

Compal confidential

Schematics Document

**Mobile Bantias/Dothan uFCBGA/uFCPGA
with Intel ODEM_MCH RevB+ICH4-M
core logic**

2003-09-01

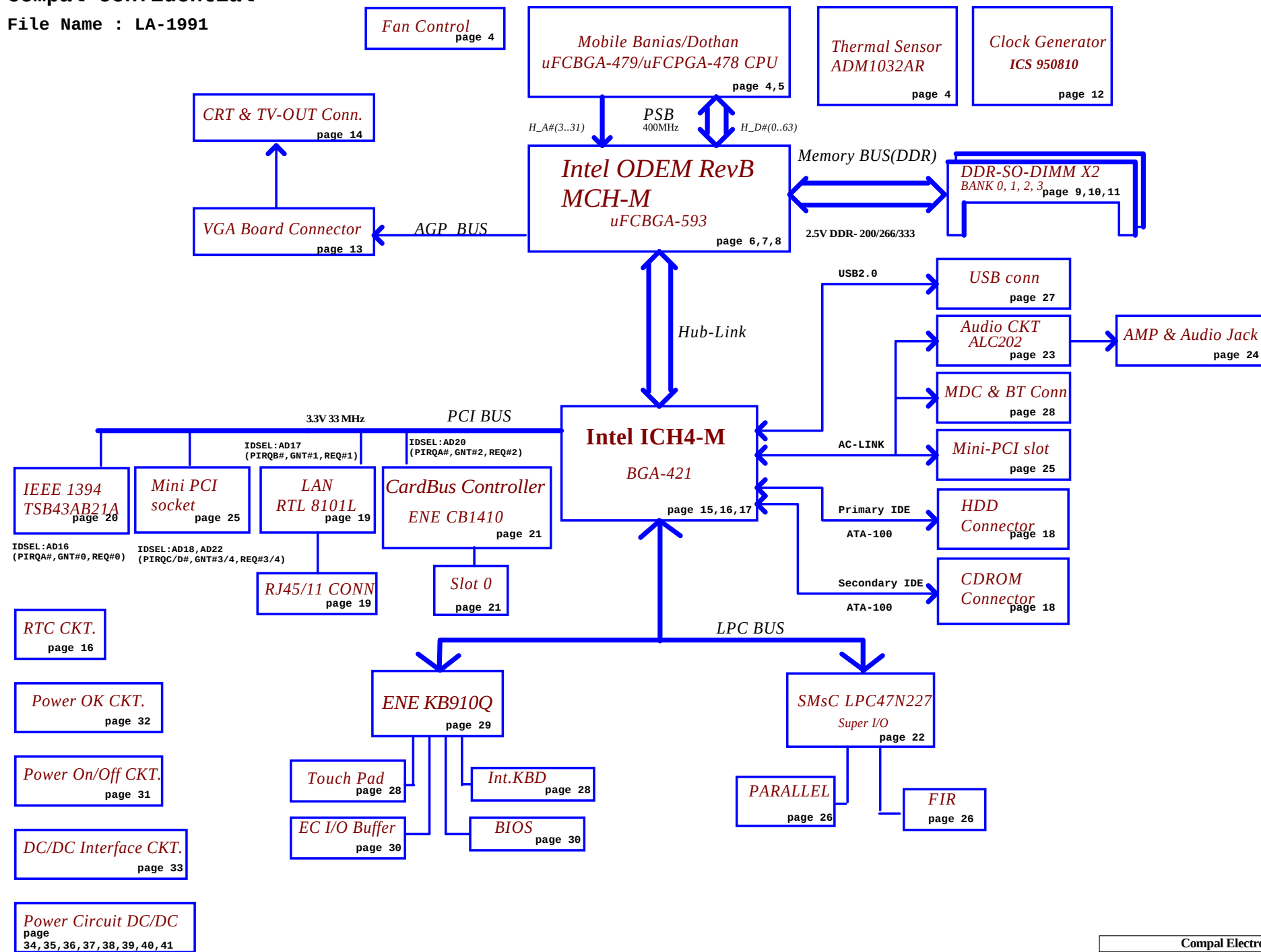
REV:1.0

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
Title			
SCHEMATIC, M/B LA-1991			
Size	Document Number		Rev
401266			1A
Date:	星期五, 九月 05, 2003	Sheet	1 of 45

