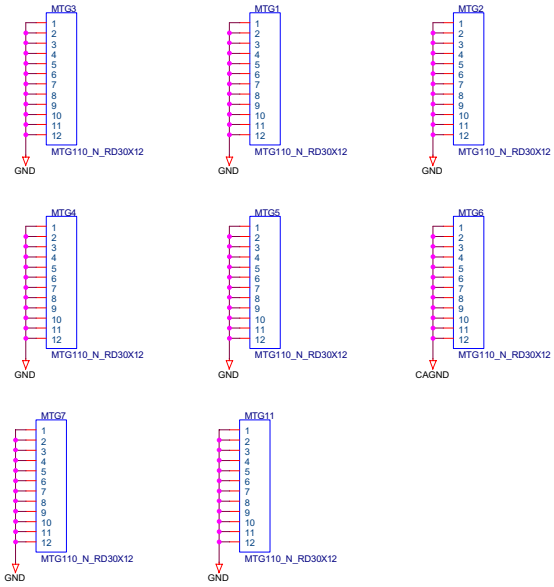
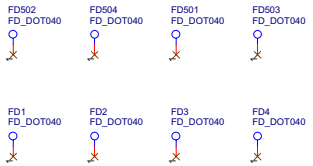
REV	DESCRIPTION OF CHANGE	ECO	DATE	APPROVAL
R00	Relayout base on 6133SX M/B R01 1. Replaced embeded controller from Hitachi H8 to NS PC87570. 2. Add Socket 370 FPGA CPU support. 3. Shared system BIOS memory. 4. Replace USB connecter. 5. Remove 7408. 6. Remove 3384. 7. Remove 74164.		8/30/'99	
R01	1. Add VDD5N to do power reset. 2. Change T_DATA and T_CLK from port 1 to port 3. 3. Add cmos between core logic and EC to prevent current leakage. 4. Add 3384.		9/15/'99	
R02	1. Reserve FC-PGA solution. 2. Phase in EMI solution.		11/05/'99	
R03	1. Relayout to phase in Sanyo HPA LM-JK63-22NTR panel.		01/13/'00	





DRAWN:	DESIGN:	CHECK:	ISSUED:

MiTAC

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C	SD41667120003	03

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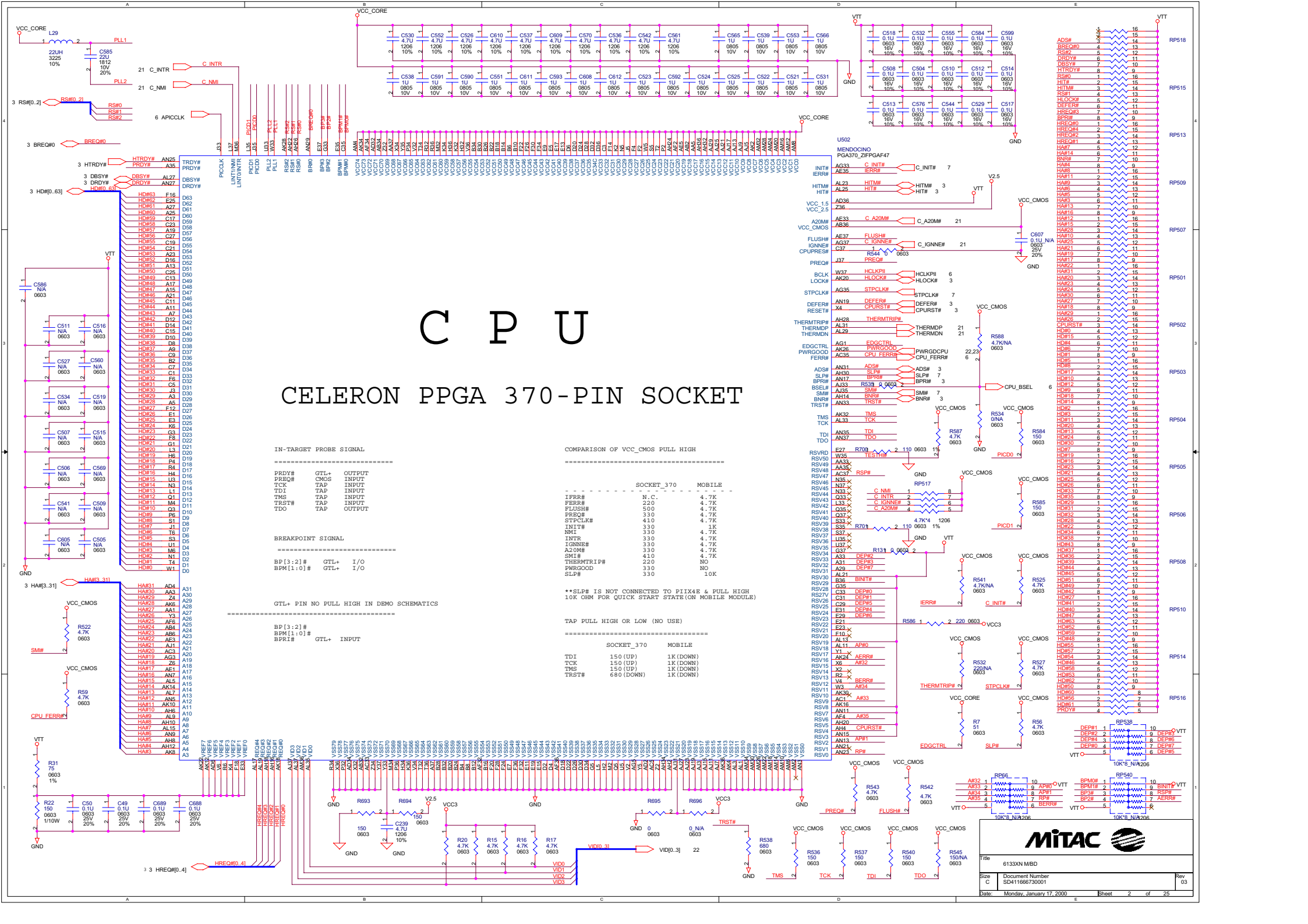
C P U
CELERON PPGA 370-PIN SOCKET
IN-TARGET PROBE SIGNAL
PRDY# GTL+ OUTPUT
PREQ# CMOS INPUT
TCK TAP INPUT
TDI TAP INPUT
TMS TAP INPUT
TRST# TAP INPUT
TDO TAP OUTPUT
BREAKPOINT SIGNAL
BP[3:2]# GTL+ I/O
BPM[1:0]# GTL+ I/O
GTL+ PIN NO PULL HIGH IN DEMO SCHEMATICS
BP[3:2]#
BPM[1:0]#
BPRI# GTL+ INPUT
COMPARISON OF VCC_CMOS PULL HIGH
SOCKET_370 MOBILE
IFRR# N.C. 4.7K
FERR# 220 4.7K
FLUSH# 500 4.7K
PREQ# 330 4.7K
STPCLK# 410 4.7K
INIT# 330 1K
NMI 330 4.7K
INTR 330 4.7K
IGNNE# 330 4.7K
A20M# 330 4.7K
SMI# 410 4.7K
THERMTRIP# 220 NO
PWRGOOD 330 NO
SLP# 330 10K
**SLP# IS NOT CONNECTED TO PIIX4E & PULL HIGH
10K OHM FOR QUICK START STATE(ON MOBILE MODULE)
TAP PULL HIGH OR LOW (NO USE)
SOCKET_370 MOBILE
TDI 150(UP) 1K(DOWN)
TCK 150(UP) 1K(DOWN)
TMS 150(UP) 1K(DOWN)
TRST# 680(DOWN) 1K(DOWN)
U502
MENDOCINO
PGA370_ZIFPGAF47
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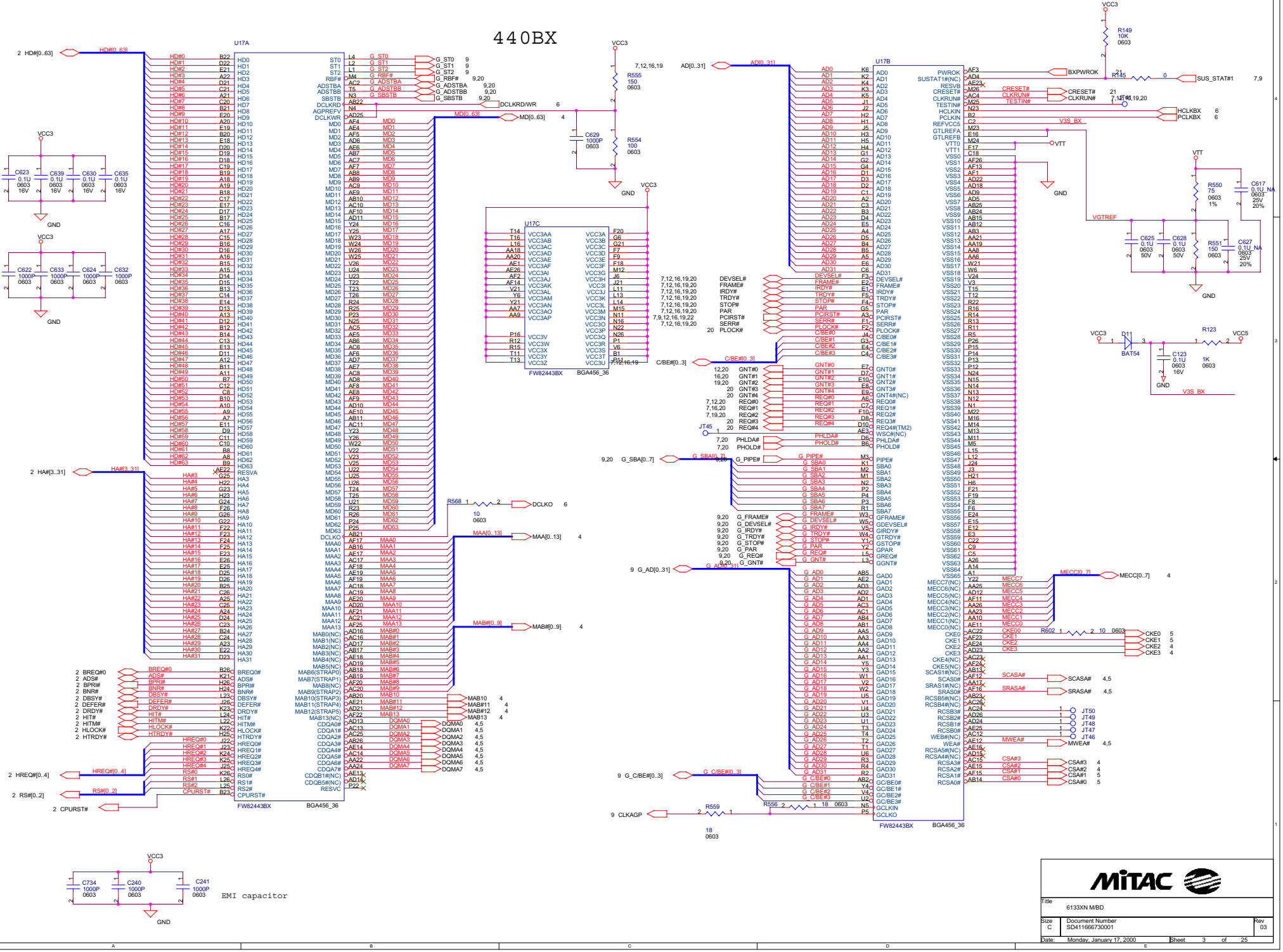
440BX



