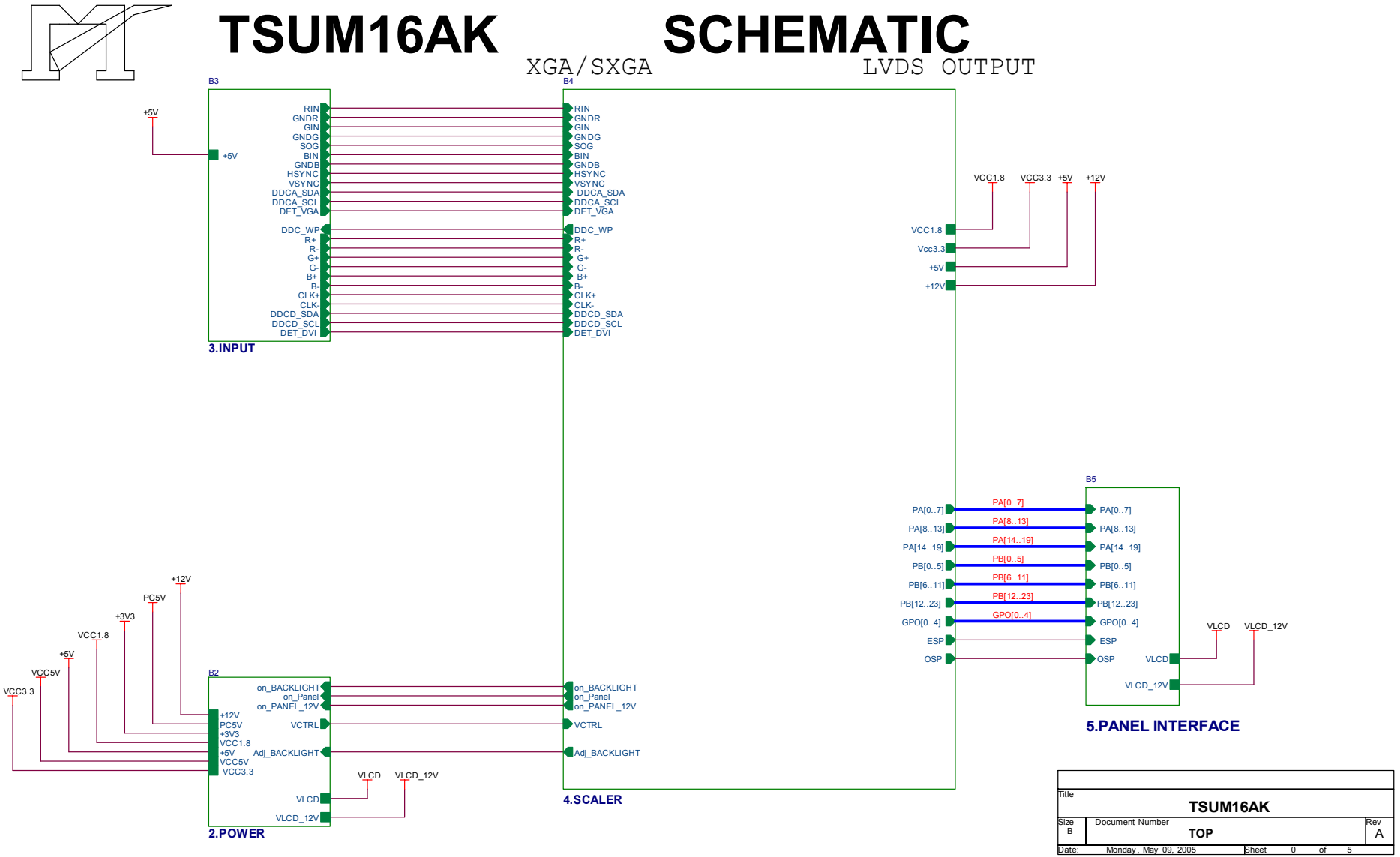
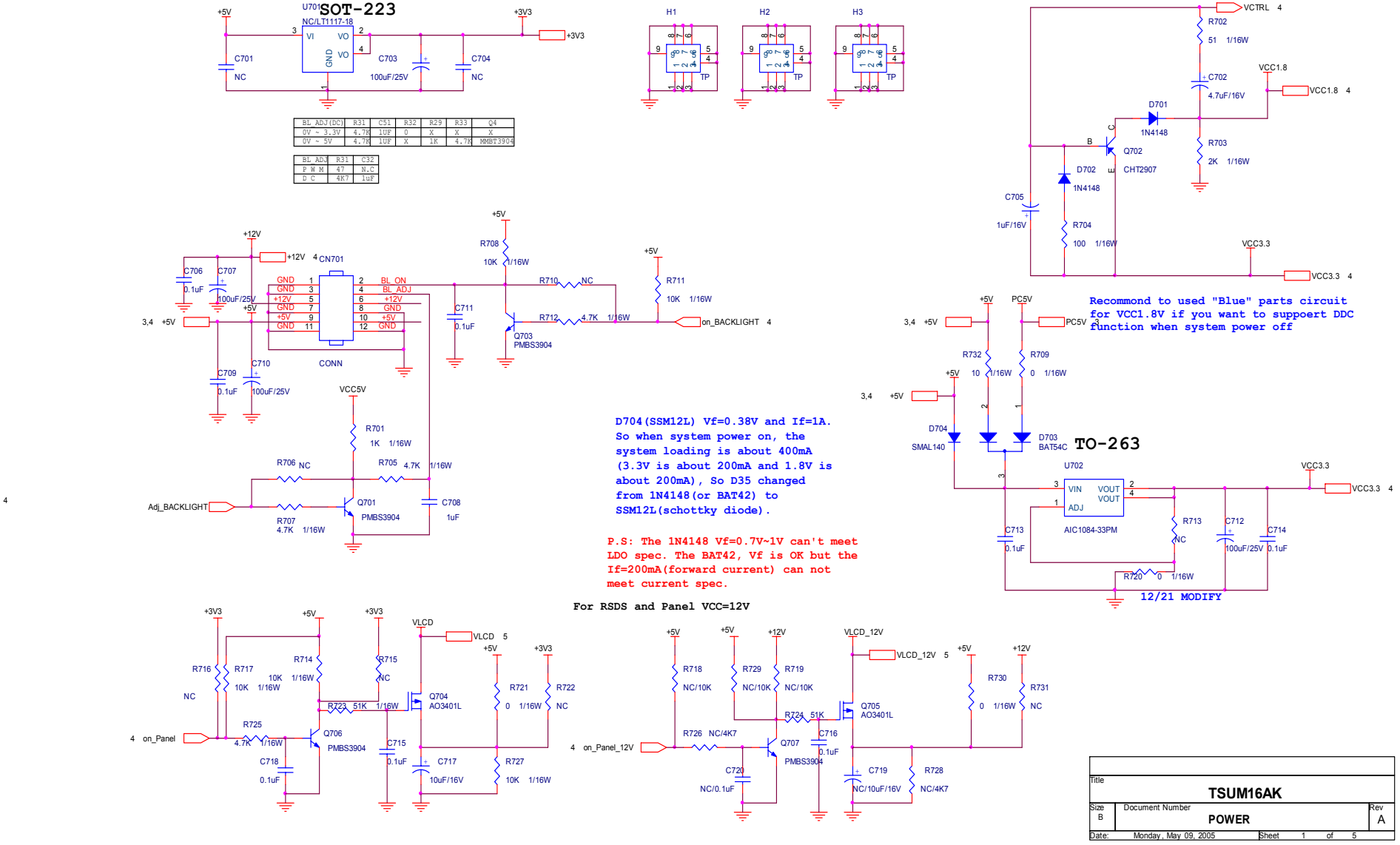
6. Schematic

6.1 Main Board

715G1558-3-2




U701 SOT-223
NC/LT1117-18
+5V
+3V3
C701 NC
C703 100uF/25V
C704 NC
H1
H2
H3
TP
BL_ADJ(DC) R31 C51 R32 R29 R33 Q4
0V ~ 3.3V 4.7K 1UF 0 X X X
0V ~ 5V 4.7K 1UF X 1K 4.7K MMBT3904
BL_ADJ R31 C32
P W M 47 N.C
D C 4K7 1uF
+12V
CN701
C706 0.1uF
C707 100uF/25V
C709 0.1uF
C710 100uF/25V
CONN
GND
BL_ON
BL_ADJ
R708 10K 1/16W
R710 NC
R711 10K 1/16W
R712 4.7K 1/16W
Q703 PMBS3904
C711 0.1uF
on_BACKLIGHT 4
VCC5V
R701 1K 1/16W
R706 NC
R705 4.7K 1/16W
R707 4.7K 1/16W
Q701 PMBS3904
C708 1uF
Adj_BACKLIGHT
VCTRL 4
R702 51 1/16W
C702 4.7uF/16V
VCC1.8
VCC1.8 4
D701 1N4148
Q702 CHT2907
D702 1N4148
R703 2K 1/16W
C705 1uF/16V
R704 100 1/16W
VCC3.3
VCC3.3 4
PC5V
R732 10 1/16W
R709 0 1/16W
D704 SMAL140
D703 BAT54C
TO-263
U702
VIN
VOUT
VOUT
ADJ
AIC1084-33PM
C713 0.1uF
R713 NC
C712 100uF/25V
C714 0.1uF
R720 0 1/16W
12/21 MODIFY
Recommond to used "Blue" parts circuit for VCC1.8V if you want to suppoert DDC function when system power off
D704(SSM12L) Vf=0.38V and If=1A. So when system power on, the system loading is about 400mA (3.3V is about 200mA and 1.8V is about 200mA), So D35 changed from 1N4148(or BAT42) to SSM12L(schottky diode).
