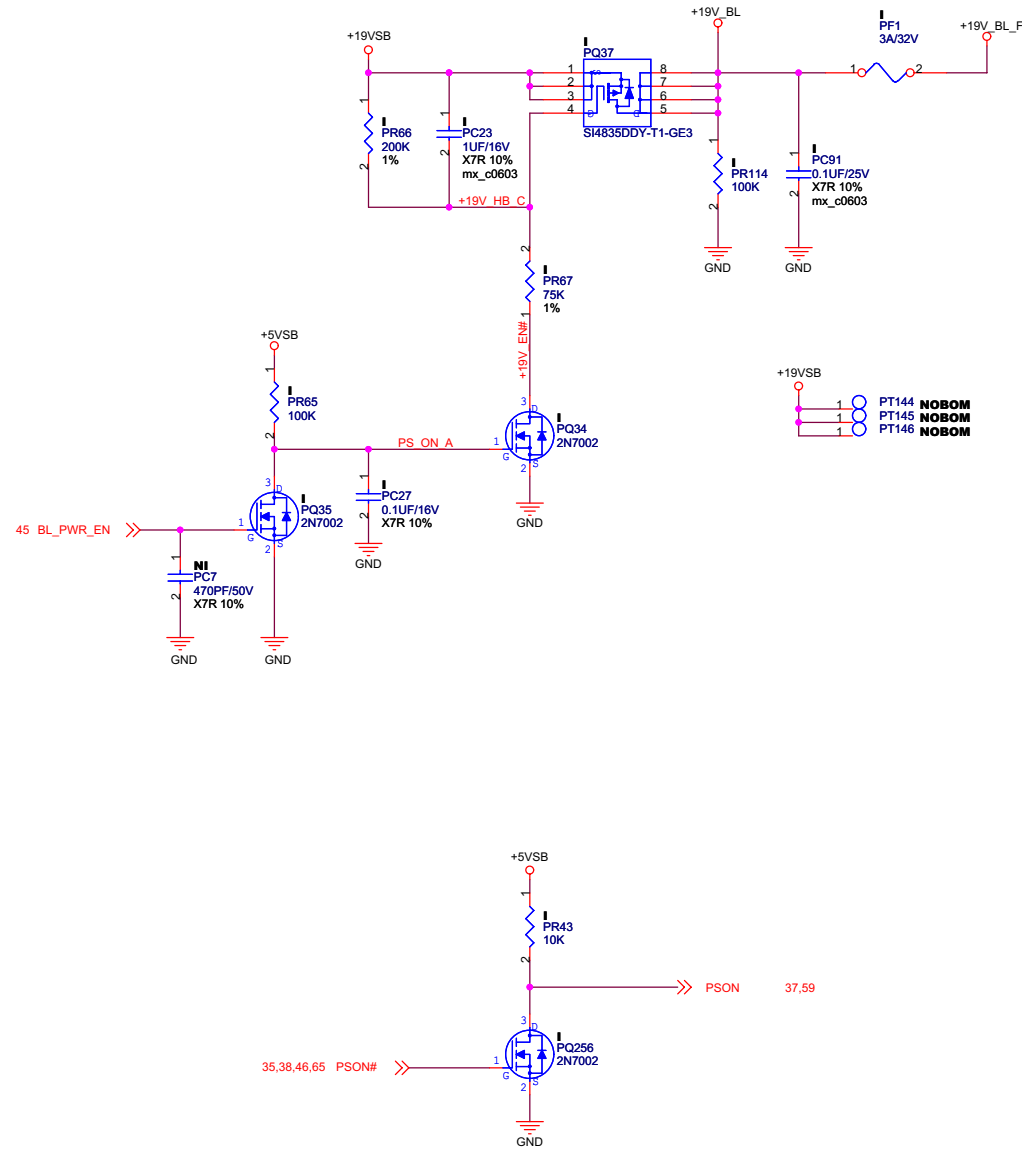




<Core Design>

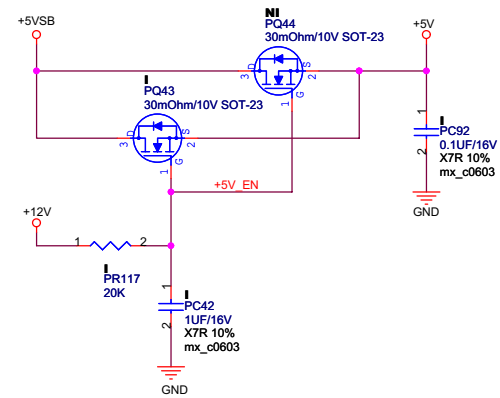
<b>PEGATRON</b>		<b>Title : +1P1V&amp;+1P1V&amp;+2P5V</b>	
PEGATRON COMPUTER INC		Engineer: <i>Melly_Liu</i>	
Size A3	Project Name <b>AAHD3-VL</b>	Rev 1.01	
Date: <i>Monday, March 12, 2012</i>		Sheet <i>57</i> of <i>71</i>	

