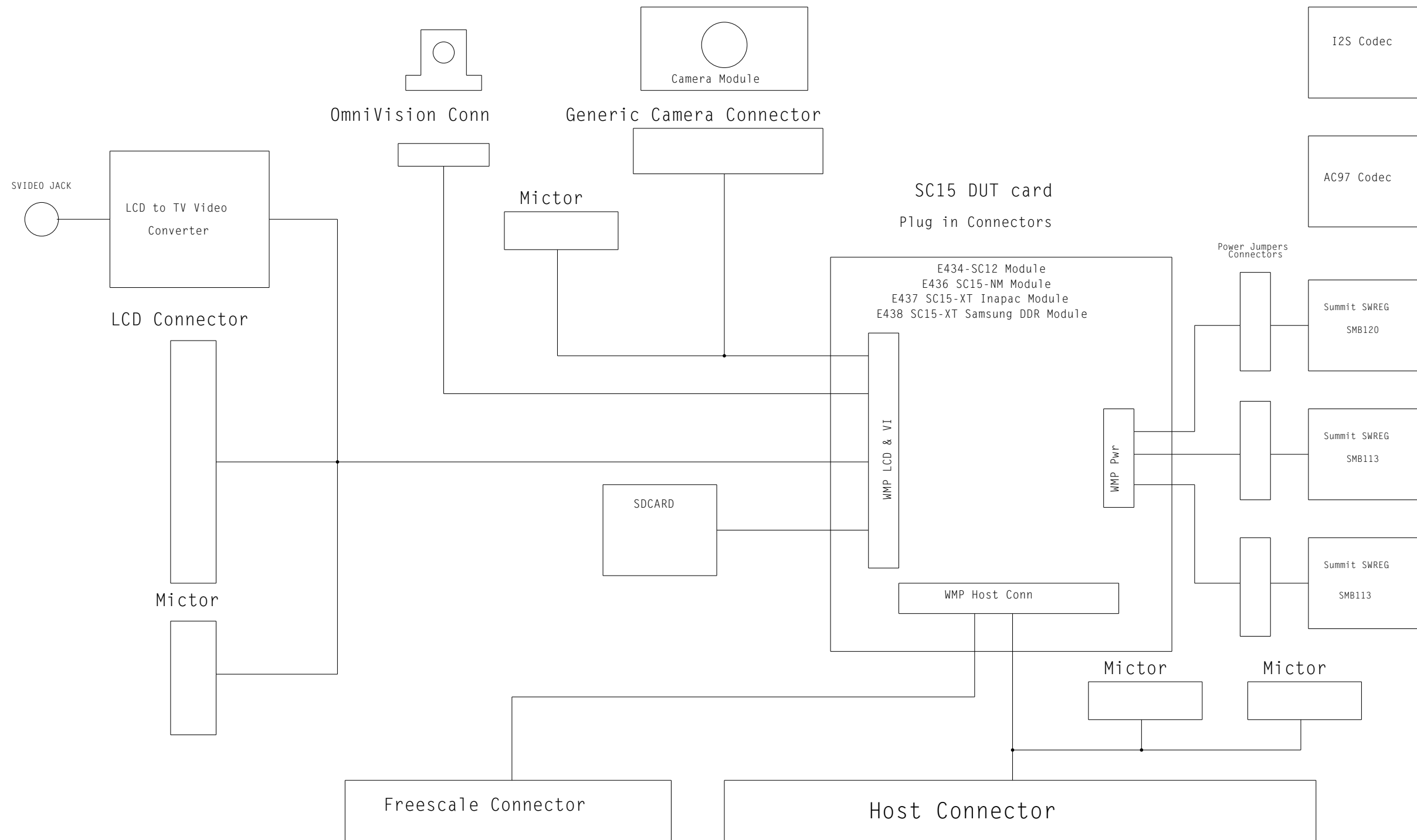


E433 SC15 Evaluation MainBoard



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ASSEMBLY PAGE DETAIL | BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL | Cover Page

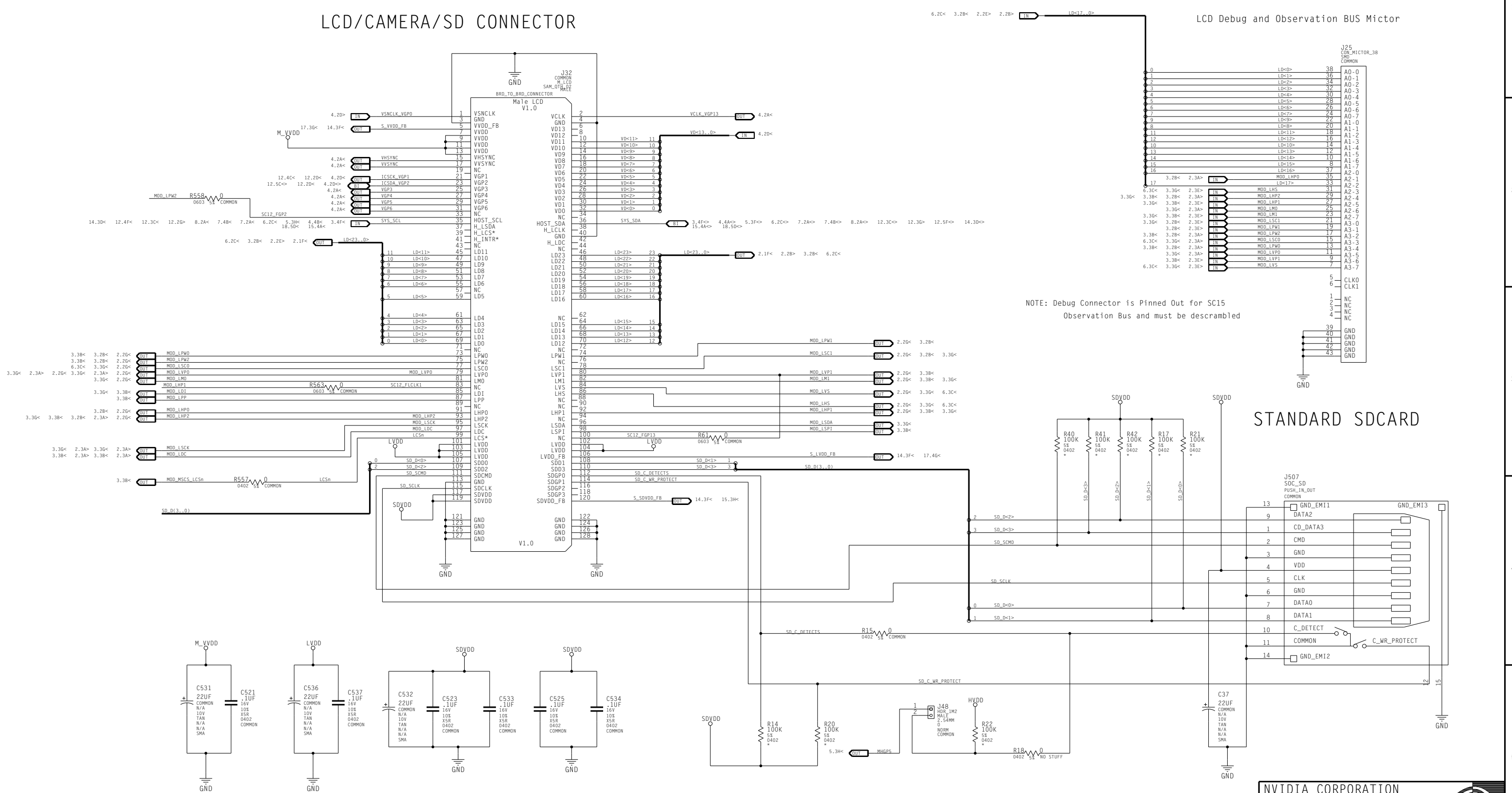
NV_PN	600-80433-0000-000	PAGE	1 OF 20
ID	e433	DATE	18-Apr-2005
NAME	Jct11a		

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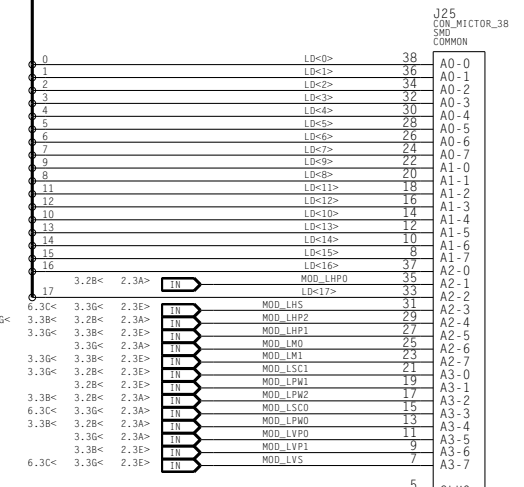
E433 SC15 Evaluation MainBoard

LCD/CAMERA/SD CONNECTOR AND SDCARD INTERFACES

LCD/CAMERA/SD CONNECTOR

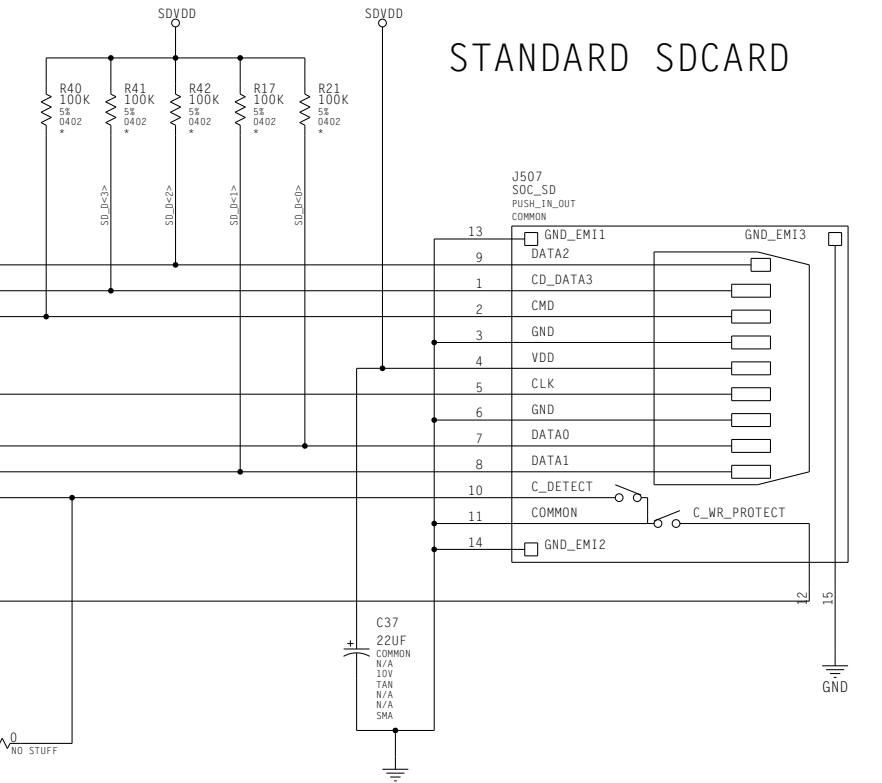


LCD Debug and Observation BUS Mictor



NOTE: Debug Connector is Pinned Out for SC15 Observation Bus and must be descrambled

STANDARD SDCARD

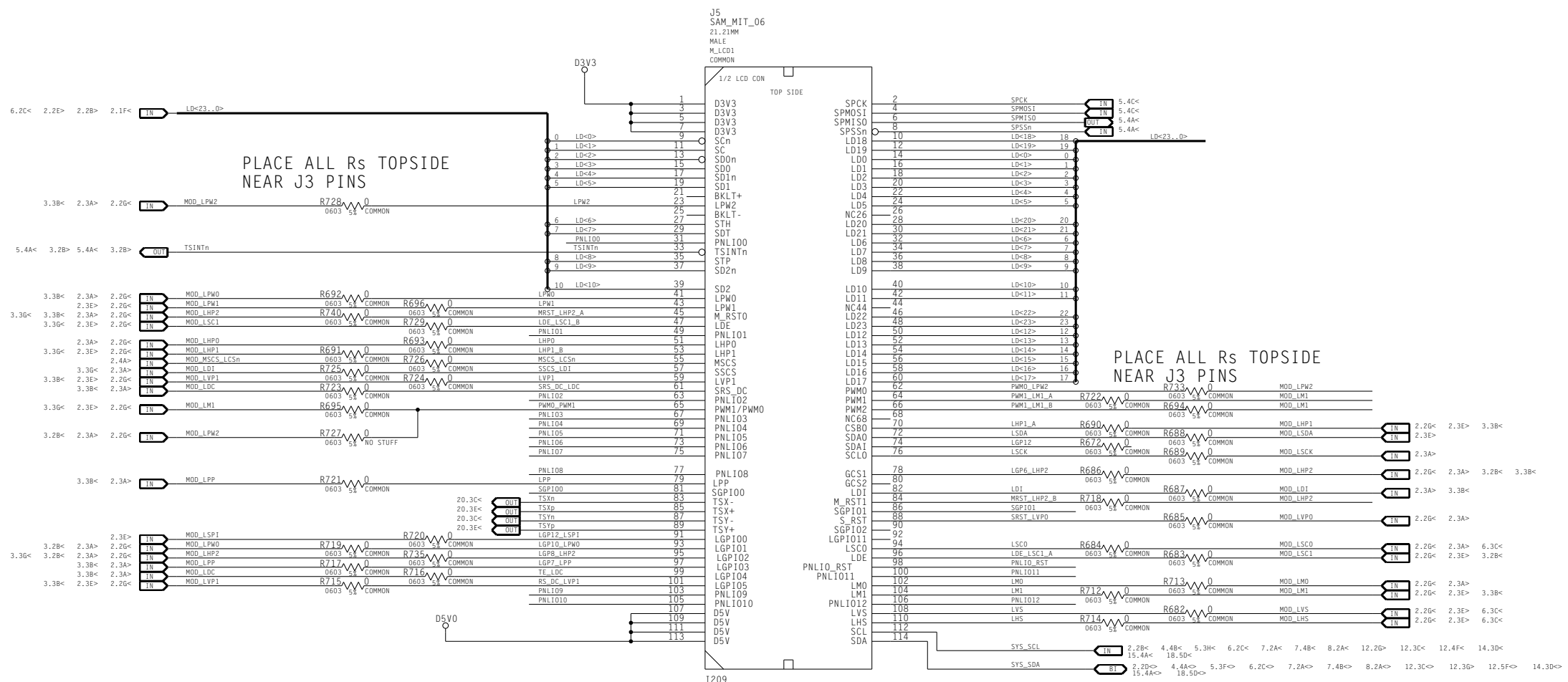


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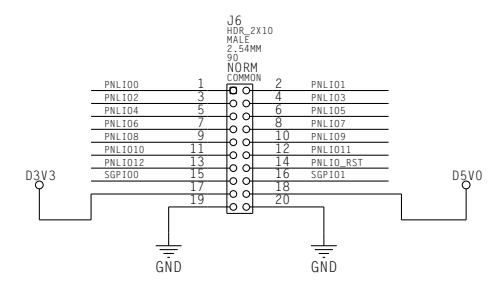
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PAGE DETAIL		LCD/Camera/SD Connector and SDCARD Interface	
NV_PN	600-80433-0000-000	ID	e433
NAME	Jct11a	PAGE	2 OF 20
		DATE	18-Apr-2005