Compal confidential

File Name : LA-1991



THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
Title			
SCHEMATIC, M/BLA-1991			
Size	Document Number		Rev
	401266		1A
Date:	星期五, 九月 05, 2003		Sheet 2 of 45

Voltage Rails

Power Plane	Description	S0-S1	S3	S5
VIN	Adapter power supply (19V)	NA	NA	NA
B+	AC or battery power rail for power circuit	NA	NA	NA
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF
+VCCP	1.05V rail for Processor I/O	ON	OFF	OFF
+1.25VS	1.25V switched power rail for DDR Vtt	ON	OFF	OFF
+1.2VS	1.2V switched power rail for MCH core power	ON	OFF	OFF
+1.5VALW	1.5V always on power rail	ON	ON	ON*
+1.5VS	1.5V switched power rail for AGP interface	ON	OFF	OFF
+1.8VS	1.8V switched power rail for CPU PLL & Hub-Link	ON	OFF	OFF
+2.5V	2.5V power rail for DDR	ON	ON	OFF
+2.5VS	2.5V switched power rail	ON	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON*
+3V	3V power rail	ON	ON	OFF
+3VS	3.3V switched power rail	ON	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON*
+5V	5V power rail	ON	ON	OFF
+5VS	5V switched power rail	ON	OFF	OFF
+12VALW	12V always on power rail	ON	ON	ON*
+12V	12V power rail	ON	ON	OFF
+12VS	12Vswitched power rail on power rail	ON	OFF	OFF
RTCVC	RTC power	ON	ON	ON

Note : ON* means that this power plane is ON only with AC power available, otherwise it is OFF.

Symbol note:

-  :means digital ground.
-  :means analog ground.
-  :means reserved.