**+19V / max=2.1A / TDC:1.58A**  
 Vdroop:  $2.1A \cdot 0.03\Omega = 0.063V$

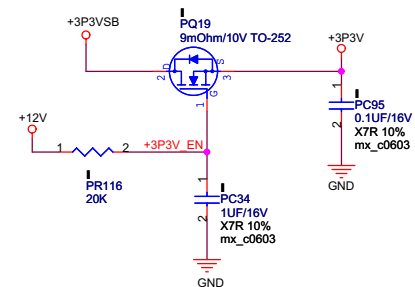


**AAHD3-AG 1.01 Change for ErP**

**+5V / I<sub>max</sub>: 1.3A / TDC: 1A**  
 Vdroop:  $1A \cdot 16m\Omega = 16mV$



**+3P3V / max:6.879A / TDC:5.2A**  
 Vdroop:  $5.2A \cdot 9m\Omega = 46mV$



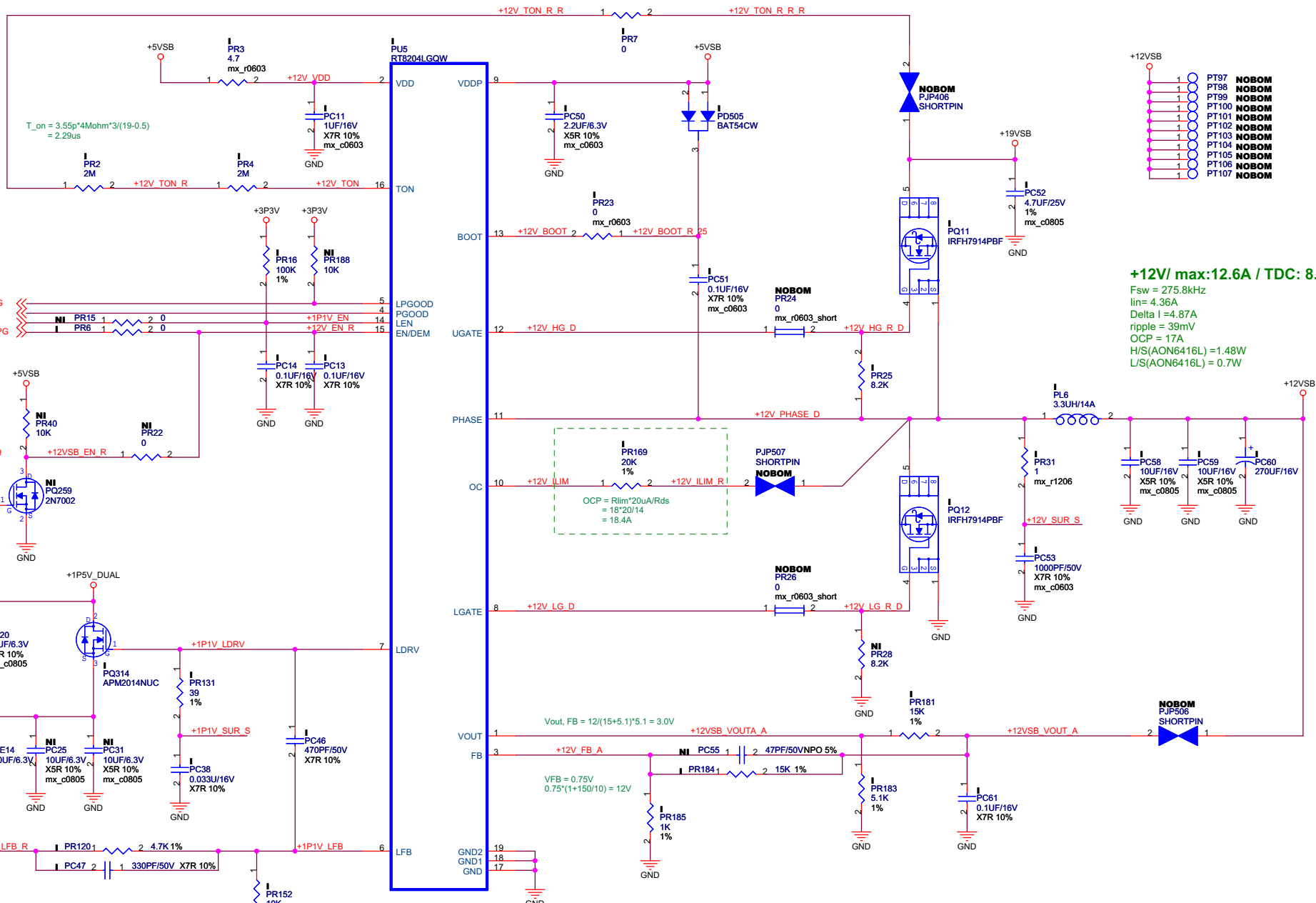
PEGATRON DT-MB RESTRICTED SECRET

**PEGATRON** Title : **+19V,+5V,+3P3V**

Pegatron Corp. Engineer: **Melly\_Liu**

Size	Project Name	Rev
A3	<b>AAHD3-VL</b>	1.01

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$T_{on} = 3.55p4M\Omega m^3 / (19-0.5) = 2.29\mu s$

$OC = R_{lim} * 20\mu A / R_{ds} = 18 * 20 / 14 = 18.4A$

**+12V/ max:12.6A / TDC: 8.8A**  
 Fsw = 275.8kHz  
 lin = 4.36A  
 Delta I = 4.87A  
 ripple = 39mV  
 OCP = 17A  
 H/S(AON6416L) = 1.48W  
 L/S(AON6416L) = 0.7W

