

DDD Discrete GDDR2

PV Build

2007.06.15

DATE	CHANGE NO.	REV

DRAWN	EE	DATE	POWER	DATE	INVENTEC			
DESIGN					TITLE			
CHECK					DDD Discrete			
RESPONSIBLE								
SIZE =	3	VER :			SIZE	CODE	DOC. NUMBER	REV
FILE NAME :	XXXX-XXXXXX-XX				A3	CS	Model No	A01
P/N	XXXXXXXXXXXX				SHEET	1	OF	55

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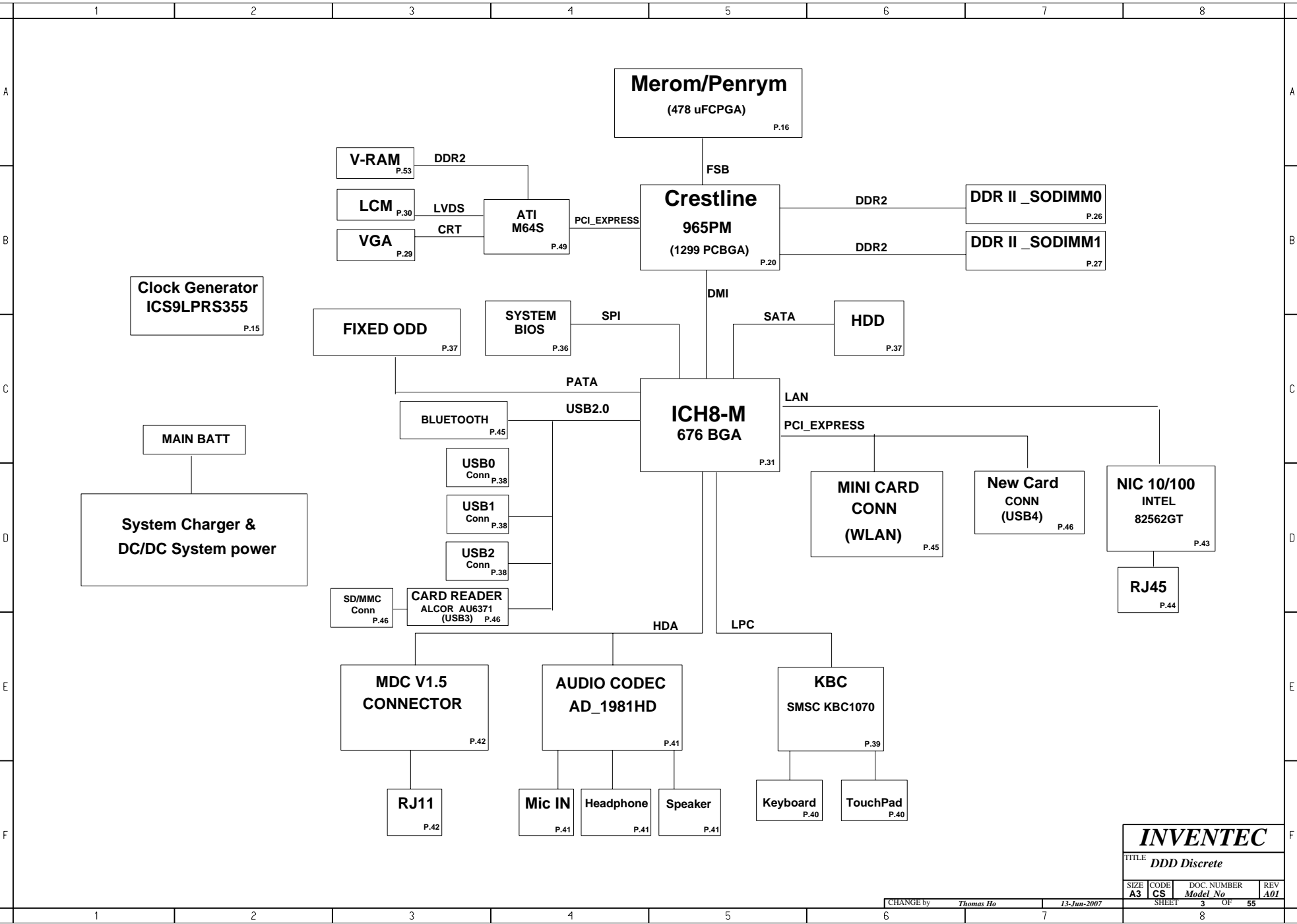
INVENTEC

TITLE *DDD Discrete*

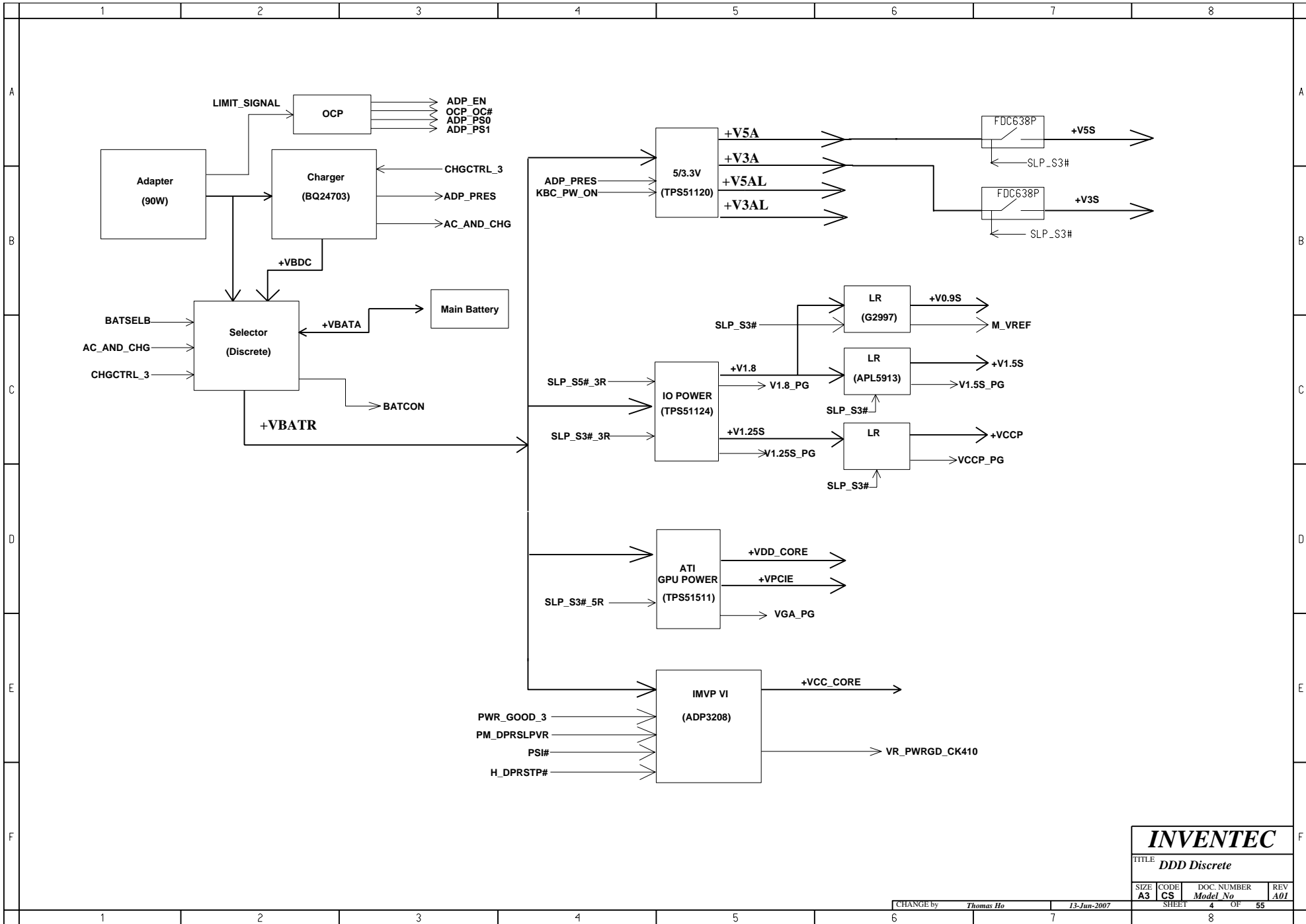
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
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INVENTEC			
TITLE <i>DDD Discrete</i>			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Thomas Ho</i>		13-Jun-2007	
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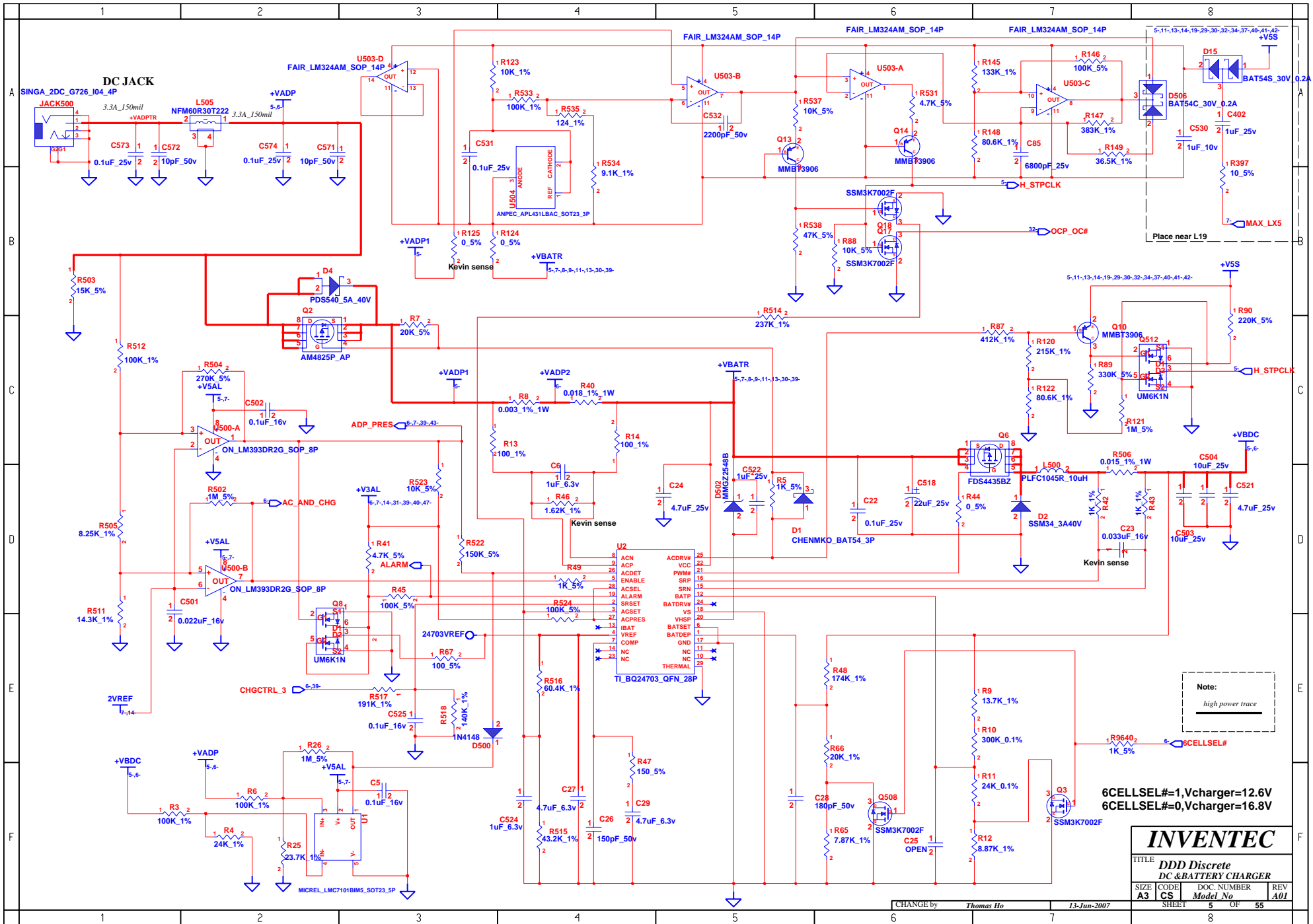


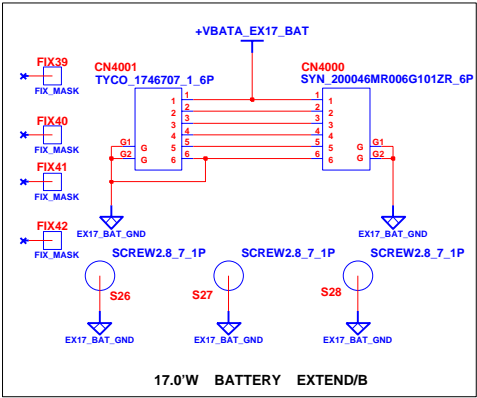
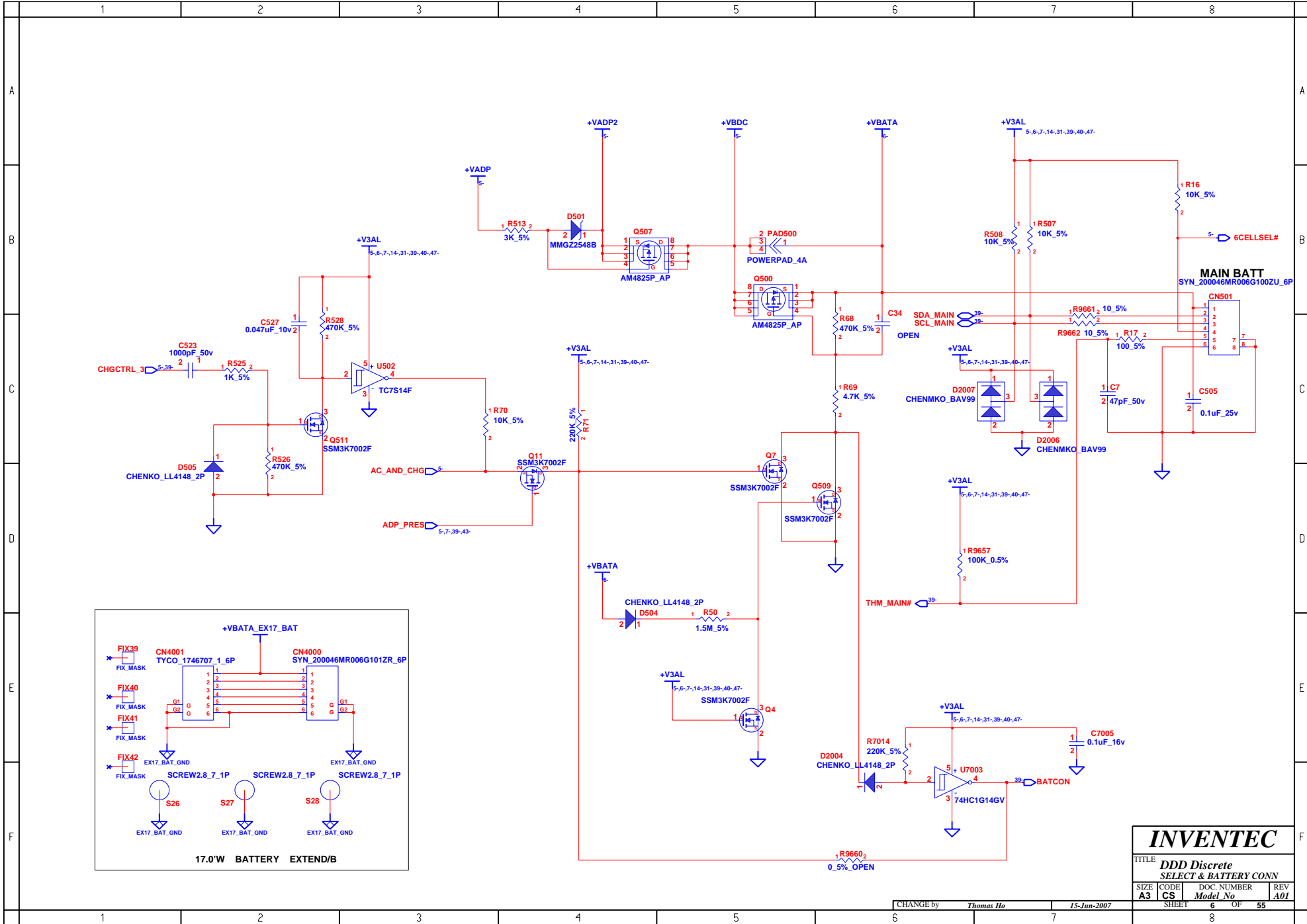
INVENTEC

TITLE **DDD Discrete**

SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
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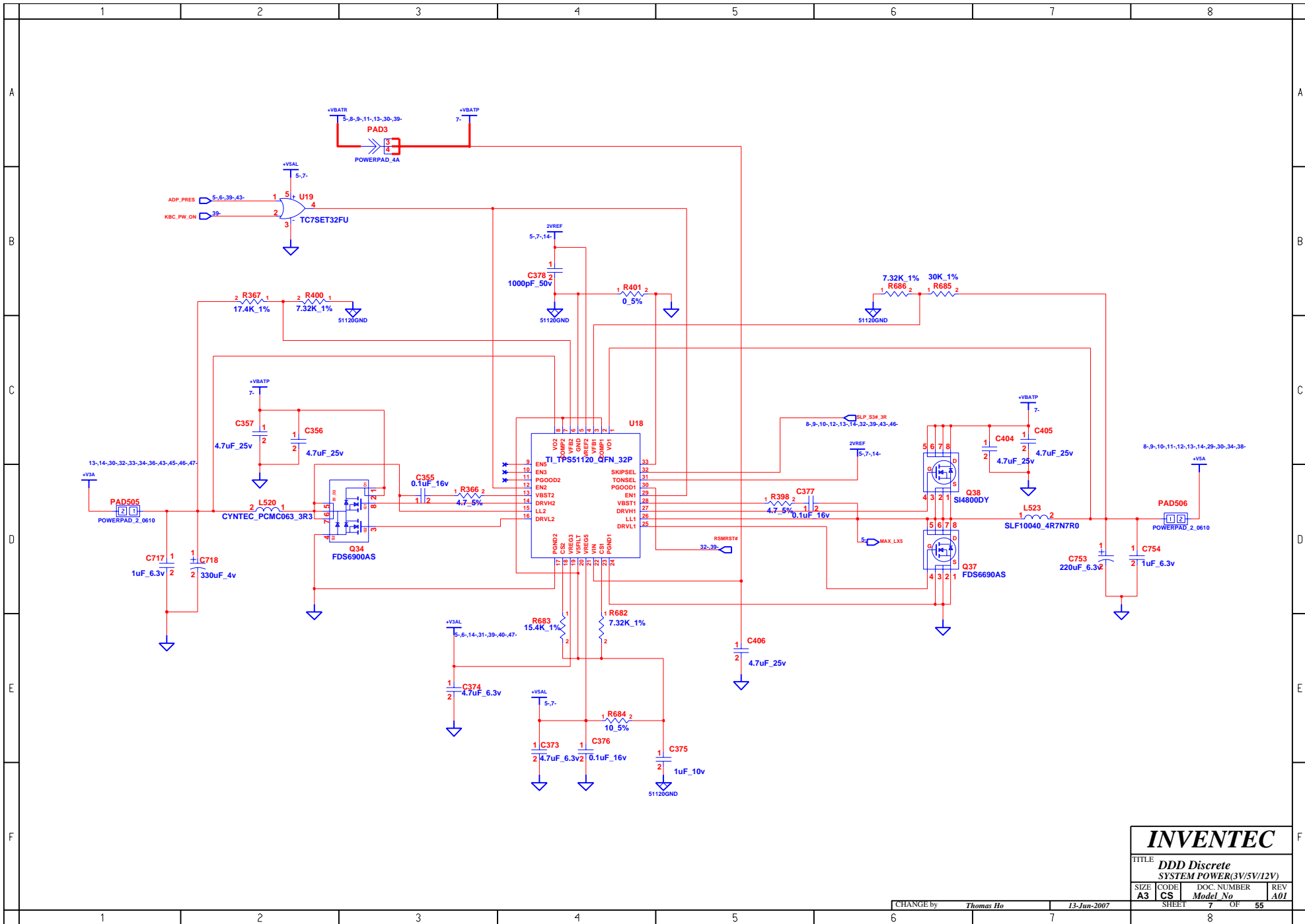


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TITLE			
DDD Discrete			
SELECT & BATTERY CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