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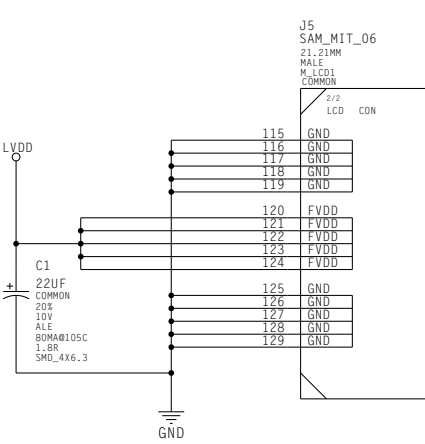
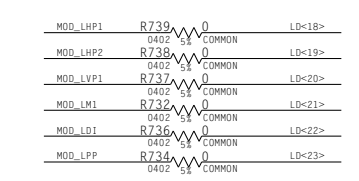
E433 SC15 Evaluation MainBoard LCD MODULE INTERFACE CONNECTOR



PLACE AS GROUP NEAR J3



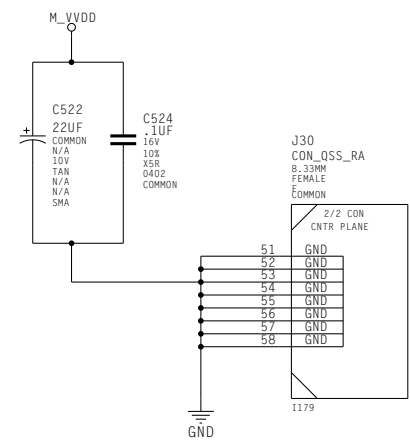
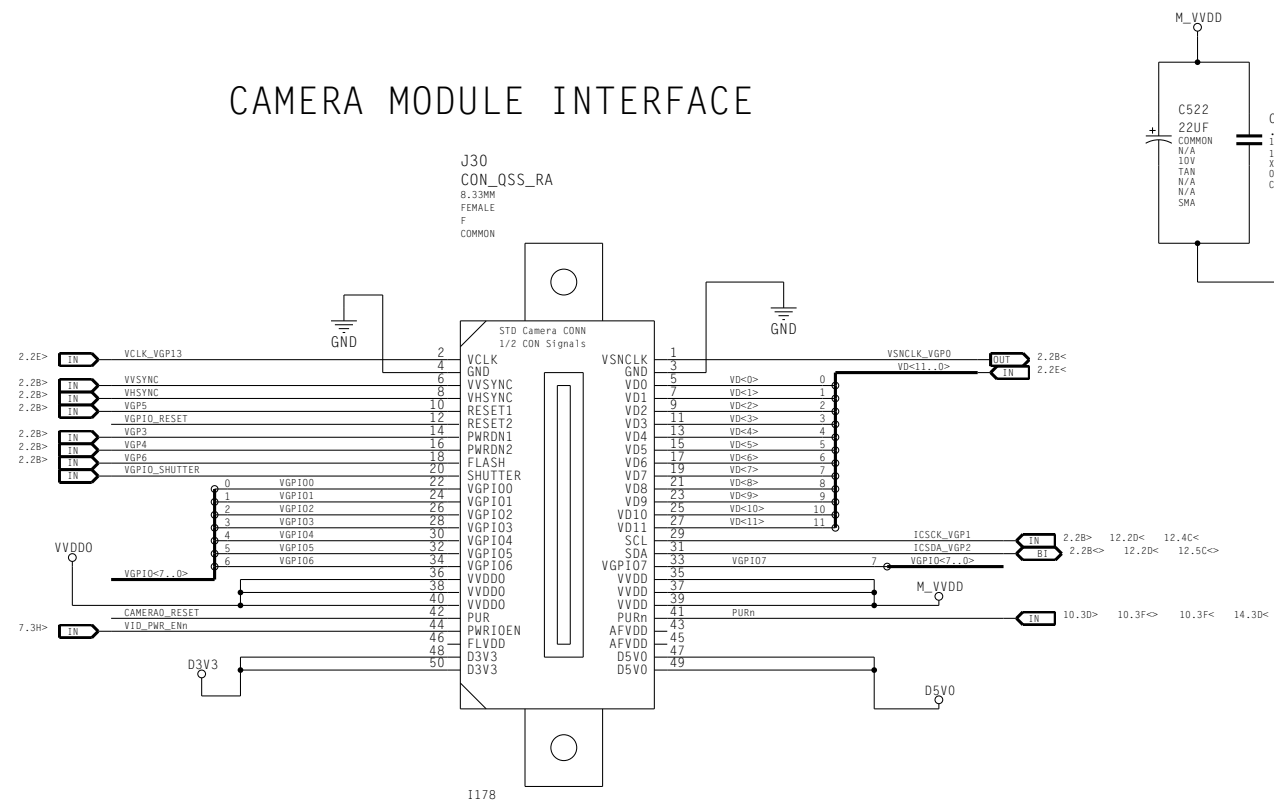
PLACE NEAR J3 LD PINS



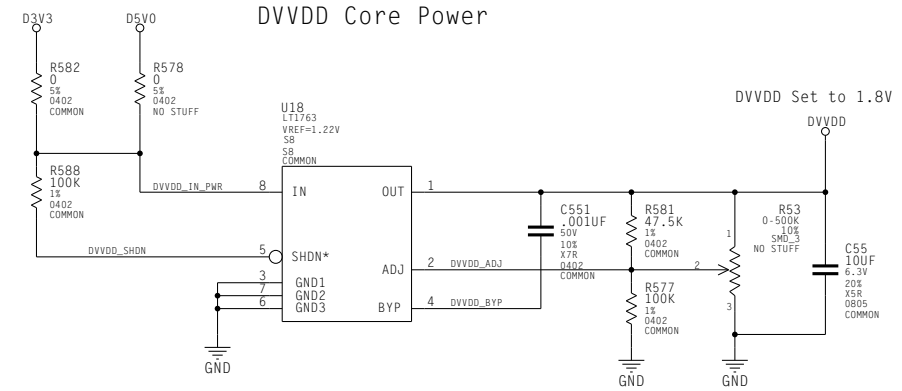
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E433 SC15 Evaluation MainBoard CAMERA CONNECTOR AND MODULE INTERFACE

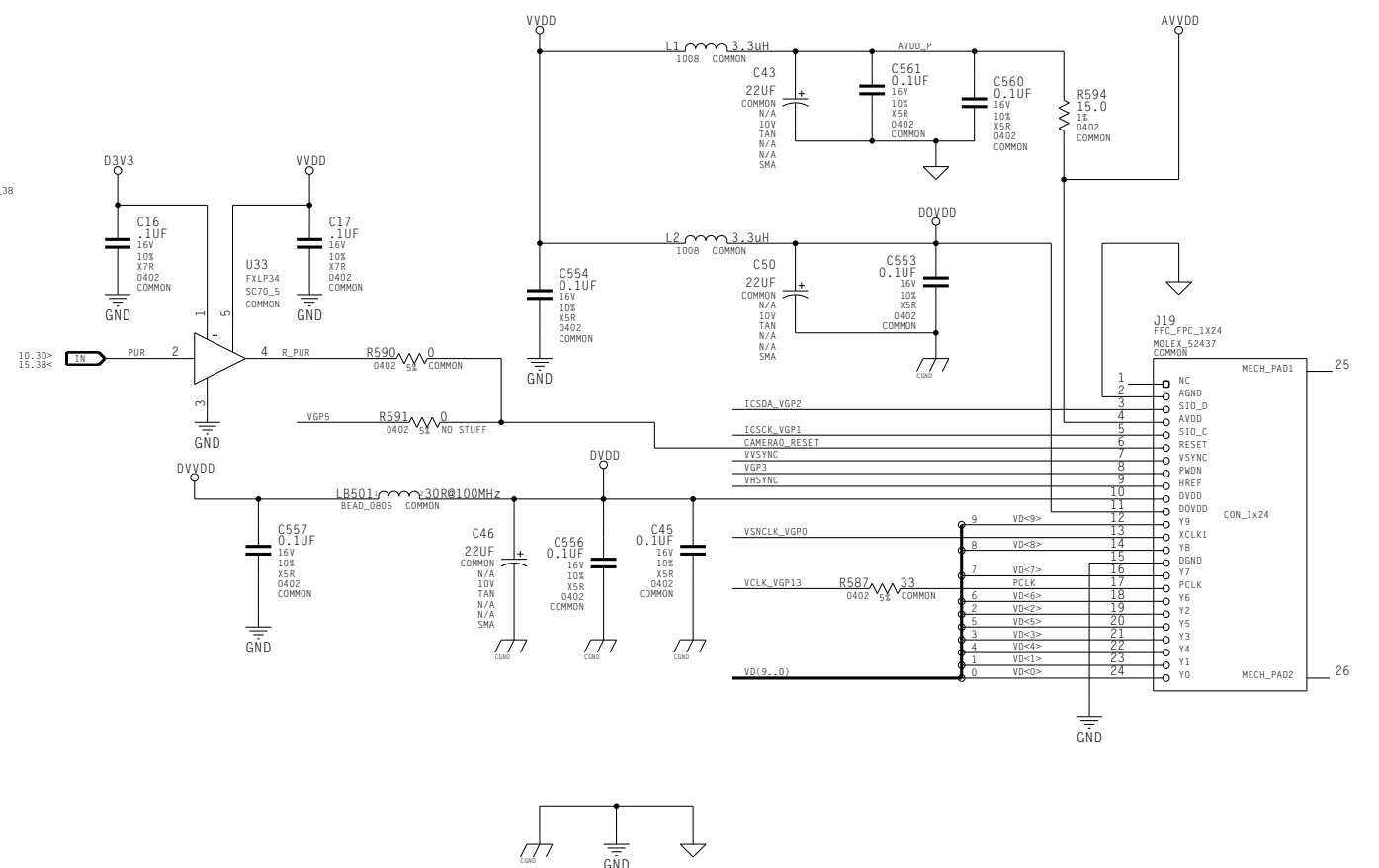
CAMERA MODULE INTERFACE



DVDD Core Power



OMNIVISION CAMERA CONNECTOR AND FILTERS



J29 CON_MICTOR_38 SMD COMMON	Pin	Signal
VVSYNC	38	A0-0
VHSYNC	36	A0-1
VGP3	34	A0-2
VGP4	32	A0-3
VGP5	30	A0-4
VGP6	28	A0-5
VGP10_SHUTTER	26	A0-6
VGP10_RESET	24	A0-7
VGP100	22	A1-0
VGP101	20	A1-1
VGP102	18	A1-2
VGP103	16	A1-3
VGP104	14	A1-4
VGP105	12	A1-5
VGP106	10	A1-6
ICSCK_VGP1	8	A1-7
ICSDA_VGP2	7	A2-0
VD<0>	35	A2-1
VD<1>	33	A2-2
VD<2>	31	A2-3
VD<3>	29	A2-4
VD<4>	27	A2-5
VD<5>	25	A2-6
VD<6>	23	A2-7
VD<7>	21	A3-0
VD<8>	19	A3-1
VD<9>	17	A3-2
VD<10>	15	A3-3
VD<11>	13	A3-4
VCLK_VGP13	9	A3-5
VSNCLK_VGPO	7	A3-6
VCLK_VGP13	5	CLK0
VSNCLK_VGPO	6	CLK1
	1	NC
	2	NC
	3	NC
	4	NC
	39	GND
	40	GND
	41	GND
	42	GND
	43	GND

I2C ADDR: 0b0100010

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DATE	dd-mon-year

ASSEMBLY	BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL
PAGE DETAIL	Camera Connector and Module Interface