P.S: The 1N4148 Vf=0.7V~1V can't meet LDO spec. The BAT42, Vf is OK but the If=200mA(forward current) can not meet current spec.
For RSDS and Panel VCC=12V
+3V3
VLCD
R716 NC
R717 10K 1/16W
R714 10K 1/16W
R715 NC
R723 51K 1/16W
Q704 AO3401L
R721 0 1/16W
R722 NC
R725 4.7K 1/16W
Q706 PMBS3904
C718 0.1uF
C715 0.1uF
C717 10uF/16V
R727 10K 1/16W
on_Panel
VLCD_12V
R718 NC/10K
R729 NC/10K
R719 NC/10K
R724 51K
Q705 AO3401L
R730 0 1/16W
R731 NC
R726 NC/4K7
Q707 PMBS3904
C716 0.1uF
C720 NC/0.1uF
C719 NC/10uF/16V
R728 NC/4K7
on_Panel_12V
Title
TSUM16AK
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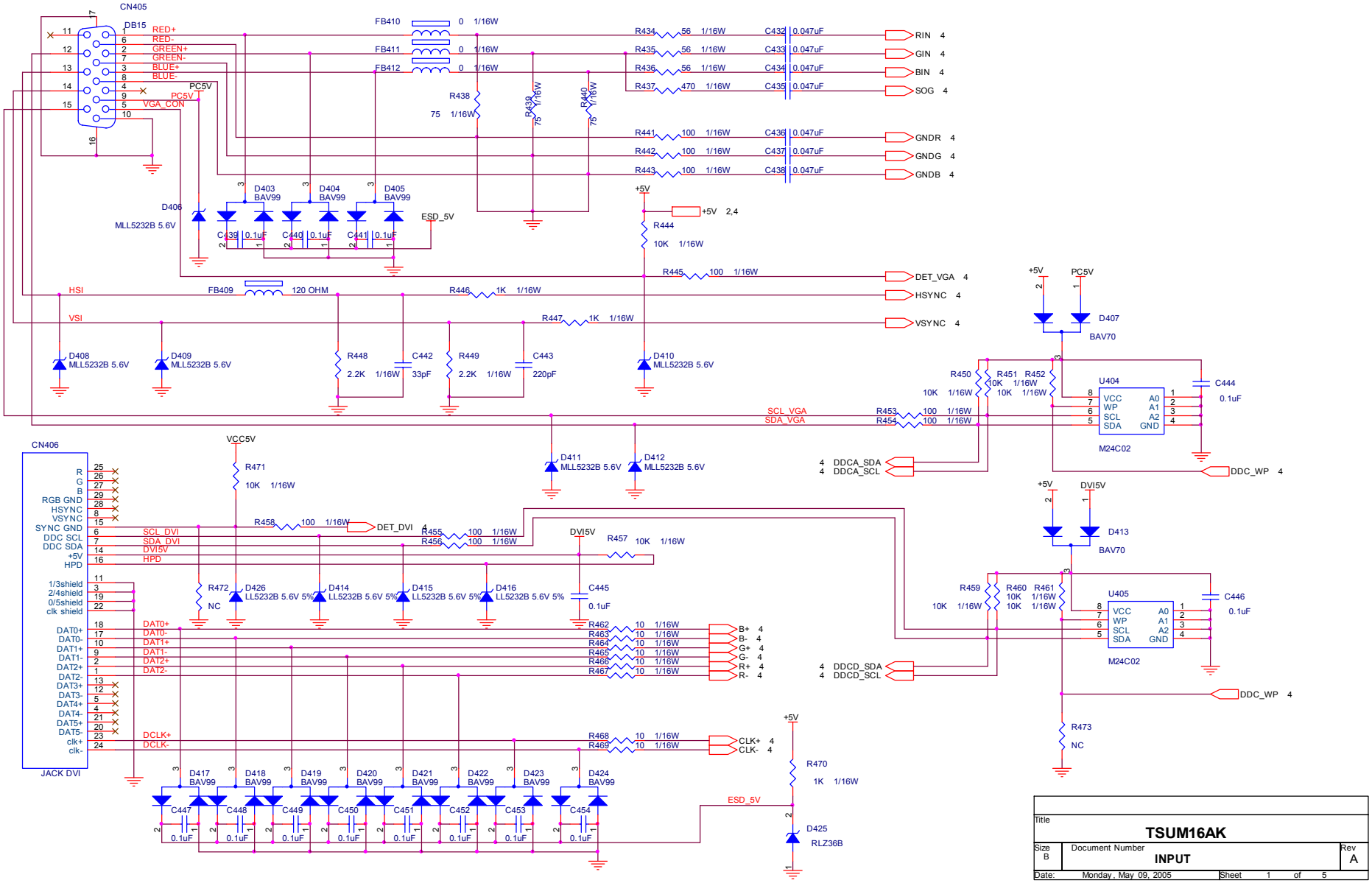
CN405
DB15
RED+
RED-
GREEN+
GREEN-
BLUE+
BLUE-