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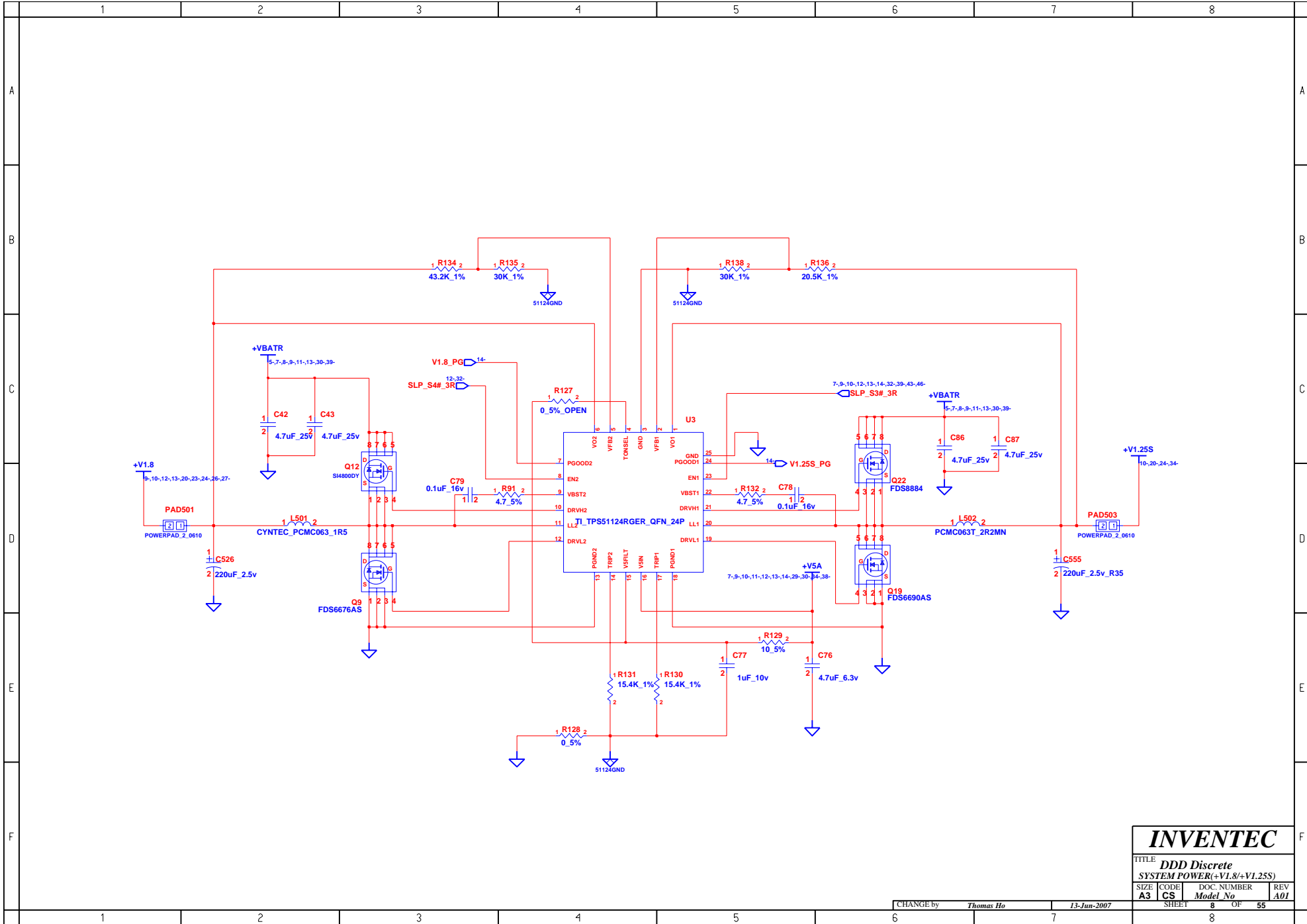


INVENTEC

TITLE
DDD Discrete
SYSTEM POWER(3V/5V/12V)

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

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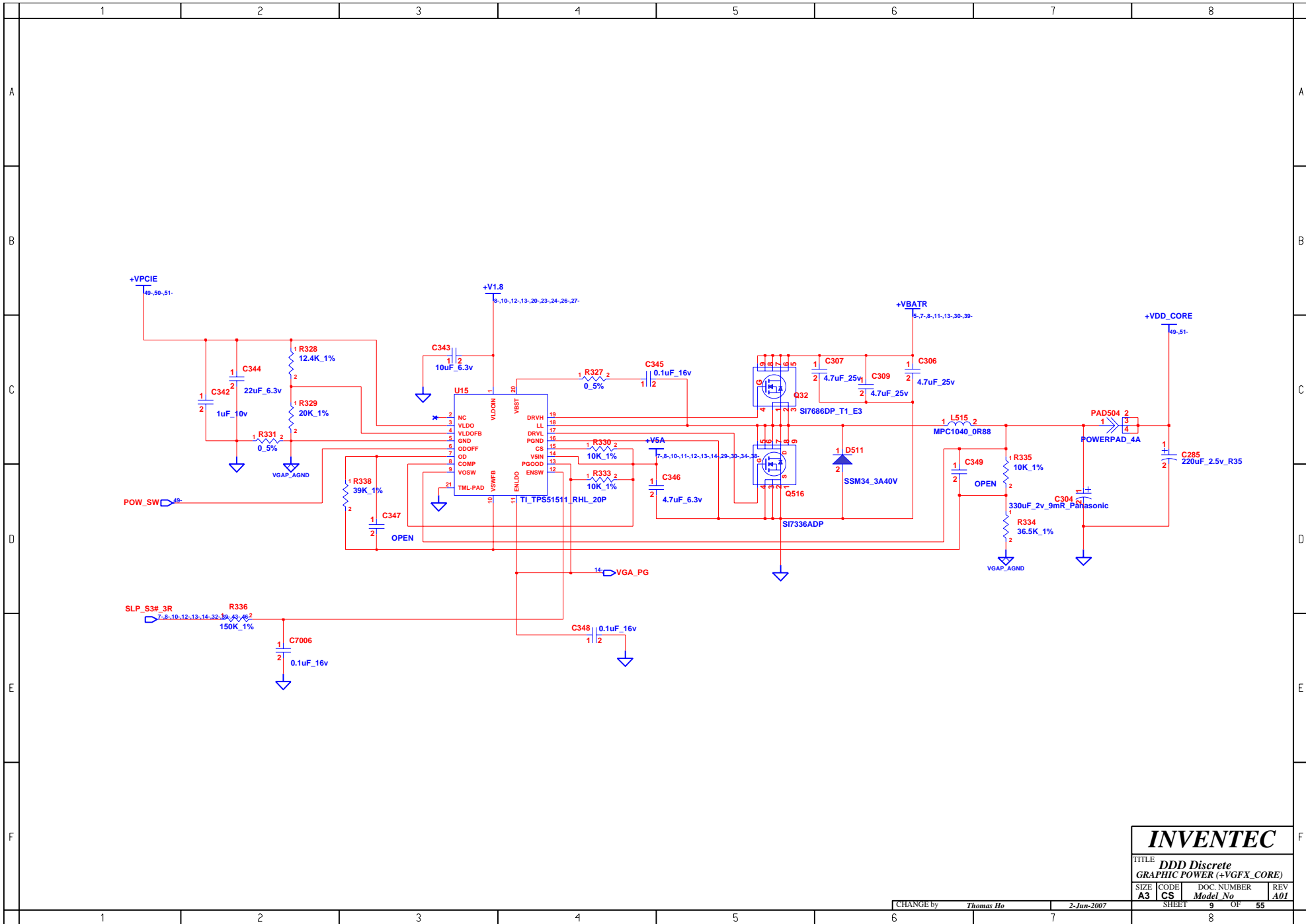


INVENTEC

TITLE
DDD Discrete
 SYSTEM POWER(+V1.8/+V1.25S)

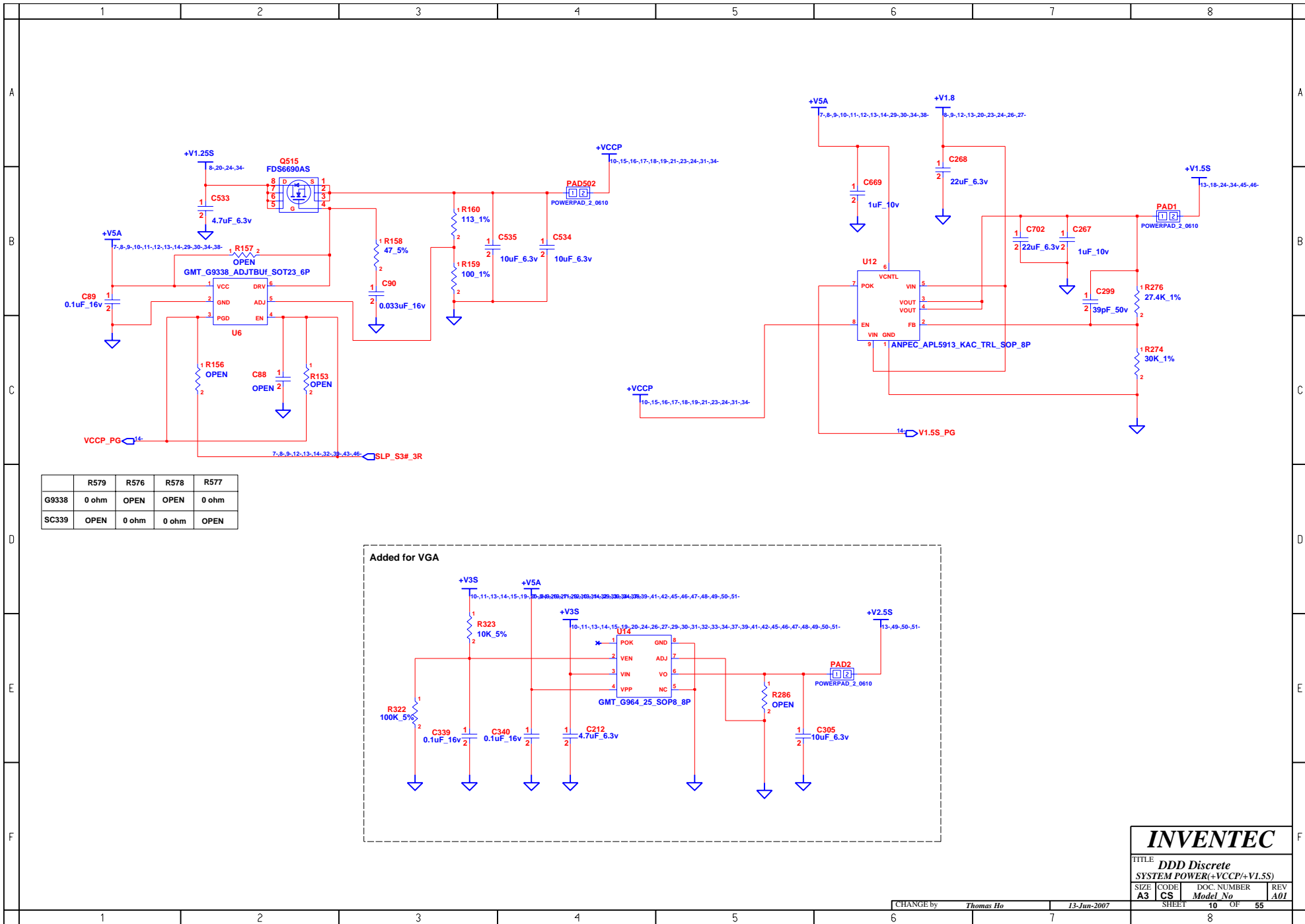
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
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CHANGE by *Thomas Ho* 13-Jun-2007
 SHEET 8 OF 55

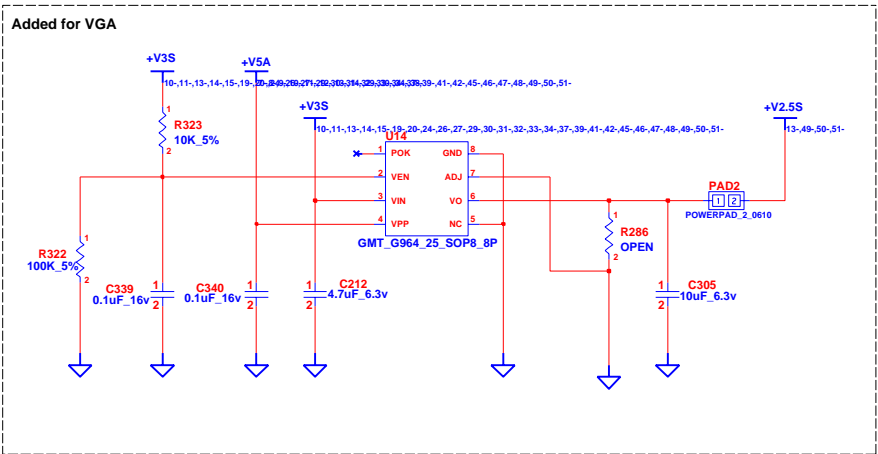


INVENTEC

TITLE			
DDD Discrete			
GRAPHIC POWER (+VGF_X_CORE)			
SIZE	CODE	DOC. NUMBER	REV
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Thomas Ho			9 OF 55
2-Jun-2007			



	R579	R576	R578	R577
G9338	0 ohm	OPEN	OPEN	0 ohm
SC339	OPEN	0 ohm	0 ohm	OPEN

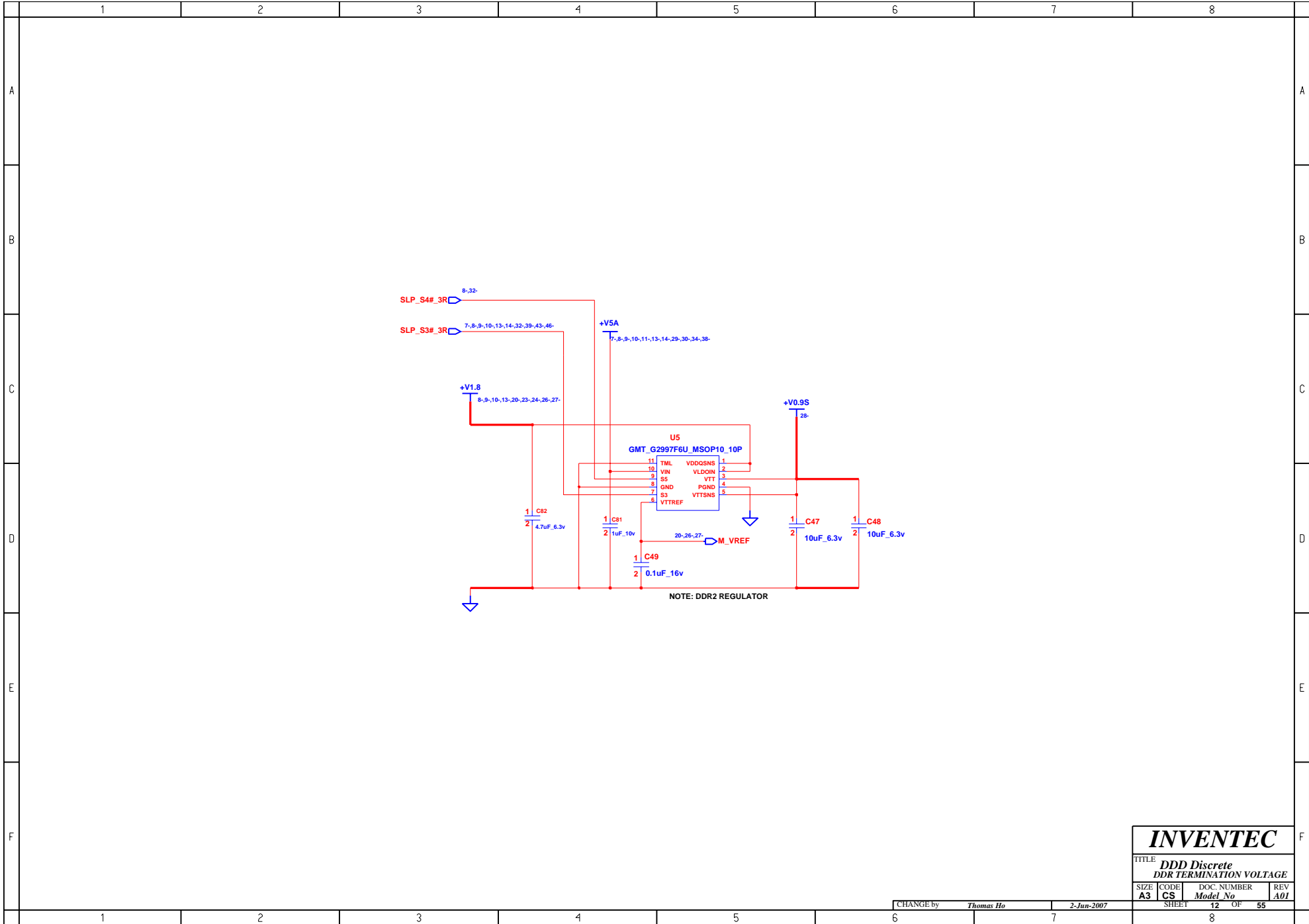


INVENTEC

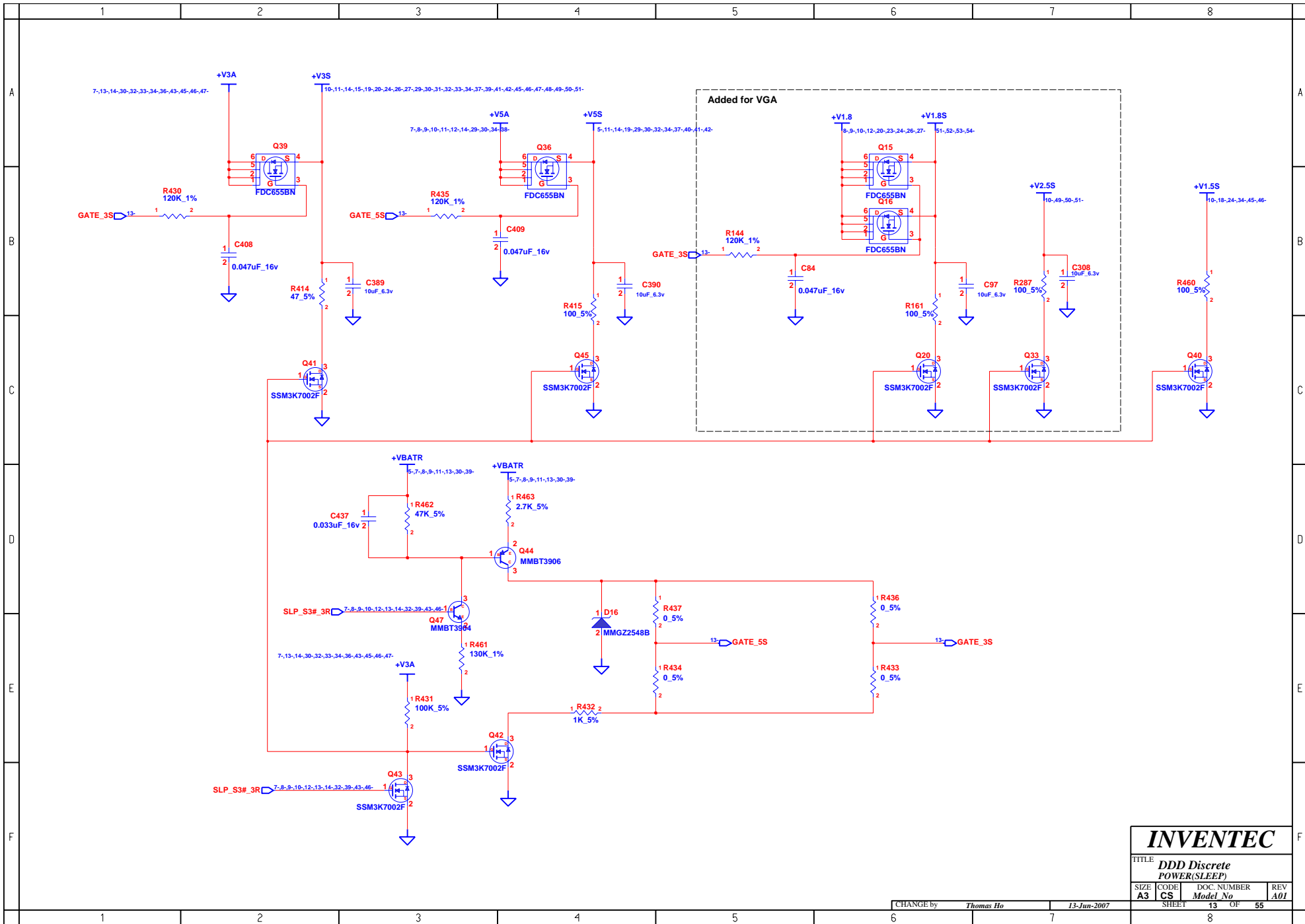
TITLE **DDD Discrete**
SYSTEM POWER(+VCCP/+V1.5S)

