

ACER_BAP10/BXP10 MAIN BOARD---A01

2010.04.02

INVENTEC

TITLE
ACER_BAP10/BXP10

SIZE CODE TIME DOC NUMBER REV

Custom CS CS-131 A01

CHANGE by IEC DATE Friday, April 02, 2010

SHEET 1 of 45

1. Schematic Page Description :

Montavina Schematic Ver : X01

- | | | |
|-----------------------------|-----------------------------|---------------------------|
| 1. Title | 17. Processor(2/4) | 33. HDD/BT/TPM/GP/FP/LID |
| 2. Schematic Page DESCR | 18. Processor(3/4) | 34. CR_AU6437-GEF |
| 3. Block Diagram | 19. Processor(4/4) | 35. KBC ITE8502E* |
| 4. Power Block Diagram | 20. PCH_RTC,SATA,PCI-E,CLK | 36. EASY PORT |
| 5. Annotations | 21. PCH_DMI,MISC,LVDS,CRT | 37. Hybrid Switch (1/2) |
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| 9. PWR_CPU Core Power | 25. PCH Power 3 (GND) | 41. GP Button board |
| 10. PWR_Graphics Core | 26. Clock Generator | 42. SW Button/BAP10 board |
| 11. PWR_DDR PWR | 27. DDR3 SDRAM SO-DIMM 0/1 | 43. SW Button/BXP10 board |
| 12. PWR_1.1VS_VTT/1.1VS | 28. LCD,CMA,CRT PLUG | 44. LED Board/BXP10 board |
| 13. PWR_5VA/5VLA/3VA/3VLA | 29. USB/MDC | 41. TPM board |
| 14. PWR_3VS/5VS/1.8VS/5VUSB | 30. LAN(BCM57760) | |
| 15. PWR_Reserve | 31. CX20672-11Z / MIC / SPK | |
| 16. Processor(1/4) | 32. UMTS/WLAN | |

2. PCI & IRQ & DMA Description :

IDSEL	CHIP	PCIINT	CHIP	Interface	REQ	CHIP
None		None			None	

3. USB & PCI-Express & SATA Description :

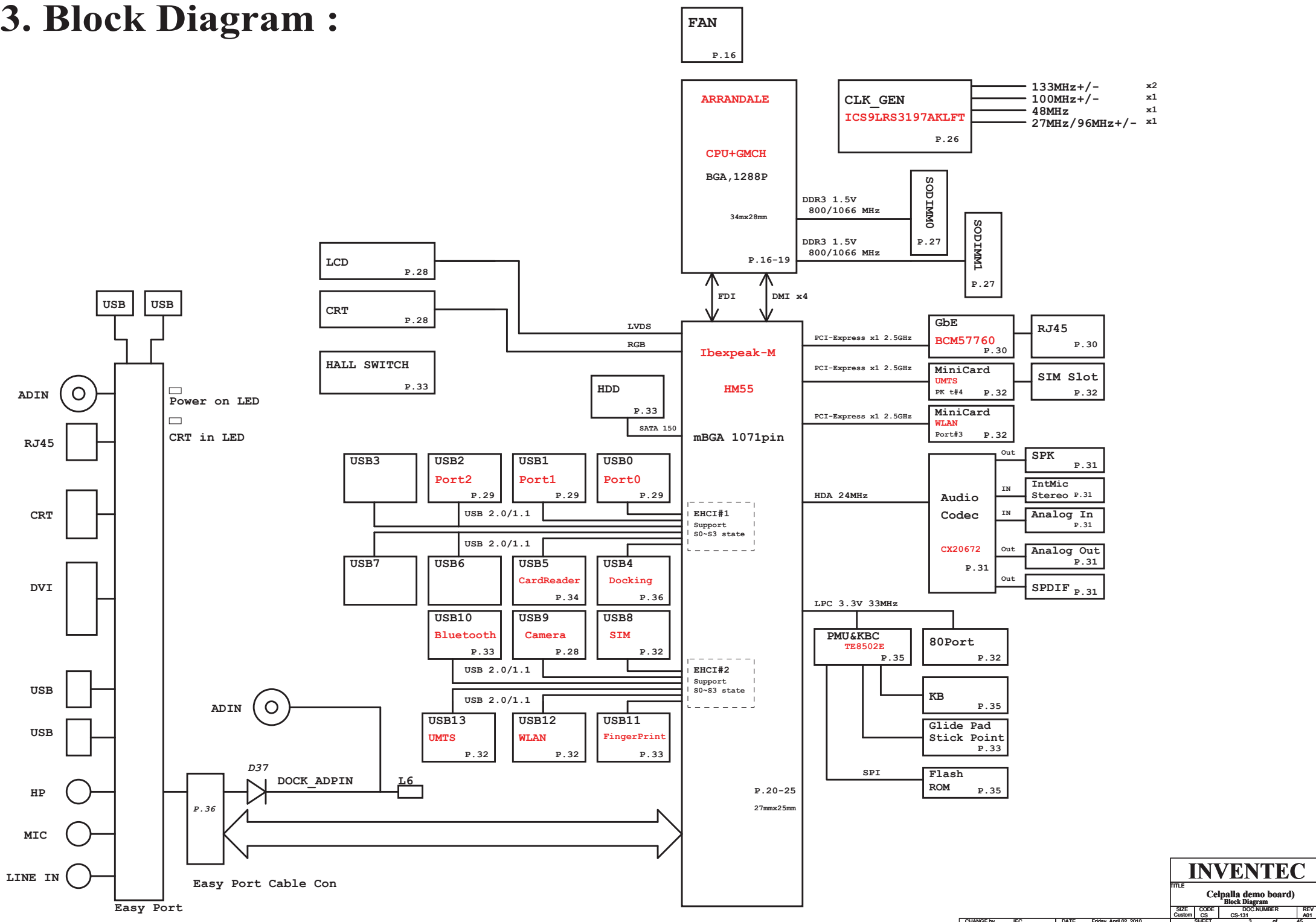
USB Port	DEVICE	USB Port	DEVICE	PCI-E	DEVICE	SATA	DEVICE
Port 0	System (ESATA)	Port 7	Bluetooth	Port 1	New Card	Port 1	HDD
Port 1	System	Port 8		Port 2	Docking	Port 2	E-SATA
Port 2	System	Port 9	Web Cam	Port 3	Mini Card(WLAN)	Port 4	BAY
Port 3	System	Port 10		Port 4	Mini Card(3G)	Port 5	None
Port 4	CardReader	Port 11	FingerPrint	Port 5	Mini Card(ROBSON)		
Port 5		Port 12		Port 6	Giga-LAN		
Port 6		Port 13	3G				

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TITLE: ACER BAP10/BXP10
schematics page DESCR

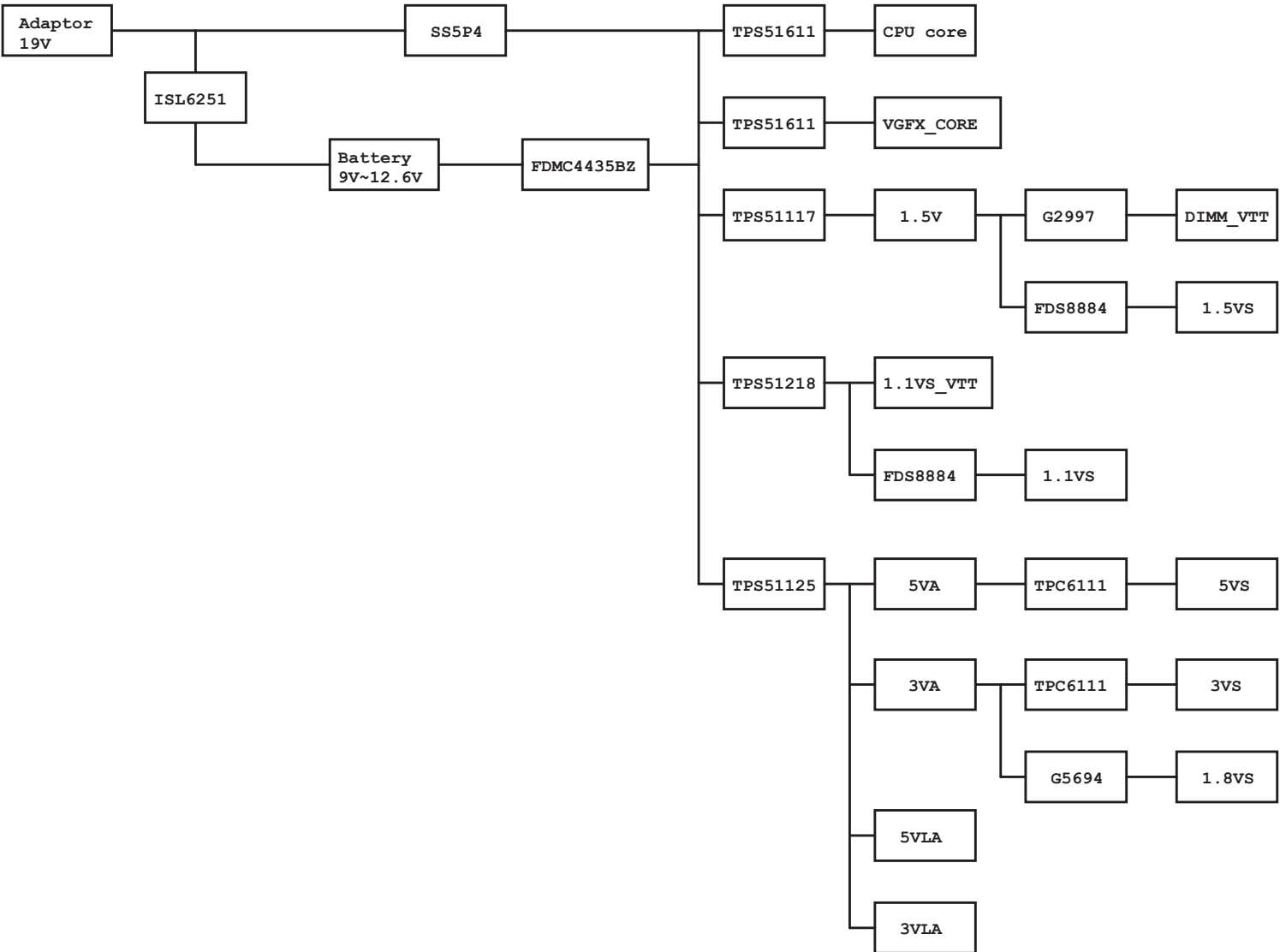
SIZE	CODE	DOC NUMBER	REV
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3. Block Diagram :



INVENTEC			
TITLE Celpalla demo board)			
Block Diagram			
SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01
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Power Block Diagram :



4. Net name Description :

Voltage Rails

DCIN	Primary DC system power supply
3VLA	3.3V always on power rail by DCIN
5VLA	5.0V always on power rail by DCIN
EC_3VLA	3.3V always on power rail by 5VAUXON
3VA	3.3V always on power rail by LATCH_ON
5VA	5.0V always on power rail by LATCH_ON

3VM	3.3V power rail by SUSM#
1.05VM	1.05V switched power rail by SUSM#

1.5V	1.5V switched power rail by SUSC#
1.8V	1.8V power rail by SUSC#

3VS	3.3V power rail by SUSB#
5VS	5.0V power rail by SUSB#
1.5VS	1.5V power rail by SUSB#
1.05VS	1.05V power rail by SUSB#
PWR_DIMM_VTT	0.75V DDR Termination Voltage by SUSB#

VGFX_CORE	1.05V power rail for UMA by SUSB#
PEG_1.8VS	1.8V switched power rail for NB9x by SUSB#
PEG_PEX_1.1VS	1.1V switched power rail for NB9x by SUSB#
PEG_NVDD	Variable switched power rail for NB9x by SUSB#

Vcore_CPU	Core switched power rail for CPU
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Part Naming Conventions





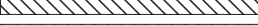


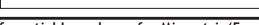
C = Capacitor	Q = Transistor
CN = Connector	R = Resistor
D = Diode	RP = Resistor Pack
F = Fuse	U = Arbitrary Logic Device
L = Inductor	Y = Crystal and Osc

Name Suffix

#	= Active Low signal
NU	= No Stuff

5. Board Stack up Description

PCB Layers

Layer 1		Component Side, Microstrip signal Layer
Layer 2		Ground Plane
Layer 3		Stripline Layer
Layer 4		Power Plane
Layer 5		Stripline Layer
Layer 6		Stripline Layer
Layer 7		Ground Plane
Layer 8		Solder Side, Microstrip signal Layer

	Differential Impedance for Microstrip(5-mils)	Differential Impedance for Stripline(4-mils)
Host Clock	95 ohm +/- 20%	100 ohm +/- 20%
PCI-E Clock	95 ohm +/- 20%	100 ohm +/- 20%
DDR2 CLK	70 ohm +/- 20%	70 ohm +/- 20%
DDR2 Strobe	85 ohm +/- 20%	90 ohm +/- 20%
DMI Bus	95 ohm +/- 20%	100 ohm +/- 20%
PCIE Bus	95 ohm +/- 20%	100 ohm +/- 20%
SDVO	95 ohm +/- 20%	100 ohm +/- 20%
SATA	95 ohm +/- 20%	100 ohm +/- 20%
USB	90 ohm +/- 20%	95 ohm +/- 20%
LVDS		100 ohm +/- 20%
Lan	95 ohm +/- 20%	100 ohm +/- 20%

Power Rail	Destination	Voltage	S0 Current
VCC_CORE	Penryn HFM: LFM:	1.3319V-1.4375V-1.4591V 0.9221V-0.9625V-0.9739V	36A
1.05VS	Penryn: AGTL+ termination Cantiga GM: Core Cantiga GM: PCIE Cantiga GM:Core+IMEL+HSIO Cantiga GM:VCC_GMCH Cantiga GM:VCCA_SM_CK and NCTF Cantiga GM:VCC_DMI Cantiga GM:VCCA_SM Cantiga GM:VTT ICH9M:VCC1_05 ICH9M:DMI ICH9M:CPU_IO	1V-1.05V-1.10V 0.997V-1.05V-1.102V 0.9975V-1.05V-1.1025V 0.9975V-1.05V-1.1025V 0.997V-1.05V-1.102V 0.997V-1.05V-1.102V 0.997V-1.05V-1.102V 0.997V-1.05V-1.102V 0.997V-1.05V-1.102V 0.997V-1.05V-1.102V 0.997V-1.05V-1.102V	4.5A 8.7A 1.78A 2.898A 10.154A 37.95mA 456mA 747.5mA 852mA 1.634A 48mA 2mA
1.5VS	Penryn PLL Cantiga GM: QDAC Cantiga GM: LVDS Cantiga GM: TVDAC Cantiga GM: Various PLLS analog supply Cantiga GM: VCC_SM_CK Cantiga GM: VCC_SM ICH9M:PCIE_ICH ICH9M:SATA_ICH ICH9M:VCC_GLAN Mini Card: Express Card:	1.425V-1.5V-1.575V 1.425V-1.5V-1.575V 1.71V-1.8V-1.89V 1.425V-1.5V-1.575V 1.425V-1.5V-1.575V 1.425V-1.5V-1.575V 1.425V-1.5V-1.575V 1.425V-1.5V-1.575V 1.425V-1.5V-1.575V 1.425V-1.5V-1.575V 1.425V-1.5V-1.575V 1.425V-1.5V-1.575V 1.425V-1.5V-1.575V	130mA 0.5mA 60.31mA 35mA 485mA 149.5mA 3.1625A 646mA 1.342A 80mA 650mA
1.5V	Cantiga GM: DDRIII System Memory	1.425V-1.5V-1.575V	3.1A(800M) 4.1A(1067M)
0.75VDDT	DDRIII:DDRIII Terminator:	0.7125V-0.75V-0.7875V	1.0A
3VS	Cantiga GM: HV CMOS Cantiga GM: VCCS_TVDDAC ICH9M:VCC3_3 ICH9M:VCCGLAN3_3 Thermal Sensor: Mini Card: UMTS Express Card: CLK Generator: ICS9LPRS397BKLFT Mini Card: WirelessLan Bluetooth: Super I/O: IT8305E Azalia Codec: ALC262 Azalia MDC:	3.135V-3.3V-3.465V 3.135V-3.3V-3.465V 3.135V-3.3V-3.465V 3.135V-3.3V-3.465V 3.0V-3.3V-3.6V 3.135V-3.3V-3.465V 3.135V-3.3V-3.465V 3.0V-3.3V-3.6V 3.135V-3.3V-3.465V 3.135V-3.3V-3.465V	105.3mA 78mA 308mA 1mA 5mA 1.3A 500mA
1.8VS	DVI	3.0V-3.3V-3.6V	120mA
3VA	ICH9M: RTC ICH9M:VCCSUS3_3 ICH9M:VCCCL3_3 ICH9M:VCCLAN3_3 LCD: Lan:82567LM Azalia MDC: Flash ROM: BIOS	2V-3.3V-3.465V 3.135V-3.3V-3.465V 3.135V-3.3V-3.465V 3.135V-3.3V-3.465V 3.0V-3.3V-3.6V 1.0V and 1.8V 3.0V-3.3V-3.6V	6uA 212mA 73mA 78mA 2A Each 1A
5VS	Cardreader: GL827 Azalia Codec: ALC262 HDD: SATA ODD: SATA Audio AMP: G1432 Inverter: WebCam	3.0V-3.3V-3.6V 3.0V-3.3V-3.6V 4.75V-5.0V-5.25V 4.75V-5.0V-5.25V 4.75V-5.0V-5.25V	Max: 1.5A ; R/W: 460mA ; STDBY: 70mA Max: 1.5A ; R/W: 900mA ; STDBY: 45mA
5VA	USB: x 2 ports USB and eSATA	5VA 5VA	1A 1.5A 2A
5VLA	Control Power		
3VLA	EC: ITE8512E	3.0V-3.3V-3.6V	300mA

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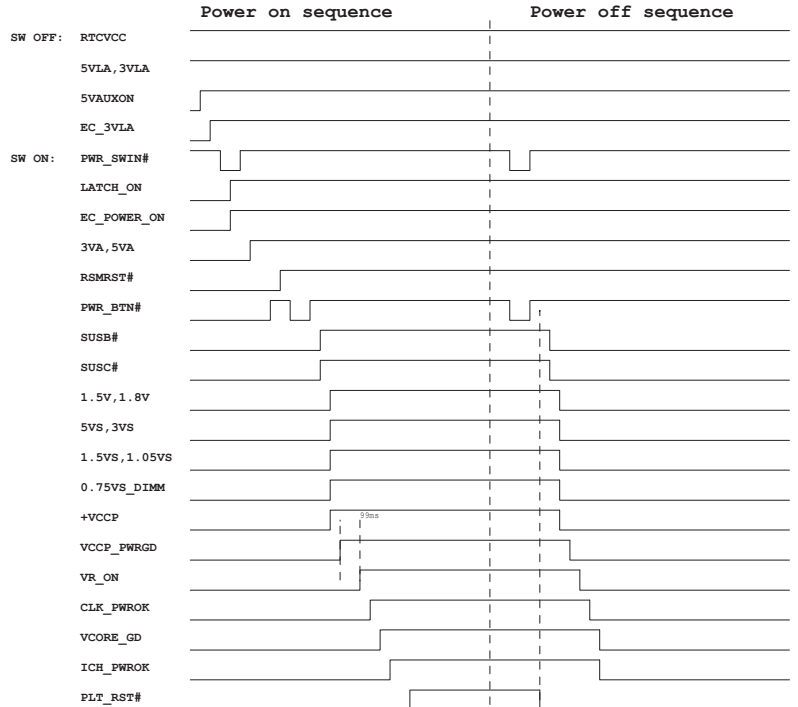
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ACER BAP10/BXP10			
Authorizations			
SIZE	CODE	DOC NUMBER	REV
Custom	CS	CS-131	A01
SHEET			5 of 45

6.Schematic modify Item and History :

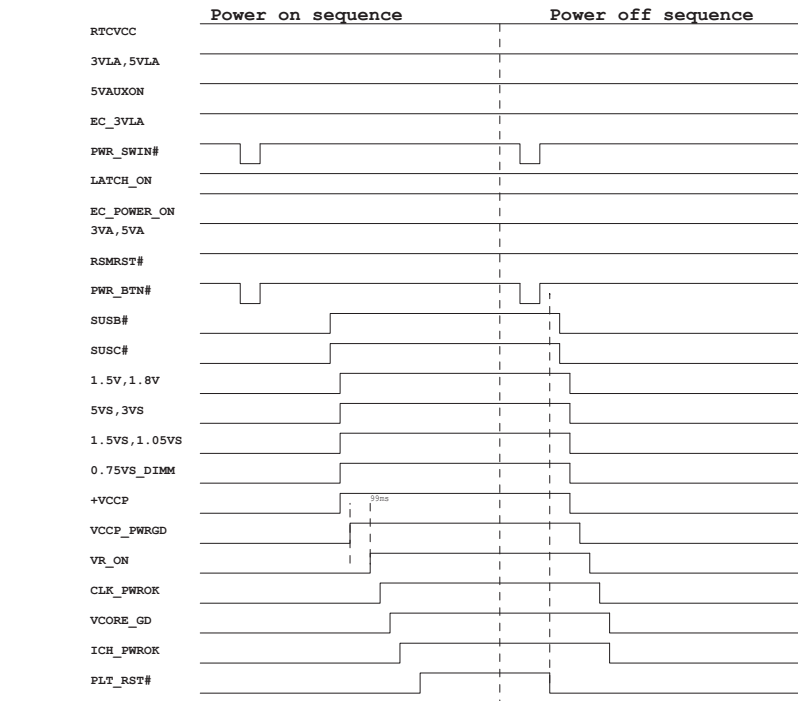
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TITLE			
ACER_BAP10/BXP10			
schematics modify			
SIZE	CODE	DOC NUMBER	REV
Custom	CS	CS-131	AX1
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8.SYSTEM POWER SEQUENCE :

