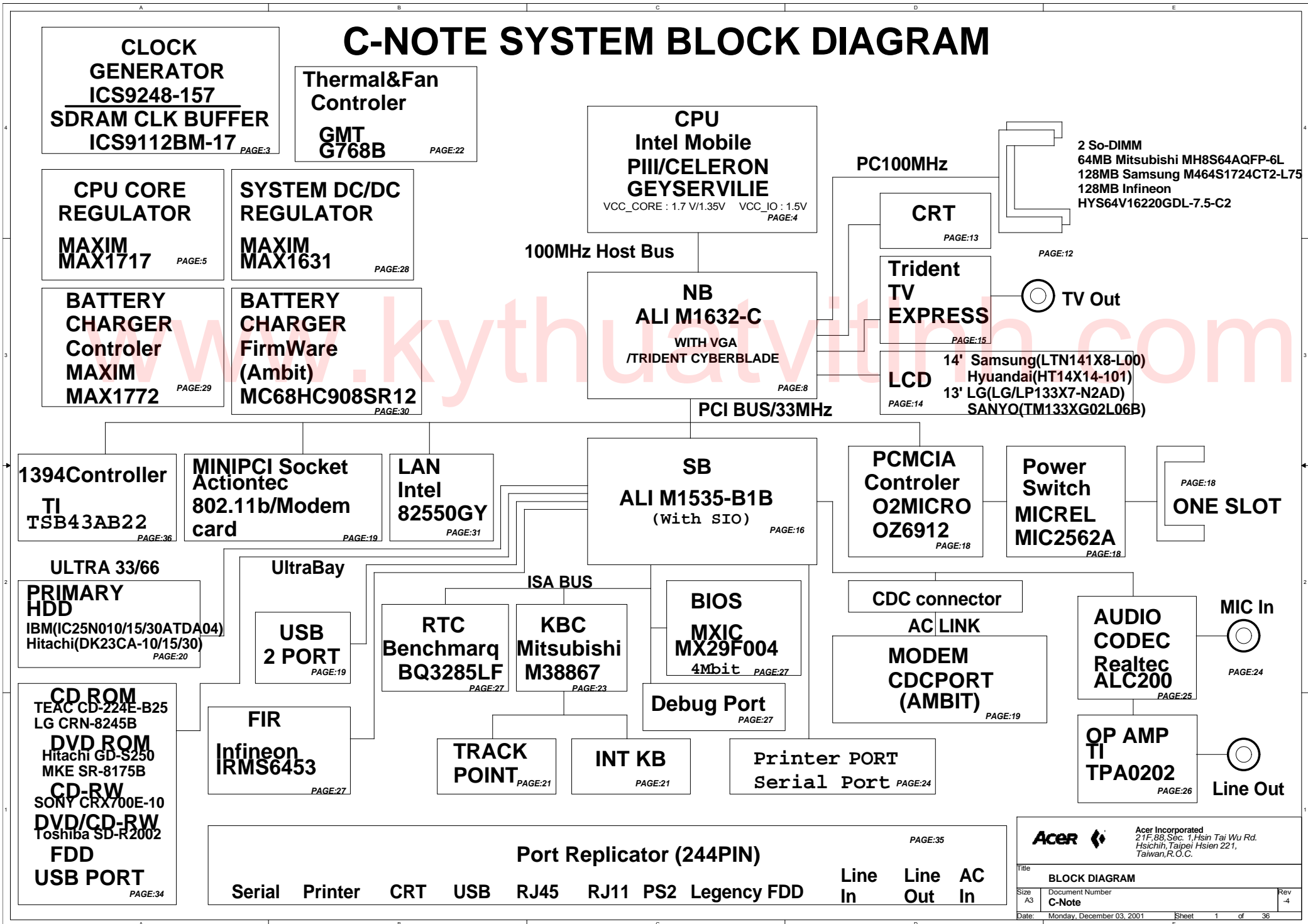


C-NOTE SYSTEM BLOCK DIAGRAM



SHEET INDEX

History

Rev:SA

Rev:SB

- 1.(P.3) PCICLK0 assign for 1394 chip
- 2.(P.5) R187/492 change from 0 ohm to 4.7 ohm
- 3.(P.7) Change charger flash circuit,use NC7S125 U83/83
- 4.(P.7) change +1.5V generate circuit (0324)

- 5.(P.8) 1632 E22/G22 change power to M+3V
- 6.(P.9) Add +2.5V bypass cap BC544
- 7.(P.13) Add U85 for 24C02 switch
- 8.(P.14) Change LCD interface
- 9.(P.15) Change TV-Port connector SKT2
- 10.(P.16) Change PCIRST#_3 logic circuit
- 11.(P.16) SB 32K for NB reserve bypass trace
- 12.(P.16) Change GPIO assignment

- XFD_INST# / CHKPW /SERIAL_EN / SB_Fn / 24C08_WP
- 13.(P.17) BT_RESET_3 change to PL(SB HW setting)
- 14.(P.18) PME#_RSM block leakage circuit change
- 15.(P.19) PME#_RSM block leakage circuit change
- 16.(P.19)MINIPCI add AC97 interface
- 17.(P.19)Change MDC interface to CDC interface
- 18.(P.19)Change modem cable connector
- 19.(P.20)Change USB connectors
- 20.(P.21)Combin bluetooth interface to CDC interface

- 21.(P.22)G768B Thermal Alert add 100K PL to prevent abnormal low signal
- 22.(P.22)Change FAN/LID connector type
- 23.(P.22)Change 24C08 to 24RF08
- 24.(P.22)24RF08 write protect signal change to C02/RF08#
- 25.(P.23)Remove TP4 PS/2 mouse serial function
- 26.(P.23)Change KBC GPIO TP4/PS2# / KBID2 / 3_MODE# / BLUEIN#
- 27.(P.23)KBC SMBus change power to M+5V
- 28.(P.24)Add printer port FDD support
- 29.(P.24)1394 connector add common mode choke
- 30.(P.26)Change speaker connector
- 31.(P.28)Change M+3V/+3.3V/+5V power switch on/off circuit

- 32.(P.29)Change charger current control circuit and Li-Ion battery full power charge function
- 33.(P.30)Change battery LED indicator circuit
- 34.(P.30)Change AD in logic,R224 to 18K ohm
- 35.(P.31)Combine RJ45/RJ11 connector
- 36.(P.34)Change Ultra Bay power control with TPS2013D
- 37.(P.35)Change modem connector type
- 38.(P.36)Add 1394 circuit
- 39.(P.25/26) SPKR_L/R+1 connect to LINE_OUTL/R
- 40.(P.16)PNF / VRCHANGE# / XFD_INST# routing together

- 41.(P.6/14/15/21)U66 change HC14 to LCX14
- 42.(P.28)UBAY +5VSB/M+5V/+5V/POWER_ON Logic change
- 43.(P.19)Modify CDC / MINIPCI interface.
- 44.(P.22)Add RA48 on FAN1_FG pin
- 45.(P.23)KBC P44 modify MDMIN#
- 46.(P.25)Add MDM_BEEP for BUZZER source
- 47.(P.19)Remove MinipCI Pin-100 SERIRQ
- 48.(P.26)Change Audio Jack Type
- 49.(P.29)Change DC Power Jack Type
- 50.(P.22)HW_THERM_EN change always PH,not control by GPO

- 51.(P.16)RA41 mount
- 52.(P.25)RA43/RA44 mount,BC227/247 un-mount
- 53.(P.23)KBC port44 change to USB_WAKE_EN
- 54.(P.28)Add Q44 for Haedward Thermal Shutdown
- 55.(P.34)Change FDD LEDSignal to DR0/1#_5
- 56.(P.28)U96 pin connect error
- 57.(P.28)Remove BC47/49/50 TC6/9
- 58.(P.5) Add RC termination near D27 for EMI
- 59.(P.22)Add RA51 for FAN1_VCC
- 60.(P.15)BC2/10 change to 150P,BC14/15 change to Dummy

- 03/30
- 61.(P.36)1394 PCI_REQ/GNT change to REQ#3/GNT#3
- 62.(P.36)1394_PME# just Pull high to +3.3V
- 63.(P.34)CD_CSEL pull low change to 470 ohm
- 64.(P.16/17)Change SBFn connection

- 04/02
- 65.(P.15)SKT2 Pin1/Pin3 Swap
- 66.(P.25)U34 Pin4 to U95 Pin3 net name duplicate(BUZZER) change to BUZZER_1

- 04/05
- 67.(P.3)RA30 and BC577 change circuit from RC filter to termination
- 68.(P.14)CN9 Pin15 change to BDC_LED
- 69.(P.16)RA53 mount 0 ohm
- 70.(P.17)SB_Fn PH(RP13 pin6) change to SBFn

- 71.(P.17)RA55 change to Dummy
- 72.(P.19)CN22 Pin31 change name to BDC_LED
- 73.(P.23)Swap net name KBC_SMBDATA and KBC_SMBCLK
- 74.(P.32)Remove G16
- 75.(P.36)Change DR#_5 and MOT#_5 logic to 2 input DR0/1#_5 and MOT0/1#_5

- 04/07
- 76.(P.16)Change DRVIRST# logic circuit,add U100(OR gate),not use Smittch trigger
- 04/08
- 78.(P.22) Change BC442 from 4.7uF to 10uF for FAN_VCC
- 79.(P.22) U26/RA6 Dummy, U36 D875 mount for Hardware Thermal Shutdown
- 80.(P.22)Hardware Thermal Shutdown enable signal change from GPO to system powergood

- 1.(P.14) LCD I/F CN18 Pin39/40 SWAP
- 2.(P.36) 1394 TSBAB22 Pin 86 PH 3.3V / Pin 96 floating. Add RB2 for cut signal.
- 3.(P.24) Remove Printer Port FDD function
- 4.(P.31) R332 change form 10K to 3.3K for S3 function
- 5.(P.34) Modify USB_WAKE_EN logic circuit
- 6.(P.12) Swap CKE1 and CKE3
- 7.(P.19)Remove MINIPCI/CDC Modem Switch
- 8.(P.26) Modify HP_IN function

- 06/02
- 09.(P.12) Change DMI type(new location SKT4)
- 10.(P.15) Add BC578/579 for EMI
- 11.(P.19) Change MINI-PCI socket type
- 12.(P.20)Remove BC148,Add TC25 for HDD power
- 13.(P.20) Add serial resistor on SIRQI_5 for ATA spec
- 14.(P.25) Add RB4 on VREFOUT path to CODEC
- 15.(P.29) Modify charger circuit
- 16.(P.30) R90/92 change to 47K ohm

- (P.28) R427 change to 33K,R426 change to 20K
- RA8/9/10/11 change to 200K ohm
- 17.(P.36) R561 change to 390K ohm
- 06/08
- 18.(P.23) KBC port60 add AD-IN signal for fresh function
- 19.(P.15) TV-OUT add composite signal
- 20.(P.21) ST_SMI signal unconnect
- 21.(P.22) AT24RF08 WP/PROT pins circuit change
- 22.(P.25) CP_SPKR# add PL resistor
- 23.(P.23)KBC_BEEP add voltage division
- 24.(P.27) Add BC582 for +5V
- 25.(P.30) Add OFF_PWRI#_5RSM signal to Charger Control IC
- 26.(P.18) Cardbus controller Pin34 PH change to +3V power
- 27.(P.25)Change Buzzer voltage division
- 28.(P.3) Add RB3 PL for CKG H/W setting

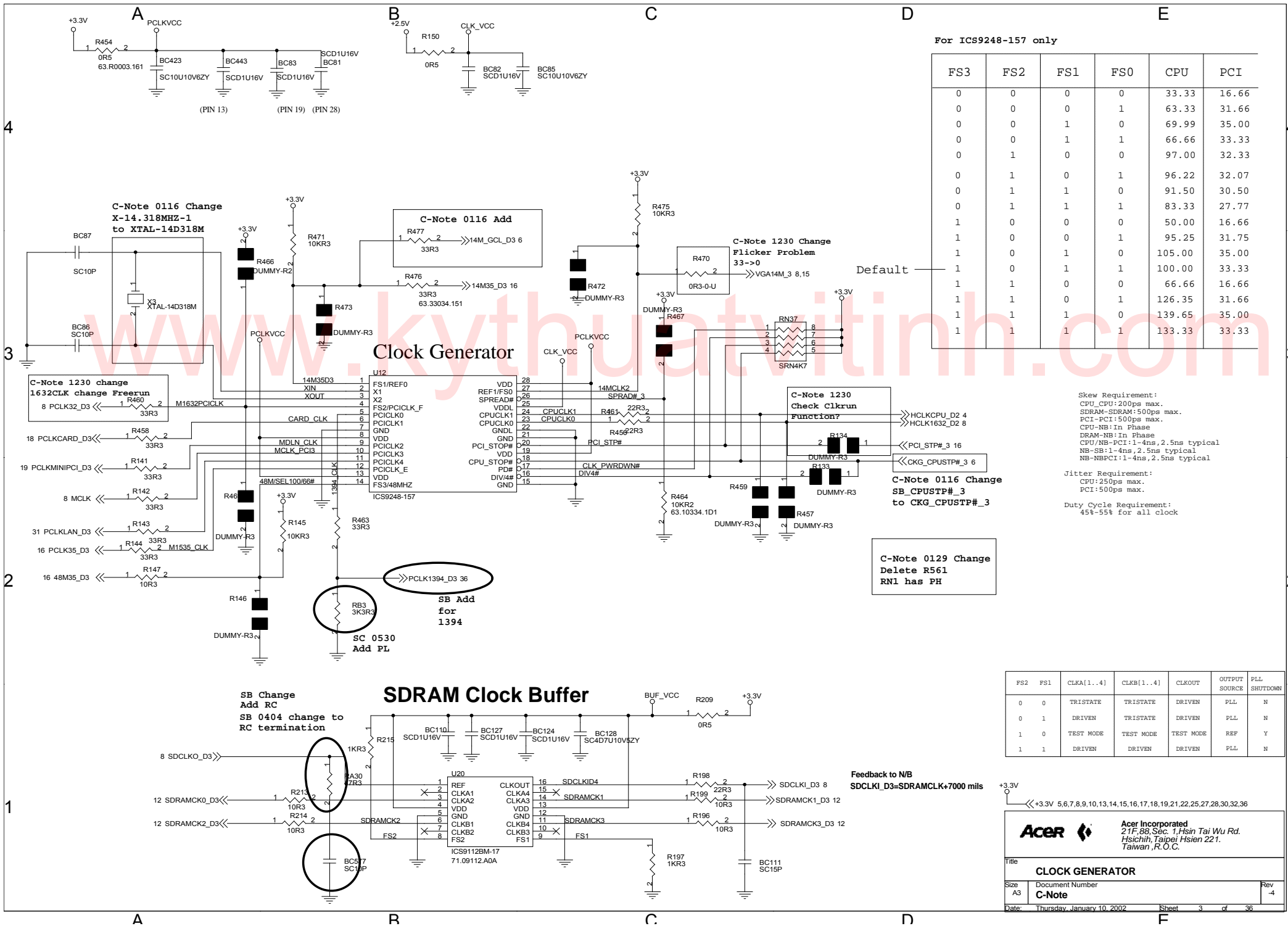
- Rev:SD 1.(P.15) Add BC584 for EMI
- 2.(P.16) R547/R550 change from 1K to 10K
- 3.(P.20) R314 change to 33 ohm, R552/RB10 change to Dummy
- 4.(P.22) U78 RFID Pin3-PROT change connection,Use U44d to do level shift 5V->3V
- 5.(P.25) BC227/BC247 change to 47uF U805,RA43/RA44 dummy for line out path change
- 6.(P.27) IRDA circuit change to 3V level,Add U106/U107 for level shift.
- R363 change to 33 ohm,BC582 change to 47uF
- 7.(P.28) BC298/BC299 change to 10u25VX5R for EMI (The schema is use 4.7uF for temporary placement before P/N is available)
- 8.(P.28) Add D32/D33 for undershoot solution
- 9.(P.28) Reserve RC4/RC5 for undershoot solution
- 10.(P.29) Change D5/D21/R21/BC575 for power on sequence
- 11.(P.29) Change RA18/RA15 for total power charge
- 12.(P.29) Change R53/BC61 for SANYO charge time solution
- 13.(P.29) Add R31/R31L change net for reserve voltage issue
- 14.(P.29) Change BC288/BC252/BC272/BC295/BC278 for EMI issue
- 15.(P.29) Add R40 for EMI
- 16.(P.34) R140 change to 33 ohm,R137 dummy for IDE signal
- 17.(P.25) CN20 pin18/169 net change,Add RC31/BC583 termination for high port issue
- 18.(P.36) U87 change to dummy,RA16/RA17 change to dummy,RB5/RB6 change to 2.7K ohm for 1394 EEPROM remove issue

- PS: P.25 RC2 (pull down resistor of MDM_BEEP).
- P.27 G26 and RC# pin
- P.28 U7 and U96 parts change to 4466
- P.31 PME#_RSM to PWRBTN#_KB
- Rev:-1 1.(P.15) Add RD7,Unmount X1,BC4,BC3,R9,R13,R14,R15 for TV-OUT issue
- 2.(P.15) Add RD5 for PCIRST# glitch issue
- 3.(P.17) Add RP15 for port resistor ID
- 4.(P.18) R217 change to 0 ohm
- 5.(P.21) Remove Bluetooth I/F
- 6.(P.23) RDB(047 unmount)(reserve)
- 7.(P.27) R247 unmount,RA44 0 ohm
- 8.(P.26) R331 change 22K,R343 change 5.6K
- 9.(P.27) R361/358 change to 3.8 ohm
- 10.(P.28) BC22/19 change to 0.01uF, R21 change to 4.7K
- 11.(P.29) R379/380 change to 20K/10K,Add RD9,R365/381 change to 3.3K/10K
- 12.(P.31) TH3 TR3/L20 change for EMI
- 13.(P.32) Add G27 for EMI
- 14.(P.34) R45 unmount

- Rev:-2 01.(P.17) PRE#_RSM change circuit.Add RE3,RE4,Q48, (Reserve,not mount)
- 02.(P.19) Add RE1 PL on AC_SDATA_IN1
- 03.(P.26) Add RE2 PL on KBC_BEEP
- 04.(P.29) D30 pin1 connect to AD+IN
- 05.(P.18) Q19 change to DTCL24EKA
- 06.(P.19) Q18 change to DTCL24EKA
- 07.(P.23) Q36/Q15 change to DTCL24EKA
- 08.(P.20) TC25 change to 150uF
- 09.(P.25) BC168,BC169 change from 5P to 18P

- Rev:-3 01.(P.12) Chnase CKE circuit,add RP1 PL
- 02.(P.25) Change X6 to 10pF part,BC168/169 change to 9pF
- 03.(P.17) D19 Un-mount for S3 solution
- Rev:-4 01.(P.20) Change TC3/22 to 150uF

Acer		Acer Incorporated 21F, 88, Sec. 1, Hsin Tai Wu Rd. Hsinchu, Taipei, Hsein 221, Taiwan, R.O.C.	
Revision History			
Rev	Description Number	Rev	4
A2	C-Note		
Date: Wednesday, December 05, 2001 Sheet 2 of 38			