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

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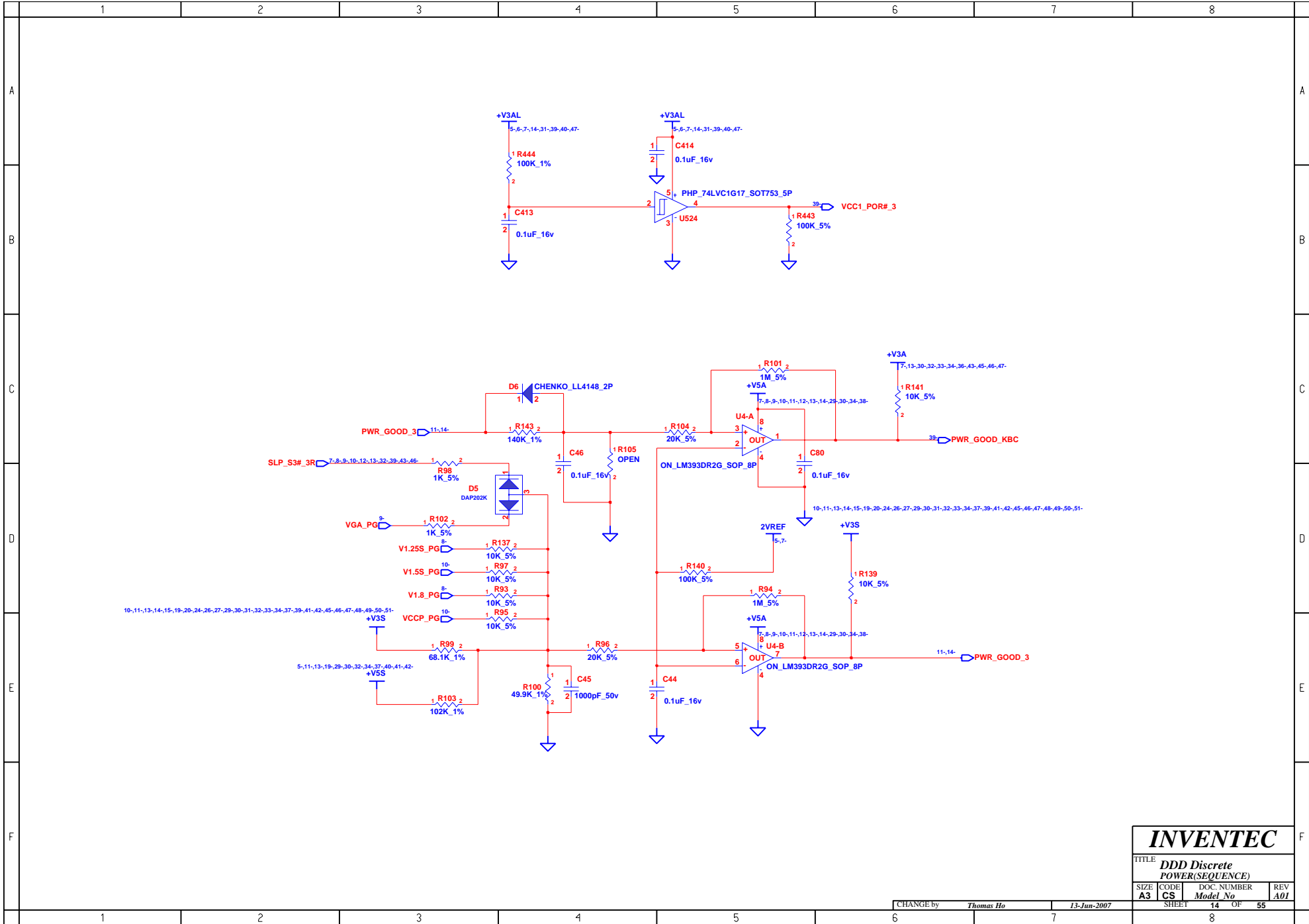
INVENTEC			
TITLE DDD Discrete DDR TERMINATION VOLTAGE			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Thomas Ho</i>		2-Jun-2007	
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INVENTEC

TITLE
**DDD Discrete
 POWER(SLEEP)**

SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
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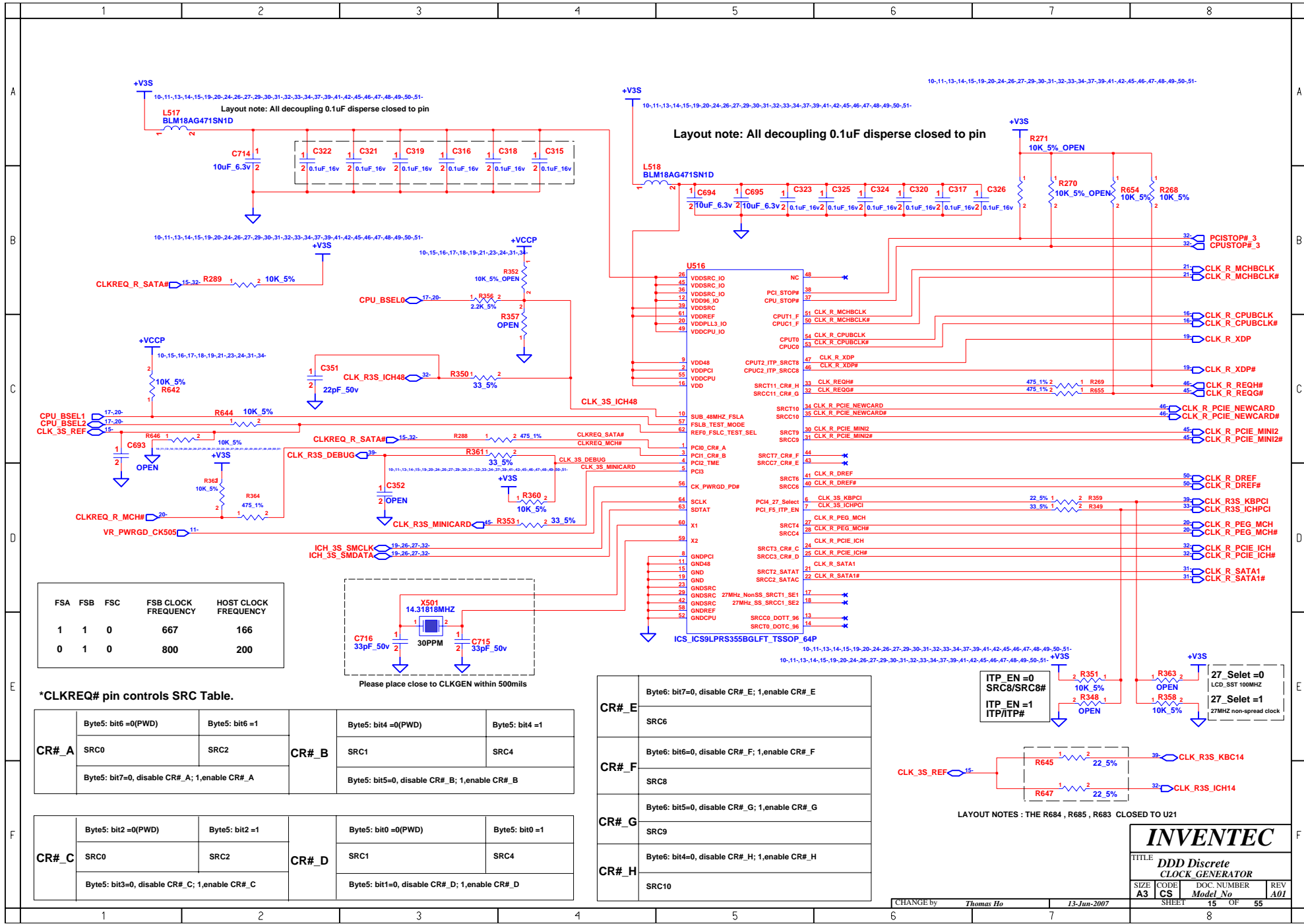
INVENTEC

TITLE
**DDD Discrete
 POWER(SEQUENCE)**

SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
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CHANGE by *Thomas Ho* 13-Jun-2007

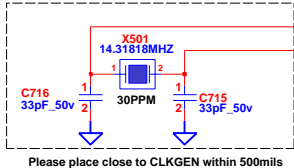
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Layout note: All decoupling 0.1uF disperse closed to pin

Layout note: All decoupling 0.1uF disperse closed to pin

FSA	FSB	FSC	FSB CLOCK FREQUENCY	HOST CLOCK FREQUENCY
1	1	0	667	166
0	1	0	800	200

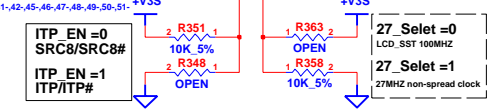


*CLKREQ# pin controls SRC Table.

CR#_A	Byte5: bit6=0(PWD)		Byte5: bit6=1		CR#_B	Byte5: bit4=0(PWD)		Byte5: bit4=1	
	SRC0	SRC2	SRC1	SRC4		SRC1	SRC4		
Byte5: bit7=0, disable CR#_A; 1,enable CR#_A		Byte5: bit5=0, disable CR#_B; 1,enable CR#_B							

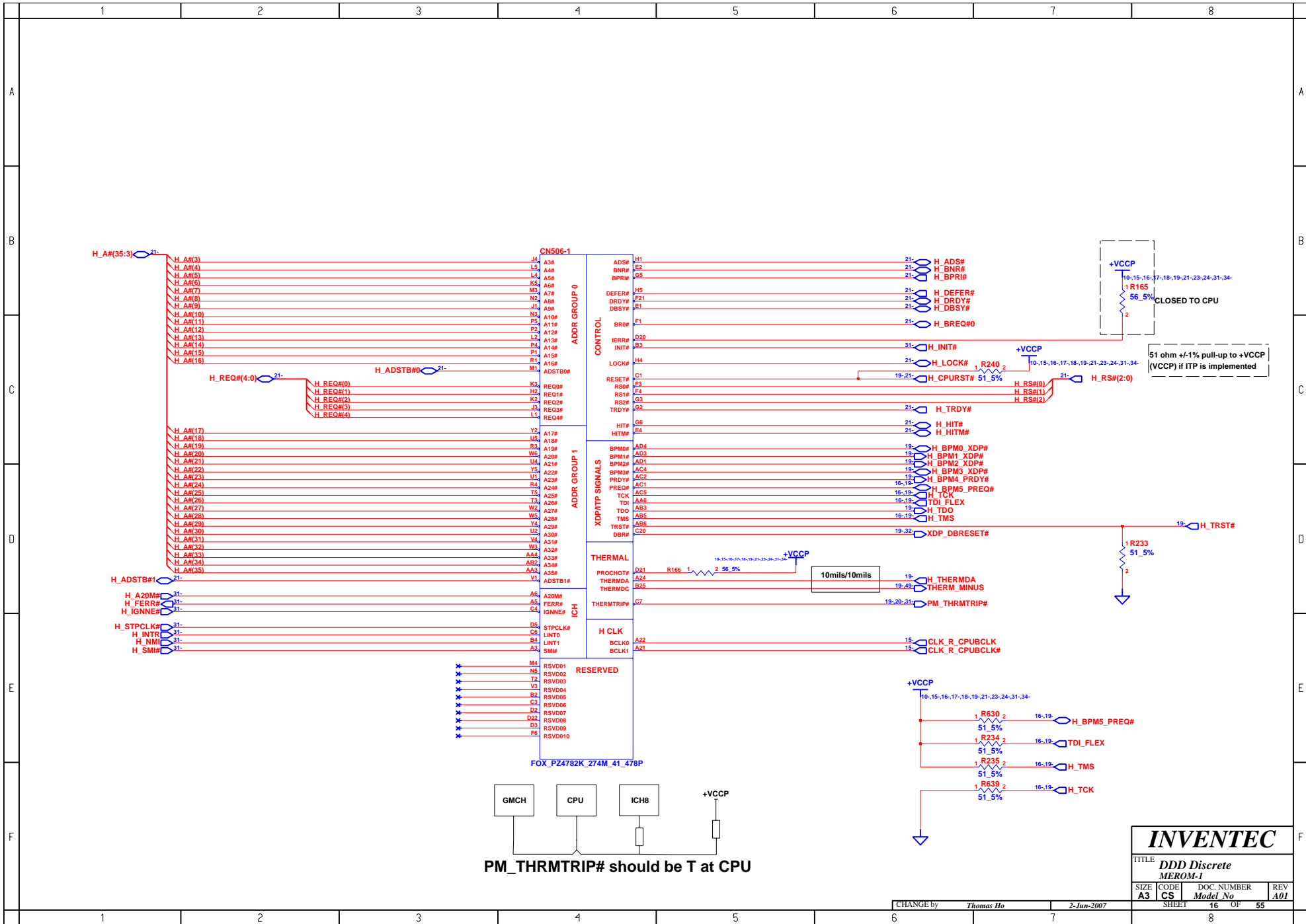
CR#_C	Byte5: bit2=0(PWD)		Byte5: bit2=1		CR#_D	Byte5: bit0=0(PWD)		Byte5: bit0=1	
	SRC0	SRC2	SRC1	SRC4		SRC1	SRC4		
Byte5: bit3=0, disable CR#_C; 1,enable CR#_C		Byte5: bit1=0, disable CR#_D; 1,enable CR#_D							

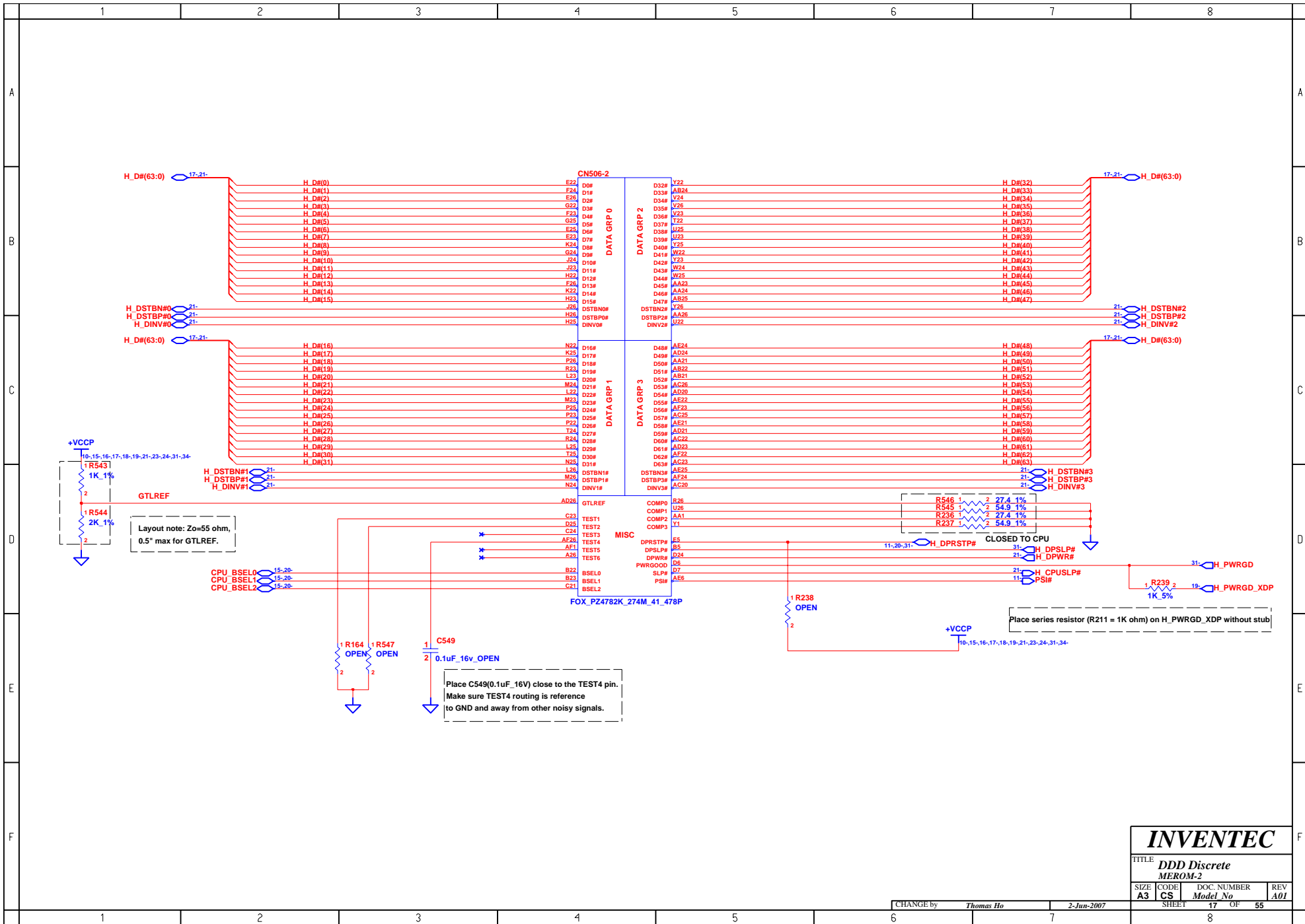
CR#_E	Byte6: bit7=0, disable CR#_E; 1,enable CR#_E	SRC6
CR#_F	Byte6: bit6=0, disable CR#_F; 1,enable CR#_F	SRC8
CR#_G	Byte6: bit5=0, disable CR#_G; 1,enable CR#_G	SRC9
CR#_H	Byte6: bit4=0, disable CR#_H; 1,enable CR#_H	SRC10



LAYOUT NOTES : THE R684 , R685 , R683 CLOSED TO U21

INVENTEC			
TITLE DDD Discrete CLOCK GENERATOR			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
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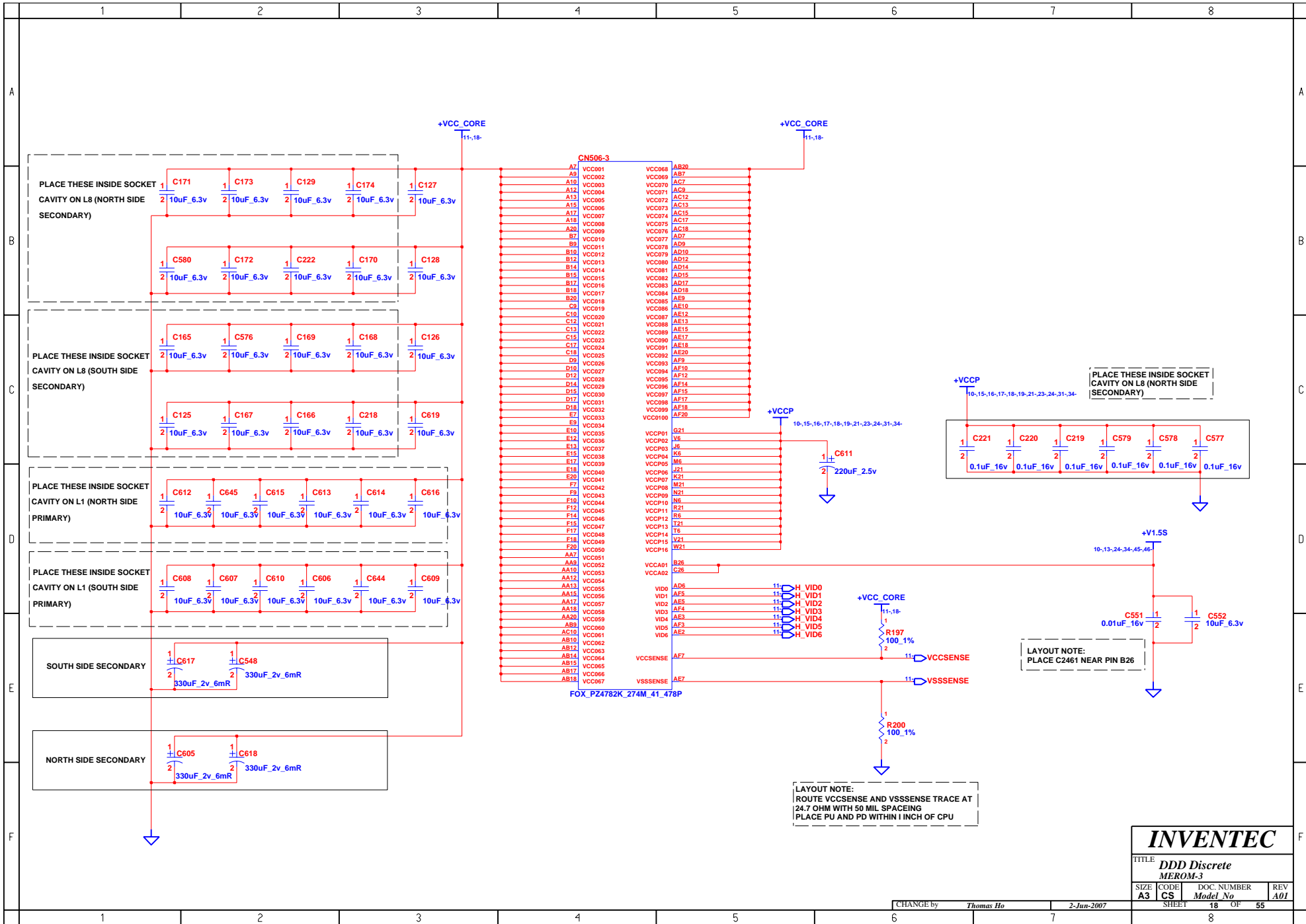
INVENTEC