**+1P1V/ Max:2.62A**

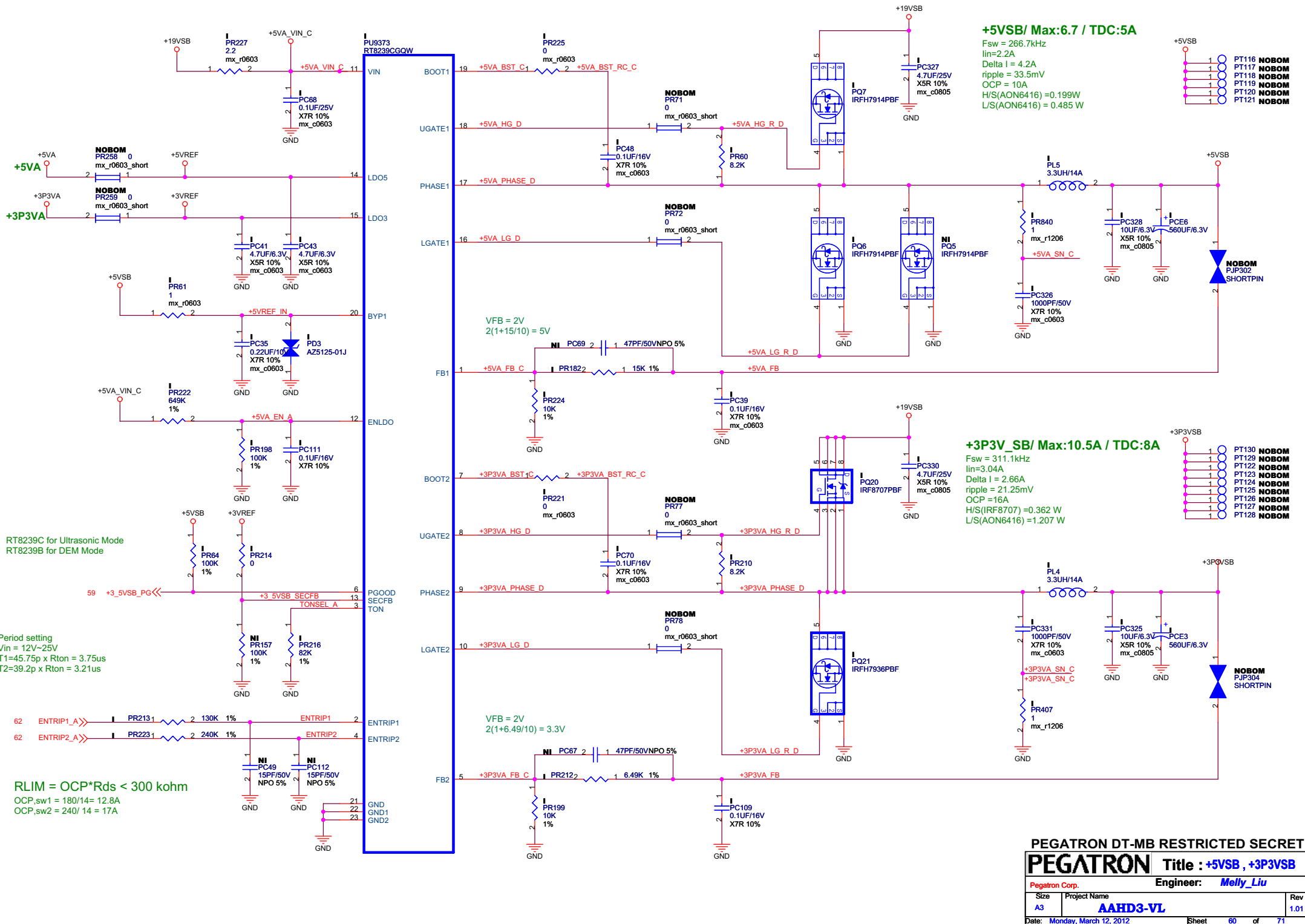
$V_{FB} = 0.75V$   
 $0.75 * (1 + 4.7/10) = 1.1V$

$V_{out, FB} = 12 / (15 + 5.1) * 5.1 = 3.0V$

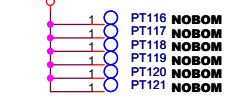
$V_{FB} = 0.75V$   
 $0.75 * (1 + 150/10) = 12V$

- 1 PT97 NOBOM
- 1 PT98 NOBOM
- 1 PT99 NOBOM
- 1 PT100 NOBOM
- 1 PT101 NOBOM
- 1 PT102 NOBOM
- 1 PT103 NOBOM
- 1 PT104 NOBOM
- 1 PT105 NOBOM
- 1 PT106 NOBOM
- 1 PT107 NOBOM

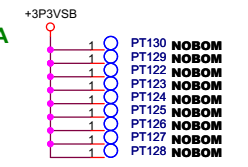
- 1 PT108 NOBOM
- 1 PT109 NOBOM
- 1 PT110 NOBOM
- 1 PT111 NOBOM



**+5VSB/ Max:6.7 / TDC:5A**  
 Fsw = 266.7kHz  
 lin=2.2A  
 Delta I = 4.2A  
 ripple = 33.5mV  
 OCP = 10A  
 H/S(AON6416) = 0.199W  
 L/S(AON6416) = 0.485 W