MiTAC			
Title	6133XN M/BD		
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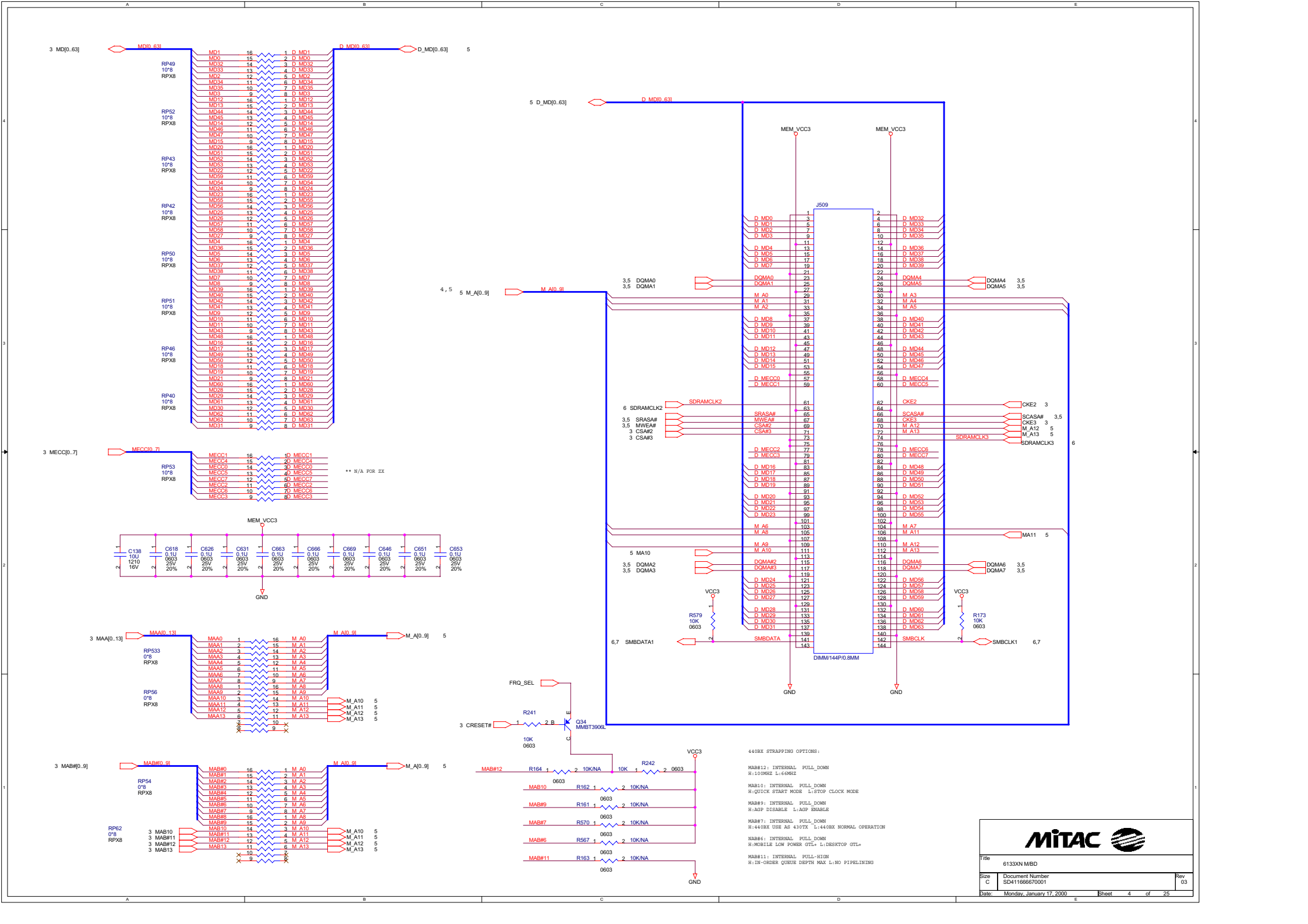
3 MD[0..63]
MD[0..63]
D_MD[0..63]
D_MD[0..63] 5
RP49 10*8 RPX8
RP52 10*8 RPX8
RP43 10*8 RPX8
RP42 10*8 RPX8
RP50 10*8 RPX8
RP51 10*8 RPX8
RP46 10*8 RPX8
RP40 10*8 RPX8
3 MECC[0..7]
MECC[0..7]
RP53 10*8 RPX8
** N/A FOR 2X
MEM_VCC3
C138 10U 1210 16V
C618 0.1U 0603 25V 20%
C626 0.1U 0603 25V 20%
C631 0.1U 0603 25V 20%
C663 0.1U 0603 25V 20%
C666 0.1U 0603 25V 20%
C669 0.1U 0603 25V 20%
C646 0.1U 0603 25V 20%
C651 0.1U 0603 25V 20%
C653 0.1U 0603 25V 20%
GND
3 MAA[0..13]
MAA[0..13]
M_A[0..9]
M_A[0..9] 5
RP533 0*8 RPX8
RP56 0*8 RPX8
3 MAB#[0..9]
MAB#[0..9]
RP54 0*8 RPX8
RP62 0*8 RPX8
3 MAB10
3 MAB#11
3 MAB#12
3 MAB13
5 D_MD[0..63]
D_MD[0..63]
4 , 5 5 M_A[0..9]
M_A[0..9]
MEM_VCC3
MEM_VCC3
J509
DIMM/144P/0.8MM
3,5 DQMA0
3,5 DQMA1
DQMA4 3,5
DQMA5 3,5
6 SDRAMCLK2
SDRAMCLK2
3,5 SRASA#
3,5 MWEA#
3 CSA#2
3 CSA#3
CKE2 3
SCASA# 3,5
CKE3 3
M_A12 5
M_A13 5
SDRAMCLK3
6
5 MA10
MA11 5
3,5 DQMA2
3,5 DQMA3
DQMA6 3,5
DQMA7 3,5
VCC3
R579 10K 0603
R173 10K 0603
6,7 SMBDATA1
SMBDATA
SMBCLK
SMBCLK1 6,7
GND
GND
FRQ_SEL
3 CRESET#
R241
Q34 MMBT3906L
10K 0603
R242
MAB#12 R164 10K/NA
MAB10 R162 10K/NA
MAB#9 R161 10K/NA
MAB#7 R570 10K/NA
MAB#6 R567 10K/NA
MAB#11 R163 10K/NA
0603
440BX STRAPPING OPTIONS:
MAB#12: INTERNAL PULL_DOWN
H:100MHZ L:66MHZ
MAB10: INTERNAL PULL_DOWN
H:QUICK START MODE L:STOP CLOCK MODE
MAB#9: INTERNAL PULL_DOWN
H:AGP DISABLE L:AGP ENABLE
MAB#7: INTERNAL PULL_DOWN
H:440BX USE AS 430TX L:440BX NORMAL OPERATION
NAB#6: INTERNAL PULL_DOWN
H:MOBILE LOW POWER GTL+ L:DESKTOP GTL+
MAB#11: INTERNAL PULL-HIGN
H:IN-ORDER QUEUE DEPTH MAX L:NO PIPELINING
MiTAC
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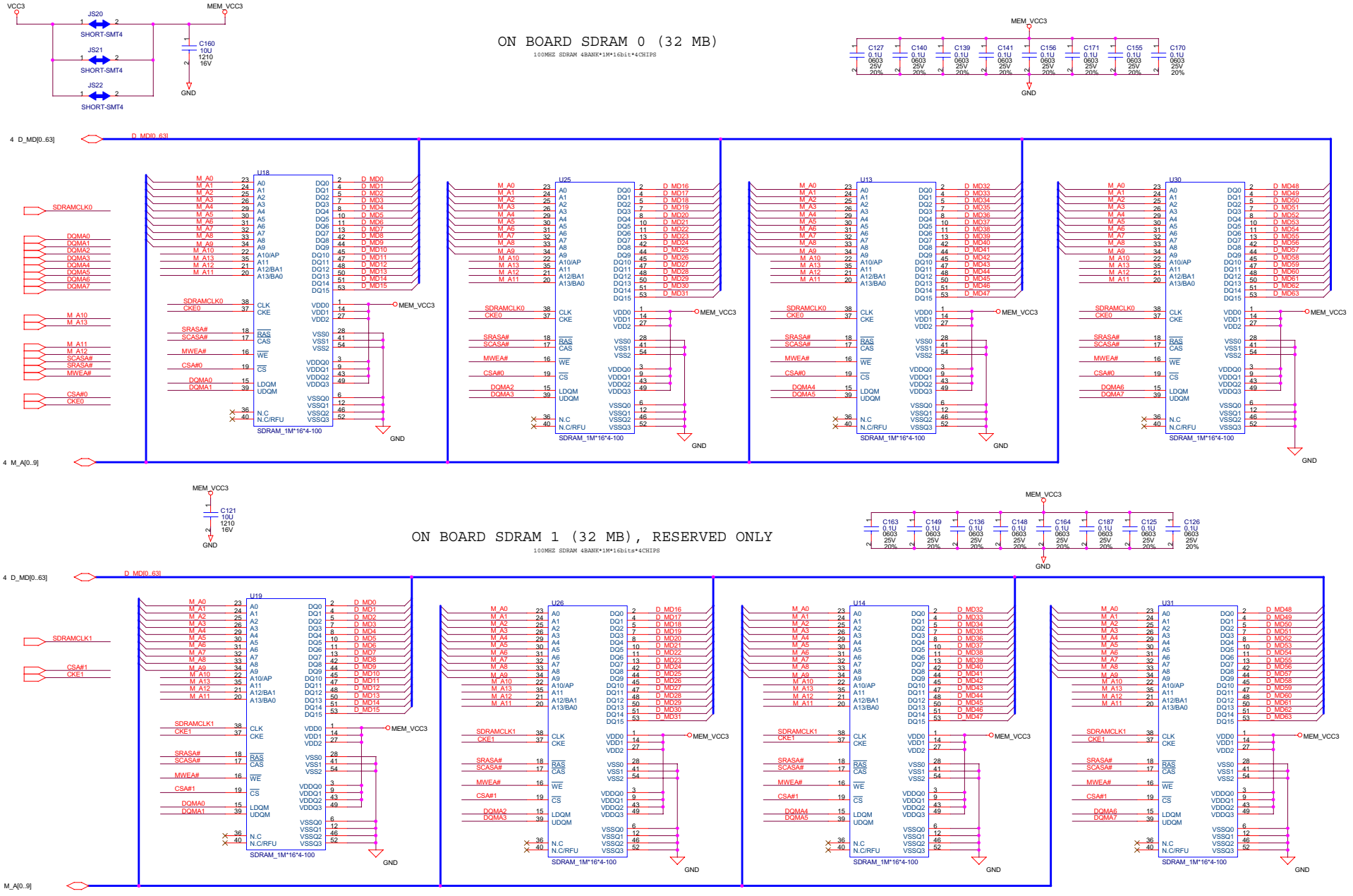

Title	6133SX M/BD		
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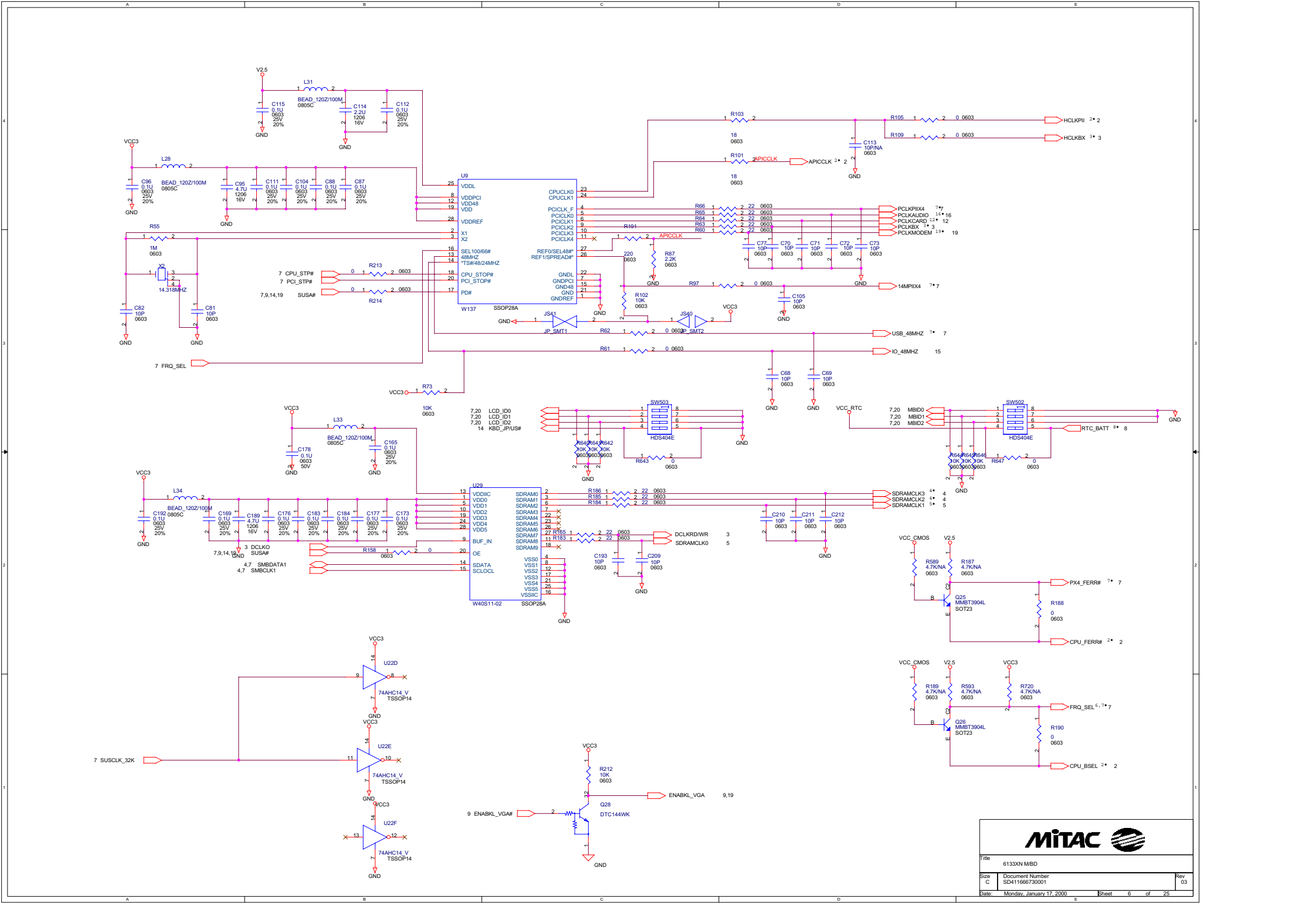
V2.5
L31
BEAD_120Z/100M
0805C
C115 0.1U 0603 25V 20%
C114 2.2U 1206 16V
C112 0.1U 0603 25V 20%
GND
VCC3
L28
BEAD_120Z/100M
0805C
C96 0.1U 0603 25V 20%
C95 4.7U 1206 16V
C111 0.1U 0603 25V 20%
C104 0.1U 0603 25V 20%
C88 0.1U 0603 25V 20%
C87 0.1U 0603 25V 20%
U9
VDDL
VDDPCI
VDD48
VDD
VDDREF
X1
X2
SEL100/66#
48MHZ
*TS#/48/24MHZ
CPU_STOP#
PCI_STOP#
PD#
CPUCLK0
CPUCLK1
PCICLK_F
PCICLK0
PCICLK1
PCICLK2
PCICLK3
PCICLK4
REF0/SEL48#*
REF1/SPREAD#*
GNDL
GNDPCI
GND48
GND
GNDREF
W137
SSOP28A
R103 18 0603
R101 18 0603
APICCLK
R105 0 0603
R109 0 0603
HCLKPII
HCLKBX
C113 10P/NA 0603
R66 22 0603
R65 22 0603
R64 22 0603
R63 22 0603
R60 22 0603
PCLKPIIX4
PCLKAUDIO
PCLKCARD
PCLKBX
PCLKMODEM
R55 1M 0603
X2 14.318MHZ
C82 10P 0603
C81 10P 0603
R213
R214
7 CPU_STP#
7 PCI_STP#
7,9,14,19 SUSA#
R191 220 0603
R87 2.2K 0603
C77 10P 0603
C70 10P 0603
C71 10P 0603
C72 10P 0603
C73 10P 0603
R102 10K 0603
C105 10P 0603
R97 0 0603
14MPIIX4
JS41 JP_SMT1
JS40 JP_SMT2
R62 0 0603
USB_48MHZ
R61 0 0603
IO_48MHZ
7 FRQ_SEL
R73 10K 0603
C68 10P 0603
C69 10P 0603
VCC_RTC
SW503
SW502
HDS404E
7,20 LCD_ID0
7,20 LCD_ID1
7,20 LCD_ID2
14 KBD_JP/US#
7,20 MBID0
7,20 MBID1
7,20 MBID2
RTC_BATT
R640 10K 0603
R641 10K 0603
R642 10K 0603
R643 0 0603
R644 10K 0603
R645 10K 0603
R646 10K 0603
R647 0 0603
L33
BEAD_120Z/100M
0805C
C178 0.1U 0603 50V
C165 0.1U 0603 25V 20%
L34
BEAD_120Z/100M
0805C
C192 0.1U 0603 25V 20%
C169 0.1U 0603 25V 20%
C189 4.7U 1206 16V
C176 0.1U 0603 25V 20%
C183 0.1U 0603 25V 20%
C184 0.1U 0603 25V 20%
C177 0.1U 0603 25V 20%
C173 0.1U 0603 25V 20%
U29
VDDIIC
VDD0
VDD1
VDD2
VDD3
VDD4
VDD5
BUF_IN
OE
SDATA
SCLOCL
SDRAM0
SDRAM1
SDRAM2
SDRAM3
SDRAM4
SDRAM5
SDRAM6
SDRAM7
SDRAM8
SDRAM9
VSS0
VSS1
VSS2
VSS3
VSS4
VSS5
VSSIIC
W40S11-02
SSOP28A
R186 22 0603
R185 22 0603
R184 22 0603
R165 22 0603
R183 22 0603
SDRAMCLK3
SDRAMCLK2
SDRAMCLK1
DCLKRD/WR
SDRAMCLK0
C210 10P 0603
C211 10P 0603
C212 10P 0603
C193 10P 0603
C209 10P 0603
R158 0 0603
3 DCLKO
3 DCLKO SUSA#
4,7 SMBDATA1
4,7 SMBCLK1
VCC_CMOS
R589 4.7K/NA 0603
R187 4.7K/NA 0603
Q25 MMBT3904L SOT23
PX4_FERR#
R188 0 0603
CPU_FERR#
R189 4.7K/NA 0603
R593 4.7K/NA 0603
R720 4.7K/NA 0603
Q26 MMBT3904L SOT23
FRQ_SEL
R190 0 0603
CPU_BSEL
U22D
U22E
U22F
74AHC14_V TSSOP14
7 SUSCLK_32K
R212 10K 0603
Q28 DTC144WK
9 ENABKL_VGA#
ENABKL_VGA 9,19
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PIIX4E