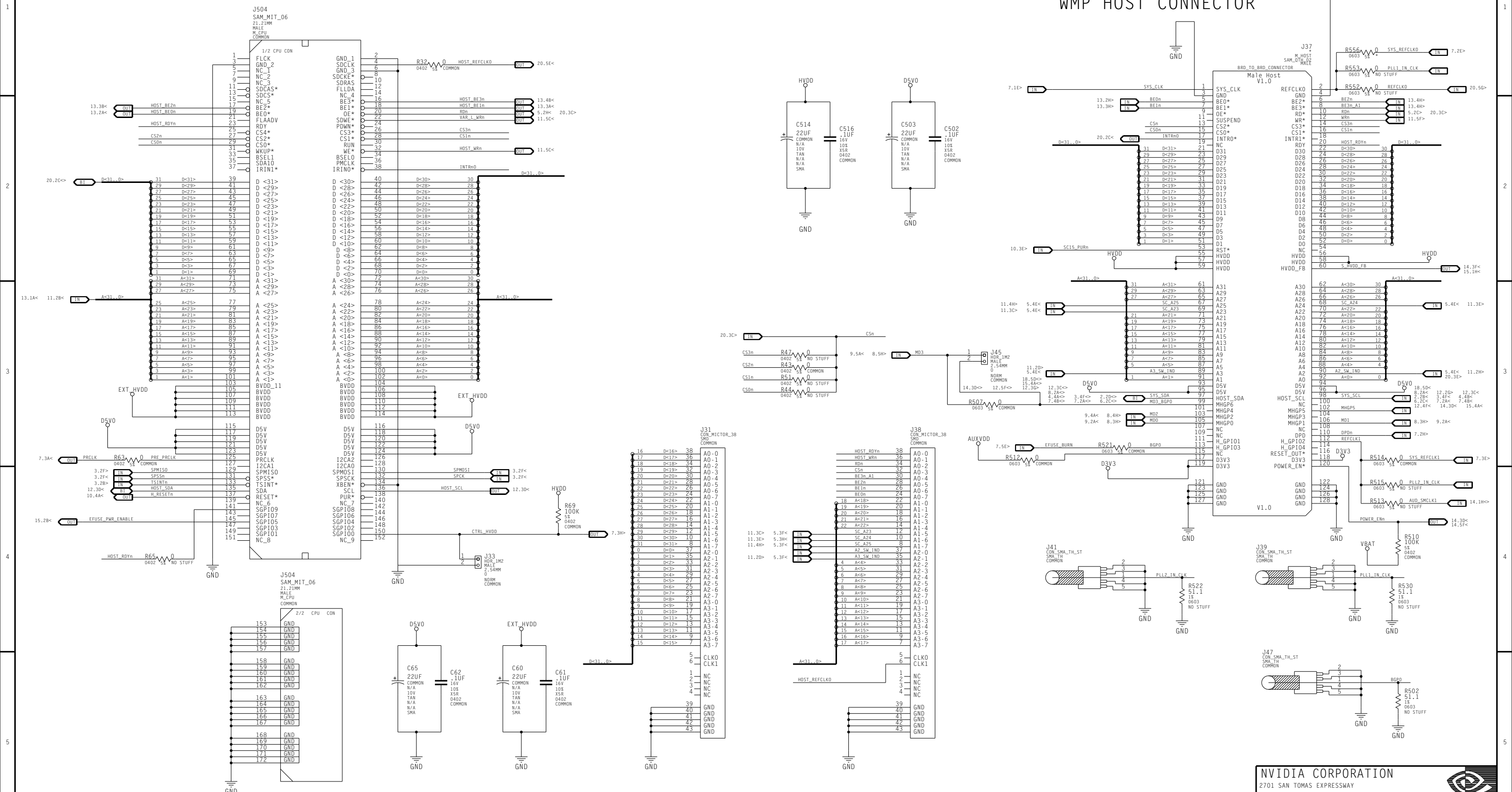
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HOST INTERFACE AND CONNECTOR

HOST INTERFACE CONNECTOR

WMP HOST CONNECTOR

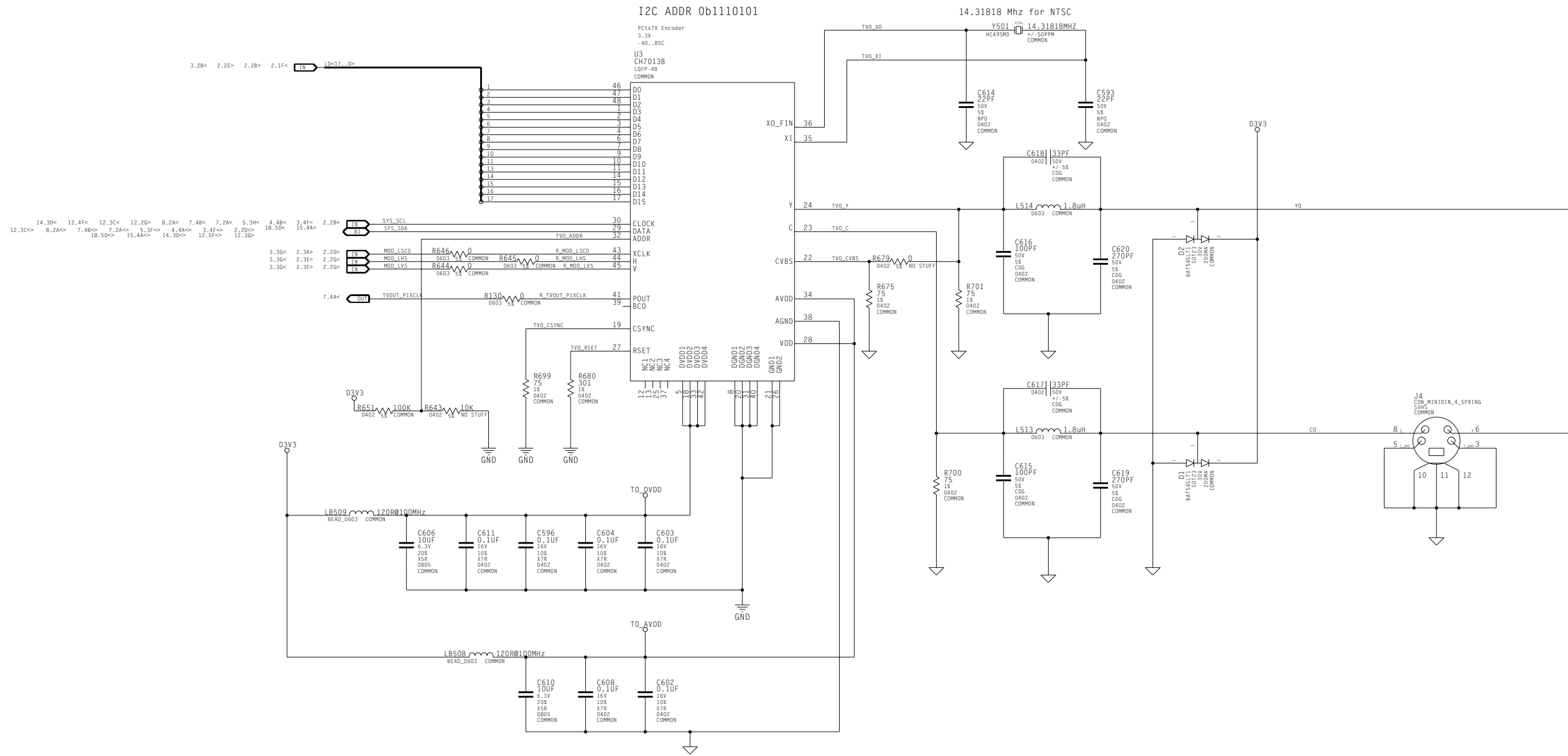


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ASSEMBLY		BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL	
PAGE DETAIL		Host Interface and Connectors	
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		DATE	dd-mon-year

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E433 SC15 Evaluation MainBoard TVOUT ENCODER AND CONNECTOR



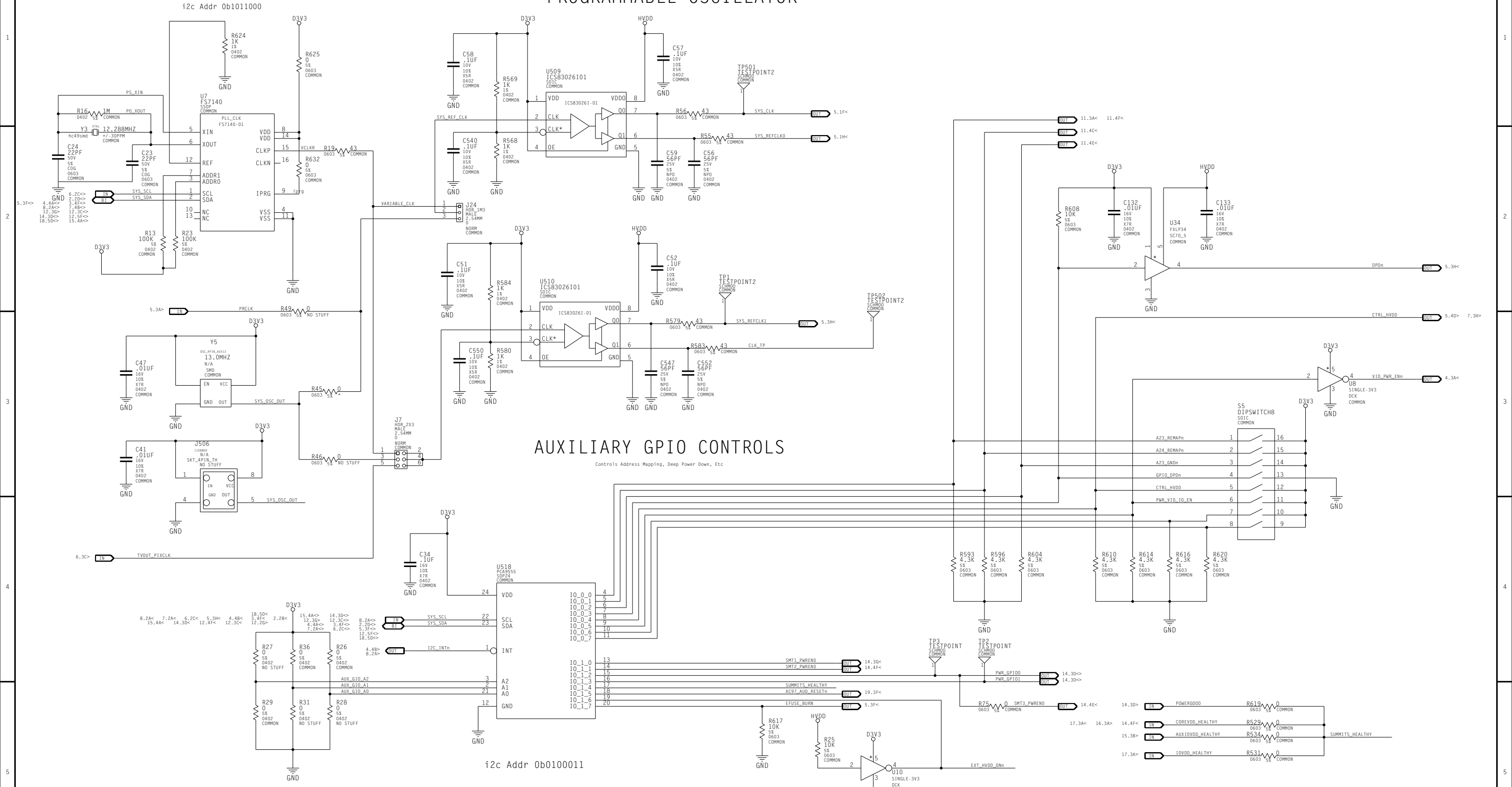
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DATE	13-SEP-2004

ASSEMBLY PAGE DETAIL BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL
TV Encoder and Connector

E433 SC15 Evaluation MainBoard

PROGRAMMABLE OSCILLATOR



AUXILIARY GPIO CONTROLS

Controls Address Mapping, Deep Power Down, Etc

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ASSEMBLY: BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL
PAGE DETAIL: Programmable Oscillator and Auxiliary GPIOs