TITLE
**DDD Discrete
 MEROM-2**

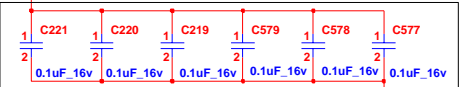
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

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PLACE THESE INSIDE SOCKET CAVITY ON L8 (NORTH SIDE SECONDARY)

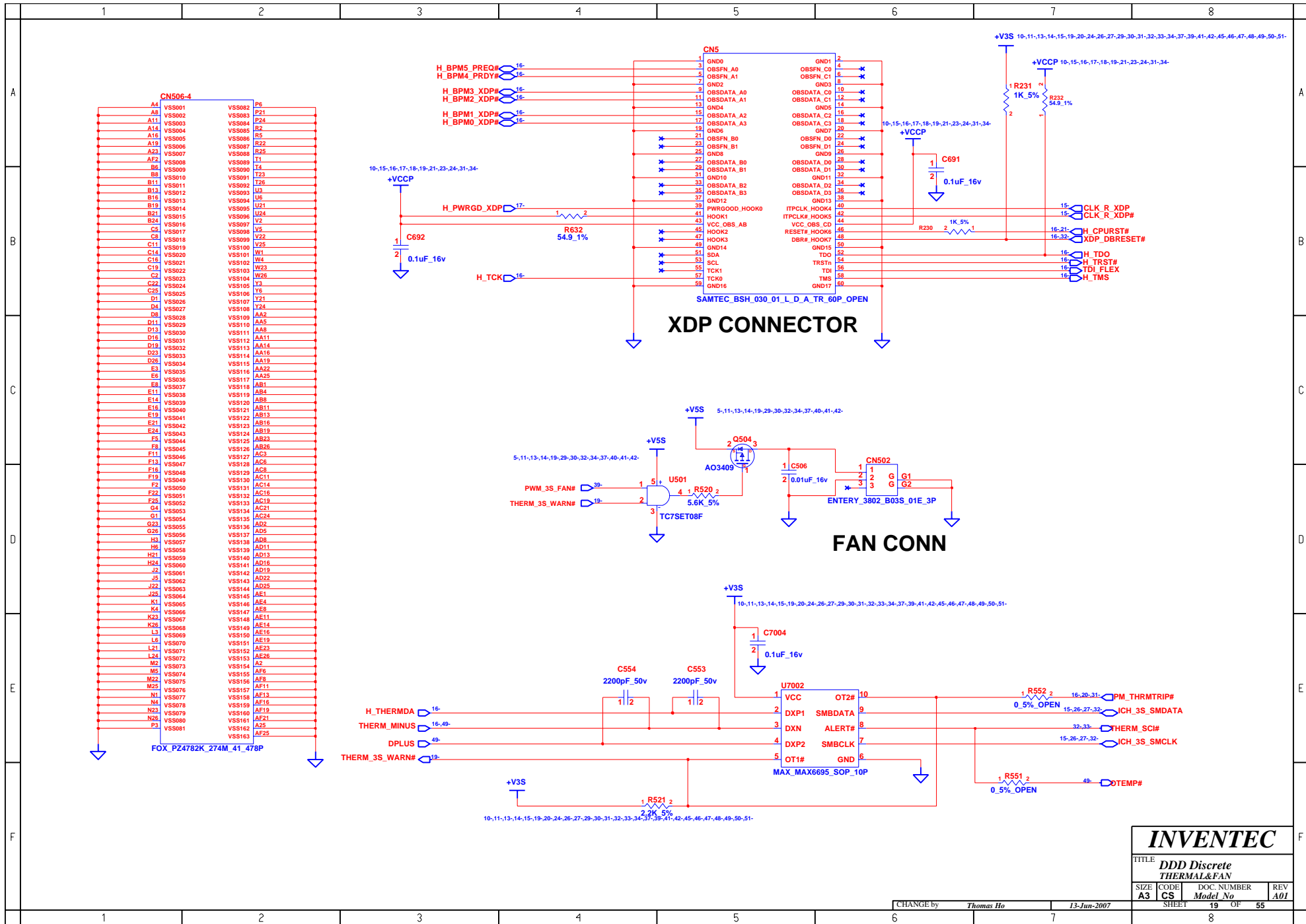


LAYOUT NOTE: PLACE C2461 NEAR PIN B26

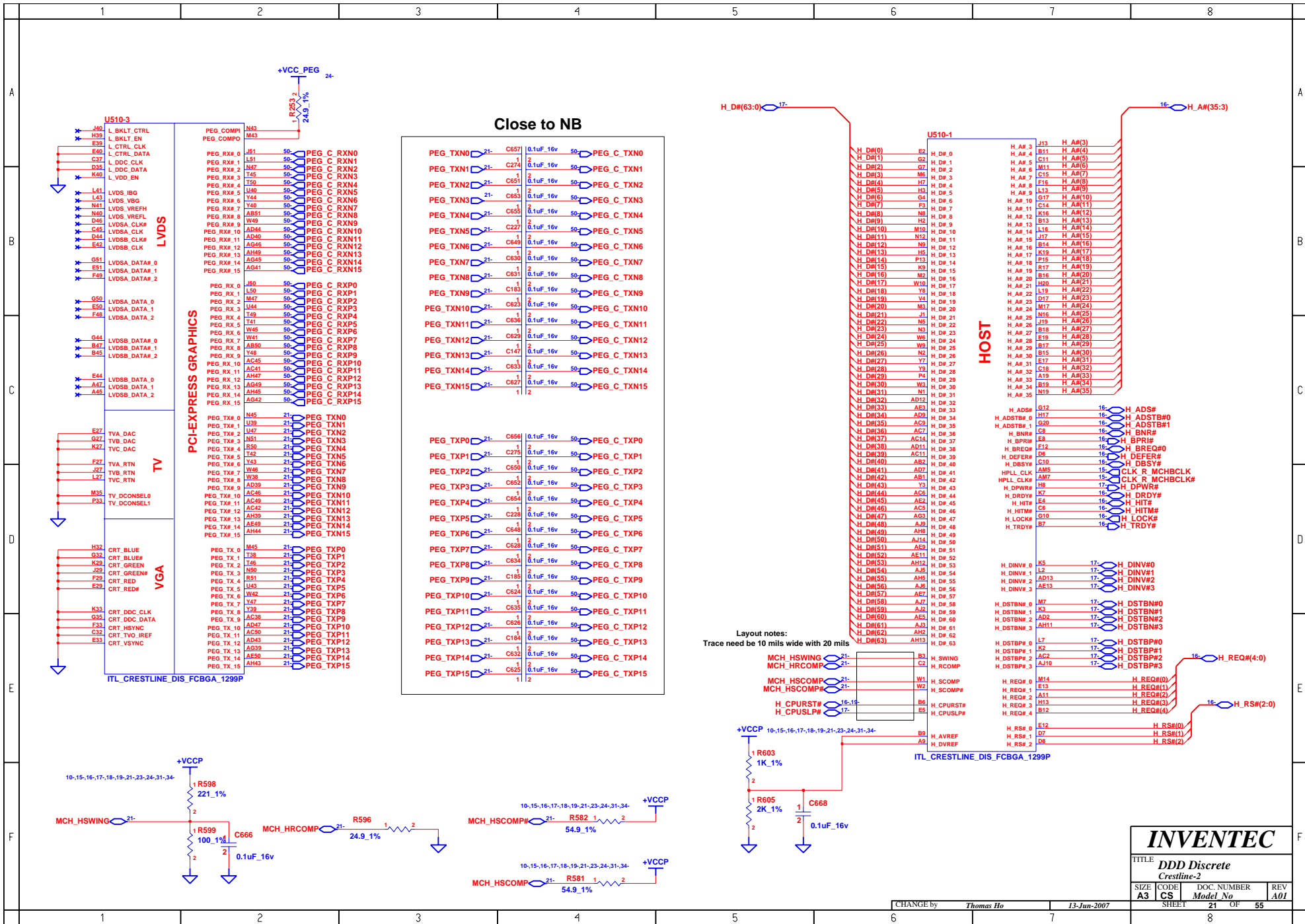
LAYOUT NOTE: ROUTE VCCSENSE AND VSSSENSE TRACE AT 24.7 OHM WITH 50 MIL SPACING PLACE PU AND PD WITHIN 1 INCH OF CPU

INVENTEC

TITLE			
DDD Discrete			
MEROM-3			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01



INVENTEC			
TITLE DDD Discrete THERMAL&FAN			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Thomas Ho		13-Jun-2007	SHEET 19 OF 55

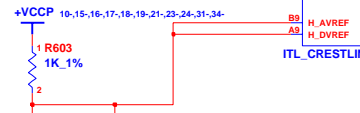
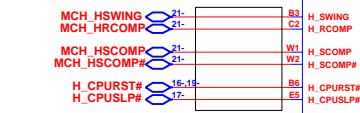


Close to NB

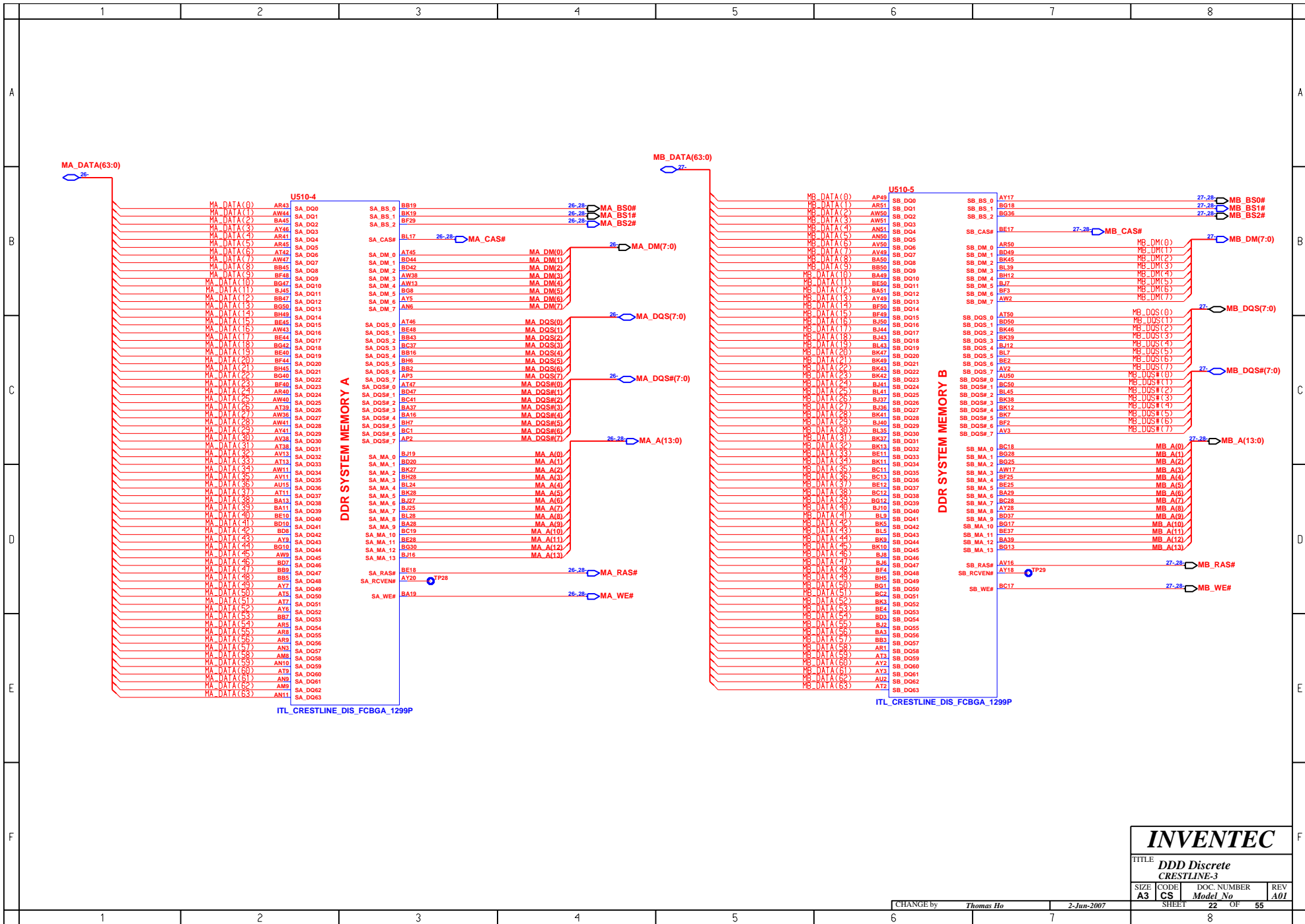
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PEG_TXN2	21	C651	2	0.1uF_16v	50	PEG_C_TXN2
PEG_TXN3	21	C653	2	0.1uF_16v	50	PEG_C_TXN3
PEG_TXN4	21	C655	2	0.1uF_16v	50	PEG_C_TXN4
PEG_TXN5	21	C227	2	0.1uF_16v	50	PEG_C_TXN5
PEG_TXN6	21	C649	2	0.1uF_16v	50	PEG_C_TXN6
PEG_TXN7	21	C630	2	0.1uF_16v	50	PEG_C_TXN7
PEG_TXN8	21	C651	2	0.1uF_16v	50	PEG_C_TXN8
PEG_TXN9	21	C183	2	0.1uF_16v	50	PEG_C_TXN9
PEG_TXN10	21	C623	2	0.1uF_16v	50	PEG_C_TXN10
PEG_TXN11	21	C636	2	0.1uF_16v	50	PEG_C_TXN11
PEG_TXN12	21	C629	2	0.1uF_16v	50	PEG_C_TXN12
PEG_TXN13	21	C147	2	0.1uF_16v	50	PEG_C_TXN13
PEG_TXN14	21	C633	2	0.1uF_16v	50	PEG_C_TXN14
PEG_TXN15	21	C627	2	0.1uF_16v	50	PEG_C_TXN15

PEG_TXP0	21	C656	1	0.1uF_16v	50	PEG_C_TXP0
PEG_TXP1	21	C275	2	0.1uF_16v	50	PEG_C_TXP1
PEG_TXP2	21	C650	2	0.1uF_16v	50	PEG_C_TXP2
PEG_TXP3	21	C652	2	0.1uF_16v	50	PEG_C_TXP3
PEG_TXP4	21	C654	2	0.1uF_16v	50	PEG_C_TXP4
PEG_TXP5	21	C228	2	0.1uF_16v	50	PEG_C_TXP5
PEG_TXP6	21	C648	2	0.1uF_16v	50	PEG_C_TXP6
PEG_TXP7	21	C628	2	0.1uF_16v	50	PEG_C_TXP7
PEG_TXP8	21	C634	2	0.1uF_16v	50	PEG_C_TXP8
PEG_TXP9	21	C185	2	0.1uF_16v	50	PEG_C_TXP9
PEG_TXP10	21	C624	2	0.1uF_16v	50	PEG_C_TXP10
PEG_TXP11	21	C635	2	0.1uF_16v	50	PEG_C_TXP11
PEG_TXP12	21	C626	2	0.1uF_16v	50	PEG_C_TXP12
PEG_TXP13	21	C184	2	0.1uF_16v	50	PEG_C_TXP13
PEG_TXP14	21	C632	2	0.1uF_16v	50	PEG_C_TXP14
PEG_TXP15	21	C625	2	0.1uF_16v	50	PEG_C_TXP15

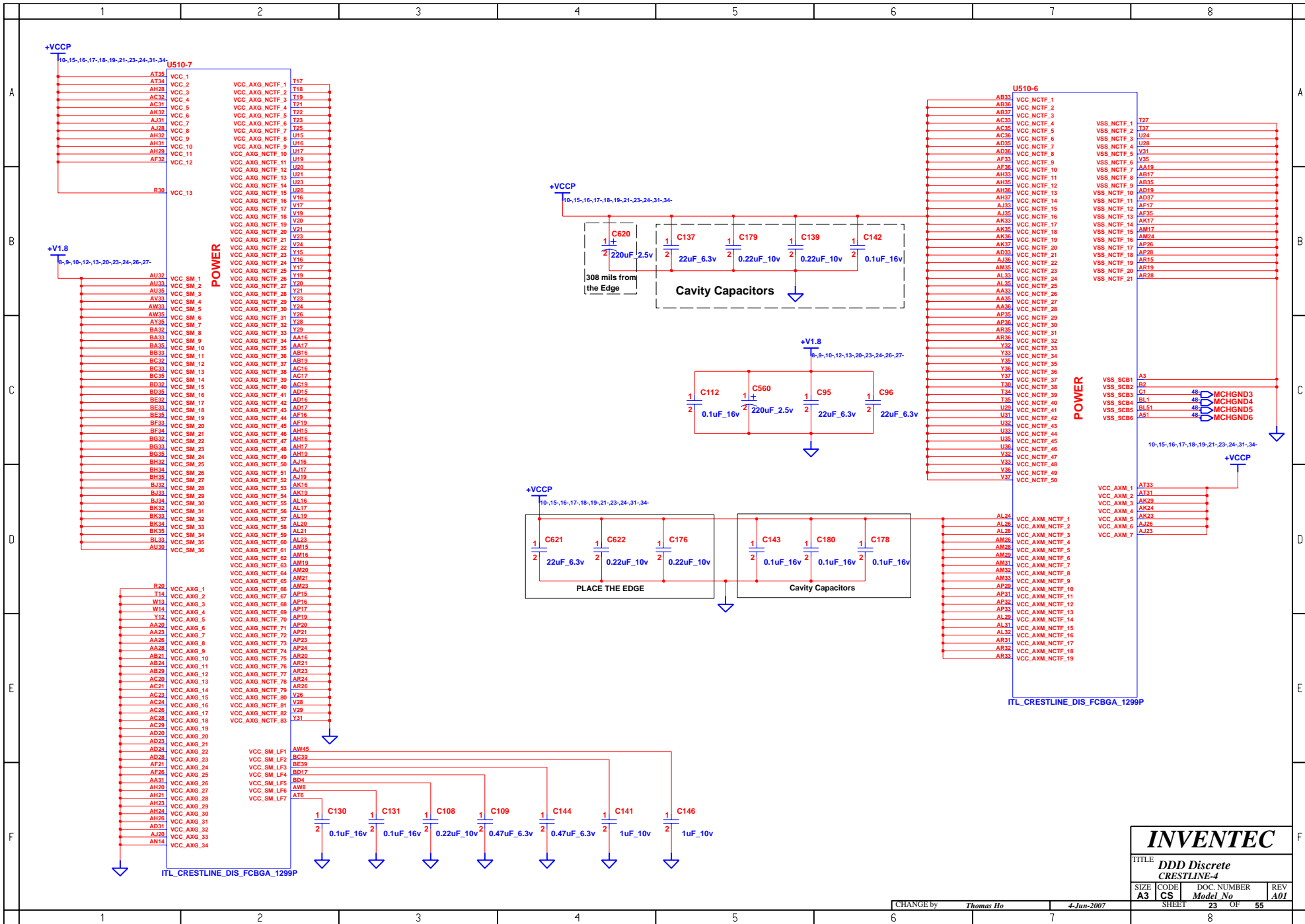
Layout notes:
Trace need be 10 mils wide with 20 mils