Internal PCI Devices

DEVICE	PCI Device ID
HUB	D30
USB	D29
AC97 MODEM	D31
AC97	D31
ATA 100	D31
ETHERNET	D8 (AD24)
LPC I/F	D31
SMBUS	D31

External PCI Devices

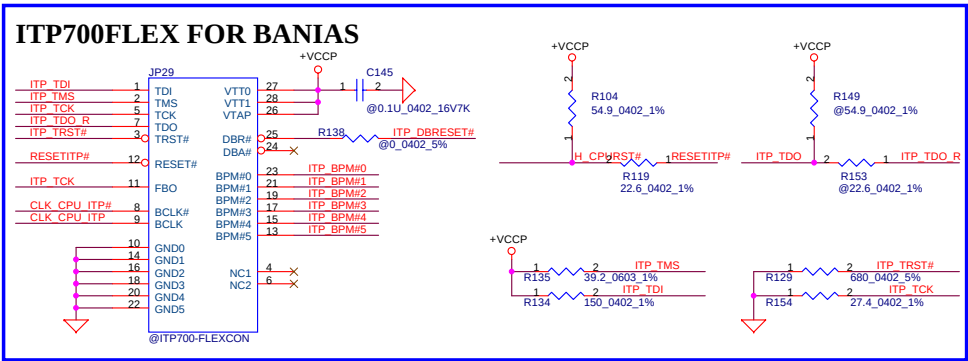
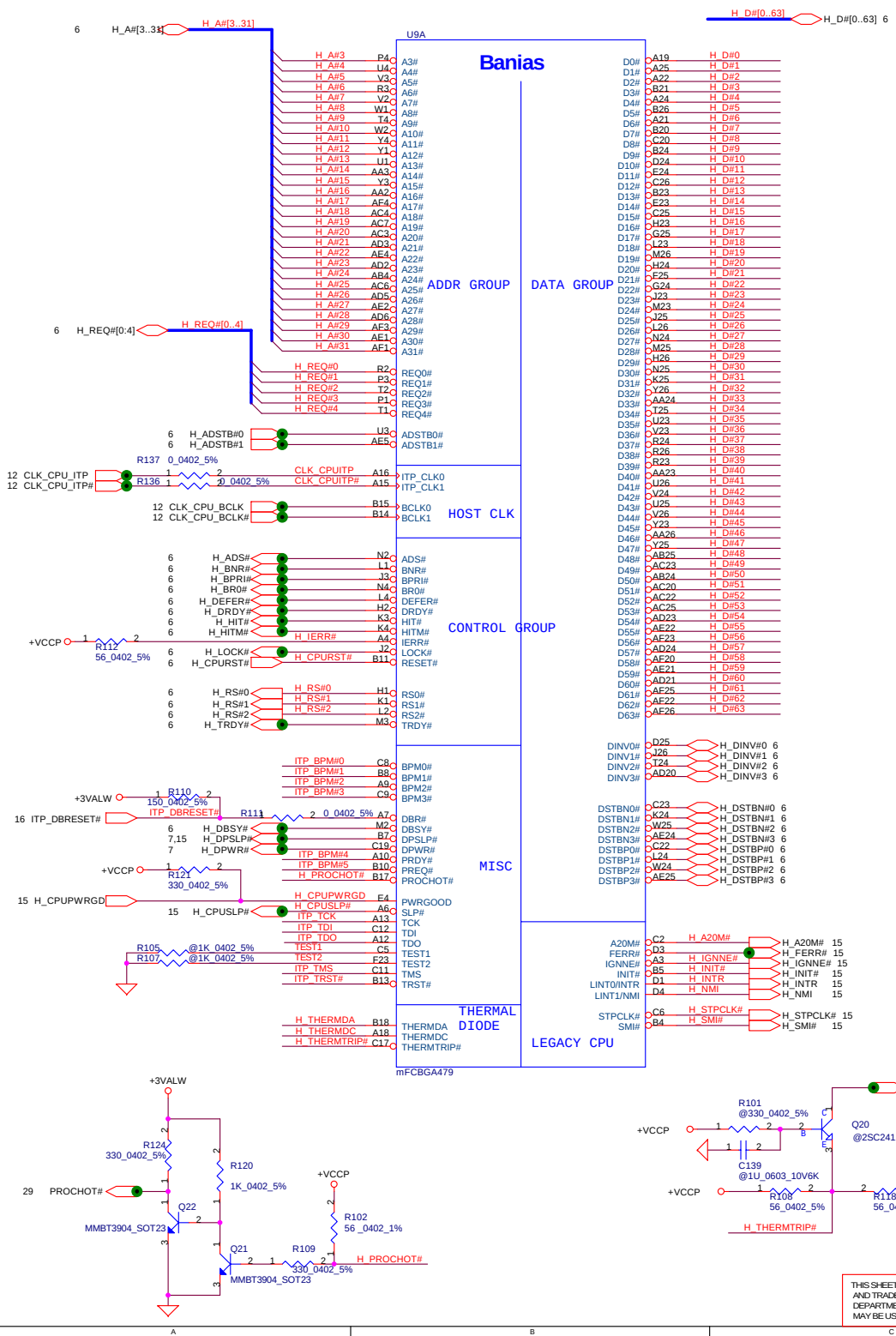
DEVICE	PCI Device ID	IDSEL #	REQ/GNT #	PIRQ
1394	D0	AD16	0	A
LAN	D1	AD17	1	B
CARD BUS	D4	AD20	2	C
Wireless LAN	D2	AD18	3	D
Mini-PCI	D6	AD22	4	D
AGP BUS	N / A	AGP_DEVSEL#	N / A	A