IDSEL:AD18

GPI	FUNCTION	PWR
GPI0	FRQ_SEL	MAIN
GPI1	SCI#	RESUME
GPI2	LCD_ID0	MAIN
GPI3	AC_IN#	MAIN
GPI4	CRT_IN#	MAIN
GPI5	LCD_ID2	MAIN
GPI6	X	RESUME
GPI7	SERIRQ	MAIN
GPI8	THRM#	MAIN
GPI9	X	RESUME
GPI10	X	RESUME
GPI11	CARDOC#	RESUME
GPI12	WAKE_UP#	RESUME
GPI13	PCIINTC#	MAIN
GPI14	LCD_ID1	MAIN
GPI15	COM1DSR#	MAIN
GPI16	MBID0	MAIN
GPI17	MBID1	MAIN
GPI18	MBID2	MAIN
GPI19	X	MAIN
GPI20	PCIINTC#	MAIN
GPI21	CARD_ACT	MAIN

GPO	FUNCTION	PWR
GPO0	X	MAIN
GPO1	AUDIORST#	MAIN
GPO2	VGA_SUS#	MAIN
GPO3	CD_RSTDRV	MAIN
GPO4	CD_PWR#	MAIN
GPO5	HDD_PWR#	MAIN
GPO6	HDD_RSTDRV	MAIN
GPO7	FDD_PWR#	MAIN
GPO8	X	RESUME
GPO9	X	MAIN
GPO10	X	MAIN
GPO11	X	MAIN
GPO12	IRMD0	MAIN
GPO13	IRMD1	MAIN
GPO14	H8_12V	MAIN
GPO15	SUS8#	RESUME
GPO16	SUSC#	RESUME
GPO17	CPU_STP#	MAIN
GPO18	PCI_STP#	MAIN
GPO19	X	MAIN
GPO20	SUS_STAT#1	RESUME
GPO21	X	RESUME
GPO22	X	MAIN
GPO23	X	MAIN
GPO24	SPK_OFF	MAIN
GPO25	RS232_OFF#	MAIN
GPO26	KBCS#	MAIN
GPO27	CARD_SUS#	MAIN
GPO28	ATI_STDBY#	MAIN
GPO29	FDD_MODE	MAIN
GPO30	X	MAIN

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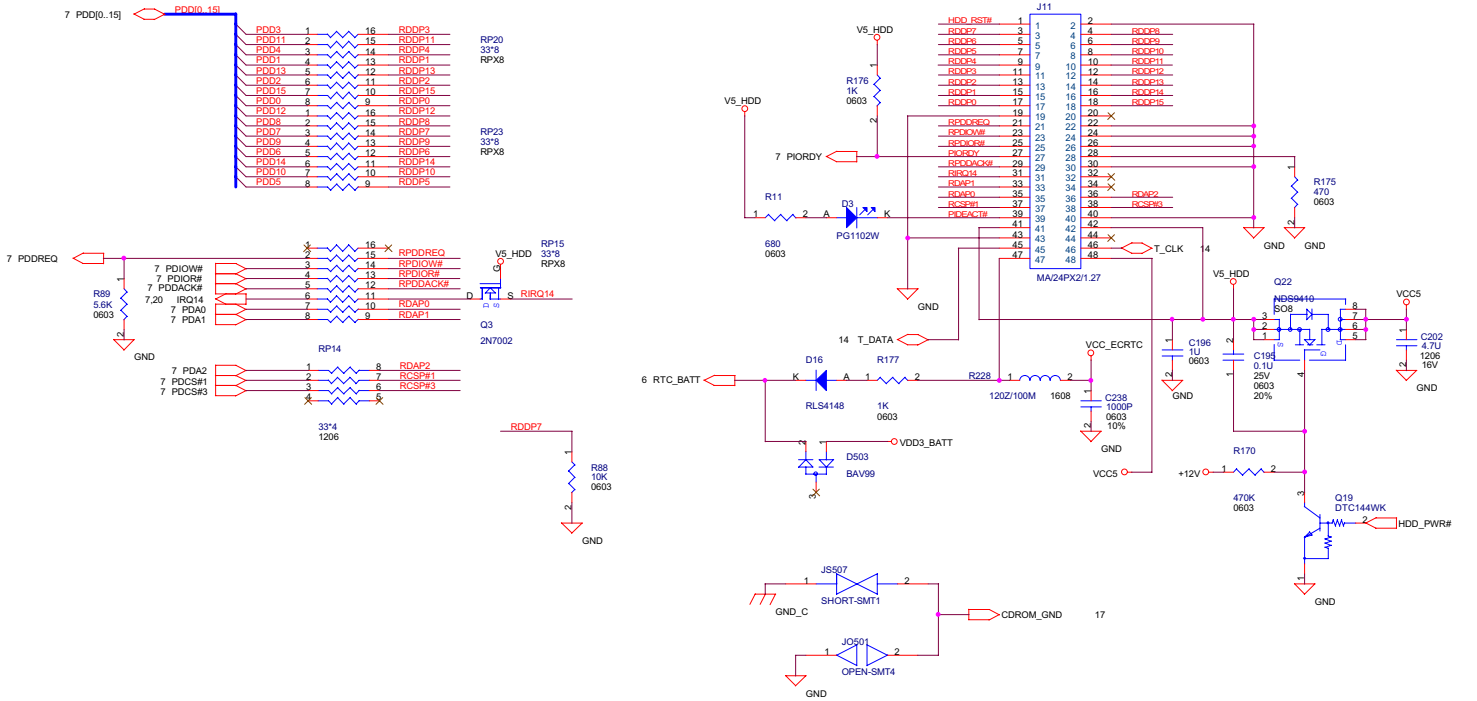
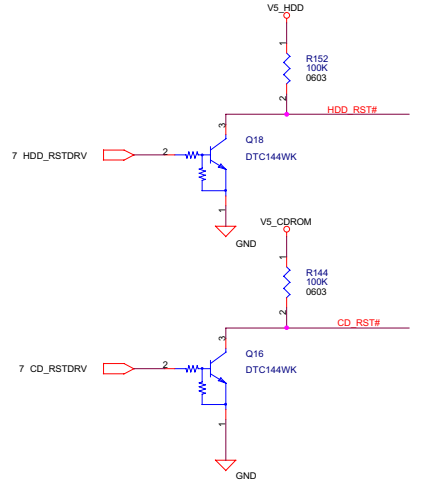
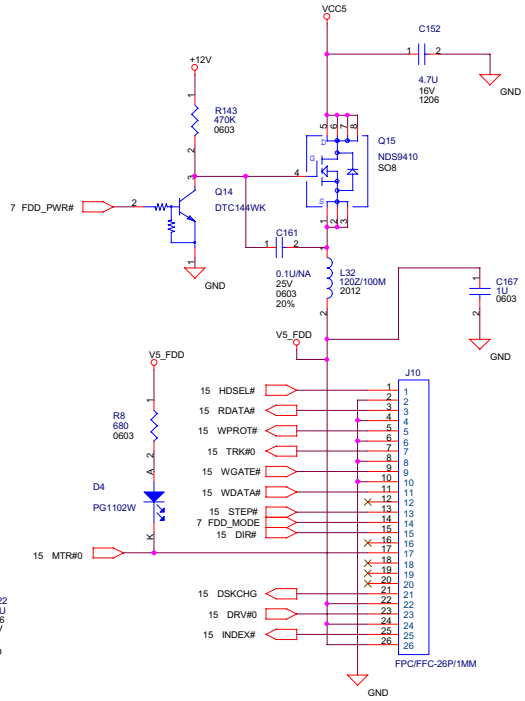
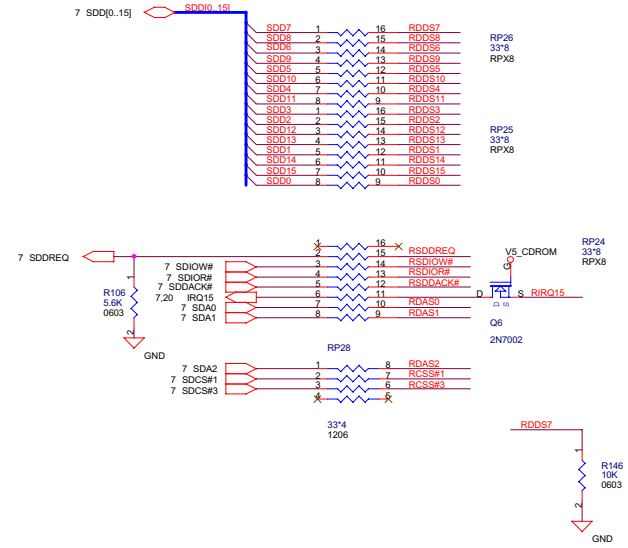
PRIMARY IDE & GLIDE PAD CONNECTOR