For ICS9248-157 only

FS3	FS2	FS1	FS0	CPU	PCI
0	0	0	0	33.33	16.66
0	0	0	1	63.33	31.66
0	0	1	0	69.99	35.00
0	0	1	1	66.66	33.33
0	1	0	0	97.00	32.33
0	1	0	1	96.22	32.07
0	1	1	0	91.50	30.50
0	1	1	1	83.33	27.77
1	0	0	0	50.00	16.66
1	0	0	1	95.25	31.75
1	0	1	0	105.00	35.00
1	0	1	1	100.00	33.33
1	1	0	0	66.66	16.66
1	1	0	1	126.35	31.66
1	1	1	0	139.65	35.00
1	1	1	1	133.33	33.33

Skew Requirement:
 CPU-CPU:200ps max.
 SDRAM-SDRAM:500ps max.
 PCI-PCI:500ps max.
 CPU-NB:In Phase
 DRAM-NB:In Phase
 CPU/NB-PCI:1-4ns,2.5ns typical
 NB-SB:1-4ns,2.5ns typical
 NB-NBPCI:1-4ns,2.5ns typical

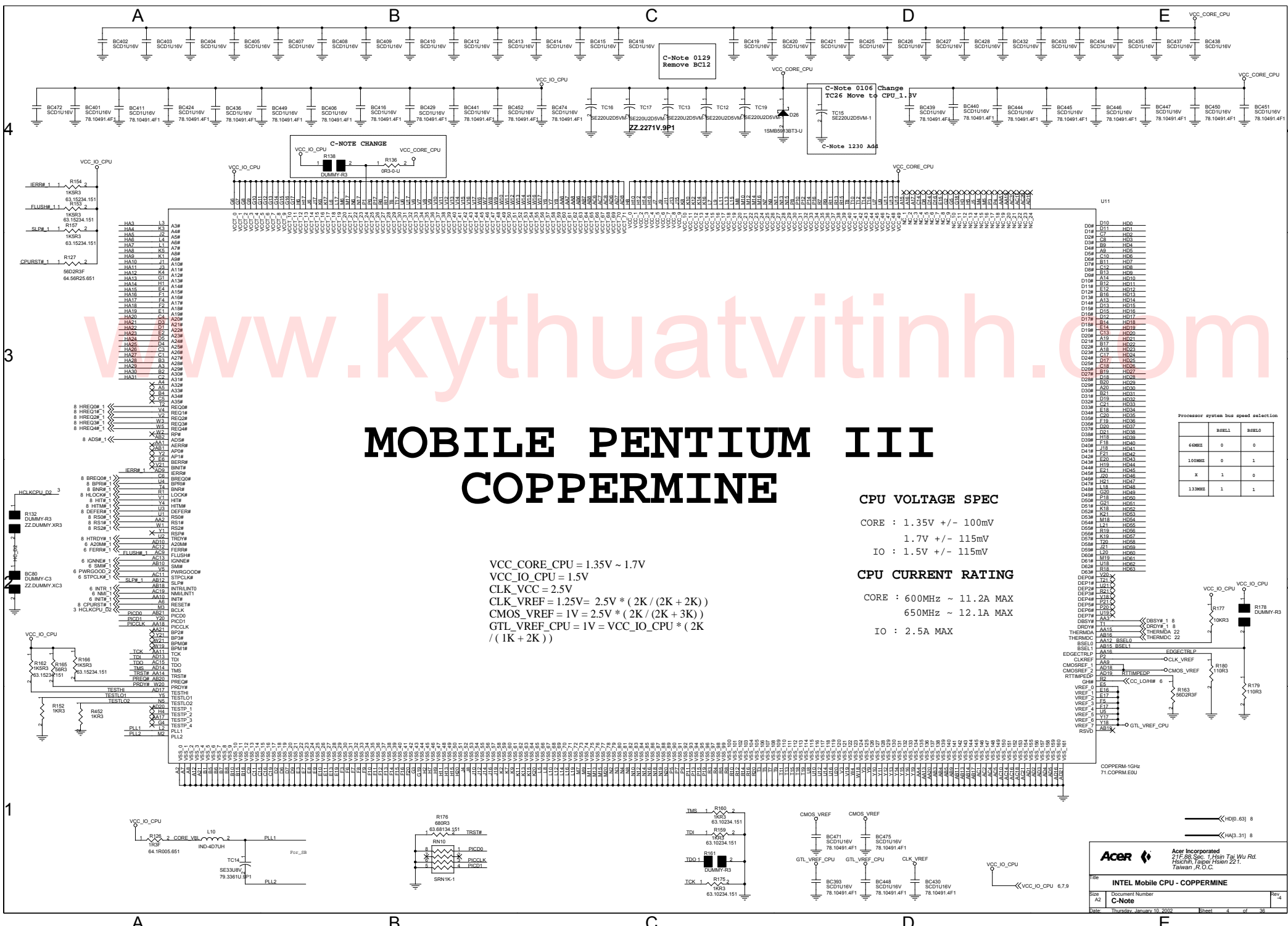
Jitter Requirement:
 CPU:250ps max.
 PCI:500ps max.

Duty Cycle Requirement:
 45%-55% for all clock

FS2	FS1	CLKA[1..4]	CLKB[1..4]	CLKOUT	OUTPUT SOURCE	PLL SHUTDOWN
0	0	TRISTATE	TRISTATE	DRIVEN	PLL	N
0	1	DRIVEN	TRISTATE	DRIVEN	PLL	N
1	0	TEST MODE	TEST MODE	TEST MODE	REF	Y
1	1	DRIVEN	DRIVEN	DRIVEN	PLL	N

+3.3V 5,6,7,8,9,10,13,14,15,16,17,18,19,21,22,25,27,28,30,32,36

ACER Acer Incorporated
 2/F,88,Sec. 1,Hsin Tai Wu Rd.
 Hsichih, Taipei Hsien 221,
 Taiwan, R.O.C.



MOBILE PENTIUM III COPPERMINE

CPU VOLTAGE SPEC

CORE : 1.35V +/- 100mV
 1.7V +/- 115mV
 IO : 1.5V +/- 115mV

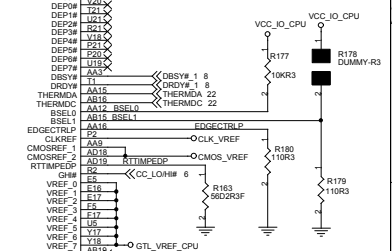
CPU CURRENT RATING

CORE : 600MHz ~ 11.2A MAX
 650MHz ~ 12.1A MAX
 IO : 2.5A MAX

VCC_CORE_CPU = 1.35V ~ 1.7V
 VCC_IO_CPU = 1.5V
 CLK_VCC = 2.5V
 CLK_VREF = 1.25V = 2.5V * (2K / (2K + 2K))
 CMOS_VREF = 1V = 2.5V * (2K / (2K + 3K))
 GTL_VREF_CPU = 1V = VCC_IO_CPU * (2K / (1K + 2K))

Processor system bus speed selection

	88E1	88E0
6MHz	0	0
100MHz	0	1
X	1	0
1.33MHz	1	1



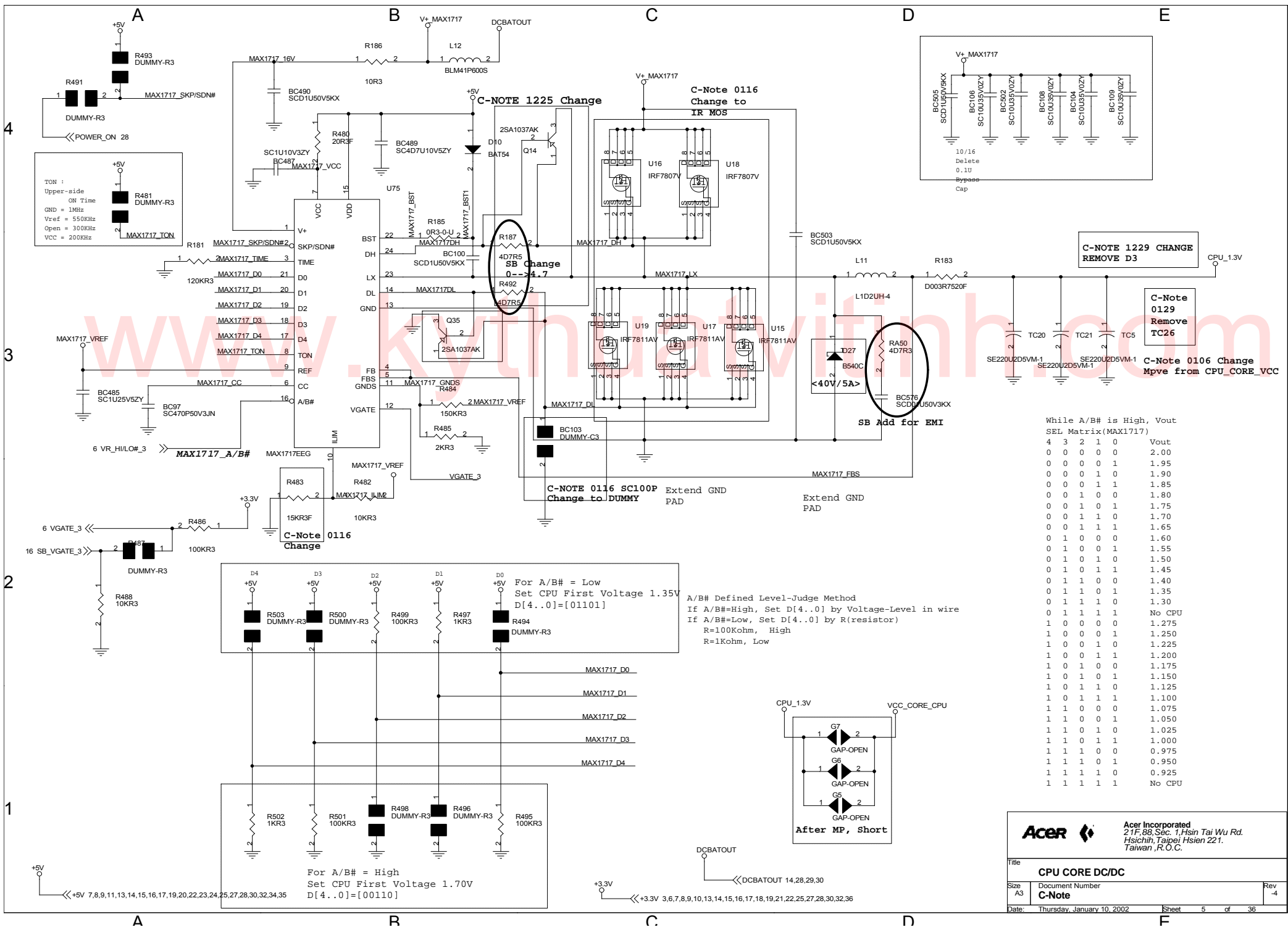
COPPERMINE 1GHZ
 71 COPPERMINE

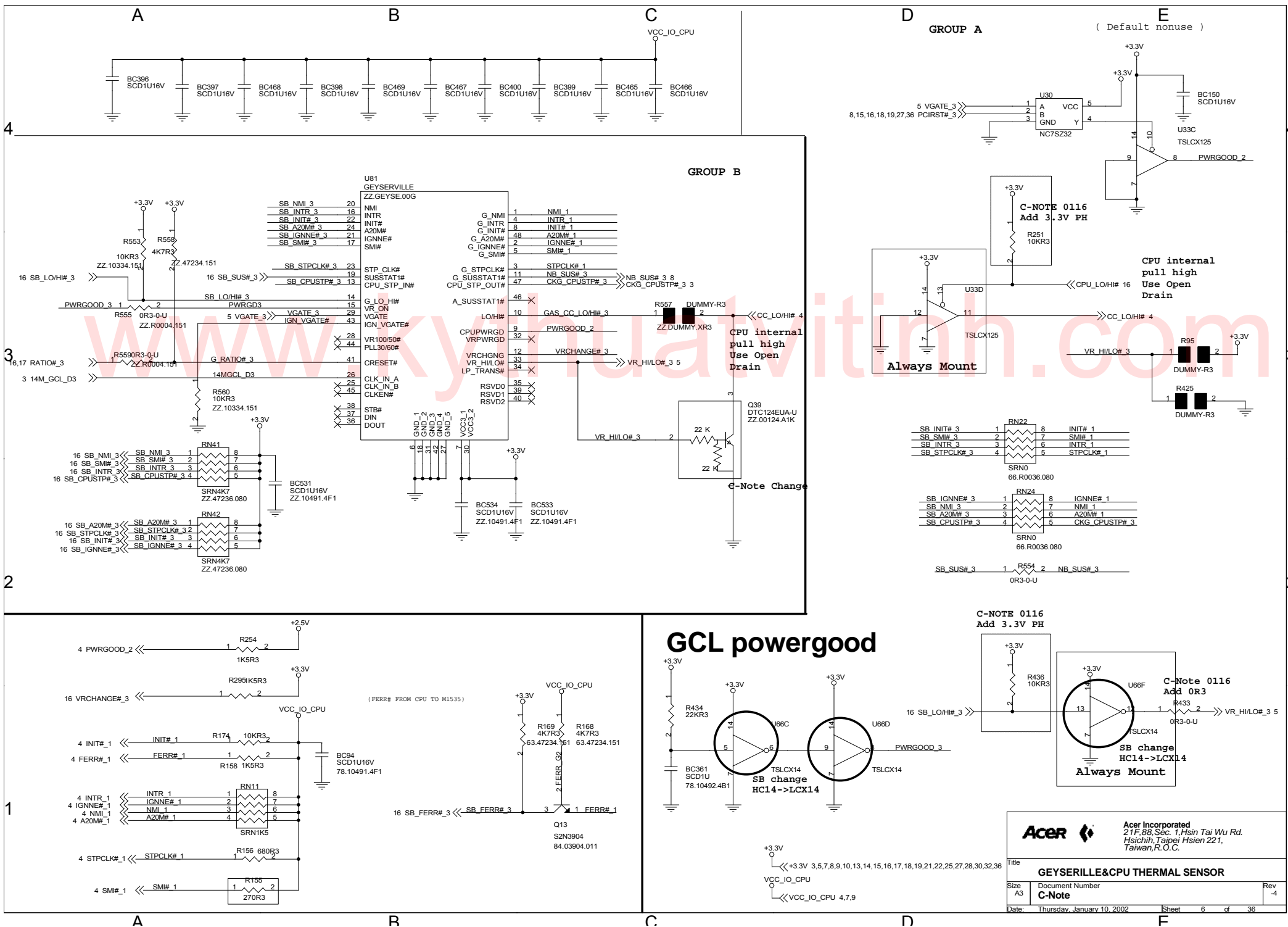
ACER

Acer Incorporated
 2/F, 88, Sec. 1, Hsien Tai Wu Rd.
 Taichung, Taiwan 40621, Taiwan, R.O.C.

INTEL Mobile CPU - COPPERMINE

Size: A4
 Doc: C-Note
 Date: Thursday, January 10, 2002





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 Hsichih, Taipei, Hsinien 221,
 Taiwan, R.O.C.

Title: **GEYSERILLE&CPU THERMAL SENSOR**

Size: A3 Document Number: **C-Note** Rev: -4

Date: Thursday, January 10, 2002 Sheet: 6 of 36

A

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C

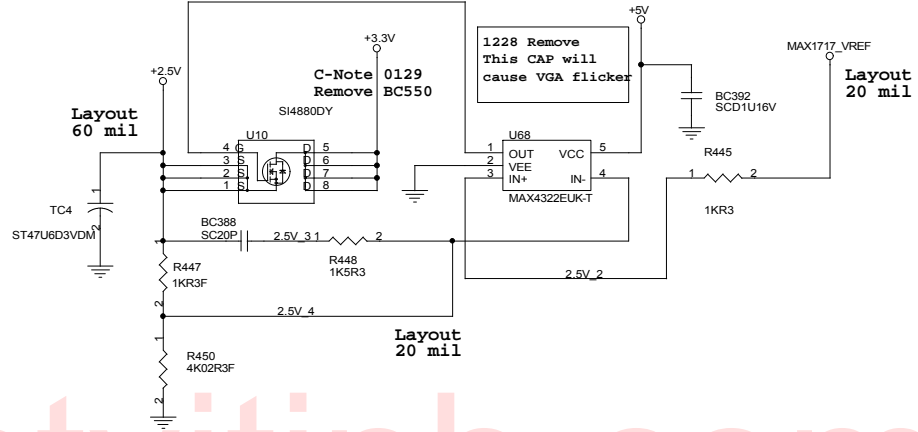
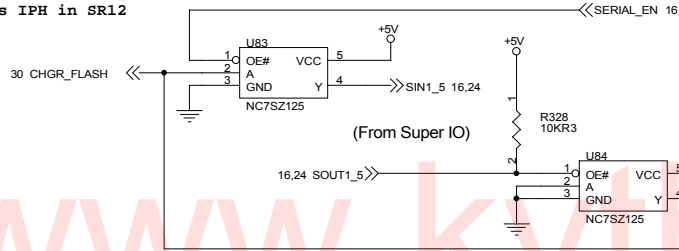
D Generate CLK_VCC (2.5V)

E TO CLOCKGEN

SB Change
 Remove R329 Q21
 TSAHC125 change to
 NC7SZ125
 SERIAL_EN use GPO

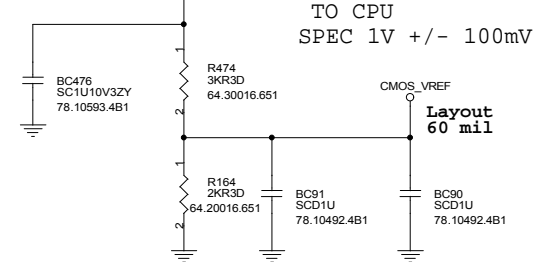
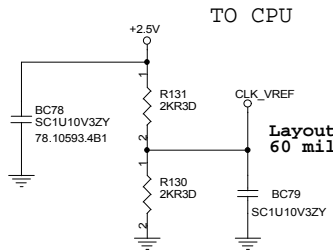
Charger F/W Flash Circuit

Check if CHGR_FLASH
 is IPH in SR12

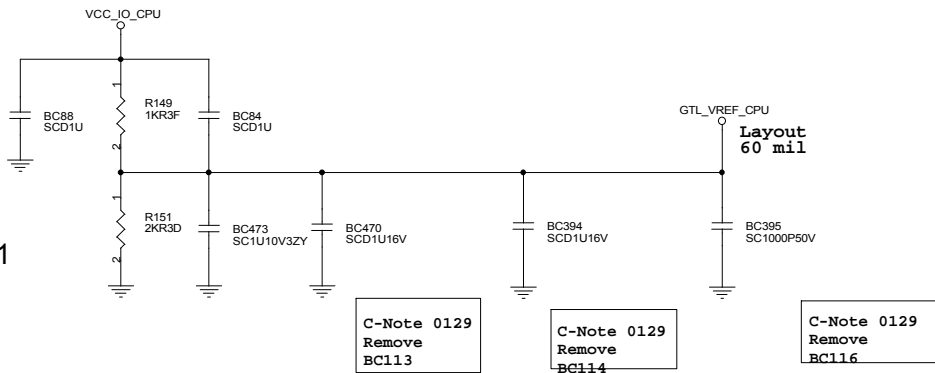


Generate CLK_VREF (1.25V)

