Block Diagram

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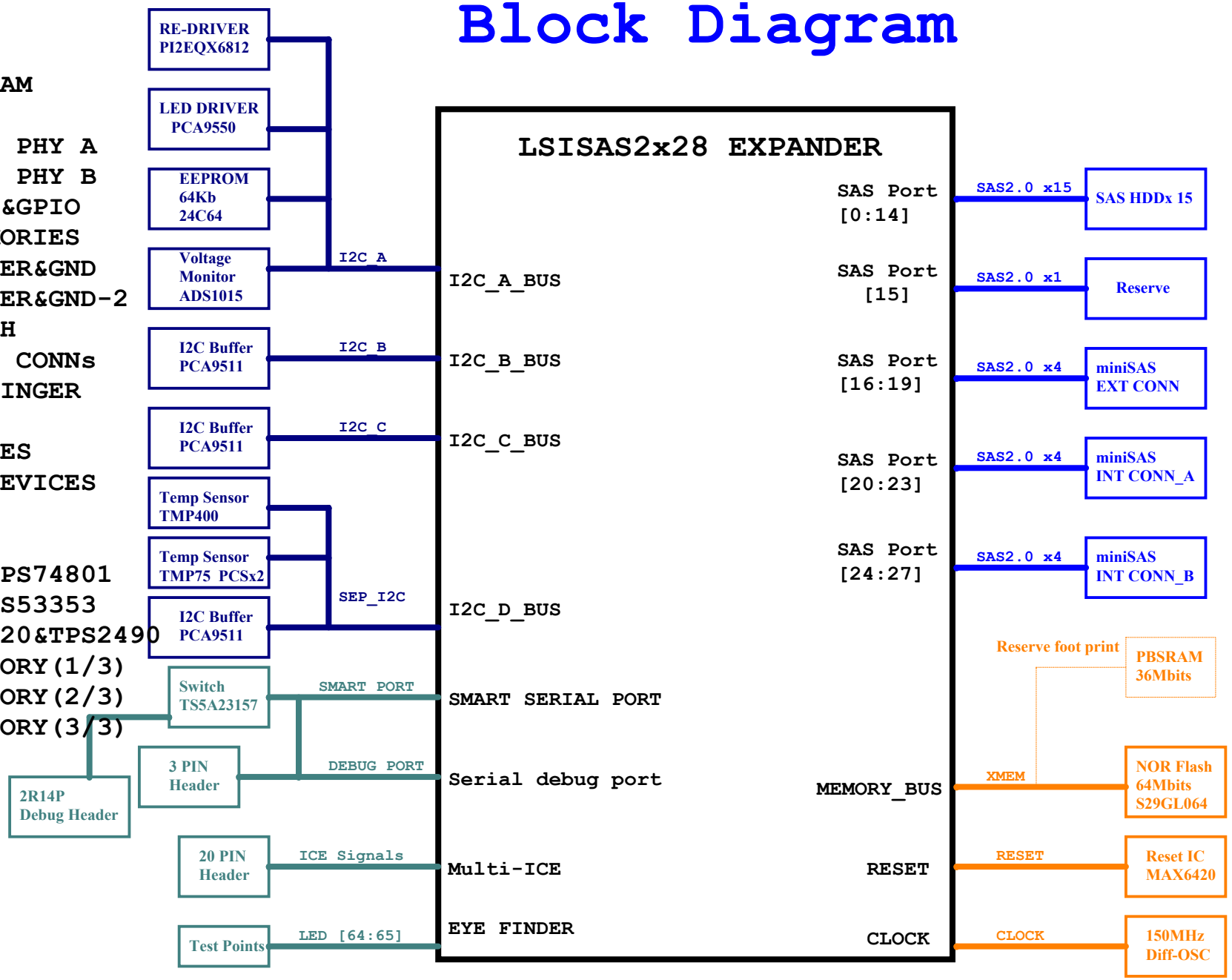

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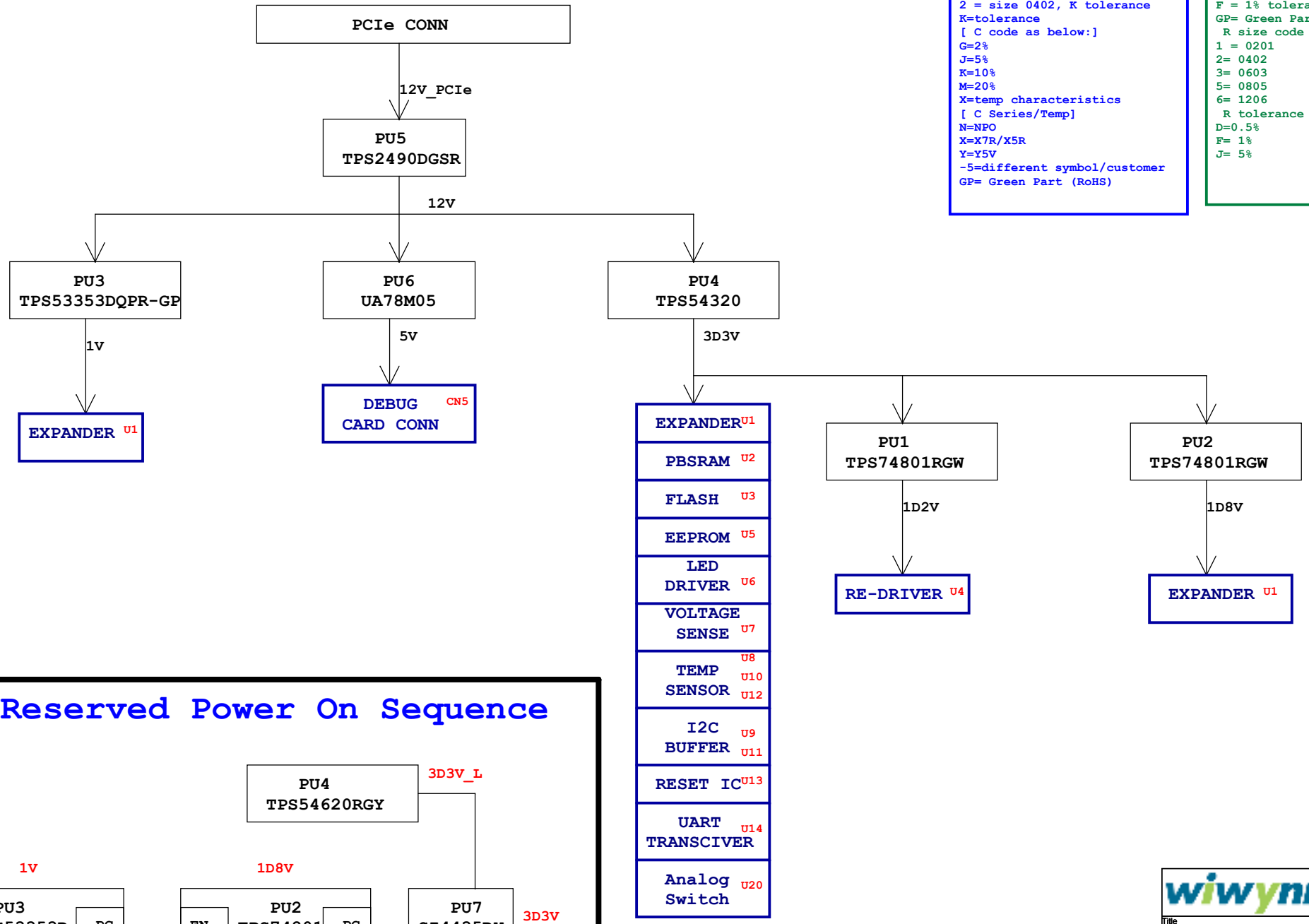
POWER MAP

DY=Dummy parts
=not populated

SCD1U10V2KX-5GP
D1U = 0.1uF (2D2U means 2.2uF)
10Voltage (6D3V means 6.3V)
2 = size 0402, K tolerance
K=tolerance
[C code as below:]
G=2%
J=5%
K=10%
M=20%
X=temp characteristics
[C Series/Temp]
N=NPO
X=X7R/X5R
Y=Y5V
-5=different symbol/customer
GP= Green Part (RoHS)

562R2F- GP
562 = 562 ohm, (2K2R means 2.2K ohm)
2 = size 0402
F = 1% tolerance
GP= Green Part (RoHS)
R size code as below:
1 = 0201
2= 0402
3= 0603
5= 0805
6= 1206
R tolerance code as below:
D=0.5%
F= 1%
J= 5%



Reserved Power On Sequence

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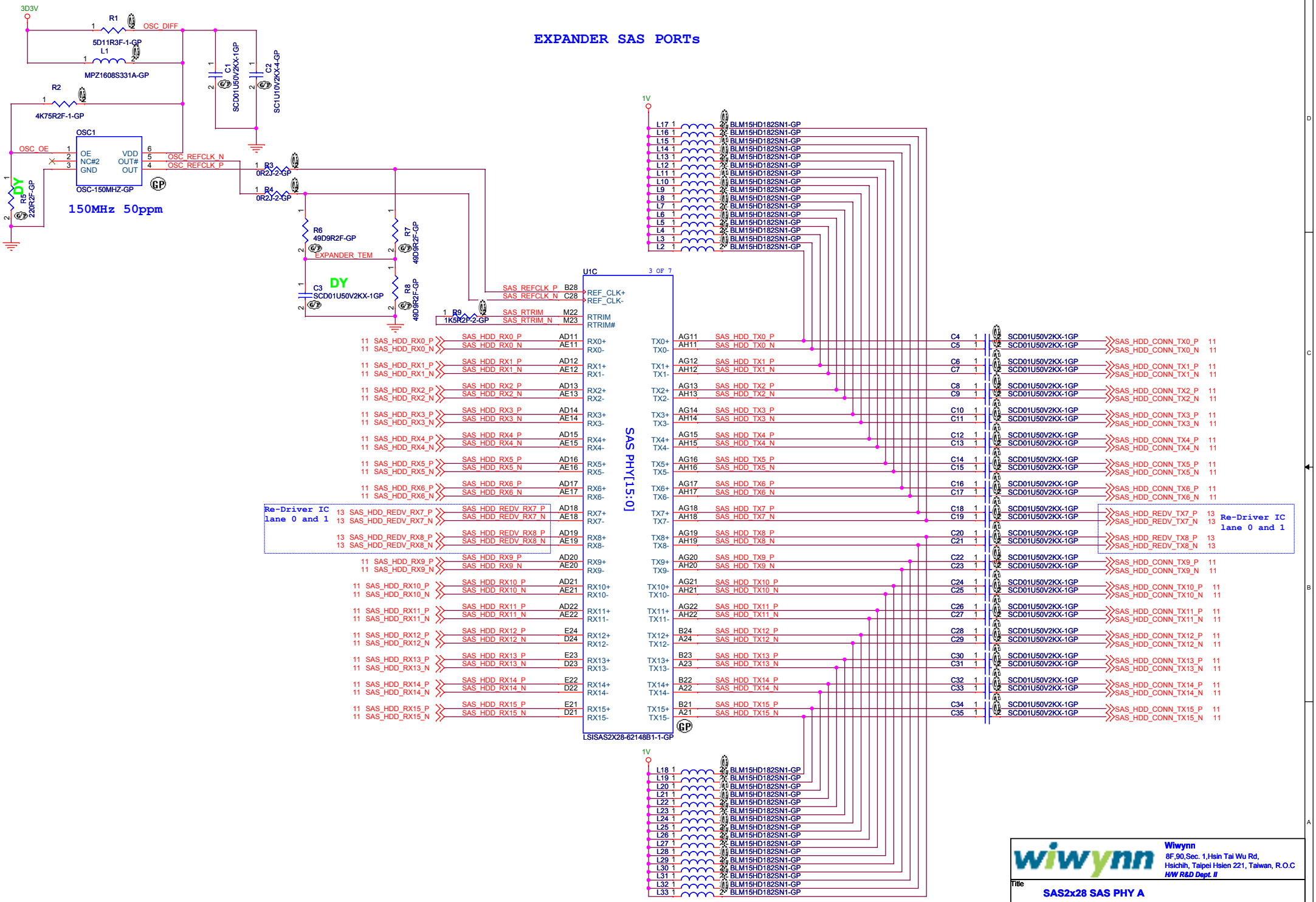
EXPANDER SAS PORTs