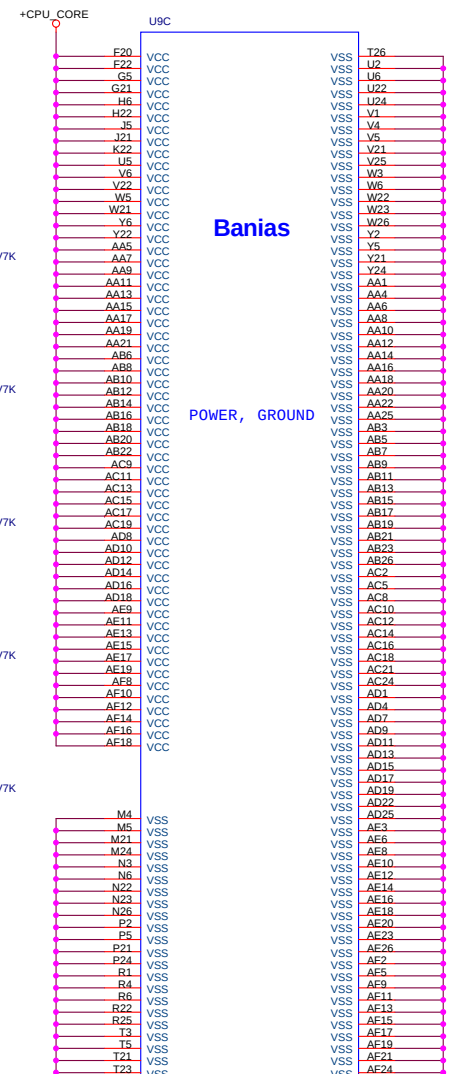
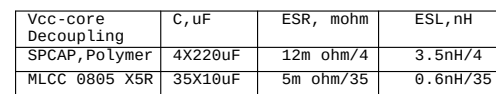
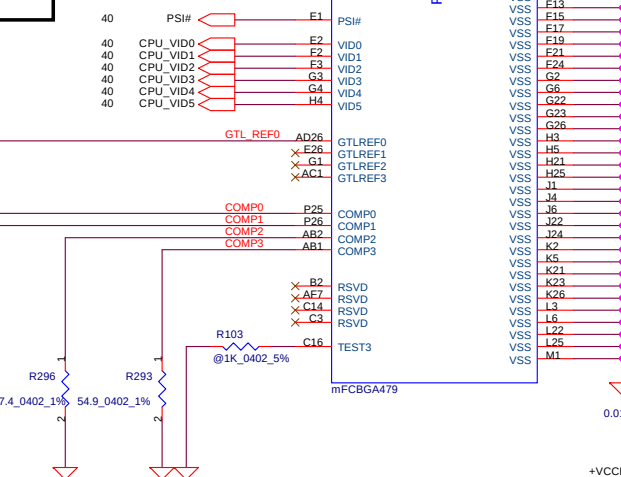
I2C / SMBUS ADDRESSING

DEVICE	HEX	ADDRESS
DDR SO-DIMM 0	A0	1 0 1 0 0 0 0 X
DDR SO-DIMM 1	A2	1 0 1 0 0 0 1 X
CLOCK GENERATOR (EXT.)	D2	1 1 0 1 0 0 1 X

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
Title			
SCHEMATIC, M/BLA-1991			
Size	Document Number	Rev	
	401266	1A	
Date:	星期五, 九月 05, 2003	Sheet	3 of 45





Resistor placed within 0.5" of CPU pin. Trace should be at least 25 miles away from any other toggling signal.

Resistor placed within 0.5" of CPU pin. Trace should be at least 25 miles away from any other toggling signal.