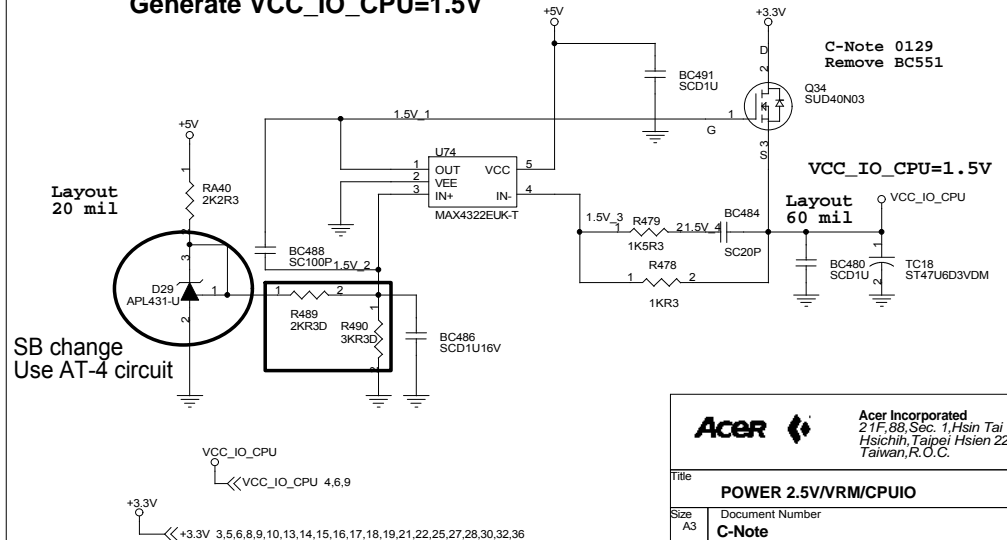
Generate CMOS_VREF (1V)



Generate GTL_VREF_CPU (1V)



Generate VCC_IO_CPU=1.5V



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Title POWER 2.5V/VRM/CPUIO		
Size A3	Document Number C-Note	Rev -4
Date: Thursday, January 10, 2002	Sheet 7	of 36

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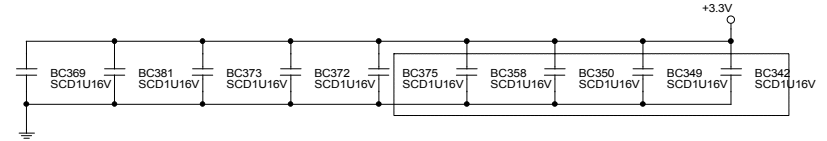
D

E

ALL CAP. are near NB power pins

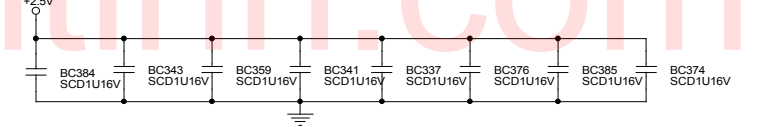
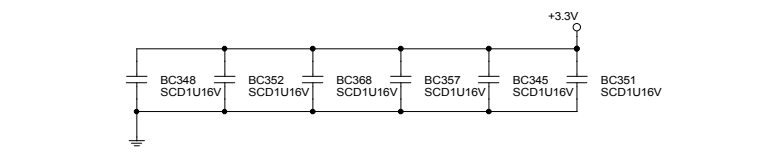
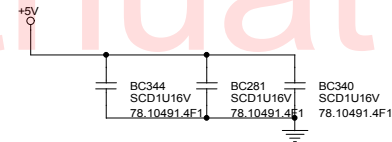
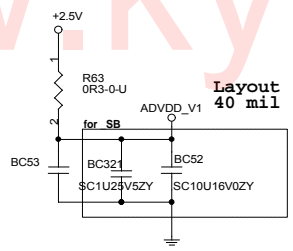
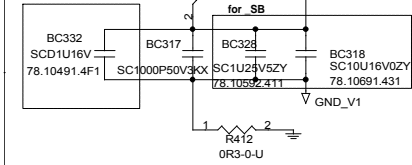
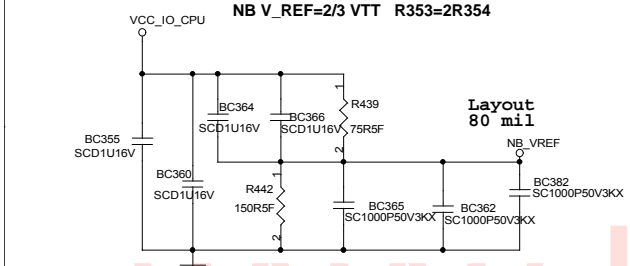
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4



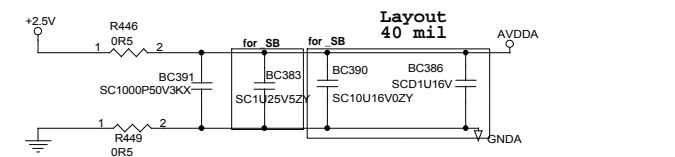
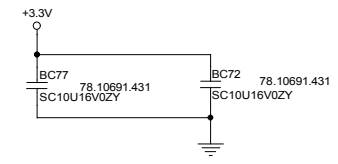
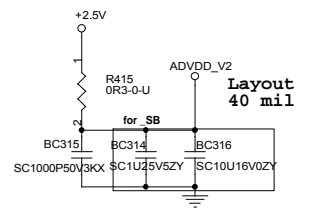
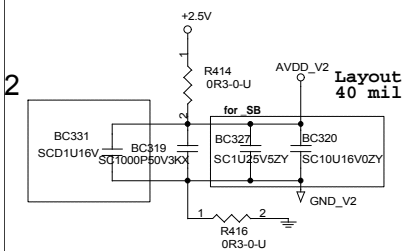
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3



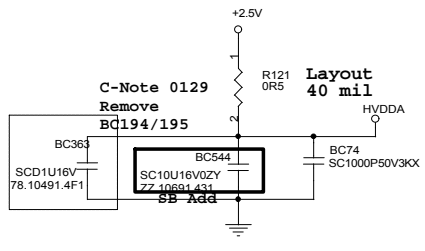
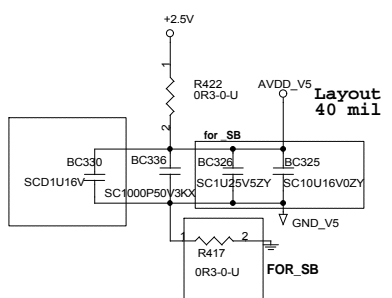
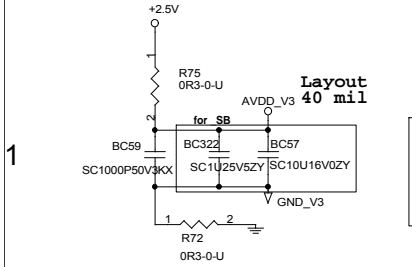
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2



1

1



Acer		Acer Incorporated 21F, 88, Sec. 1, Hsin Tai Wu Rd. Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
VGA POWER&FILTER&DAMPING RES			
Size A3	Document Number	Rev -4	
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A

B

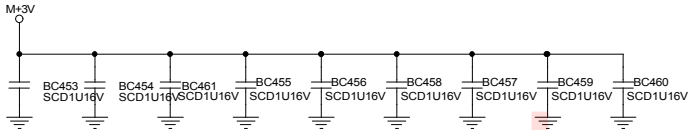
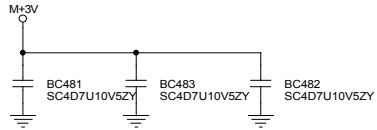
C

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E

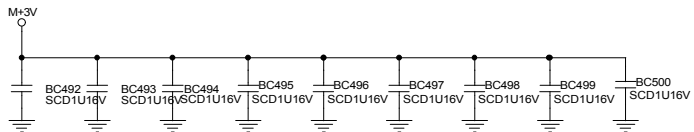
5V 5, 7, 8, 11, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 25, 27, 28, 30, 32, 34, 35

DIMM module power bypass Cap. are **DIMM use M+3V** closed to DM1 power pins



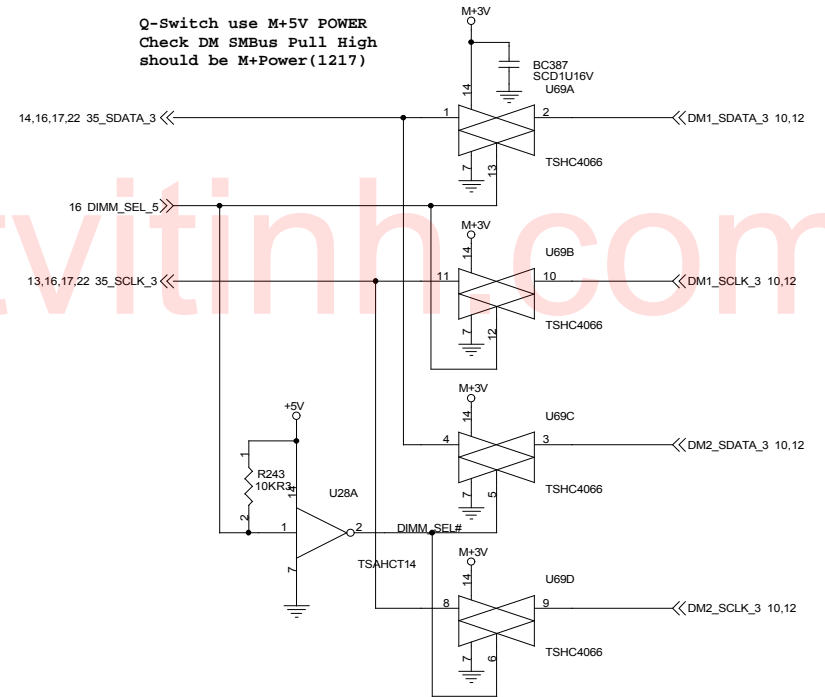
C-Note 0129
Remove BC217
BC216

DIMM module power bypass Cap. are closed to DM2 power pins



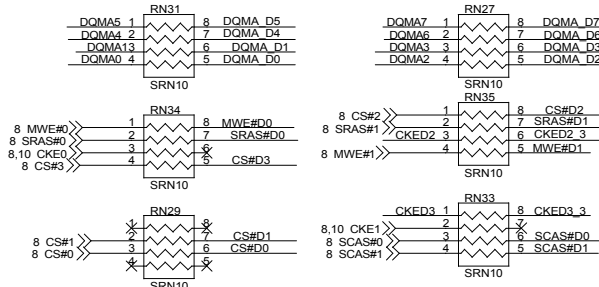
C-Note 0129
Remove BC231
BC230

DIMM SMBUS EEPROM SELECTOR



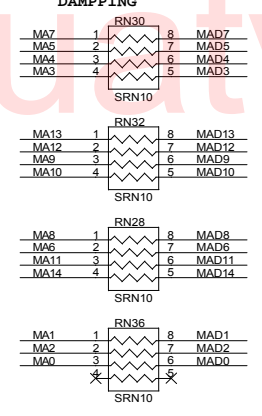
(Normal TYPE)

MEMORY COMMAND DAMPING

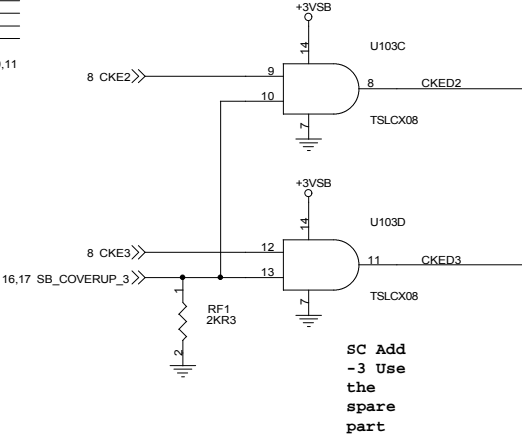
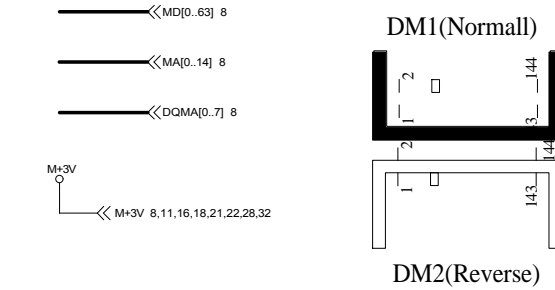
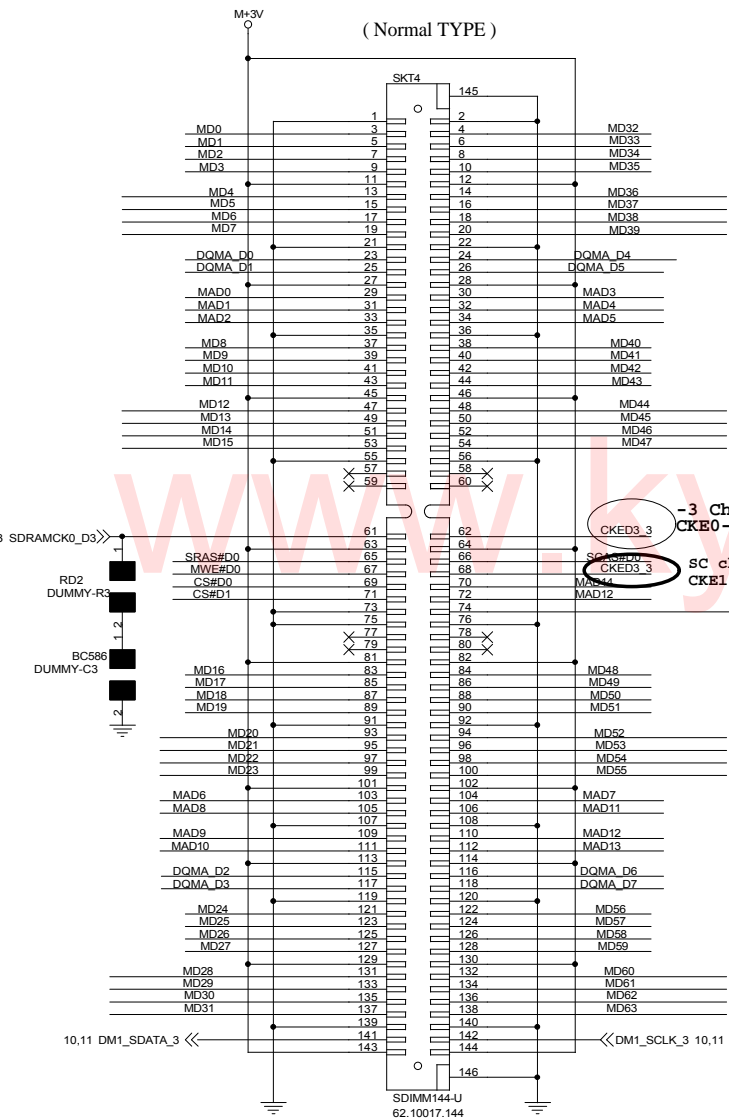
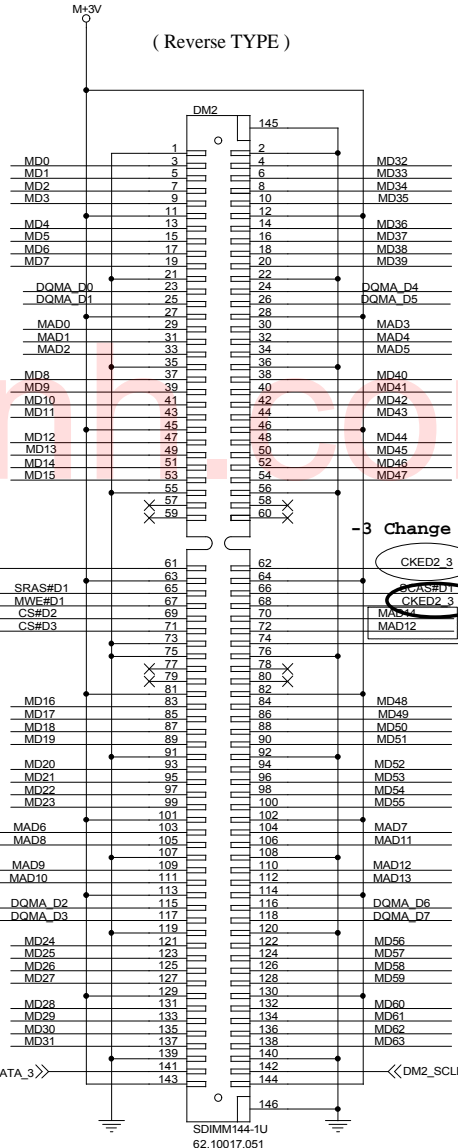


C-NOTE 1226 CHANGE C-Note 0103 Swap Pin again SWAP THE PIN ASSIGN BY LAYOUT TEAM

MEMORY ADDRESS DAMPING



(Reverse TYPE)