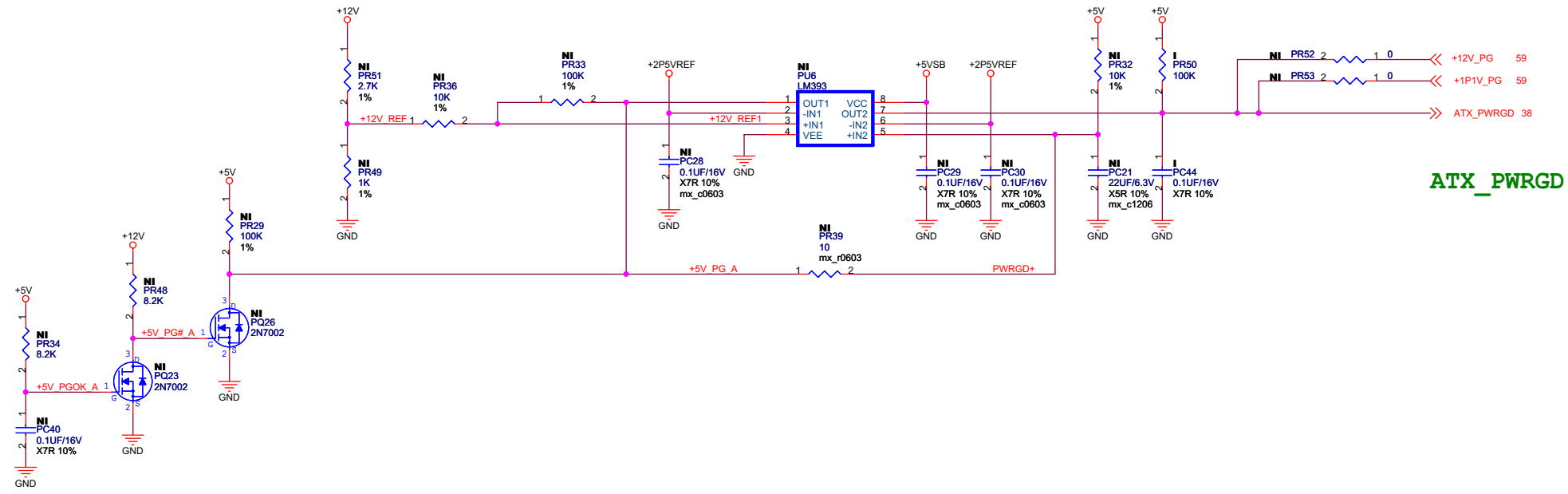
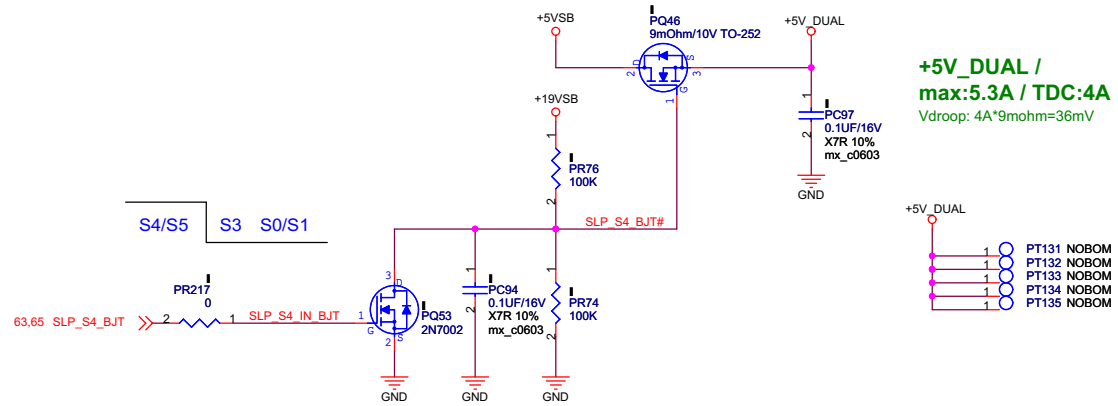
**+3P3V\_SB/ Max:10.5A / TDC:8A**  
 Fsw = 311.1kHz  
 lin=3.04A  
 Delta I = 2.66A  
 ripple = 21.25mV  
 OCP = 16A  
 H/S(IRF8707) = 0.362 W  
 L/S(AON6416) = 1.207 W



RT8239C for Ultrasonic Mode  
 RT8239B for DEM Mode

Period setting  
 Vin = 12V~25V  
 T1=45.75p x Rton = 3.75us  
 T2=39.2p x Rton = 3.21us