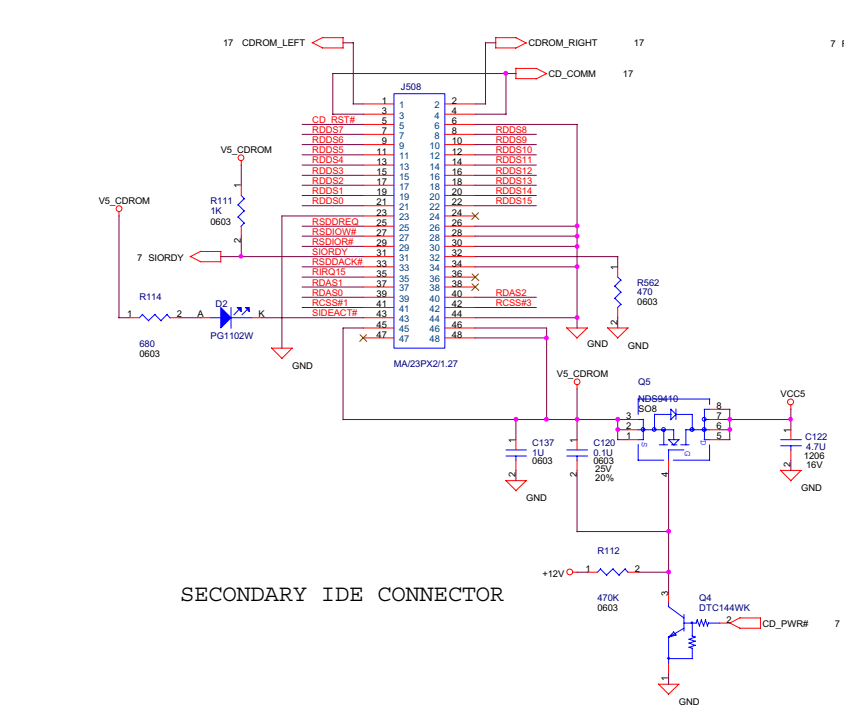




FDD CONNECTOR







SECONDARY IDE CONNECTOR

Title	6133XN M/BD		
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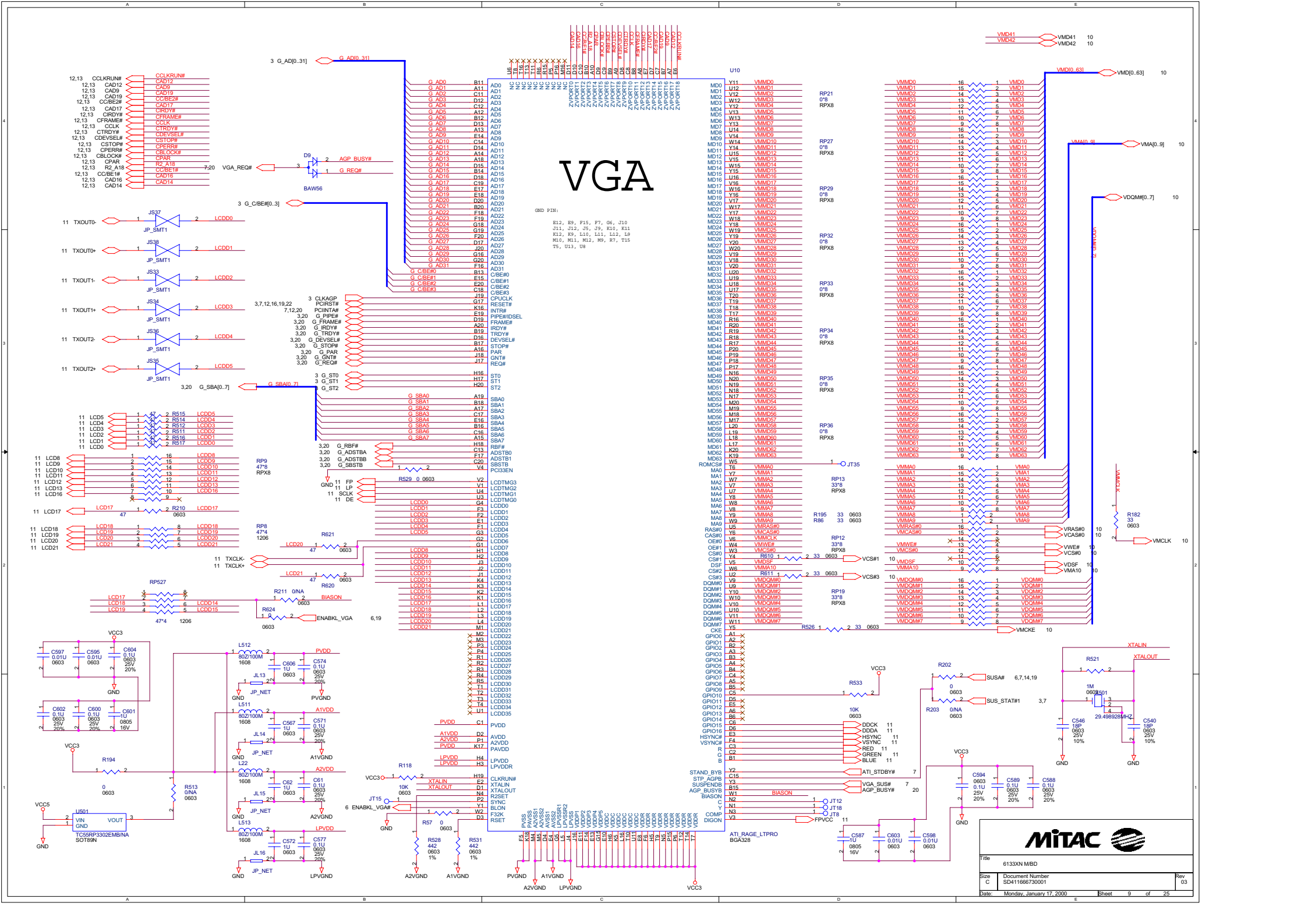
VGA


U10
GND PIN:
B12, E9, F15, F7, G6, J10
J11, J12, J5, J9, K10, K11
K12, K9, L10, L11, L12, L9
M10, M11, M12, M9, R7, T15
T5, U13, U8
ATI_RAGE_LTPRO
BGA328
JS37
JS38
JS33
JS34
JS36
JS35
JP_SMT1
BAW56
U501
TC55RP3302EMB/NA
SOT89N
RP9
RP8
RP527
RP21
RP27
RP29
RP32
RP33
RP34
RP35
RP36
RP12
RP13
RP19
JT35
JT15
JT12
JT18
JT8
JP_NET
L512
L511
L22
L513
JL13
JL14
JL15
JL16
PVDD
A1VDD
A2VDD
LPVDD
PVGND
A1VGND
A2VGND
LPVGND
VCC3
VCC5
GND
MITAC
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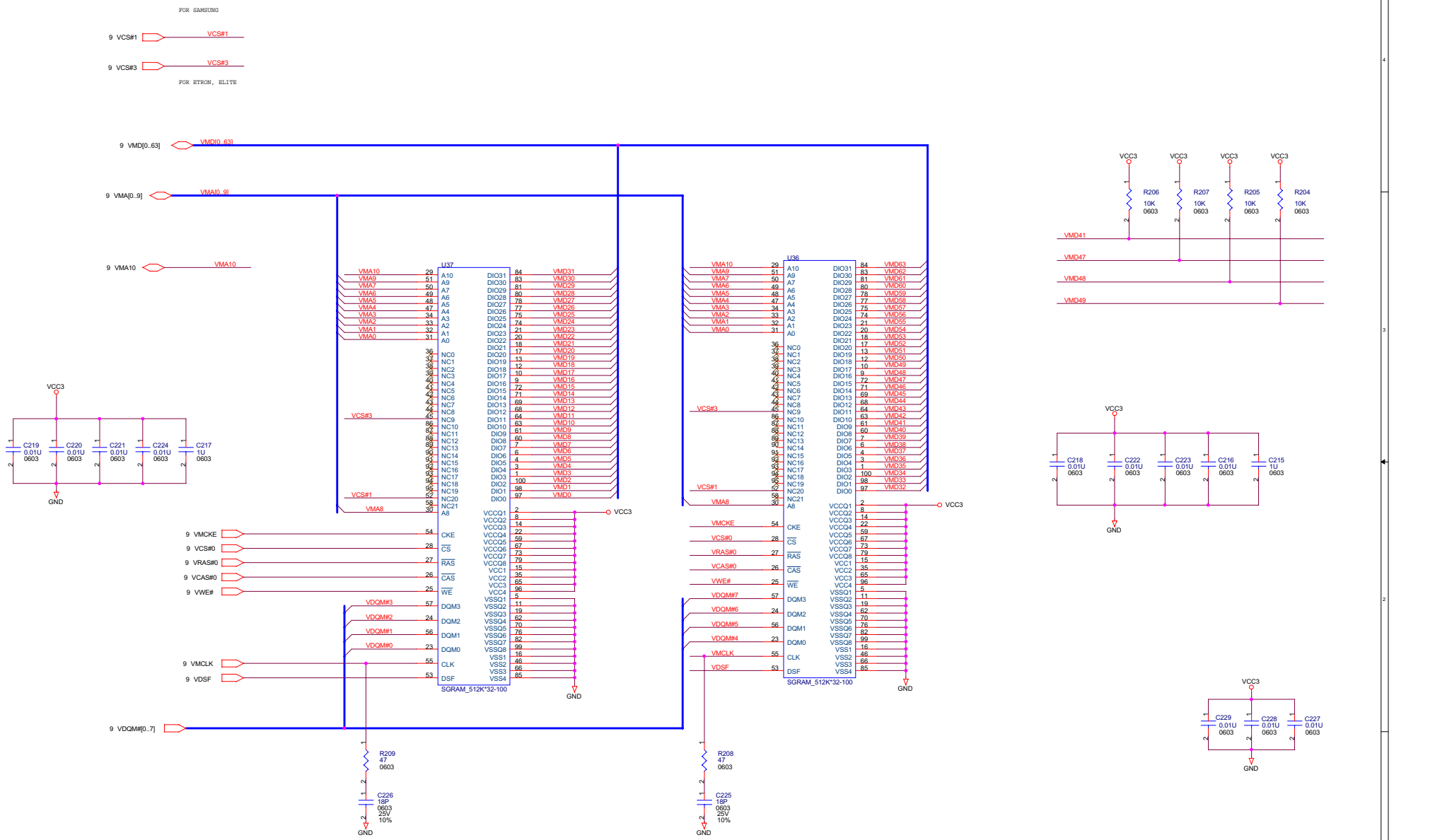

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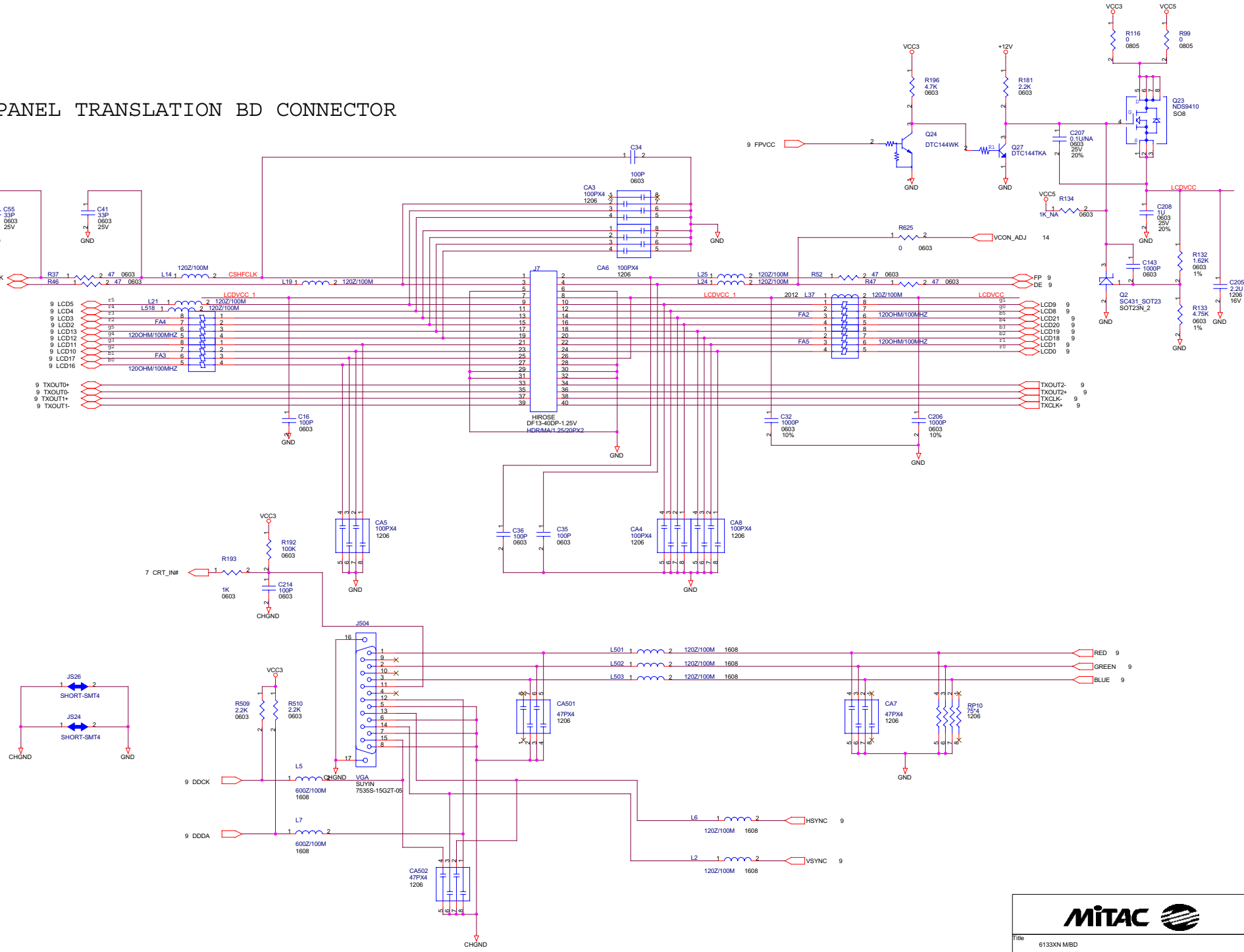
LCD PANEL TRANSLATION BD CONNECTOR



MiTAC		
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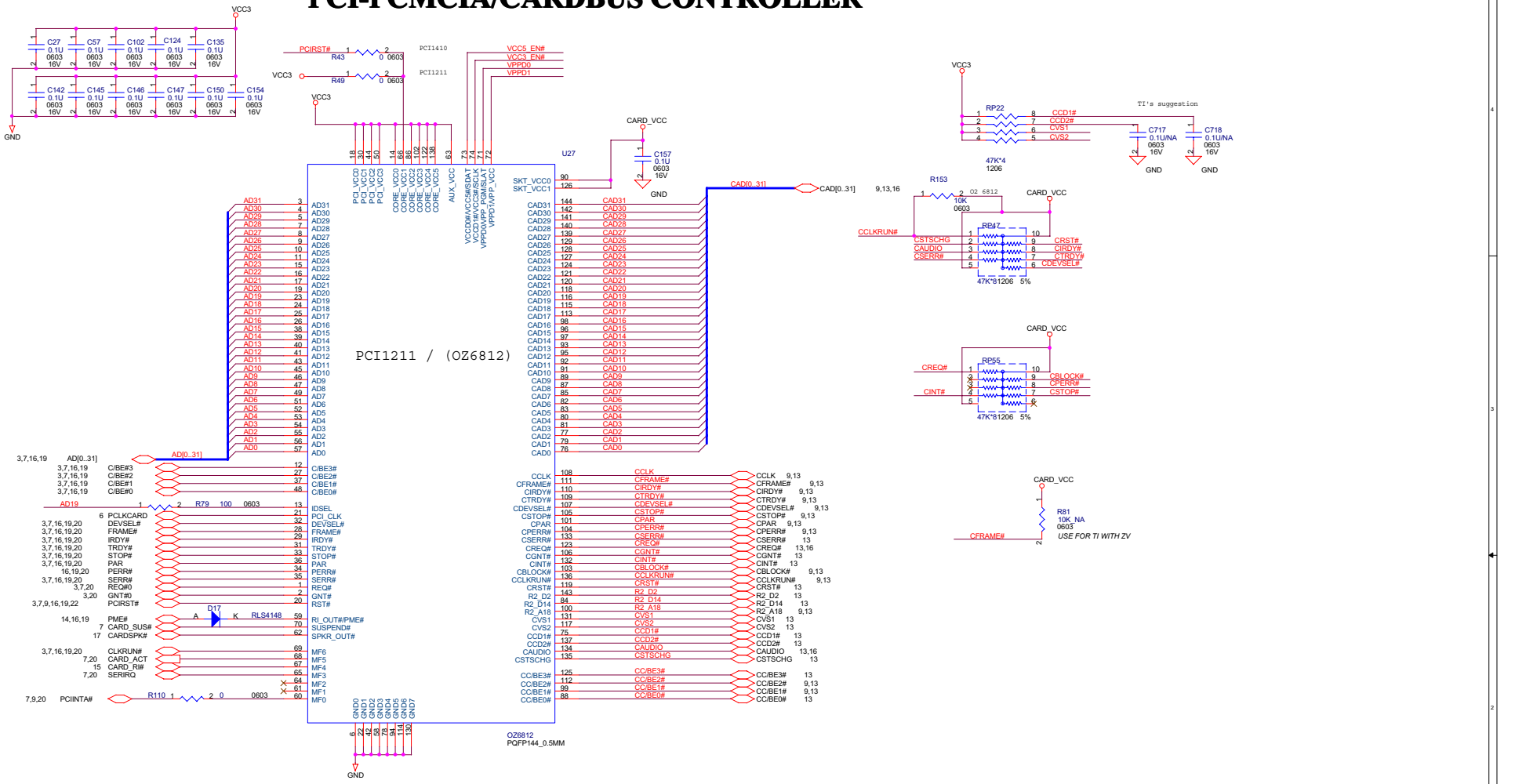
PCI-PCMCIA/CARDBUS CONTROLLER