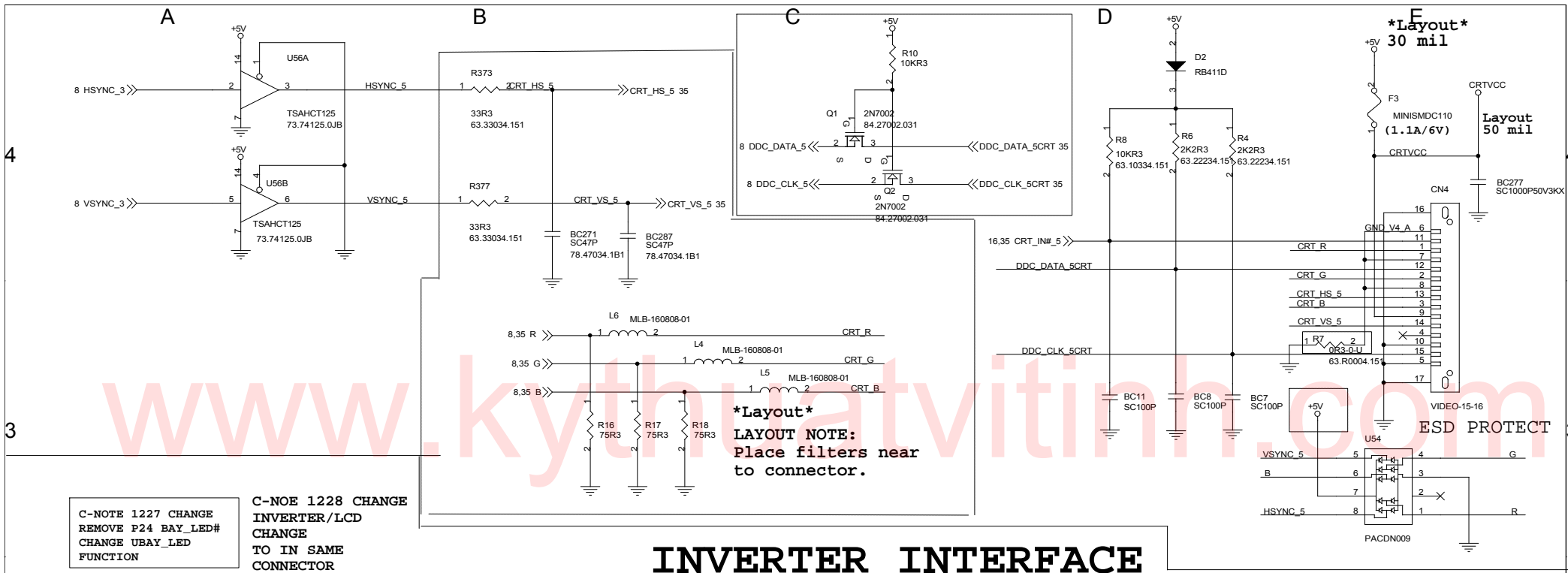


SC Add -3 Use the spare part

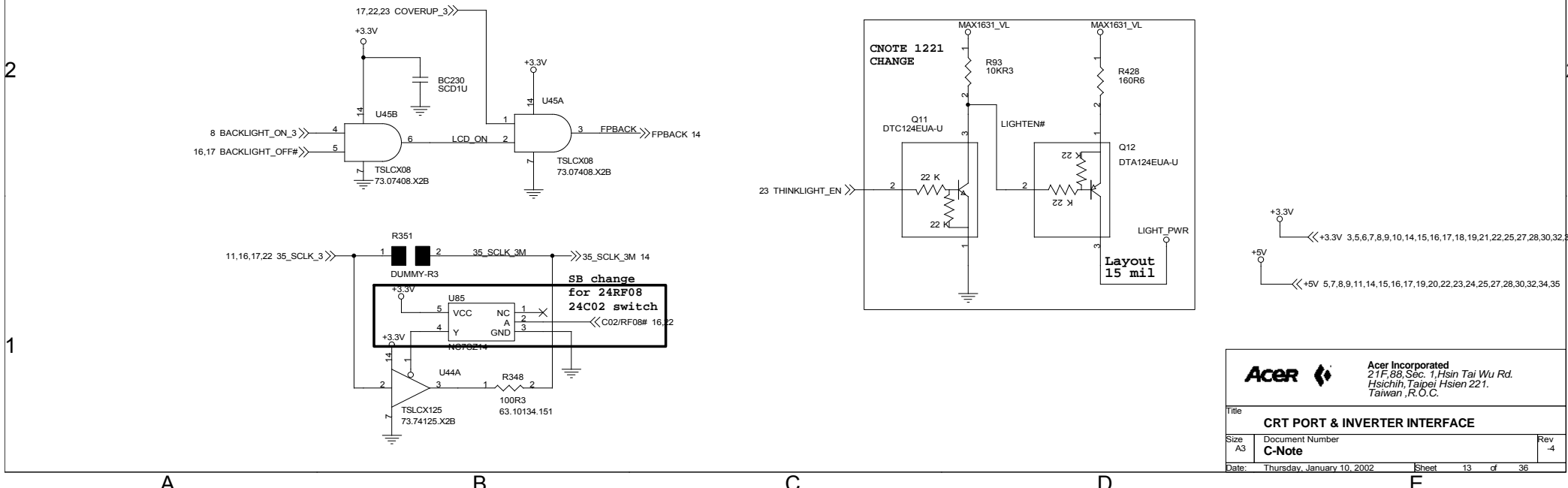
UP BOTTOM SIDE

Acer Incorporated 2/F, 89, Sec. 1, Hsin Tai Wu Rd. Hsichih, Taipei, Hsien 221, Taiwan, R.O.C.

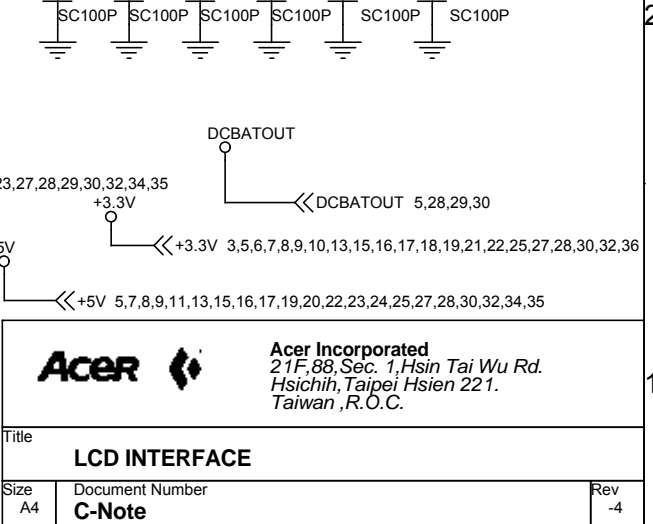
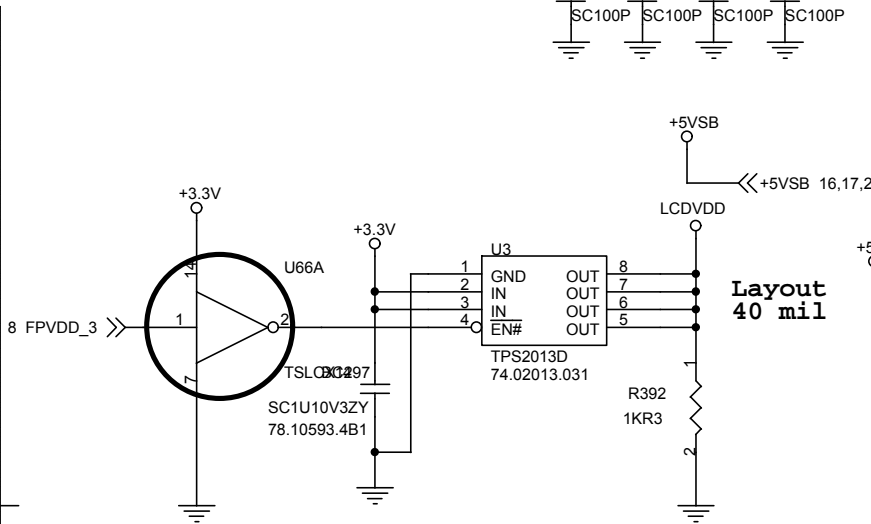
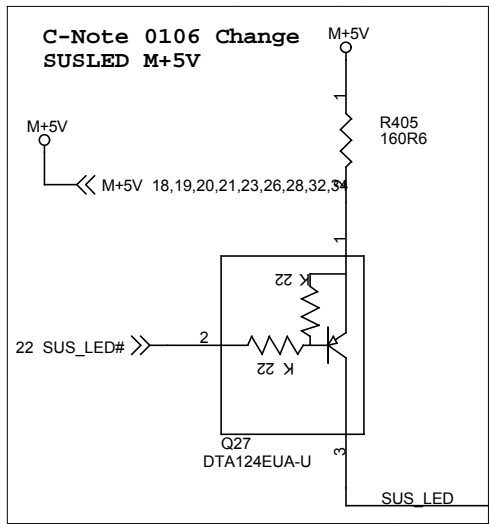
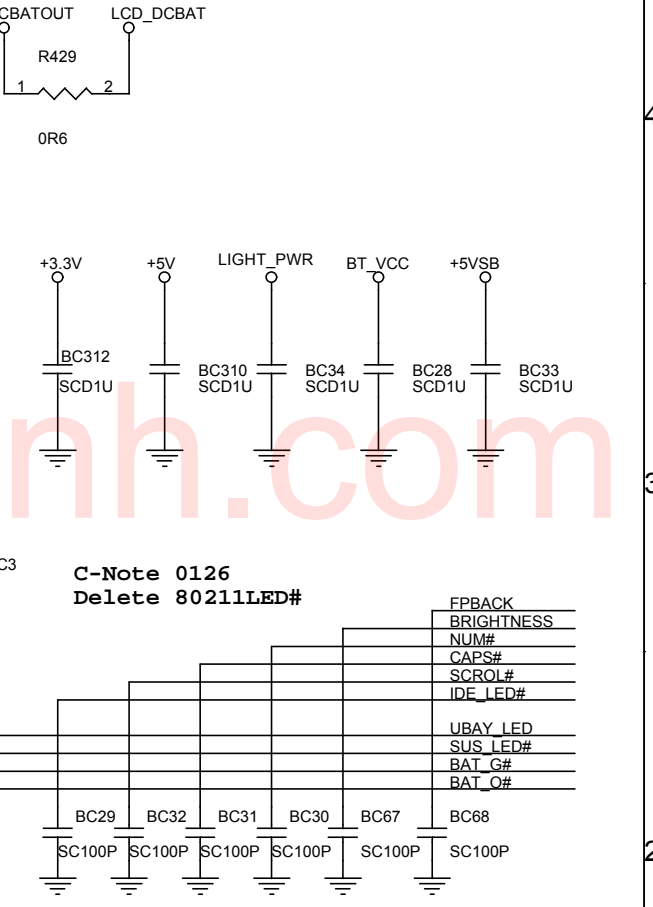
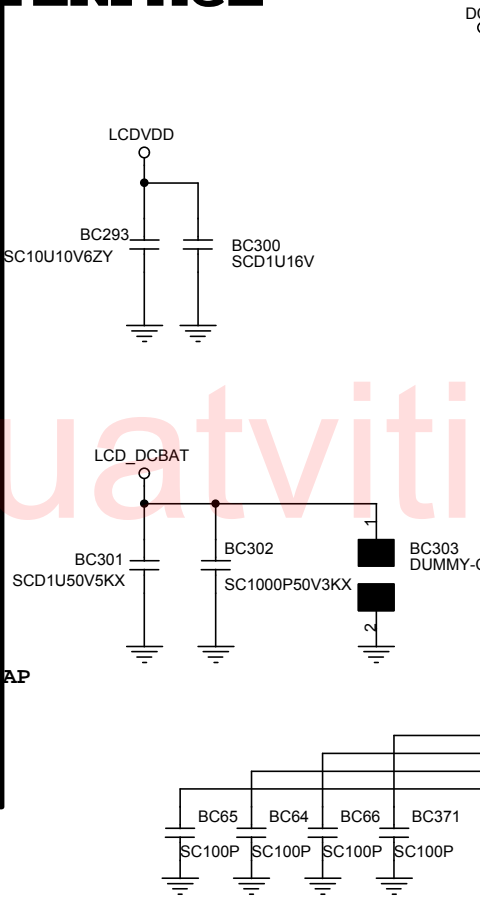
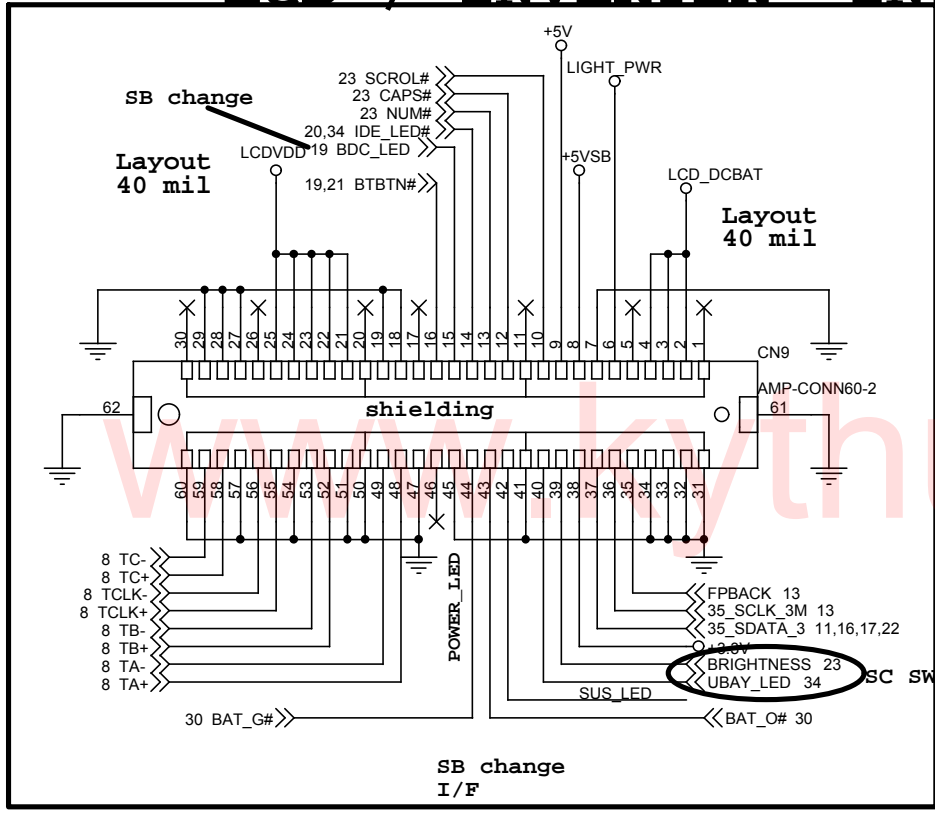
Table with 4 columns: Title (SODIMM SOCKET), Size (A3), Document Number (C-Note), and Rev (-4). Includes Date: Thursday, January 10, 2002 and Sheet 12 of 36.



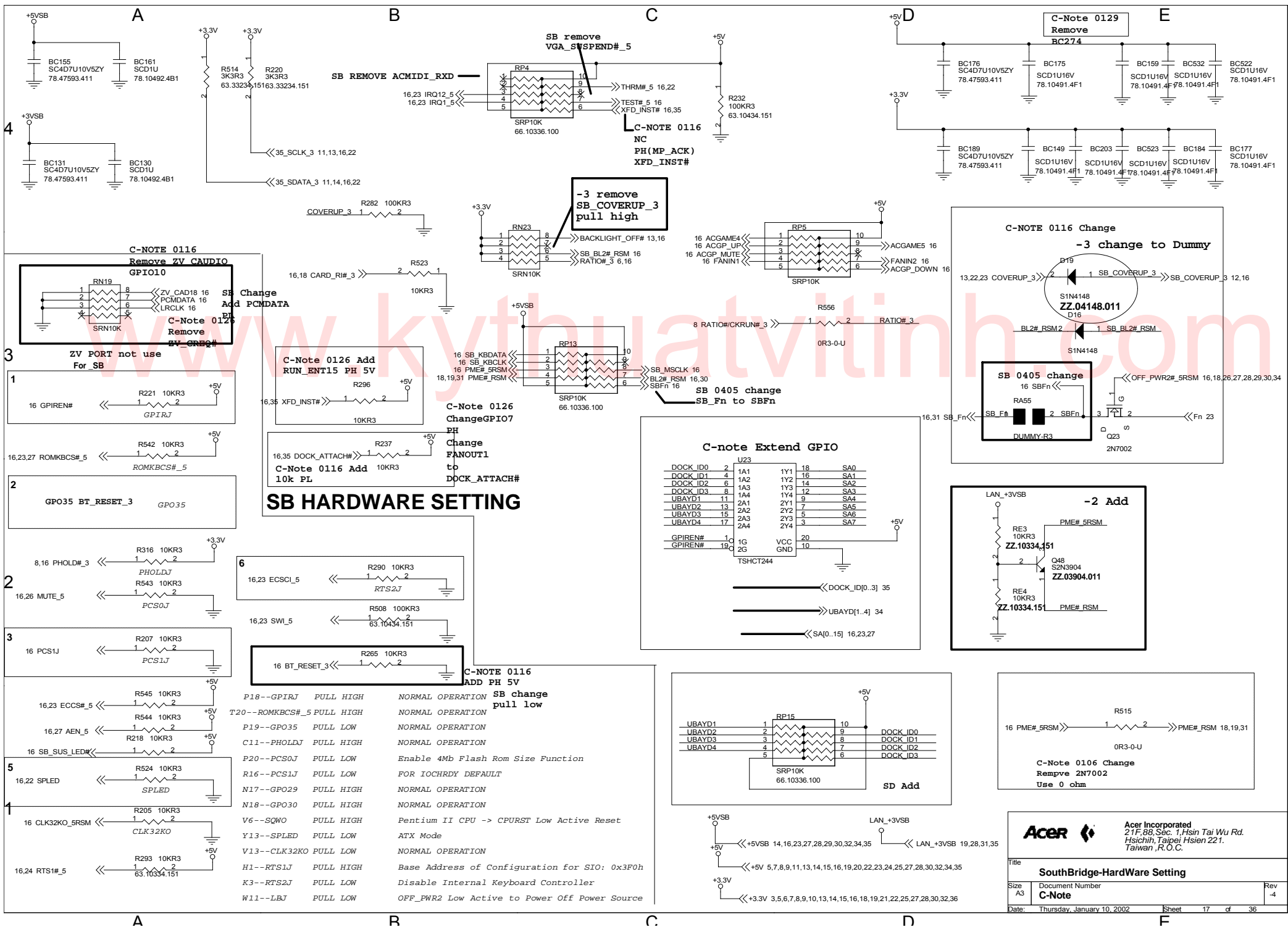
INVERTER INTERFACE



LCD / INVERTER INTERFACE



Acer Incorporated 21F, 88, Sec. 1, Hsin Tai Wu Rd. Hsichih, Taipei Hsien 221. Taiwan, R.O.C.		
Title LCD INTERFACE		
Size A4	Document Number C-Note	Rev -4
Date: Thursday, January 10, 2002	Sheet 14	of 36



SB HARDWARE SETTING

P18--GPIRJ	PULL HIGH	NORMAL OPERATION	SB change pull low
T20--ROMKBCS#_5	PULL HIGH	NORMAL OPERATION	
P19--GPO35	PULL LOW	NORMAL OPERATION	
C11--PHOLDJ	PULL HIGH	NORMAL OPERATION	
P20--PCS0J	PULL LOW	Enable 4Mb Flash Rom Size Function	
R16--PCS1J	PULL LOW	FOR IOCHRDY DEFAULT	
N17--GPO29	PULL HIGH	NORMAL OPERATION	
N18--GPO30	PULL HIGH	NORMAL OPERATION	
V6--SQWO	PULL HIGH	Pentium II CPU -> CPUST Low Active Reset	
Y13--SPLD	PULL LOW	ATX Mode	
V13--CLK32KO	PULL LOW	NORMAL OPERATION	
H1--RTS1J	PULL HIGH	Base Address of Configuration for SIO: 0x3F0h	
K3--RTS2J	PULL LOW	Disable Internal Keyboard Controller	
W11--LBJ	PULL LOW	OFF_PWR2 Low Active to Power Off Power Source	

C-note Extend GPIO

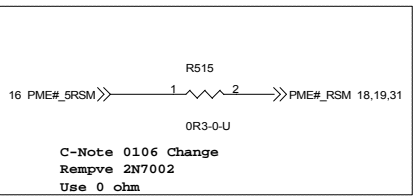
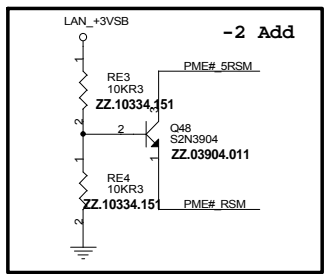
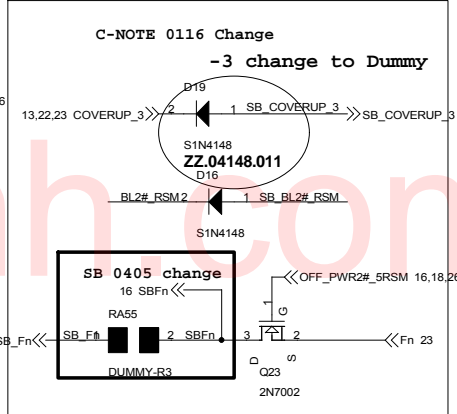
DOCK_ID0	2	1A1	1Y1	18	SA0
DOCK_ID1	4	1A2	1Y2	16	SA1
DOCK_ID2	6	1A3	1Y3	14	SA2
DOCK_ID3	8	1A4	1Y4	12	SA3
UBAYD1	11	2A1	2Y1	9	SA4
UBAYD2	13	2A2	2Y2	7	SA5
UBAYD3	15	2A3	2Y3	3	SA6
UBAYD4	17	2A4	2Y4	3	SA7
GPIREN#	1	1G	VCC	20	
GPIREN#	18	2G	GND	10	

TSHT244

DOCK_ID[0..3] 35

UBAYD[1..4] 34

SA[0..15] 16,23,27



Acer Incorporated

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Hsichih, Taipei Hsien 221,
Taiwan, R.O.C.