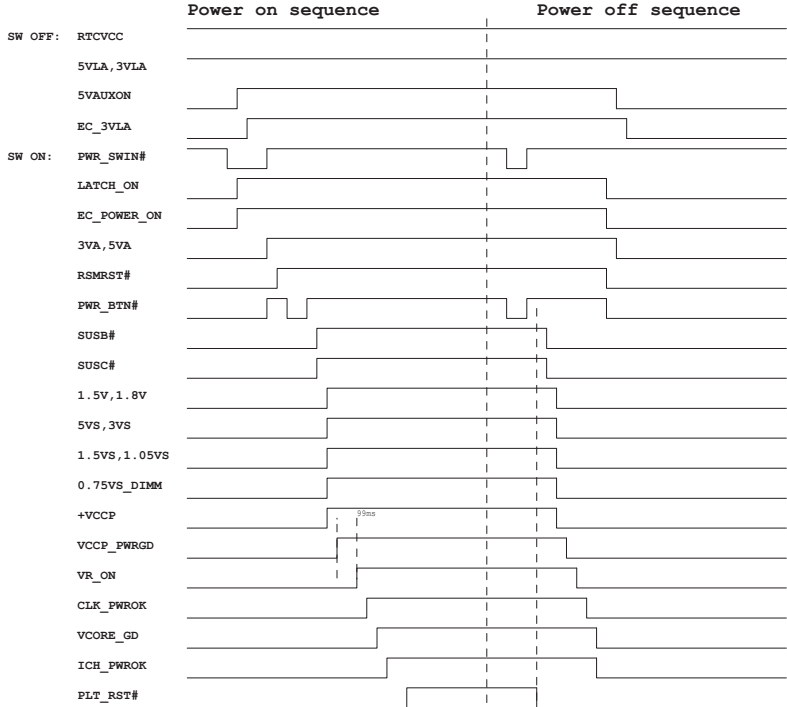
Power on/off sequence AC insert(First)



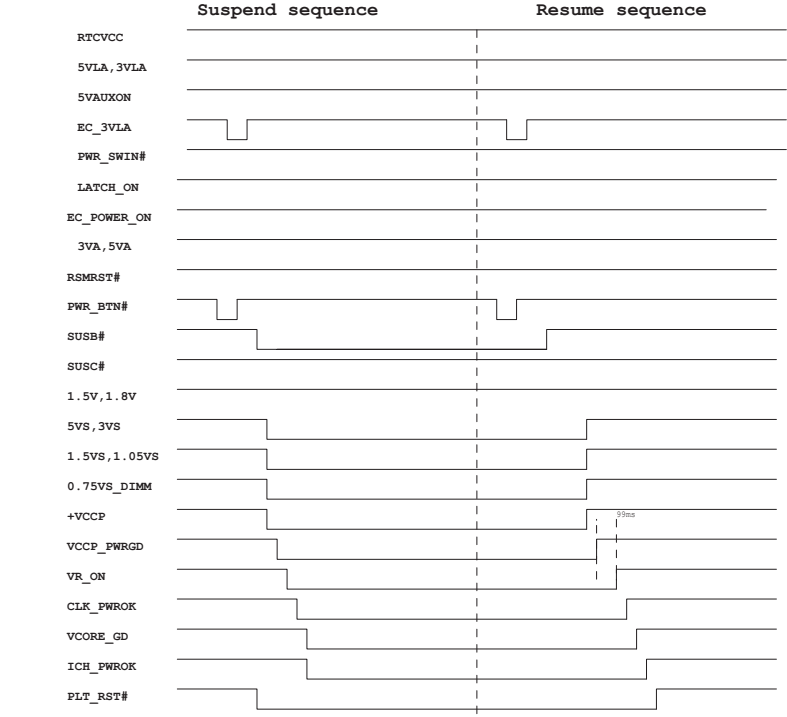
Power on/off sequence AC insert(S4)



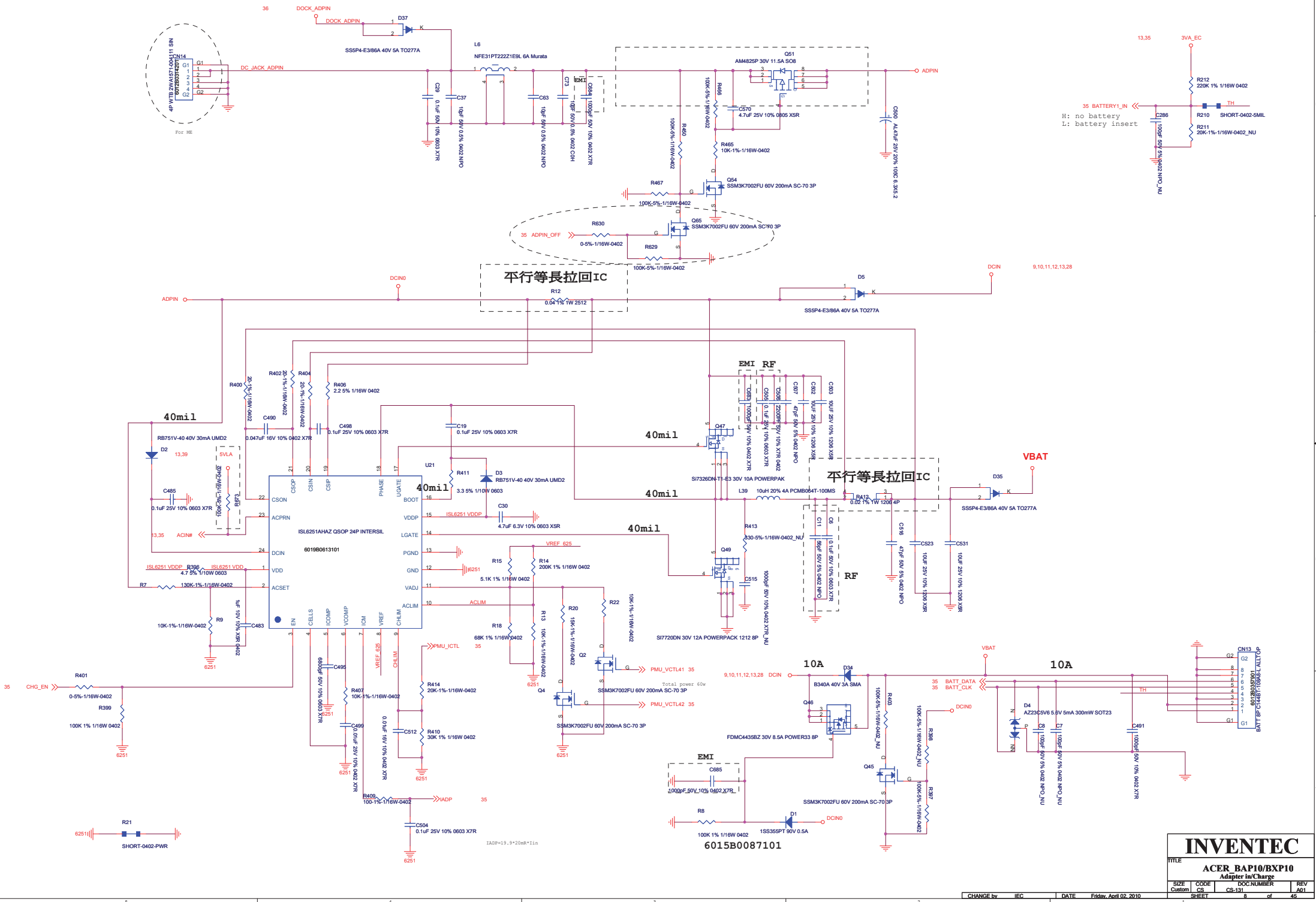
Battery only Power on/off sequence



Suspend resume sequence(S3)



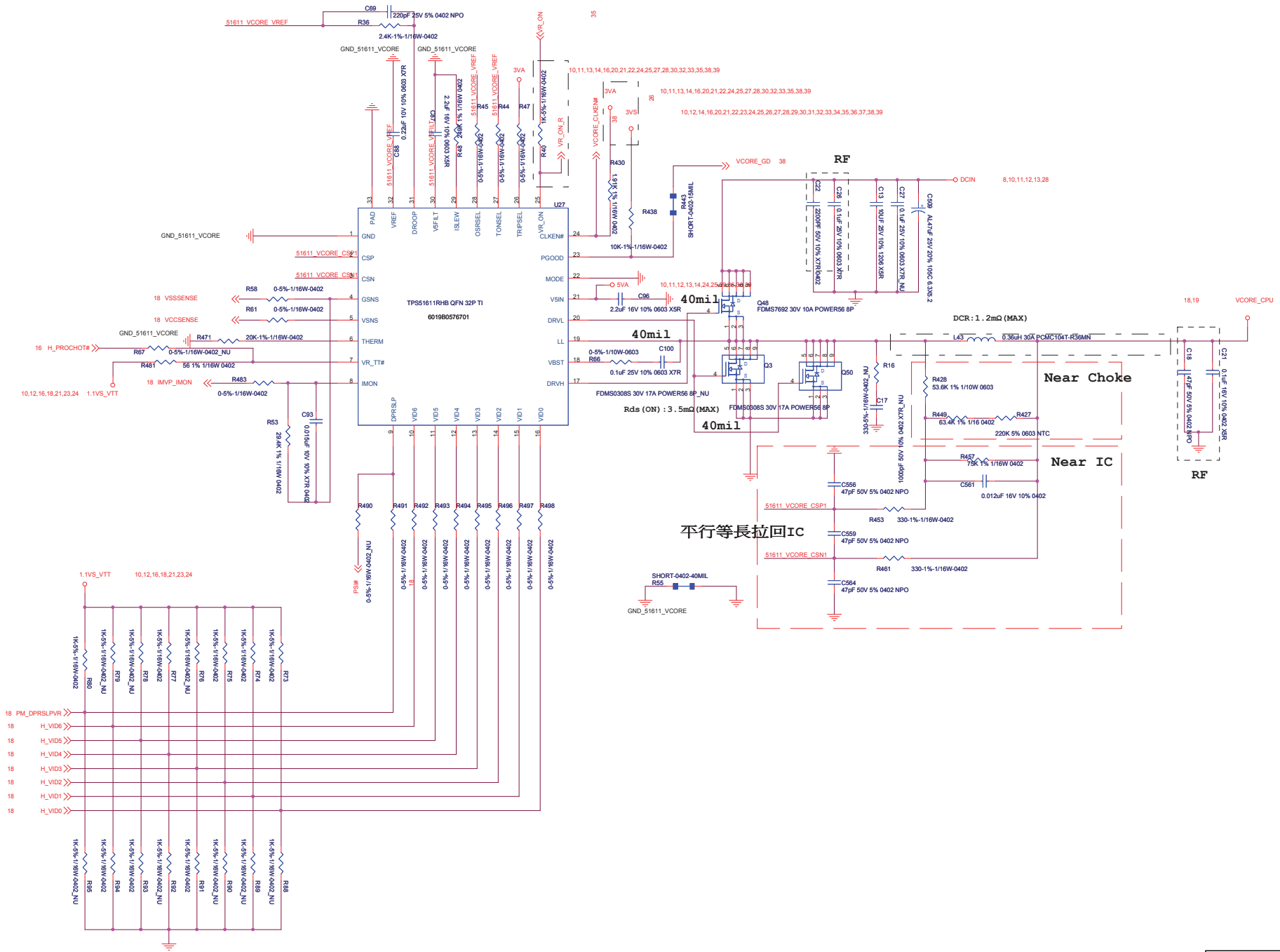
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TITLE ACER BAP10/BXP10				
Timing Diagram				
SIZE	CODE	DOC NUMBER	REV	
Custom	CS	CS-131	A01	
CHANGE by IEC			DATE	Friday, April 02, 2010
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TITLE			
ACER BAP10/BXP10			
Adapter in-Charge			
SIZE	CODE	DC NUMBER	REV
Custom	CS	CS-131	A01
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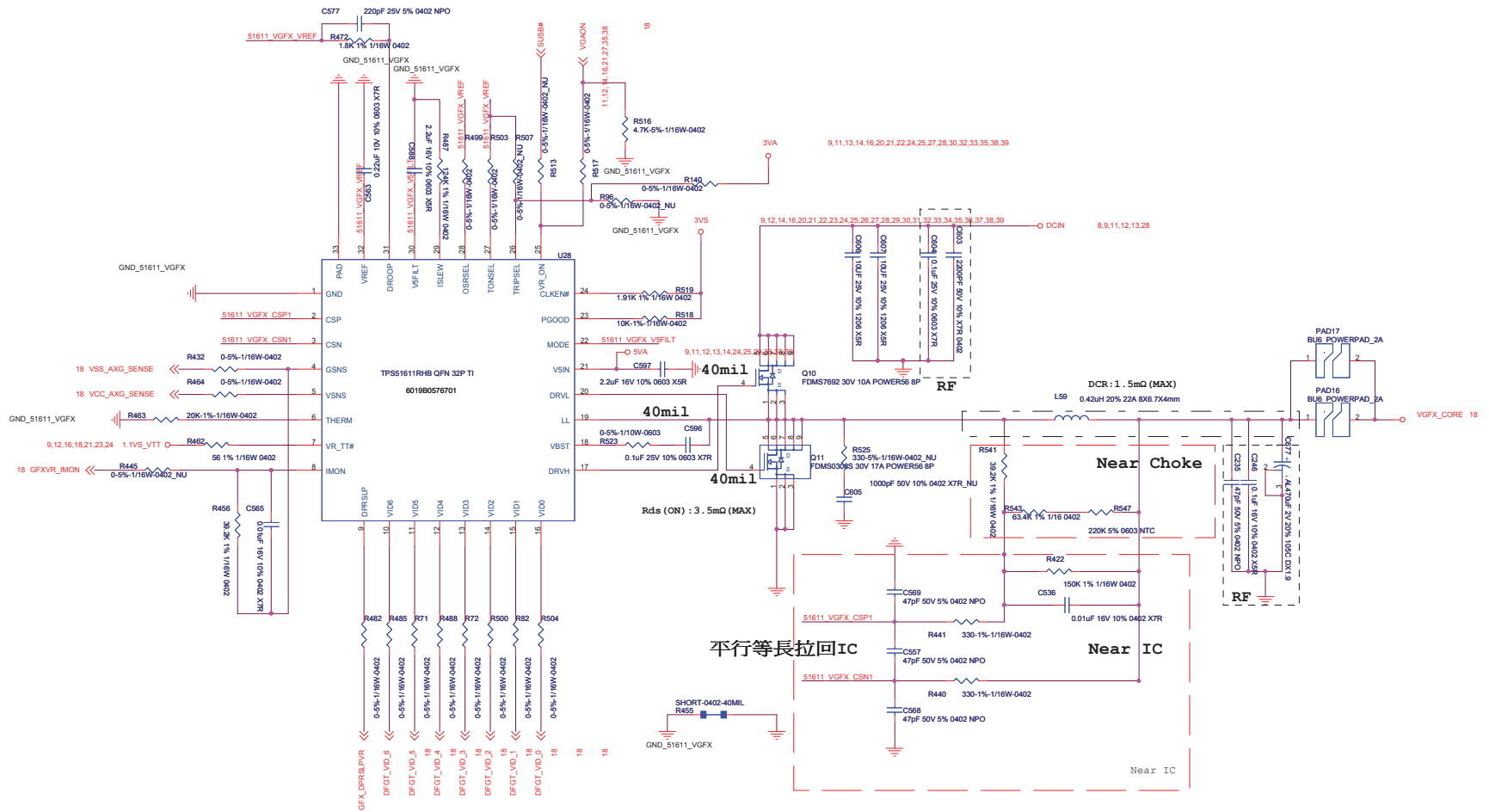
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Near Choke

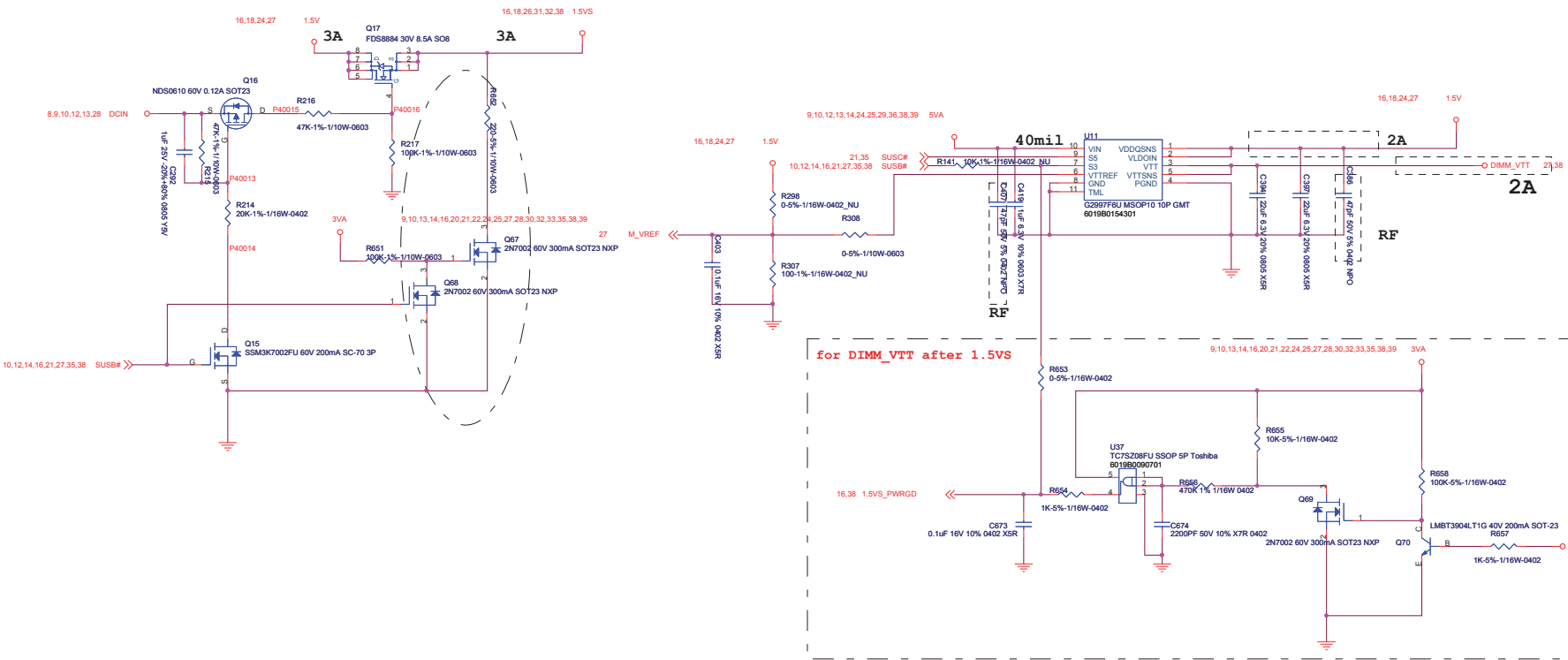
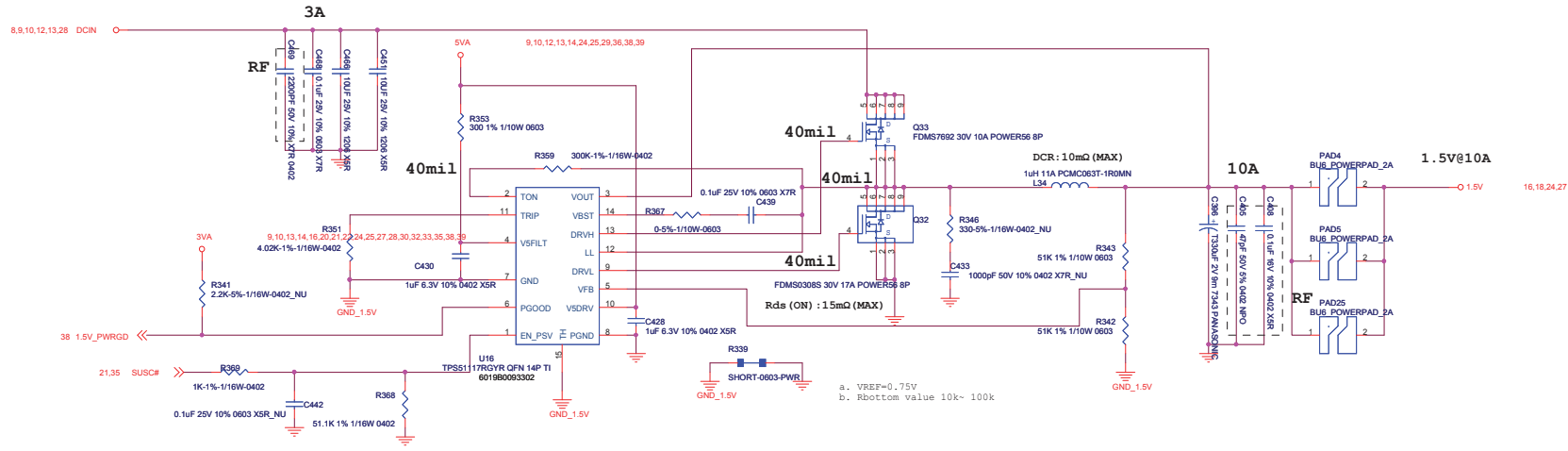
Near IC

RF

INVENTEC			
TITLE ACER BAPI0/BXP10			
CPU core Power			
SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01
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DDR POWER



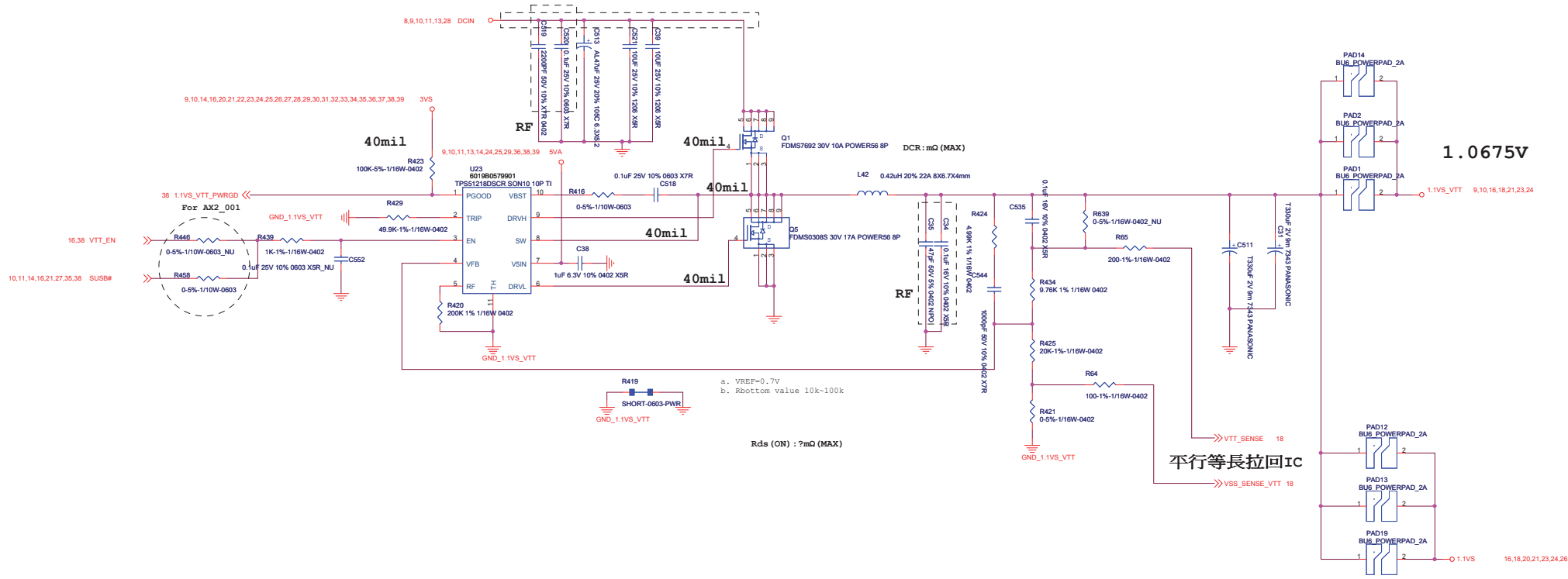
Control by 1.5VS

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TITLE: **ACER BAP10/BXP10 DDR PWR**