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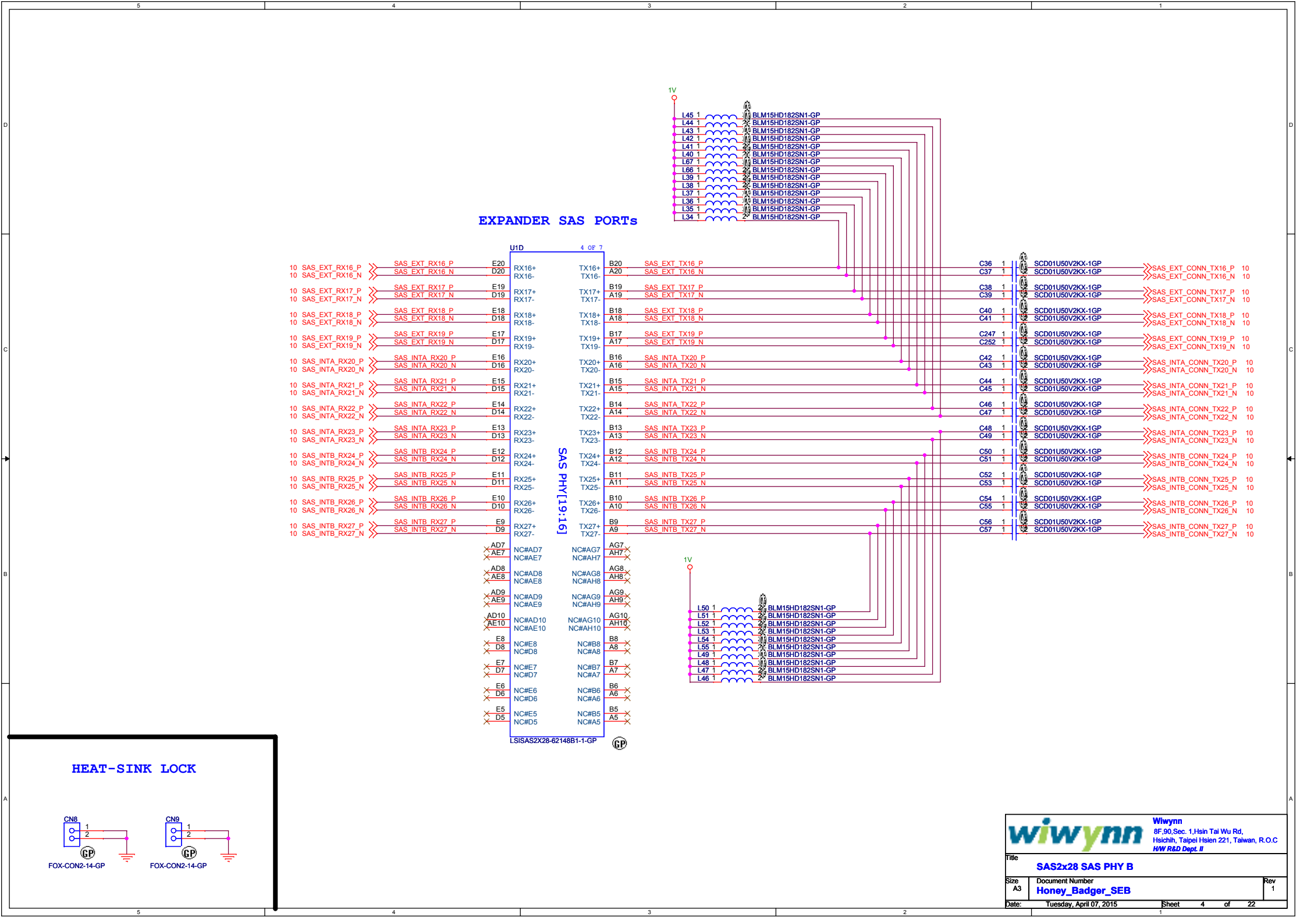

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Title: SAS2x28 SAS PHY B

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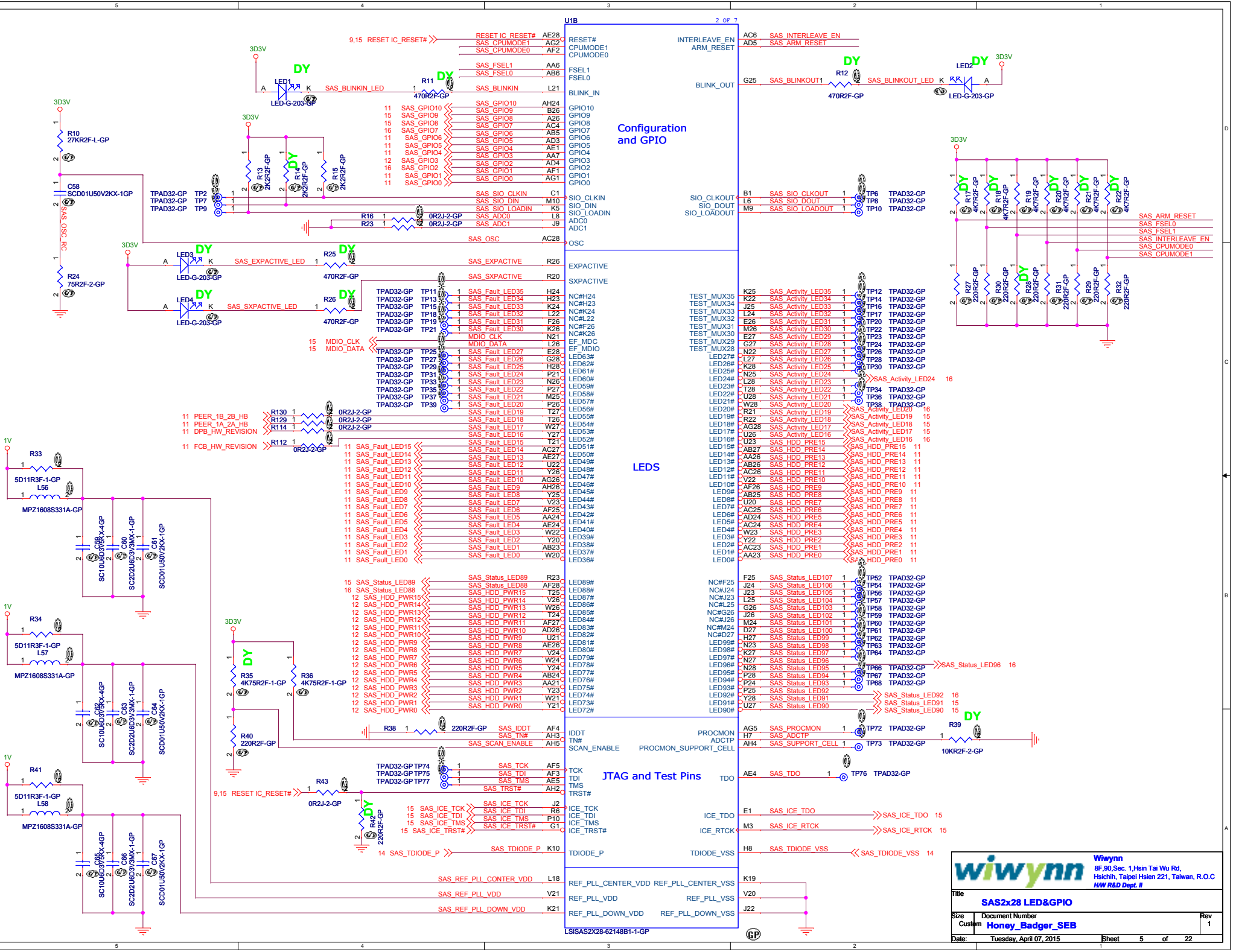
U1B
2 OF 7
Configuration and GPIO
LEDS
JTAG and Test Pins
LSISAS2X28-62148B1-1-GP
wiwynn
Wiwynn
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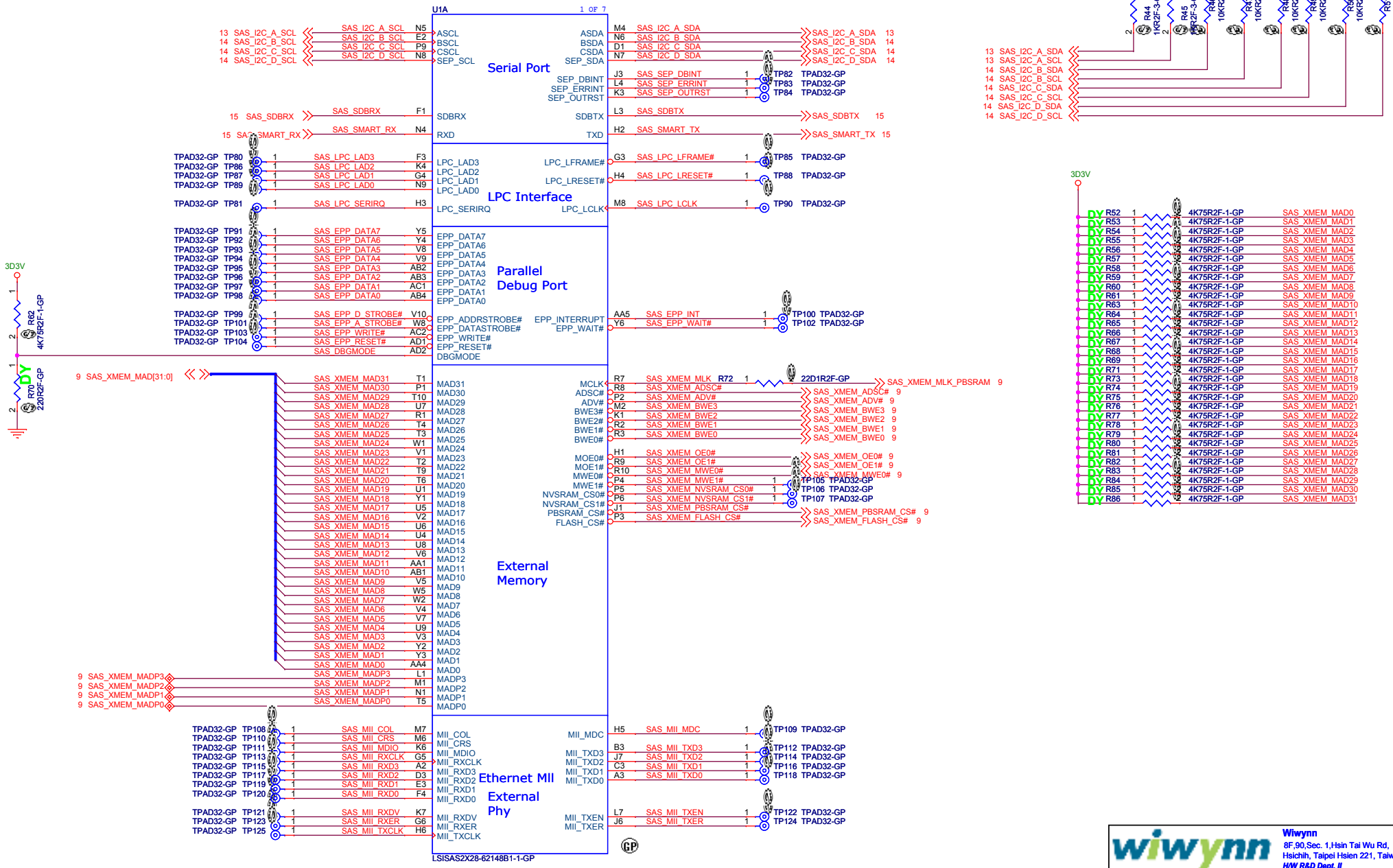
EXPANDER I2C and XMEM I/F