**RLIM = OCP\*Rds < 300 kohm**  
 OCP\_sw1 = 180/14 = 12.8A  
 OCP\_sw2 = 240/ 14 = 17A



PEGATRON DT-MB RESTRICTED SECRET

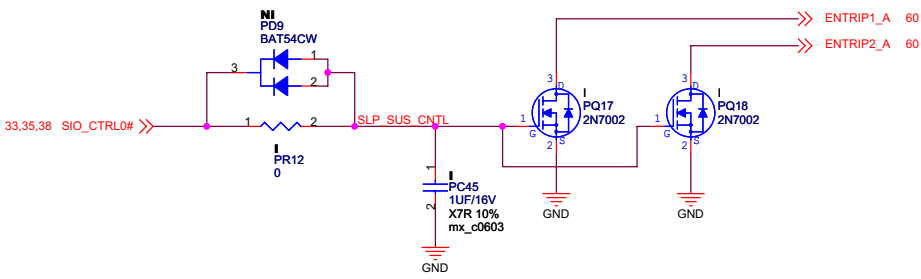
**PEGATRON** Title : +5V\_DUAL

Pegatron Corp. Engineer: Melly\_Liu

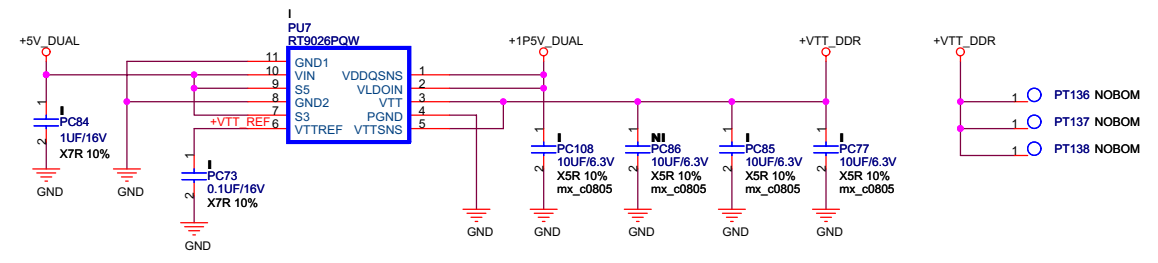
Size	Project Name	Rev
A3	AAHD3-VL	1.01

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**+5VSB-EN  
+3VSB-EN**