SIZE	CODE	DOC NUMBER	REV
Custom	CS	CS-131	A01

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1.0675V

a. VREF=0.7V
b. Bottom value 10k-100k

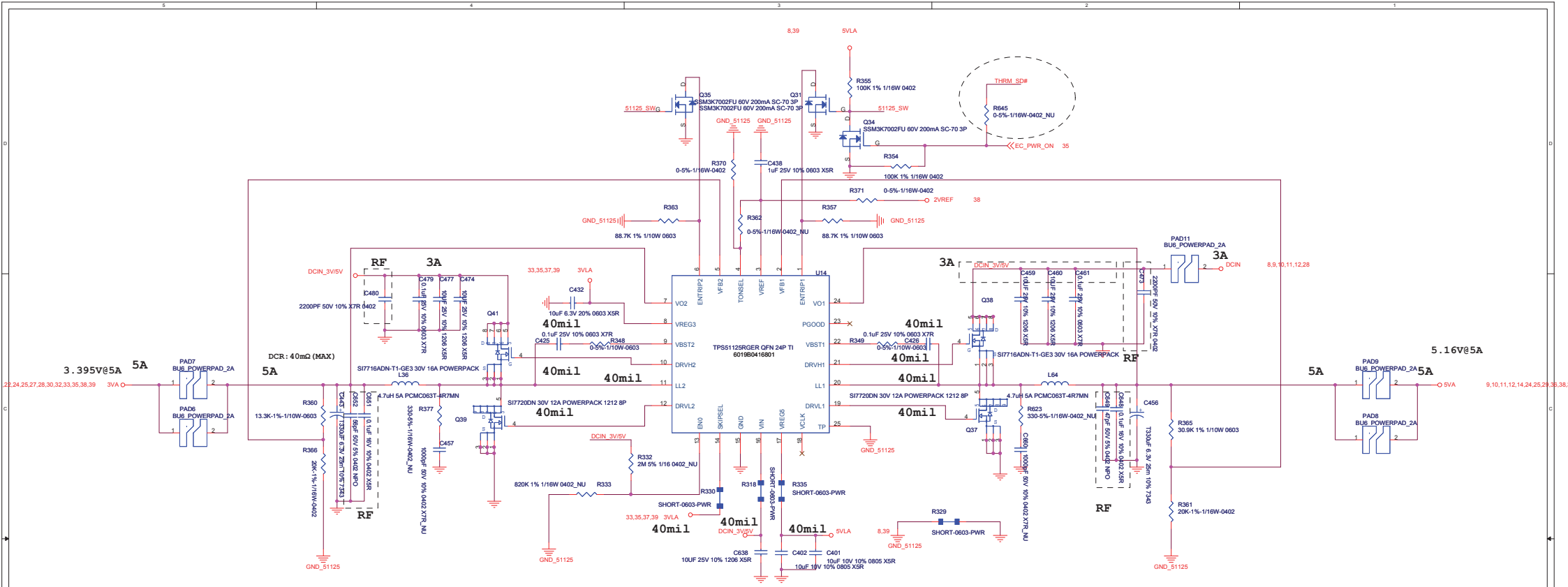
Rds (ON) : ?mΩ (MAX)

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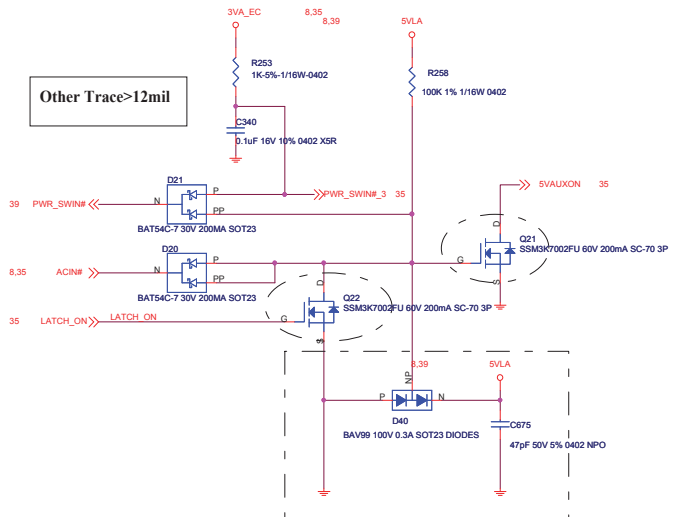
INVENTEC

TITLE
ACER_BAP10/BXP10
1.IVS_VTT1.IVS

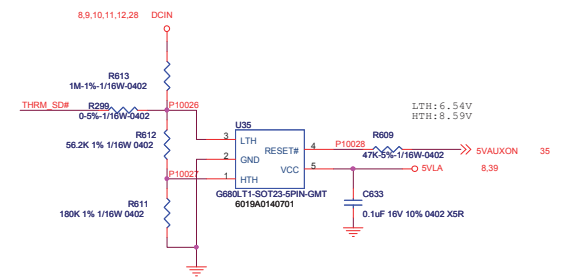
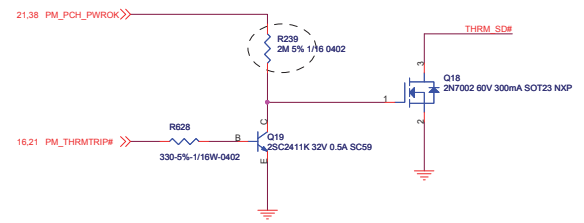
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Custom	CS	CS-131	A01



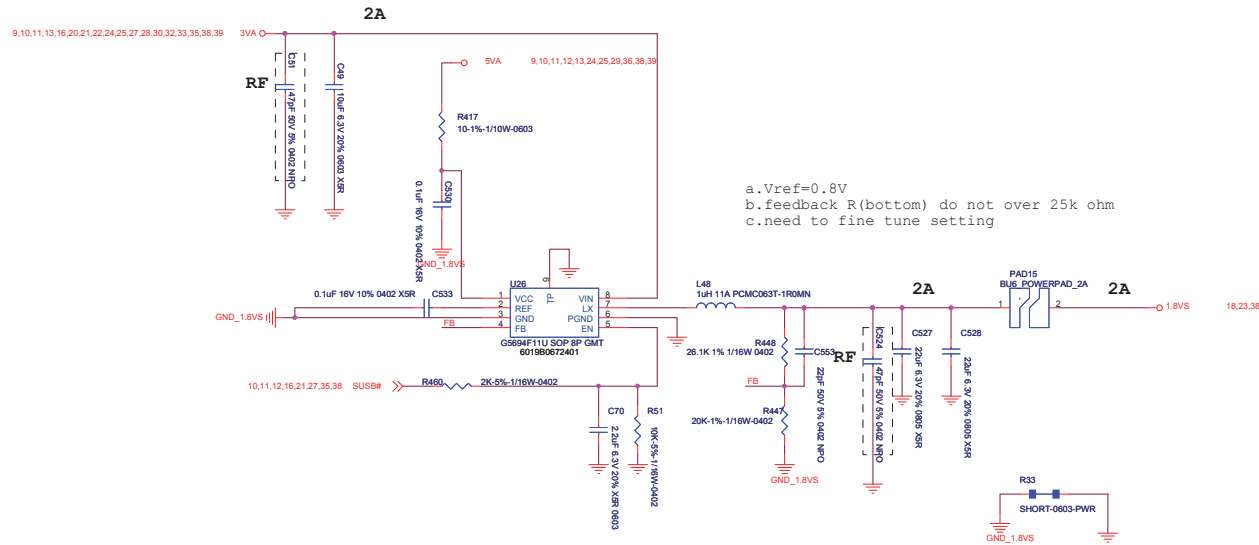
Other Trace>12mil



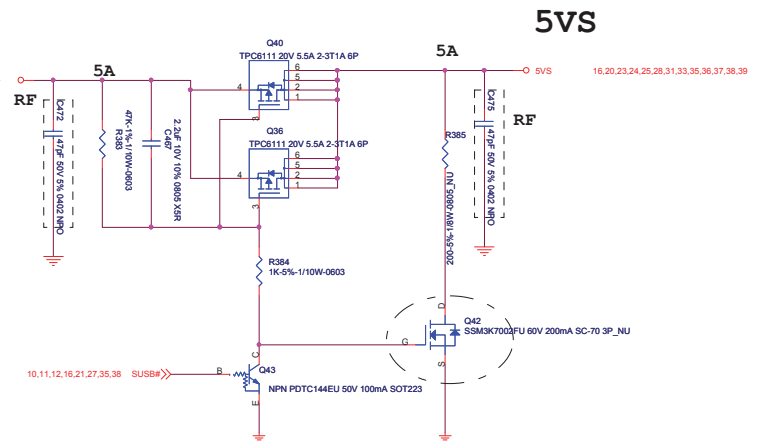
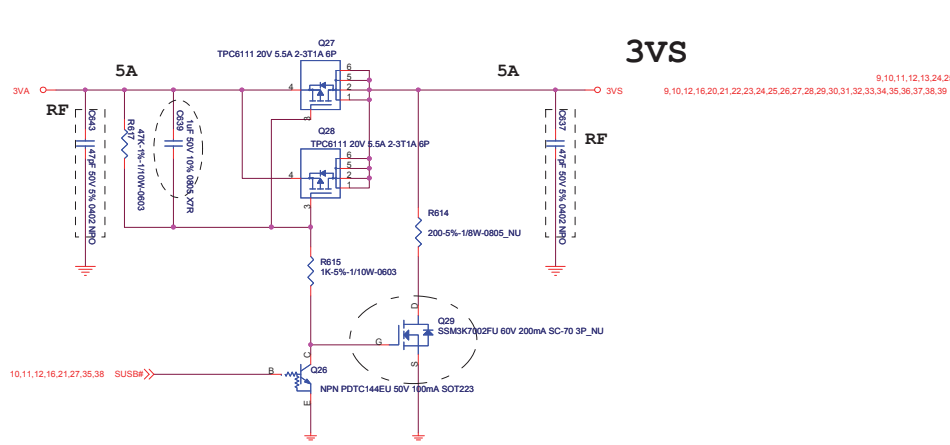
Temperature Security



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 TITLE: ACER_BAP10/BXP10
 5V_A5VLA3V_A3VLA
 SIZE CODE REV
 Custom CS CS-131 A01
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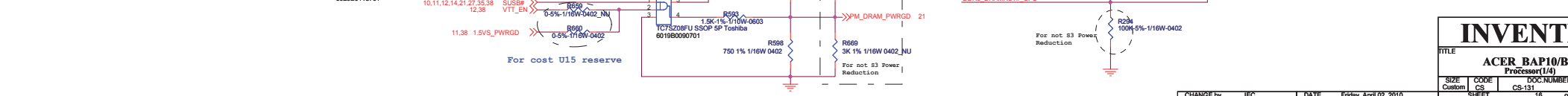
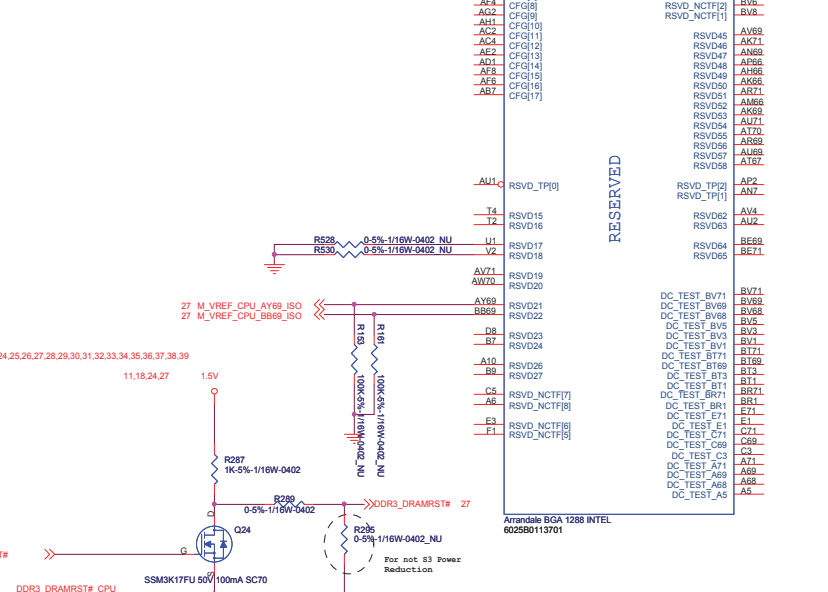
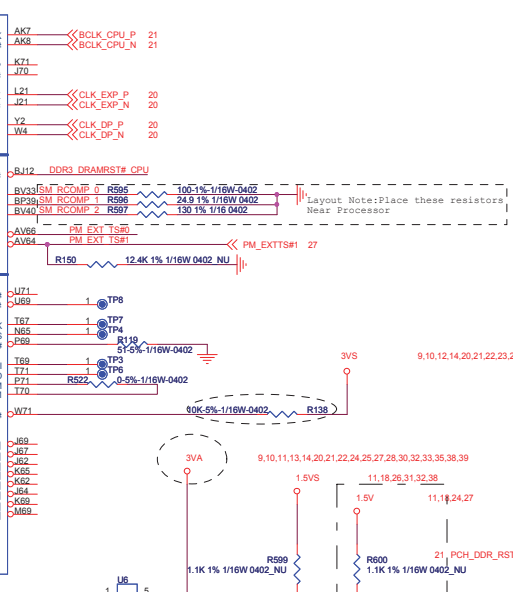
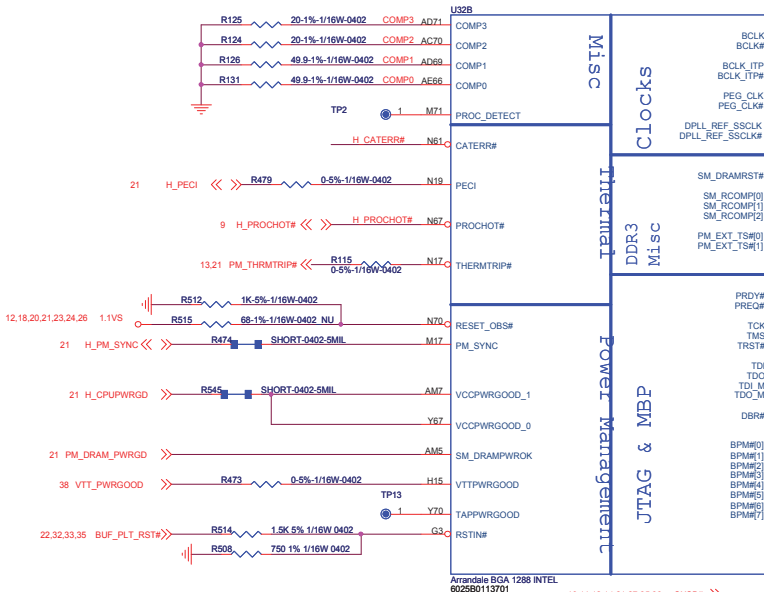
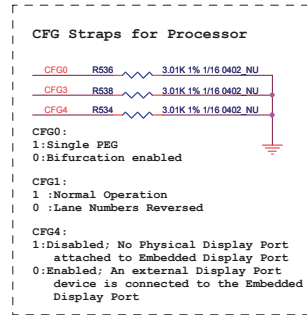
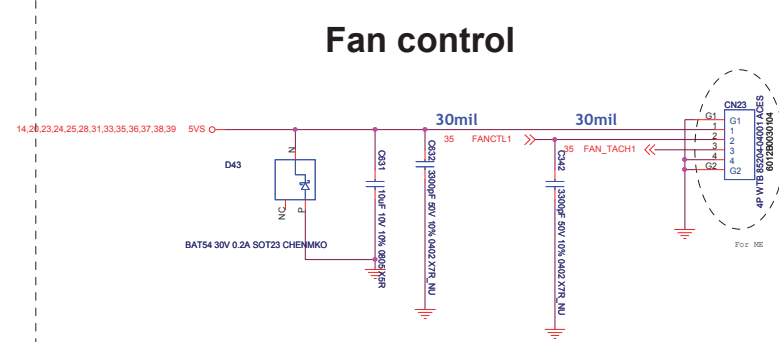
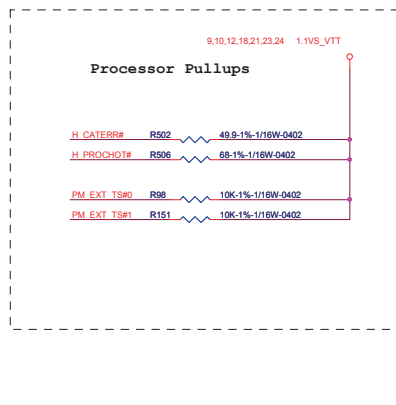
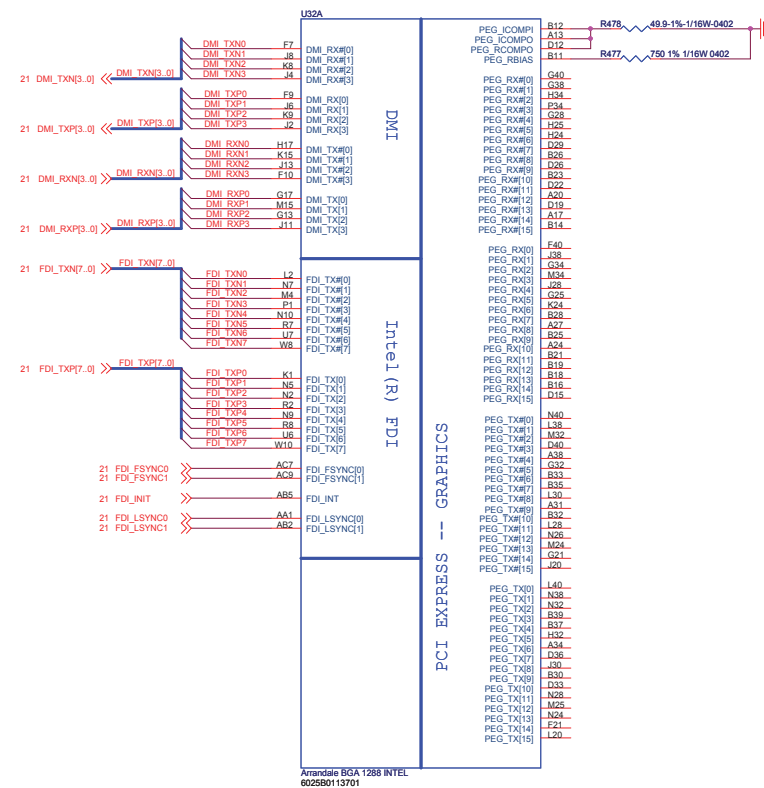
a. Vref=0.8V
 b. feedback R(bottom) do not over 25k ohm
 c. need to fine tune setting



INVENTEC			
TITLE: ACER BAP10/BXP10			
3VS/5VS/1.8VS/3VM			
SIZE	CODE	IPC NUMBER	REV
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Title	
ACER_BAP10IBXP10	
Size	Document Number
Customer/Doc#	Rev
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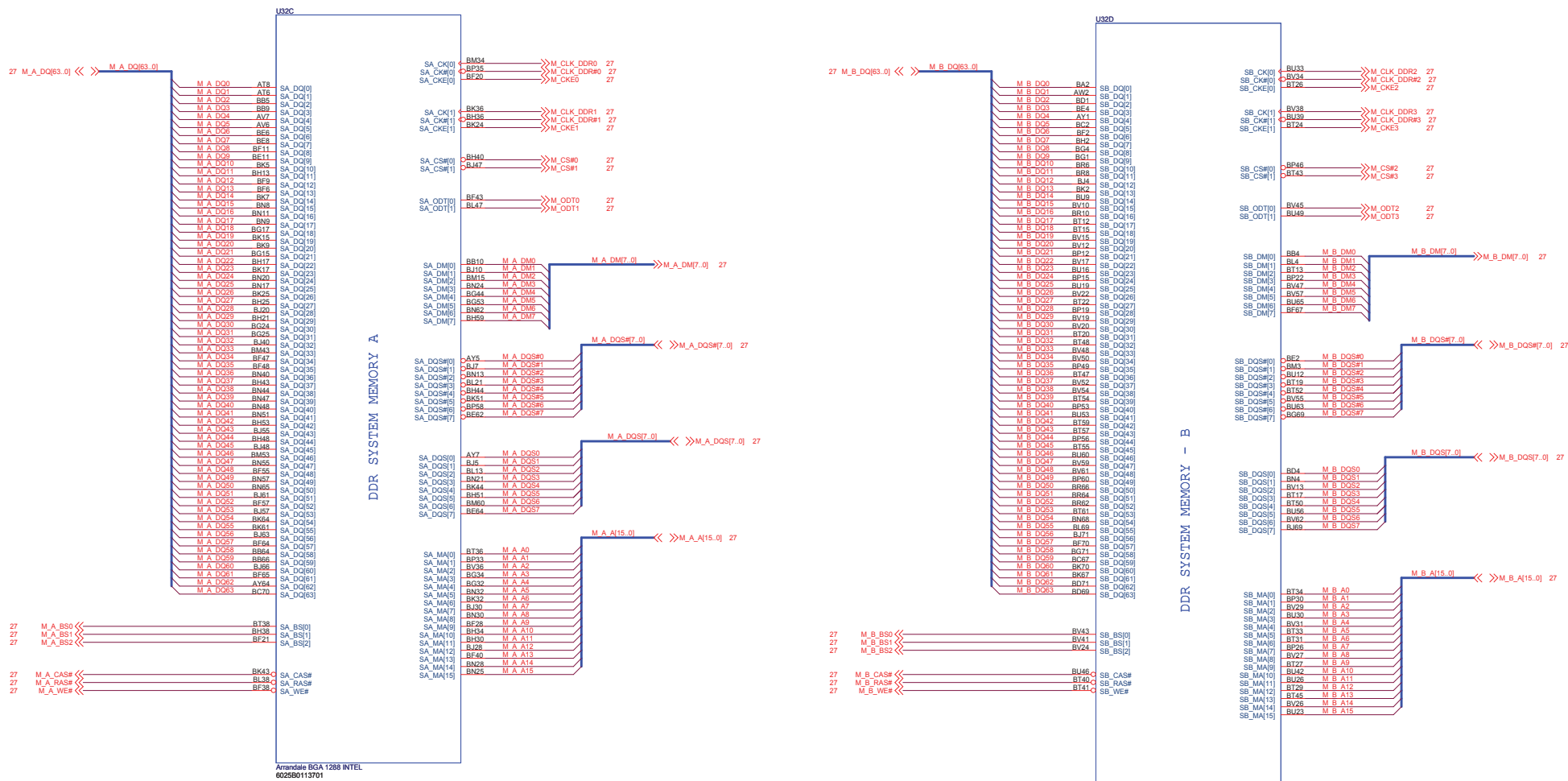
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TITLE: **ACER BAP10/BXP10**
 Processor (1/4)