Title: **SouthBridge-HardWare Setting**

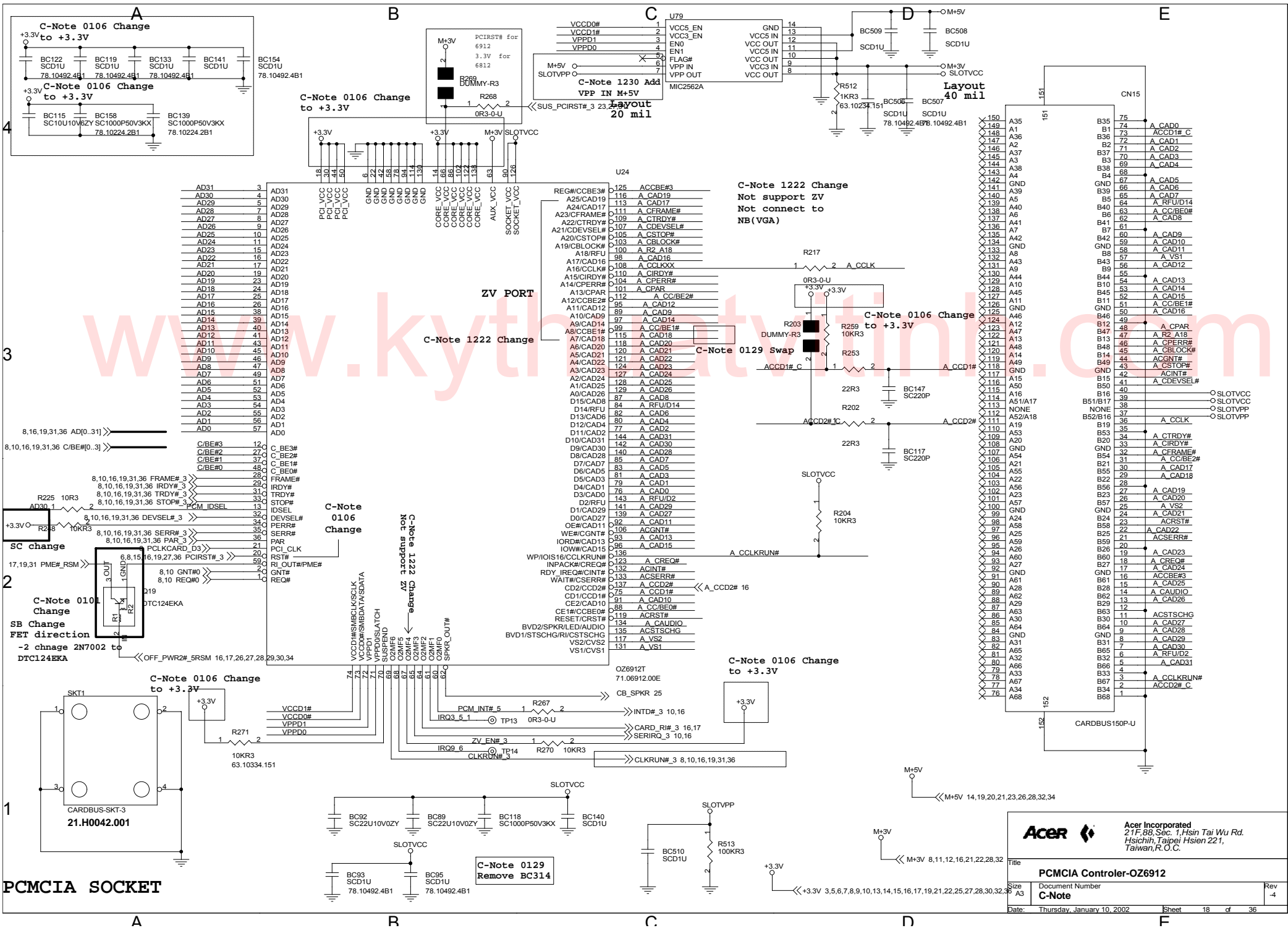
Size: A3

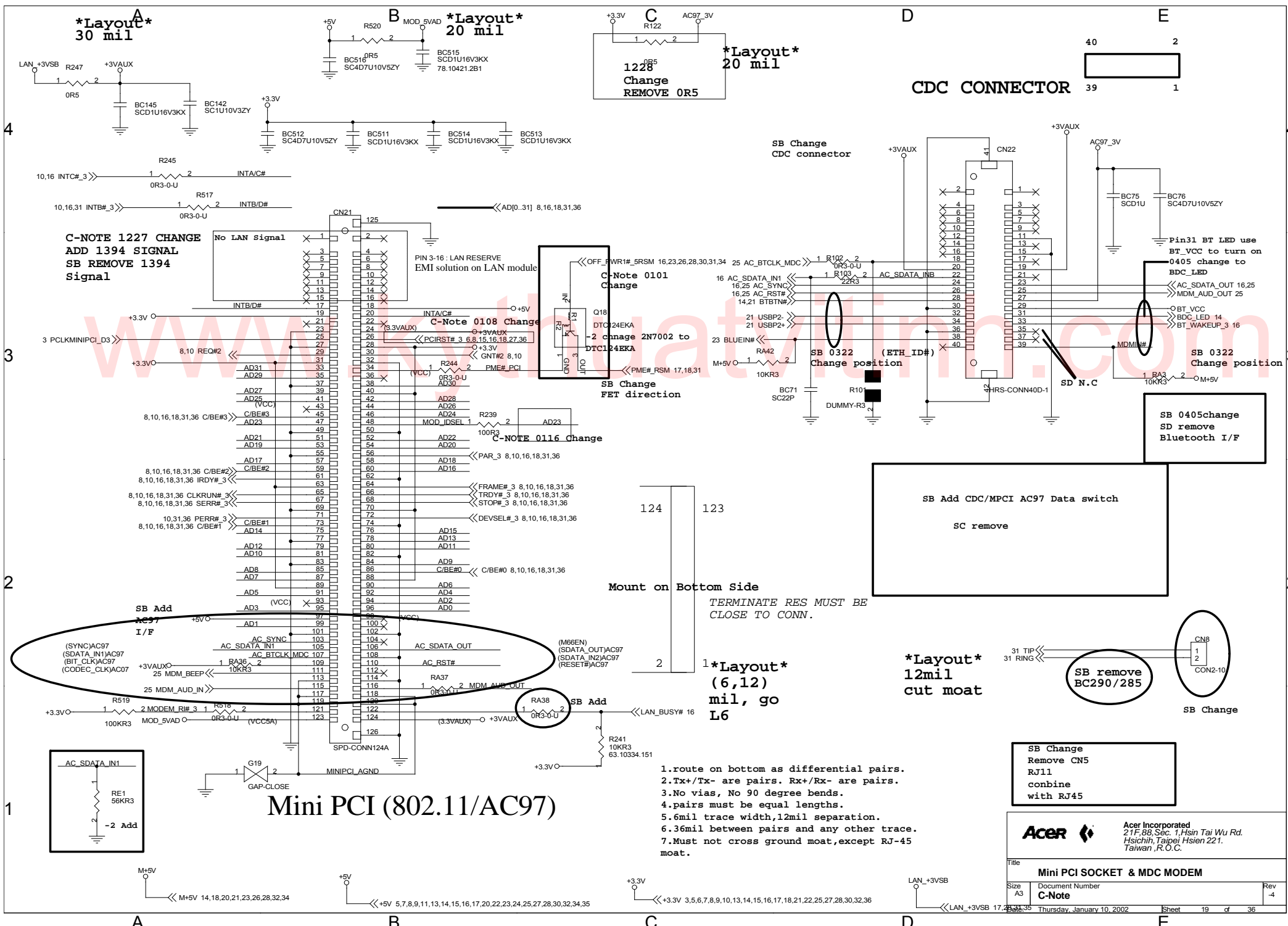
Document Number: **C-Note**

Rev: 4

Date: Thursday, January 10, 2002

Sheet: 17 of 36





***Layout*
30 mil**

***Layout*
20 mil**

***Layout*
20 mil**
1228
Change
REMOVE OR5

CDC CONNECTOR

**C-NOTE 1227 CHANGE
ADD 1394 SIGNAL
SB REMOVE 1394
Signal**

**C-Note 0101
Change**

C-Note 0108 Change

C-NOTE 0116 Change

SB Add CDC/MPCI AC97 Data switch

SC remove

**SB 0322
Change position**

**SB 0405change
SD remove
Bluetooth I/F**

Mount on Bottom Side

**TERMINATE RES MUST BE
CLOSE TO CONN.**

***Layout*
(6,12)
mil, go
L6**

***Layout*
12mil
cut moat**

**SB remove
BC290/285**

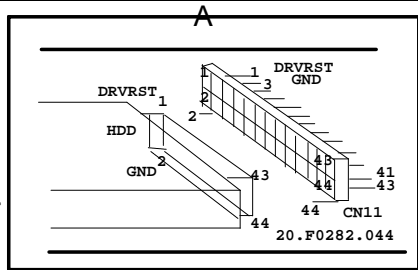
**SB Change
Remove CN5
RJ11
combine
with RJ45**

- 1.route on bottom as differential pairs.
- 2.Tx+/Tx- are pairs. Rx+/Rx- are pairs.
- 3.No vias, No 90 degree bends.
- 4.pairs must be equal lengths.
- 5.6mil trace width,12mil separation.
- 6.36mil between pairs and any other trace.
- 7.Must not cross ground moat,except RJ-45 moat.

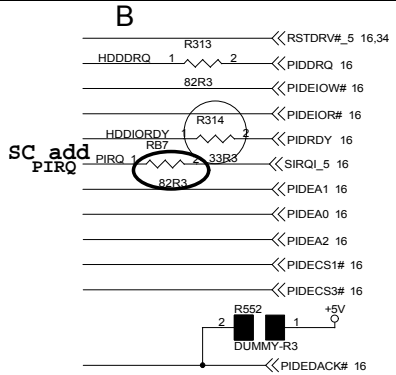
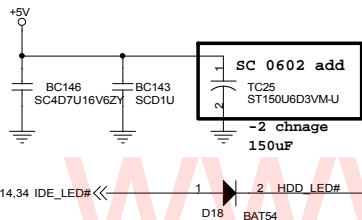
Mini PCI (802.11/AC97)

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Hsichih, Taipei, Hsien 221.
Taiwan, R.O.C.

Title Mini PCI SOCKET & MDC MODEM		
Size A3	Document Number C-Note	Rev -4
Date: Thursday, January 10, 2002 Sheet 19 of 36		

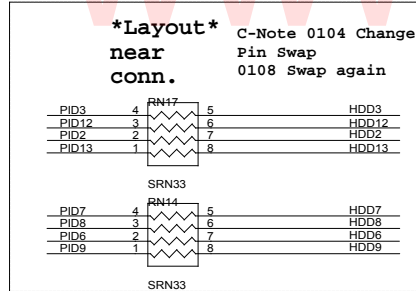
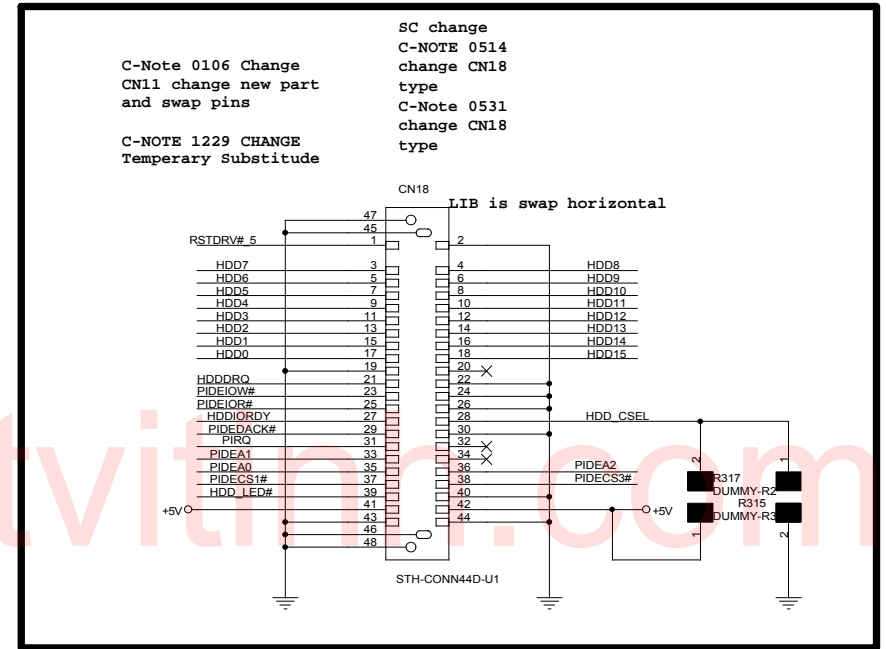
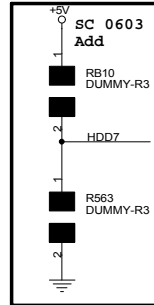


***Layout*
50 mil For HDD**



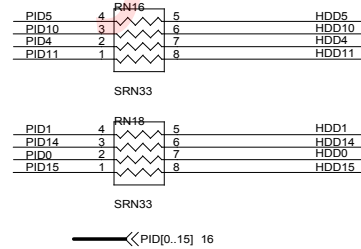
**HDD Connector substitute
with FALCON2.5
AMP-CONN44 20.80071.044
->FOX-CONN44 20.F0112.044
1229 temporary change to
FOX-CONN44D**

HDD



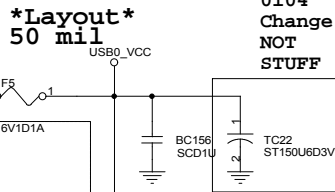
***Layout*
near
conn.**

**C-Note 0104 Change
Pin Swap
0108 Swap again**



**USB signal target
impedance=45ohm +- 10%**

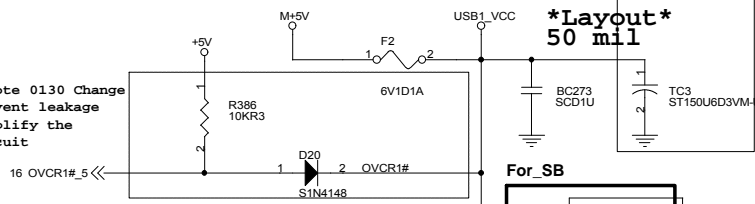
USB PORT



***Layout*
50 mil**

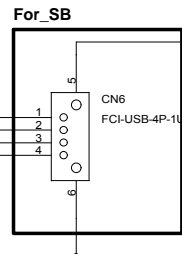
**0104
Change
NOT
STUFF**

**C-Note 0130 Change
Prevent leakage
Simplify the
circuit**

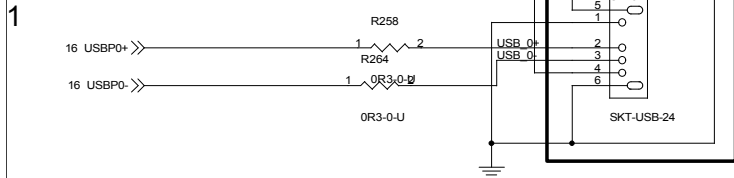


***Layout*
50 mil**

**0104
Change
NOT
STUFF**

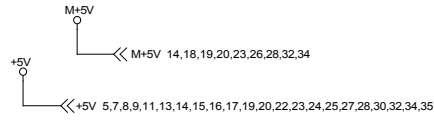
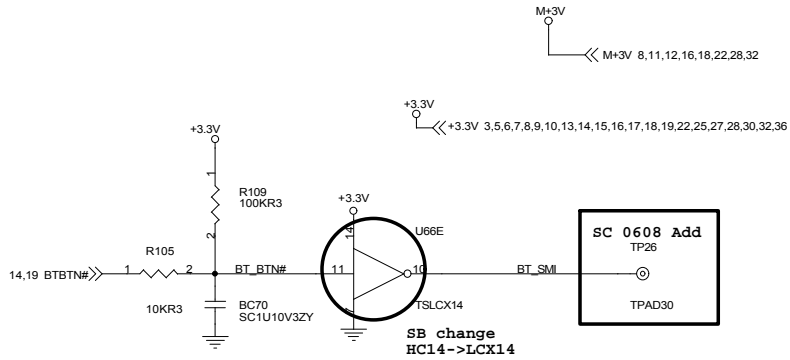


**For_SB
SB Change
Change USB port
type**



**SB Change
Connector**

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Hsichih, Taipei, Hsien 221,
Taiwan, R.O.C.



**C-NOTE 1228 CHANGE
REMOVE U35 (BLUELED#)
USE BT_VCC TO LIGHT THE
BLUETOOTH LED**

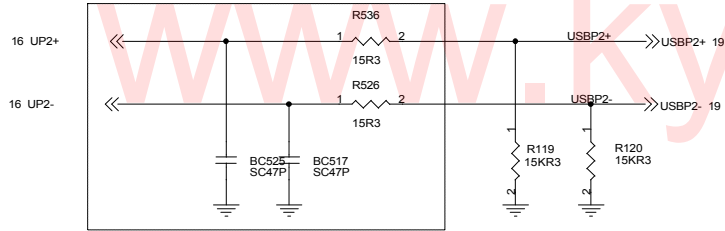
Enable bluetooth power with S.W.