I2C PULL UP

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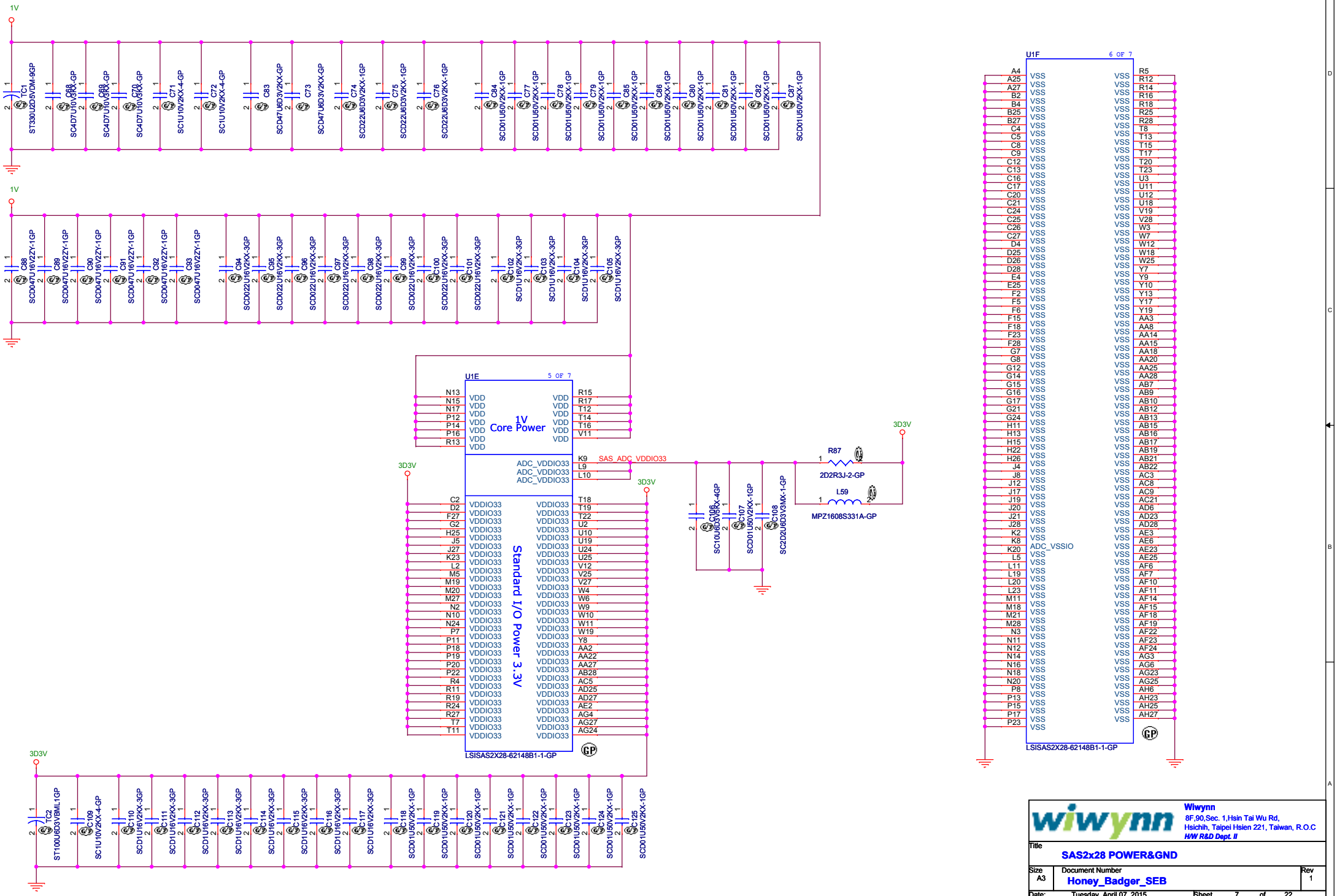

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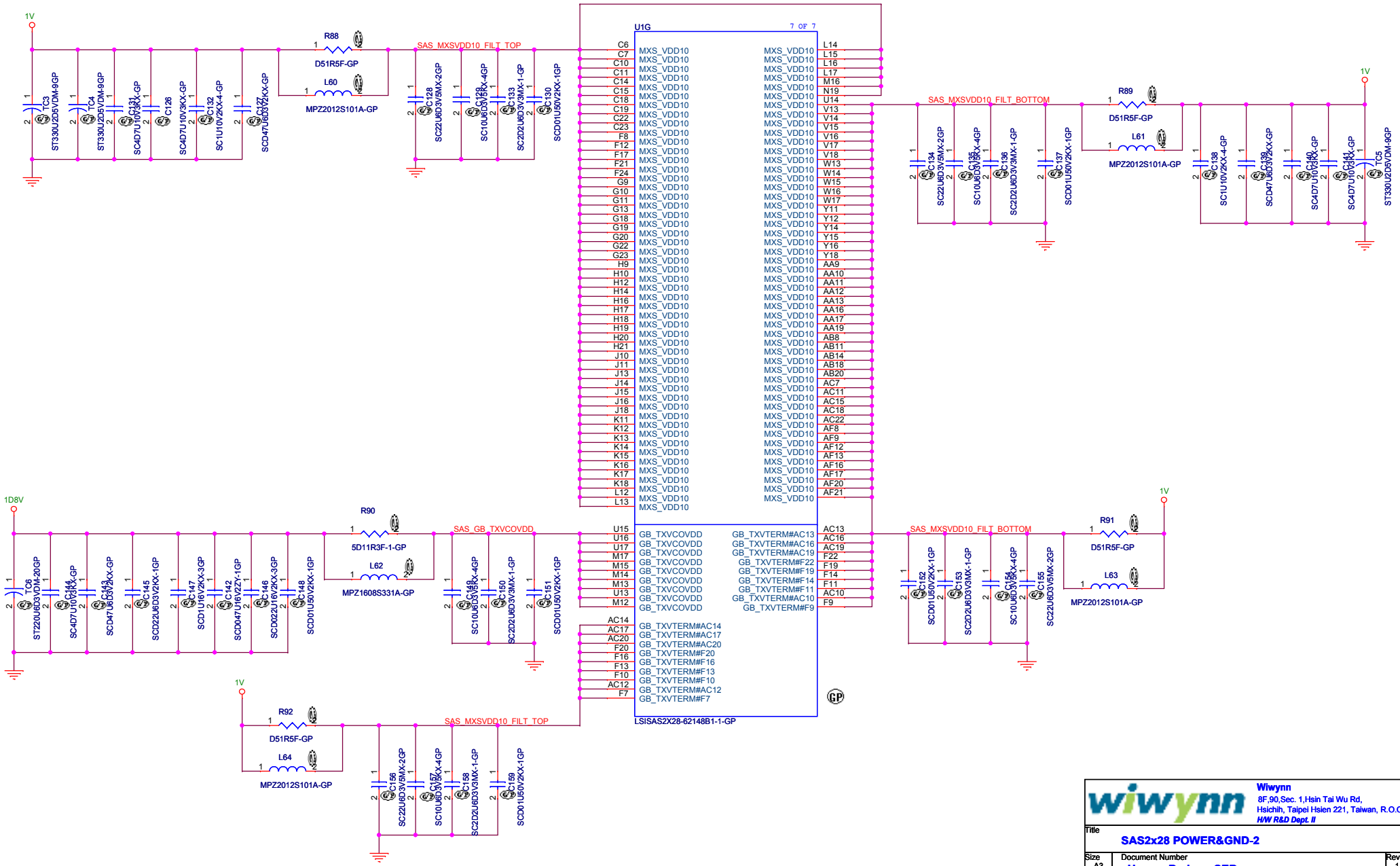