SIZE	CODE	DOC NUMBER	REV
Custom	CS	CS-131	A01

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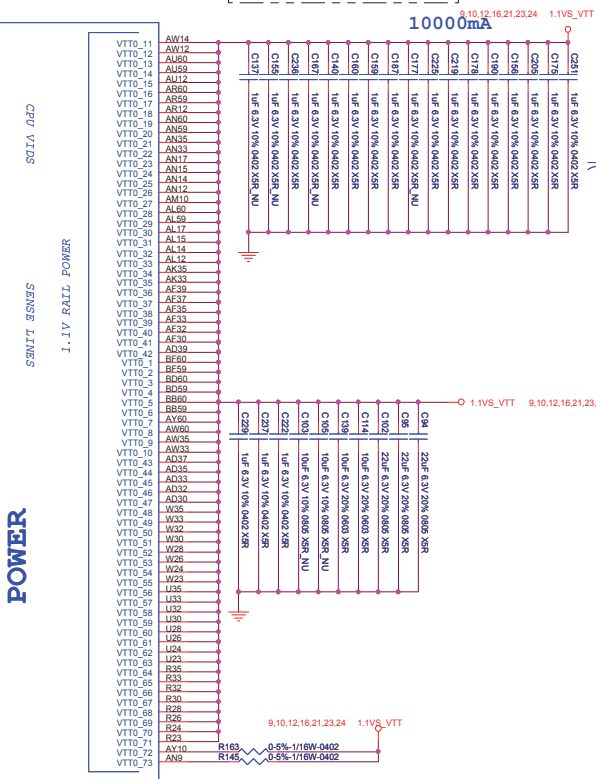
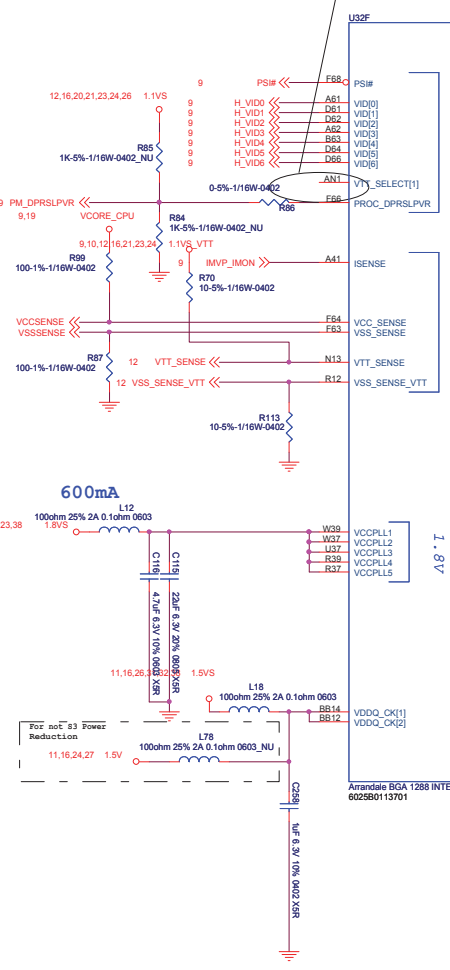
Arrandale BGA 1288 INTEL
602580113701

Arrandale BGA 1288 INTEL
602580113701

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SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01
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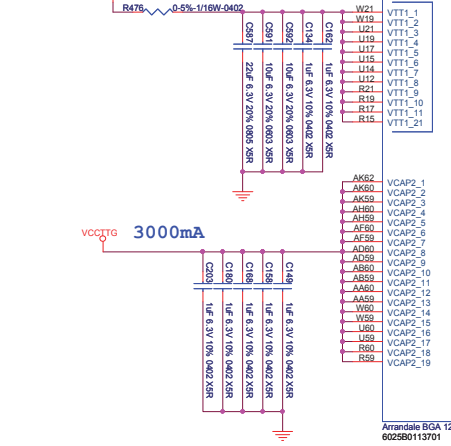
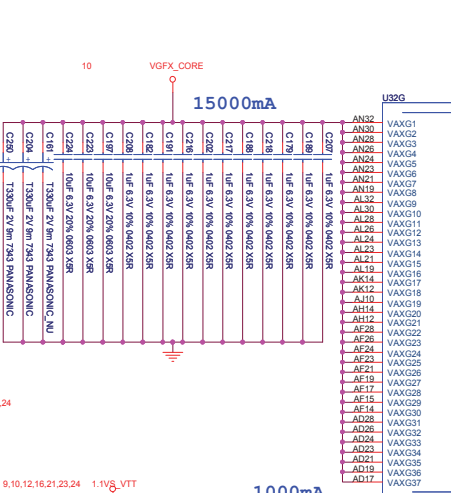
H_VTTVID1 = low,
1.1V-----Clarksfield
H_VTTVID1 = high,
1.05V-----Auburndale

Layout note: Place 2 nu caps on
TOP and 7 caps on BOTTOM.



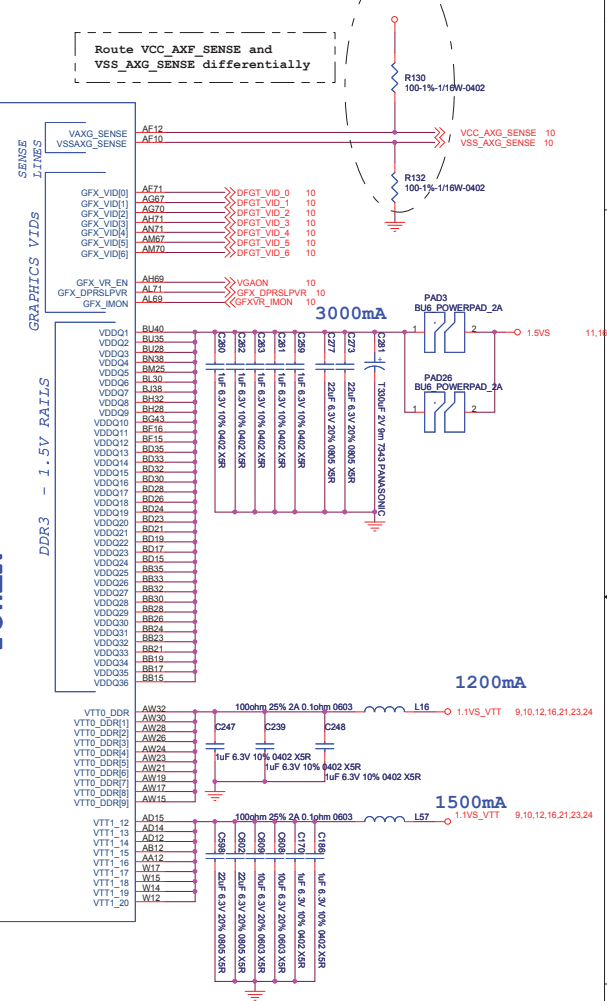
POWER

1.8V



POWER

DDR3 - 1.5V RAILS



Route VCC_AXF_SENSE and
VSS_AXF_SENSE differentially

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TITLE
ACER BAP10/BXP10
Processor (34)

SIZE Custom	CODE CS	DOC NUMBER CS-131	REV AX1
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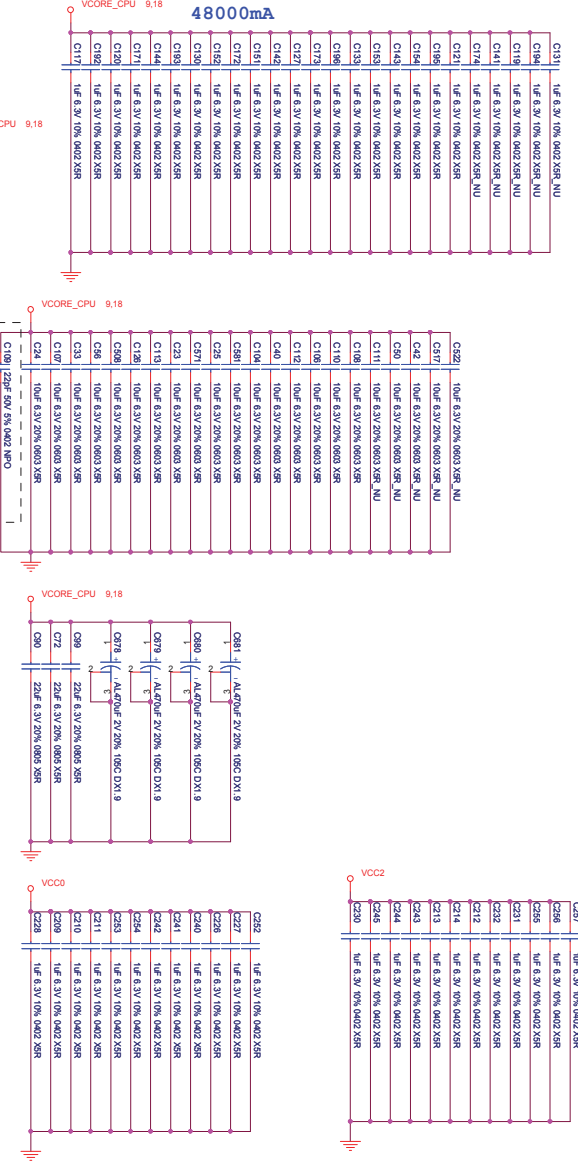
U321	U322	U323	U324	U325	U326
BU62	VSS1	AV24	AH53	VSS202	A40
BU68	VSS1	AV22	AH51	VSS203	A36
BU55	VSS2	AV18	AH50	VSS204	A29
BU51	VSS4	AV19	AH48	VSS205	A26
BU48	VSS5	AV15	AH46	VSS206	A25
BU44	VSS6	AV14	AH42	VSS207	A19
BU39	VSS7	AV12	AH40	VSS208	A15
BU32	VSS7	AV8	AH39	VSS209	A12
BU28	VSS8	AV7	AH38	VSS210	A8
BU25	VSS9	AV4	AH37	VSS211	AB
BU21	VSS10	AH67	AH35	VSS212	BB5
BU18	VSS10	AH33	AH34	VSS213	BBS
BU11	VSS12	AH29	AH32	VSS214	BBS1
BU7	VSS13	AH25	AH28	VSS215	BS1
BN54	VSS14	AH21	AH26	VSS216	B48
BN6	VSS16	AH14	AH24	VSS217	A59
BN6	VSS17	AH11	AH23	VSS218	A50
BN70	VSS18	AH7	AH22	VSS219	A55
BM51	VSS18	AH2	AH19	VSS220	A52
BM44	VSS20	AH1	AH17	VSS221	A48
BM2	VSS21	AH15	AH15	VSS222	A46
BM24	VSS21	AH8	AH12	VSS223	A47
BM17	VSS23	AH57	AH4	VSS224	AA15
BL2	VSS24	AH3	AG9	VSS225	AA14
BL5	VSS25	AH5	AG8	VSS226	AA4
BL40	VSS26	AH2	AG6	VSS227	W69
BL28	VSS28	AH29	AG5	VSS228	W62
RG63	VSS29	AH30	AF1	VSS229	W60
RG61	VSS30	U33	AF2	VSS230	W57
RG60	VSS31	U32	AF1	VSS231	W53
BK34	VSS32	U31	AG4	VSS232	W46
BK33	VSS33	U30	AG3	VSS233	W42
BK32	VSS34	U29	AG2	VSS234	W41
BK31	VSS35	U28	AG1	VSS235	W40
BK29	VSS36	U27	AG	VSS236	W39
BK27	VSS37	U26	AH2	VSS237	W38
BK26	VSS38	U25	AH1	VSS238	W37
BK25	VSS39	U24	AC7	VSS239	W36
BK24	VSS40	U23	AC6	VSS240	W35
BK23	VSS41	U22	AC5	VSS241	W34
BK22	VSS42	U21	AC4	VSS242	W33
BK21	VSS43	U20	AC3	VSS243	W32
BK20	VSS44	U19	AC2	VSS244	W31
BK19	VSS45	U18	AC1	VSS245	W30
BK18	VSS46	U17	AC	VSS246	W29
BK17	VSS47	U16	AC	VSS247	W28
BK16	VSS48	U15	AC	VSS248	W27
BK15	VSS49	U14	AC	VSS249	W26
BK14	VSS50	U13	AC	VSS250	W25
BK13	VSS51	U12	AC	VSS251	W24
BK12	VSS52	U11	AC	VSS252	W23
BK11	VSS53	U10	AC	VSS253	W22
BK10	VSS54	U9	AC	VSS254	W21
BK9	VSS55	U8	AC	VSS255	W20
BK8	VSS56	U7	AC	VSS256	W19
BK7	VSS57	U6	AC	VSS257	W18
BK6	VSS58	U5	AC	VSS258	W17
BK5	VSS59	U4	AC	VSS259	W16
BK4	VSS60	U3	AC	VSS260	W15
BK3	VSS61	U2	AC	VSS261	W14
BK2	VSS62	U1	AC	VSS262	W13
BD71	VSS63	AV18	AH28	VSS263	N21
BD62	VSS64	AV14	AH26	VSS264	N15
BD57	VSS65	AV11	AH23	VSS265	N9
BD56	VSS66	AV8	AH22	VSS266	M63
BD55	VSS67	AV7	AH21	VSS267	M42
BD54	VSS68	AV4	AH19	VSS268	M36
BD53	VSS69	AV2	AH17	VSS269	M1
BD52	VSS70	AV1	AH15	VSS270	L70
BD51	VSS71	AV0	AH15	VSS271	L57
BD50	VSS72	AV-1	AH12	VSS272	L48
BD49	VSS73	AV-2	AH12	VSS273	L39
BD48	VSS74	AV-3	AH9	VSS274	L13
BD47	VSS75	AV-4	AH7	VSS275	K5
BD46	VSS76	AV-5	AH4	VSS276	K4
BD45	VSS77	AV-6	AH2	VSS277	K3
BD44	VSS78	AV-7	AH1	VSS278	K2
BD43	VSS79	AV-8	AH0	VSS279	K1
BD42	VSS80	AV-9	AH-1	VSS280	K0
BD41	VSS81	AV-10	AH-2	VSS281	K-1
BD40	VSS82	AV-11	AH-3	VSS282	K-2
BD39	VSS83	AV-12	AH-4	VSS283	K-3
BD38	VSS84	AV-13	AH-5	VSS284	K-4
BD37	VSS85	AV-14	AH-6	VSS285	K-5
BD36	VSS86	AV-15	AH-7	VSS286	K-6
BD35	VSS87	AV-16	AH-8	VSS287	K-7
BD34	VSS88	AV-17	AH-9	VSS288	K-8
BD33	VSS89	AV-18	AH-10	VSS289	K-9
BD32	VSS90	AV-19	AH-11	VSS290	K-10
BD31	VSS91	AV-20	AH-12	VSS291	K-11
BD30	VSS92	AV-21	AH-13	VSS292	K-12
BD29	VSS93	AV-22	AH-14	VSS293	K-13
BD28	VSS94	AV-23	AH-15	VSS294	K-14
BD27	VSS95	AV-24	AH-16	VSS295	K-15
BD26	VSS96	AV-25	AH-17	VSS296	K-16
BD25	VSS97	AV-26	AH-18	VSS297	K-17
BD24	VSS98	AV-27	AH-19	VSS298	K-18
BD23	VSS99	AV-28	AH-20	VSS299	K-19
BD22	VSS100	AV-29	AH-21	VSS300	K-20
BD21	VSS101	AV-30	AH-22	VSS301	K-21
BD20	VSS102	AV-31	AH-23	VSS302	K-22
BD19	VSS103	AV-32	AH-24	VSS303	K-23
BD18	VSS104	AV-33	AH-25	VSS304	K-24
BD17	VSS105	AV-34	AH-26	VSS305	K-25
BD16	VSS106	AV-35	AH-27	VSS306	K-26
BD15	VSS107	AV-36	AH-28	VSS307	K-27
BD14	VSS108	AV-37	AH-29	VSS308	K-28
BD13	VSS109	AV-38	AH-30	VSS309	K-29
BD12	VSS110	AV-39	AH-31	VSS310	K-30
BD11	VSS111	AV-40	AH-32	VSS311	K-31
BD10	VSS112	AV-41	AH-33	VSS312	K-32
BD9	VSS113	AV-42	AH-34	VSS313	K-33
BD8	VSS114	AV-43	AH-35	VSS314	K-34
BD7	VSS115	AV-44	AH-36	VSS315	K-35
BD6	VSS116	AV-45	AH-37	VSS316	K-36
BD5	VSS117	AV-46	AH-38	VSS317	K-37
BD4	VSS118	AV-47	AH-39	VSS318	K-38
BD3	VSS119	AV-48	AH-40	VSS319	K-39
BD2	VSS120	AV-49	AH-41	VSS320	K-40
BD1	VSS121	AV-50	AH-42	VSS321	K-41

VSS

VSS

POWER

POWER



- BD55 VCAP0_1
- BD51 VCAP0_2
- BD48 VCAP0_3
- BD47 VCAP0_4
- BD46 VCAP0_5
- BD45 VCAP0_6
- BD44 VCAP0_7
- BD43 VCAP0_8
- BD42 VCAP0_9
- BD41 VCAP0_10
- BD40 VCAP0_11
- BD39 VCAP0_12
- BD38 VCAP0_13
- BD37 VCAP0_14
- BD36 VCAP0_15
- BD35 VCAP0_16
- BD34 VCAP0_17
- BD33 VCAP0_18
- BD32 VCAP0_19
- BD31 VCAP0_20
- BD30 VCAP0_21
- BD29 VCAP0_22
- BD28 VCAP0_23
- BD27 VCAP0_24
- BD26 VCAP0_25
- BD25 VCAP0_26
- BD24 VCAP0_27

VCC2

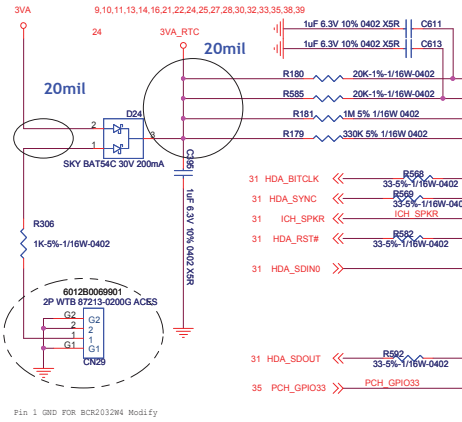
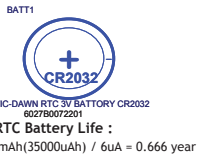
Arrandale BGA 1288 INTEL 602580113701

Arrandale BGA 1288 INTEL 602580113701

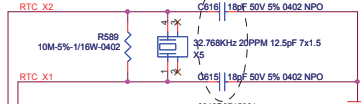
INVENTEC

ACER BAPI0/BXP10
Processor(3/4)

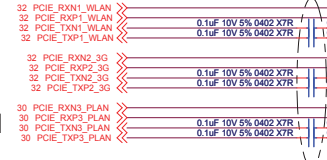
RTC Circuit



Pin 1 GND FOR BCR2032M4 Modify



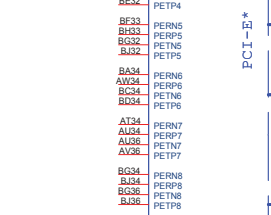
WLAN 3G CARD PCI E LAN



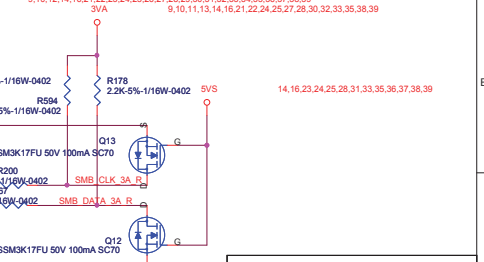
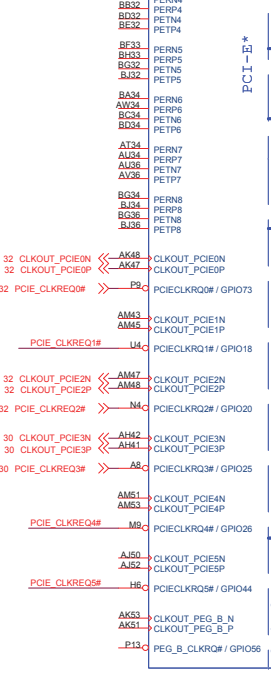
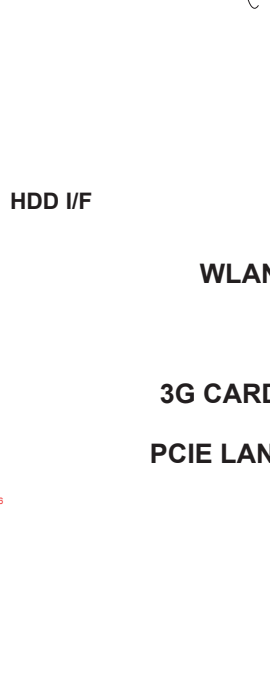
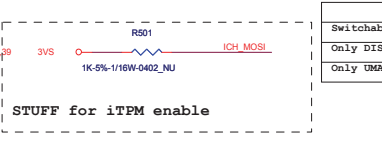
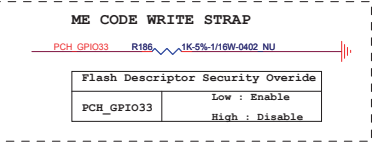
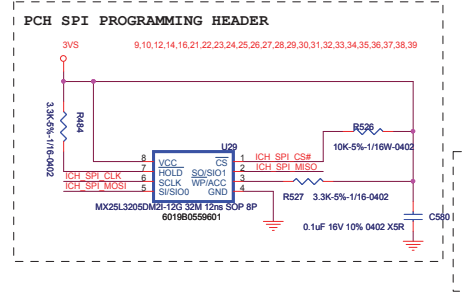
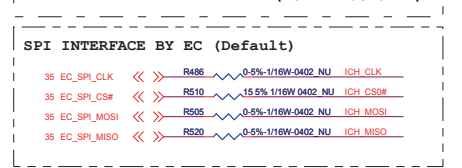
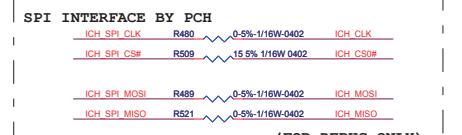
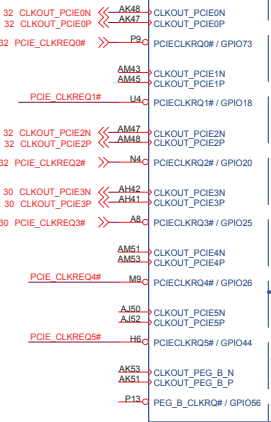
HDD I/F