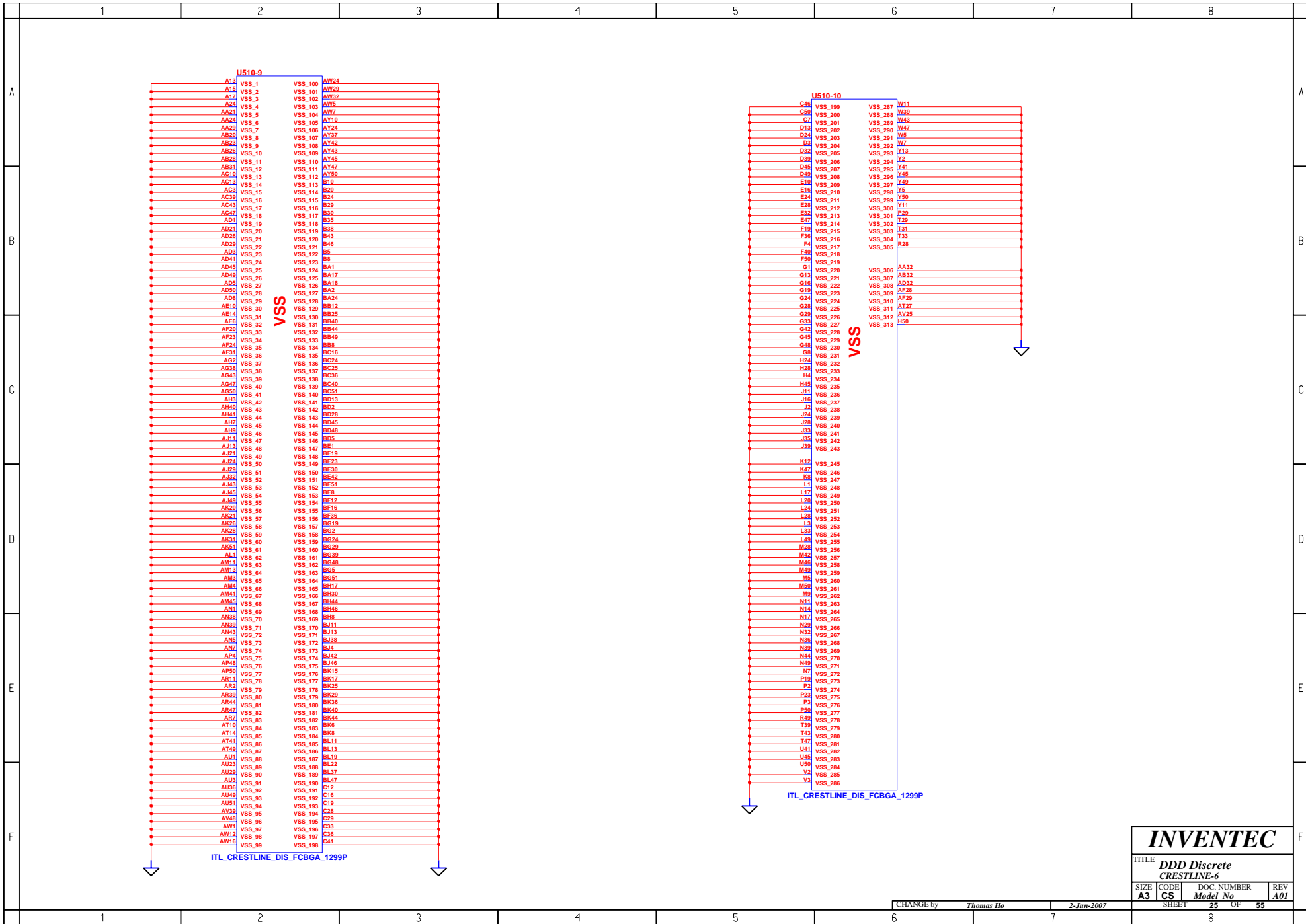


INVENTEC			
TITLE DDD Discrete Crestline-2			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Thomas Ho		13-Jun-2007	
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INVENTEC			
TITLE DDD Discrete CRESTLINE-3			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Thomas Ho		2-Jun-2007	
SHEET 22		OF 55	





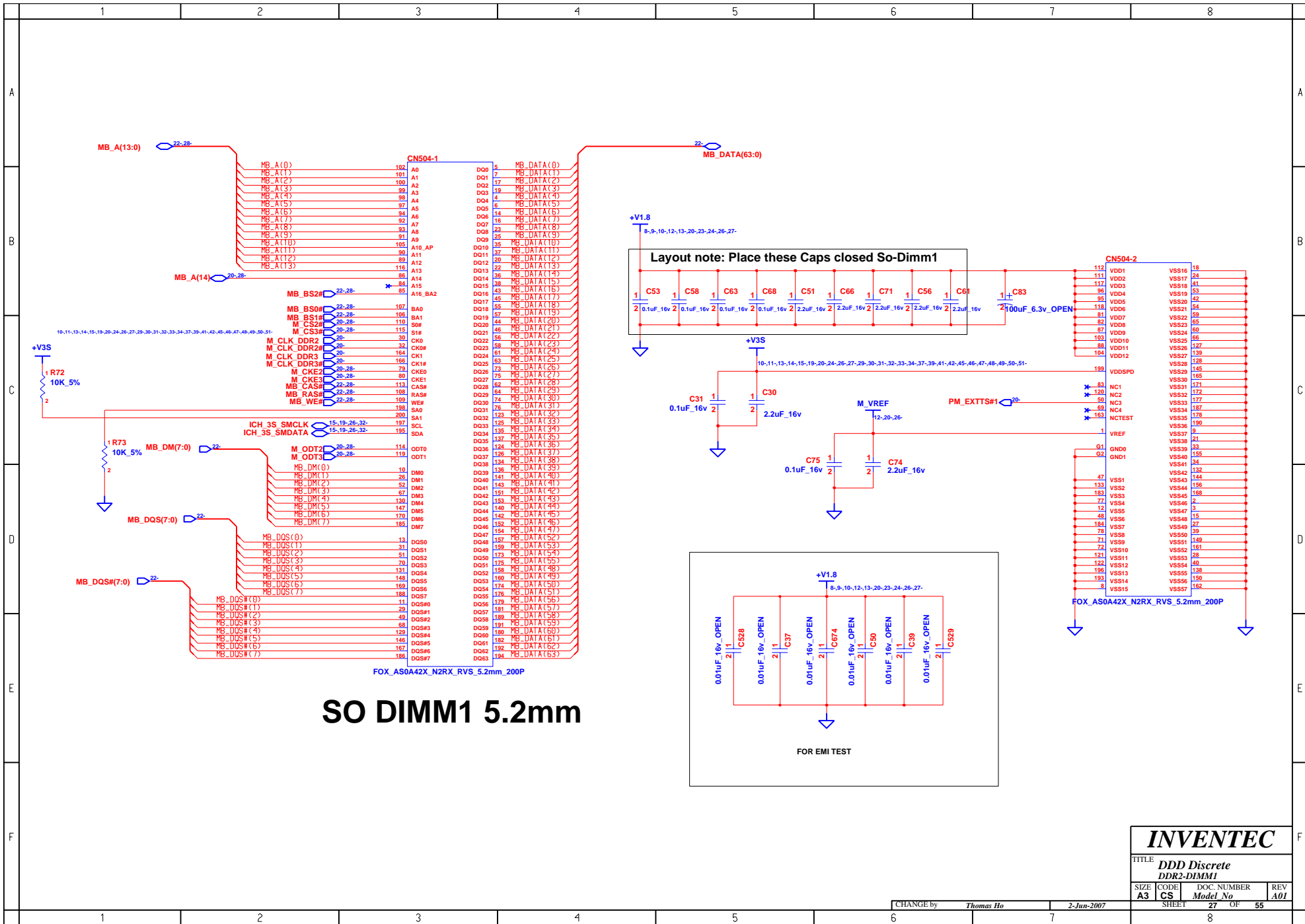
INVENTEC

TITLE
DDD Discrete
CRESTLINE-6

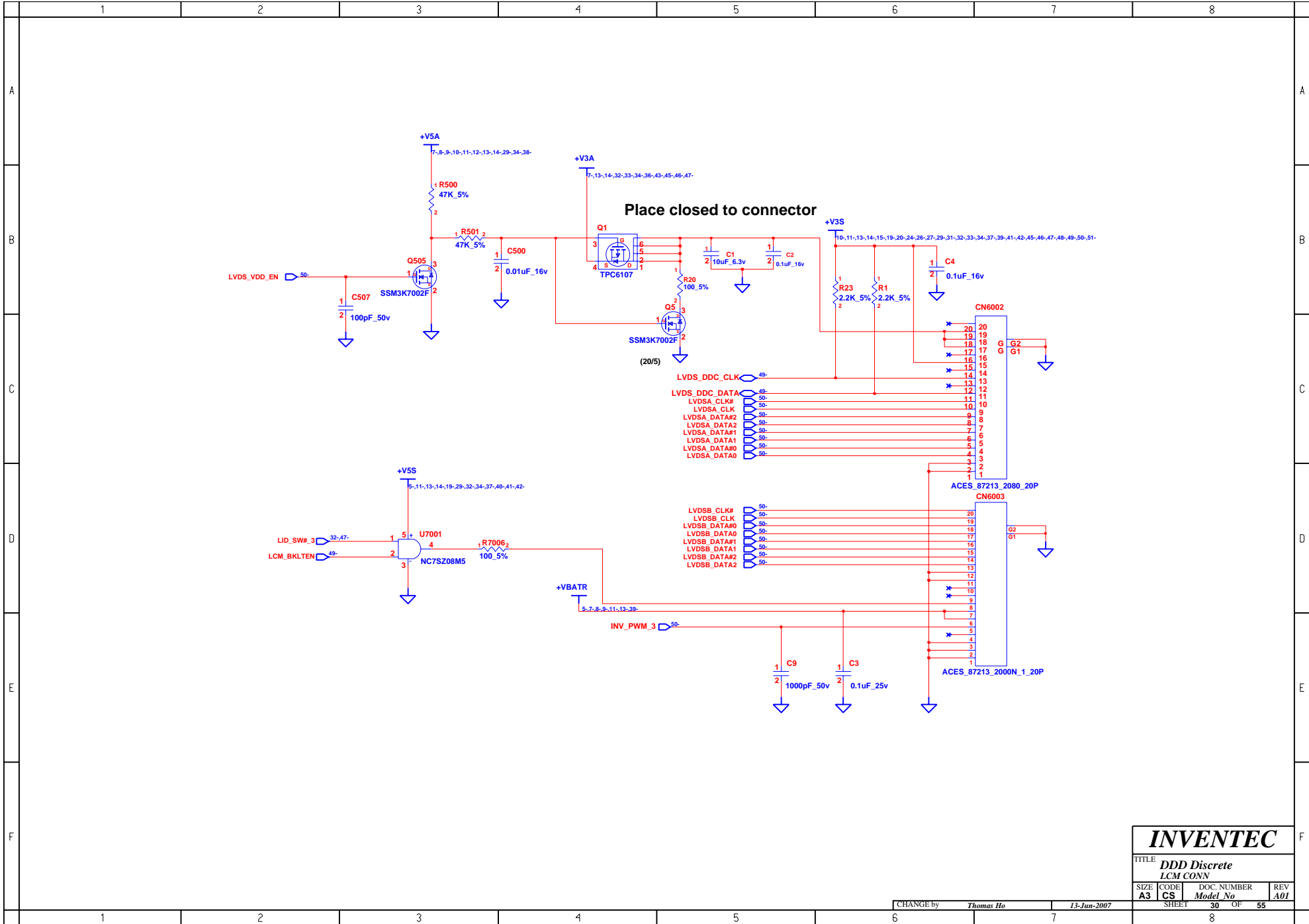
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

CHANGE by *Thomas Ho* 2-Jun-2007

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INVENTEC			
TITLE DDD Discrete DDR2-DIMM1			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Thomas Ho		2-Jun-2007	
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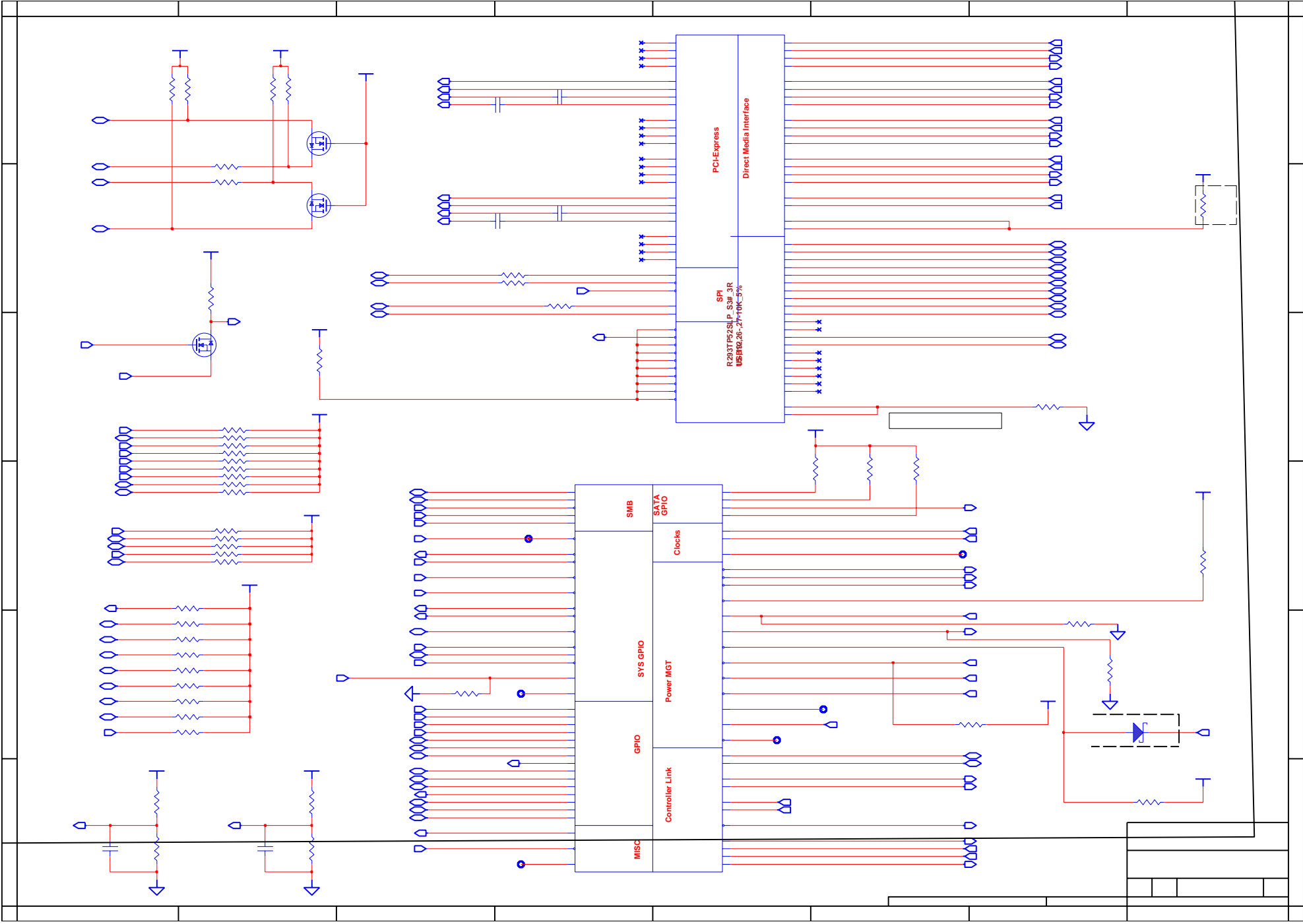


INVENTEC

TITLE
DDD Discrete
LCM CONN

SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
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CHANGE by *Thomas Ho* 13-Jun-2007 SHEET 30 OF 55



	1	2	3	4	5	6	7	8	
A									
B									
C									
D									
E									
F									

U519-5

AA1	VSS001	VSS099	K7
AA2	VSS002	VSS100	L1
AA3	VSS003	VSS101	L13
AA4	VSS004	VSS102	L15
AA5	VSS005	VSS103	L26
AA6	VSS006	VSS104	L27
AA7	VSS007	VSS105	L4
AA8	VSS008	VSS106	L5
AA9	VSS009	VSS107	M12
AA10	VSS010	VSS108	M13
AA11	VSS011	VSS109	M14
AA12	VSS012	VSS110	M15
AA13	VSS013	VSS111	M16
AA14	VSS014	VSS112	M17
AA15	VSS015	VSS113	M23
AA16	VSS016	VSS114	M28
AA17	VSS017	VSS115	M29
AA18	VSS018	VSS116	M3
AA19	VSS019	VSS117	N1
AA20	VSS020	VSS118	N11
AA21	VSS021	VSS119	N12
AA22	VSS022	VSS120	N13
AA23	VSS023	VSS121	N14
AA24	VSS024	VSS122	N15
AA25	VSS025	VSS123	N16
AA26	VSS026	VSS124	N17
AA27	VSS027	VSS125	N18
AA28	VSS028	VSS126	N26
AA29	VSS029	VSS127	N27
AA30	VSS030	VSS128	N4
AA31	VSS031	VSS129	N5
AA32	VSS032	VSS130	N6
AA33	VSS033	VSS131	P12
AA34	VSS034	VSS132	P13
AA35	VSS035	VSS133	P14
AA36	VSS036	VSS134	P15
AA37	VSS037	VSS135	P16
AA38	VSS038	VSS136	P17
AA39	VSS039	VSS137	P23
AA40	VSS040	VSS138	P28
AA41	VSS041	VSS139	P29
AA42	VSS042	VSS140	R11
AA43	VSS043	VSS141	R12
AA44	VSS044	VSS142	R13
AA45	VSS045	VSS143	R14
AA46	VSS046	VSS144	R15
AA47	VSS047	VSS145	R16
AA48	VSS048	VSS146	R17
AA49	VSS049	VSS147	R18
AA50	VSS050	VSS148	R28
AA51	VSS051	VSS149	R4
AA52	VSS052	VSS150	T12
AA53	VSS053	VSS151	T13
AA54	VSS054	VSS152	T14
AA55	VSS055	VSS153	T15
AA56	VSS056	VSS154	T16
AA57	VSS057	VSS155	T17
AA58	VSS058	VSS156	T2
AA59	VSS059	VSS157	U12
AA60	VSS060	VSS158	U13
AA61	VSS061	VSS159	U14
AA62	VSS062	VSS160	U15
AA63	VSS063	VSS161	U16
AA64	VSS064	VSS162	U17
AA65	VSS065	VSS163	U23
AA66	VSS066	VSS164	U26
AA67	VSS067	VSS165	U27
AA68	VSS068	VSS166	U3
AA69	VSS069	VSS167	U5
AA70	VSS070	VSS168	V13
AA71	VSS071	VSS169	V15
AA72	VSS072	VSS170	V28
AA73	VSS073	VSS171	W2
AA74	VSS074	VSS172	W26
AA75	VSS075	VSS173	W27
AA76	VSS076	VSS174	W27
AA77	VSS077	VSS175	Y28
AA78	VSS078	VSS176	Y29
AA79	VSS079	VSS177	Y4
AA80	VSS080	VSS178	AB4
AA81	VSS081	VSS179	AB23
AA82	VSS082	VSS180	AB5
AA83	VSS083	VSS181	AB6
AA84	VSS084	VSS182	AD5
AA85	VSS085	VSS183	U4
AA86	VSS086	VSS184	W24
AA87	VSS087	VSS_NCTF_01	A1
AA88	VSS088	VSS_NCTF_02	A2
AA89	VSS089	VSS_NCTF_03	A28
AA90	VSS090	VSS_NCTF_04	A29
AA91	VSS091	VSS_NCTF_05	AH1
AA92	VSS092	VSS_NCTF_06	AH29
AA93	VSS093	VSS_NCTF_07	AJ1
AA94	VSS094	VSS_NCTF_08	AJ2
AA95	VSS095	VSS_NCTF_09	AJ28
AA96	VSS096	VSS_NCTF_10	AJ29
AA97	VSS097	VSS_NCTF_011	B1
AA98	VSS098	VSS_NCTF_012	B29