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	H/W R&D Dept. II
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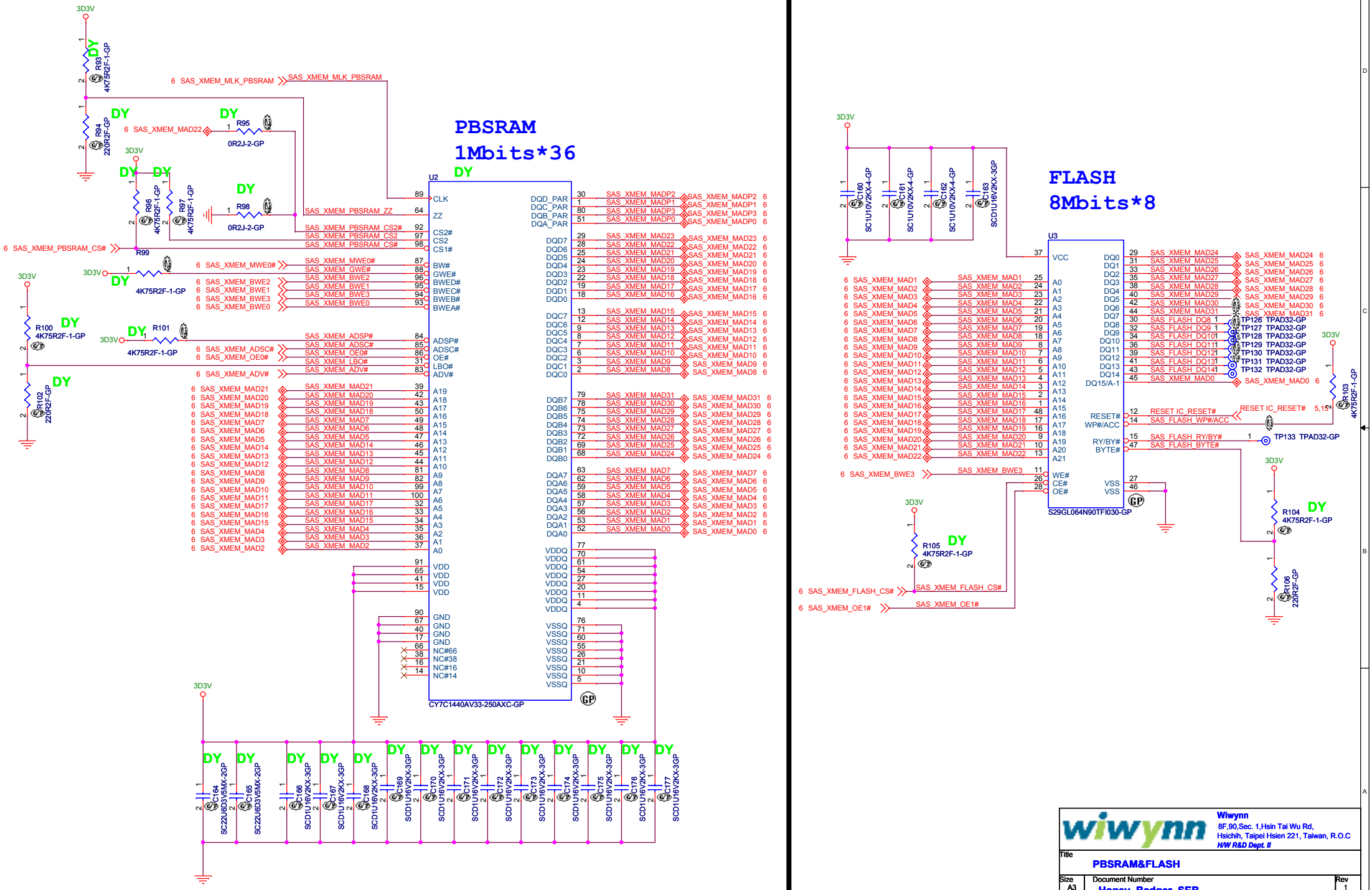

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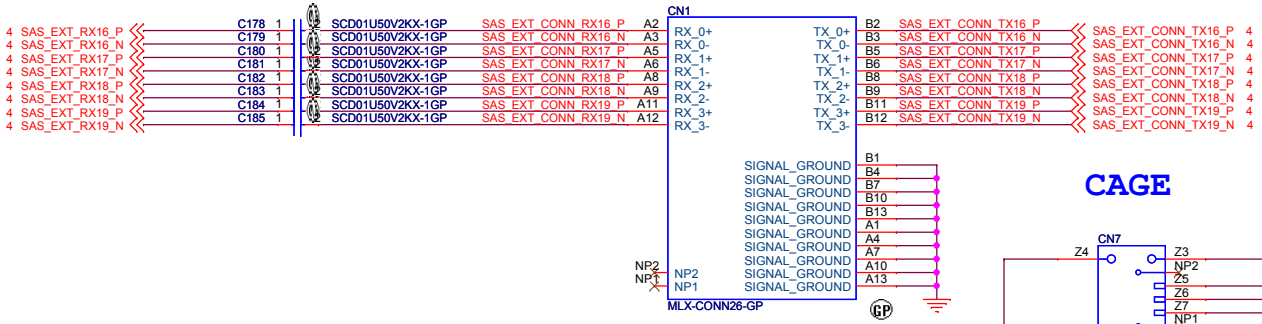
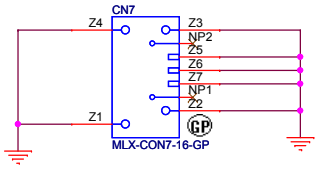
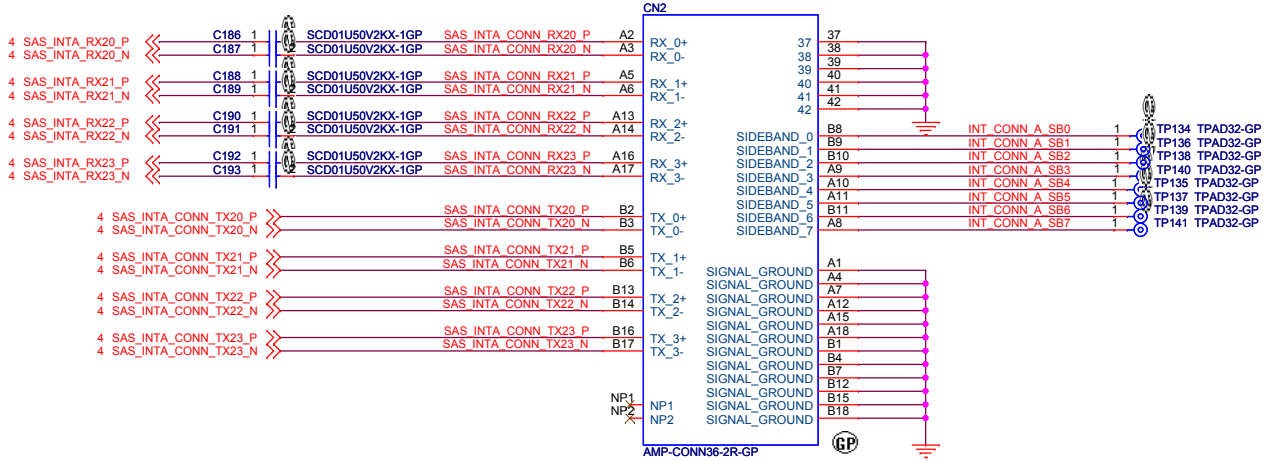
EXT miniSAS CONN



CAGE



INT miniSAS CONN_A



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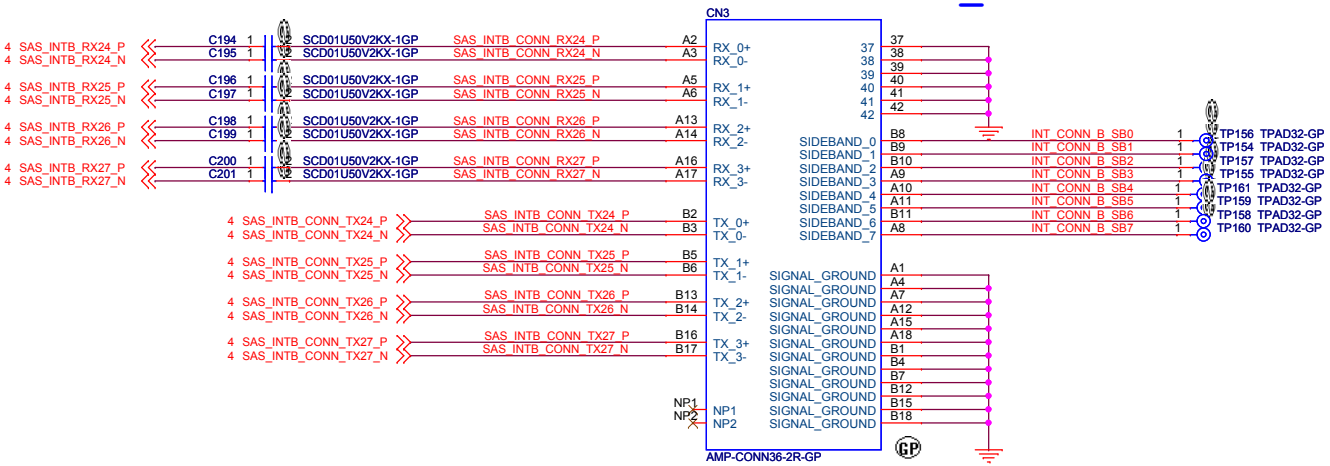