ZOOM-VIDEO SIGNALS

CCLKRUN#	ZV_VCLK
CAD9	ZV_HSYNC
CAD12	ZV_VSYNC
CAD14	ZV_Y0
CC/BE1#	ZV_Y2
CPAR	ZV_Y4
CPERR#	ZV_Y6
CCLK	ZV_UV2
CIRDY#	ZV_UV4
CC/BE2#	ZV_UV6
CAD16	ZV_Y1
R2_A18	ZV_Y3
CBLOCK#	ZV_Y5
CSTOP#	ZV_Y7
CDEVSEL#	ZV_UV0
CTRDY#	ZV_UV1
CFRAME#	ZV_UV3
CAD17	ZV_UV5
CAD19	ZV_UV7
CAUDIO	ZV_SDATA
CREQ#	ZV_LRCLK
CAD18	ZV_SCLK
CAD20	ZV_MCLK

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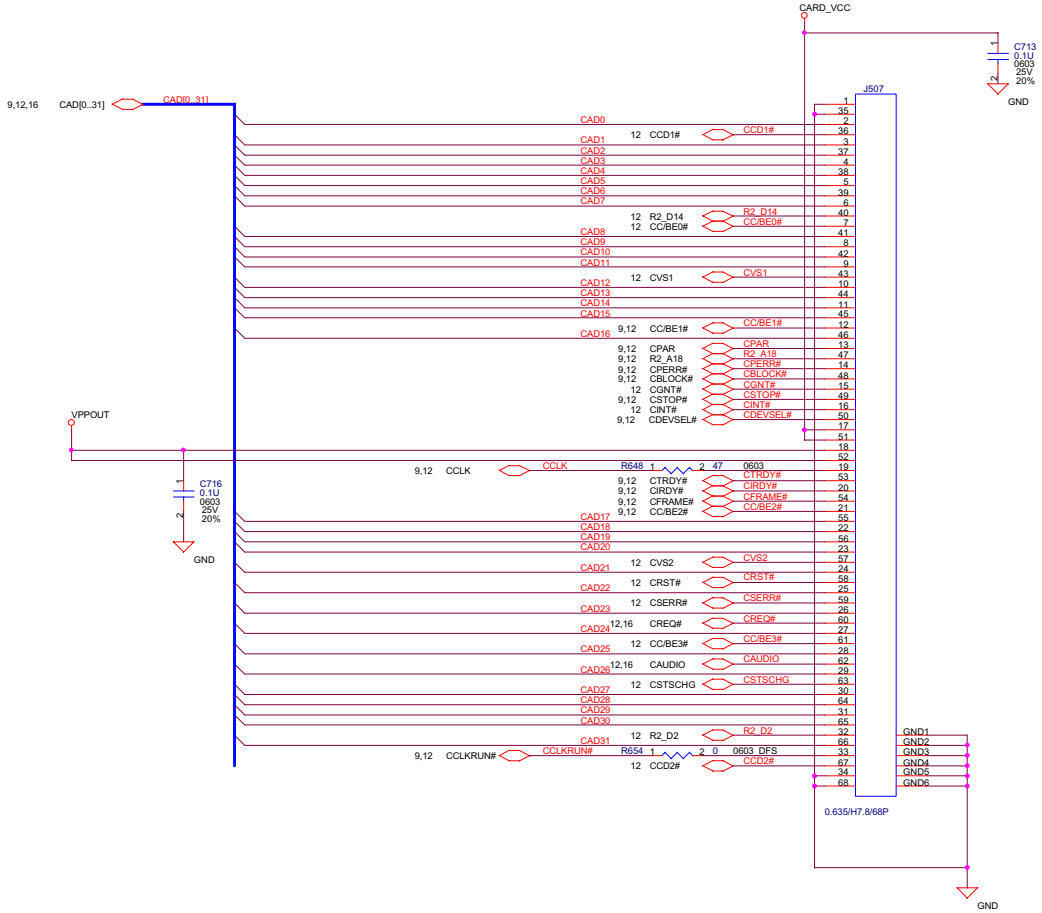
PCMCIA/ CARDBUS SLOT



Title	6133XN M/BD	
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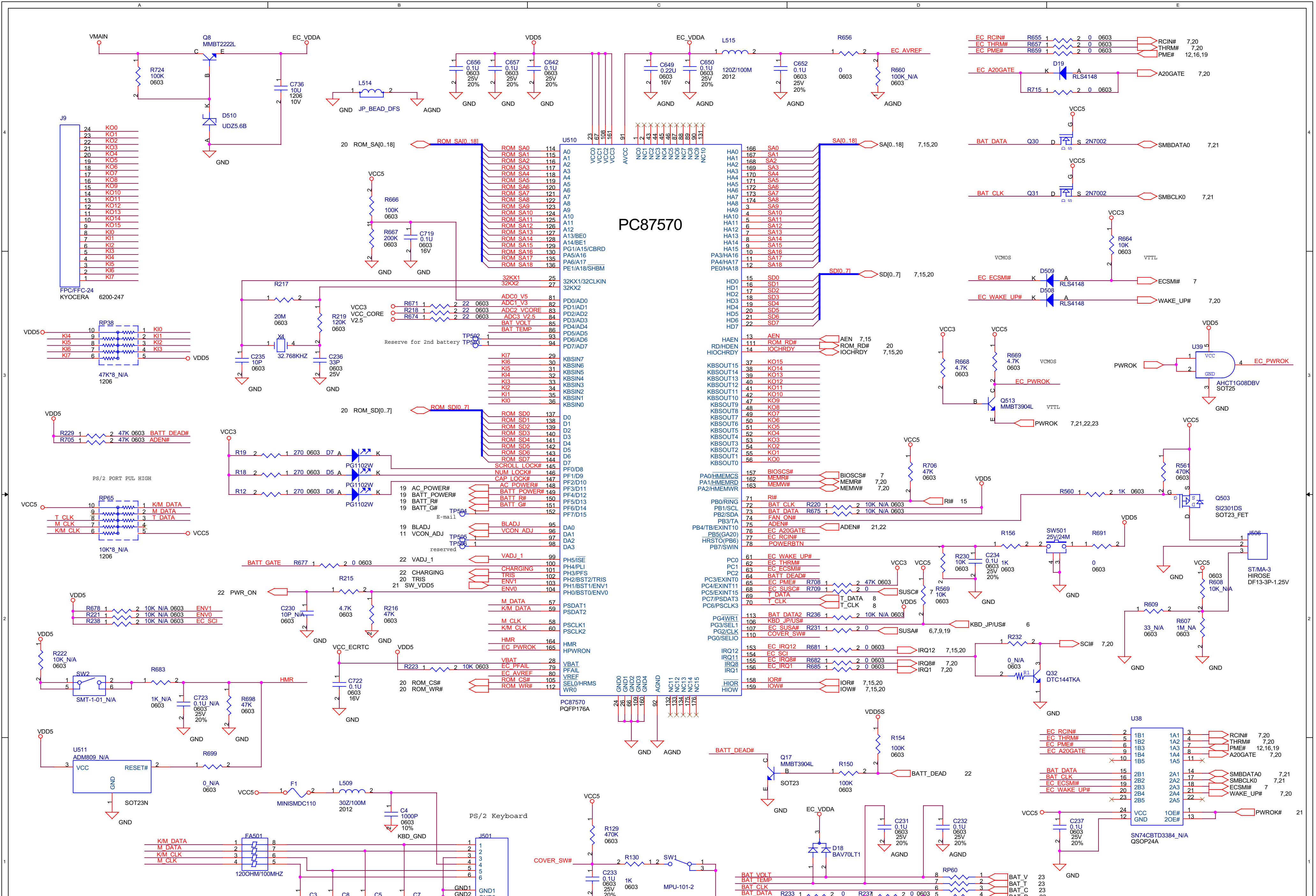

MITAC

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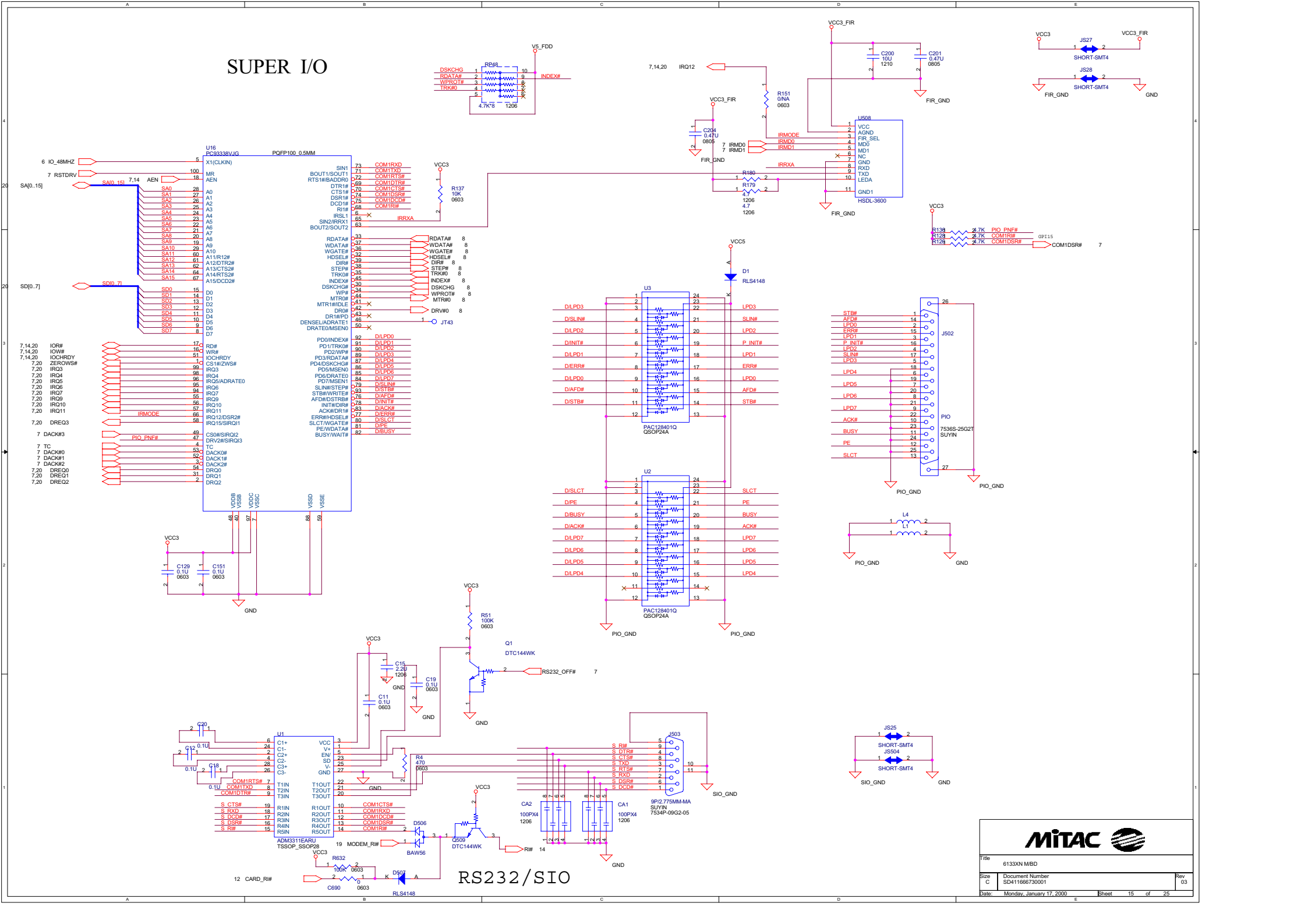
SUPER I/O