ITL_ICH8_M_BGA_676P

48- ICHGND1

48- ICHGND4

48- ICHGND7

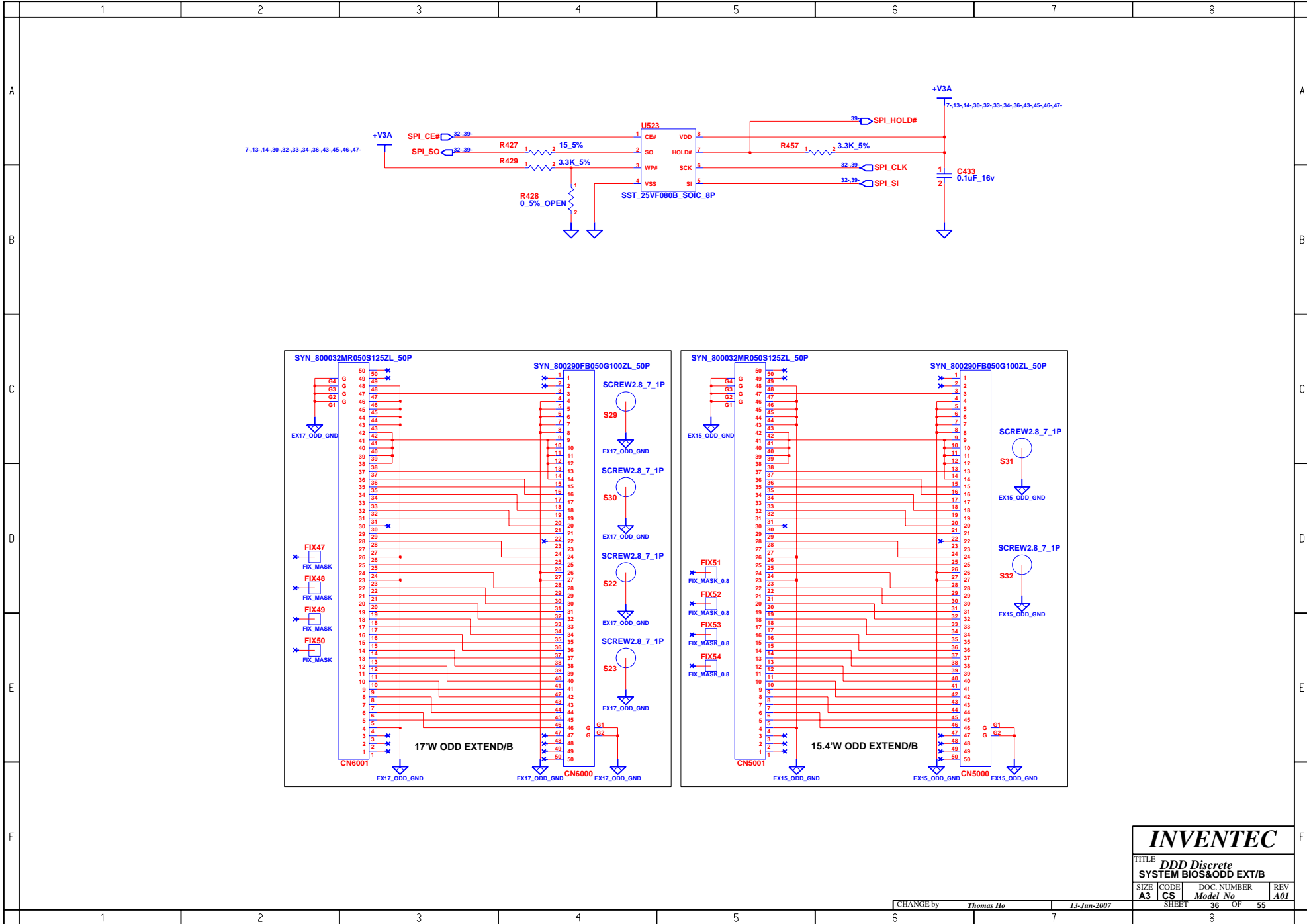
48- ICHGND10

INVENTEC

TITLE **DDD Discrete**
ICH8-5

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

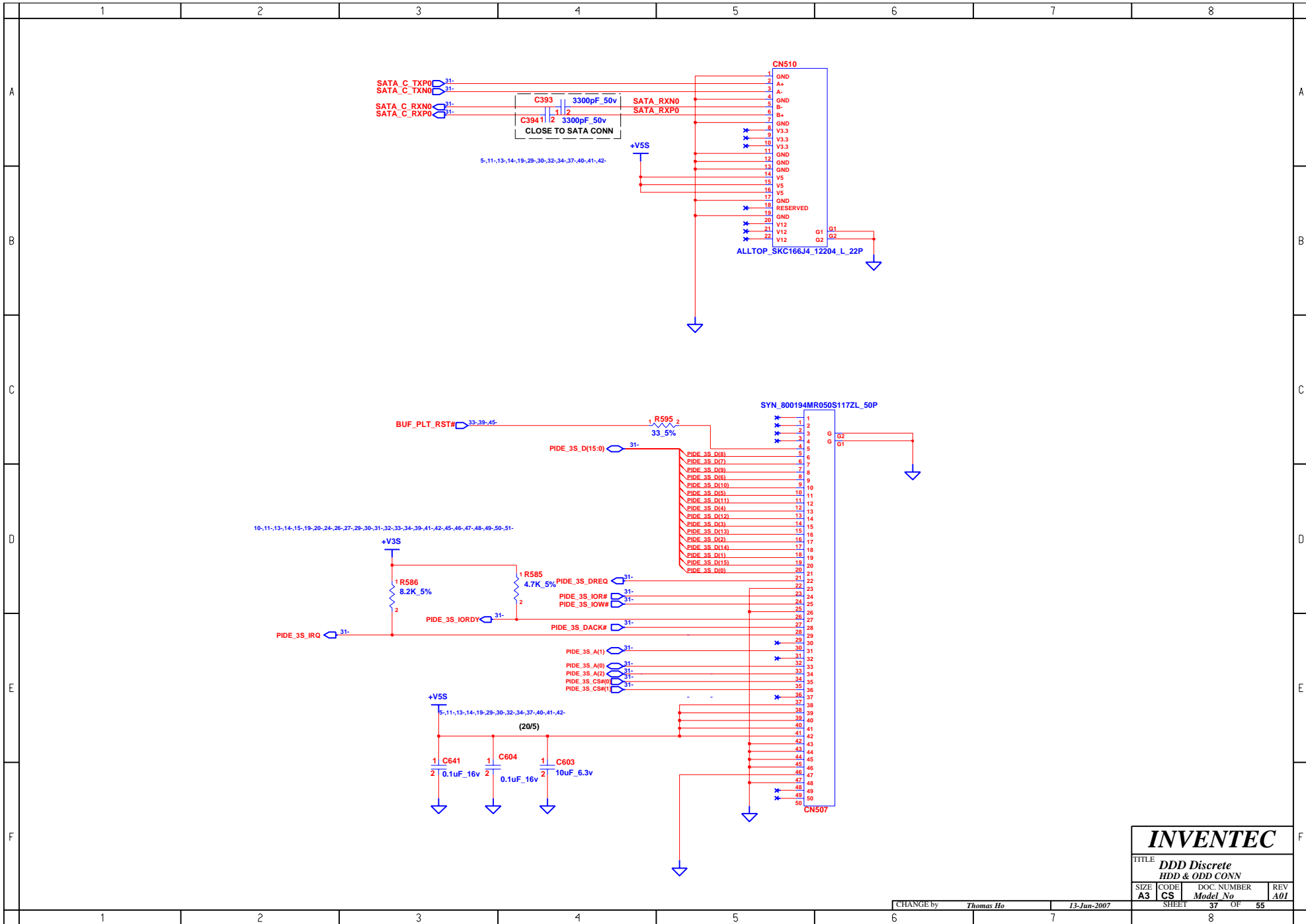
CHANGE by *Thomas Ho* 4-Jun-2007 SHEET 35 OF 55



INVENTEC

TITLE			
DDD Discrete			
SYSTEM BIOS&ODD EXT/B			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01
CHANGE by		SHEET	
Thomas Ho		36 OF 55	

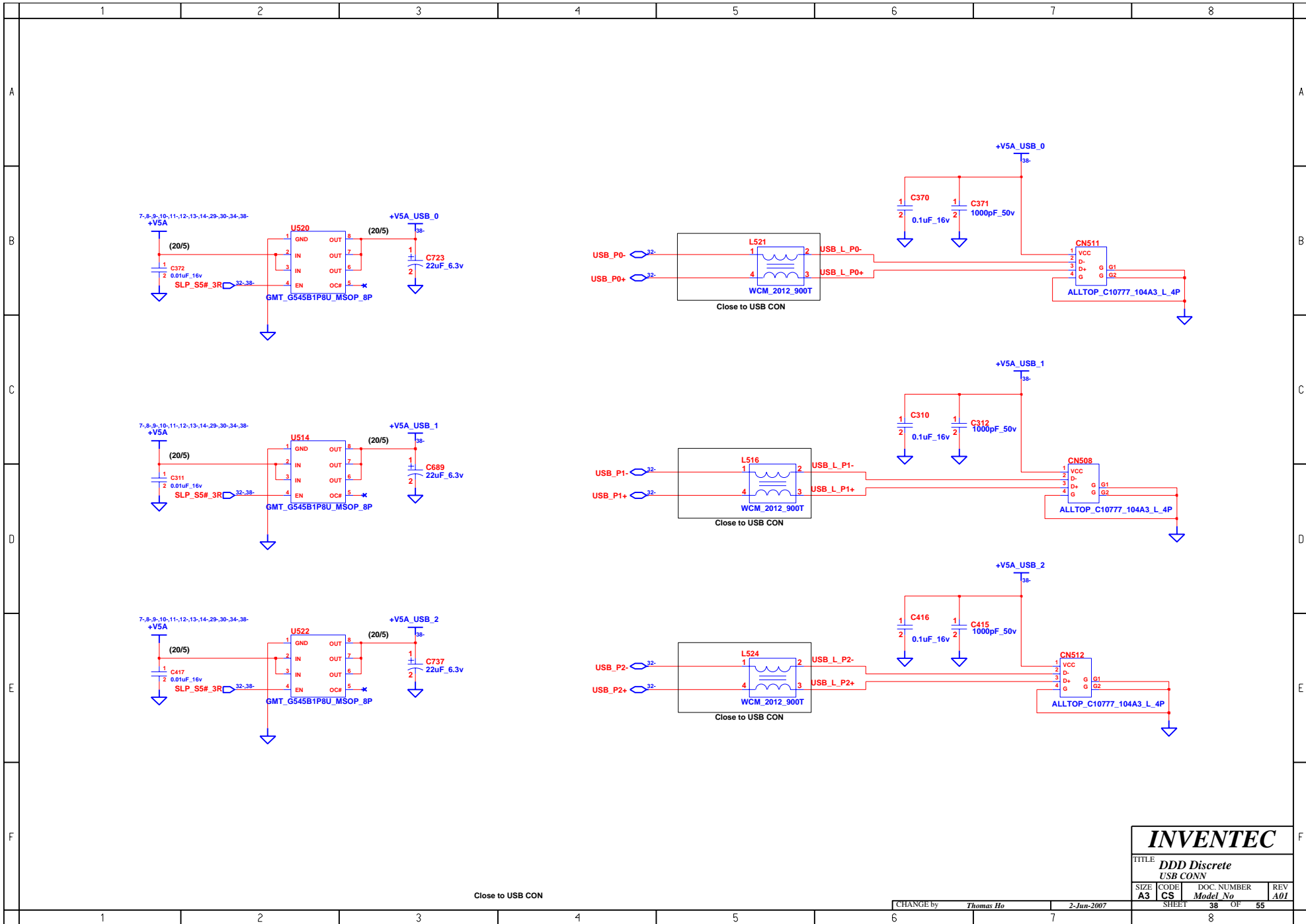
13-Jun-2007



INVENTEC

TITLE
**DDD Discrete
 HDD & ODD CONN**

SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Thomas Ho</i>		13-Jun-2007	
SHEET 37		OF 55	



Close to USB CON

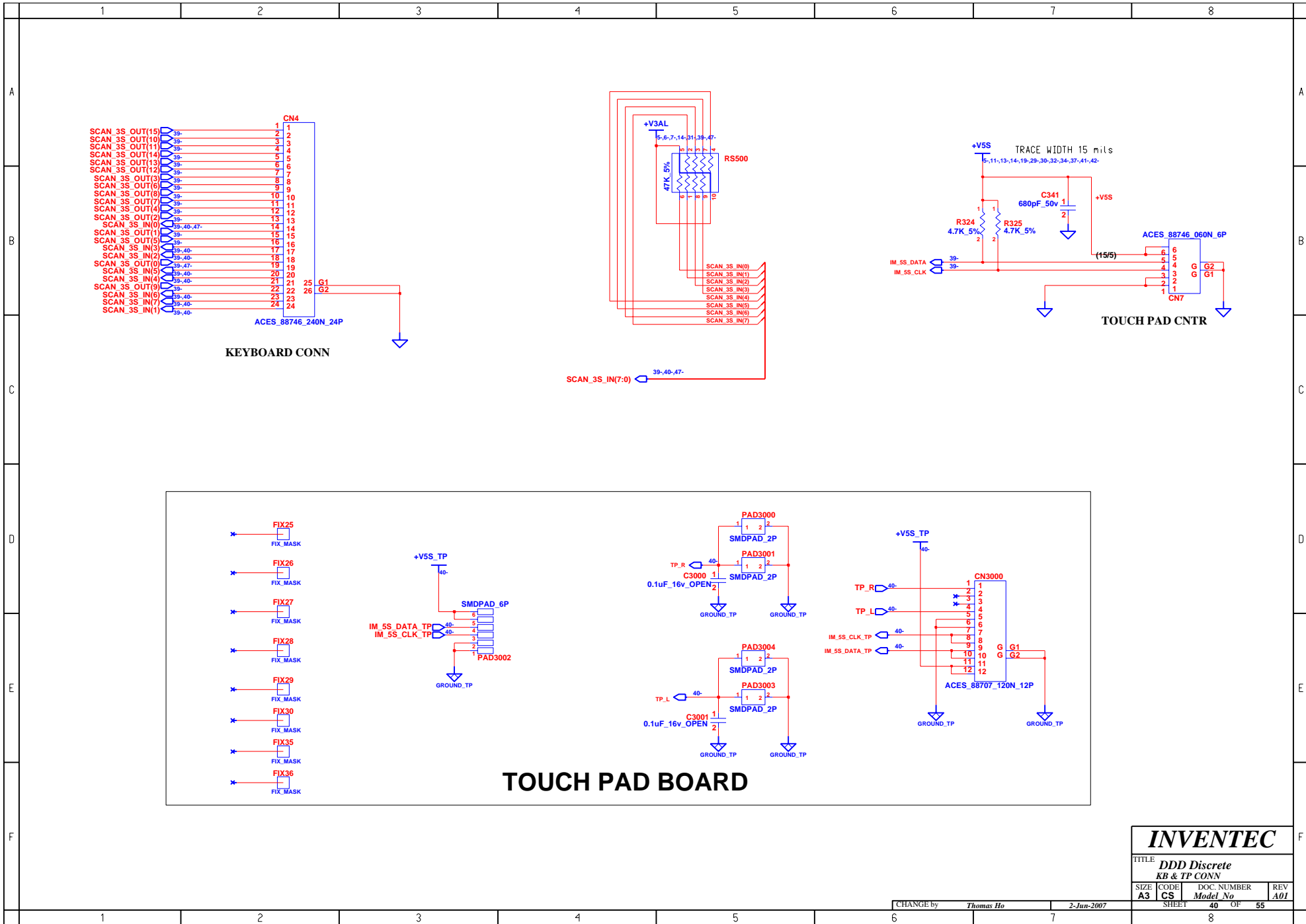
INVENTEC

TITLE
DDD Discrete
 USB CONN

SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
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CHANGE by *Thomas Ho* 2-Jun-2007

SHEET 38 OF 55



KEYBOARD CONN

TOUCH PAD CNTR

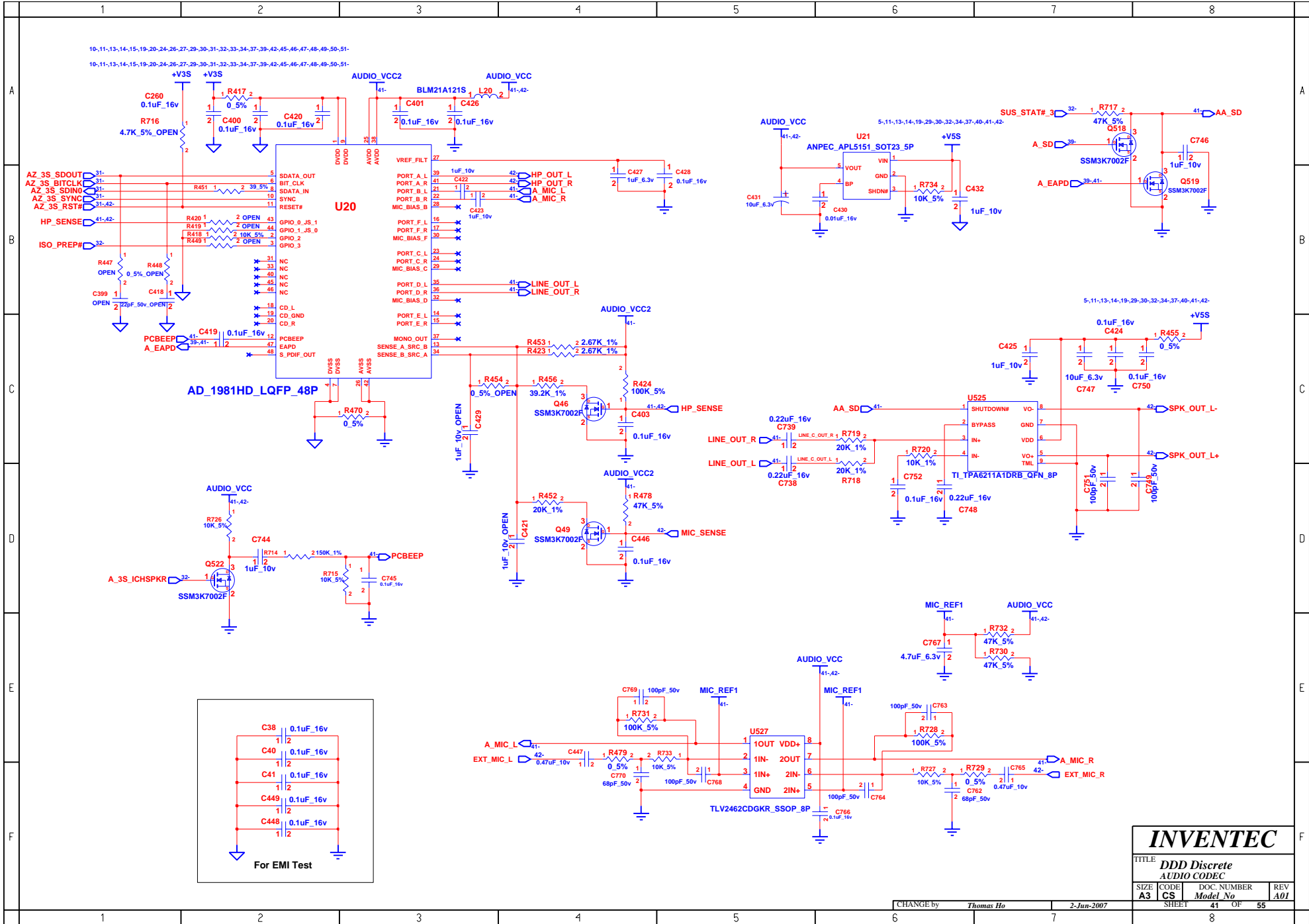
TOUCH PAD BOARD

INVENTEC

TITLE			
DDD Discrete			
KB & TP CONN			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