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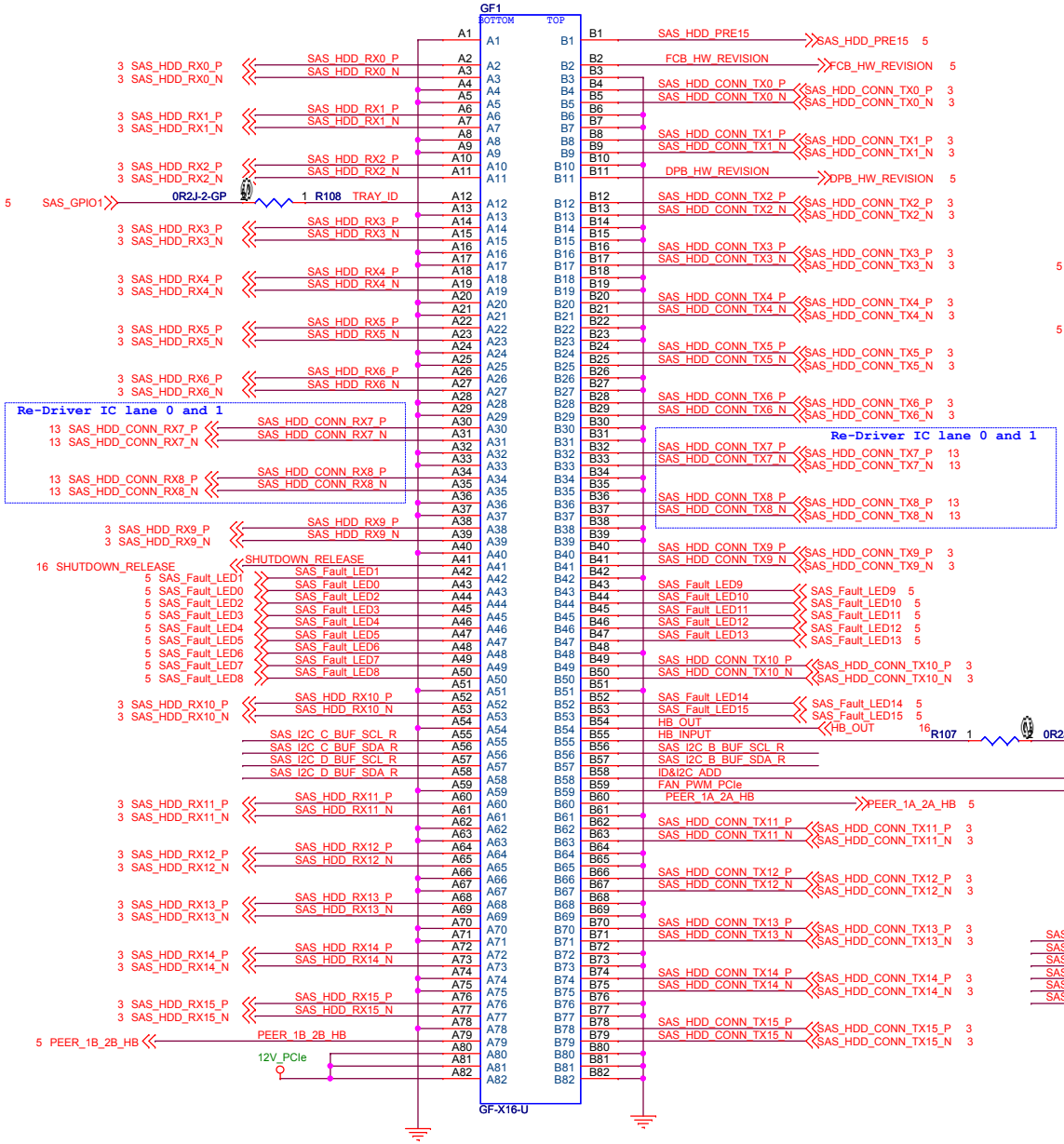
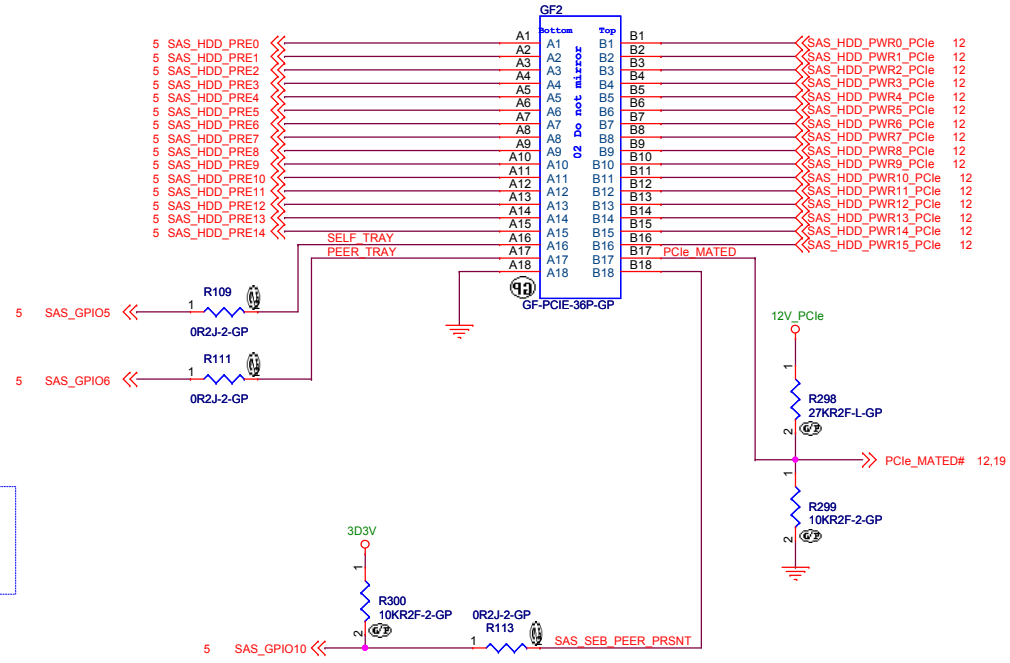
x16 PCIe 164 PINs GOLDEN FINGER STRADDLE TYPE



x1 PCIe 36 PINs GOLDEN FINGER STRADDLE TYPE



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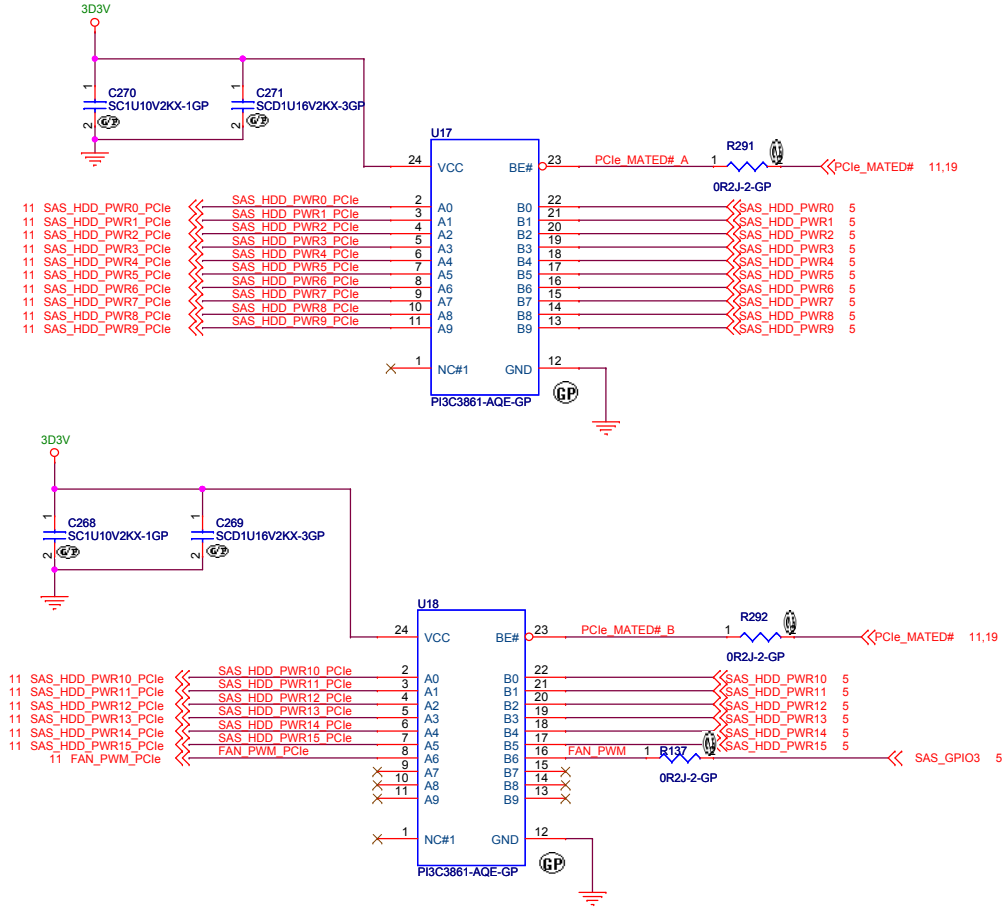
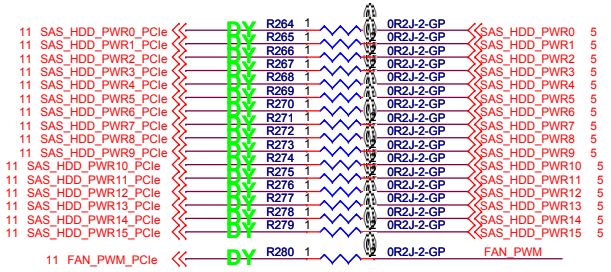
BUS SWITCH