PC5V
VGA_CON
FB410 0 1/16W
FB411 0 1/16W
FB412 0 1/16W
R434 56 1/16W
R435 56 1/16W
R436 56 1/16W
R437 470 1/16W
C432 0.047uF
C433 0.047uF
C434 0.047uF
C435 0.047uF
RIN 4
GIN 4
BIN 4
SOG 4
R438 75 1/16W
R439 75 1/16W
R440 75 1/16W
R441 100 1/16W
R442 100 1/16W
R443 100 1/16W
C436 0.047uF
C437 0.047uF
C438 0.047uF
GNDR 4
GNDG 4
GNDB 4
D403 BAV99
D404 BAV99
D405 BAV99
D406 MLL5232B 5.6V
ESD_5V
C439 0.1uF
C440 0.1uF
C441 0.1uF
+5V
+5V 2,4
R444 10K 1/16W
R445 100 1/16W
DET_VGA 4
HSI
VSI
FB409 120 OHM
R446 1K 1/16W
R447 1K 1/16W
HSYNC 4
VSYNC 4
D408 MLL5232B 5.6V
D409 MLL5232B 5.6V
R448 2.2K 1/16W
C442 33pF
R449 2.2K 1/16W
C443 220pF
D410 MLL5232B 5.6V
SCL_VGA
SDA_VGA
R453 100 1/16W