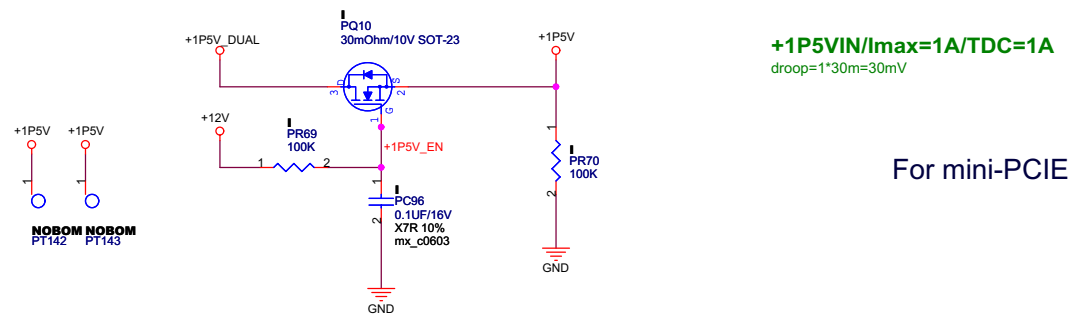
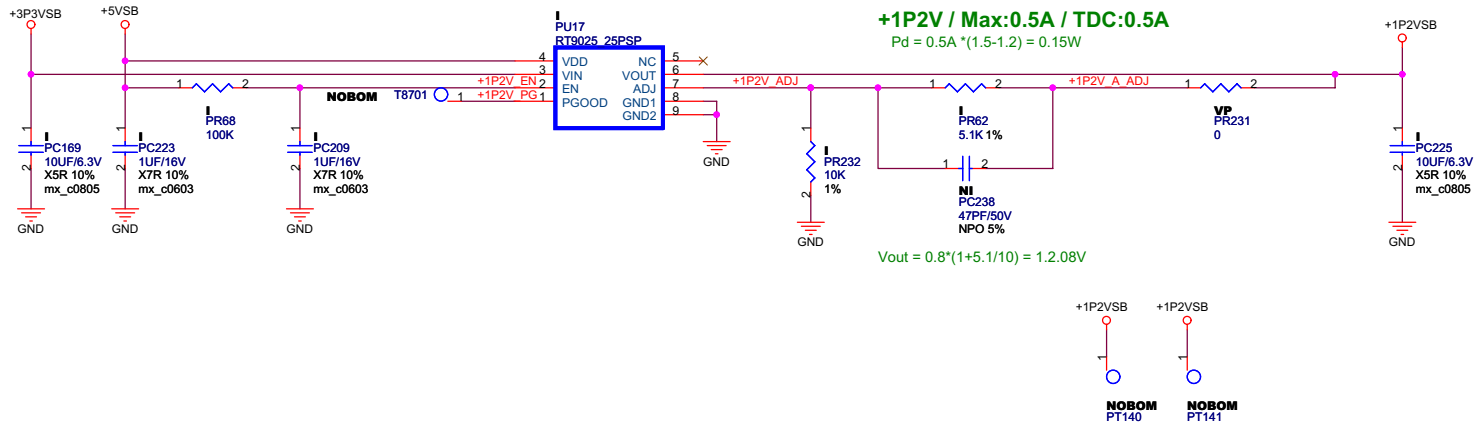
**+VTT\_DDR / Max:2A / TDC:1.5A  
Pd=7.8W**



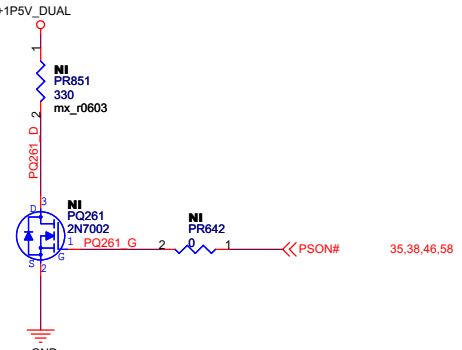
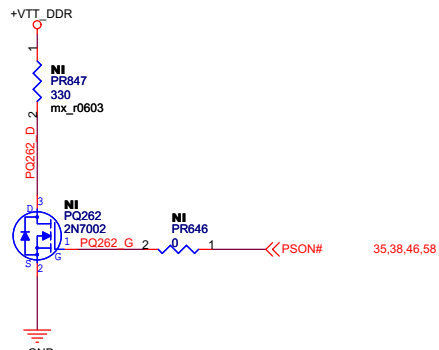
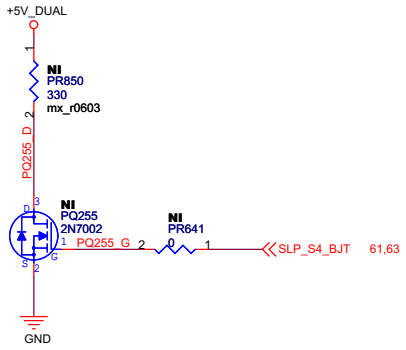
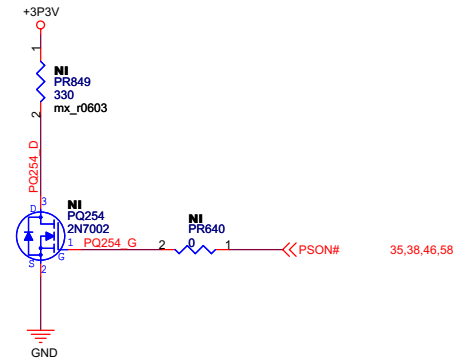
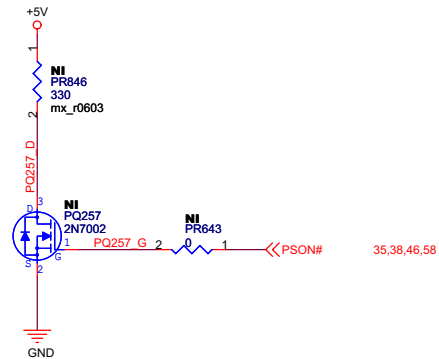
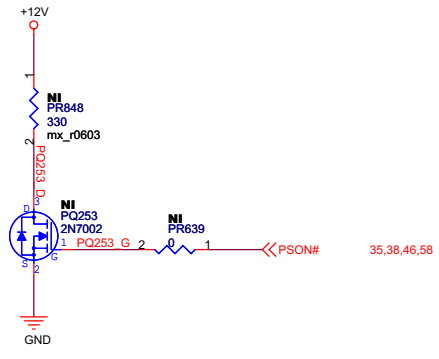
PEGATRON DT-MB RESTRICTED SECRET