RESERVE FOR BYPASS



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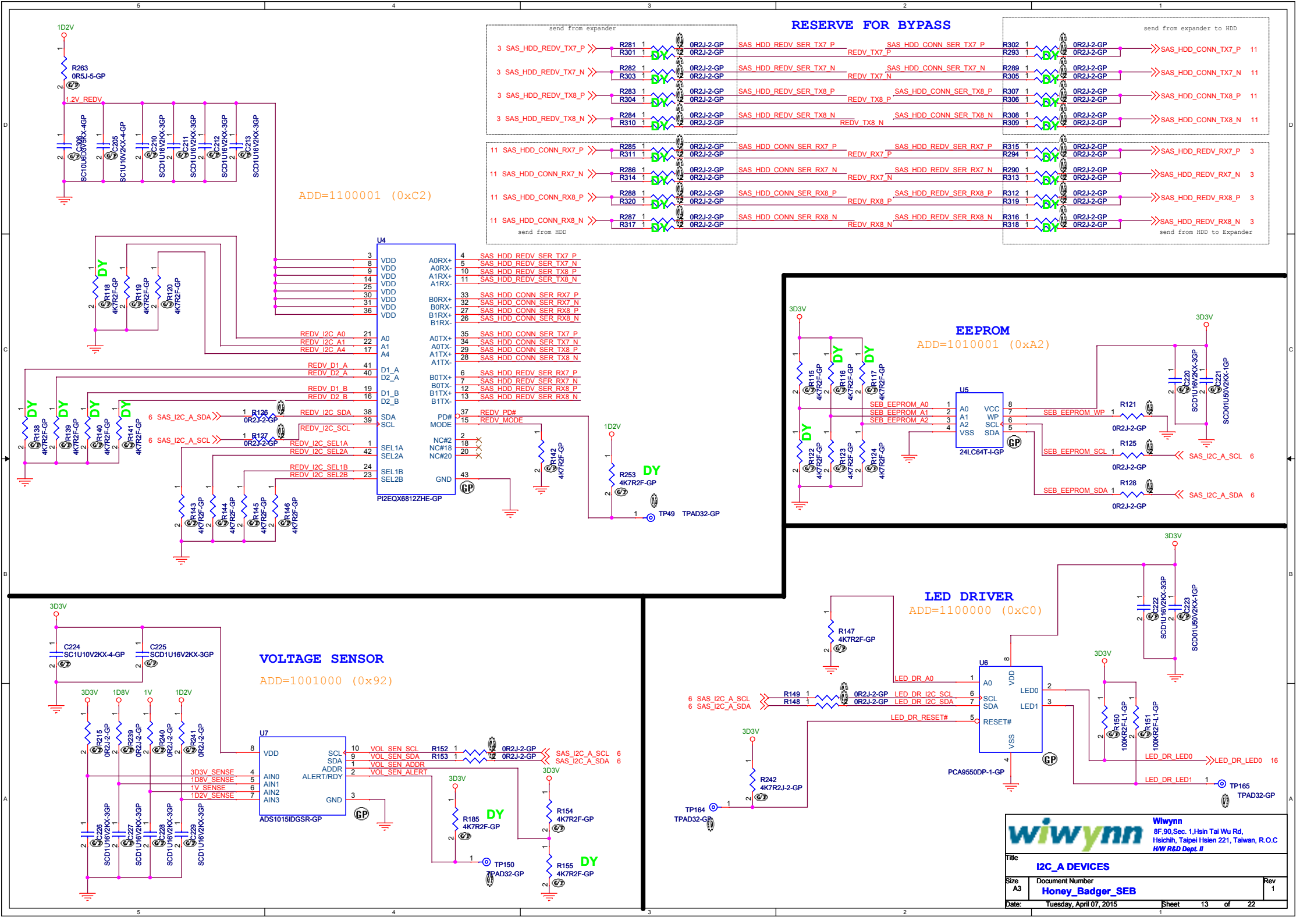
RESERVE FOR BYPASS
send from expander
send from expander to HDD
send from HDD
send from HDD to Expander
ADD=1100001 (0xC2)
U4
PI2EQX6812ZHE-GP
EEPROM
ADD=1010001 (0xA2)
U5
24LC64T-I-GP
VOLTAGE SENSOR
ADD=1001000 (0x92)
U7
ADS1015IDGSR-GP
LED DRIVER
ADD=1100000 (0xC0)
U6
PCA9550DP-1-GP
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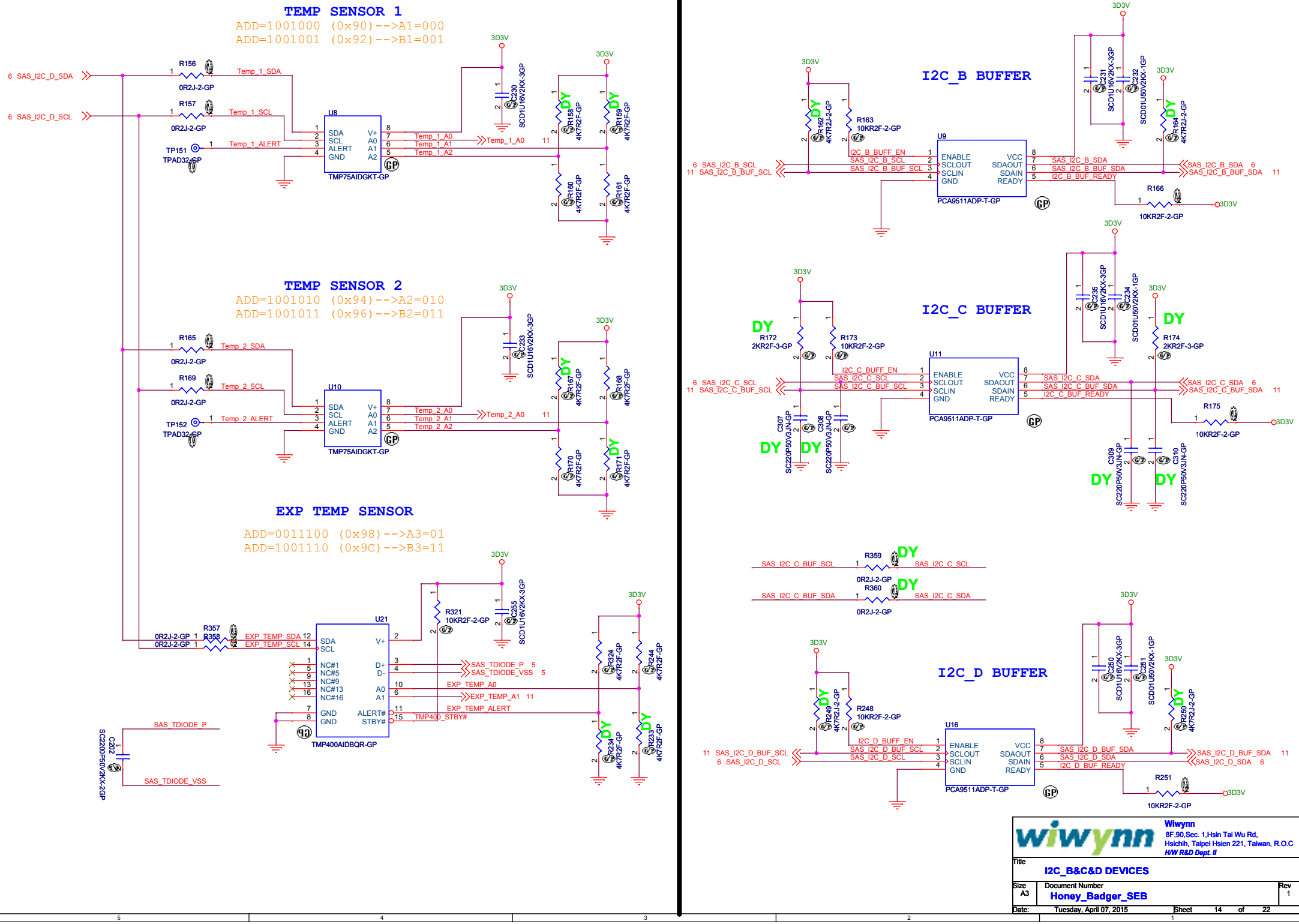
TEMP SENSOR 1
ADD=1001000 (0x90)-->A1=000
ADD=1001001 (0x92)-->B1=001
TEMP SENSOR 2
ADD=1001010 (0x94)-->A2=010
ADD=1001011 (0x96)-->B2=011
EXP TEMP SENSOR
ADD=0011100 (0x98)-->A3=01
ADD=1001110 (0x9C)-->B3=11
I2C_B BUFFER
I2C_C BUFFER
I2C_D BUFFER
3D3V
U8
U9
U10
U11
U16
U21
TMP75AIDGKT-GP
PCA9511ADP-T-GP
TMP400AIDBQR-GP
Temp_1_SDA
Temp_1_SCL
Temp_1_ALERT
Temp_2_SDA
Temp_2_SCL
Temp_2_ALERT
EXP_TEMP_SDA
EXP_TEMP_SCL
SAS_TDIODE_P
SAS_TDIODE_VSS
EXP_TEMP_A0
EXP_TEMP_A1
EXP_TEMP_ALERT
TMP400_STBY#
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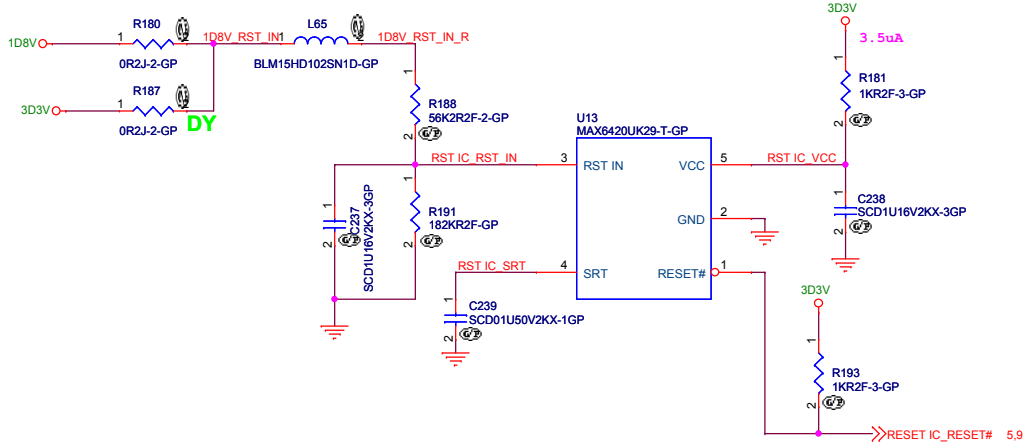
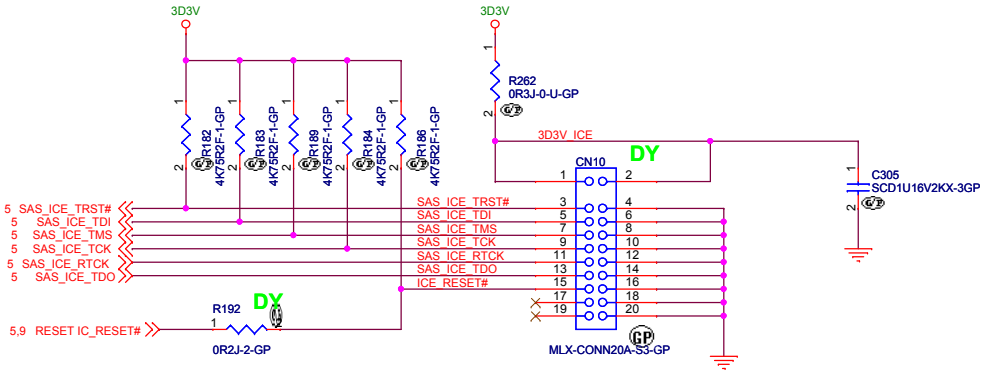
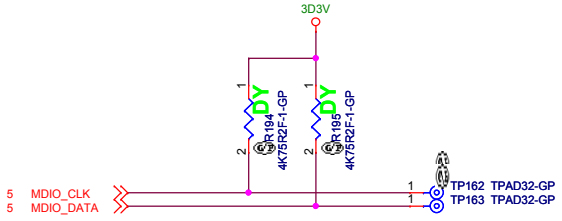
SYSTEM RESET