Banias

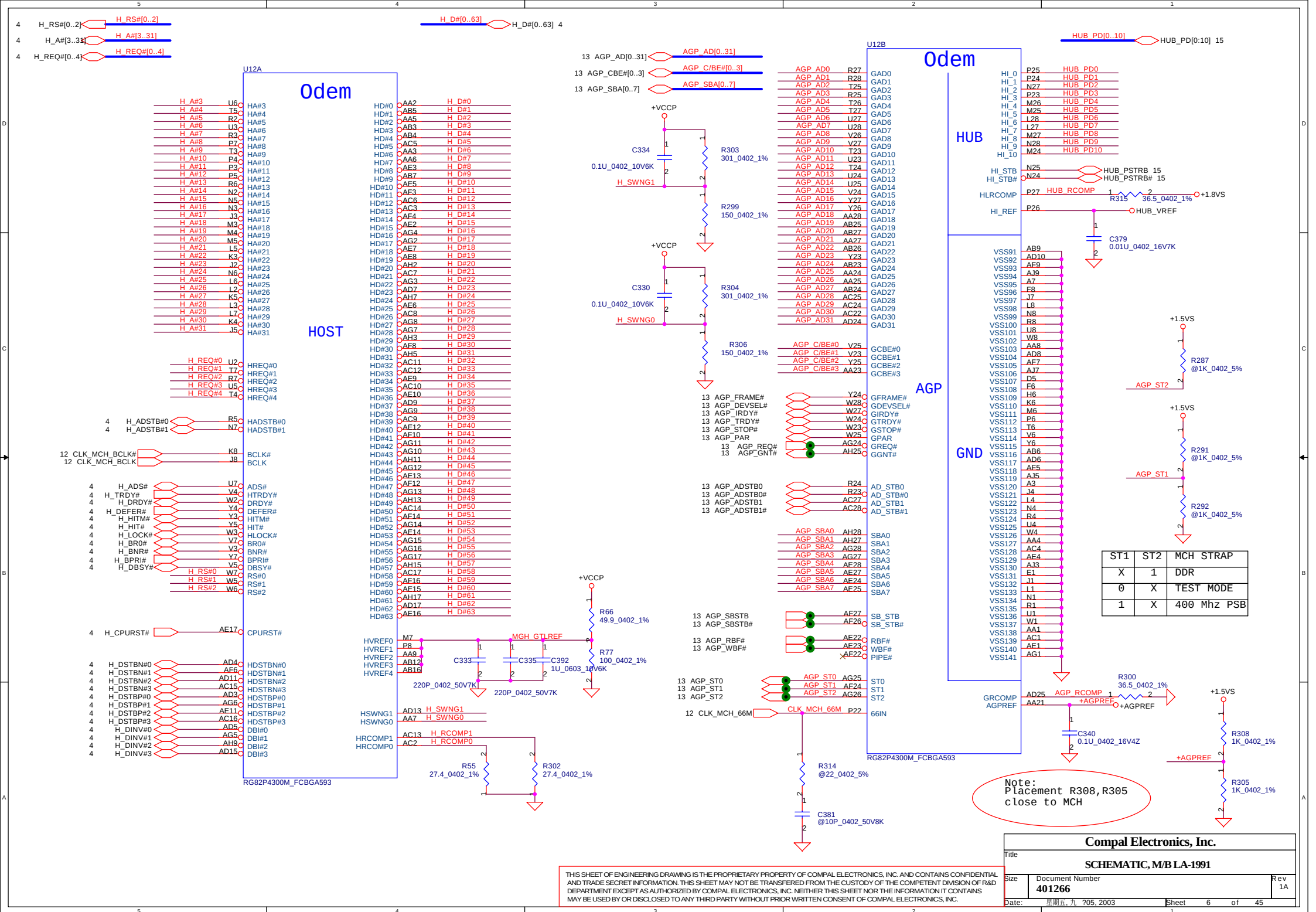
POWER, GROUND

Compal Electronics, Inc.

SCHEMATIC, M/BLA-1991

Title			
SCHEMATIC, M/BLA-1991			
Size	Document Number		Rev
	401266		1A
Date:	星期五, 九月 05, 2003	Sheet	5 of 45

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.



THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

9,10 DDR_MMA[0..12] DDR_MMA[0..12]
9 DDR_SDQ[0..63] DDR_SDQ[0..63]
9 DDR_SDQS[0..8] DDR_SDQS[0..8]
9 DDR_CB[0..7] DDR_CB[0..7]

DDR MMA0 E12
DDR MMA1 F17
DDR MMA2 E16
DDR MMA3 G17
DDR MMA4 G18
DDR MMA5 E18
DDR MMA6 F19
DDR MMA7 G20
DDR MMA8 G19
DDR MMA9 F21
DDR MMA10 F13
DDR MMA11 E20
DDR MMA12 G21
G22
DDR SDQS0 F26
DDR SDQS1 C26
DDR SDQS2 C23
DDR SDQS3 B19
DDR SDQS4 D12
DDR SDQS5 C8
DDR SDQS6 C5
DDR SDQS7 E3
DDR SDQS8 F15

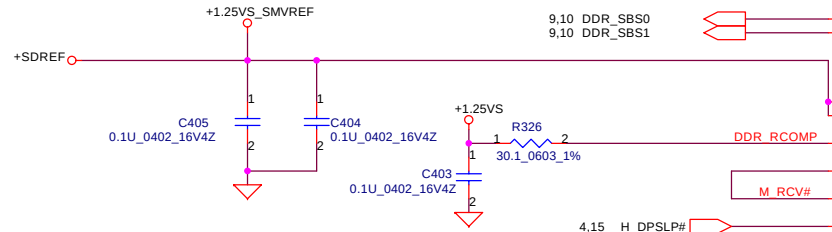
9,10 DDR_SWE# G11
9,10 DDR_SRAS# F11
9,10 DDR_SCAS# G8

9 DDR_CLK0 J25
9 DDR_CLK0# K25
9 DDR_CLK1 G5
9 DDR_CLK1# F5
9 DDR_CLK2 G24
9 DDR_CLK2# E24
10 DDR_CLK3 J24
10 DDR_CLK3# G6
10 DDR_CLK4 G7
10 DDR_CLK4# K23
10 DDR_CLK5 J23