RS232/SIO

MiTAC			
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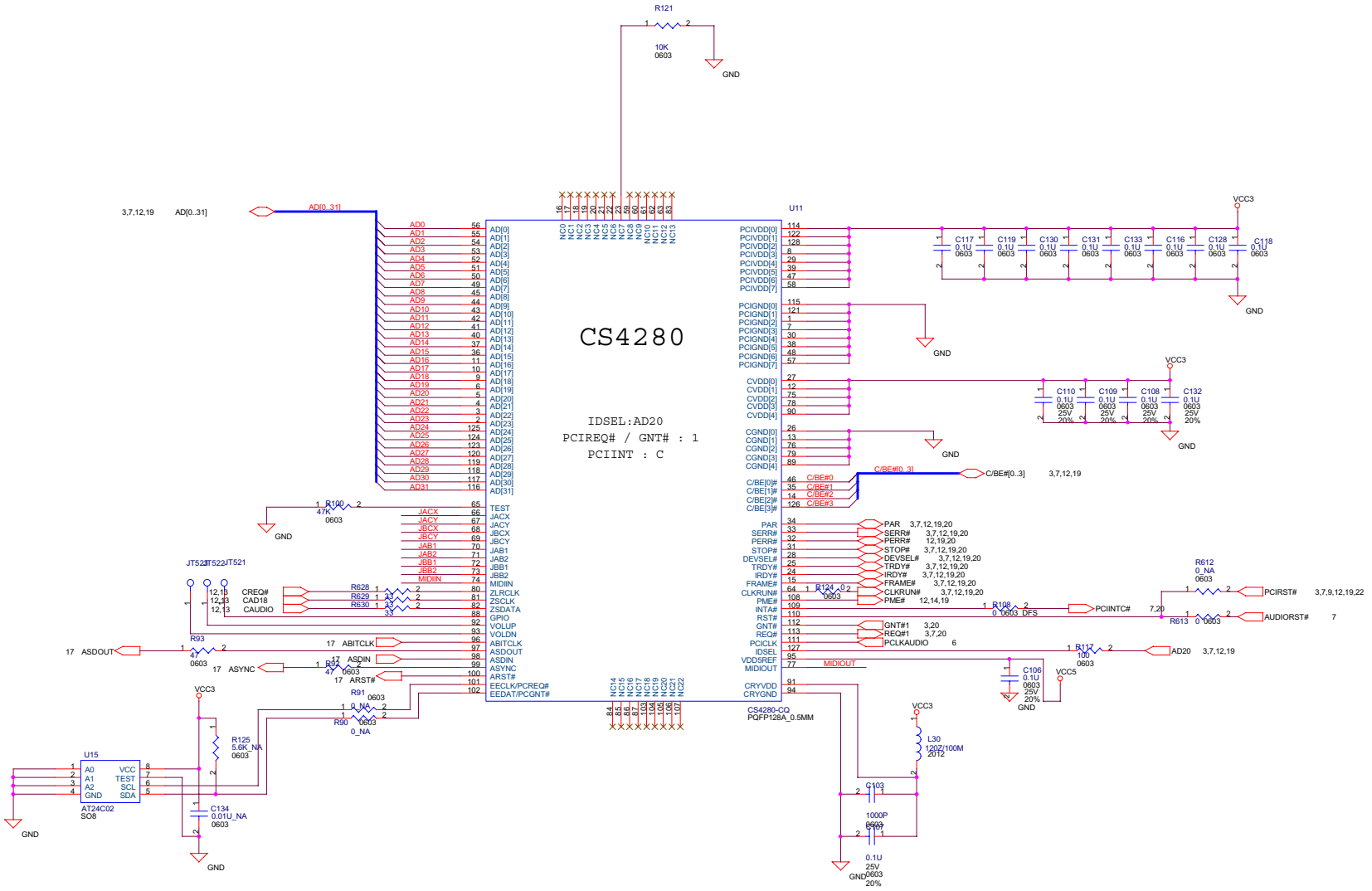
CS4280
IDSEL:AD20
PCIREQ# / GNT# : 1
PCIINT : C
CS4280-CO
PQFP128A_0.5MM
U11
R121
10K
0603
GND
VCC3
VCC5
AD[0..31]
3,7,12,19
C/BE#[0..3]
C/BE#[0..3]
3,7,12,19
PAR
SERR#
PERR#
STOP#
DEVSEL#
TRDY#
IRDY#
FRAME#
CLKRUN#
PME#
INTA#
RST#
GNT#
REQ#
PCICLK
IDSEL
VDD5REF
MIDIOUT
CRYVDD
CRYGND
PCIINTC#
PCIRST#
AUDIORST#
AD20
CREQ#
CAD18
CAUDIO
ASDOUT
ASYNC
ASDIN
ARST#
ABITCLK
JACX
JACY
JBCX
JBCY
JAB1
JAB2
JBB1
JBB2
MIDIIN
ZLRCLK
ZSCLK
ZSDATA
GPIO
VOLUP
VOLDN
ABITCLK
ASDOUT
ASDIN
ASYNC
ARST#
EECLK/PCREQ#
EEDAT/PCGNT#
U15
AT24C02
SO8
RP17
47K*4_NA
1206
RP18
47K*4_NA
1206
L30
120Z/100M
2012
MiTAC
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6133XN M/BD
Size
C
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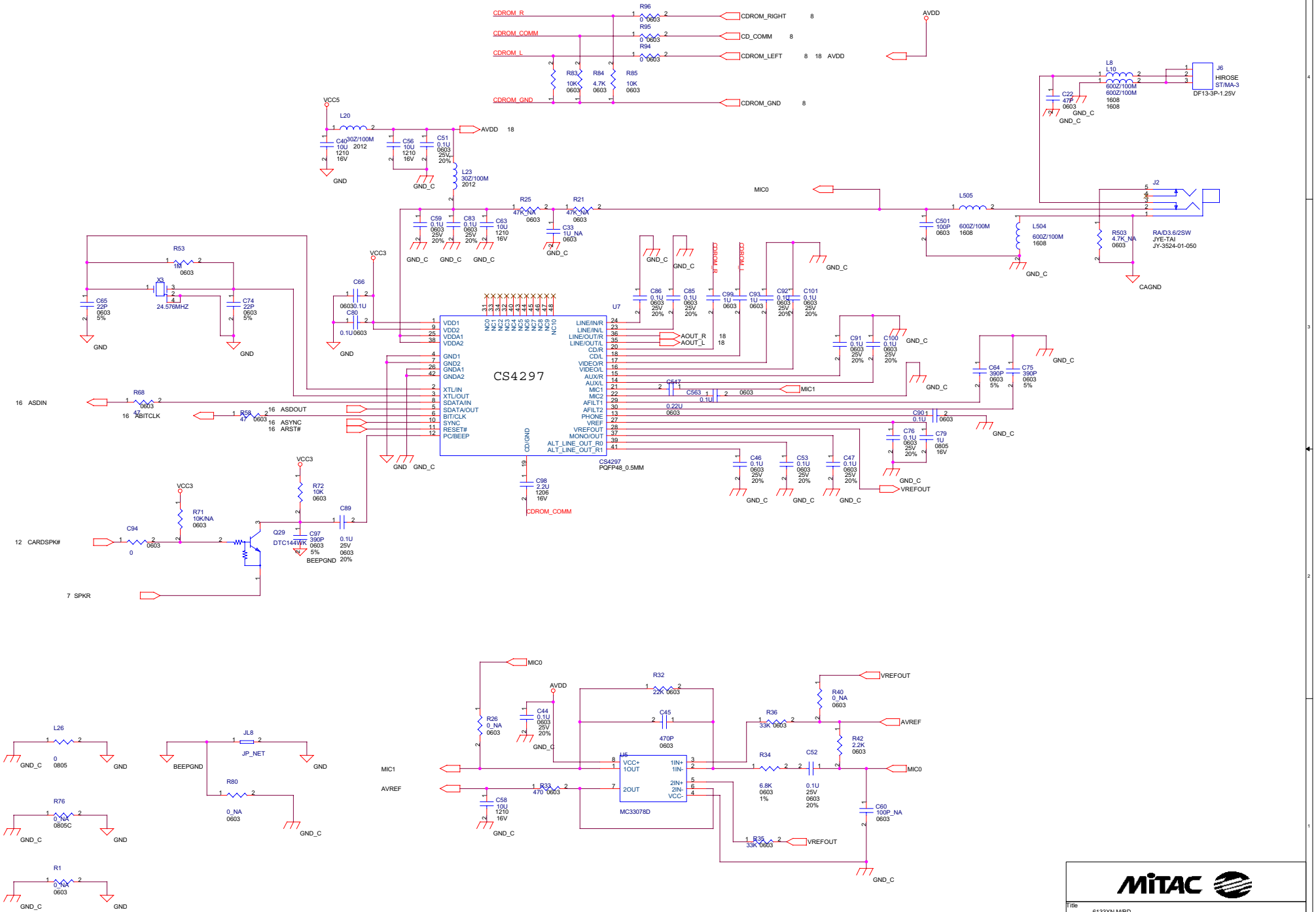
25



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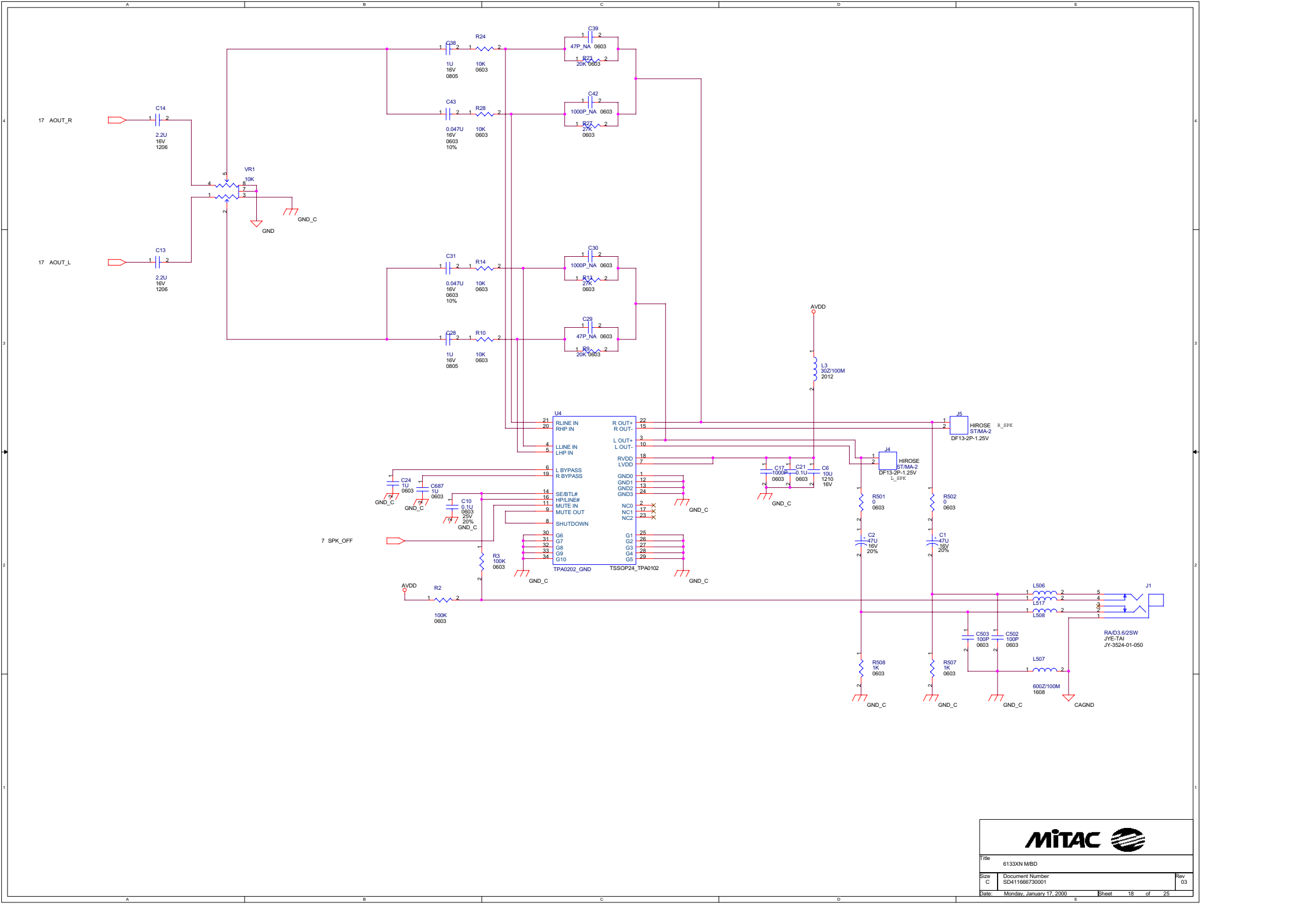

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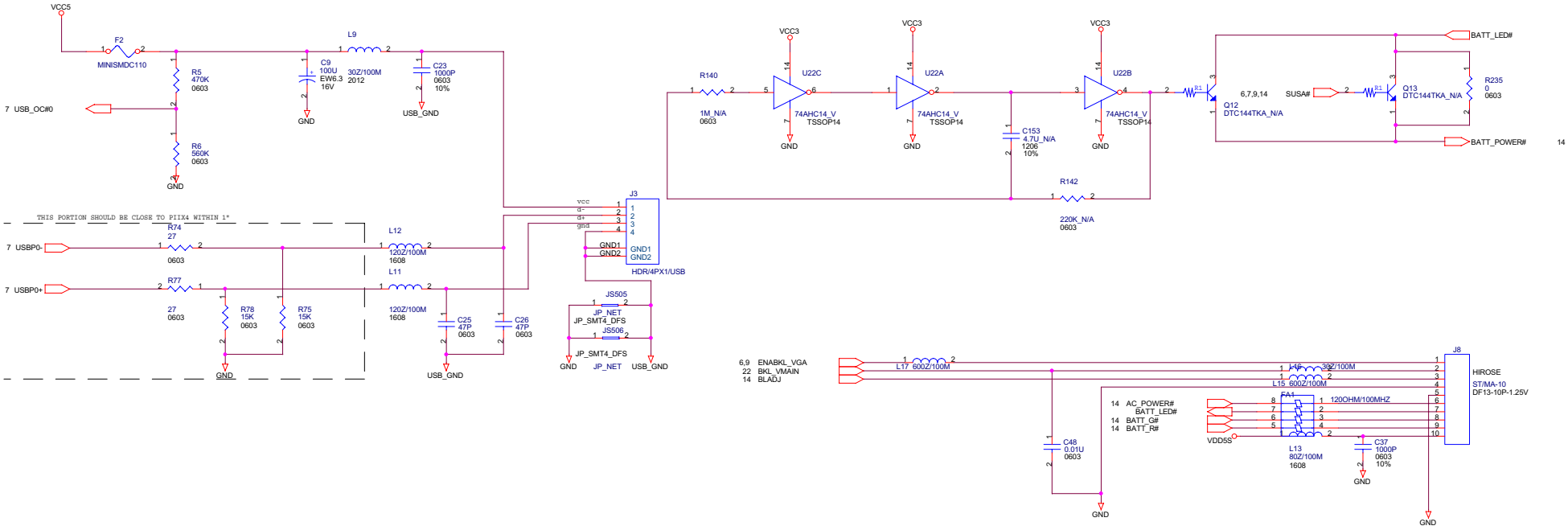
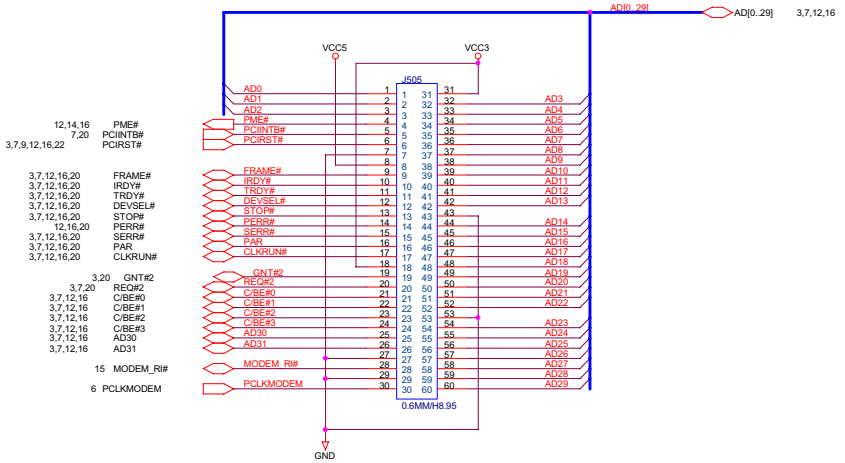
USB CONNECTOR