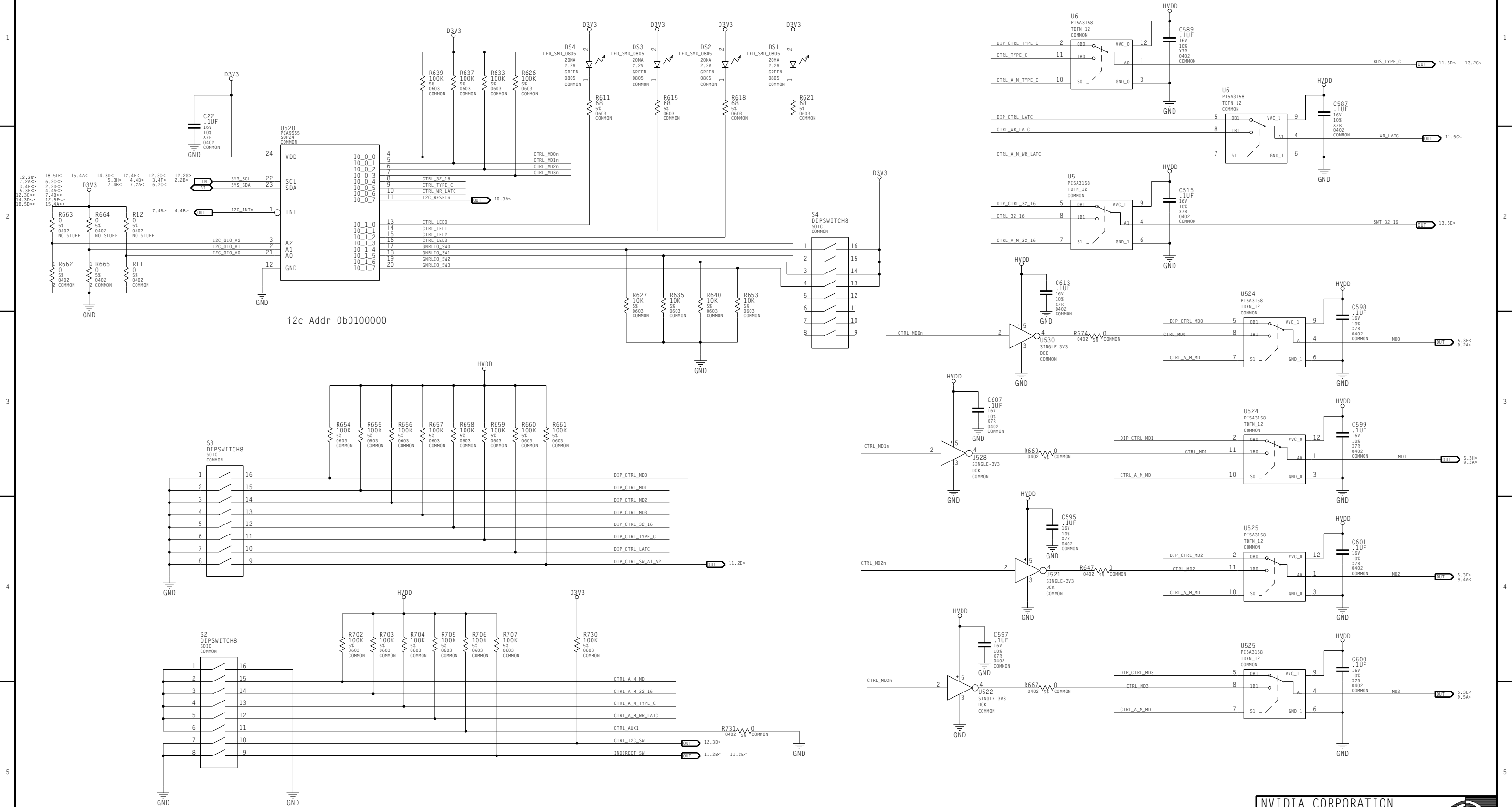
NV_PN: 600-80433-0000-000

ID: e433
NAME: Jct11a
PAGE: 7 OF 20
DATE: 13-SEP-2004


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HOST INTERFACE CONTROL LOGIC AND I2C GPIO



i2c Addr 0b0100000

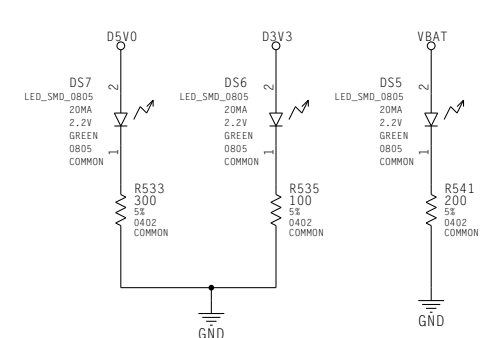
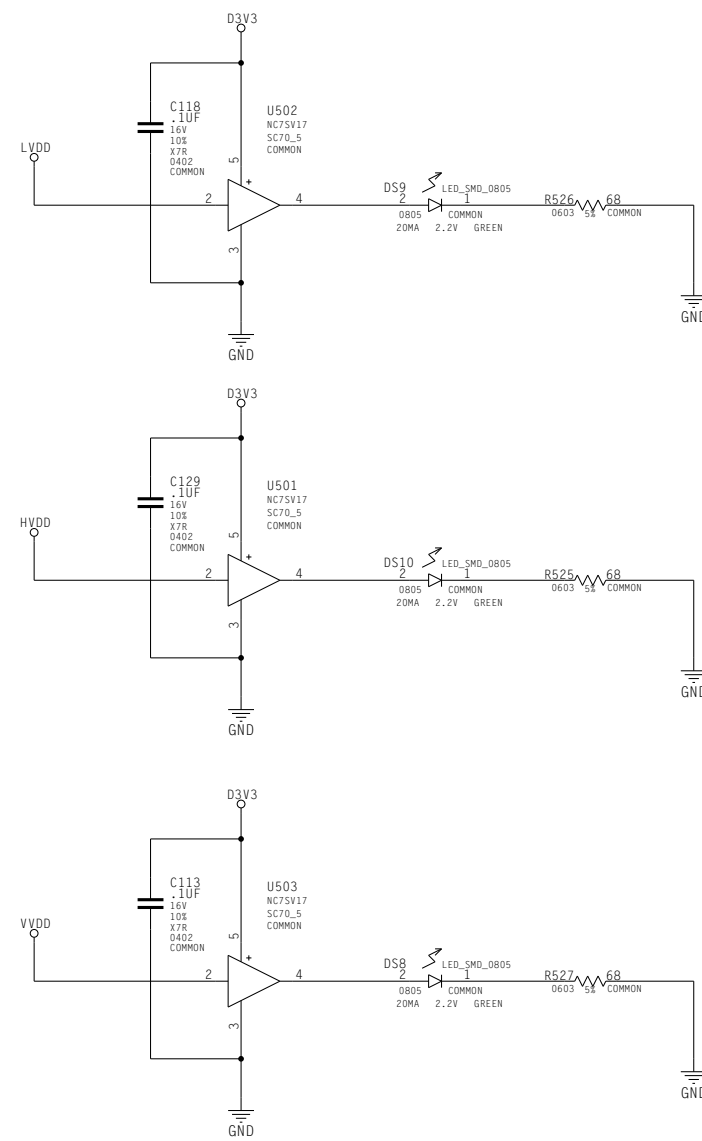
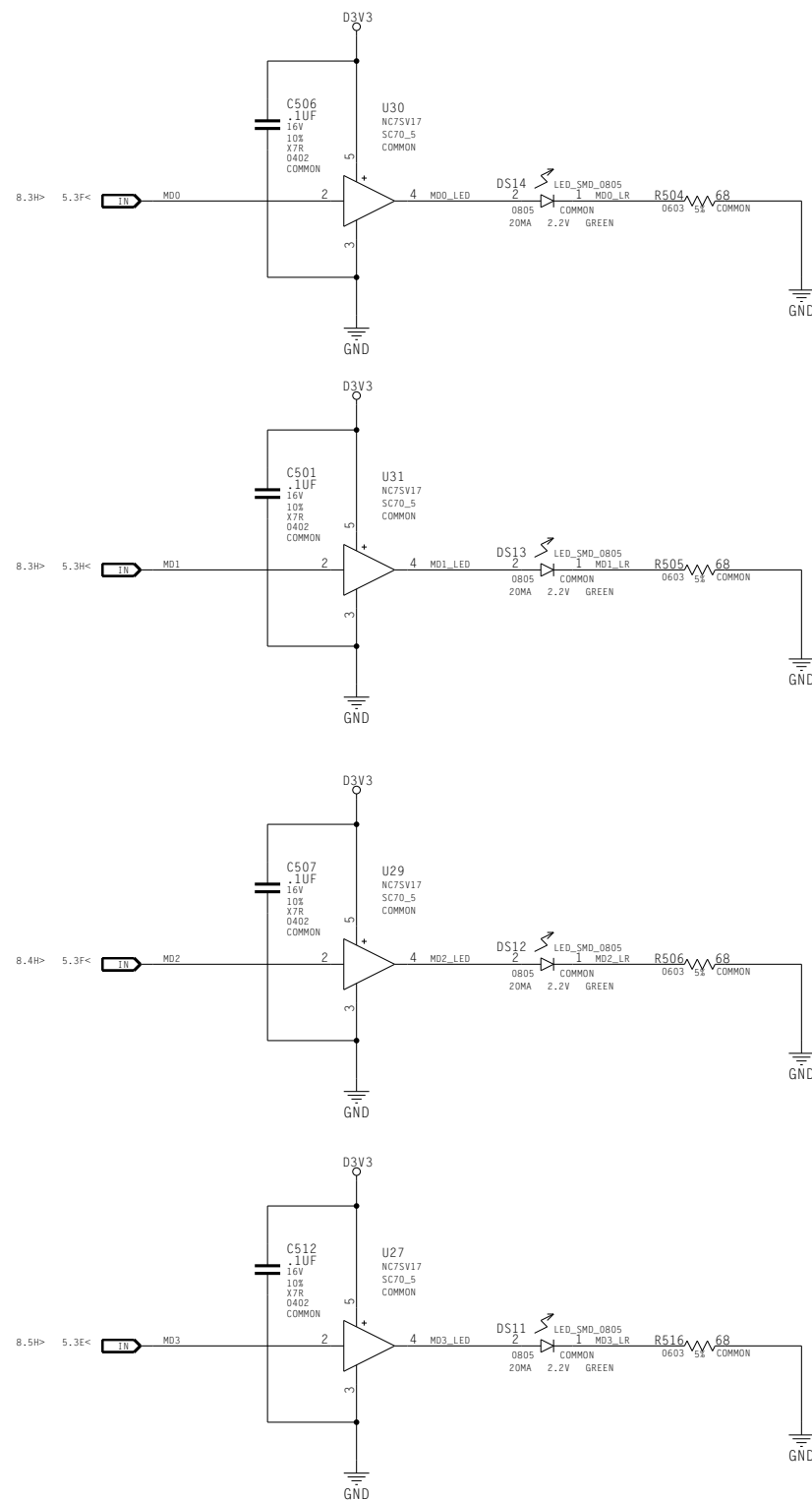
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NV_PN	600-80433-0000-000	
ID	e433	PAGE 8 OF 20
NAME	Jct11a	DATE dd-mon-year

ASSEMBLY	BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL
PAGE DETAIL	Host Interface Control and I2C Bus Expansion


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MODE and VOLTAGE LEDS



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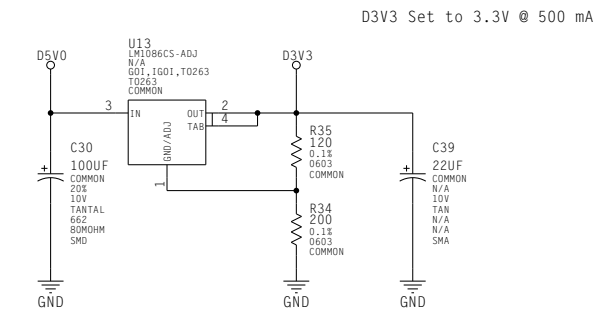
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ID	e433	PAGE	9 OF 20
NAME	Jct11a	DATE	dd-mon-year

ASSEMBLY	BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL
PAGE DETAIL	Mode and Voltage LEDs