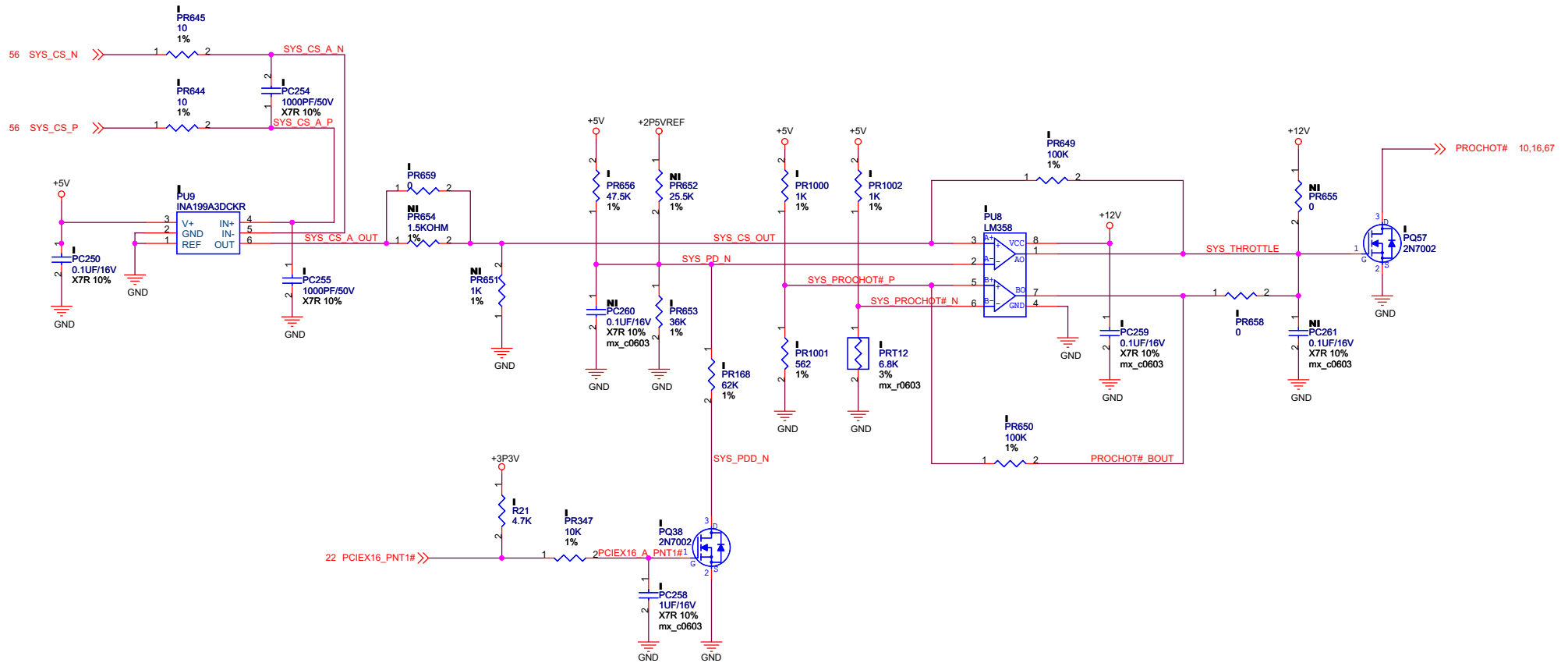
<b>PEGATRON</b>		Title : <b>+VTT_DDR</b>	
Pegatron Corp.		Engineer: <b>Melly_Liu</b>	
Size A3	Project Name <b>AAHD3-VL</b>	Date Monday, March 12, 2012	Rev 1.01
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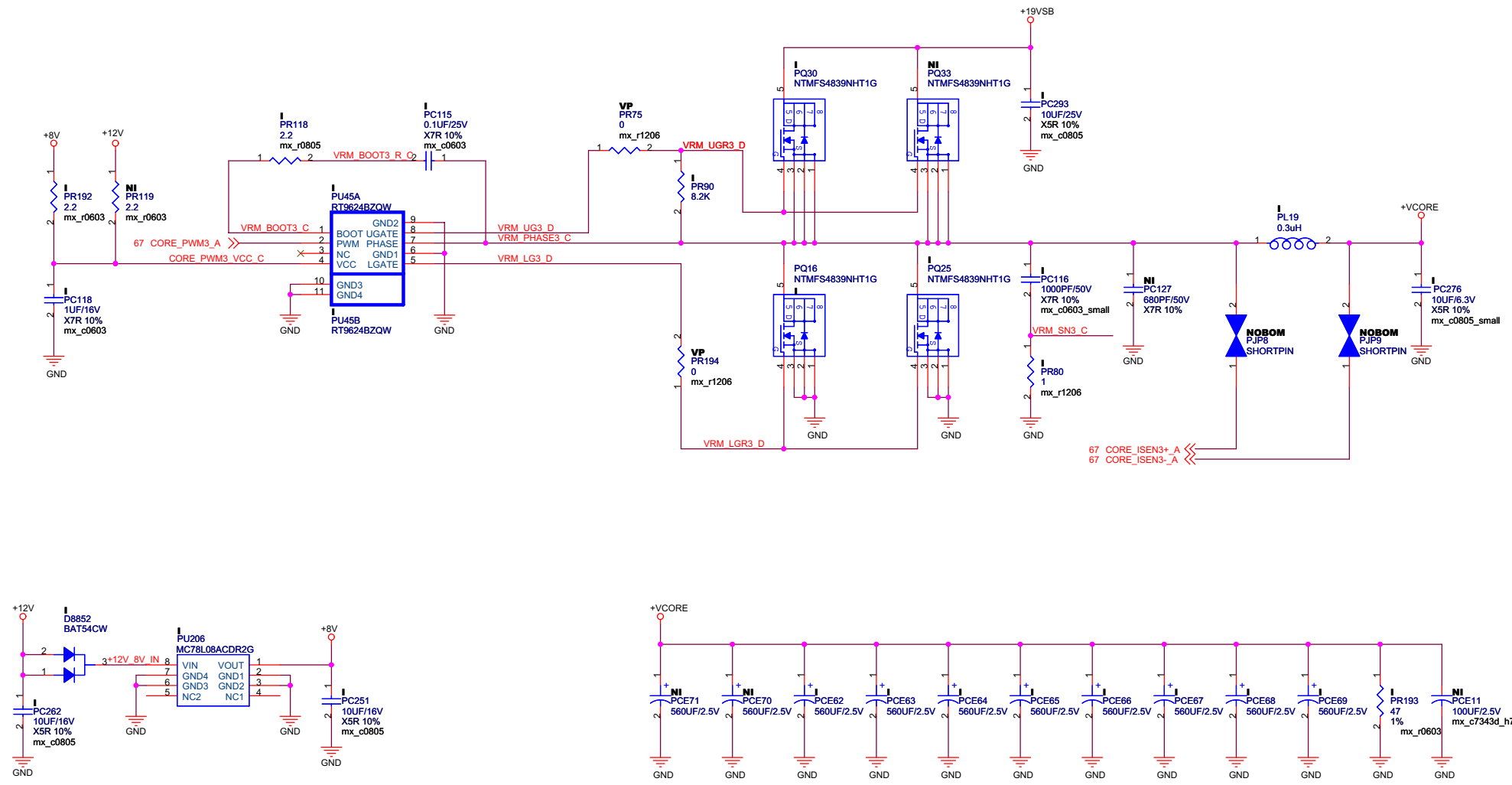