SD remove U8

***Layout*
20 mil**

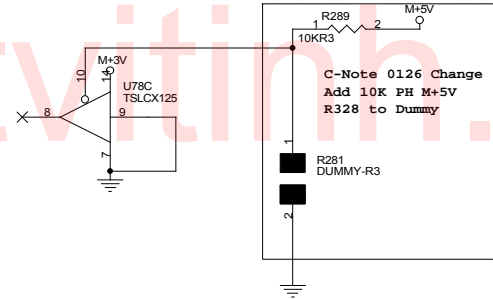
Add R597, R598, R599, R600
to set B.T. and 802.11

NEAR M1535



Check connect to KBC GPIO

C-NOTE 0116 Update



**SB REMOVE U67
BT_RESET**

C-Note 0116 Change
2.93V reset

BLUETOOTH MODULE CONN
USB: PCB impedance control : 90 ohm/pair
45 ohm/trace
**S/W RESET ONLY
CHECK GPIO DEFAULT LOW**

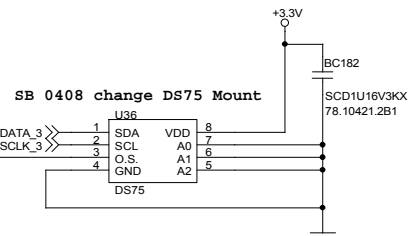
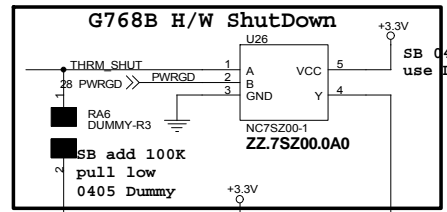
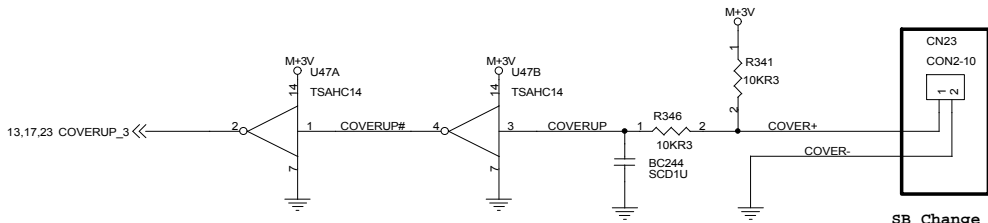
A

B

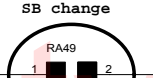
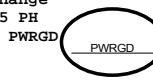
C

D

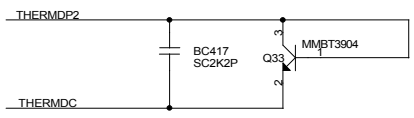
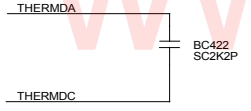
E



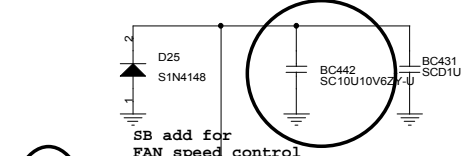
SB 0408 change
remove R255 PH
change to PWRGD



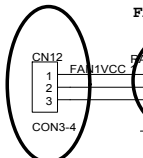
THERMAL SENSOR & FAN CONTROLLER



U71 Must
Close
to Q33

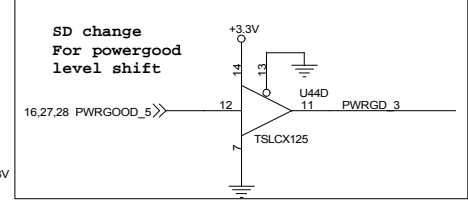
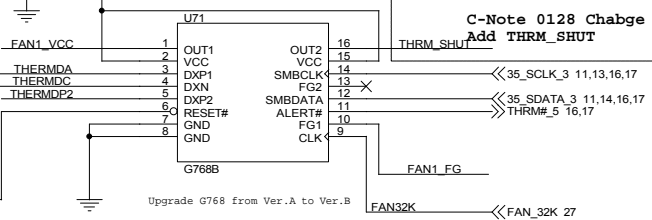


Layout
15 mil

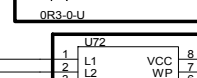


SB Change
SC SWAP
P1/P3

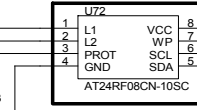
C-Note 0128 Change
Add THRM_SHUT



SD change
to
SC 0607 Add
0R3-0-U

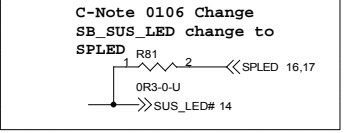
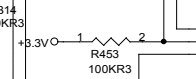
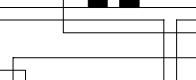


SB change
to 24RF08

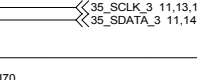


RFID 24RF08 (24C08)

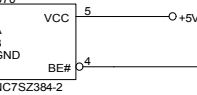
SC 0608 Add
SC 0607 Add



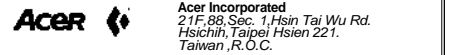
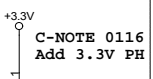
SB Change
use BT
series
circuit



C-Note 0106 Change
Add NC7SZ384



C-NOTE 0116
Add 3.3V PH



Title	BLUETOOTH INTERFACE&THERMAL/FAN CONTROLLER		
Size	A3	Document Number	C-Note
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M38867 KBC

HOTKEY SMI

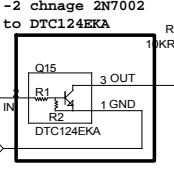
KCOL1	54	P00/AD0/P3REF
KCOL2	53	P01/AD1
KCOL3	52	P02/AD2
KCOL4	51	P03/AD3
KCOL5	50	P04/AD4
KCOL6	49	P05/AD5
KCOL7	48	P06/AD6
KCOL8	47	P07/AD7
KCOL9	46	P10/AD8
KCOL10	45	P11/AD9
KCOL11	44	P12/AD10
KCOL12	43	P13/AD11
KCOL13	42	P14/AD12
KCOL14	41	P15/AD13
KCOL15	40	P16/AD14
KCOL16	39	P17/AD15
P20/DB0	38	P21/DB1
P22/DB2	36	P23/DB3
P24/DB4	34	P25/DB5
P27/DB6	31	P27/DB7
P30/PWM0	62	P31/PWM10
P32/ONW#	59	P33/RESETOUT#
P34	58	P35/SYNC
P36/WR#	56	P37/RD#
P40/XCOUT	26	P41/XCIN
P42/INT0/OBF0	23	P43/INT1/OBF1
P44/RD	22	P45/TD
P46/SCLK1/OBF10	19	P47/SRDY1/S1

C-NOTE 1227 CHANGE REMOVE P24 BAT_LED#

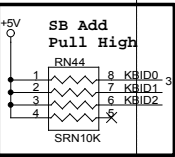
C-Note 0116 Change CHKPW to Fn ,CHKPW change to SB GPIO10

C-Note 1230 Change Add P44 KBC_BEEP for S3 Warning 0116 change to P57

C-Note 1230 Change Remove R357



C-NOTE 1229 CHANGE SUBSTITUTE PART FOR LAYOUT 0112 Change Connector is ready



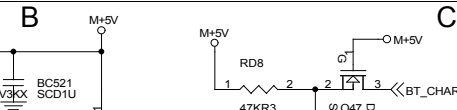
SB Change Pin Define
C-Note 0115 Net Swap

C-Note 0116 Add 10K PH

C-Note 0115 Change

Change GPIO(Default HI)

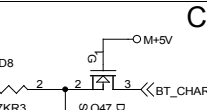
Internal Keyboard



SB Change SC P60 change to AD_INSD N.C
BT_SMI

SB Remove TP4/PS2# and set KBID2

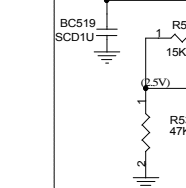
SB Change KBID2->KBID0
SB add USB WAKE_EN



Change ROMKBCS#_5 16,17,27
C-NOTE 0101 Change
C-NOTE 0116 Change from P44

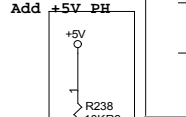
SB Change to M+5V
C-Note 0116 Add

85.47R01.001

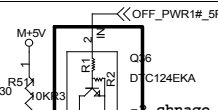


***Layout* near chip, check PAD**

***Layout* near KBC**



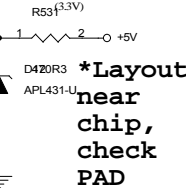
C-NOTE 0116 Add +5V PH



Change ROMKBCS#_5 16,17,27
C-NOTE 0101 Change
C-NOTE 0116 Change from P44

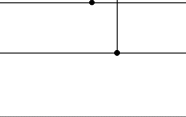
SB Change to M+5V
C-Note 0116 Add

85.47R01.001

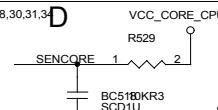


***Layout* near chip, check PAD**

***Layout* near KBC**



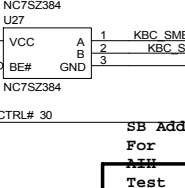
C-NOTE 0116 Add +5V PH



Change ROMKBCS#_5 16,17,27
C-NOTE 0101 Change
C-NOTE 0116 Change from P44

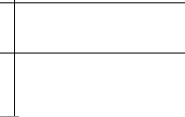
SB Change to M+5V
C-Note 0116 Add

85.47R01.001

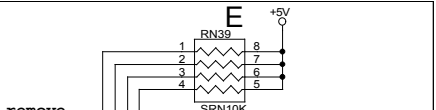


***Layout* near chip, check PAD**

***Layout* near KBC**



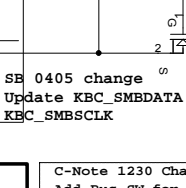
C-NOTE 0116 Add +5V PH



Change ROMKBCS#_5 16,17,27
C-NOTE 0101 Change
C-NOTE 0116 Change from P44

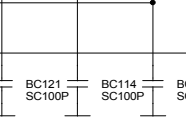
SB Change to M+5V
C-Note 0116 Add

85.47R01.001

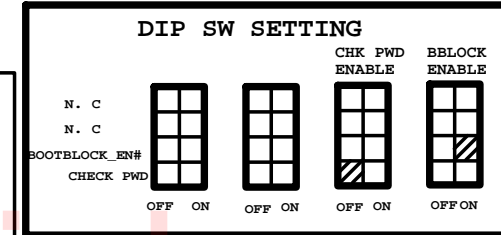


***Layout* near chip, check PAD**

***Layout* near KBC**



C-NOTE 0116 Add +5V PH



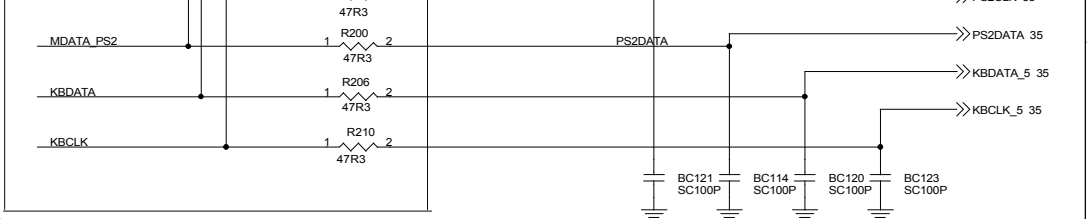
C-Note 0116 Change Add KBC_CTRL#

SB 0405 change Update KBC_SMBDATA KBC_SMB_SCLK

SB Add For Test G2# PWRBTN0#_KB

C-Note 1230 Change Add Bus SW for TP4/PS2 serial function SB change Remove TP4/PS2 mouse serial function

PS/2 PORT



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Taiwan, R.O.C.

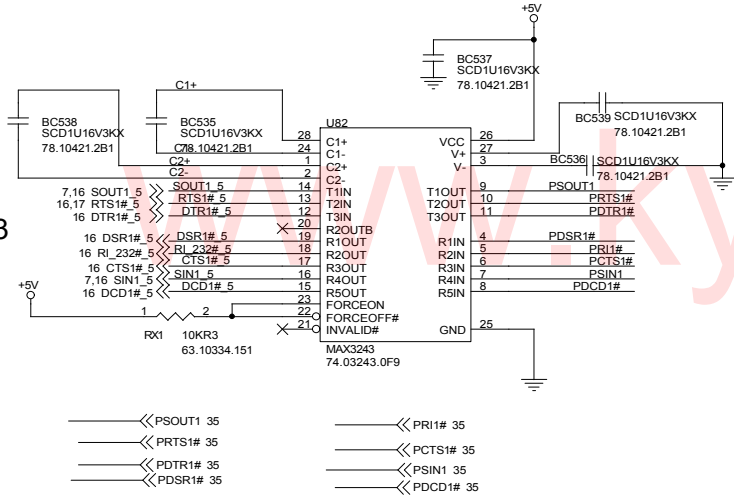
Title: **KBC/PS2 PORT**

Size: A3 Document Number: **C-Note** Rev: -4

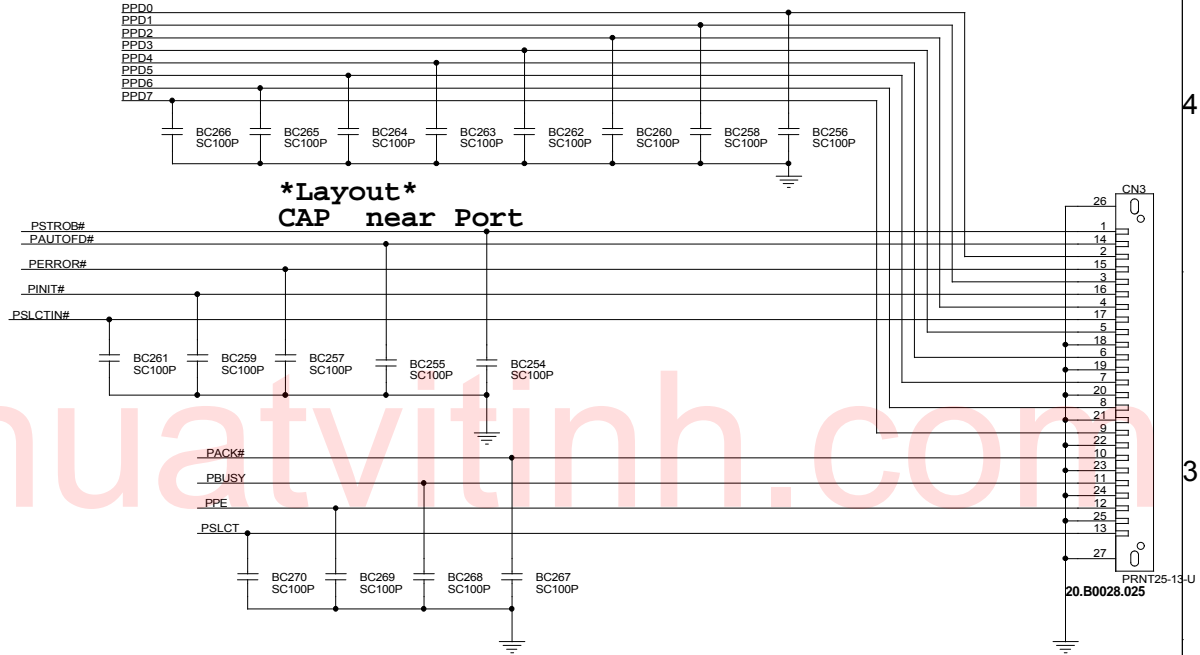
Date: Thursday, January 10, 2002 Sheet: 23 of 36

1394 Port change to P.36

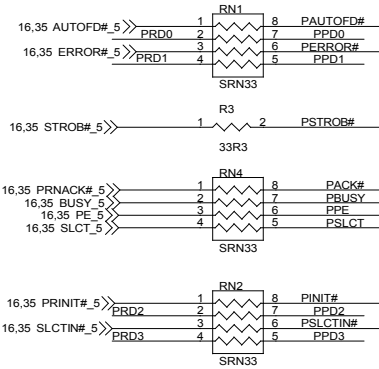
SERIAL PORT



Printer Port

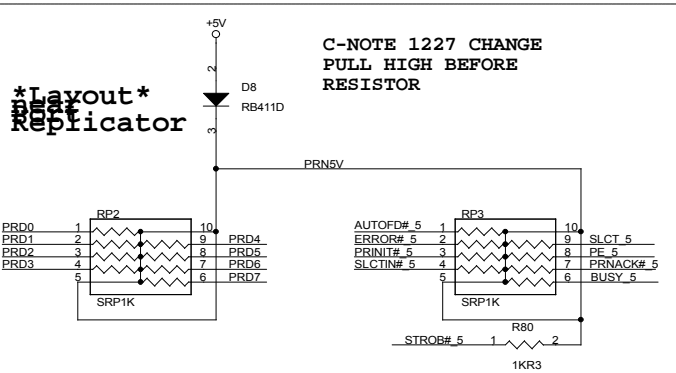


C-Note 0104 Change Pin Swap



SB change
add PrinterPort
FDD function
SC Remove again

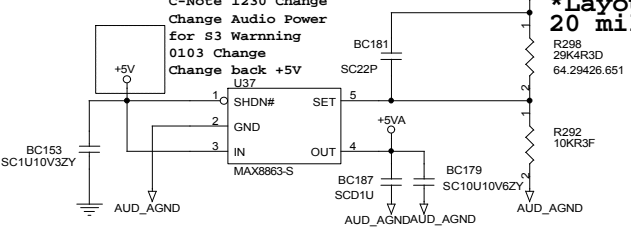
C-NOTE 1227 CHANGE PULL HIGH BEFORE RESISTOR



ALC200 AC97 AUDIO CODEC

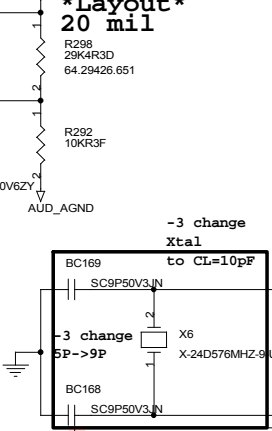
A

C-Note 1230 Change
Change Audio Power
for S3 Warning
0103 Change
Change back +5V
U37



B

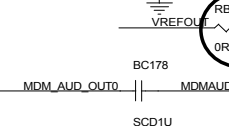
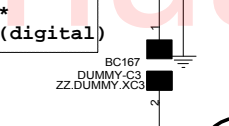
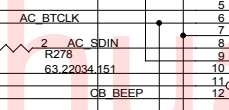
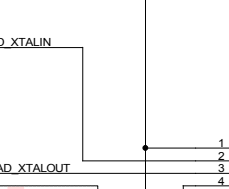
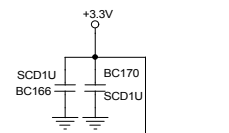
Layout
20 mil