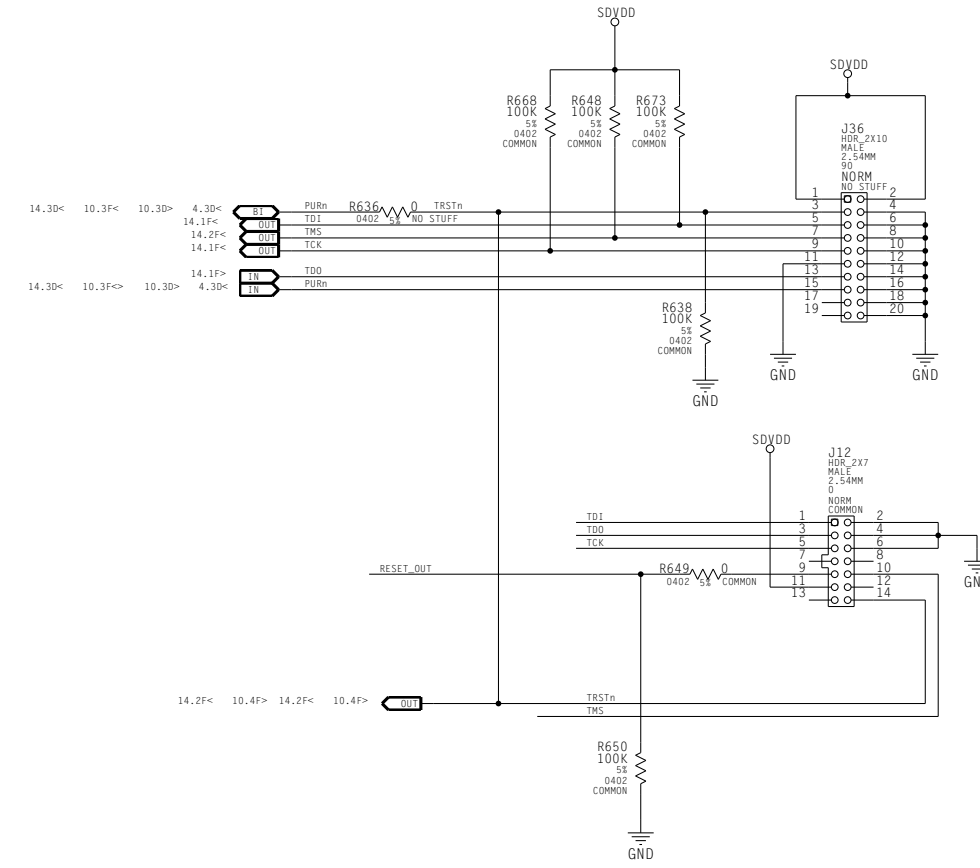
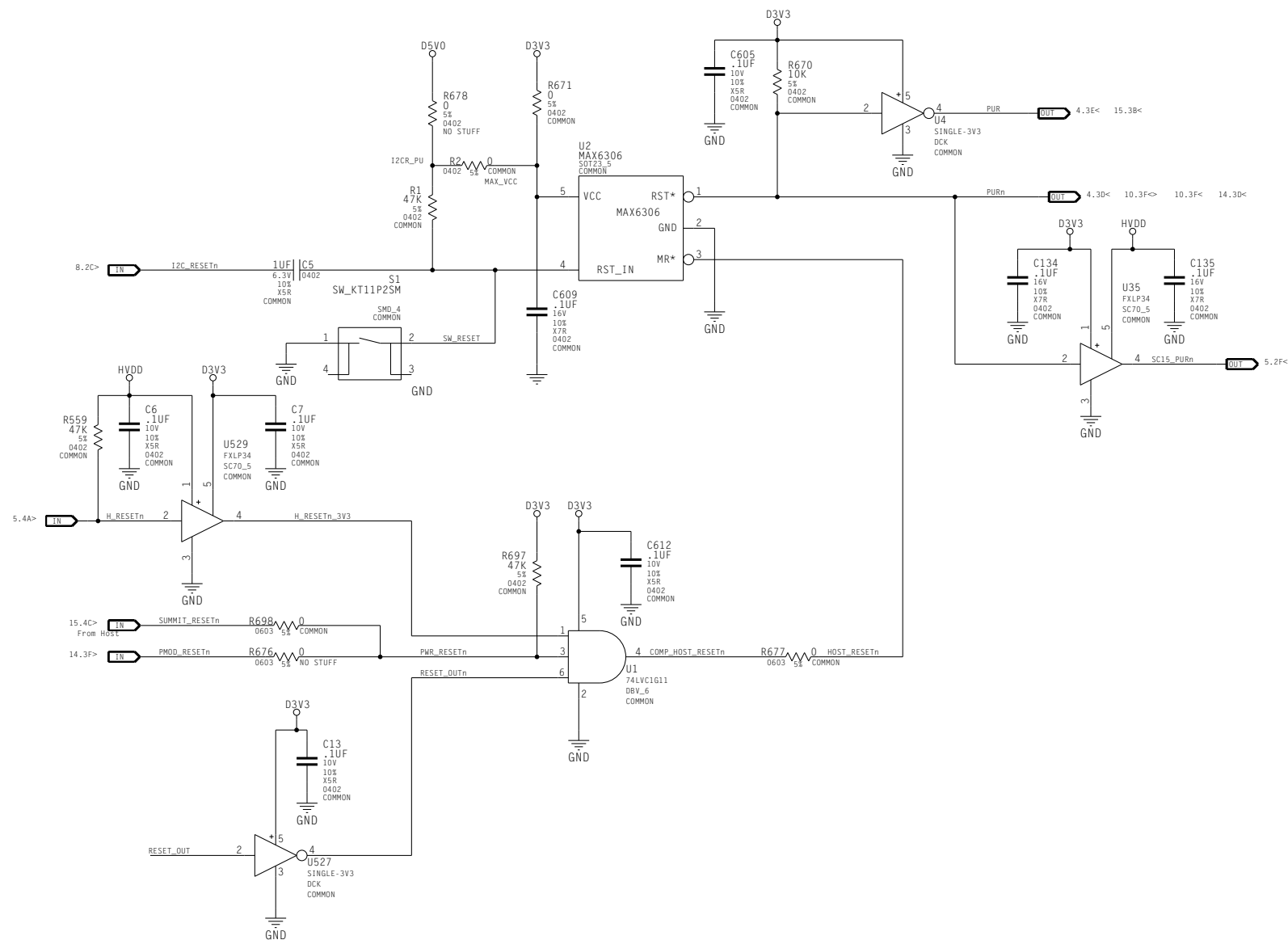
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Reset, JTAG and 3.3V Power

3V Regulator



RESET CIRCUIT



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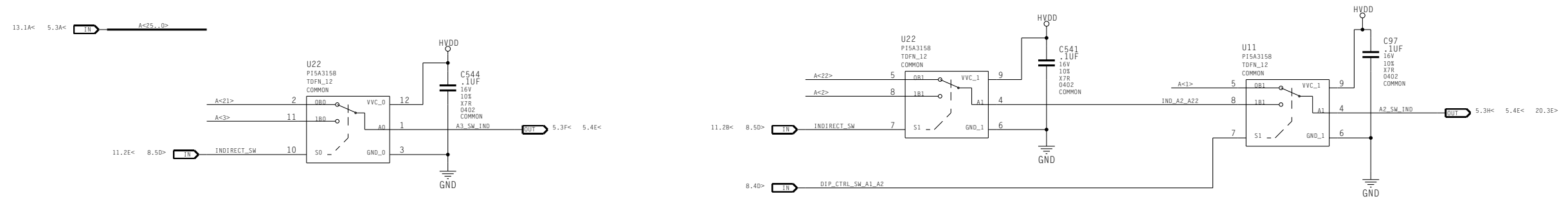
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PAGE DETAIL	RESET, JTAG and 3V3 Power

E433 SC15 Evaluation MainBoard

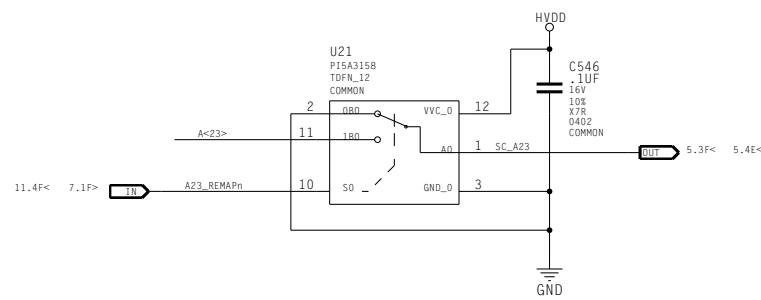
HOST INTERFACE ADDRESS AND CTYPE CONTROLS

Indirect Addressing Remap

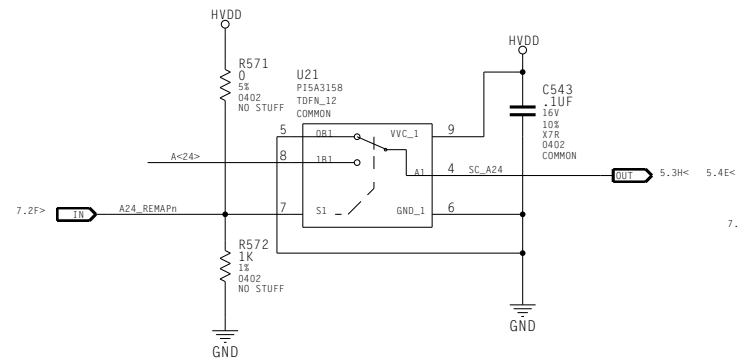
(Remaps to Higher Addr space to support autoincrementing buses)
 (Writes to 0xXX40_0000 control A2, Writes to 0xXX20_0000 control A3)



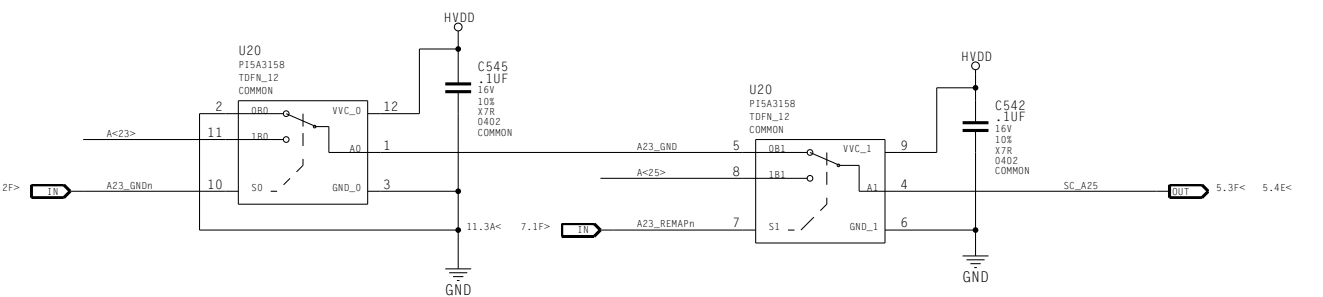
SC15 Address Remap



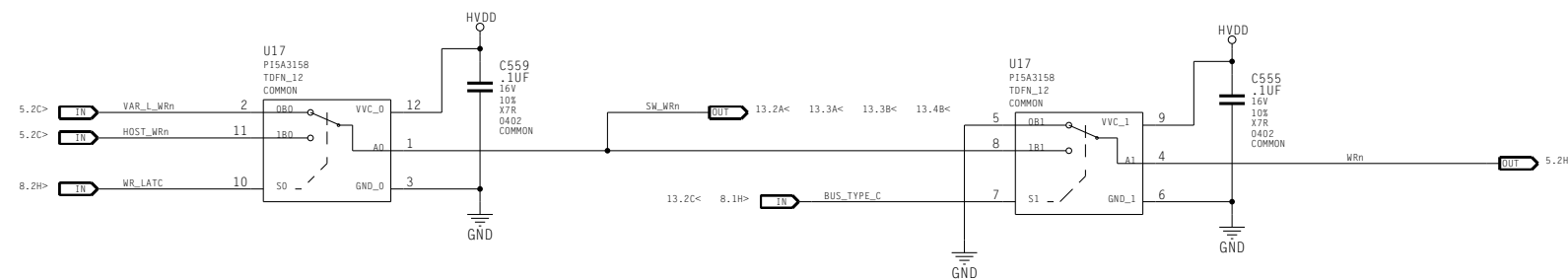
SC15 Address Remap



SC15 Address Remap



TYPE C VARIABLE LATENCY CONTROL



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NAME	Jc1h1a		

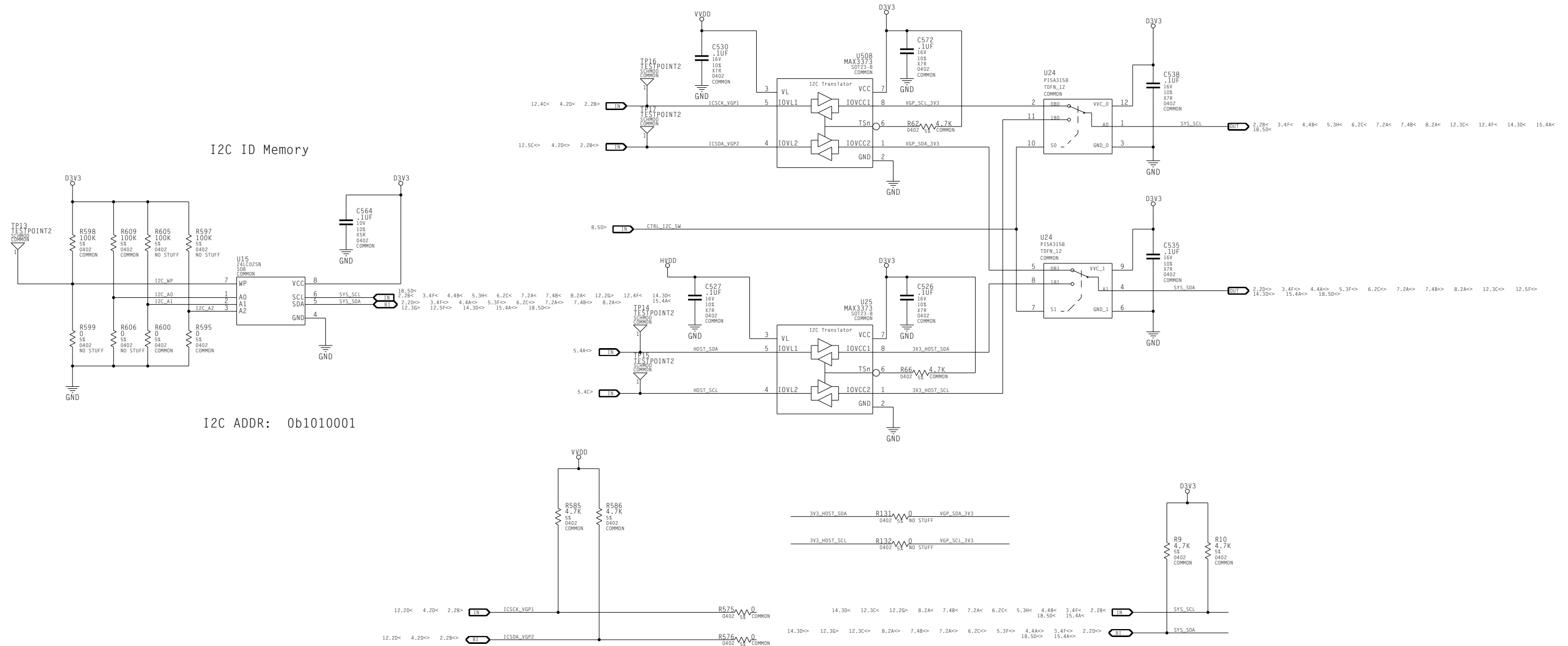
ASSEMBLY	BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL
PAGE DETAIL	Host Interface Address and CType Mode Controls