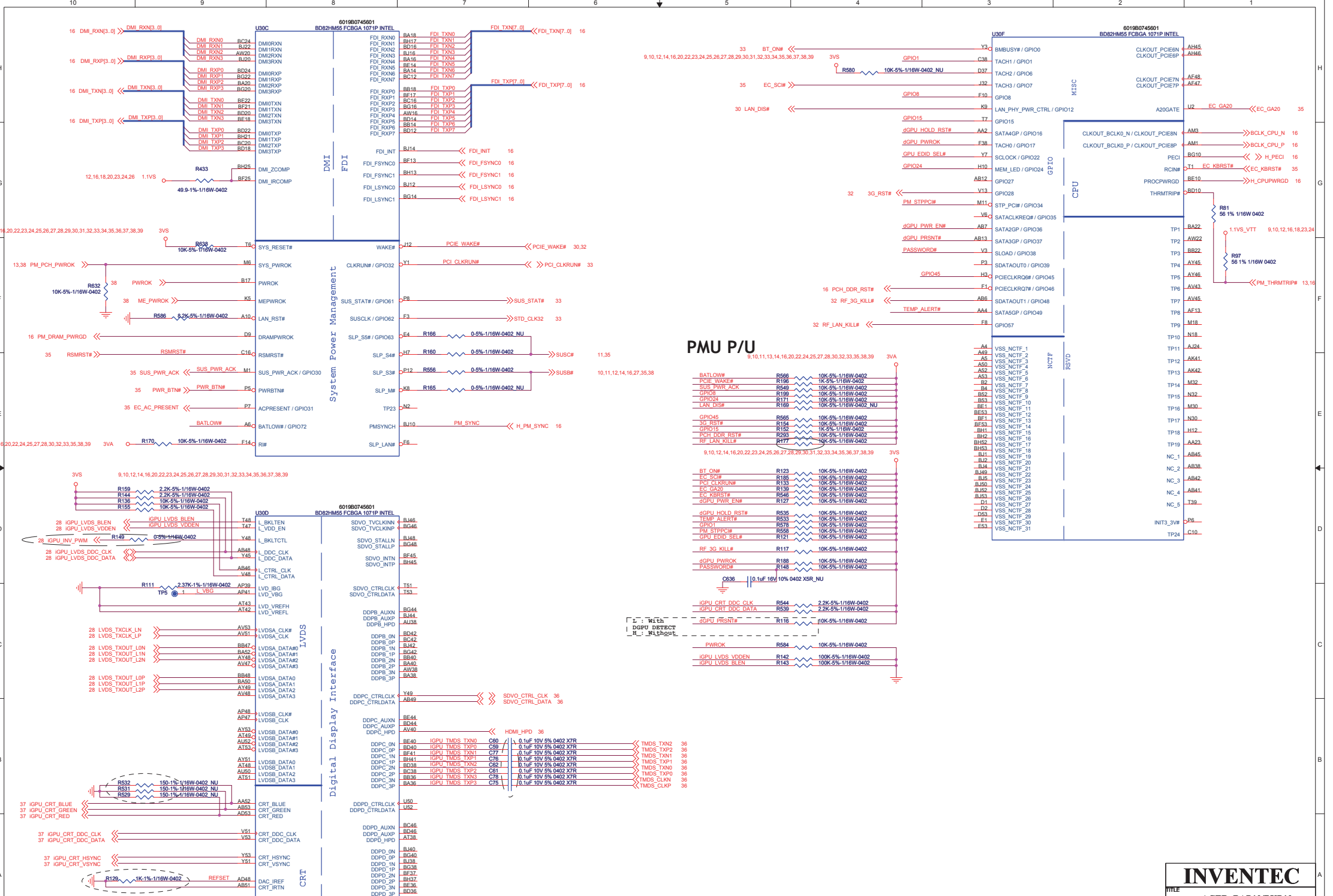
WLAN



3G CARD PCI E LAN



INVENTEC			
TITLE ACER BAPI0/BXPI0 PCH(HDA,JTAG,SATA)			
SIZE Custom	CODE CS	DWG NUMBER CS-131	REV A01
SHEET 20		of 45	



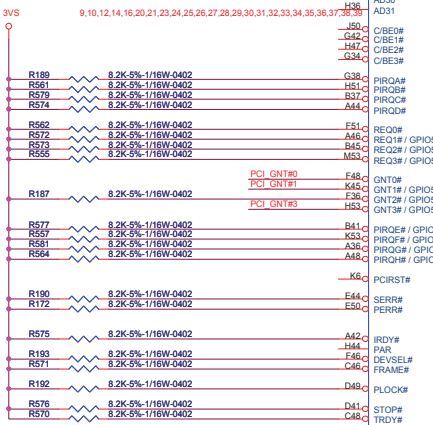
PMU P/U

BATLOW#	R566	10K-5%-1/16W-0402
PCIE_WAKE#	R196	1K-5%-1/16W-0402
SUS_PWR_ACK	R649	10K-5%-1/16W-0402
GPIO8	R199	10K-5%-1/16W-0402
GPIO24	R171	10K-5%-1/16W-0402
LAN_DIS#	R169	10K-5%-1/16W-0402_NU
GPIO4#	R565	10K-5%-1/16W-0402
3G_RST#	R154	10K-5%-1/16W-0402
GPIO15	R182	1K-5%-1/16W-0402
PCH_DDR_RST#	R263	10K-5%-1/16W-0402
RF_LAN_KILL#	R177	10K-5%-1/16W-0402
BT_ON#	R123	10K-5%-1/16W-0402
EC_SC#	R185	10K-5%-1/16W-0402
PCI_CLKRUN#	R133	10K-5%-1/16W-0402
EC_GA20	R139	10K-5%-1/16W-0402
EC_KBRST#	R546	10K-5%-1/16W-0402
GPU_PWR_EN#	R127	10K-5%-1/16W-0402
GPU_HOLD_RST#	R535	10K-5%-1/16W-0402
TEMP_ALERT#	R533	10K-5%-1/16W-0402
GPIO1	R578	10K-5%-1/16W-0402
PM_STPPC#	R558	10K-5%-1/16W-0402
GPU_EDID_SEL#	R121	10K-5%-1/16W-0402
RF_3G_KILL#	R117	10K-5%-1/16W-0402
GPU_PWR_OK	R188	10K-5%-1/16W-0402
PASSWDOR#	R148	10K-5%-1/16W-0402
GPU_CRT_DDC_CLK	R544	2.2K-5%-1/16W-0402
GPU_CRT_DDC_DATA	R539	2.2K-5%-1/16W-0402
GPU_PRESNT#	R116	10K-5%-1/16W-0402
PWR_OK	R584	10K-5%-1/16W-0402
GPU_LVDS_VDDEN	R142	100K-5%-1/16W-0402
GPU_LVDS_BLEN	R143	100K-5%-1/16W-0402

INVENTEC
 TITLE
ACER BAP10/BXP10
 PCH(FDL/MLSPM)

SIZE	CODE	DOC NUMBER	REV
Custom	CS	CS-131	A01
SHEET		21	of 46

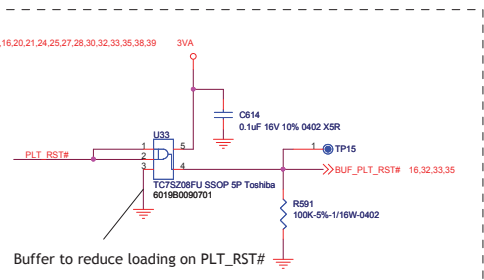
PCI Pull up



PCI_GNT#3 No stuff - by default
Stuff : For A16 swap override

PCI_GNT#0	PCI_GNT#1	
0	0	LPC
Floating	0	PCI
Floating	Floating	SPI

BIOS type select



USB

PCI

NVDRAM

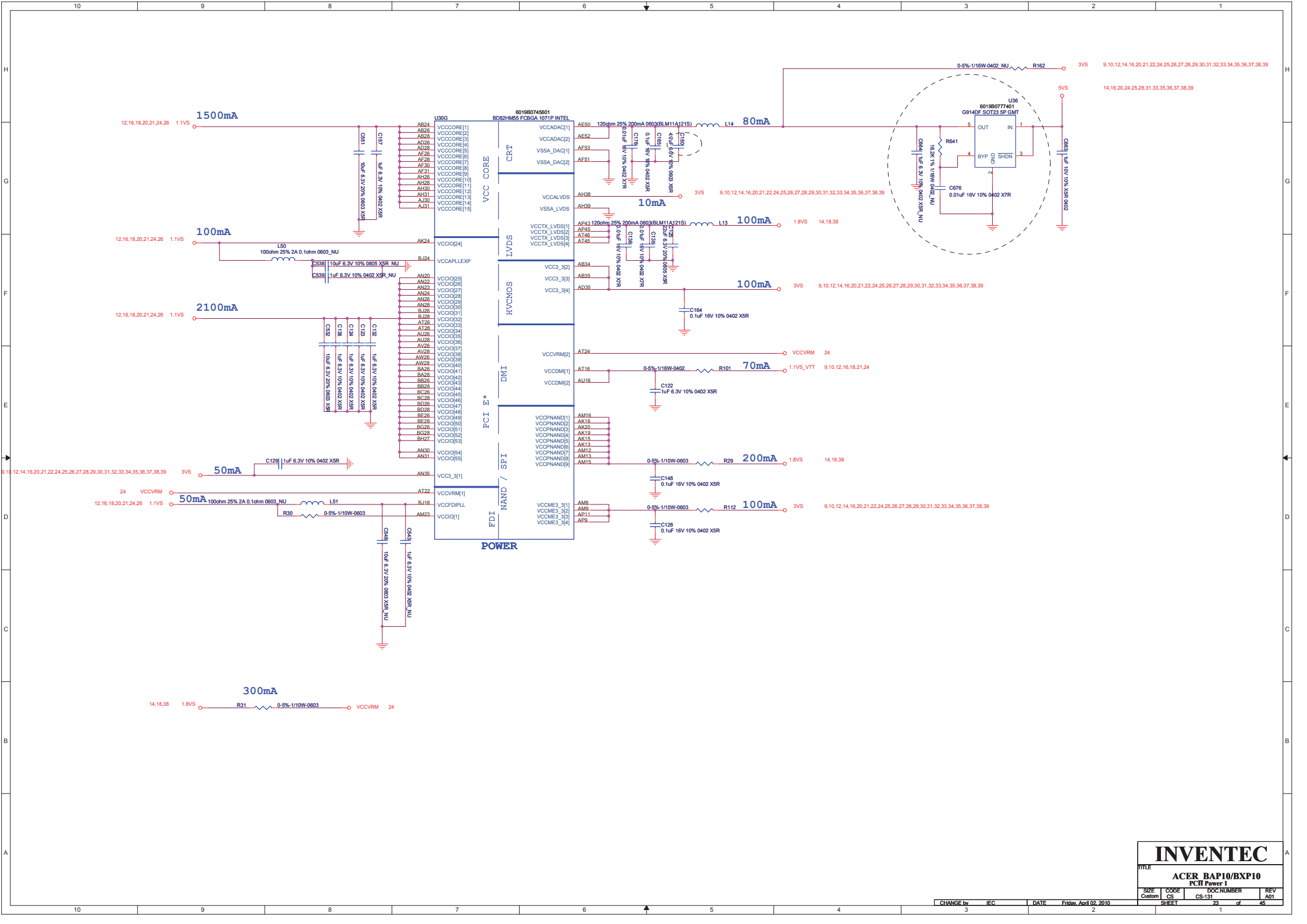
5/5 mils spacing on microstrip

BIOS ID setting

Project	MB_ID4	MB_ID3	MB_ID2	MB_ID1	MB_ID0
BAP10 (UMA)	1	1	1	1	1
BXP10 (UMA)	1	1	1	1	0
BAP30 (UMA)	1	1	1	0	1
BXP30 (UMA)	1	1	1	0	0
BAD50 (UMA)	1	1	0	1	1
BXD50 (UMA)	1	1	0	1	0
SJM40 (UMA)	1	1	0	0	1
SJM40 (dGPU)	1	1	0	0	0
BAP30 (dGPU)	1	0	1	1	1
BAD50 (dGPU)	1	0	1	0	1
BXD50 (dGPU)	1	0	1	0	0
SJM40 (dGPU optimum)	1	0	0	1	1
BAP30 (dGPU optimum)	1	0	0	0	1
BXP30 (dGPU optimum)	1	0	0	0	0



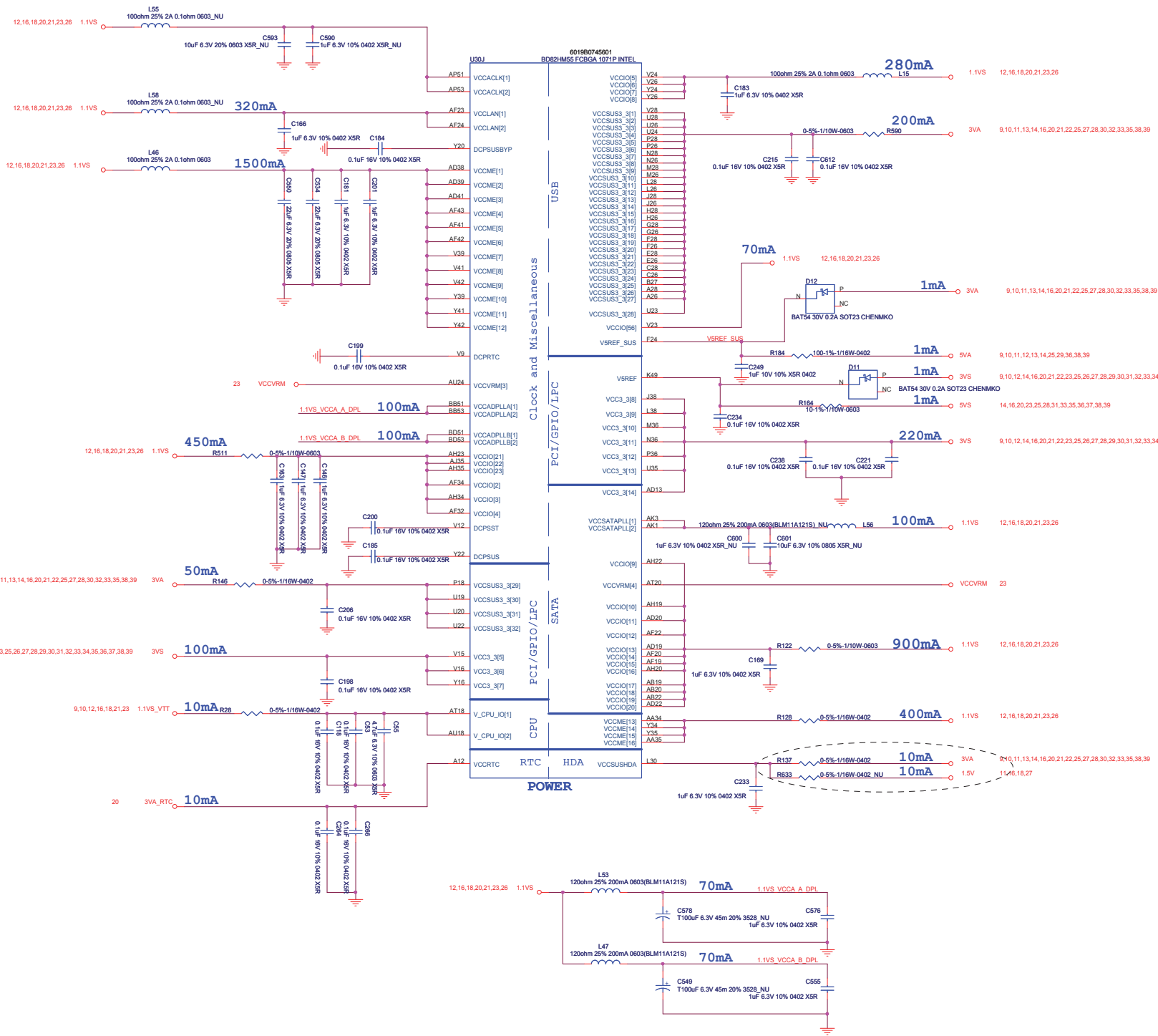
ACER BAP10/BXP10 PCH(USB, PCI)			
SIZE Custom	CODE CS	DWG NUMBER CS-131	REV A01
SHEET 22		of 46	



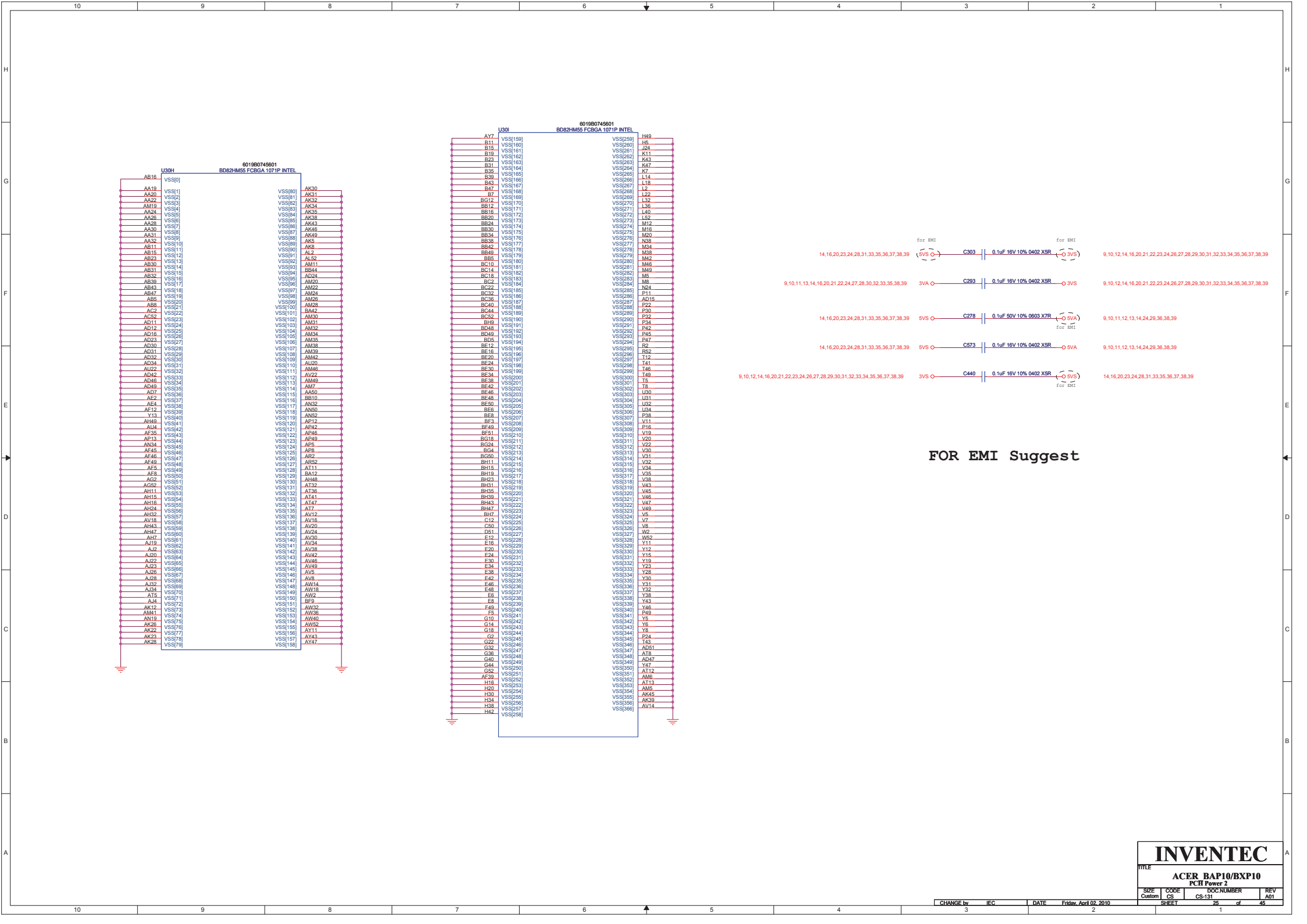
INVENTEC

TITLE
ACER BAP10/BXP10
PCH Power 1

SIZE Custom	CODE CS	DWG NUMBER CS-191	REV A01
SHEET		23	of 45



INVENTEC			
ACER BAPI0/BXP10			
PCH Power 2			
SIZE	CODE	DWG NUMBER	REV
Custom	CS	CS-131	A01
SHEET		24	of 45



6019B0745601
BD82HM55 FCBGA 1071P INTEL

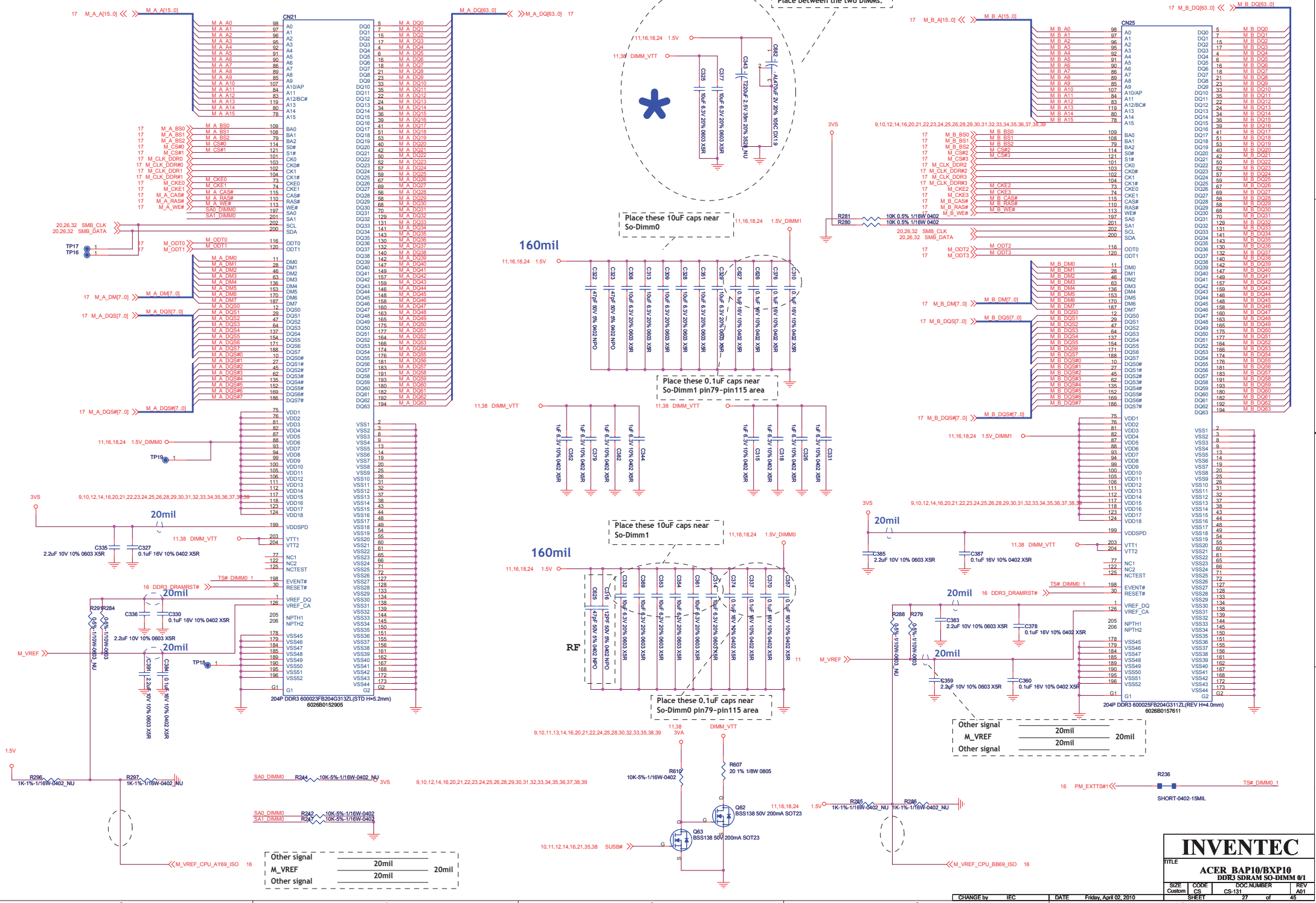
6019B0745601
BD82HM55 FCBGA 1071P INTEL

FOR EMI Suggest

INVENTEC			
TITLE ACER BAP10/BXP10			
PCH Power 2			
SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01
SHEET		25	of 45