R454 100 1/16W
4 DDCA_SDA
4 DDCA_SCL
D411 MLL5232B 5.6V
D412 MLL5232B 5.6V
+5V
PC5V
D407 BAV70
R450 10K 1/16W
R451 10K 1/16W
R452 10K 1/16W
U404
VCC
WP
SCL
SDA
A0
A1
A2
GND
M24C02
C444 0.1uF
DDC_WP 4
CN406
R
G
B
RGB GND
HSYNC
VSYNC
SYNC GND
DDC SCL
DDC SDA
+5V
HPD
1/3shield
2/4shield
0/5shield
clk shield
JACK DVI
VCC5V
R471 10K 1/16W
R458 100 1/16W
DET_DVI 4
SCL_DVI
SDA_DVI
DVI5V
HPD
R455 100 1/16W
R456 100 1/16W
DVI5V
R457 10K 1/16W
R472 NC
D426 LL5232B 5.6V 5%
D414 LL5232B 5.6V 5%
D415 LL5232B 5.6V 5%
D416 LL5232B 5.6V 5%
C445 0.1uF
DAT0+
DAT0-
DAT1+
DAT1-
DAT2+
DAT2-
R462 10 1/16W
R463 10 1/16W
R464 10 1/16W
R465 10 1/16W
R466 10 1/16W
R467 10 1/16W
B+ 4
B- 4
G+ 4
G- 4
R+ 4
R- 4