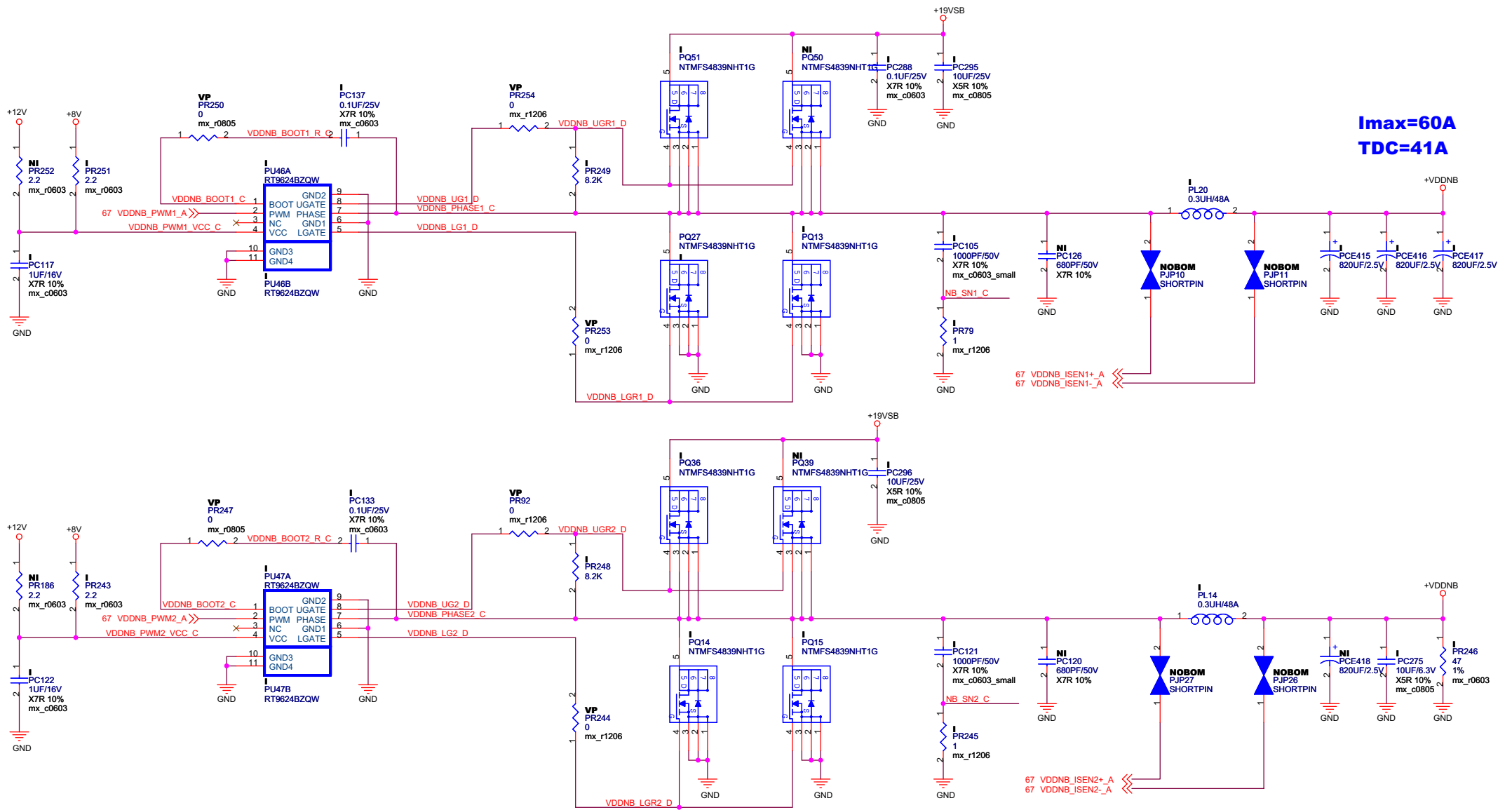


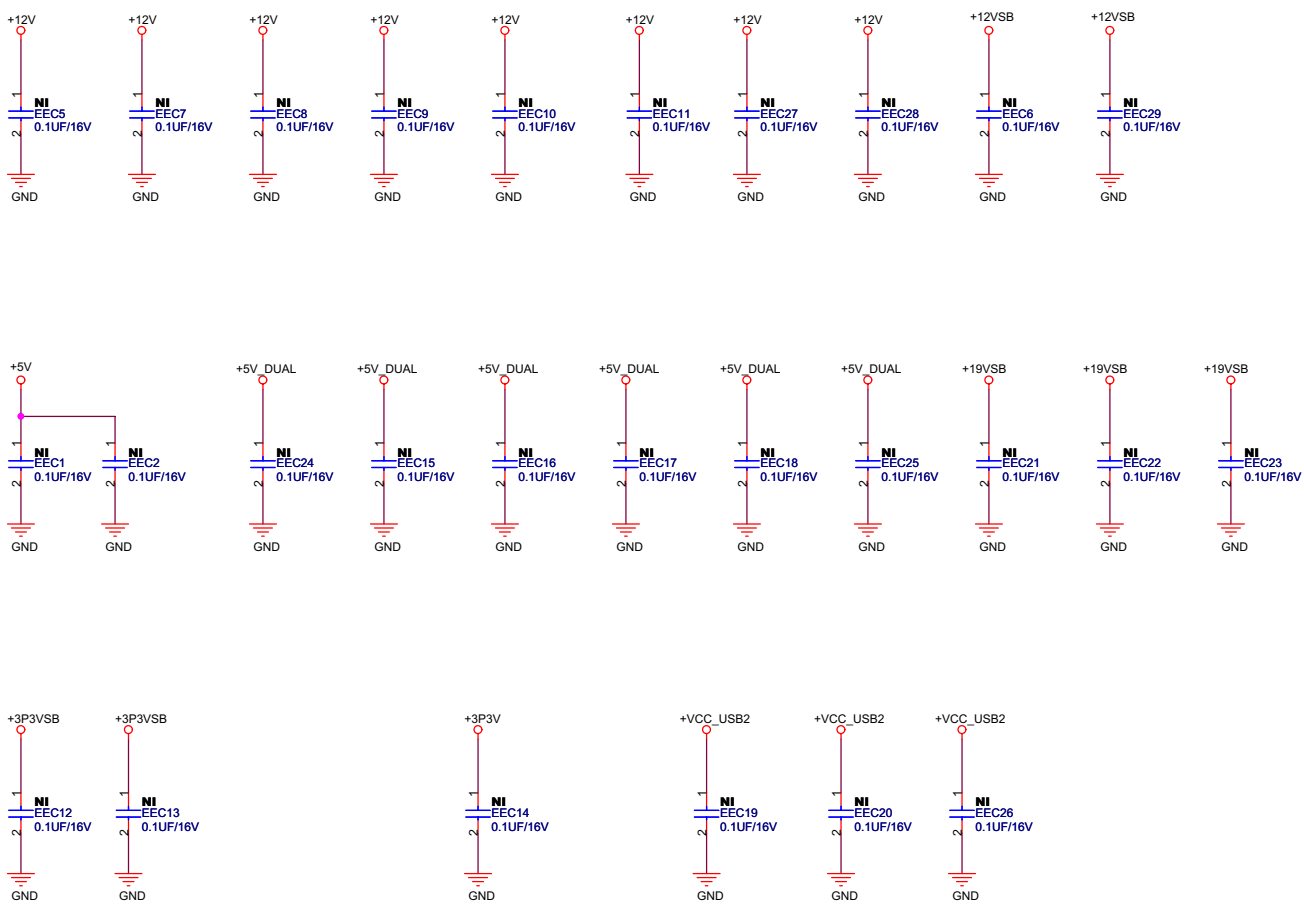




1011

<b>PEGATRON</b>		Title :VCORE-DRIVER2	
Pegatron Corp.		Engineer: <i>Melly_Liu</i>	
Size A3	Project Name <b>AAHD3-VL</b>	Rev 1.01	
Date: Monday, March 12, 2012		Sheet	69 of 71





<Variant Name>		<b>PEGATRON</b> Title : <b>EMI</b>	
PEGATRON COMPUTER INC		Engineer: <b>Melly_Liu</b>	
Size A3	Project Name <b>AAHD3-VL</b>	Rev 1.01	
Date: Monday, March 12, 2012		Sheet 71 of 71	