C

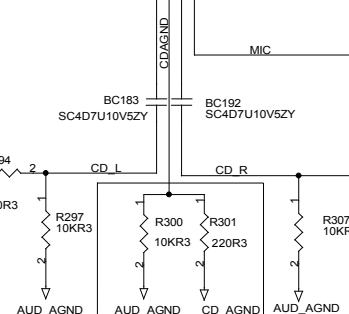
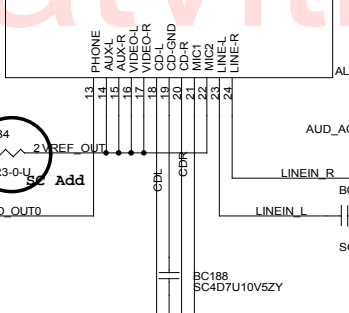
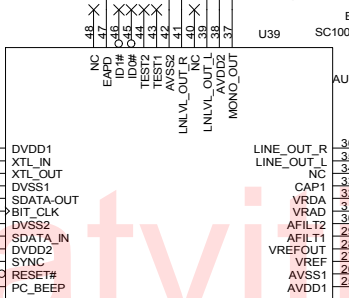
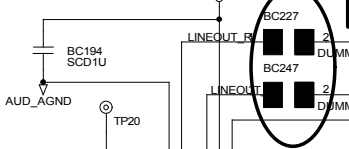
-3 change
Xtal
to CL=10pF

Layout
AC-LINK(digital)
6 mil



D

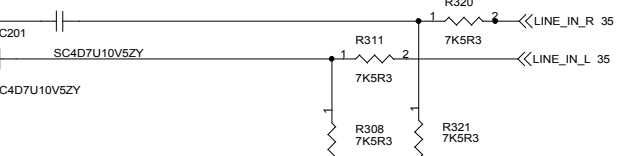
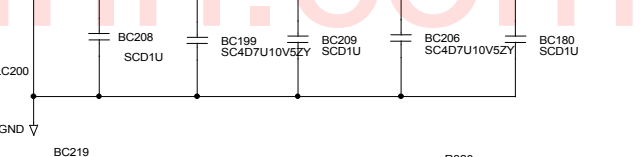
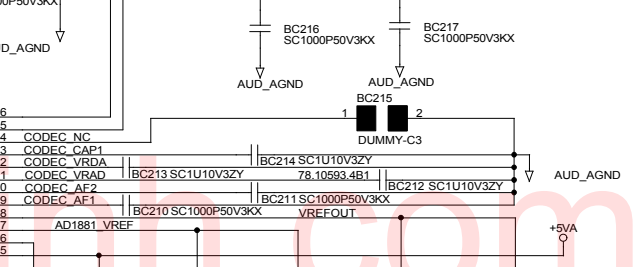
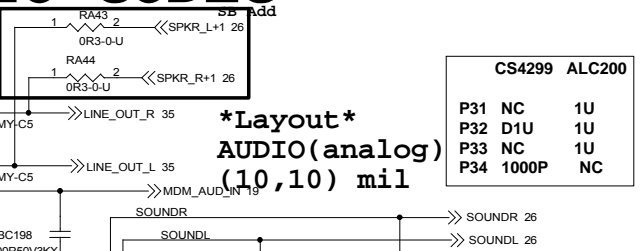
SD change
0602->0805



E

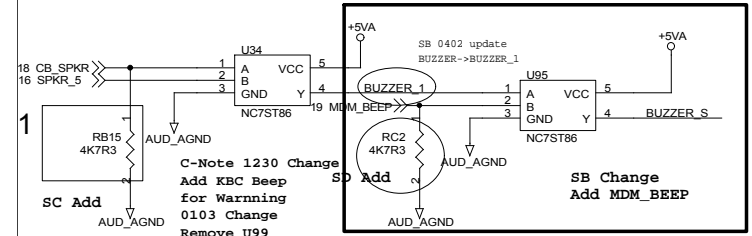
Layout
AUDIO(analog)
(10,10) mil

CS4299 ALC200	
P31 NC	1U
P32 D1U	1U
P33 NC	1U
P34 1000P	NC



BEEP SOUND LOGIC

Layout
locate near audio moat opening
6 mil



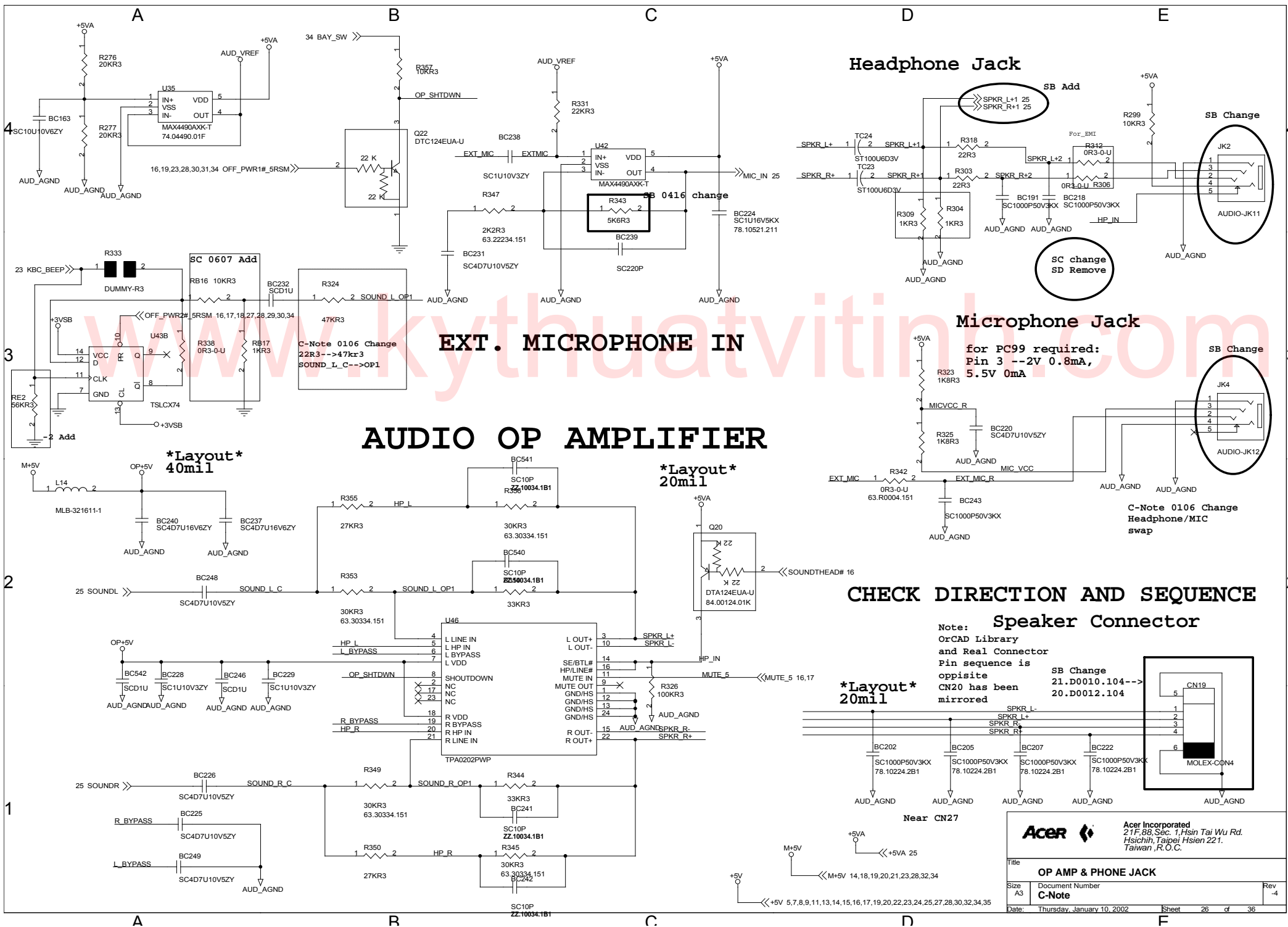
C-Note 1230 Change
Add KBC BEEP
for Warning
0103 Change
Remove U99
KBC_BEEP use
BUZZER

SB Change
Add MDM_BEEP



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Taiwan, R.O.C.

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EXT. MICROPHONE IN

AUDIO OP AMPLIFIER

Headphone Jack

Microphone Jack

CHECK DIRECTION AND SEQUENCE

Speaker Connector

Note:
OrCAD Library
and Real Connector
Pin sequence is
opposite
CN20 has been
mirrored

SB Change
21.D0010.104-->
20.D0012.104

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Title OP AMP & PHONE JACK		
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Layout
40mil

Layout
20mil

Layout
20mil

Near CN27

1

2

3

4

1

2

3

4

A

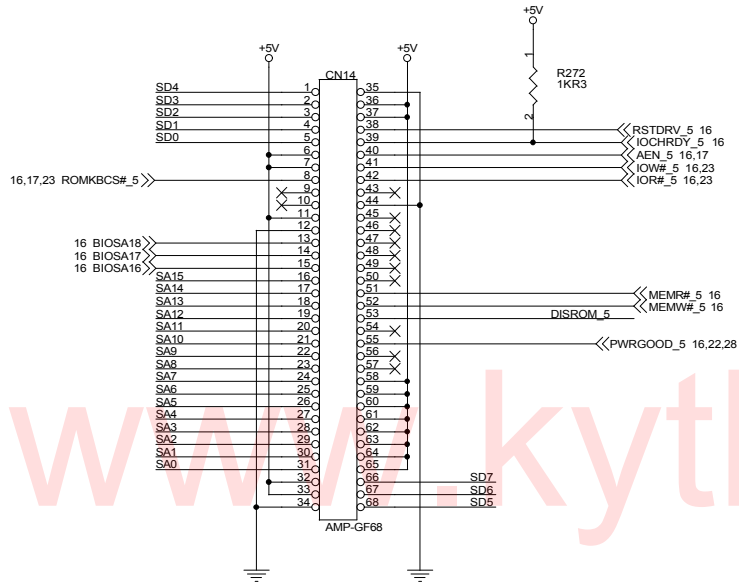
R

C

D

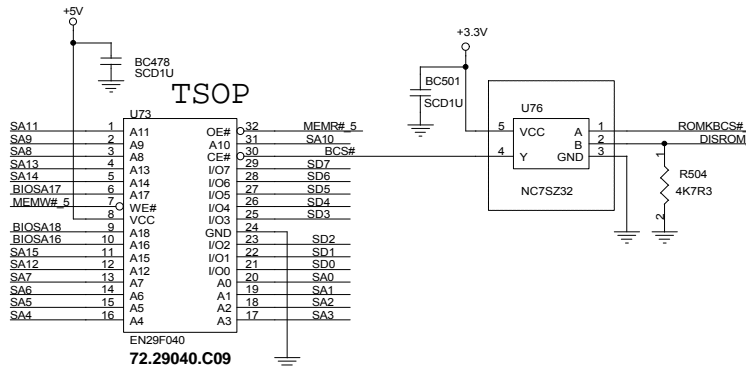
F

A GOLD FINGER (PORT 80)

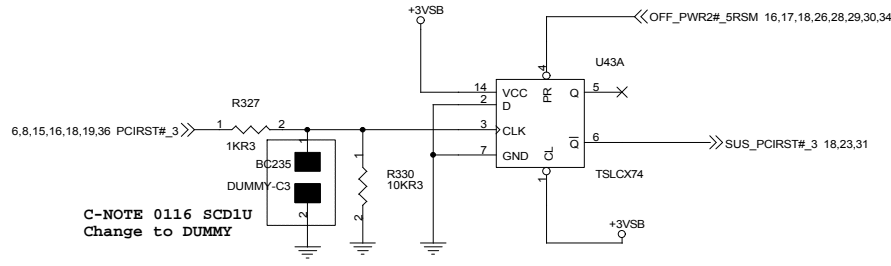


TOP 34
BOTTOM 68

BIOS ROM

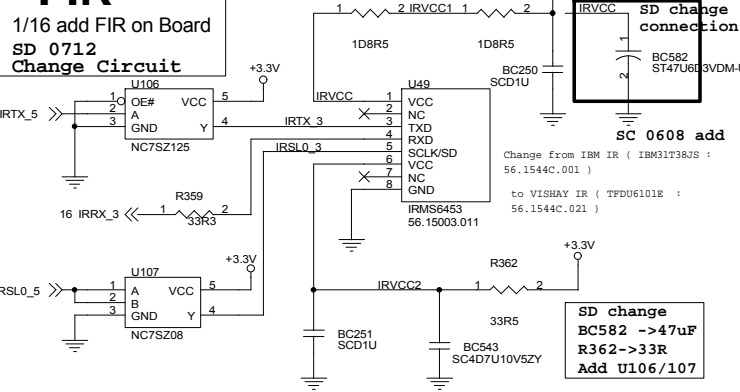


SUSPEND RESET CIRCUIT



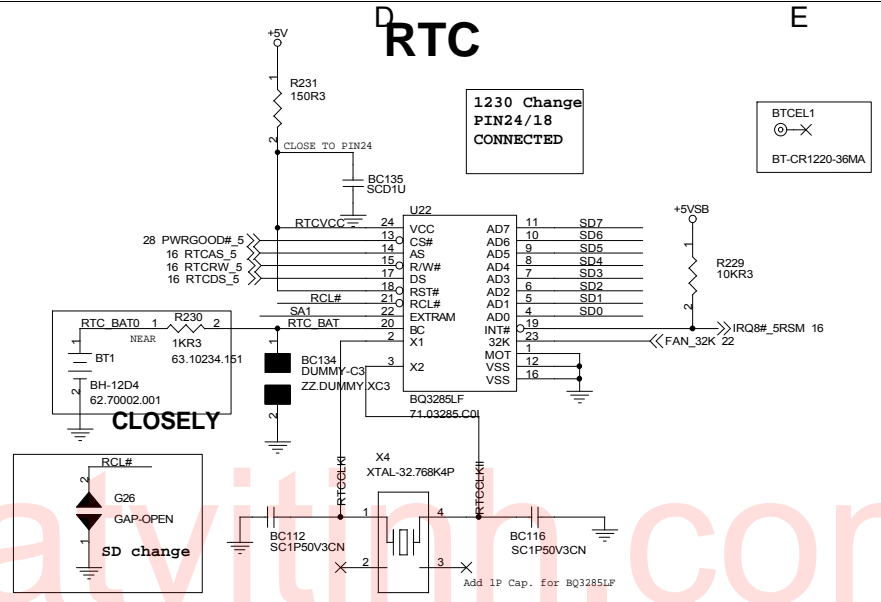
C-NOTE 0116 SCD1U
Change to DUMMY

FIR



1/16 add FIR on Board
SD 0712
Change Circuit

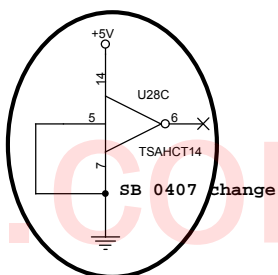
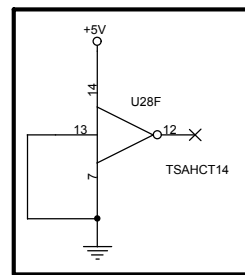
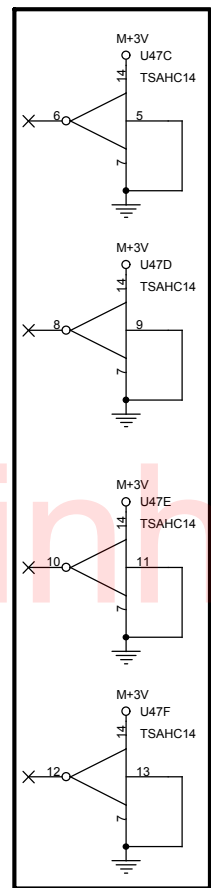
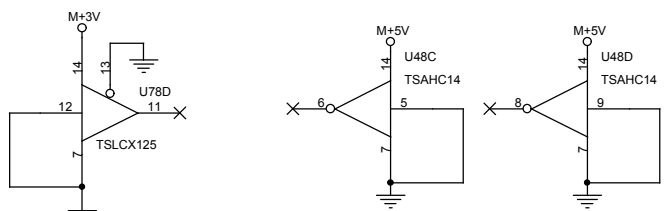
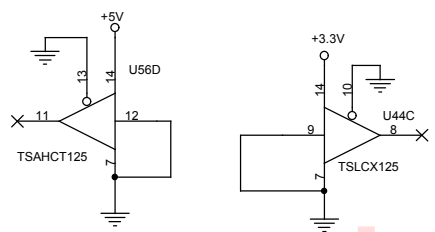
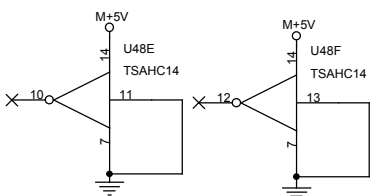
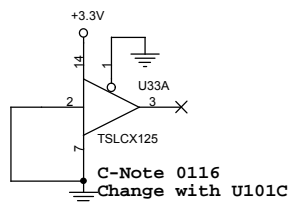
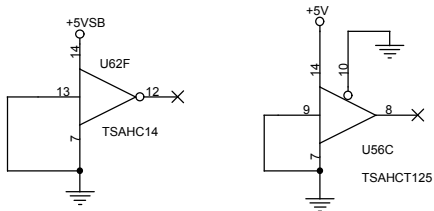
RTC



1230 Change
PIN24/18
CONNECTED

BTCEL1
BT-CR1220-36MA

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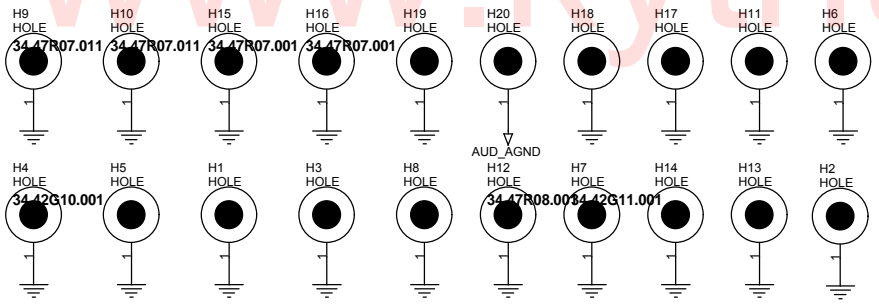


C-Note 0116
Change with U101C

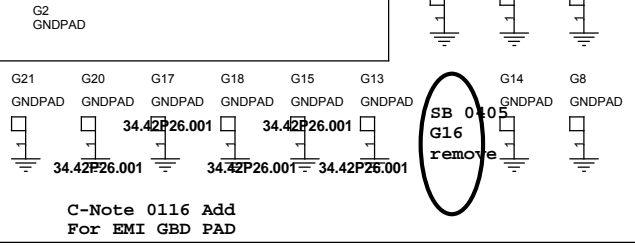
C-NOTE 0103 Change
NC Logic are increased

SB 0407 change

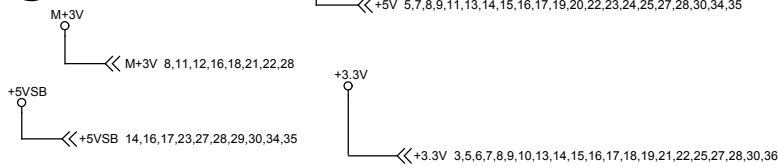
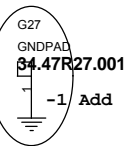
C-Note 0104 Add Hole