DCLK+
DCLK-
R468 10 1/16W
R469 10 1/16W
CLK+ 4
CLK- 4
D417 BAV99
D418 BAV99
D419 BAV99
D420 BAV99
D421 BAV99
D422 BAV99
D423 BAV99
D424 BAV99
C447 0.1uF
C448 0.1uF
C449 0.1uF
C450 0.1uF
C451 0.1uF
C452 0.1uF
C453 0.1uF
C454 0.1uF
ESD_5V
+5V
R470 1K 1/16W
D425 RLZ36B
+5V
DVI5V
D413 BAV70
R459 10K 1/16W
R460 10K 1/16W
R461 10K 1/16W
U405
M24C02
C446 0.1uF
4 DDCD_SDA
4 DDCD_SCL
DDC_WP 4
R473 NC
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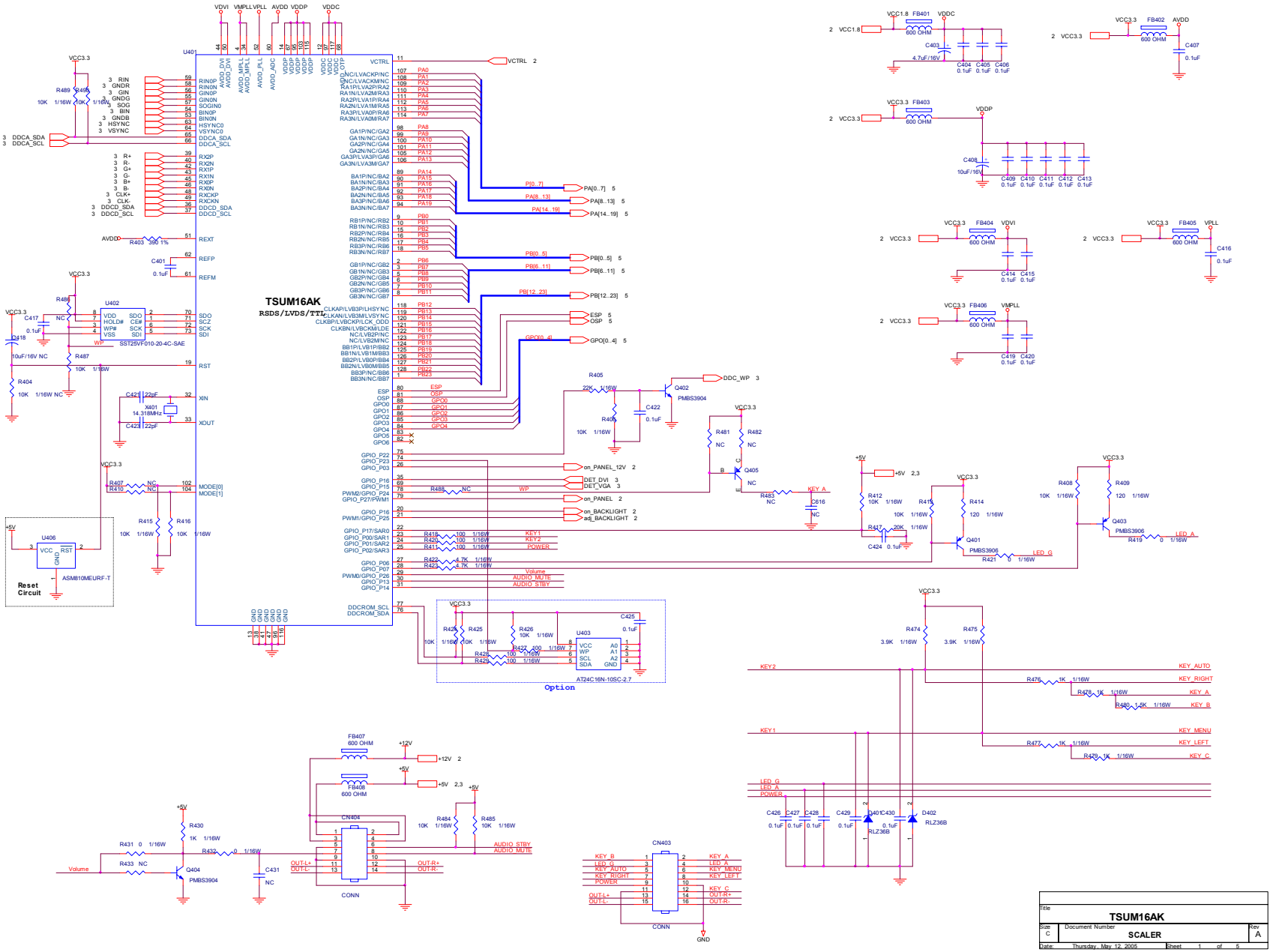
TSUM16AK
RSDS/LVDS/TTL
U401
U402
U403
U406
X401
14.318MHz
SST25VF010-20-4C-SAE
AT24C16N-10SC-2.7
ASMB10MEURF-T
Reset Circuit
Option
CN403
CN404
CONN
Q401
Q402
Q403
Q404
Q405
PMBS3904
RLZ36B
FB401
FB402