SO-DIMM0

SO-DIMM1



Place these 10µF caps near So-Dimm0

Place these 0.1µF caps near So-Dimm0 pin79-pin115 area

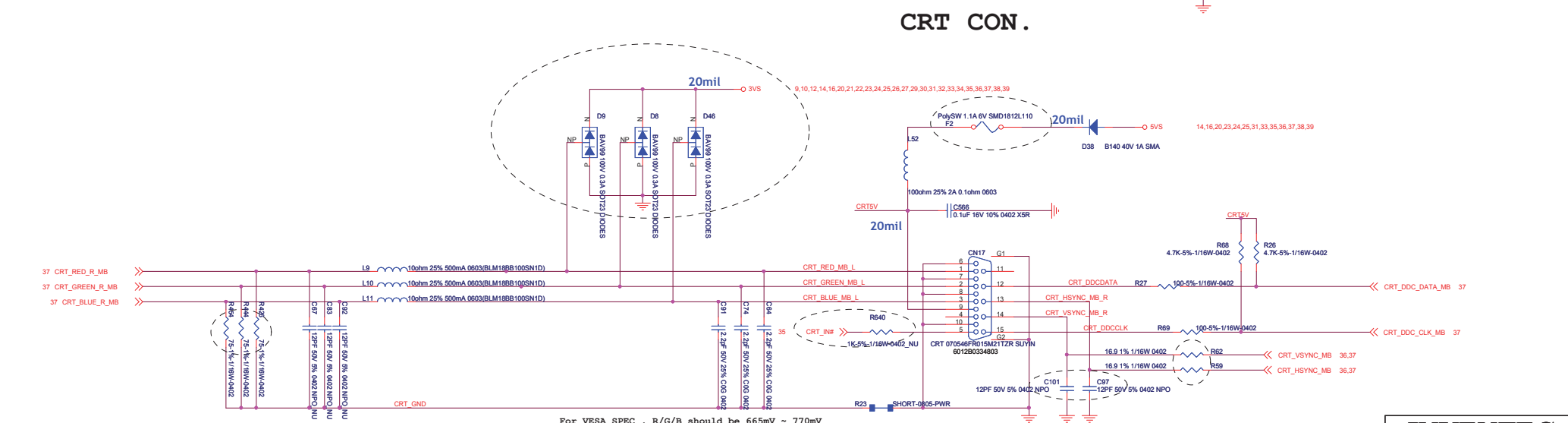
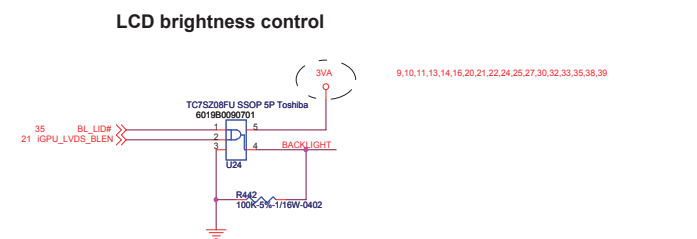
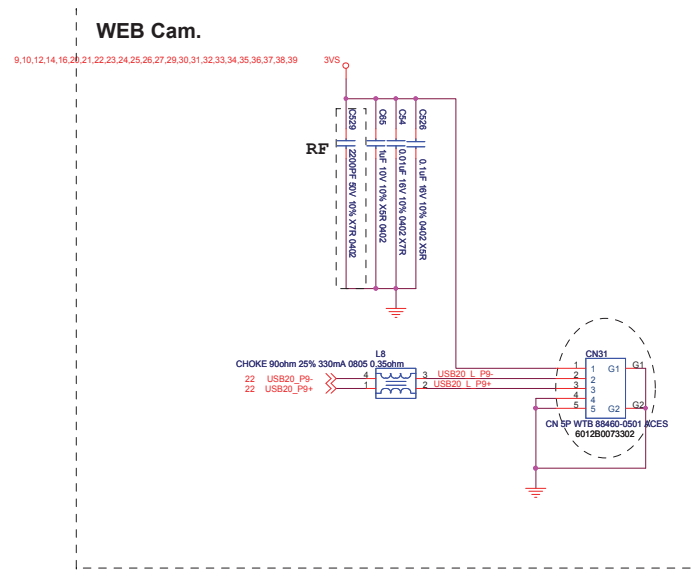
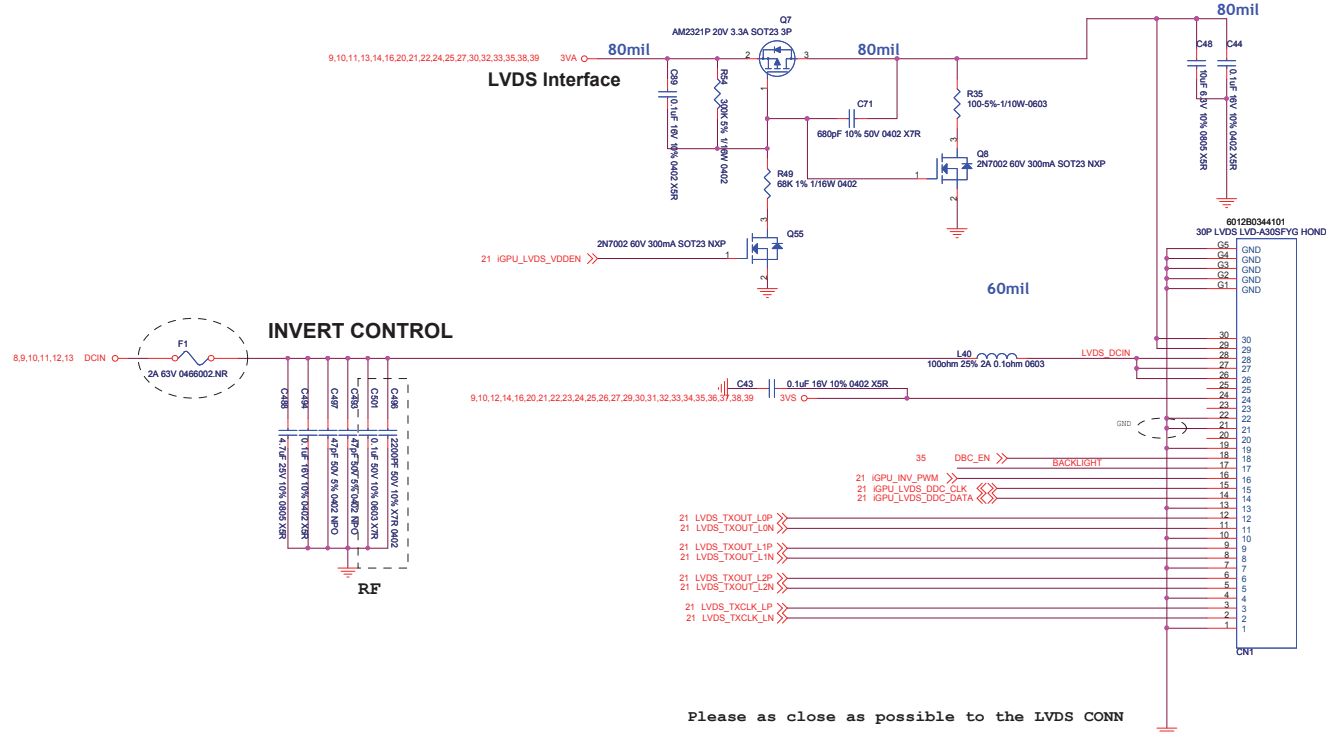
Place these 10µF caps near So-Dimm1

Place these 0.1µF caps near So-Dimm0 pin79-pin115 area

Other signal
M_VREF
Other signal

Other signal
M_VREF
Other signal

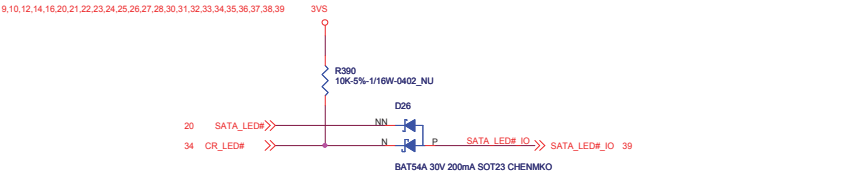
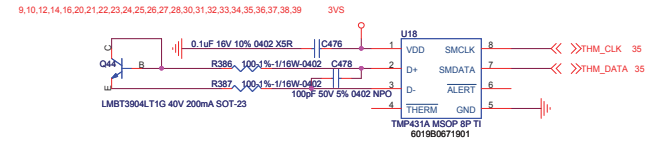
INVENTEC			
TITLE: ACER BAP10/BXP10 DDR3 SDRAM SO-DIMM 0/1			
SIZE: Custom	CODE: CS	DOC NUMBER: CS-131	REV: A01
CHANGE By: IEC		DATE: Friday, April 02, 2010	
SHEET: 27		of 45	



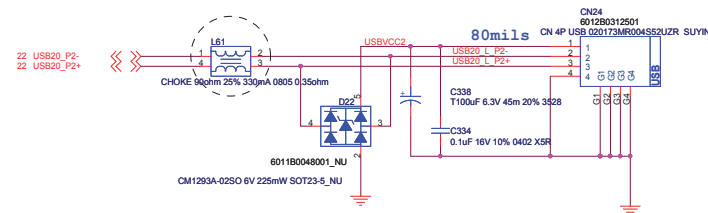
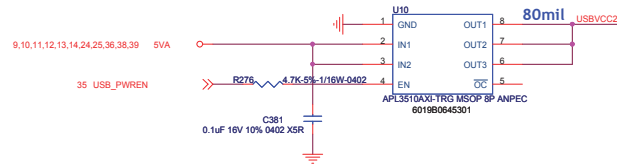
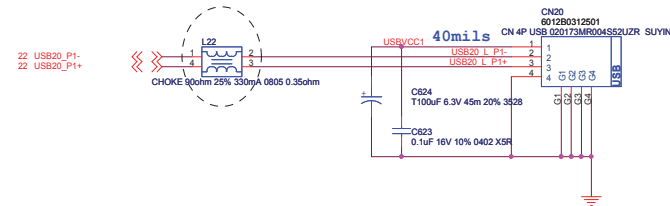
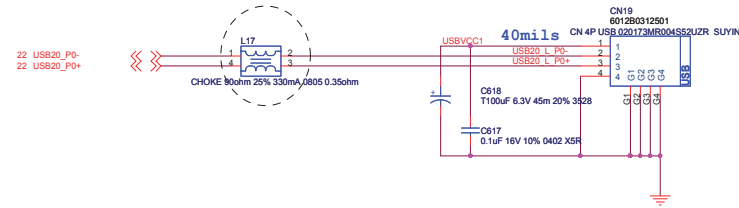
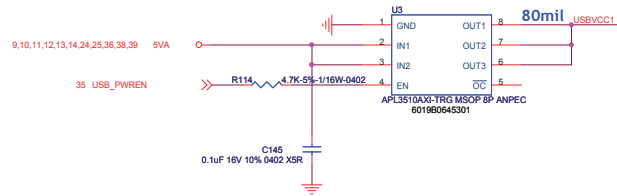
INVENTEC			
TITLE ACER BAPI0/BXP10 LCD/MA/CT			
SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01
CHANGE by IEC		DATE	Friday, April 02, 2010
SHEET		26	of 45

Thermal Sensor

REMOTE thermal sensor
Place near the hottest spot area under Palm-rest



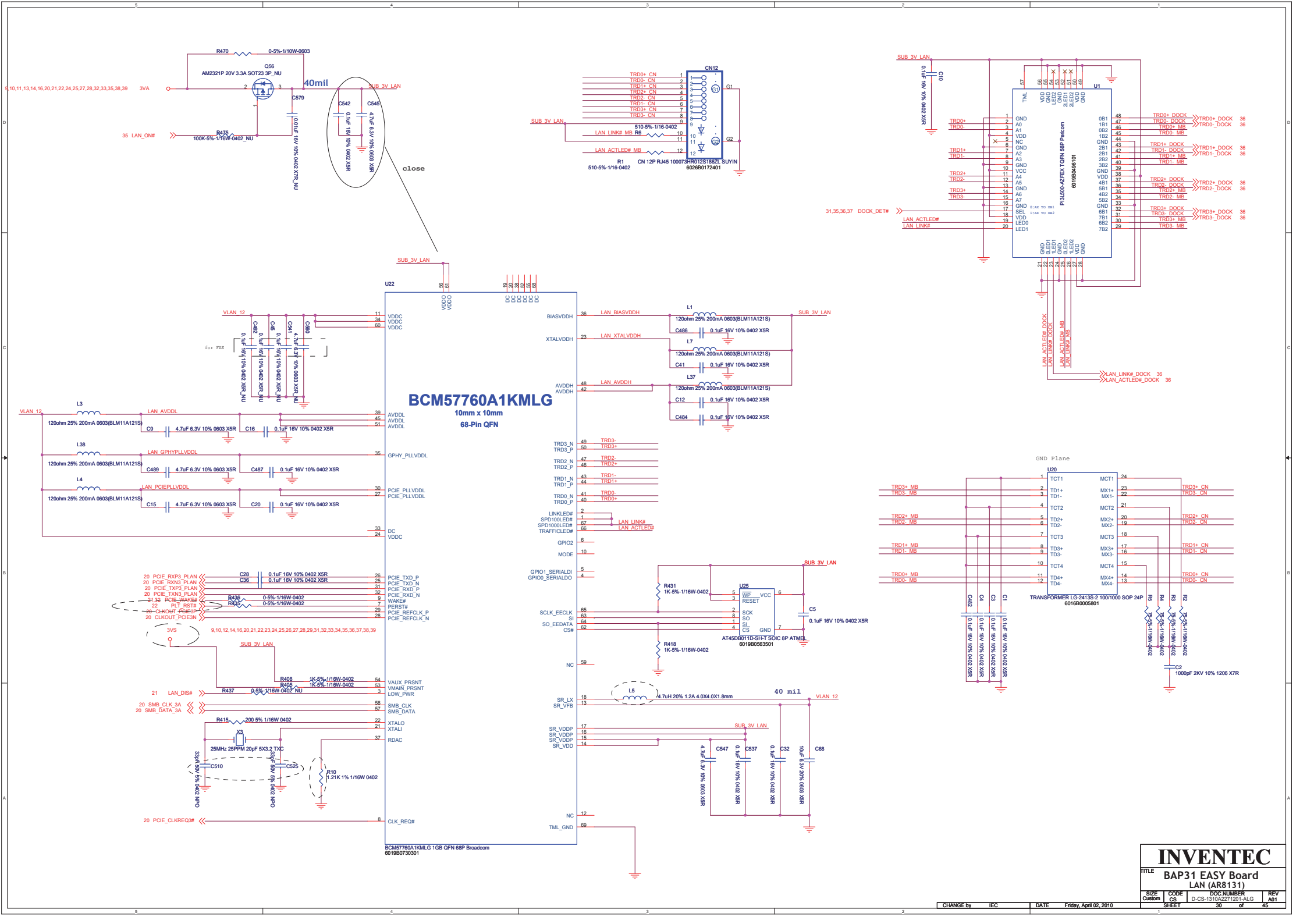
USB



INVENTEC

TITLE
ACER BAP10/BXP10
USBSSENSOR

SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01
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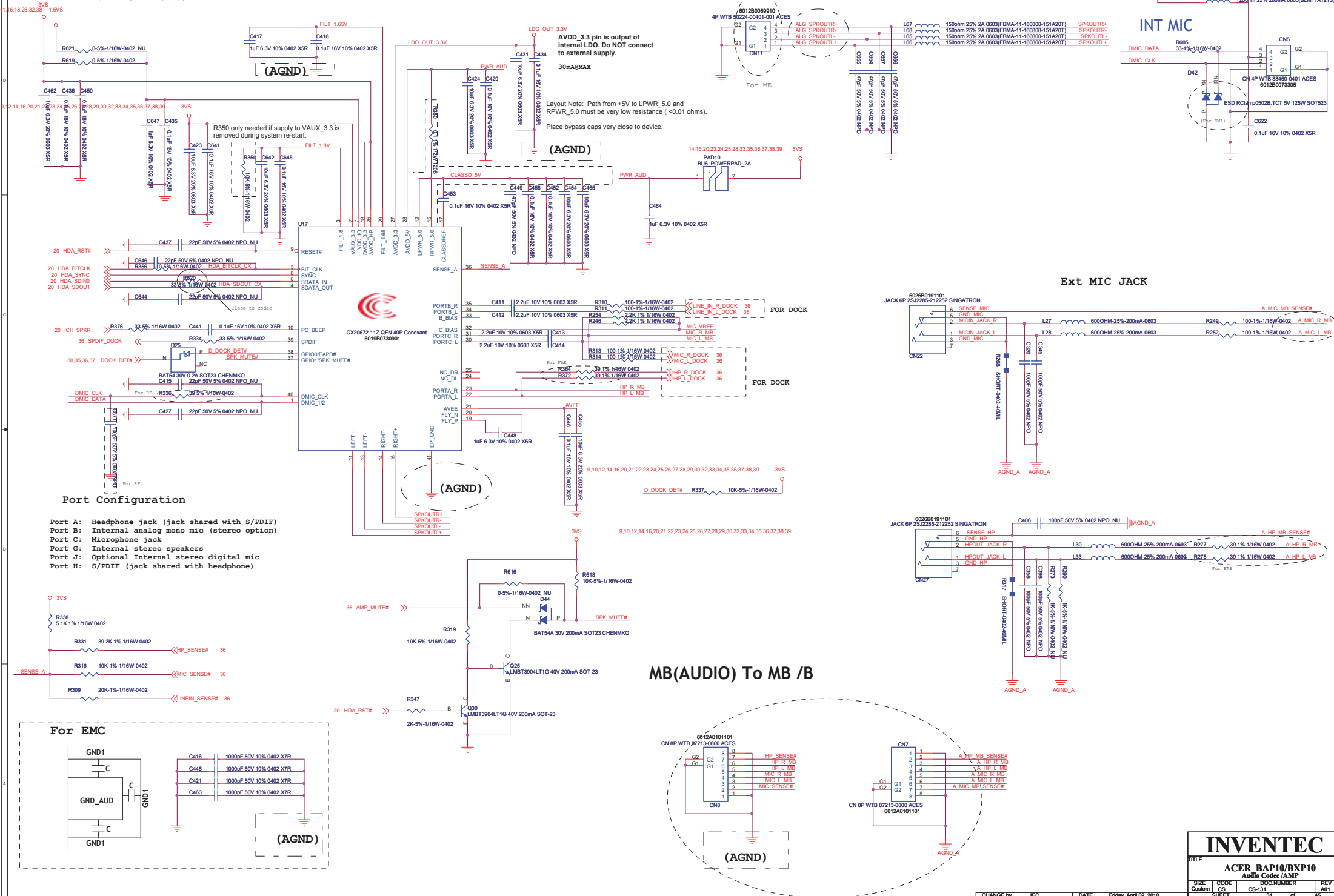


Note:
To support Wake-on-Jack, the CODEC VAUX_3.3 pins must be powered by a Standby supply.