FAX/MODEM CONNECTOR



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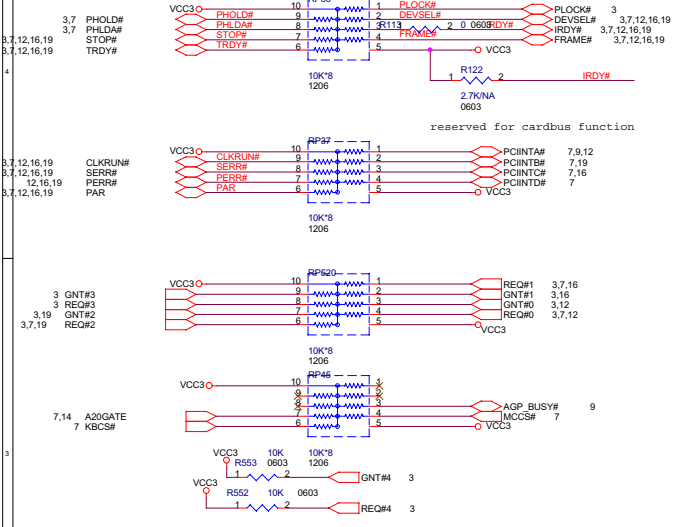
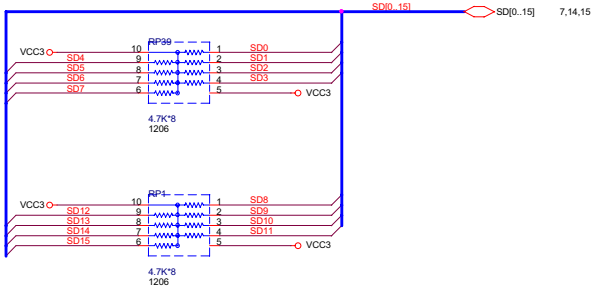
PCI PULL HIGH

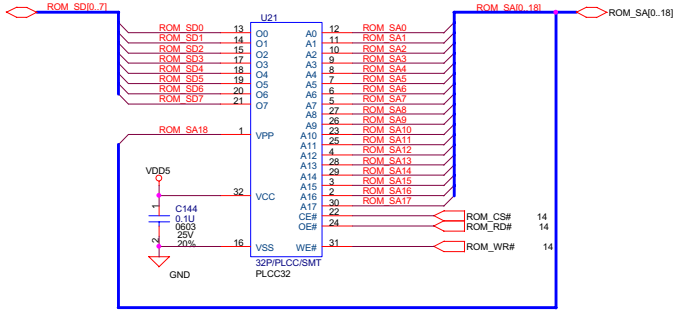


reserved for cardbus function

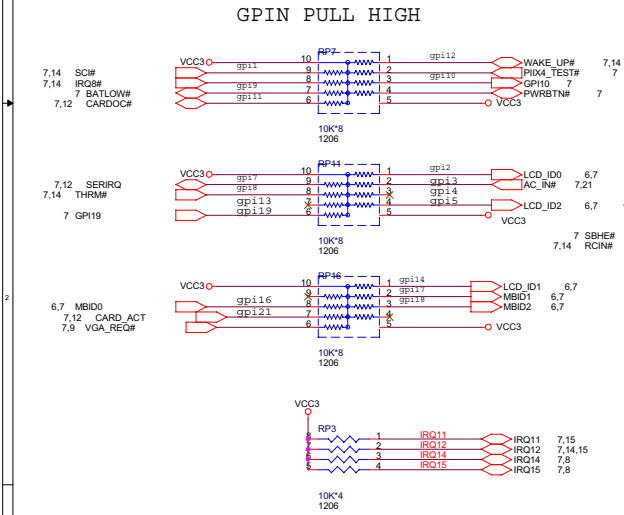
ISA PULL HIGH

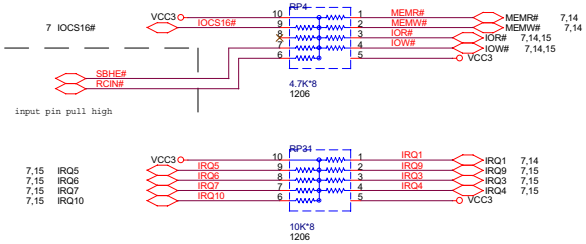


SYSTEM BIOS

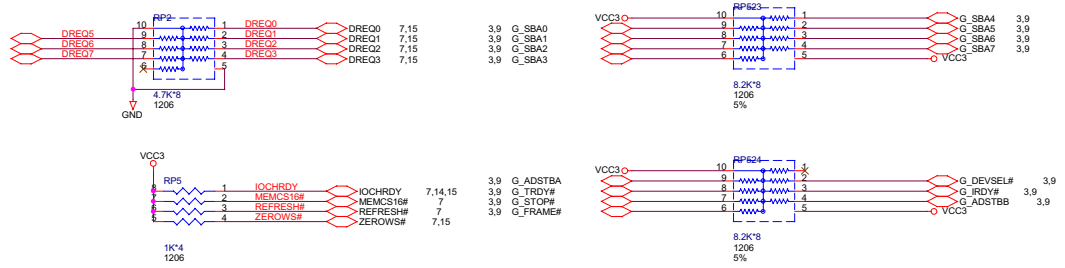


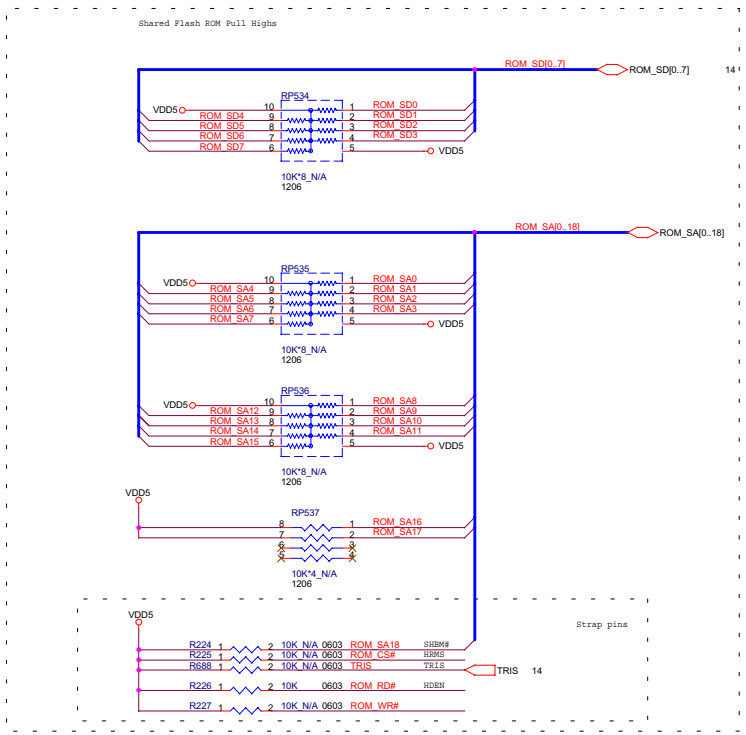
GPIN PULL HIGH

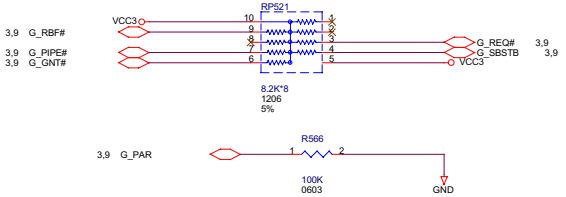




AGP PULL HIGH







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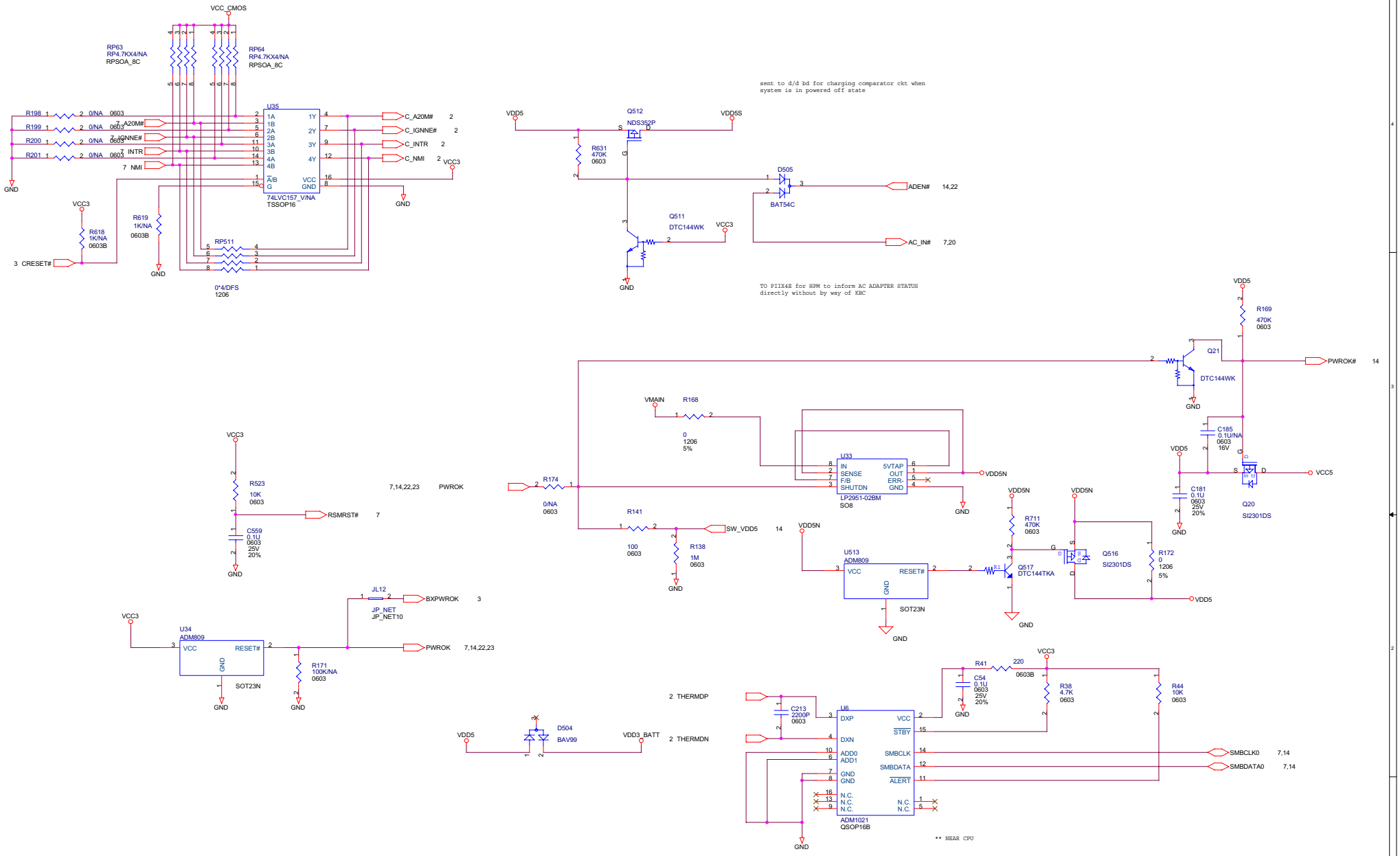

SUSTAT1#	SUSTAT2#	SUSA#	SUSC#		VDD5	VDD5S	VDD3	+12V	VCC5	VCC3	V2.5	VTT_CPUCORE	V_L2CORE	VL2_I/O
O	O	O	O	FULL ON	O	O	O	O	O	O	O	O	O	O
X	X	X	O	POS	O	O	O	O	O	O	O	O	O	O
X	X	X	O	STR	O	O	O	O	O	O	X	X	X	X
X	X	X	X	STD(SOFT OFF) (ACIN OR BATTERY IN)	O	O / X ADIN / BAT	O	X	X	X	X	X	X	X
X	X	X	X	MECH OFF (NO ACIN & NO BATT)	X	X	X	X	X	X	X	X	X	X