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I2C and IDPR0M

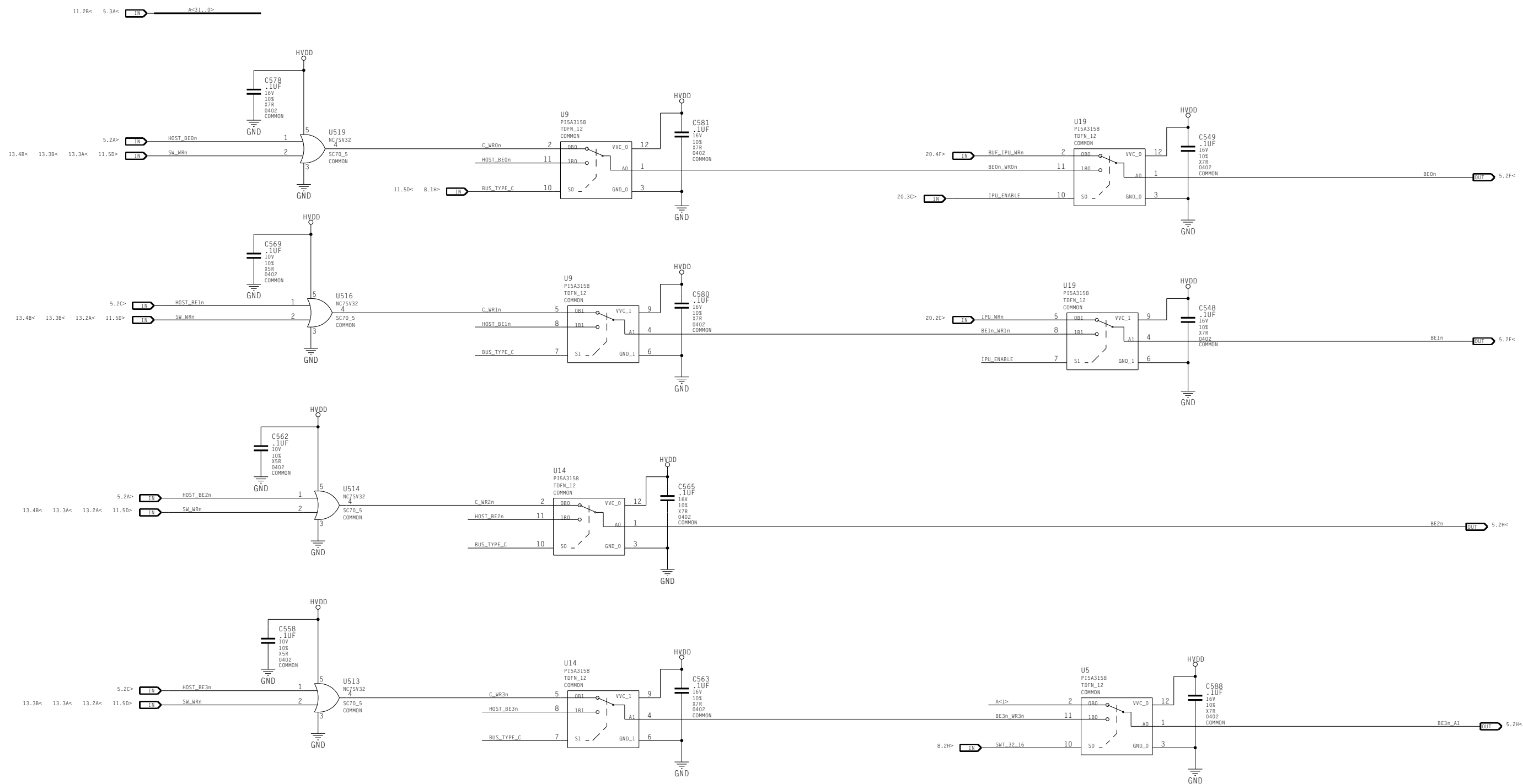
CPU vs GPU I2C Control



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TYPE C BUS MUX CONTROLS



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DATE	18-Jun-2005

ASSEMBLY	BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL
PAGE DETAIL	Host Bus Mode C Control Logic

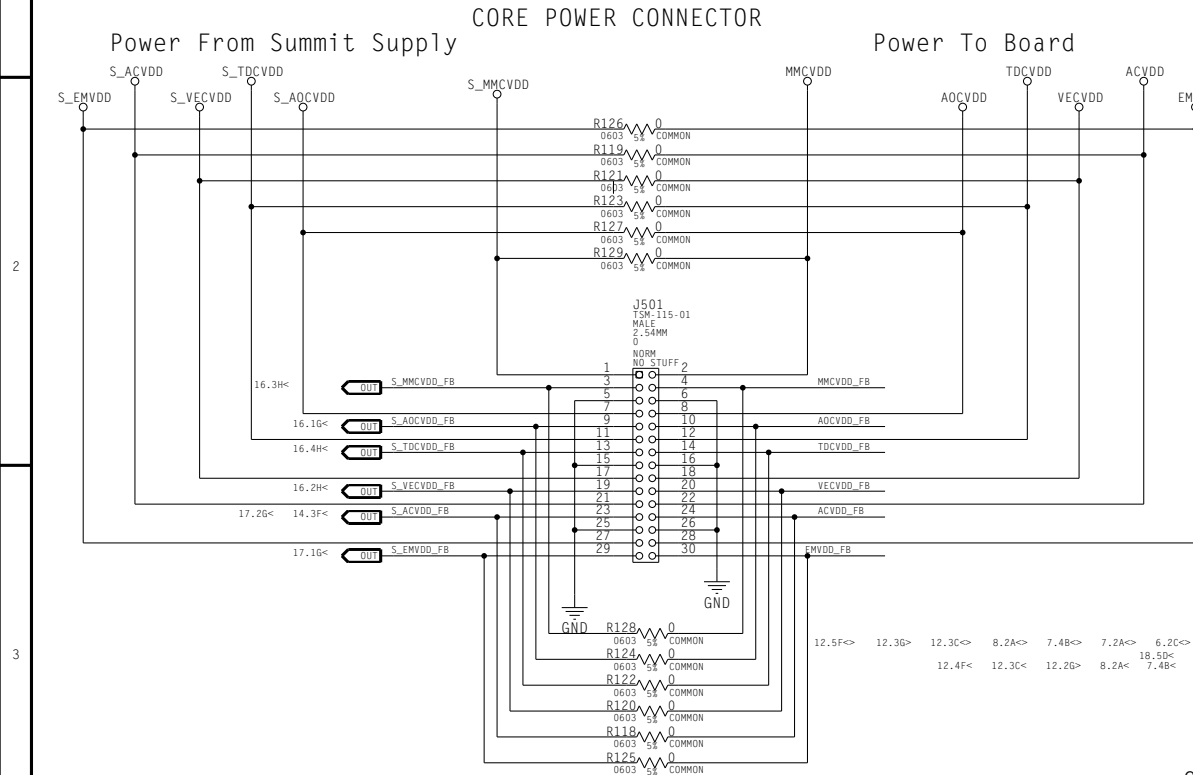
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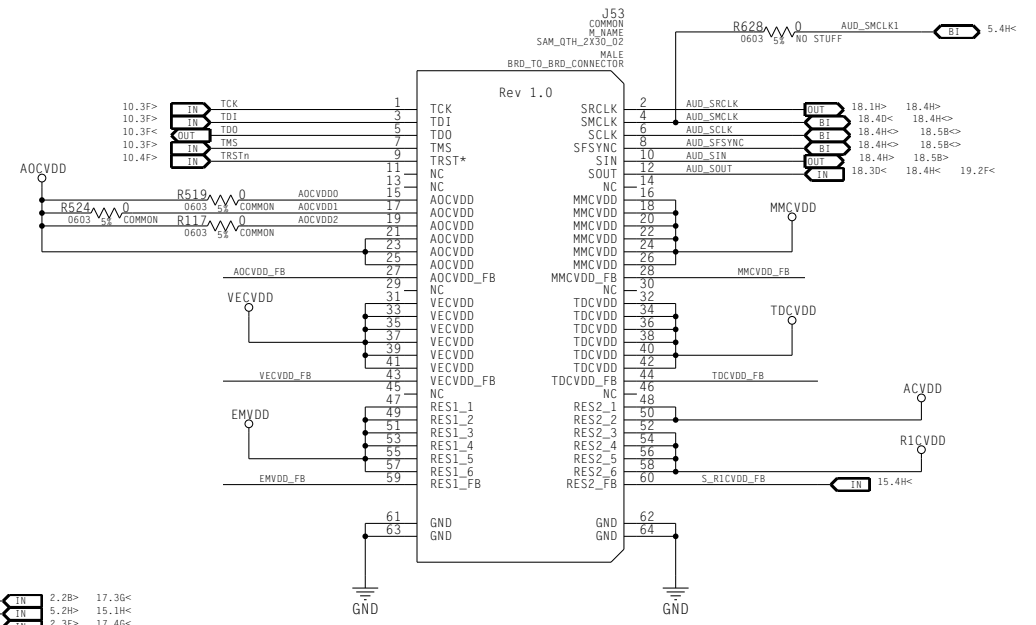
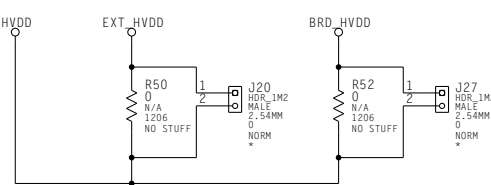
EXPANSION POWER INTERFACE, JTAG, RESET