C-Note 1226 Change
For screw hole




C-Note 0116 Add
For EMI GBD PAD



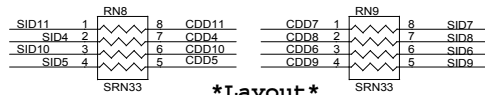
		Acer Incorporated 21F, 89, Sec. 1, Hsin Tai Wu Rd. Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
		Title NCLOGIC	
Size B	Document Number	Rev	
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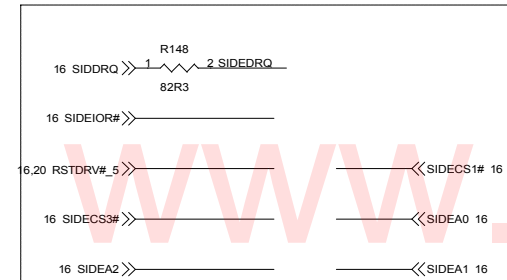
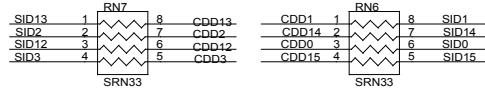
		Acer Incorporated 21F, 88, Sec. 1, Hsin Tai Wu Rd. Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
TEST_POINTS			
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C-Note 0104 Change Pin Swap

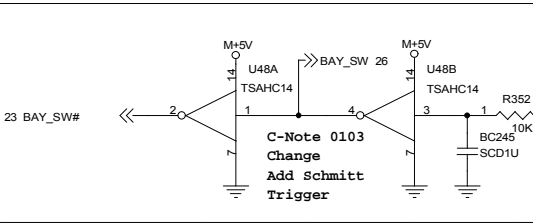
CD-ROM I/F Signals



***Layout* near conn.**

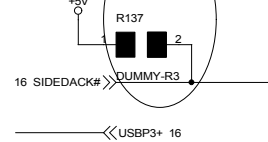
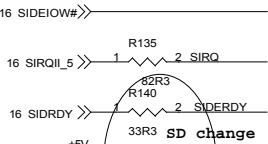
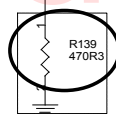


14,20 IDE_LED#

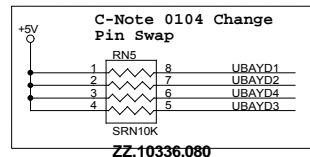
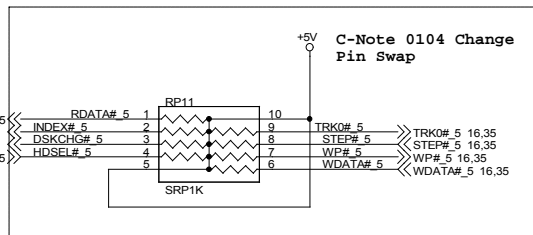


C-Note 0126 Change PULL LOW

C-Note 0116 Change For CD-ROM Hi or Open-->Slave Low --> Master Cable Select (CSEL)

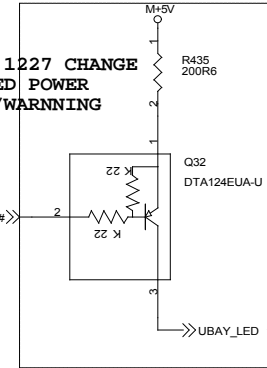


FDD I/F Signal

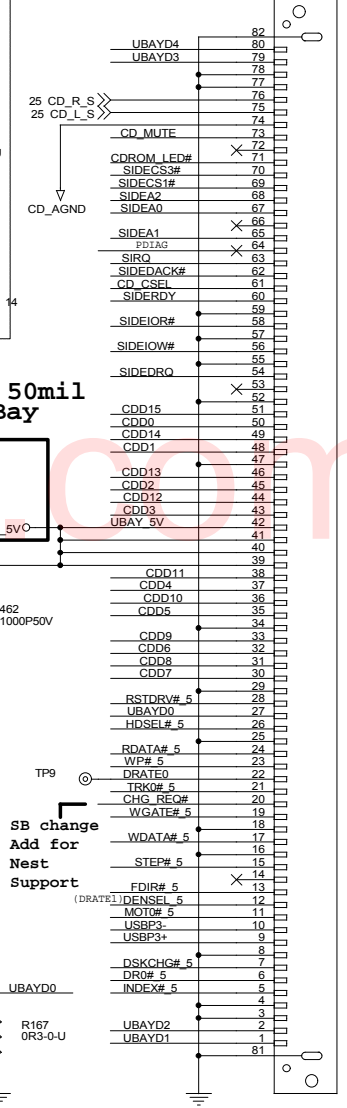


ZZ-10336.080

C-NOTE 1227 CHANGE UBAY LED POWER ATTACH/WARNING



Bios need to program to inverse DENSEL

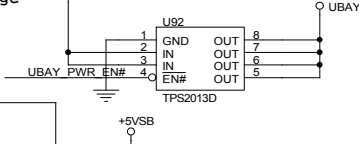


***Layout* 50mil for UltraBay**

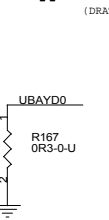


C-Note 0101 Add for poly switch Support Remove F4

SB change Add for Nest Support

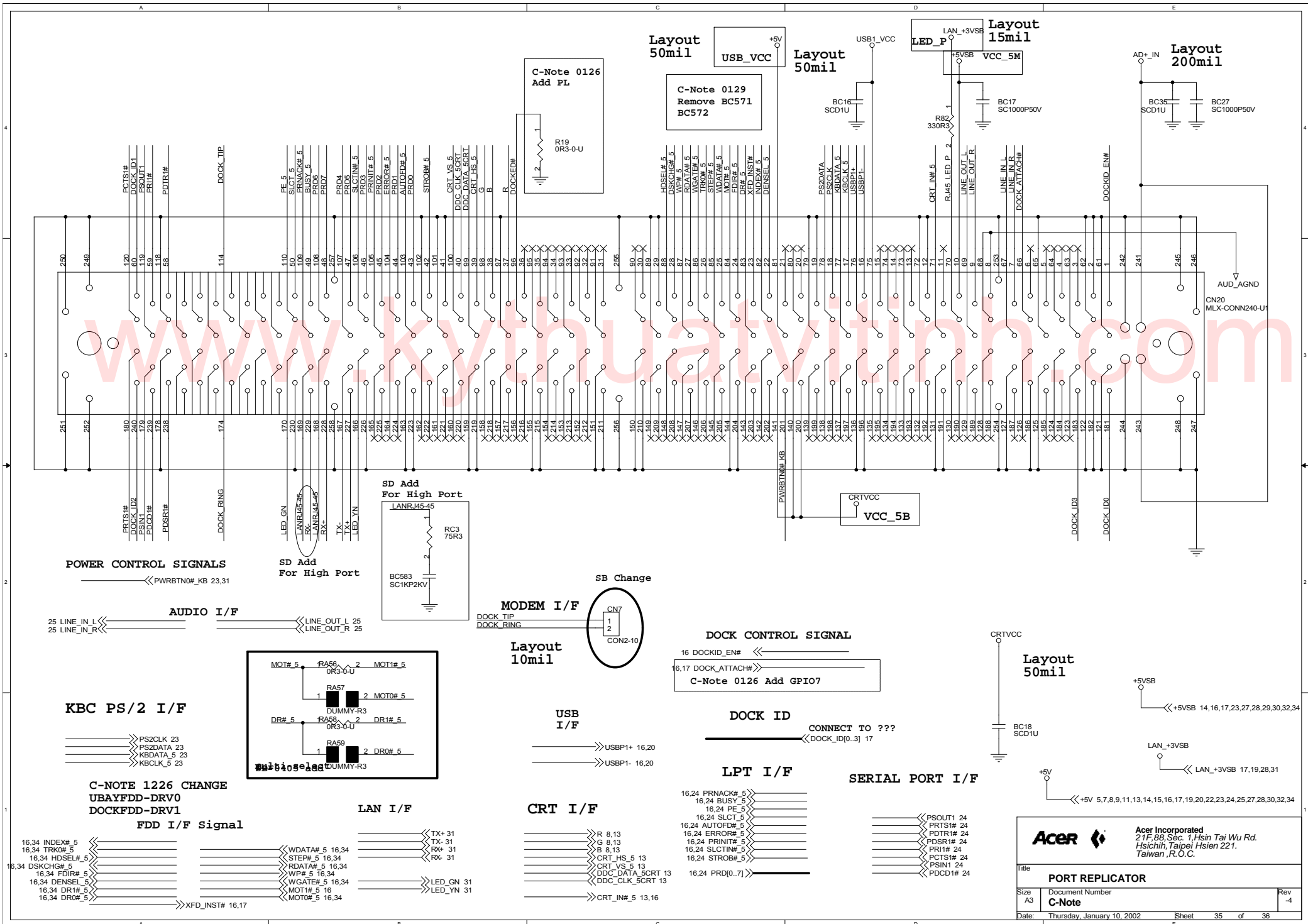


SB change Add for Nest Support



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Taiwan, R.O.C.

Title: **UltraBay**
Size: A3 Document Number: **C-Note** Rev: -4
Date: Thursday, January 10, 2002 Sheet: 34 of 36



Layout 50mil

USB_VCC +5V

Layout 50mil

Layout 15mil

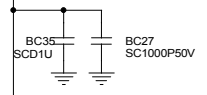
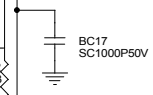
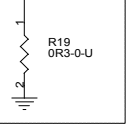
Layout 200mil

C-Note 0126 Add PL

C-Note 0129 Remove BC571 BC572

LAN_+3VSB VCC_5M

BC35 SCD1U BC27 SC1000P50V



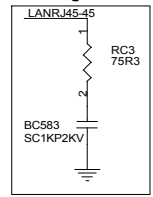
POWER CONTROL SIGNALS

<<PWRBTN0#_KB 23.31

AUDIO I/F

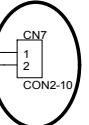
25 LINE_IN_L << LINE_OUT_L 25
25 LINE_IN_R << LINE_OUT_R 25

SD Add For High Port



SD Add For High Port

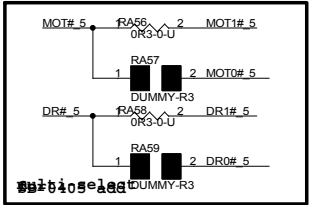
SB Change



MODEM I/F

DOCK TIP
DOCK_RING

Layout 10mil



KBC PS/2 I/F

<<PS2CLK 23
<<PS2DATA 23
<<KBDATA_5 23
<<KBCLK_5 23

C-NOTE 1226 CHANGE UBAYFDD-DRV0 DOCKFDD-DRV1

FDD I/F Signal

16.34 INDEX#_5 << WDATA#_5 16.34
16.34 TRK0#_5 << STEP#_5 16.34
16.34 HDSEL#_5 << RDATA#_5 16.34
16.34 DSKCHG#_5 << WP#_5 16.34
16.34 FDIR#_5 << WGATE#_5 16.34
16.34 DENSEL#_5 << MOT1#_5 16
16.34 DR1#_5 << MOT0#_5 16.34
16.34 DR0#_5 << XFD_INST# 16.17

LAN I/F

<<TX+ 31
<<TX- 31
<<RX+ 31
<<RX- 31

CRT I/F

<<R 8.13
<<G 8.13
<<B 8.13
<<CRT_HS_5 13
<<CRT_VS_5 13
<<DDC_DATA_SCRT 13
<<DDC_CLK_SCRT 13
<<CRT_IN#_5 13.16

USB I/F

<<USBP1+ 16.20
<<USBP1- 16.20

DOCK CONTROL SIGNAL

16 DOCK_EN# <<
16.17 DOCK_ATTACH# <<
C-Note 0126 Add GPIO7

DOCK ID

CONNECT TO ???
<<DOCK_ID[0..3] 17

LPT I/F

16.24 PRNACK#_5 <<
16.24 BUSY_5 <<
16.24 PE_5 <<
16.24 SLCT#_5 <<
16.24 AUTOFD#_5 <<
16.24 ERROR#_5 <<
16.24 PRINT#_5 <<
16.24 SLCTIN#_5 <<
16.24 STROB#_5 <<
16.24 PRD[0..7] <<

SERIAL PORT I/F

<<PSOUT1 24
<<PRTS# 24
<<PDTR# 24
<<PDSR1# 24
<<PRI1# 24
<<PCTS# 24
<<PSIN1 24
<<PDCD1# 24

Layout 50mil

CRTVCC



<<+5VSB 14,16,17,23,27,28,29,30,32,34

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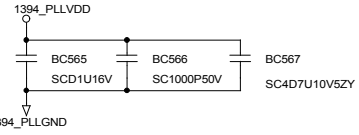
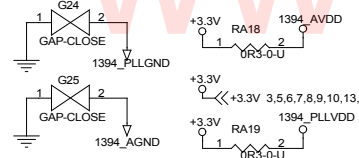
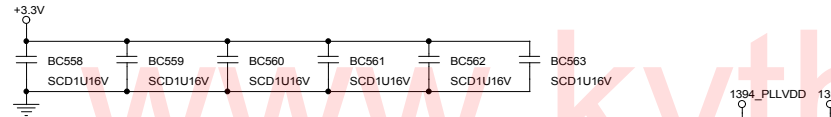
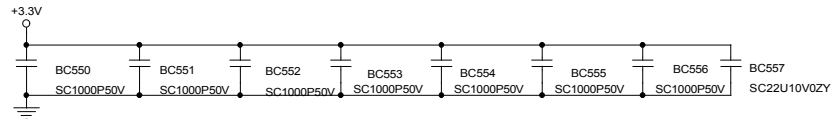
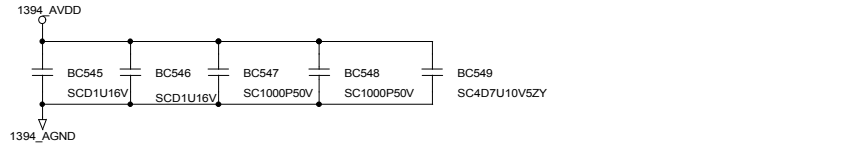
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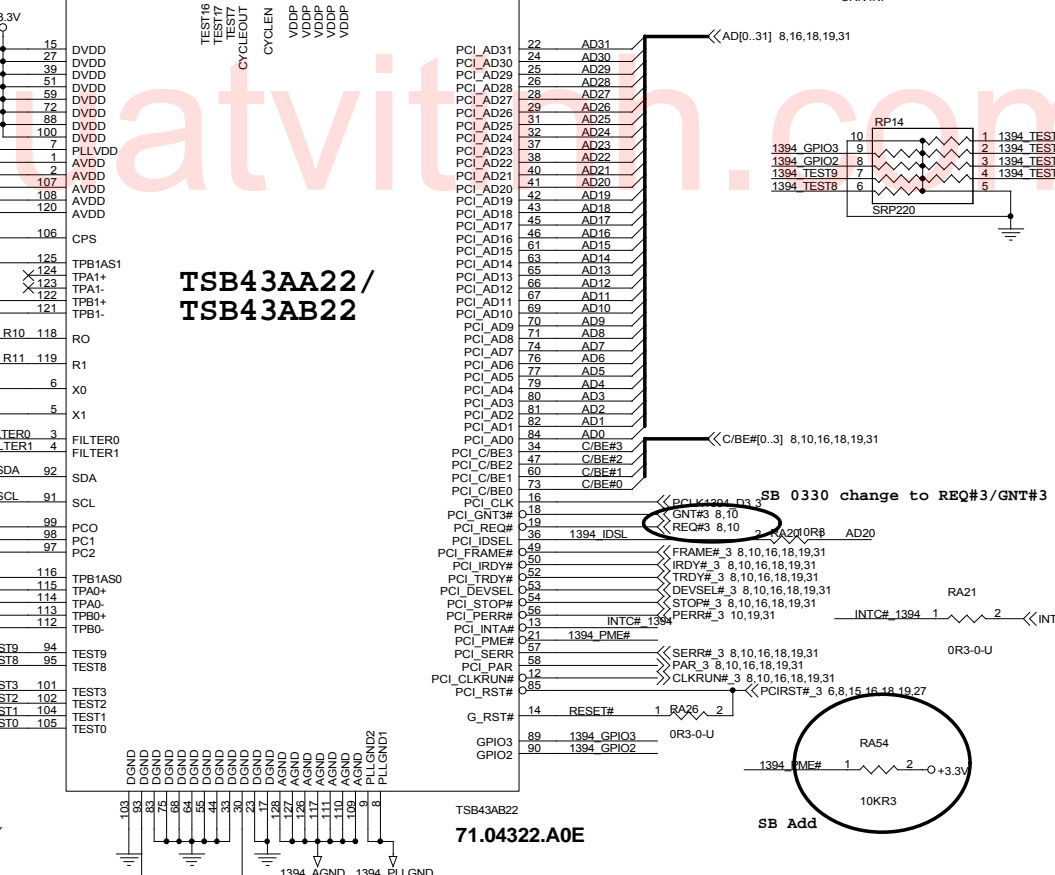
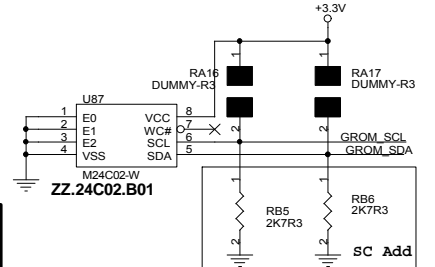
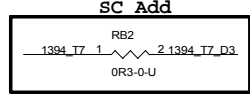
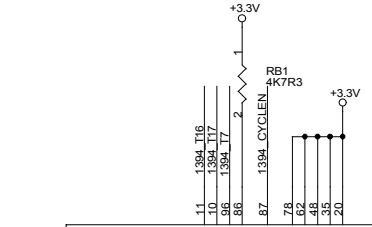
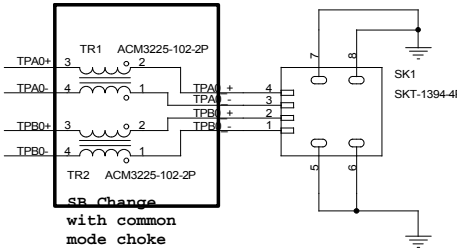
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Integrated OHCI PHY/Link Layer Controller

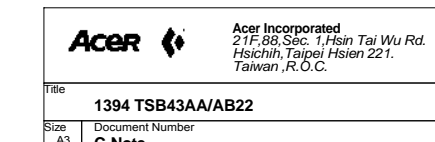
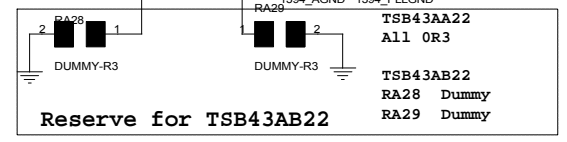


TPA+/- and TPB+/- Trace Length Summary
CONN <-> Choke <-> Chip

C-NOTE 1227 CHANGE REMOVE CN17



TSB43AA22 / TSB43AB22



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