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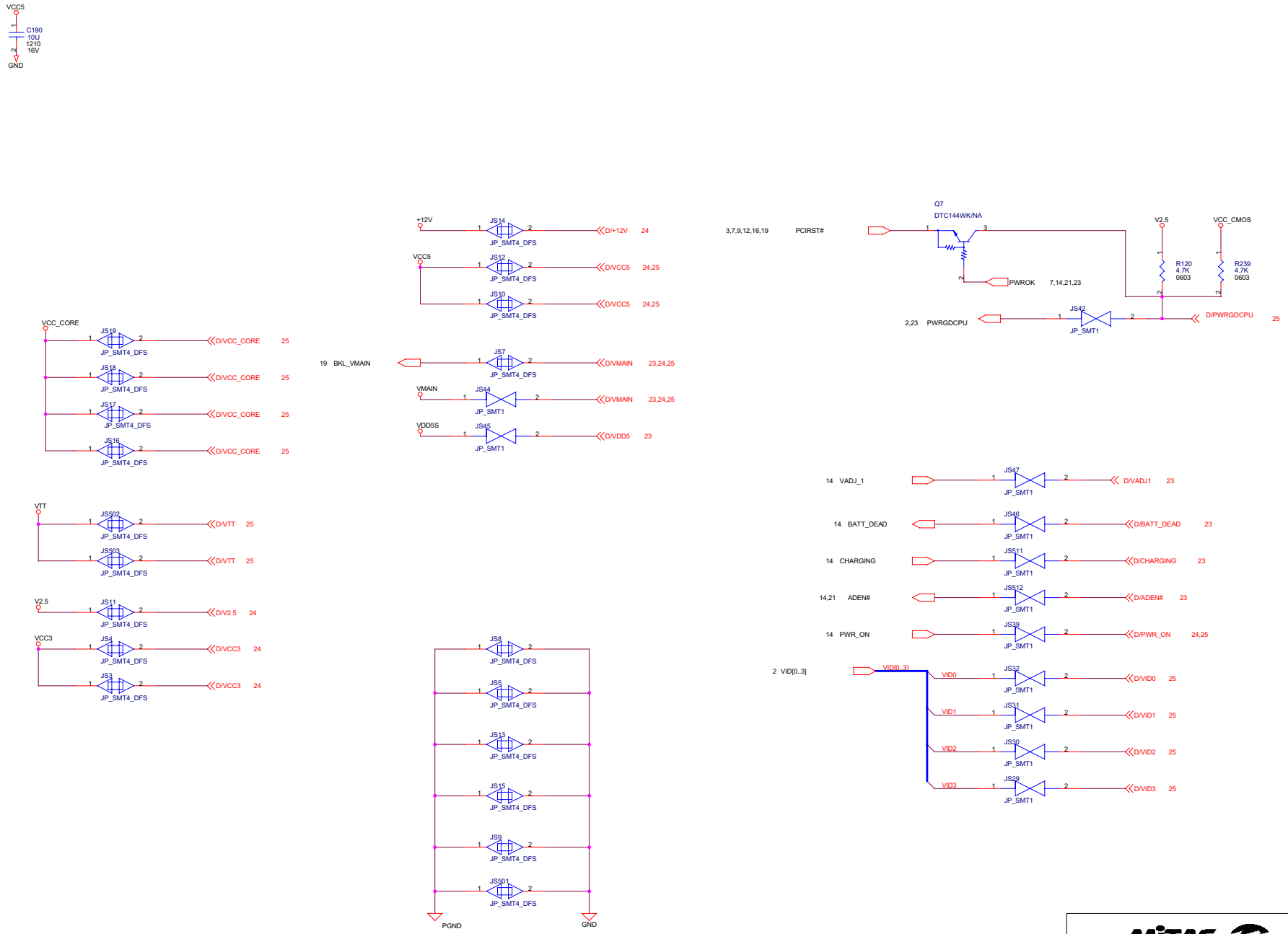

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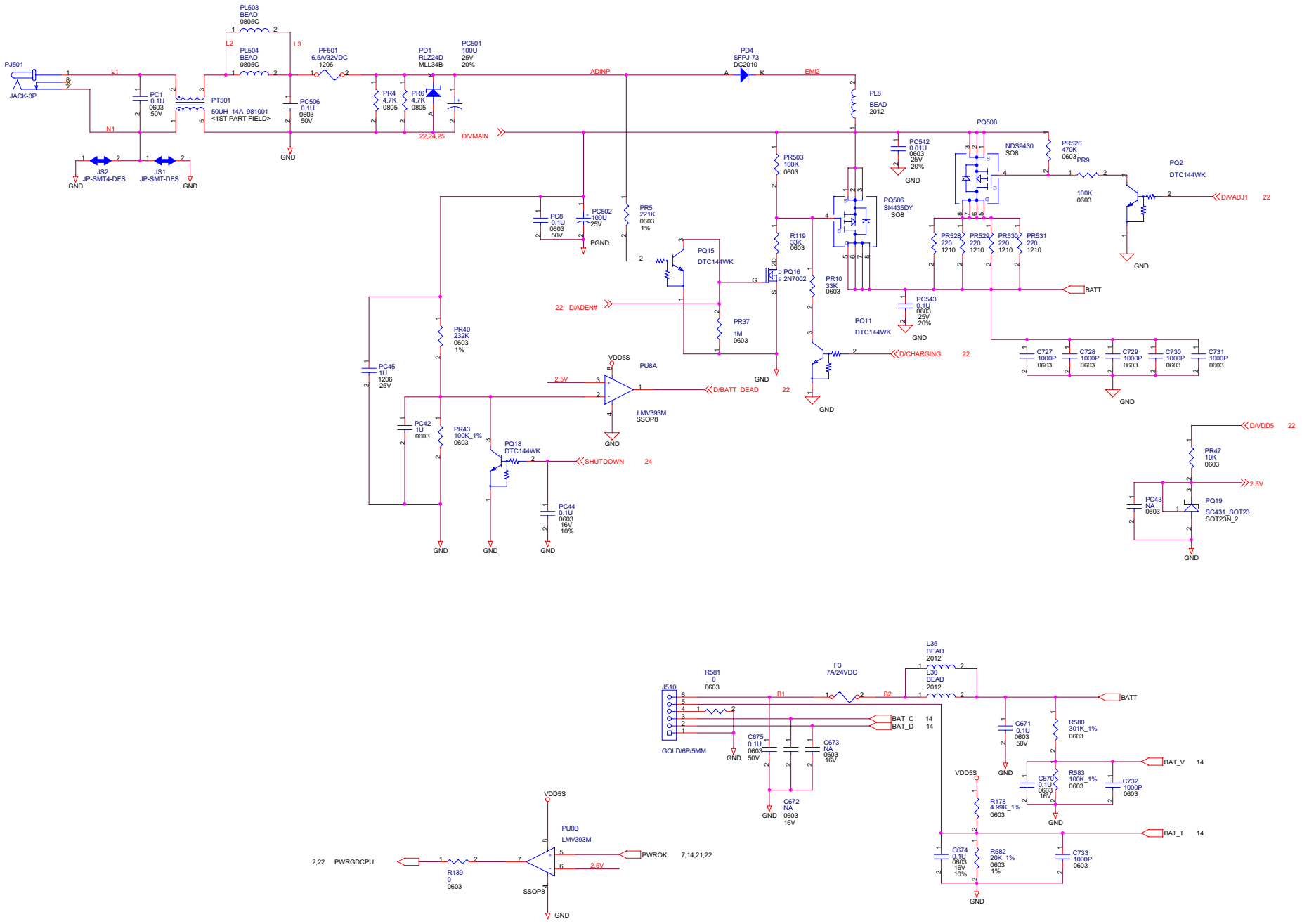

MITAC INTERNATIONAL CORP.

Title	6133XN charge & discharge	
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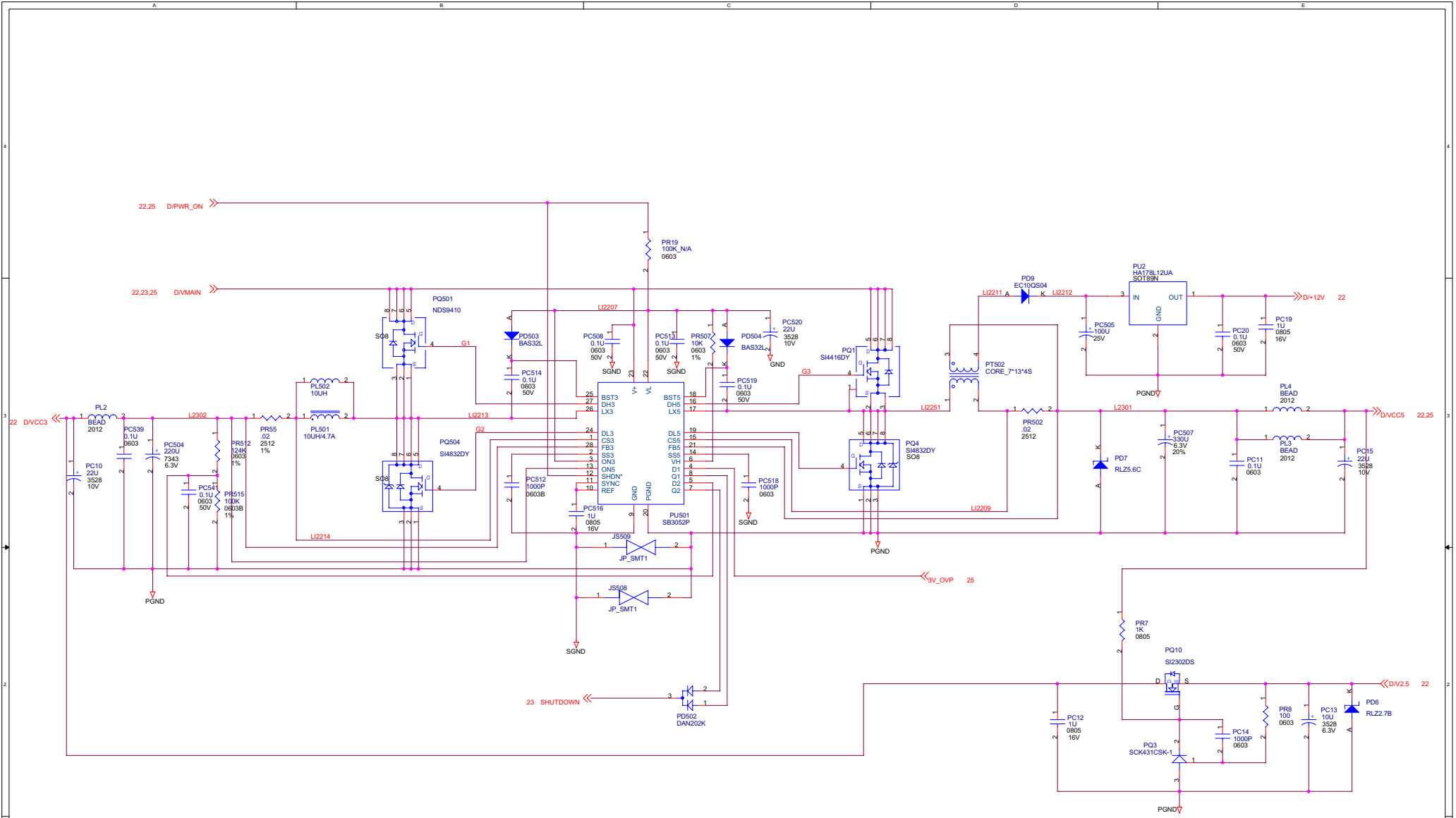

MITAC INTERNATIONAL CORP.

Title	6133XN MAIN POWER	
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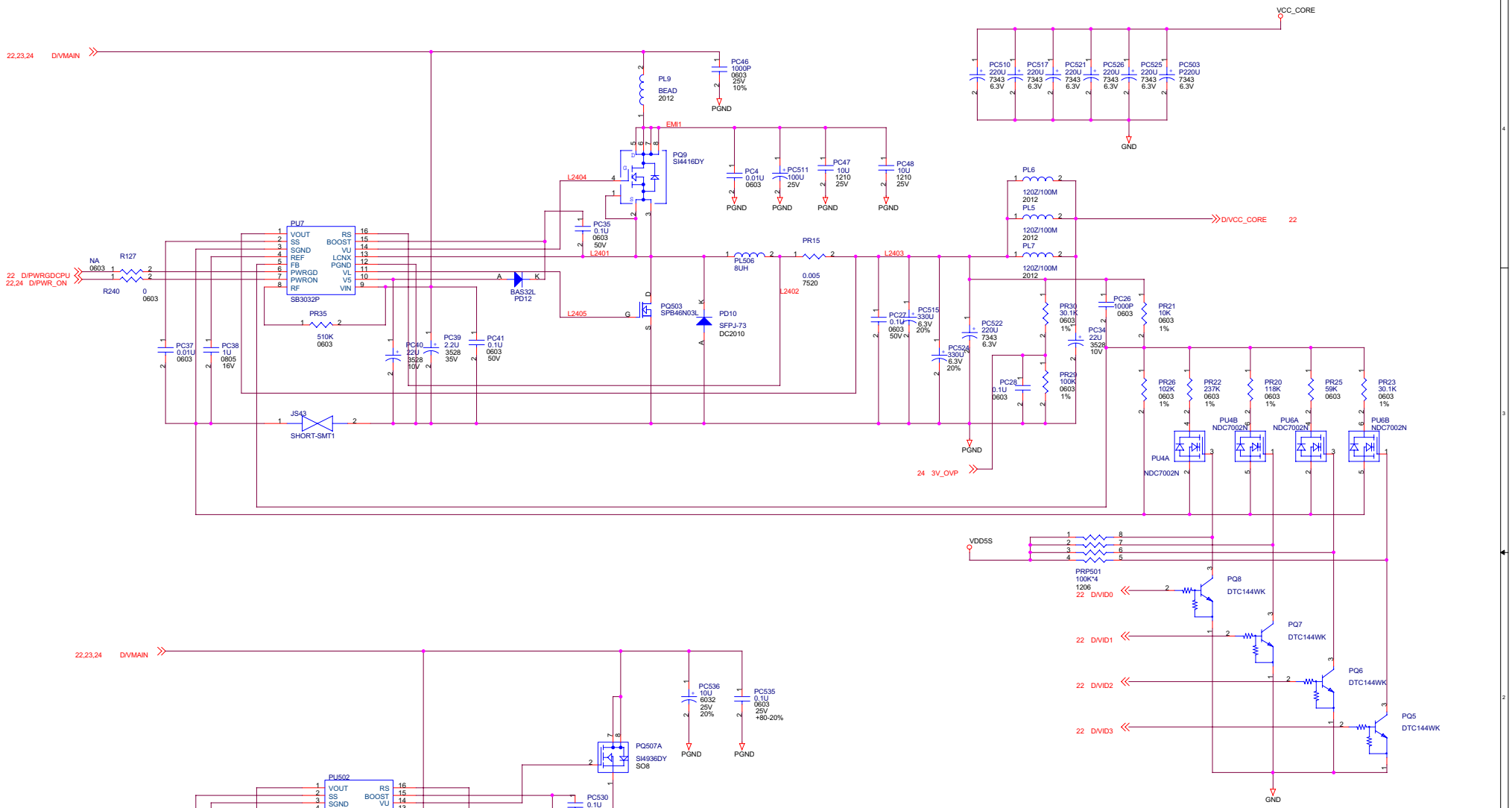

MITAC INTERNATIONAL CORP.

Title	MARK-2-M/B	
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