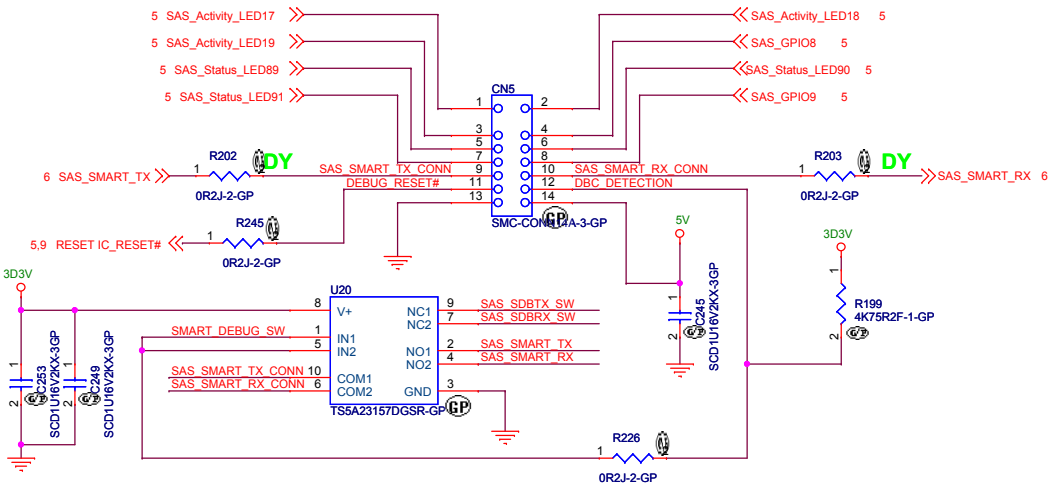
ICE CONN



MDIO EYE FINDER



DEBUG CARD HEADER



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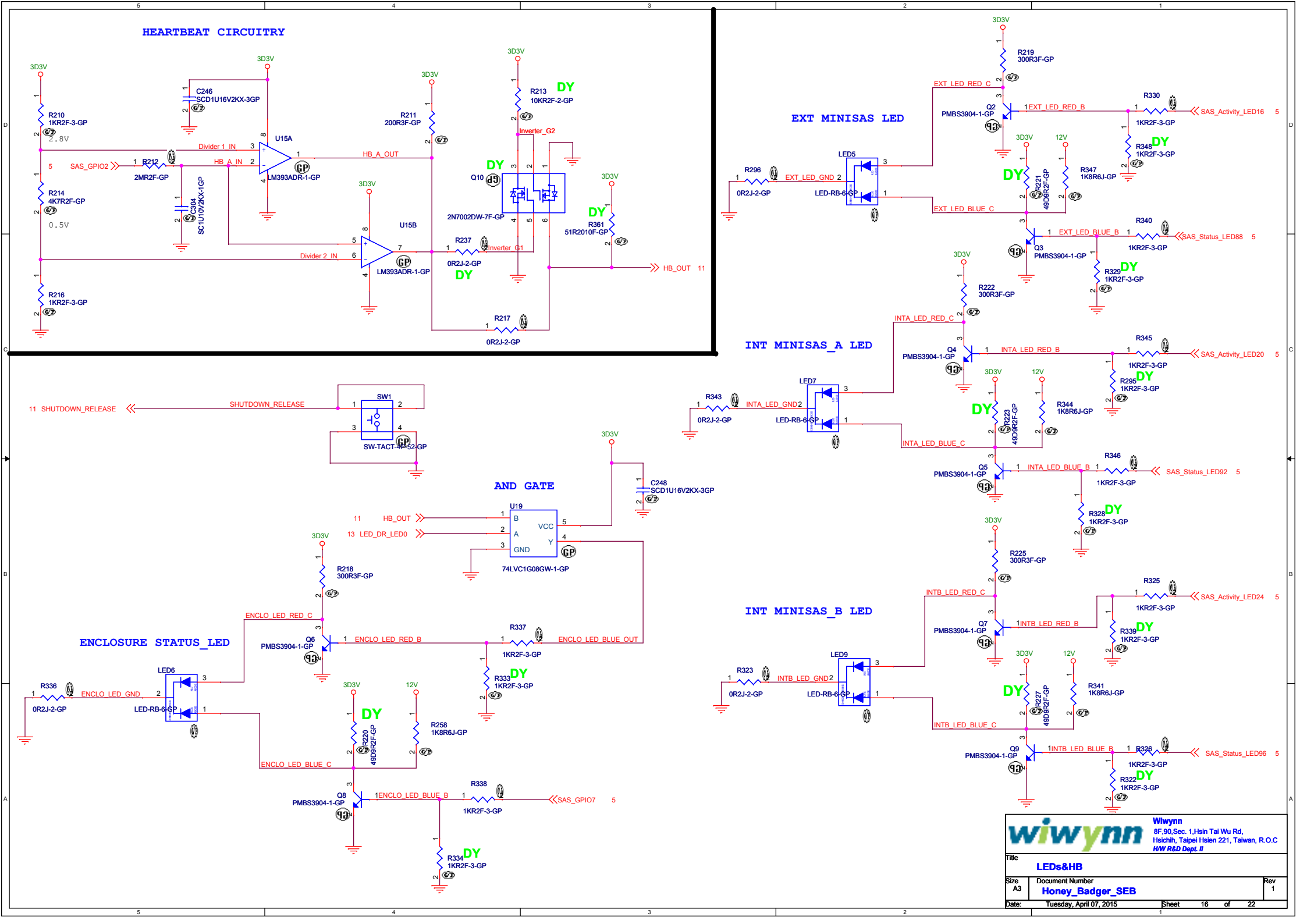
HEARTBEAT CIRCUITRY
3D3V
R210 1KR2F-3-GP
2.8V
R214 4K7R2F-GP
0.5V
R216 1KR2F-3-GP
C246 SCD1U16V2KX-3GP
SC1U10V2KX-1GP
C304
SAS_GPIO2
R212 2MR2F-GP
Divider 1_IN
HB_A_IN
U15A
LM393ADR-1-GP
HB_A_OUT
R211 200R3F-GP
U15B
Divider 2_IN
R237 0R2J-2-GP
Inverter_G1
R213 10KR2F-2-GP
DY
Inverter_G2
Q10
2N7002DW-7F-GP
R361 51R2010F-GP
HB_OUT 11
R217 0R2J-2-GP
EXT MINISAS LED
R219 300R3F-GP
EXT_LED_RED_C
Q2 PMBS3904-1-GP
1EXT_LED_RED_B
R330 1KR2F-3-GP
SAS_Activity_LED16 5
R348 1KR2F-3-GP
12V
R347 1K8R6J-GP
R221 49D9R2F-GP
LED5
LED-RB-6-GP
R296 0R2J-2-GP
EXT_LED_GND 2
EXT_LED_BLUE_C
Q3 PMBS3904-1-GP
EXT_LED_BLUE_B 1
R340 1KR2F-3-GP
SAS_Status_LED88 5
R329 1KR2F-3-GP
INT MINISAS_A LED
R222 300R3F-GP
INTA_LED_RED_C
Q4 PMBS3904-1-GP
INTA_LED_RED_B
R345 1KR2F-3-GP
SAS_Activity_LED20 5
R295 1KR2F-3-GP
LED7
R343 0R2J-2-GP
INTA_LED_GND2
R223 49D9R2F-GP
R344 1K8R6J-GP
INTA_LED_BLUE_C
Q5 PMBS3904-1-GP
INTA_LED_BLUE_B 1
R346 1KR2F-3-GP
SAS_Status_LED92 5
R328 1KR2F-3-GP
INT MINISAS_B LED
R225 300R3F-GP
INTB_LED_RED_C
Q7 PMBS3904-1-GP
1INTB_LED_RED_B
R325 1KR2F-3-GP
SAS_Activity_LED24 5
R339 1KR2F-3-GP
LED9
R323 0R2J-2-GP
INTB_LED_GND2
R227 49D9R2F-GP
R341 1K8R6J-GP
INTB_LED_BLUE_C
Q9 PMBS3904-1-GP
1INTB_LED_BLUE_B
R326 1KR2F-3-GP
SAS_Status_LED96 5
R322 1KR2F-3-GP
11 SHUTDOWN_RELEASE
SHUTDOWN_RELEASE
SW1
SW-TACT-4P-52-GP
AND GATE
U19
74LVC1G08GW-1-GP
11 HB_OUT
13 LED_DR_LED0
C248 SCD1U16V2KX-3GP
ENCLOSURE STATUS_LED
R218 300R3F-GP
ENCLO_LED_RED_C
Q6 PMBS3904-1-GP
ENCLO_LED_RED_B
R337 1KR2F-3-GP
ENCLO_LED_BLUE_OUT
R333 1KR2F-3-GP
LED6
R336 0R2J-2-GP
ENCLO_LED_GND 2
R220 49D9R2F-GP
R258 1K8R6J-GP
ENCLO_LED_BLUE_C
Q8 PMBS3904-1-GP
1ENCLO_LED_BLUE_B
R338 1KR2F-3-GP
SAS_GPIO7 5
R334 1KR2F-3-GP
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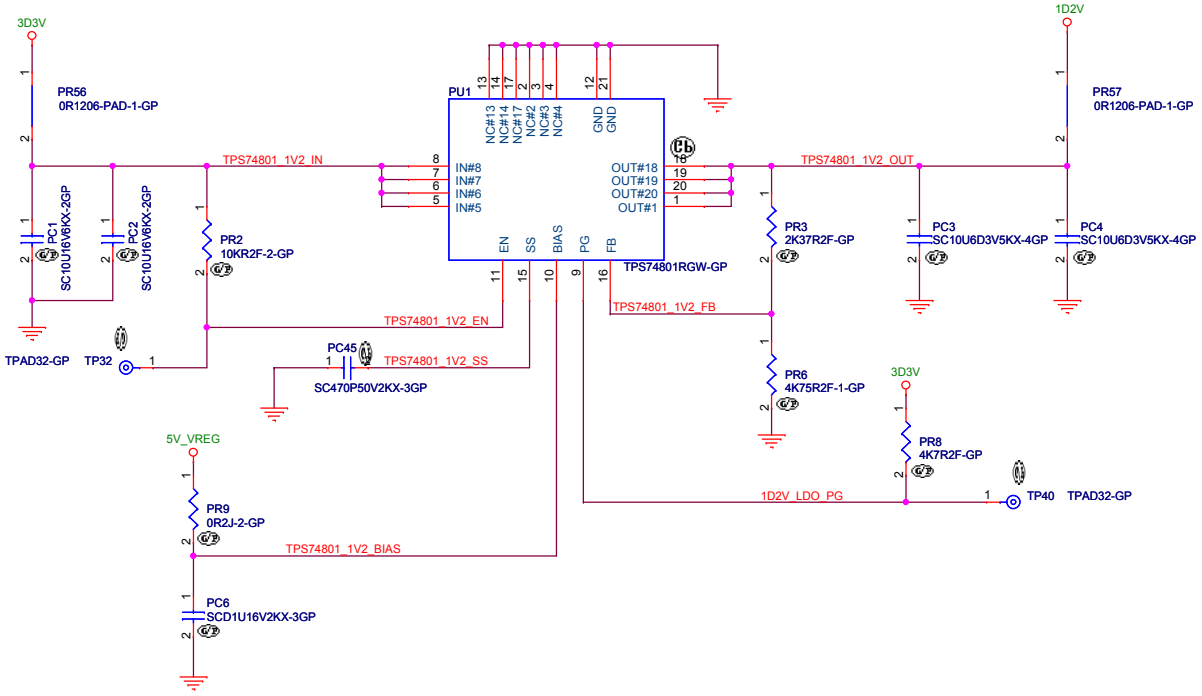
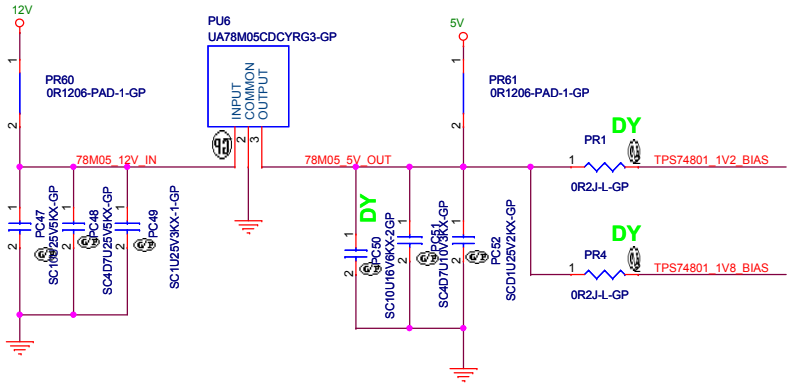
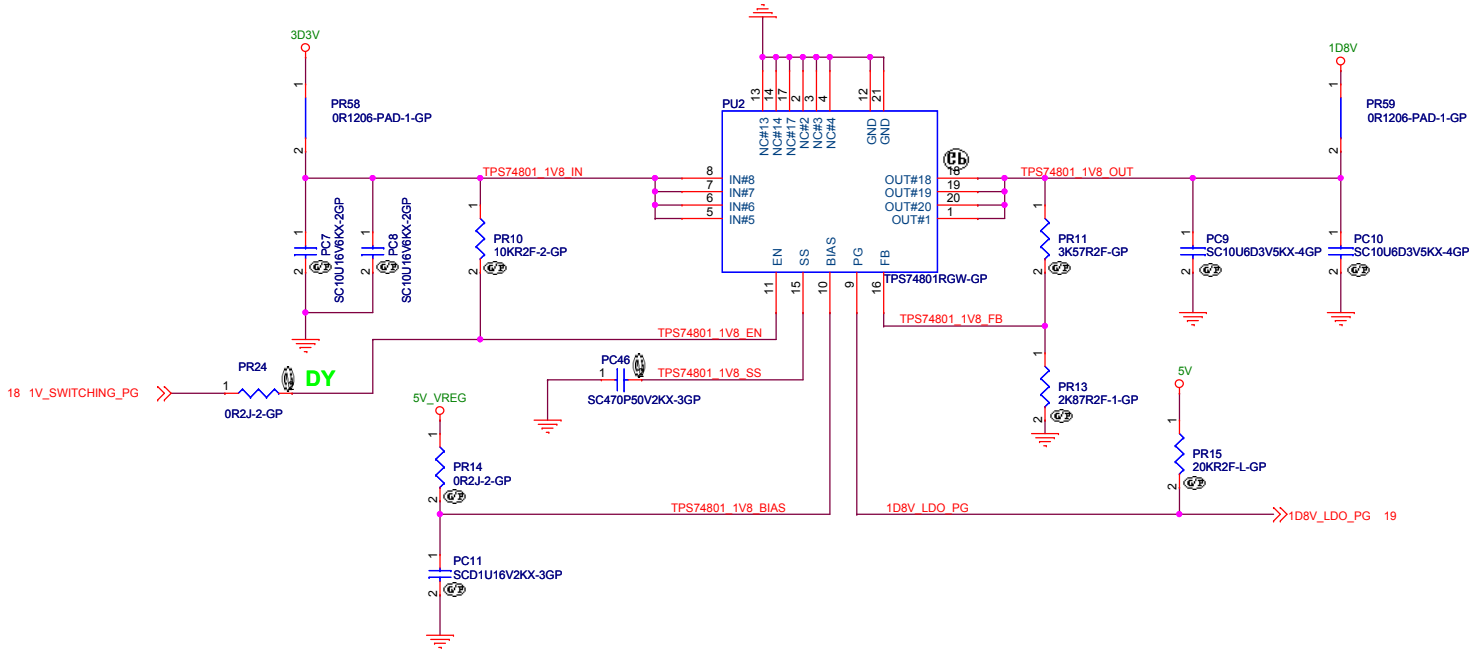
1D2V LDO TPS74801