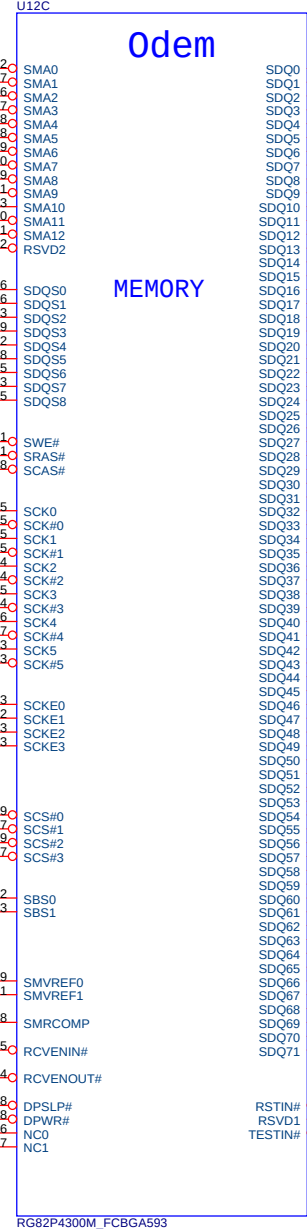
9,10 DDR_CKE0 G23
9,10 DDR_CKE1 E22
10 DDR_CKE2 H23
10 DDR_CKE3 F23