AUDIO CODEC

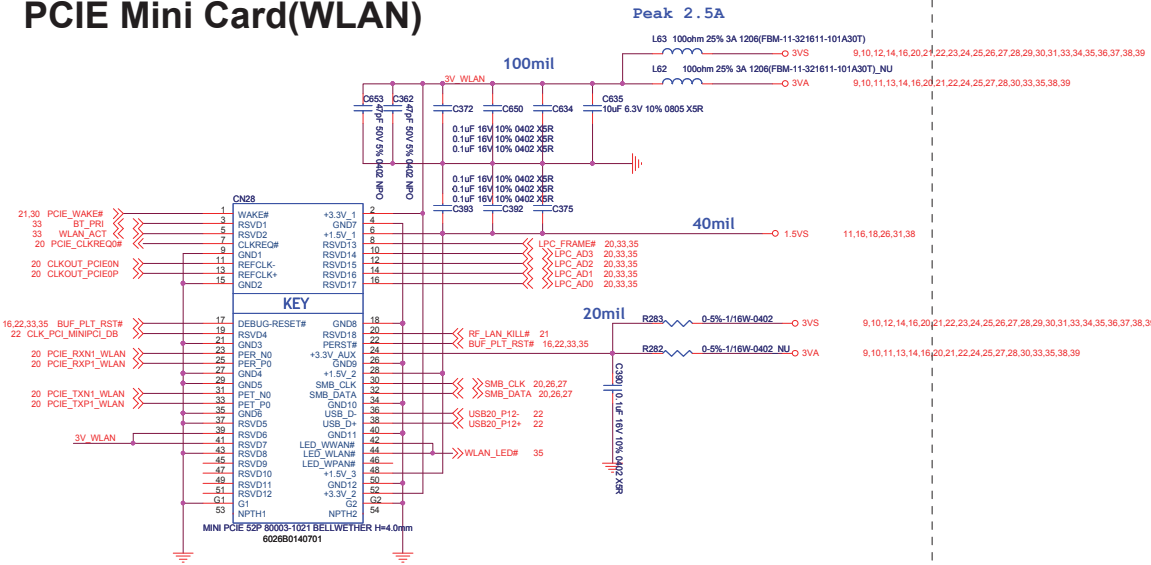
SPEAKER 30mil

9,10,12,14,16,20,21,22,23,24,25,26,27,28,29,30,32,33,34,35,36,37,38,39 3VS



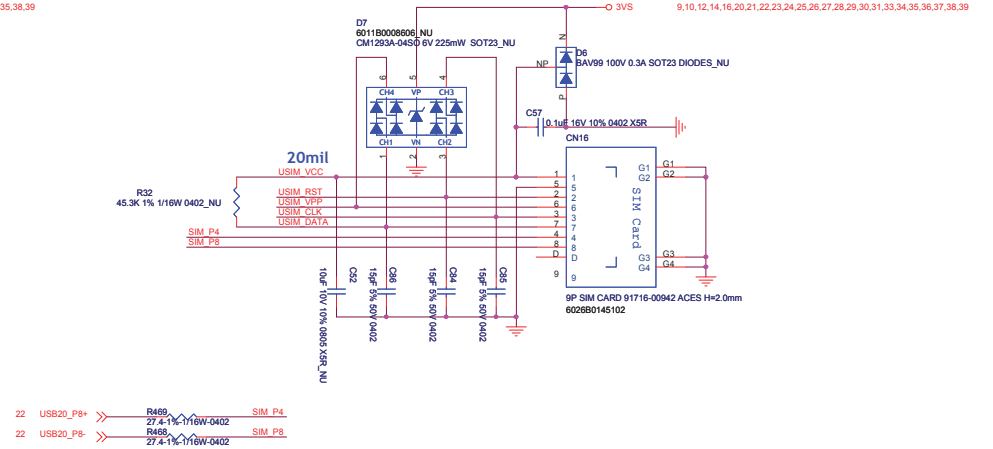
INVENTEC			
TITLE ACER BAP10/BXP10			
Audio Codec / AMP			
SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01
CHANGE By IEC		DATE Friday, April 02, 2010	
SHEET 31		of 45	

PCIE Mini Card(WLAN)

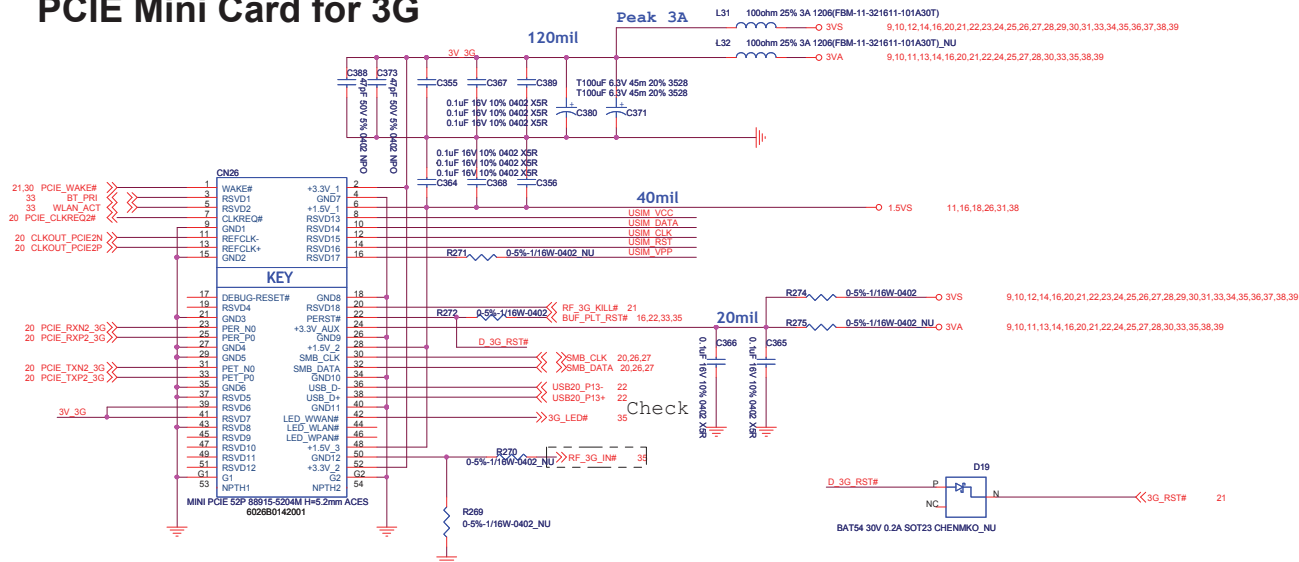


On Chip 5V to 3.3V regulator. No external regulator required.
On-Chip power MOSFETs for supplying flash media card power.

SIM CARD slot



PCIE Mini Card for 3G

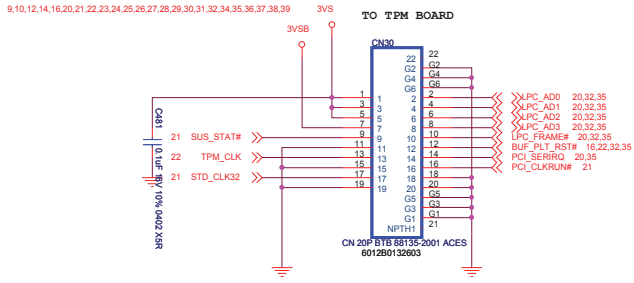


INVENTEC

TITLE **ACER BAP10/BXP10**

SIZE Custom CS DOCNUMBER CS-131 REV A01

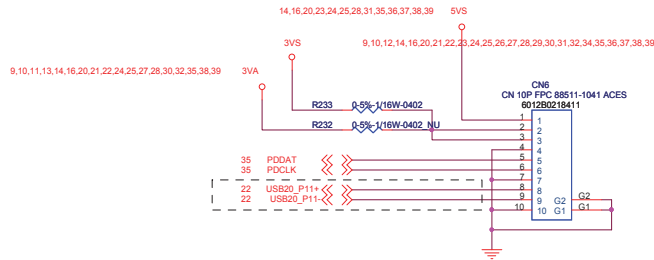
TO TPM CNN.



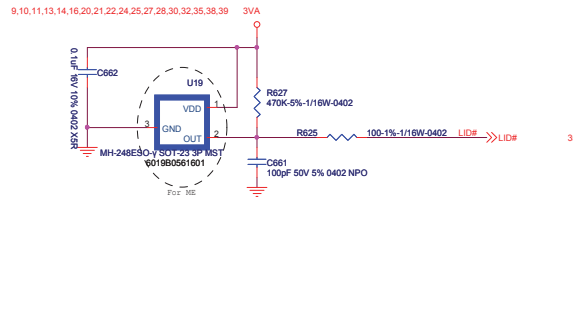
IN TPM SKU STUFF



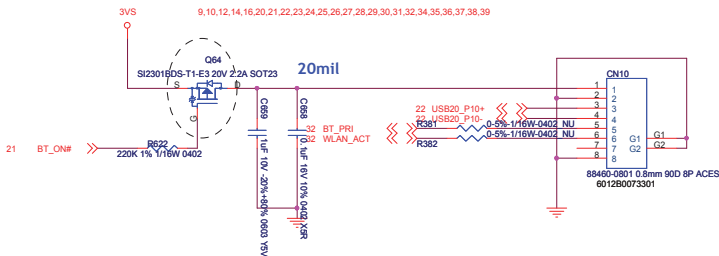
GP + FP CNN.



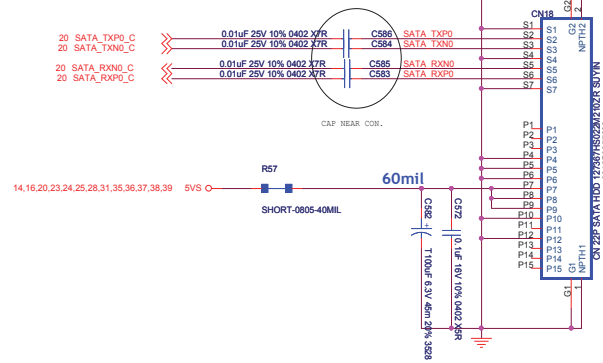
HALL Switch



Bluetooth CNN.



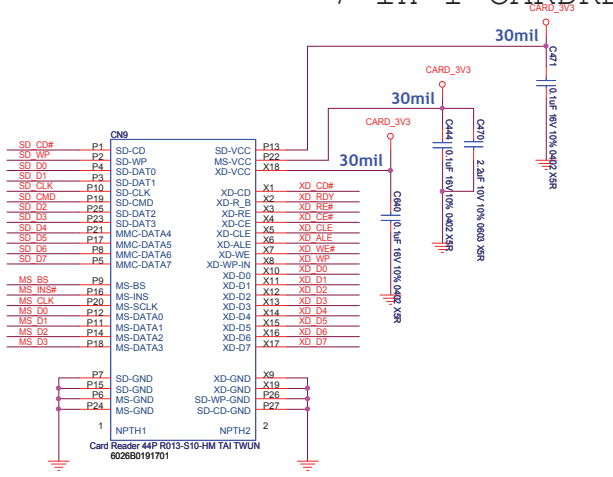
HDD I/F



INVENTEC

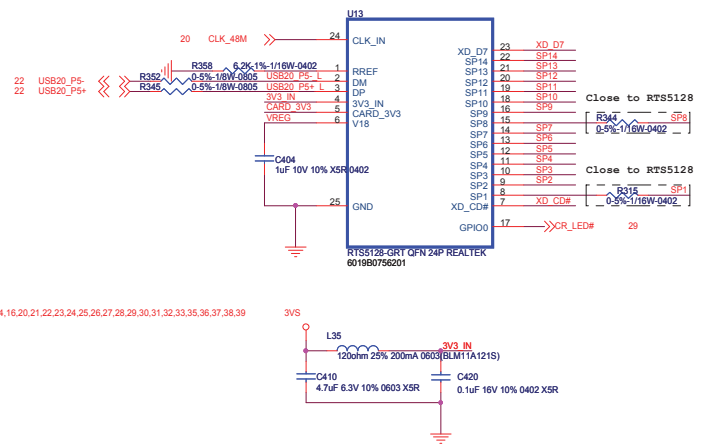
TITLE			
ACER BAP10/BXP10			
USB+SATA+G+mouse+CON			
SIZE	CODE	DOC NUMBER	REV
Custom	CS	CS-131	A01
SHEET		of	
33		45	

7 in 1 CARDREADER



SP1	XD_RDY	SD_WP	MS_CLK
SP2	XD_RE#		MS_INS#
SP3	XD_CE#	SD_D1	MS_D7
SP4	XD_CLE	SD_D0	MS_D3
SP5	XD_ALE	SD_D7	MS_D3
SP6	XD_WE#	SD_CD#	
SP7	XD_WP	SD_D6	MS_D6
SP8	XD_D0	SD_CLK	MS_D2
SP9	XD_D1	SD_D5	MS_D0
SP10	XD_D2	SD_CMD	
SP11	XD_D3	SD_D4	MS_D4
SP12	XD_D4	SD_D3	MS_D1
SP13	XD_D5	SD_D2	MS_D5
SP14	XD_D6		MS_BS

Close to connector



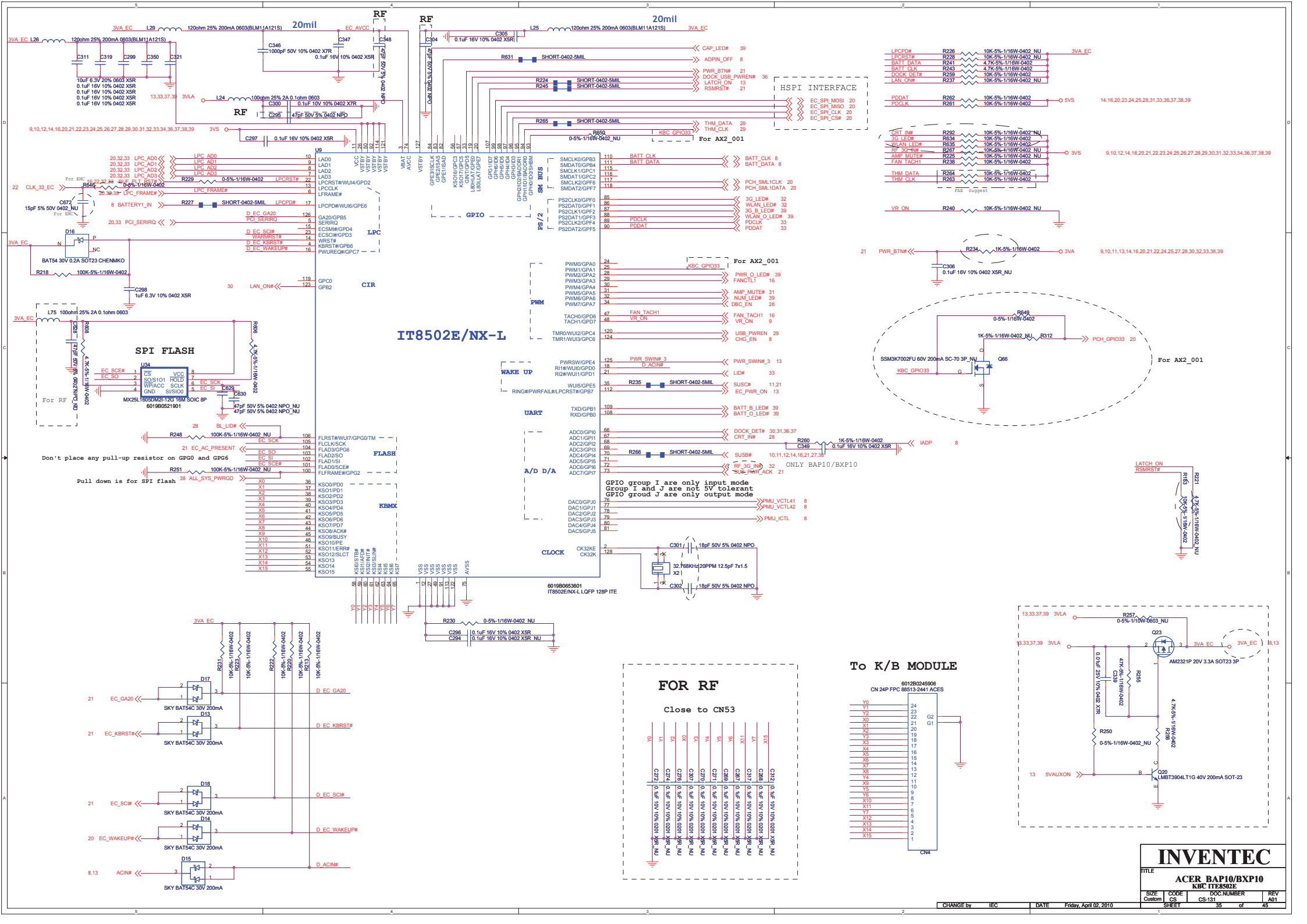
INVENTEC

TITLE: **BAP10 EASY Board CARD READER**

SIZE	CODE	DOCNUMBER	REV
C	A03	34	A01

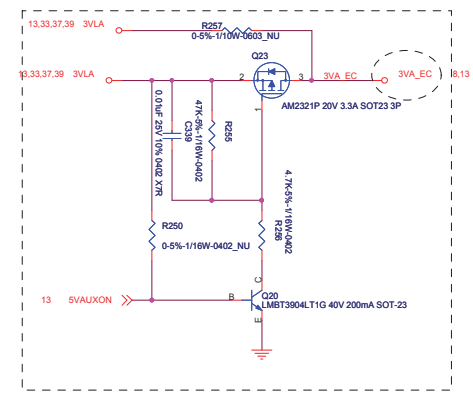
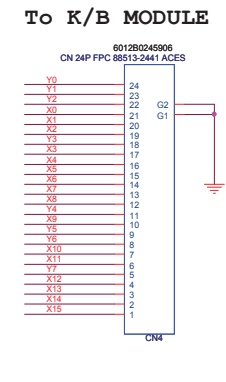
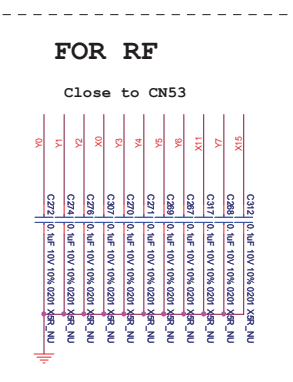
CHANGE by: <CHANGE by> DATE: Friday, April 02, 2010

SHEET 1 of 45



IT8502E/NX-L

GPIO group I are only input mode
 Group I and J are not 5V tolerant
 GPIO group J are only output mode