MODULE POWER CONNECTOR

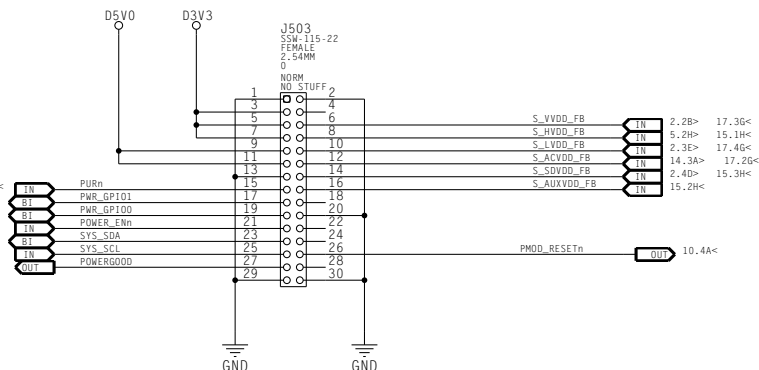
EXPANSION POWER INTERFACE



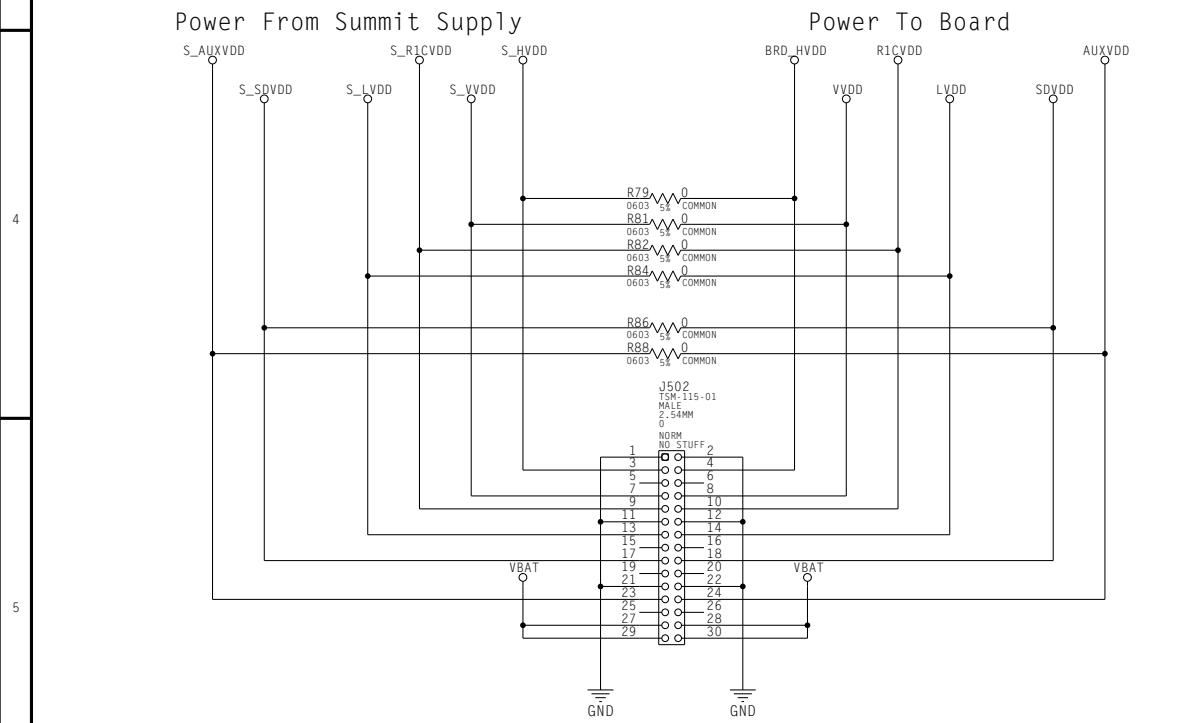
HVDD SELECTION JUMPERS



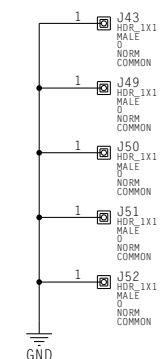
IO FEEDBACK and MISC CONNECTOR



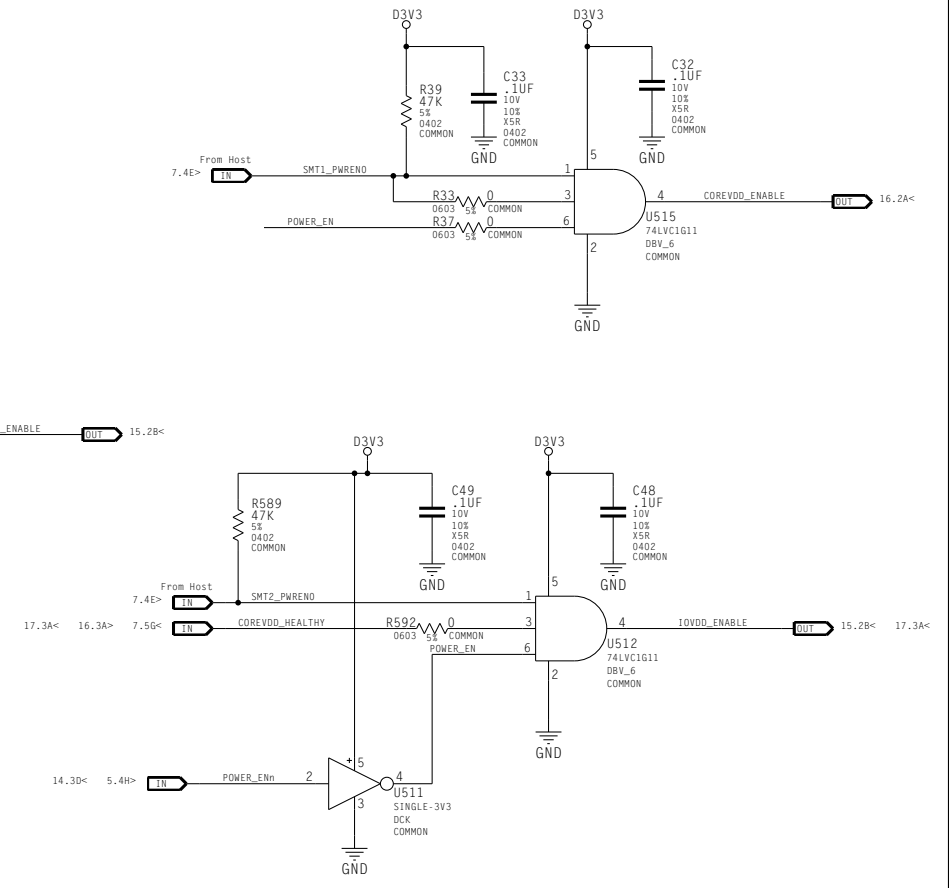
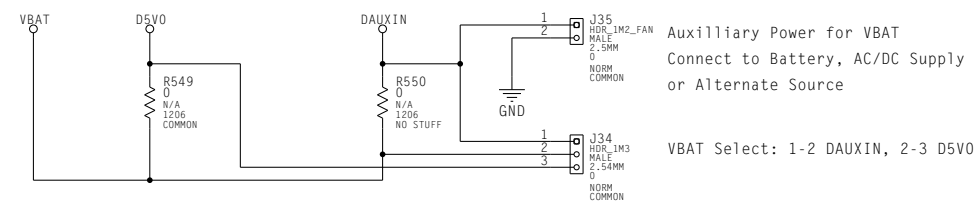
IO POWER CONNECTOR



Ground Points



VBAT SELECTION JUMPERS

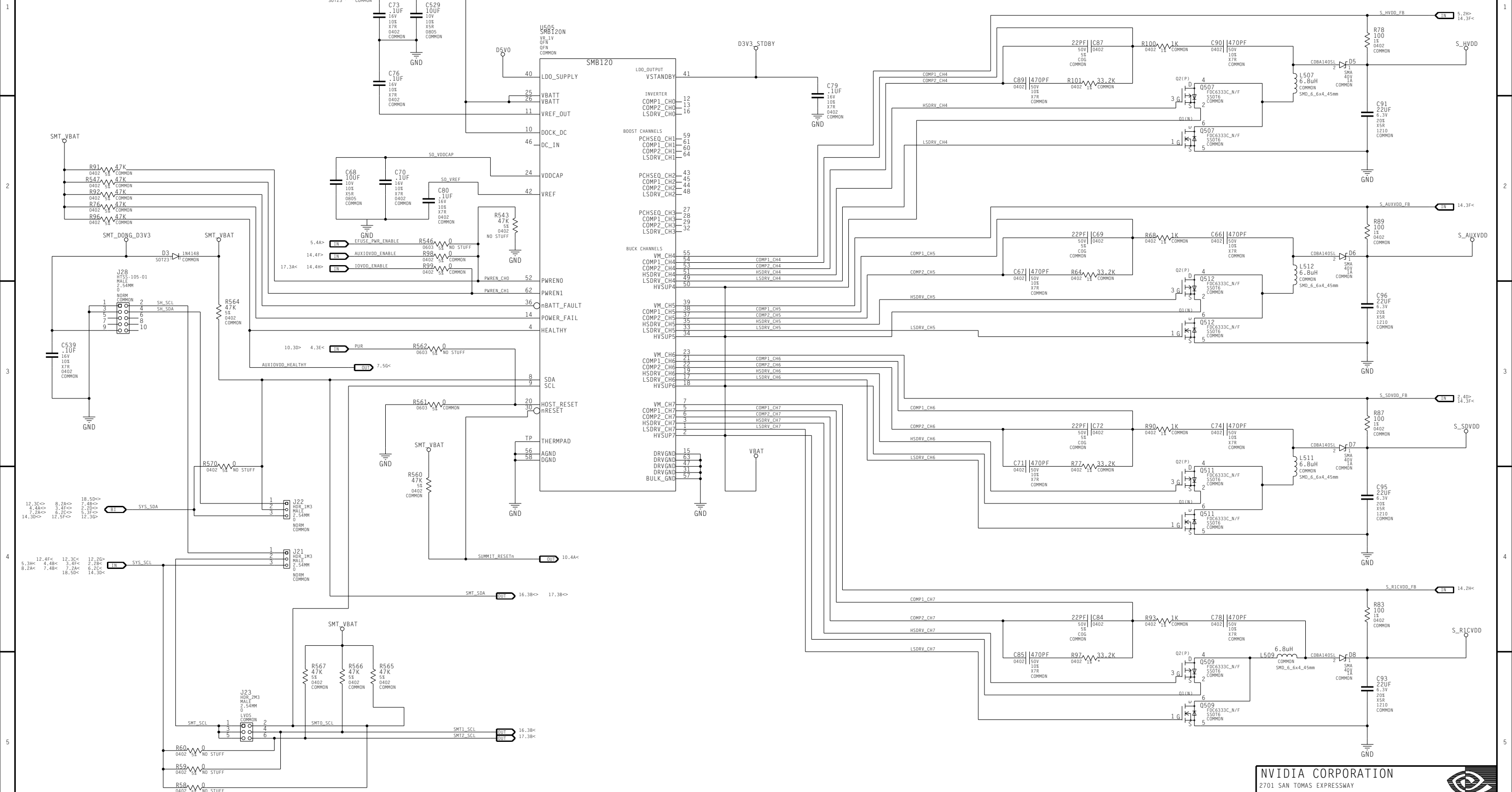


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ASSEMBLY	BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL
PAGE DETAIL	Expansion Power Interface

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E433 SC15 Evaluation MainBoard IO AND AUX POWER SUPPLY RAILS



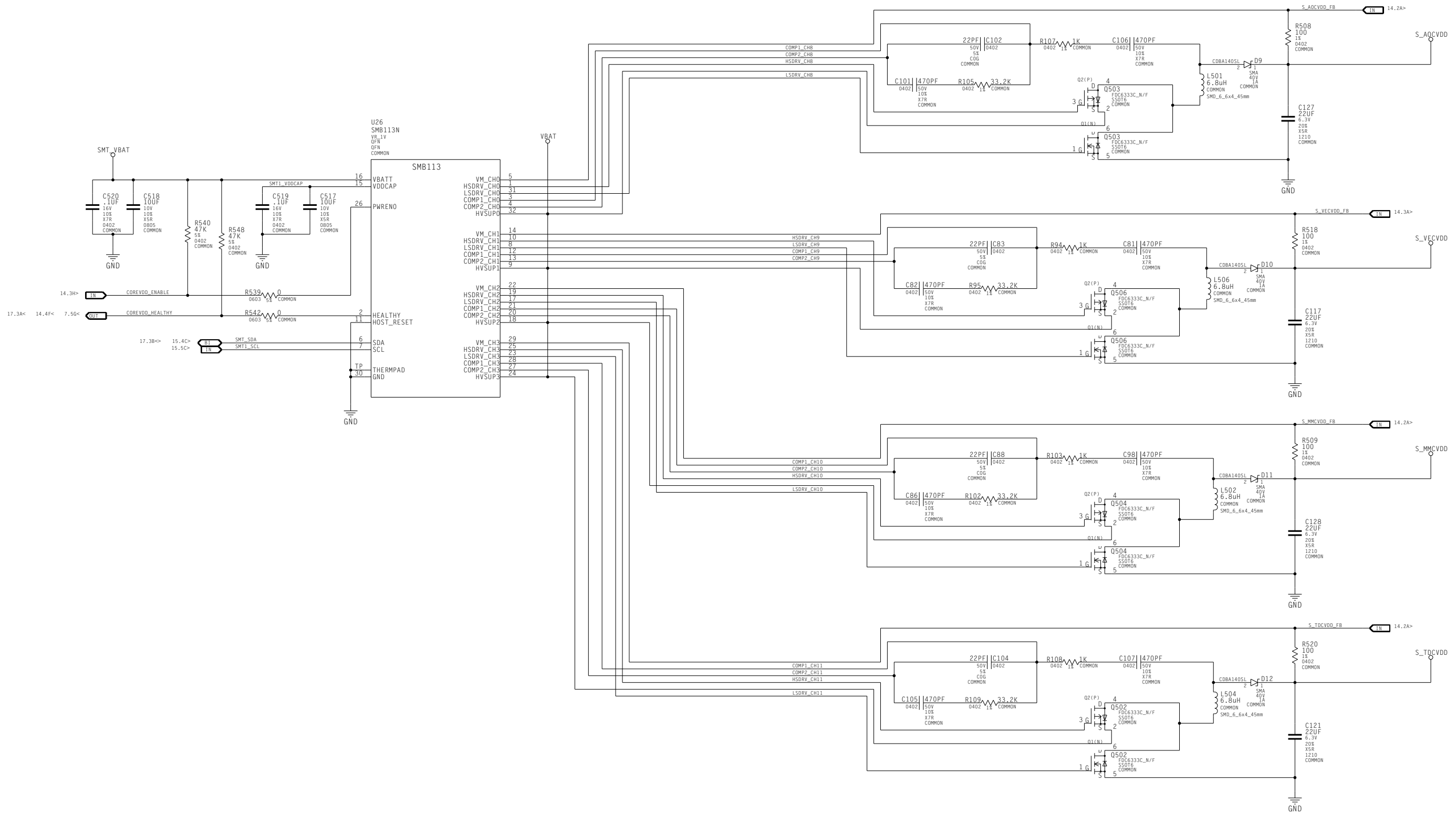
ASSEMBLY: BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BOM NOT FINAL
 PAGE DETAIL: Summit 120 and IO Power Rails

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E433 SC15 Evaluation MainBoard

PRIMARY CORE POWER SUPPLY



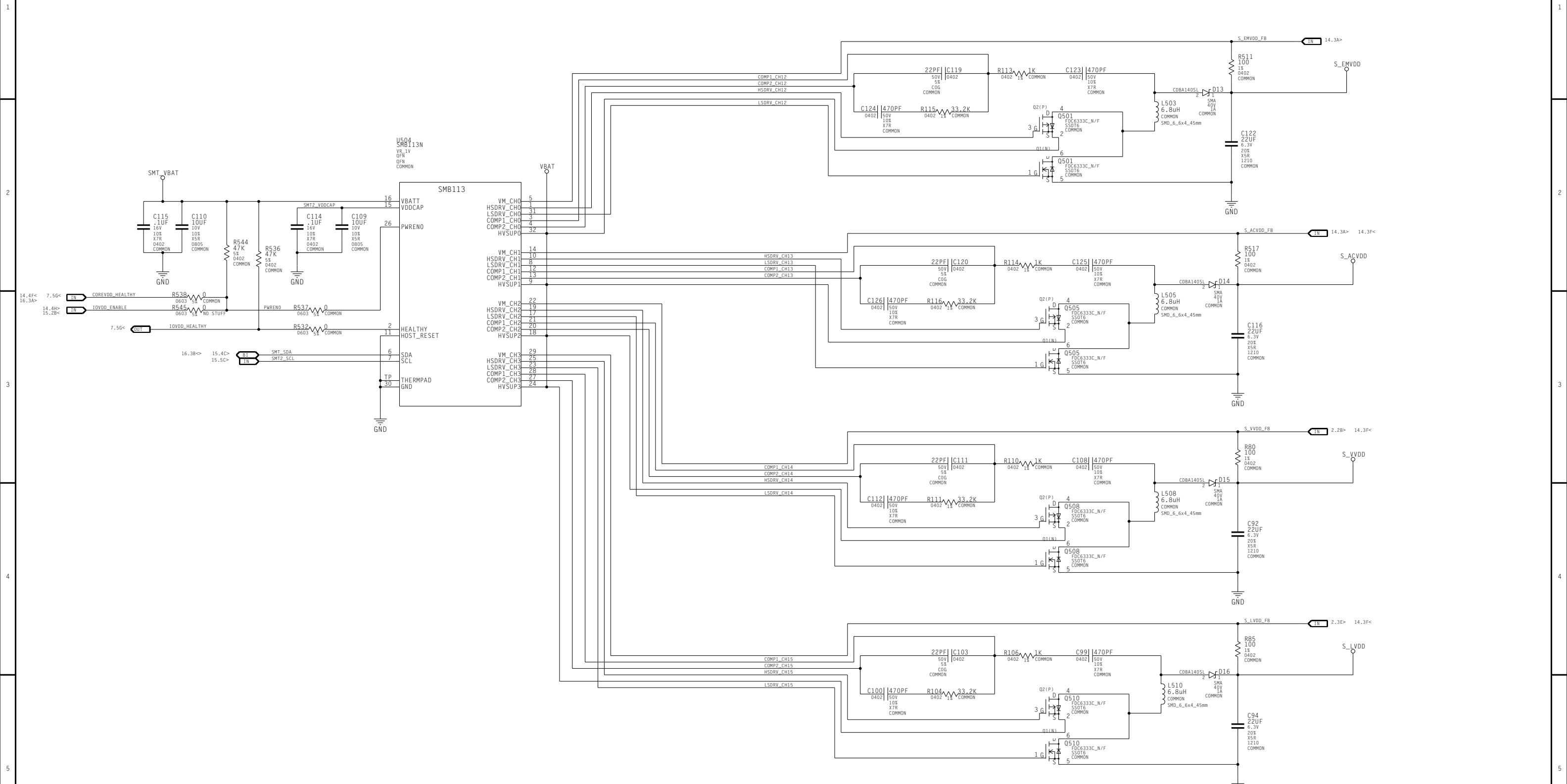
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 PAGE DETAIL: Summit 113 and Primary Core Power Rails