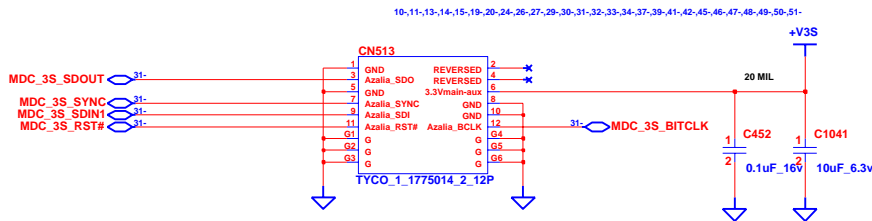
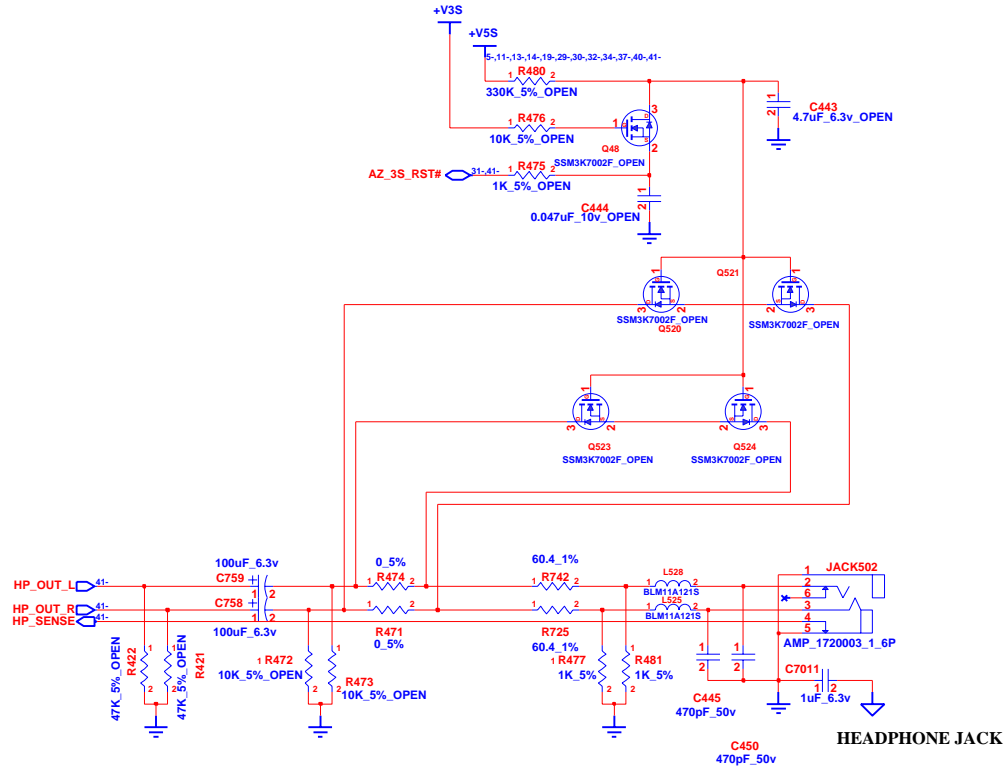
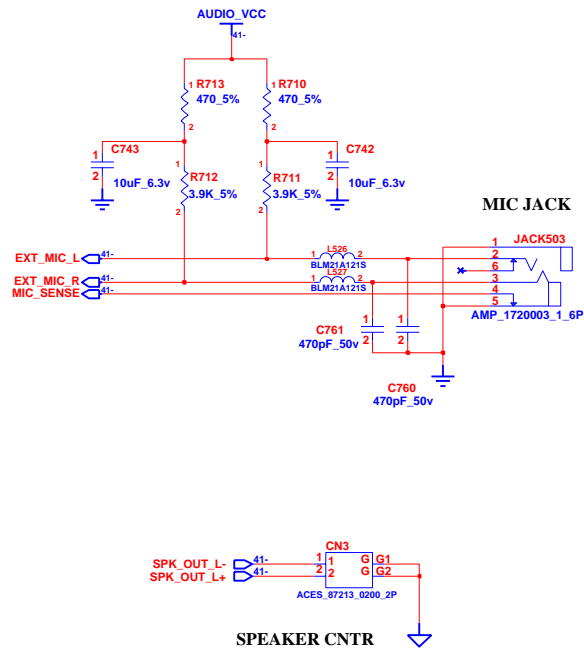
CHANGE by Thomas Ho 2-Jun-2007

SHEET 40 OF 55



INVENTEC			
TITLE DDD Discrete AUDIO CODEC			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by <i>Thomas Ho</i>		2-Jun-2007	
SHEET 41		OF 55	

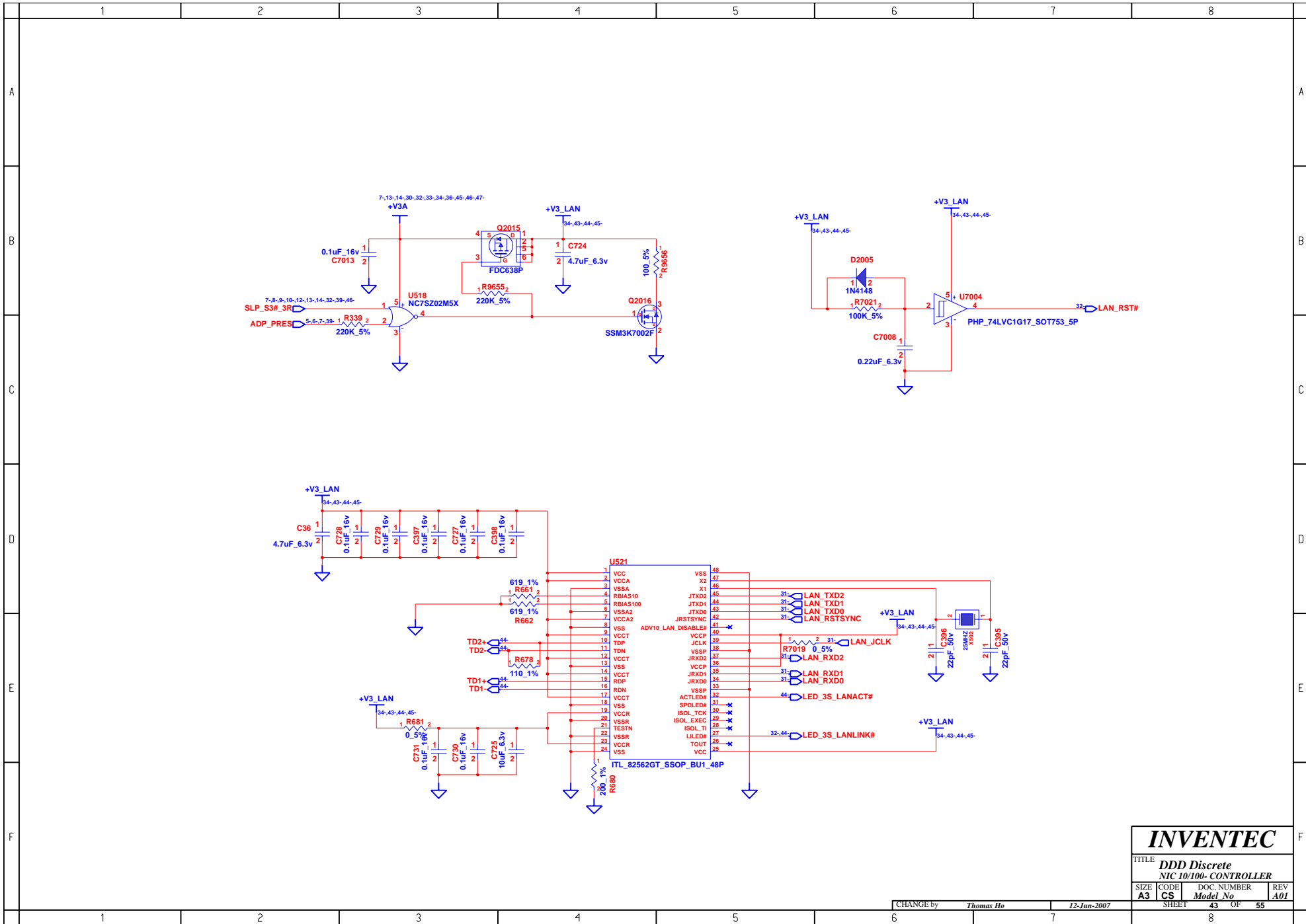
10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-



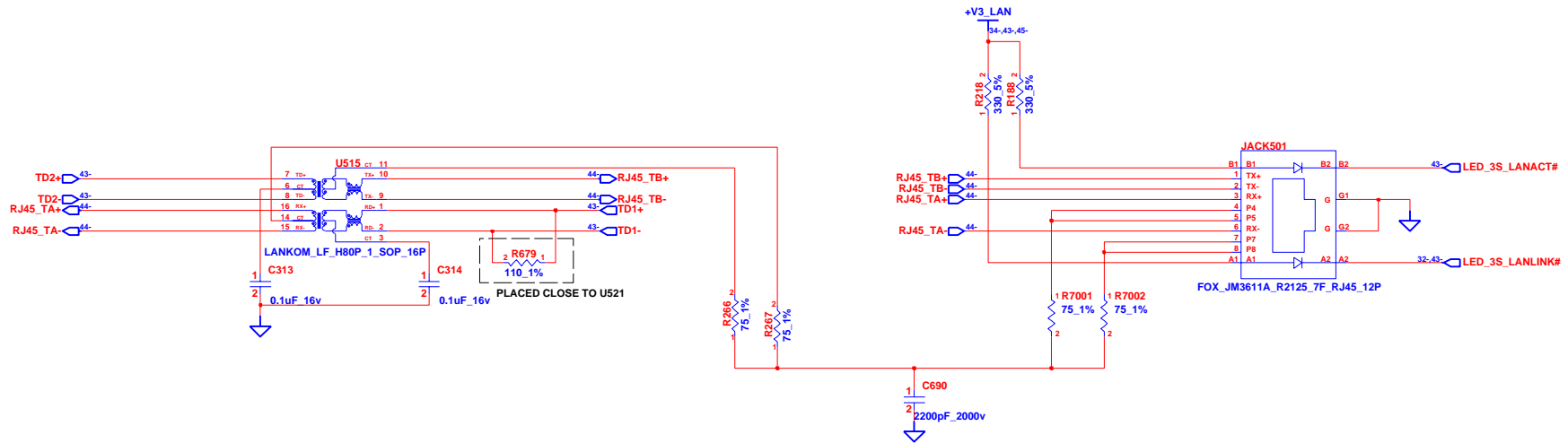
MDC CNTR

INVENTEC

TITLE			
DDD Discrete			
MDC CNTR			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

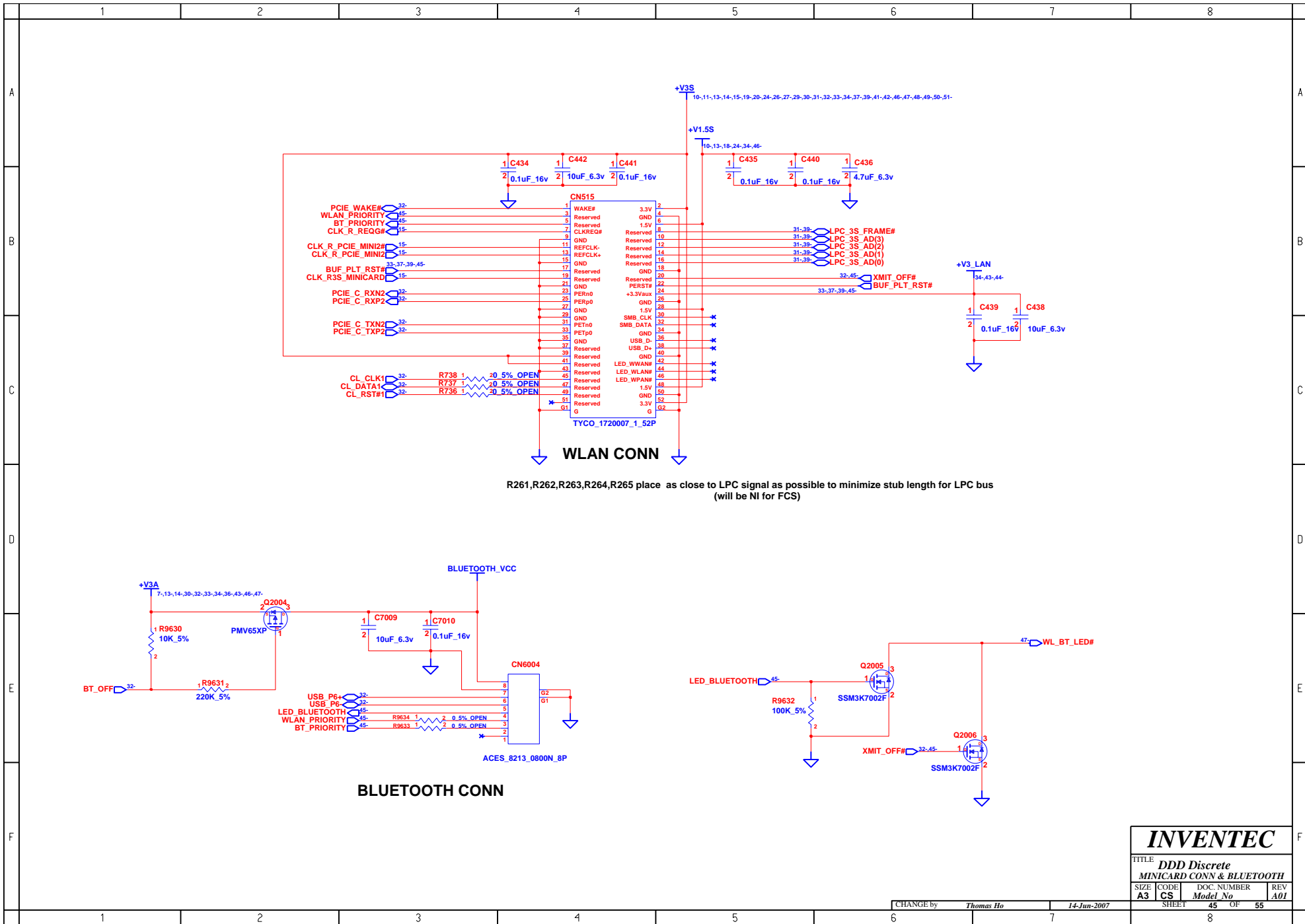


INVENTEC			
TITLE DDD Discrete NIC 10/100- CONTROLLER			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01
CHANGE by <i>Thomas Ho</i>		12-Jun-2007	
SHEET 43		OF 55	



INVENTEC			
TITLE <i>DDD Discrete</i>			
NIC 10/100 - RJ45			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

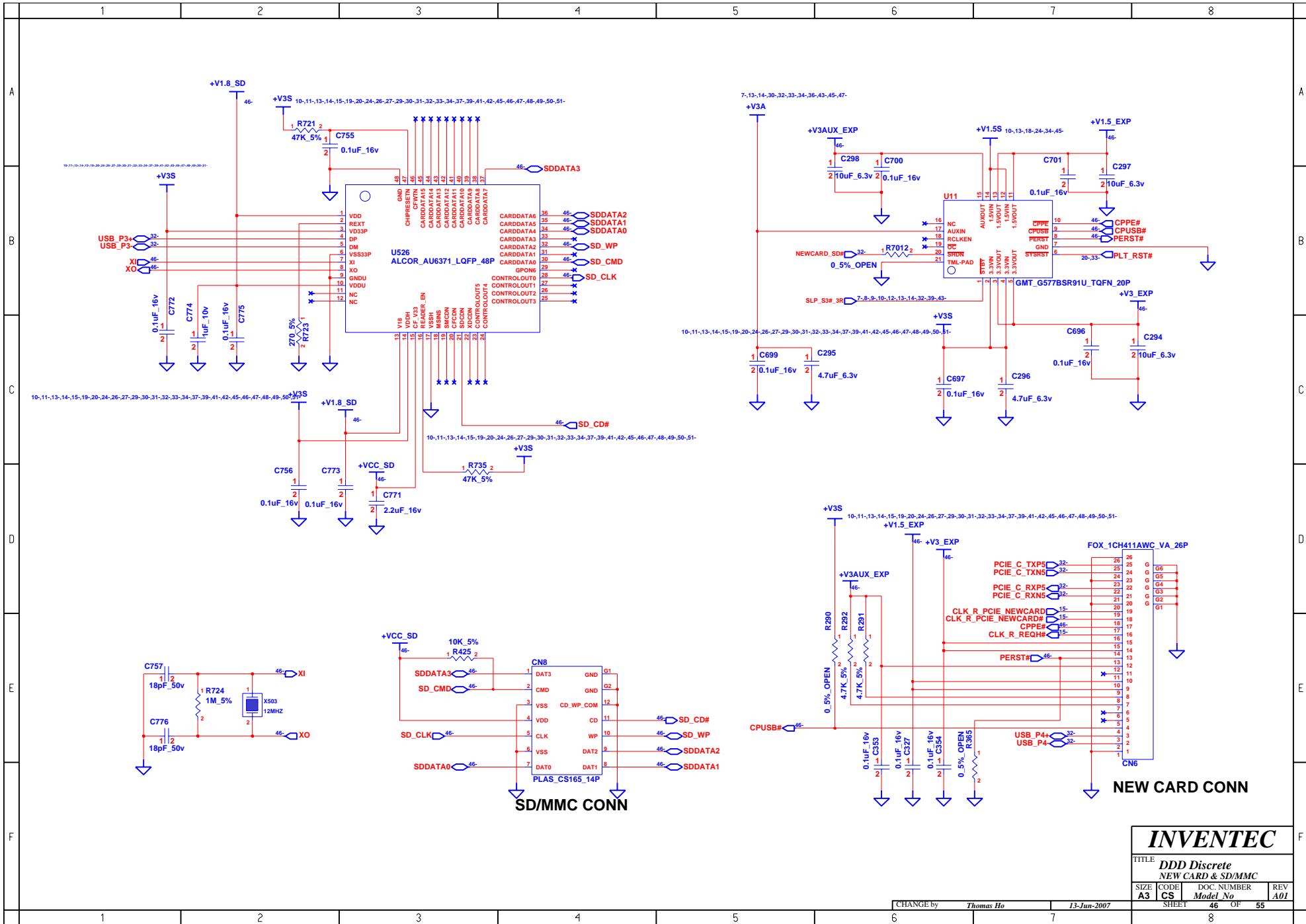
CHANGE by *Thomas Ho* 2-Jun-2007



INVENTEC			
TITLE DDD Discrete			
MINICARD CONN & BLUETOOTH			
SIZE A3	CODE CS	DOC. NUMBER <i>Model No</i>	REV A01

CHANGE by *Thomas Ho* 14-Jun-2007

SHEET 45 OF 55



INVENTEC			
TITLE DDD Discrete NEW CARD & SD/MMC			
SIZE A3	CODE CS	DOC NUMBER Model No	REV A01
CHANGE by Thomas Ho		13-Jun-2007	
SHEET 46		OF 55	