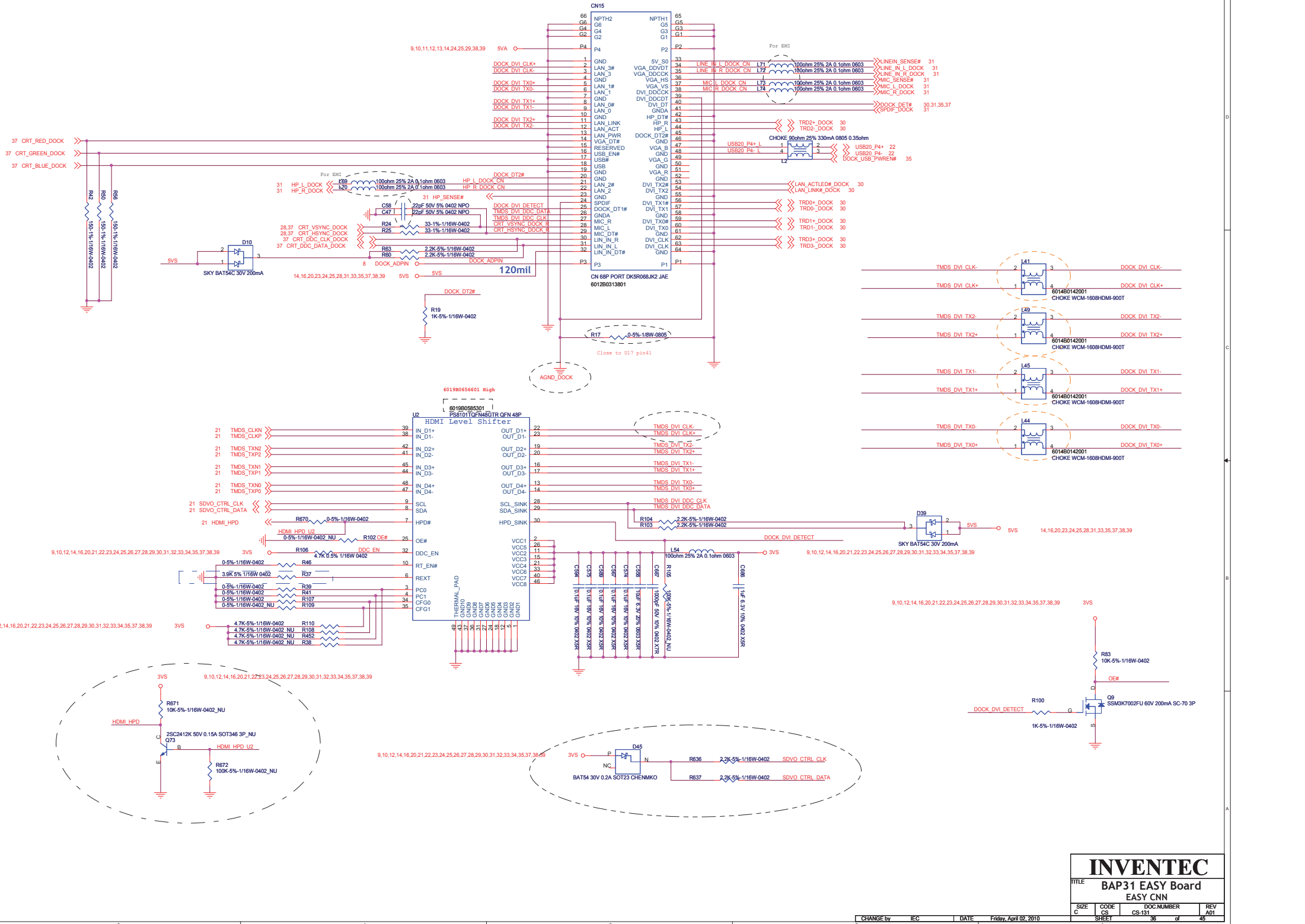
INVENTEC

TITLE: **ACER BAP10/BXP10**
 KBC IT8502E

SIZE	CODE	DOC NUMBER	REV
Custom	CS	CS-131	A01

CHANGE By: IEC DATE: Friday, April 02, 2010

SHEET 35 of 45

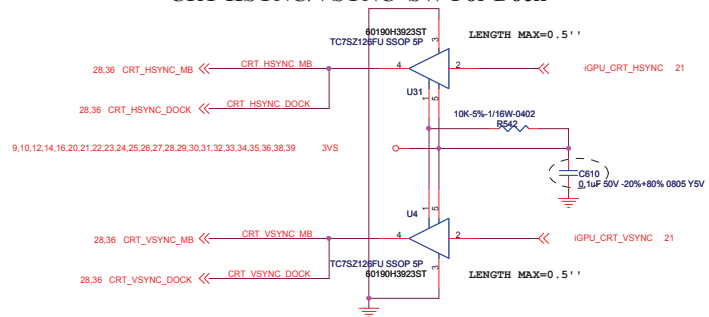


INVENTEC

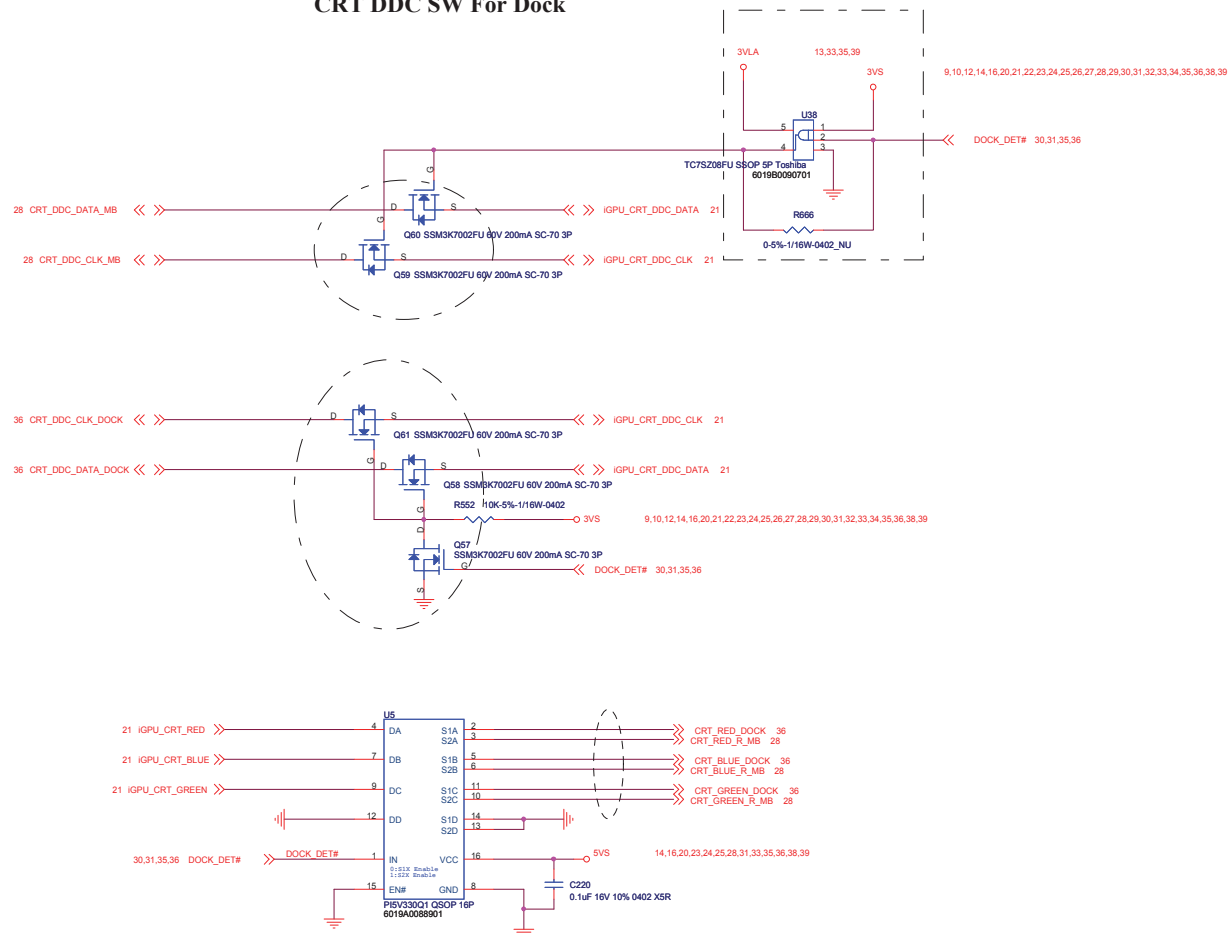
TITLE **BAP31 EASY Board**
EASY CNN

SIZE	CODE	DOCNUMBER	REV
C	CS	CS-131	A01
SHEET			of 45

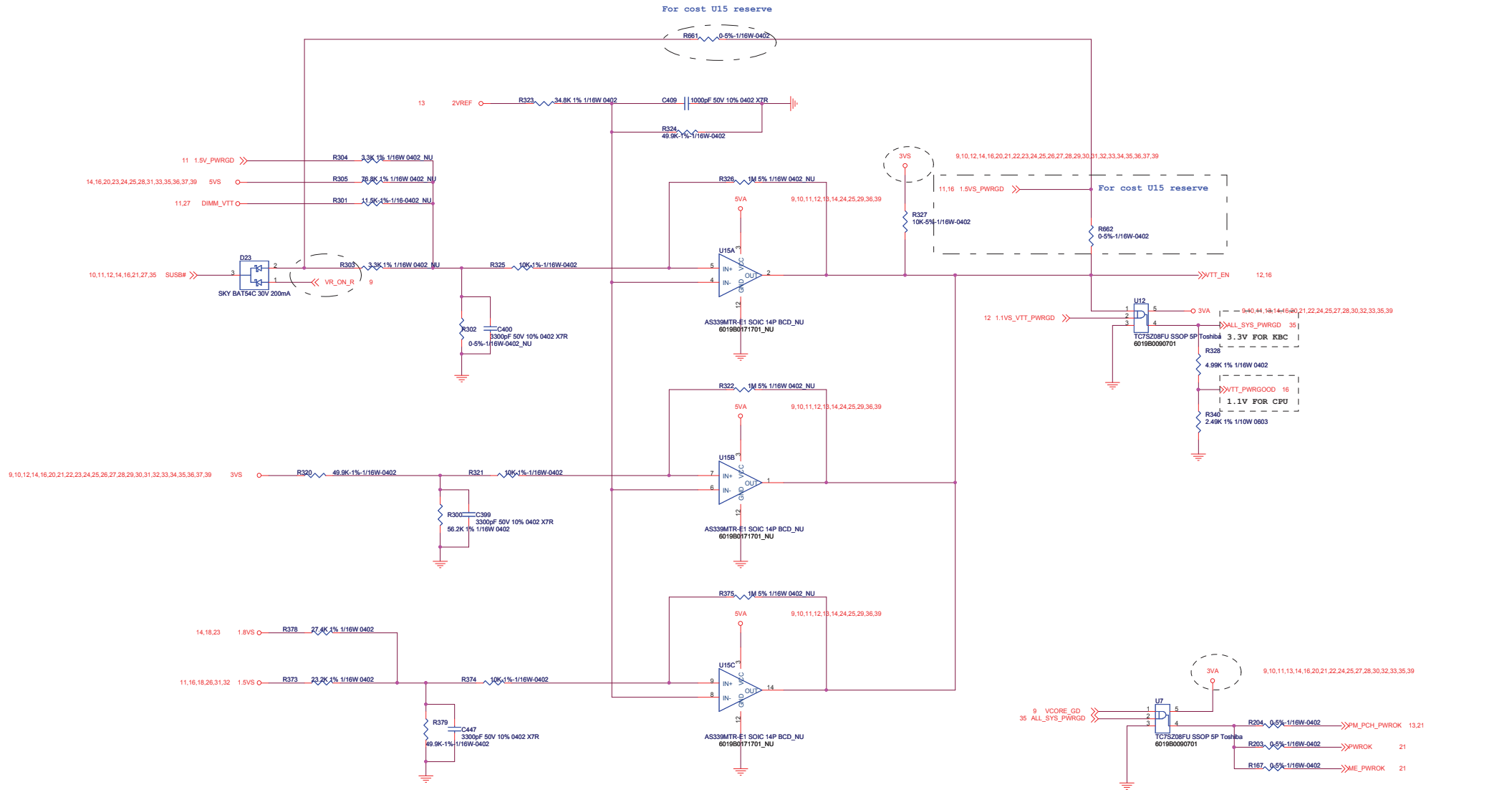
CRT HSYNC/VSYNC SW For Dock



CRT DDC SW For Dock



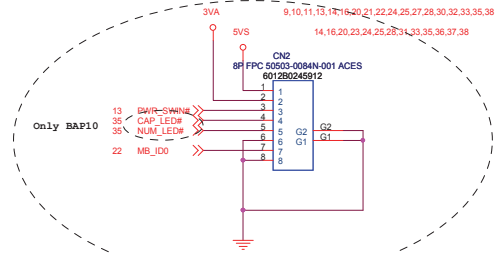
INVENTEC			
TITLE ACER BAP10/BXP10			
Hybrid Switch (1/2)			
SIZE	CODE	DOC NUMBER	REV
Custom	CS	CS-131	A01
CHANGE by		DATE	of
IEC		Friday, April 02, 2010	37



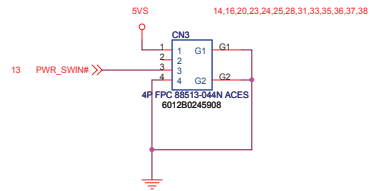
For BAP10 SW BOARD and BXP10 LED

Pin2 for BIOS ID setting

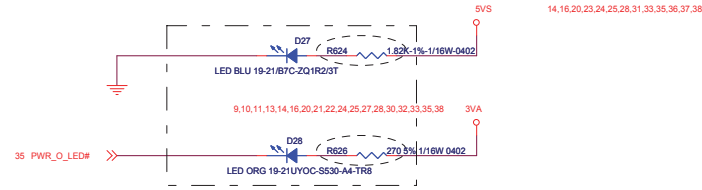
Project	MB_ID0
BAP10 (UMA)	1
BXP10 (UMA)	0



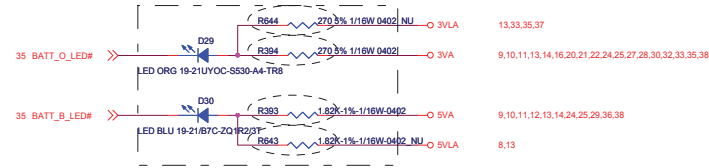
For BXP10 SW BOARD



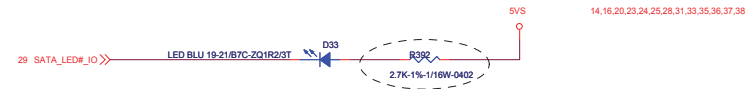
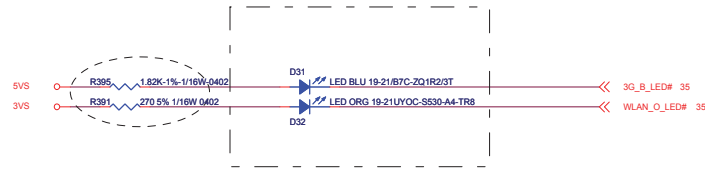
System Power / Sleep status indicator: Blue/Orange



Battery Charging status indicator: Blue/Orange

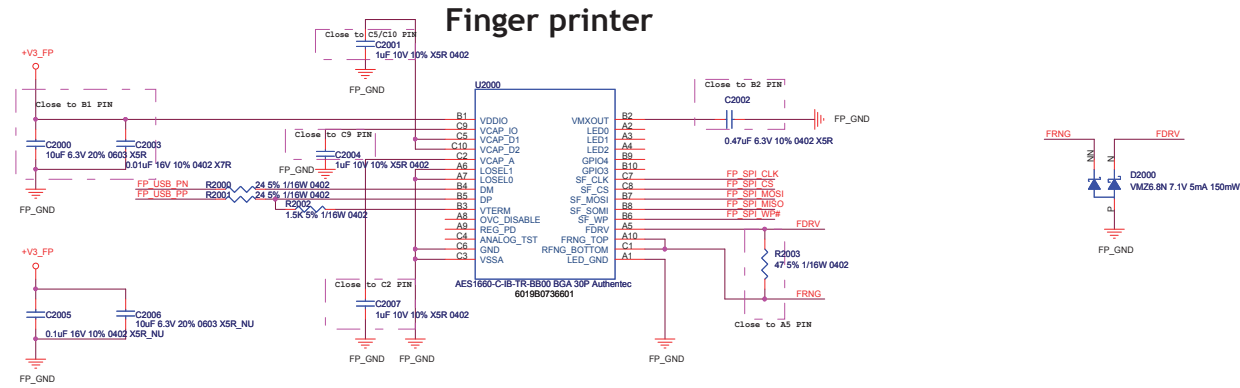


Communication device status indicator: Blue/Orange

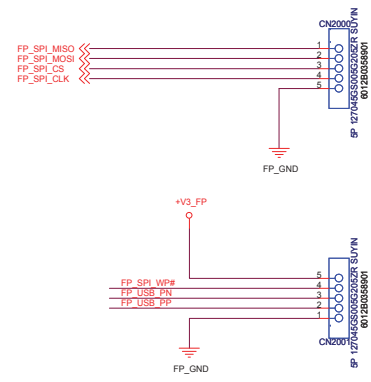


Finger printer Board

w/ Fingerprint: Stuff
w/o Fingerprint: OPEN



TO GP PIN HEADER

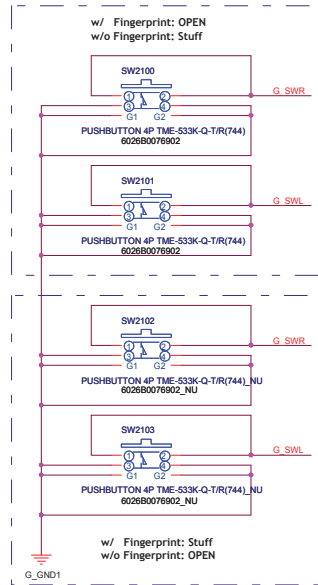
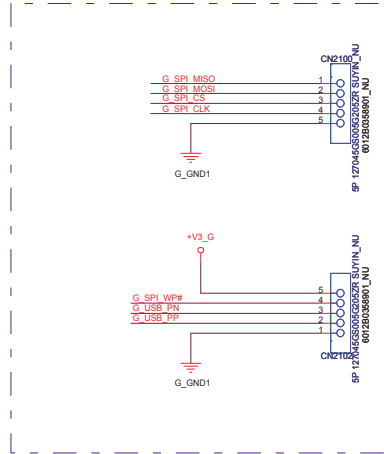


INVENTEC			
TITLE ACER BAP10/BXP10			
G/F Button			
SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01
CHANGE by IEC		DATE Friday, April 02, 2010	SHEET 40 of 45

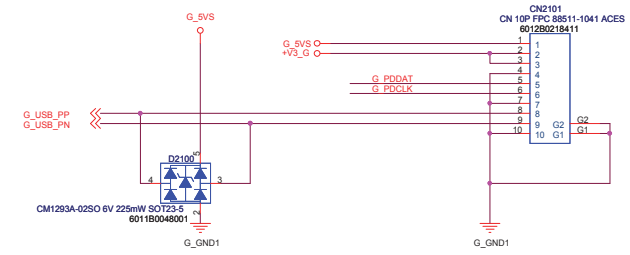
GP Board

GP Button

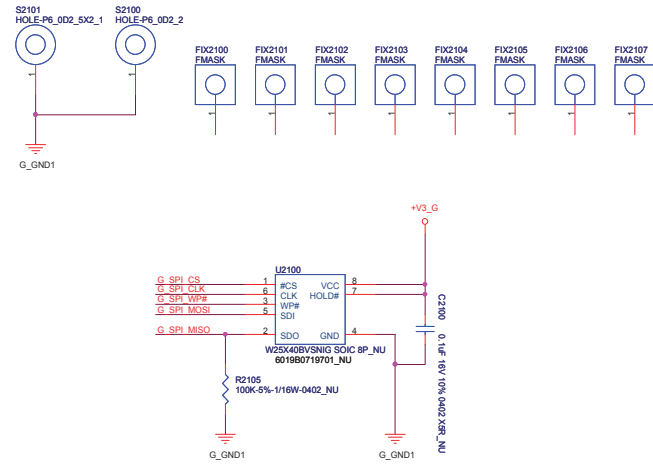
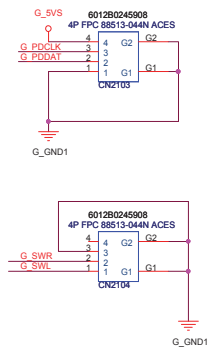
TO FP PIN HEADER



TO MB



TO touch Pad

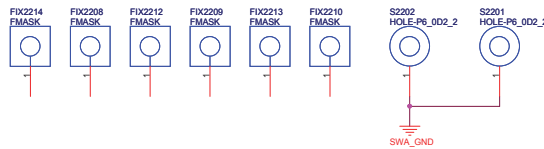
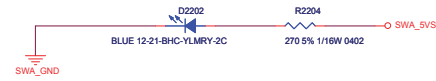
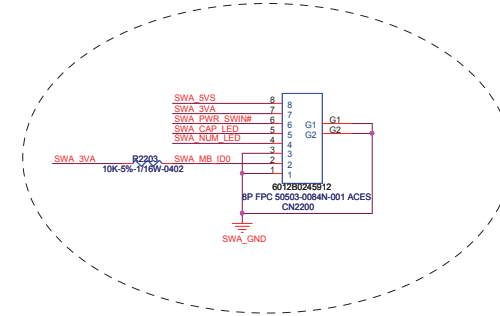
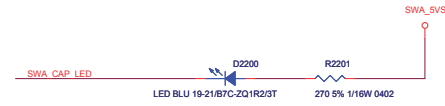
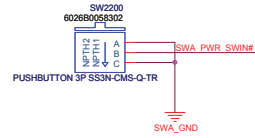


INVENTEC			
TITLE ACER_BAP10/BXP10			
GP			
SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01

BAP10 1 SW+3 LED Board

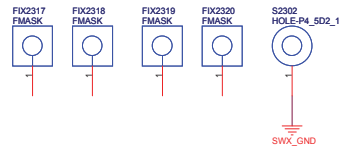
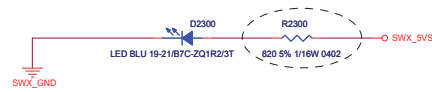
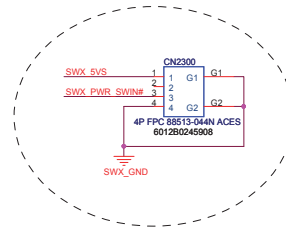
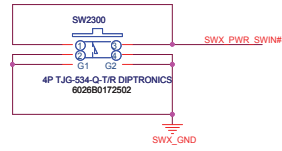
Pin2 for BIOS ID setting

Project	MB_ID0
BAP10 (UMA)	1
BXP10 (UMA)	0



INVENTEC			
TITLE ACER BAP10			
SIZE Custom		SW DOC NUMBER CS-131	
REV A01	REV A01	REV A01	REV A01

BXP10 1 SW+1 LED Board

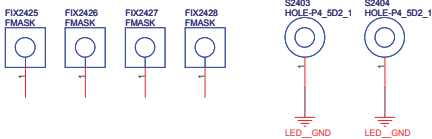
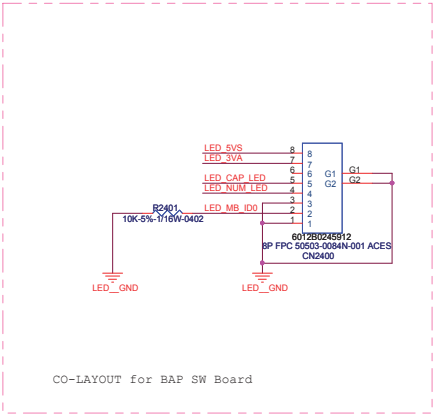
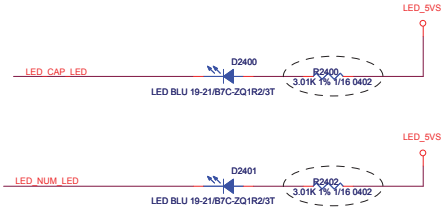


INVENTEC			
TITLE ACER BXP10			
CODE SW			
SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01
CHANGE by IEC		DATE Friday, April 02, 2010	
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BXP10 2 LED Board

Pin2 for BIOS ID setting

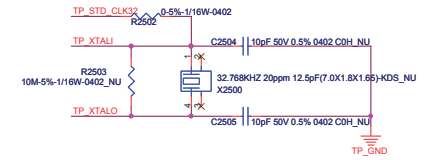
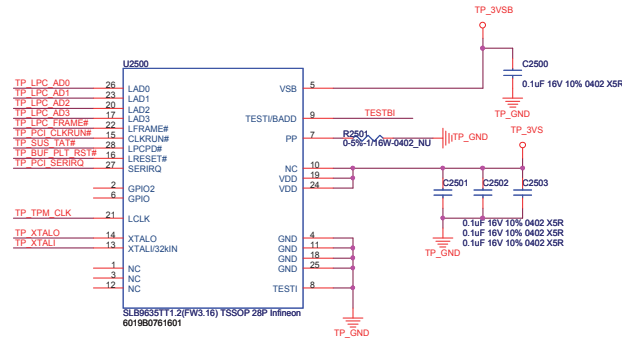
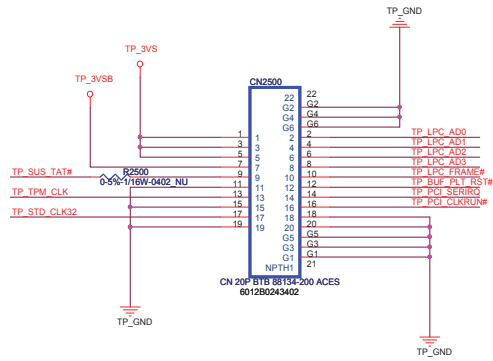
Project	MB_ID0
BAP10 (UMA)	1
BXP10 (UMA)	0



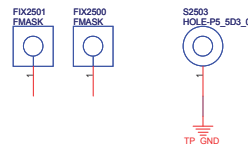
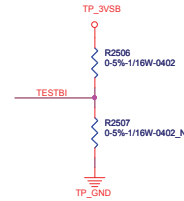
INVENTEC			
TITLE ACER BXP10			
LED			
SIZE Custom	CODE CS	DOC NUMBER CS-131	REV A01
CHANGE by IEC		DATE Friday, April 02, 2010	
SHEET		44 of 45	

TPM Board

TO MB BOARD



TESTBI	I/O ADDRESS
	CONFIG REGISTER
HIGH	4EH
LOW	2EH



INVENTEC			
TITLE ACER_BAP10/BXP10			
TPM			
SIZE	CODE	DOC NUMBER	REV
Custom	CS	CS-131	A01
PAGE		45	of 45