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ADDITIONAL IO POWER SUPPLY RAILS



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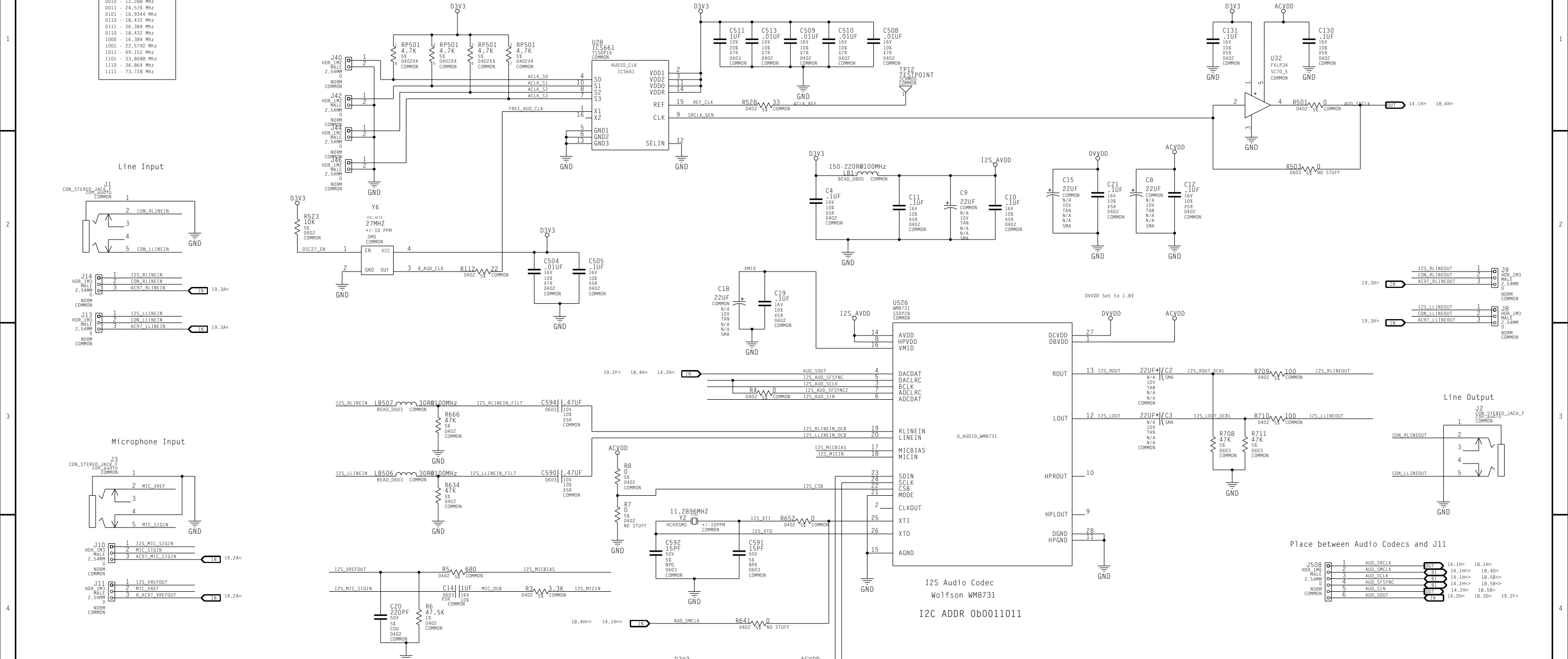
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PAGE DETAIL		Additional IO Power Supply Rails	
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I2S AUDIO

J20, J10, J9, J8 Audio Sample Clock	
0000	- 8.192 Mhz
0001	- 11.2896 Mhz
0010	- 12.288 Mhz
0011	- 24.576 Mhz
0101	- 16.9344 Mhz
0110	- 18.432 Mhz
0111	- 36.864 Mhz
1000	- 16.384 Mhz
1001	- 22.5792 Mhz
1011	- 49.152 Mhz
1101	- 33.8688 Mhz
1110	- 36.864 Mhz
1111	- 73.728 Mhz

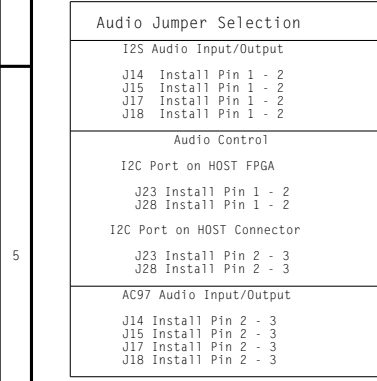


Line Input

Microphone Input

Audio Jumper Selection

I2S Audio Input/Output	
J14	Install Pin 1 - 2
J15	Install Pin 1 - 2
J17	Install Pin 1 - 2
J18	Install Pin 1 - 2
Audio Control	
I2C Port on HOST FPGA	
J23	Install Pin 1 - 2
J28	Install Pin 1 - 2
I2C Port on HOST Connector	
J23	Install Pin 2 - 3
J28	Install Pin 2 - 3
AC97 Audio Input/Output	
J14	Install Pin 2 - 3
J15	Install Pin 2 - 3
J17	Install Pin 2 - 3
J18	Install Pin 2 - 3



Place between Audio Codex and J11

J508	
1	AUD_SRCLK
2	AUD_SCLK
3	AUD_SFSYNC
4	AUD_SIN
5	AUD_SIN
6	AUD_SOUT

Analog Audio IO I2S

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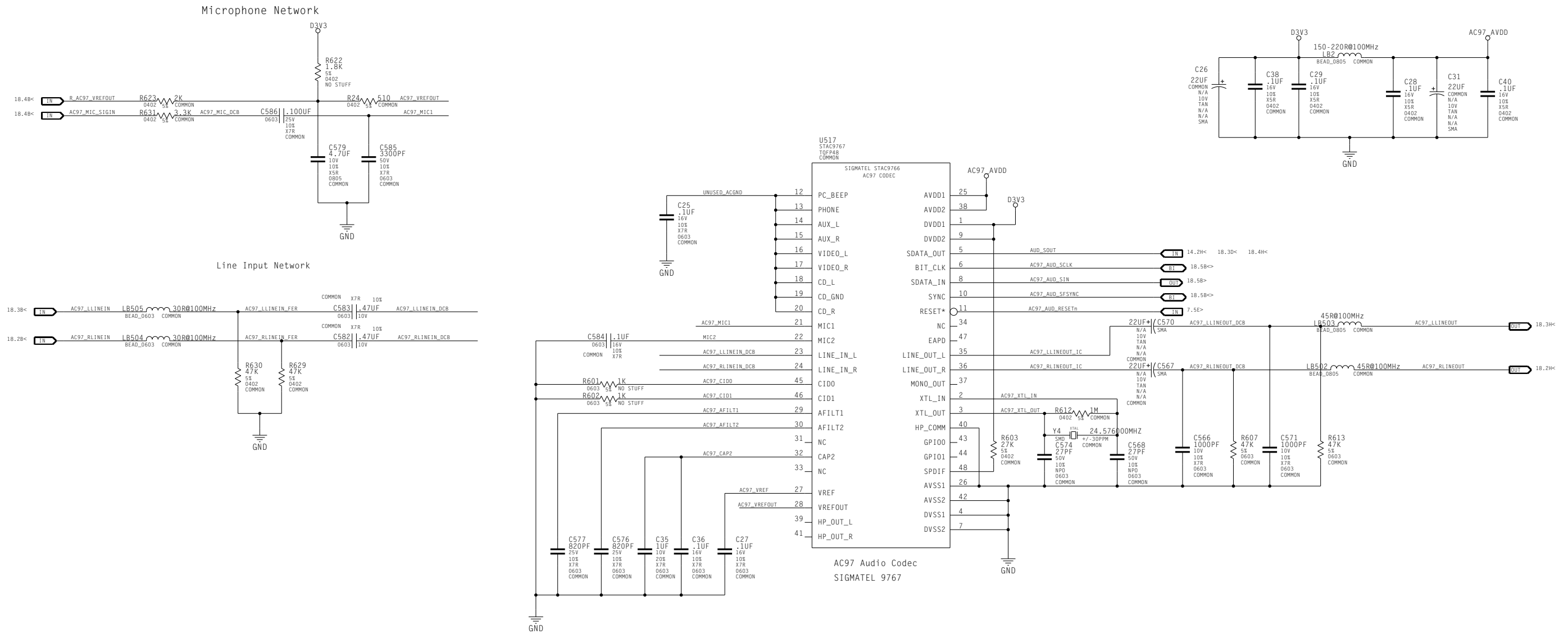
ASSEMBLY PAGE DETAIL BASE LEVEL GENERIC ONLY, COMMON & NO_STUFF ASSEMBLY NOTES AND BDM NOT FINAL Analog Audio IO I2S

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E433 SC15 Evaluation MainBoard

AC97 AUDIO

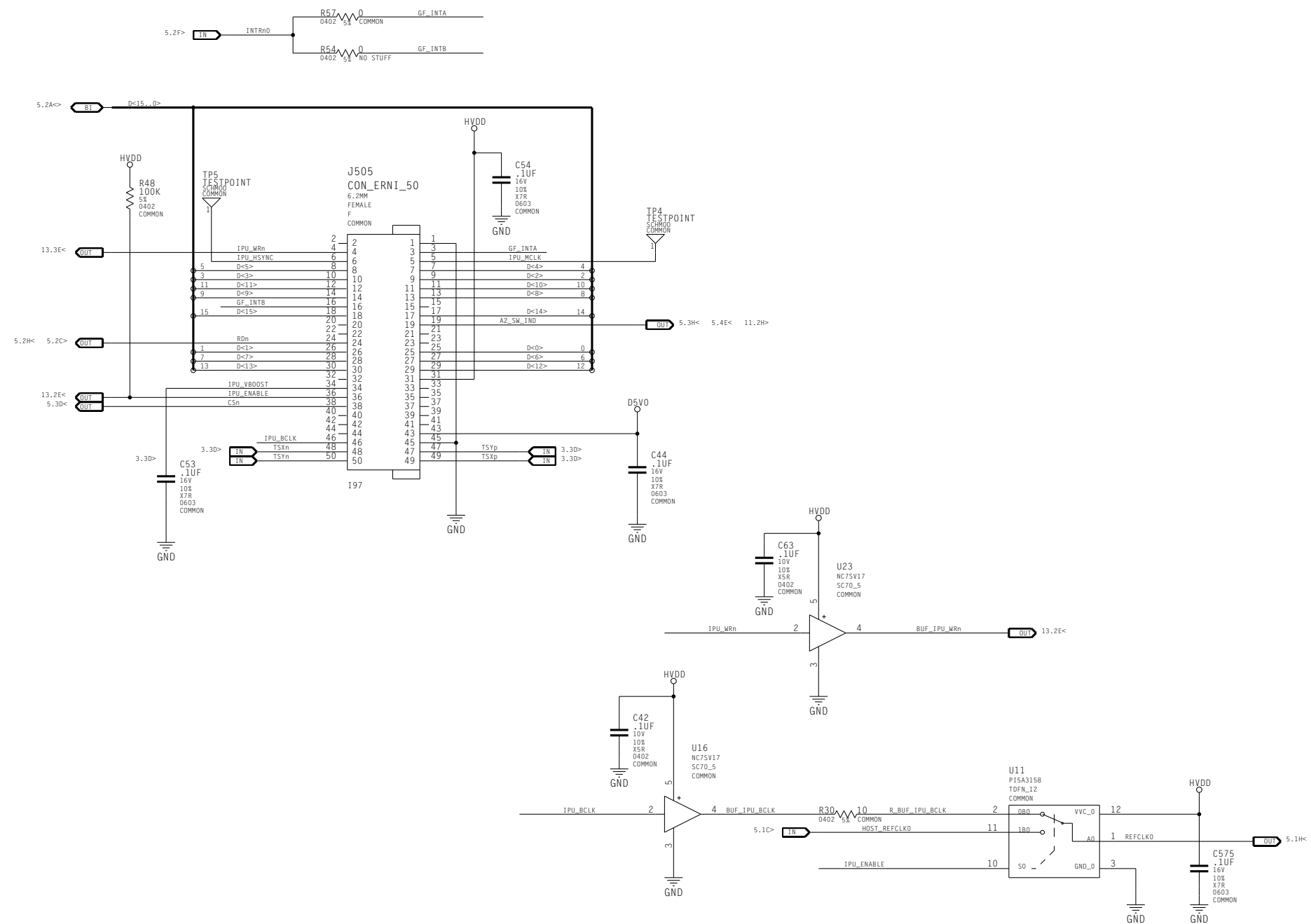


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PAGE DETAIL	Analog Audio IO AC97

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E433 SC15 Evaluation MainBoard IPU INTERFACE AND MISC CIRCUITS



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PAGE DETAIL	IPU Interface

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