A

B

C

D

E

F

A

B

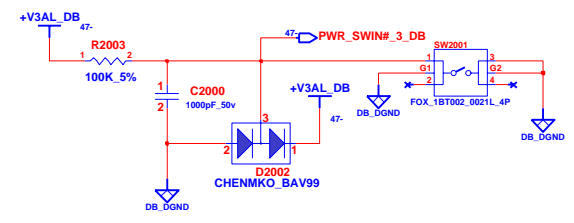
C

D

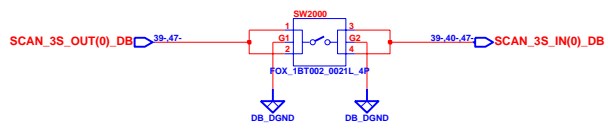
E

F

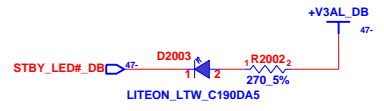
POWER BUTTON



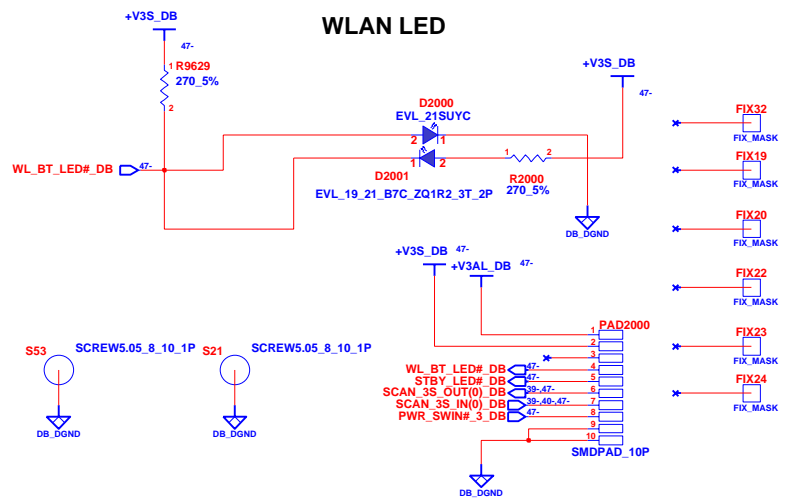
WIRELESS BUTTON



POWER / STANDBY LED

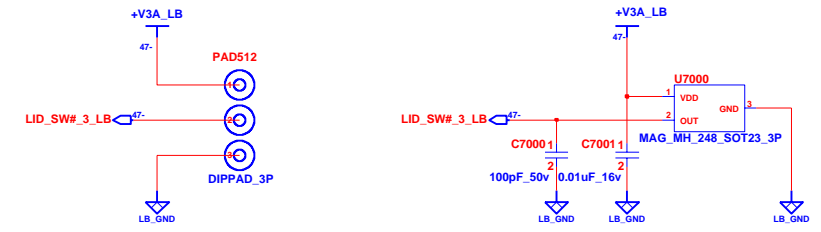


WLAN LED

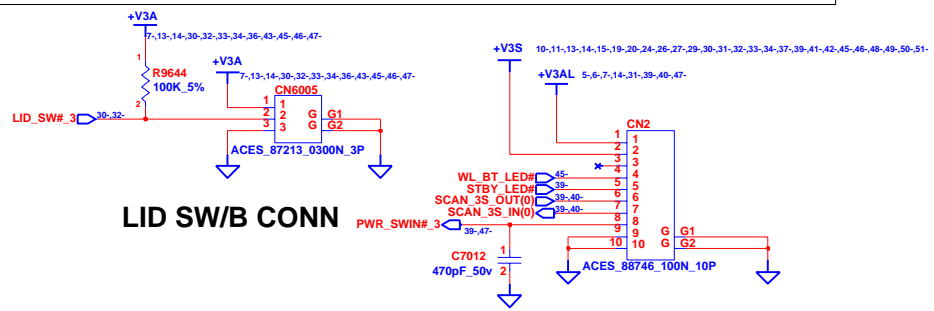


LED&SWITCH BOARD

LID SWITCH

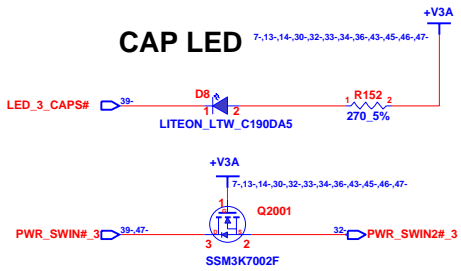


LID SW/B

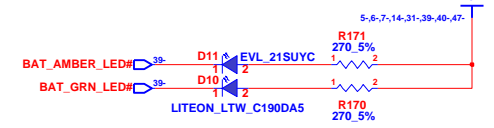


LID SW/B CONN

CAP LED

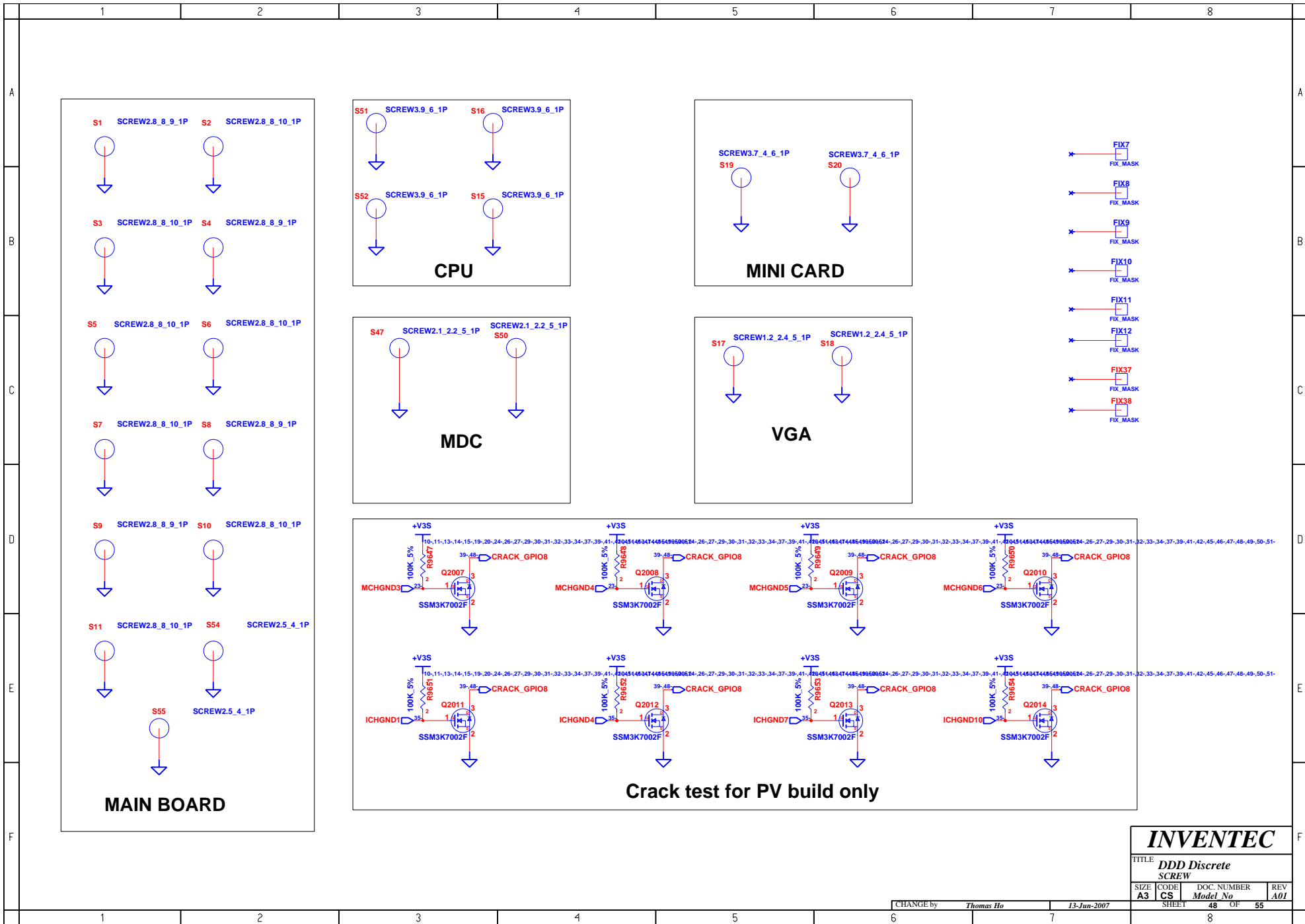


BATTERY-CHARGE LED



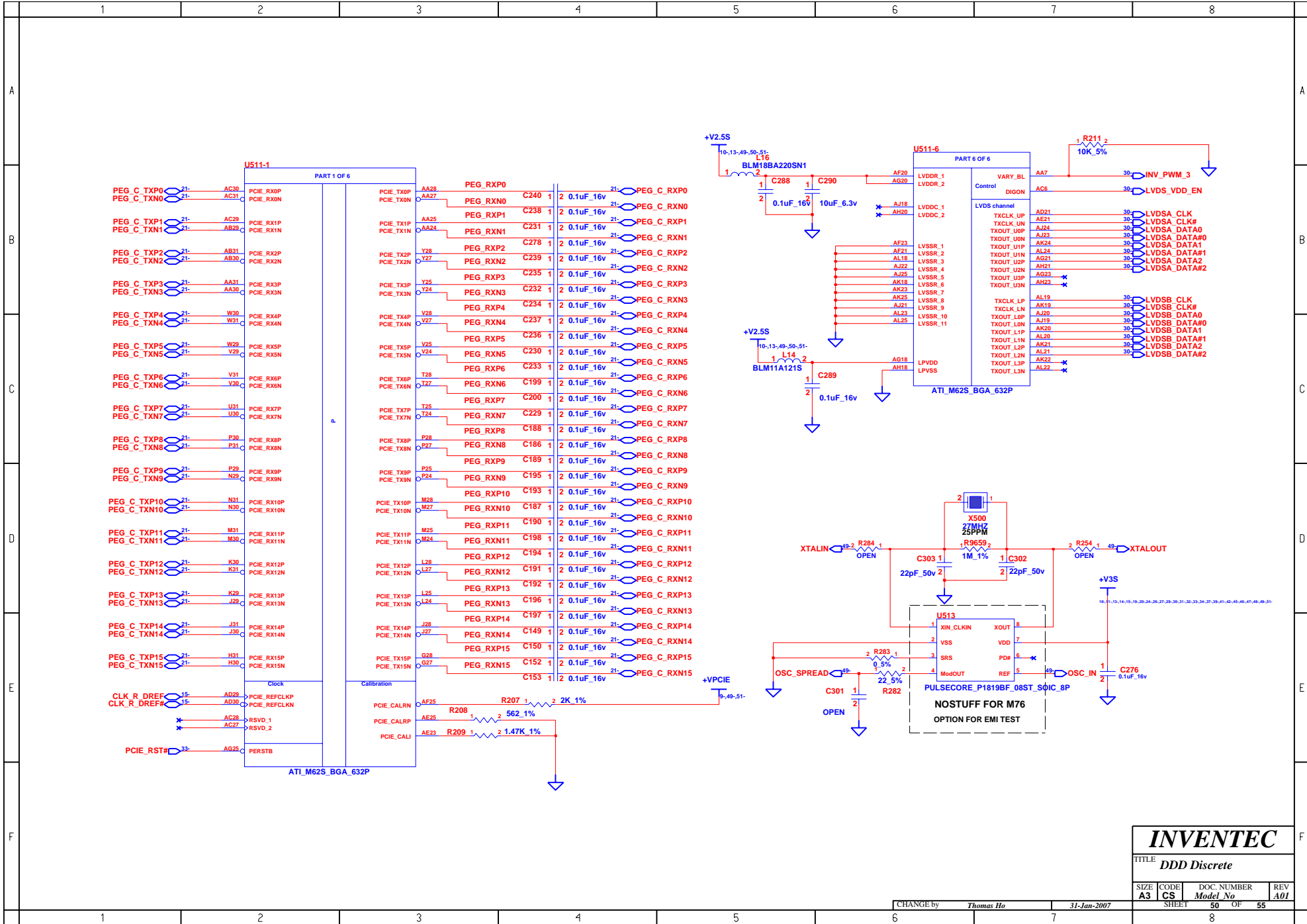
INVENTEC

TITLE			
DDD Discrete			
BUTTON & LED			
SIZE	CODE	DOC NUMBER	REV
A3	CS	Model No	A01

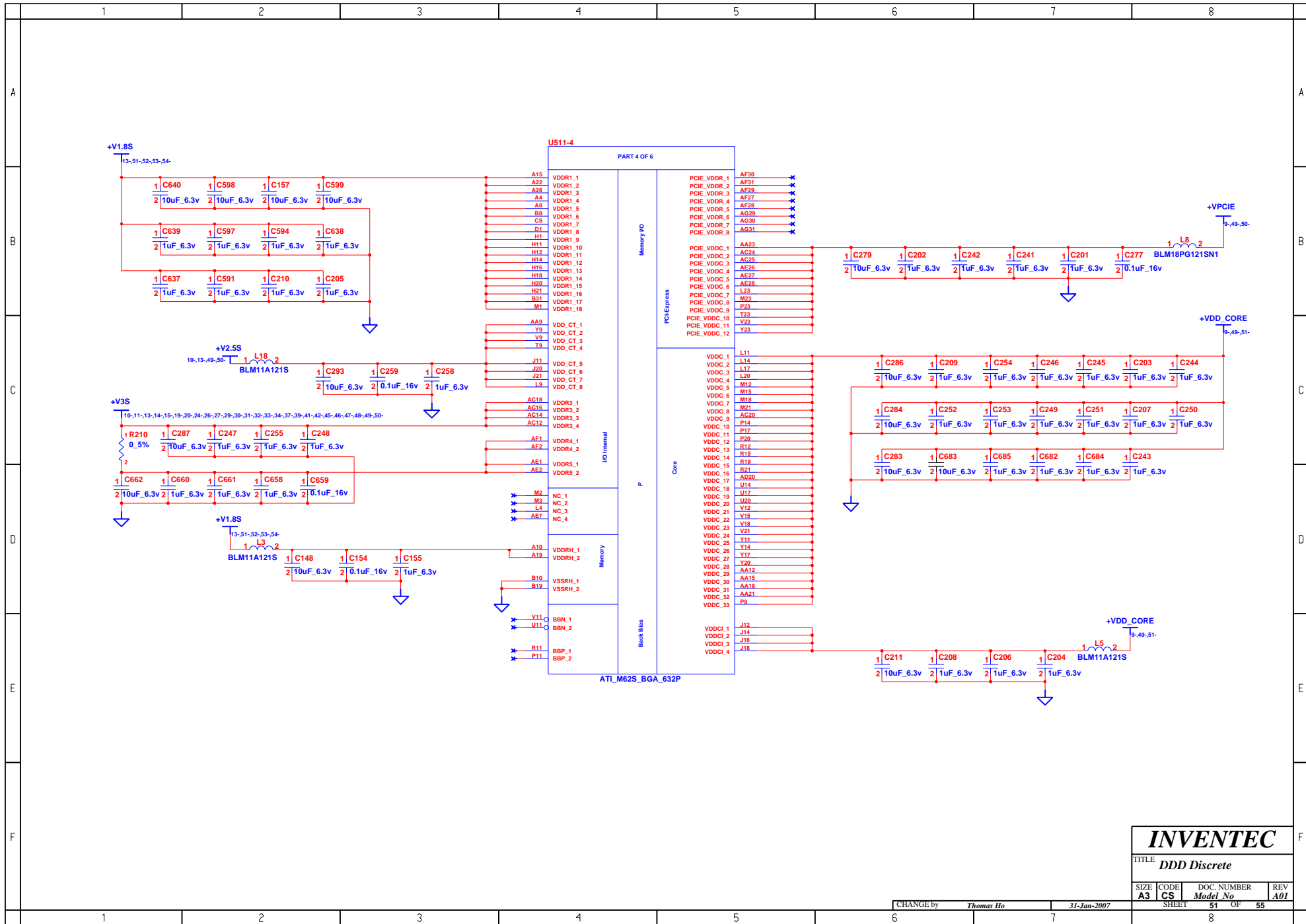


INVENTEC

TITLE			
DDD Discrete			
SCREW			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01



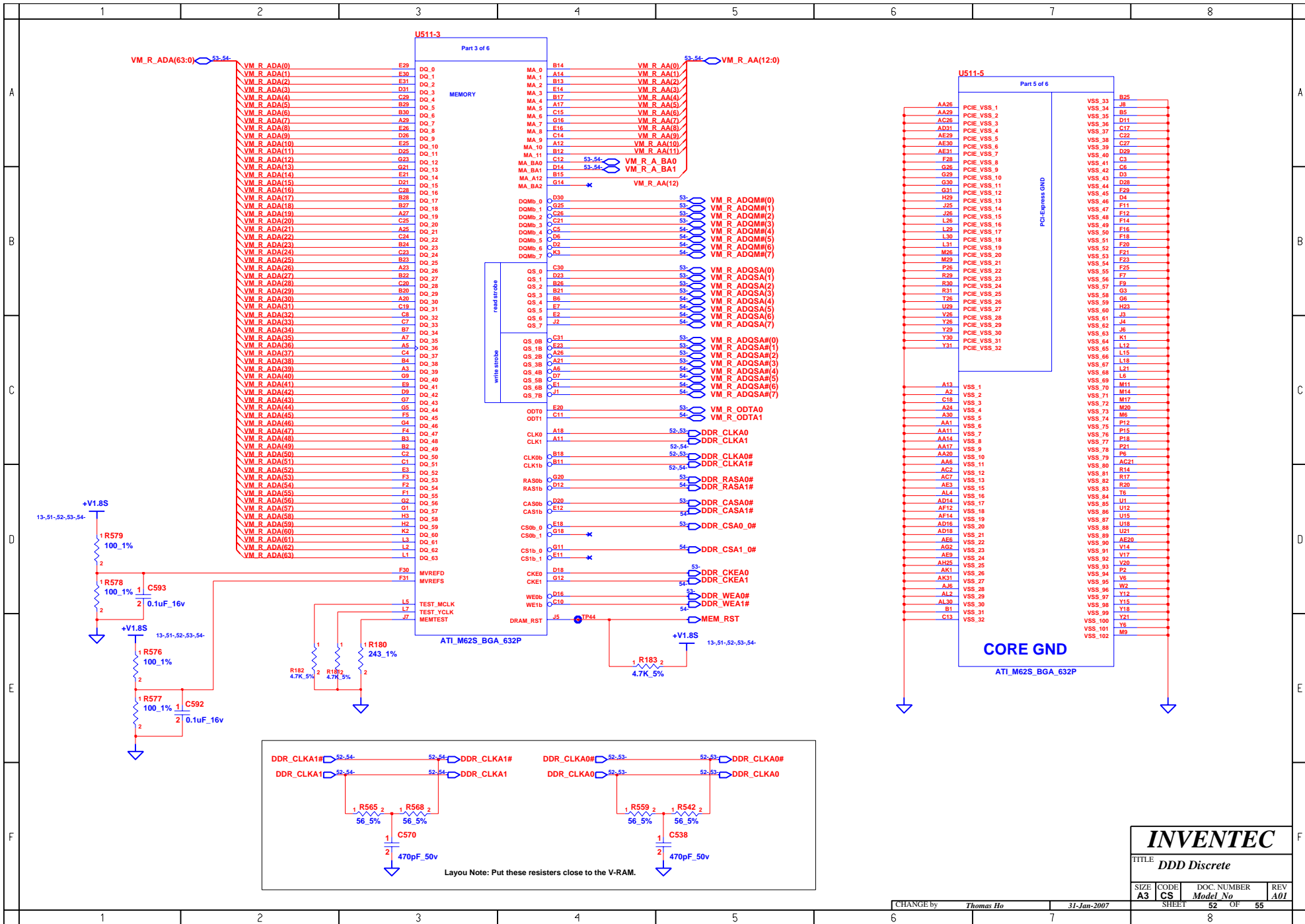
INVENTEC			
TITLE DDD Discrete			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Thomas Ho		31-Jan-2007	
SHEET 50		OF 55	



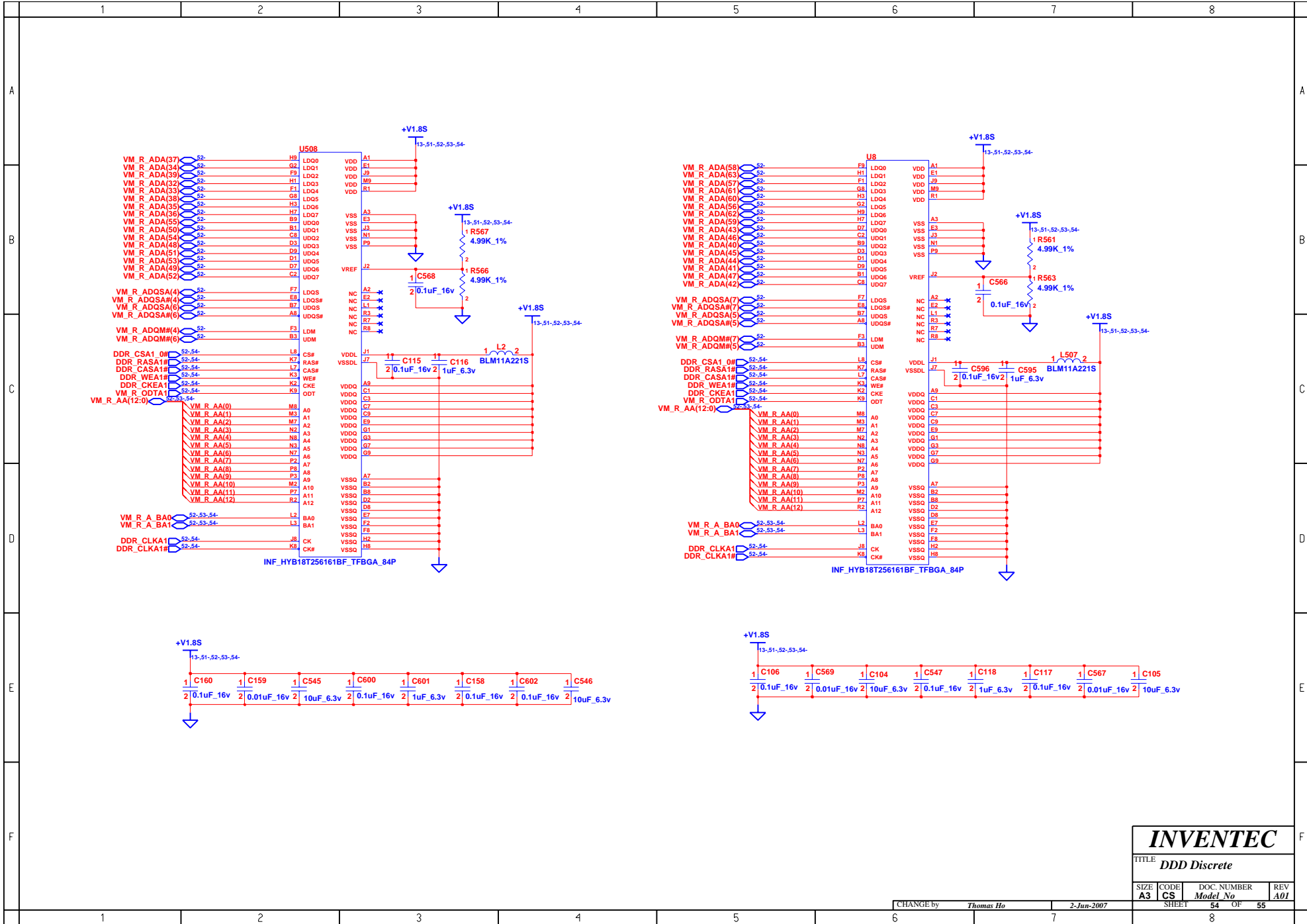
INVENTEC

TITLE **DDD Discrete**

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01



INVENTEC			
TITLE DDD Discrete			
SIZE A3	CODE CS	DOC. NUMBER Model No	REV A01
CHANGE by Thomas Ho		31-Jan-2007	
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INVENTEC

TITLE
DDD Discrete

SIZE	CODE	DOC. NUMBER	REV
A3	CS	Model No	A01

CHANGE by Thomas Ho 2-Jun-2007

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