FB403
FB404
FB405
FB406
FB407
FB408
600 OHM
VCC3.3
VCC1.8
VDDC
VDDP
AVDD
VDVI
VPLL
VMPLL
+5V
+12V
GND
VCTRL
PA[0..7]
PA[8..13]
PA[14..19]
PB[0..5]
PB[6..11]
PB[12..23]
GPO[0..4]
ESP
OSP
on_PANEL_12V
DET_DVI
DET_VGA
on_PANEL
on_BACKLIGHT
adj_BACKLIGHT
DDC_WP
KEY1
KEY2
POWER
Volume
AUDIO_MUTE
AUDIO_STBY
KEY_AUTO
KEY_RIGHT
KEY_A
KEY_B
KEY_MENU
KEY_LEFT
KEY_C
LED_G
LED_A
OUT-L+
OUT-L-
OUT-R+
OUT-R-
Title
TSUM16AK
Size C
Document Number
SCALER
Rev A
Date: Thursday, May 12, 2005
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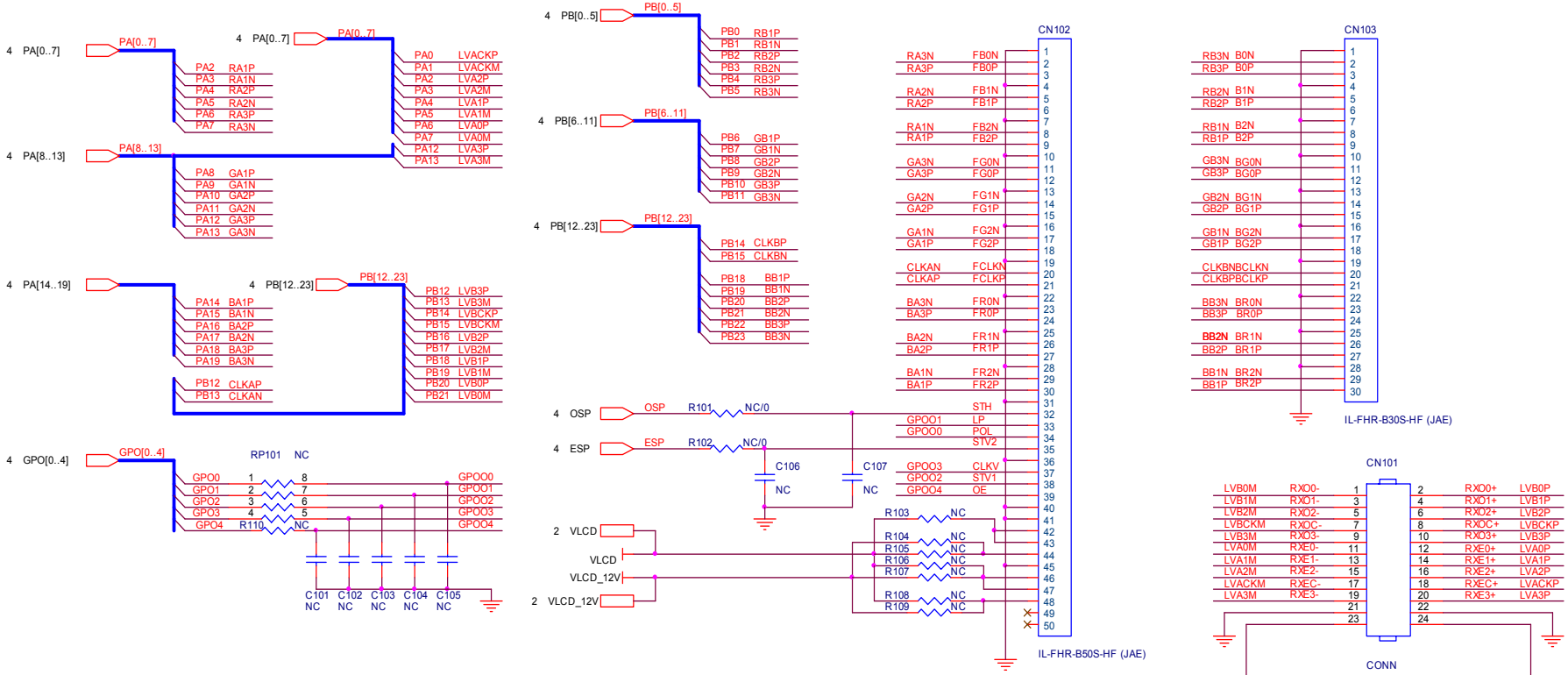

	CN7	CN8	CN9	RP1	R88	R89	R91	Table 1
LVDS Panel	X	X	V	X	X	X	X	X
RSDS Panel	V	V	X	V	V	V	V	V

Table 1	R90	R92	R93	R94	R95	R96	R97