5V RERULATOR



1D8V LDO TPS74801



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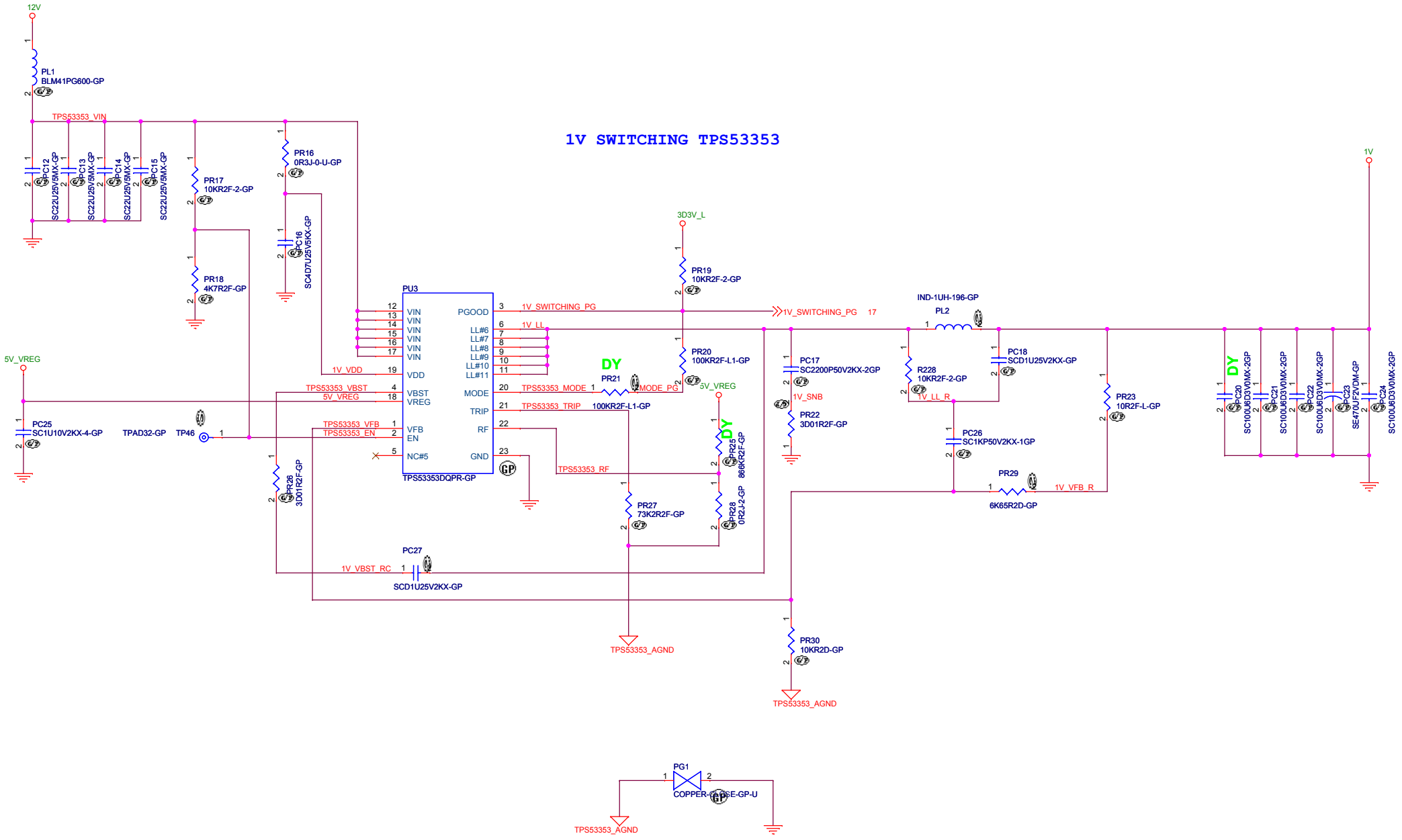
1V SWITCHING TPS53353



Wiwynn	8F,90,Sec. 1,Hsin Tai Wu Rd, Hsichih, Taipei Hsien 221, Taiwan, R.O.C	
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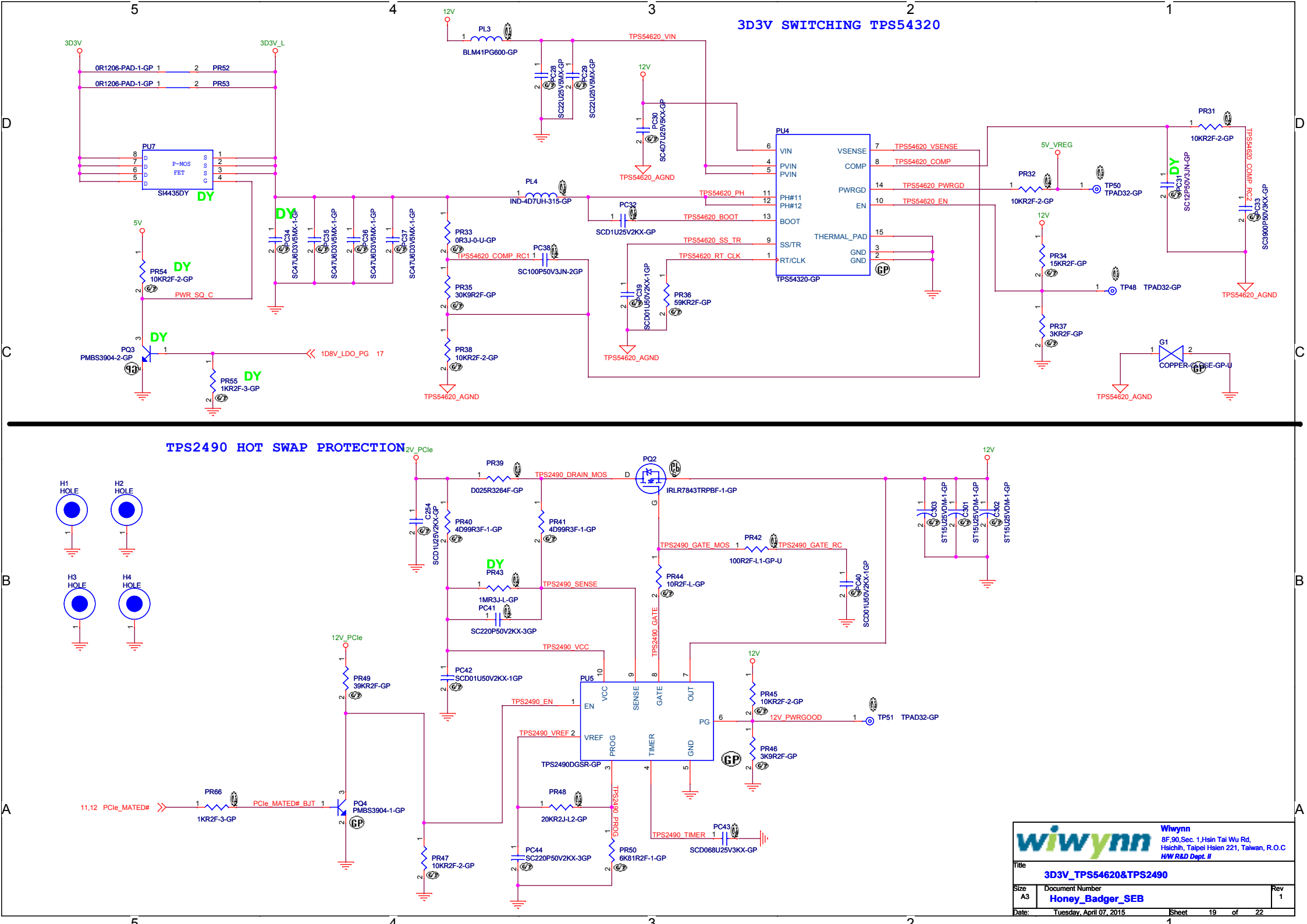
3D3V SWITCHING TPS54320
TPS2490 HOT SWAP PROTECTION
PU4
TPS54320-GP
PU5
TPS2490DGSR-GP
PU7
SI4435DY
PQ2
IRLR7843TRPBF-1-GP
PQ3
PMBS3904-2-GP
PQ4
PMBS3904-1-GP
PL3
BLM41PG600-GP
PL4
IND-4D7UH-315-GP
TPS54620_VIN
TPS54620_PH
TPS54620_BOOT
TPS54620_SS_TR
TPS54620_RT_CLK
TPS54620_COMP_RC1
TPS54620_VSENSE
TPS54620_COMP
TPS54620_PWRGD
TPS54620_EN
TPS54620_AGND
TPS2490_DRAIN_MOS
TPS2490_GATE_MOS
TPS2490_GATE_RC
TPS2490_GATE
TPS2490_SENSE
TPS2490_VCC
TPS2490_EN
TPS2490_VREF
TPS2490_PROG
TPS2490_TIMER
12V_PWRGOOD
PCIe_MATED#
PCIe_MATED#_BJT
1D8V_LDO_PG
PWR_SQ_C
3D3V
3D3V_L
5V
5V_VREG
12V
12V_PCIe
2V_PCIe
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