AU 17	NC	NC	5V 0R	5V 0R	NC	5V 0R	NC
QDI 17 CPT 17	3.3V 0R	12V 0R	NC	NC	12V 0R	NC	12V 0R
INNOLUX 15	3.3V 0R	NC	3.3V 0R	NC	NC	NC	NC
HannStar 15 CPT 15	3.3V 0R	NC	3.3V 0R	NC	12V 0R	NC	NC
LG 15	3.3V 0R	NC	3.3V 0R	NC	NC	NC	NC
Innolux 17"	NC	NC	3.3V 0R	3.3V 0R	NC	3.3V 0R	NC

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B	**PANEL INTERFACE**	A

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6.2 Power Board

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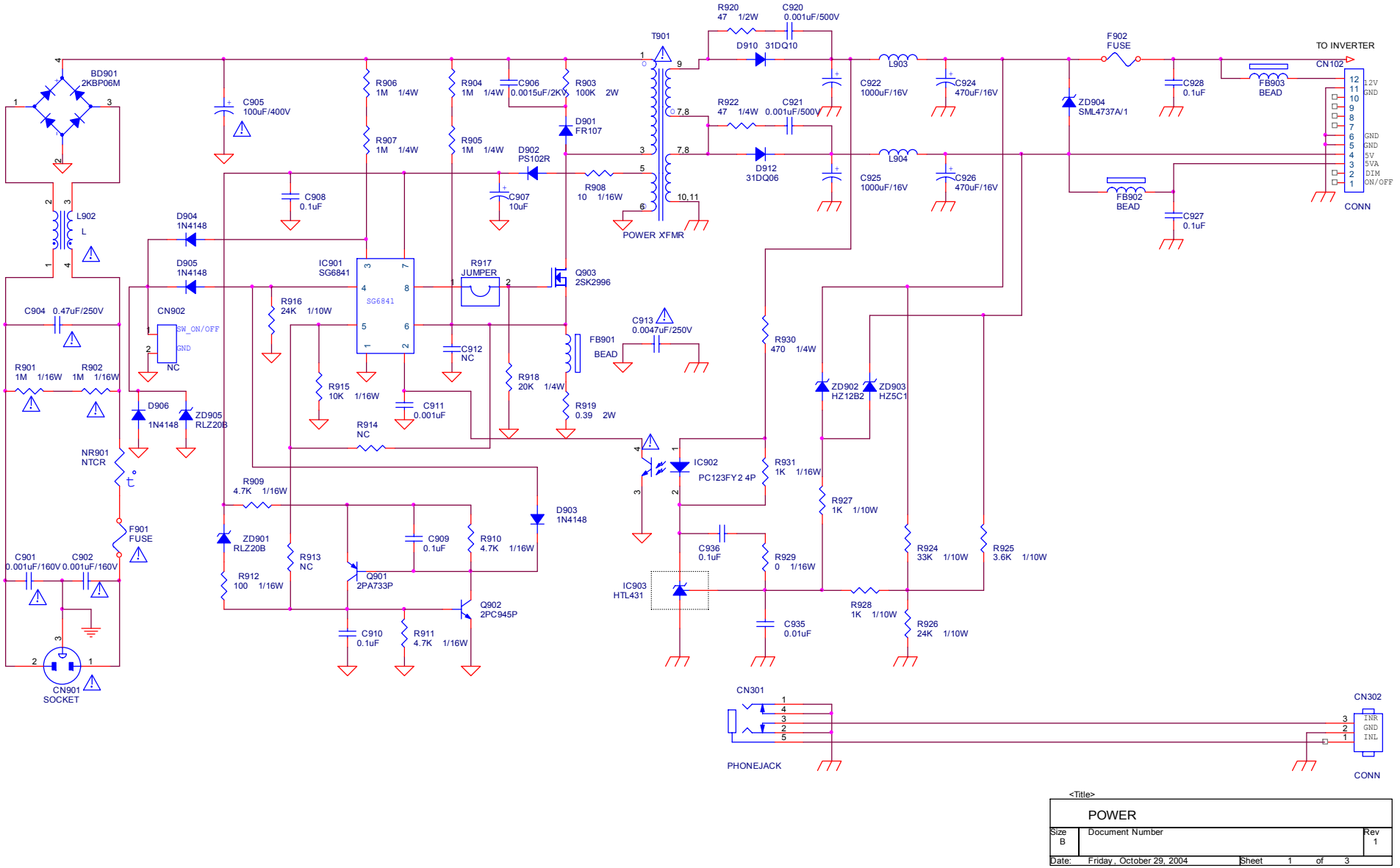

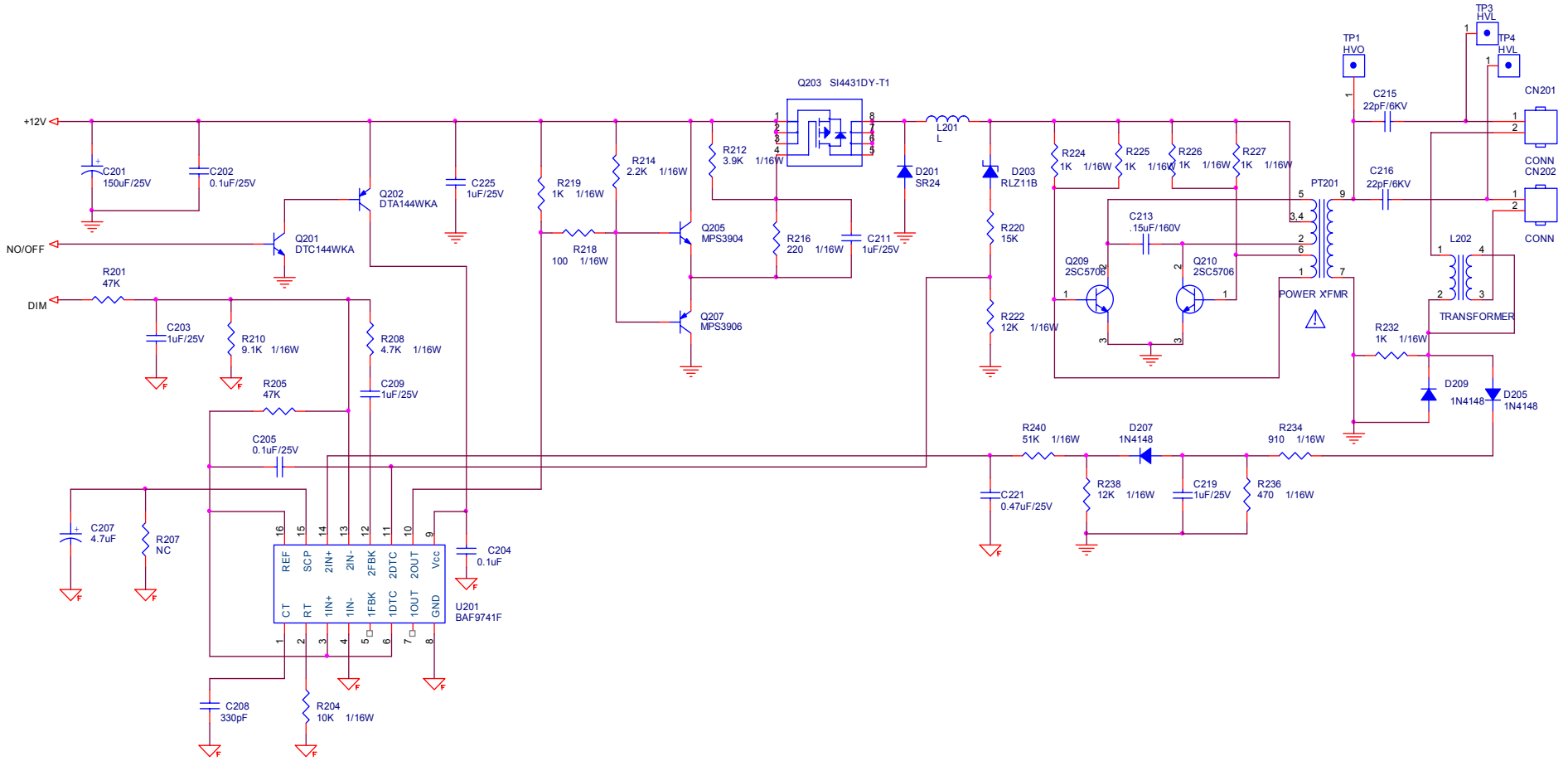

AOC (Top Victory) Electronics Co., Ltd.		
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is power GND

is signal GND