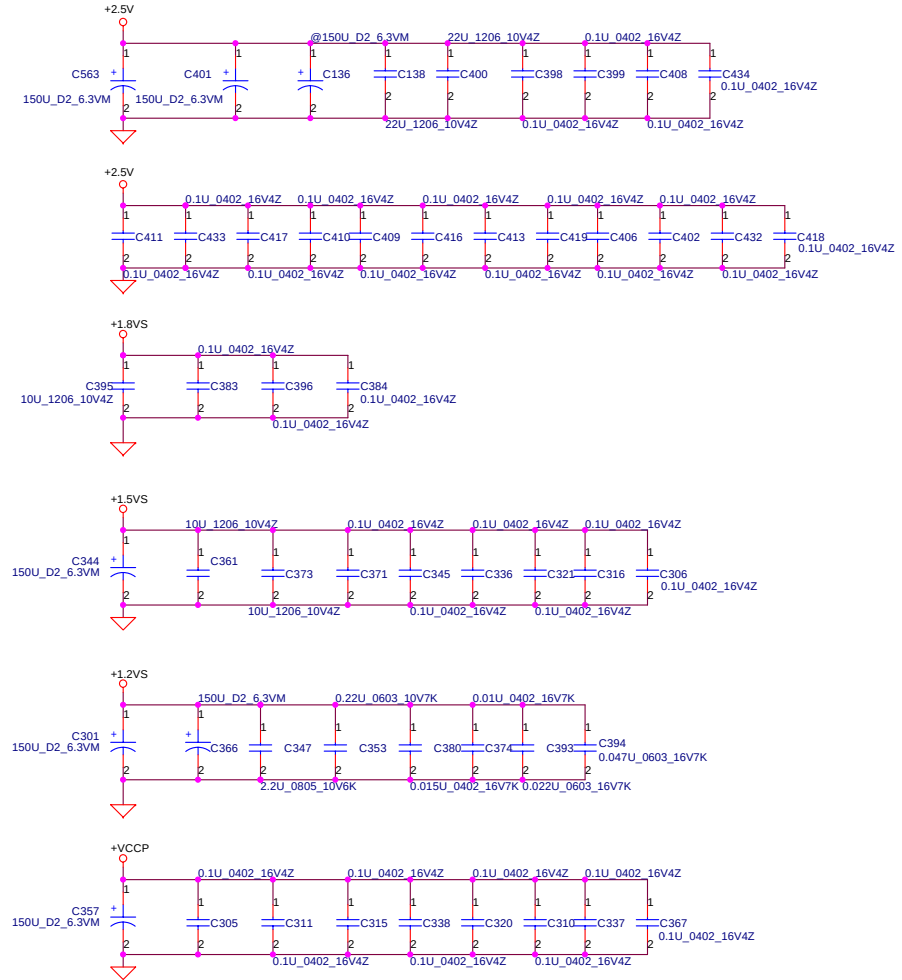
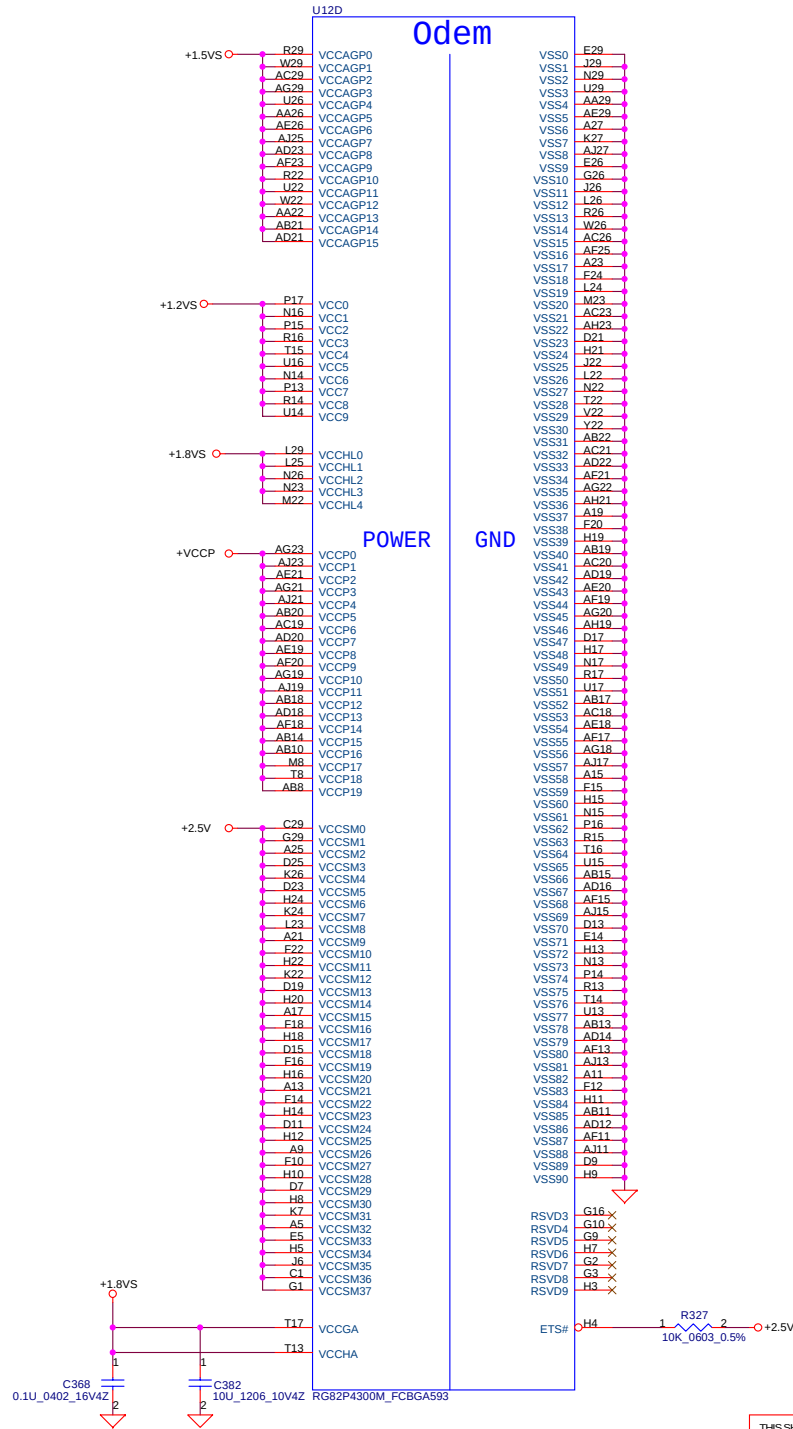
9,10 DDR_SCS#0 E9
9,10 DDR_SCS#1 E7
10 DDR_SCS#2 F9
10 DDR_SCS#3 E7

9,10 DDR_SBS0 G12
9,10 DDR_SBS1 G13



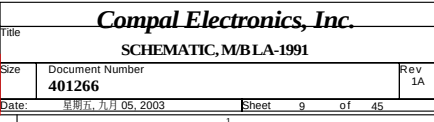
NOTE:1.M_RCV# max 2Via
2.G15 to Via max=40mils
3.G14 to Via max=40mils
4.Via to Via must = 100mils +-5mils

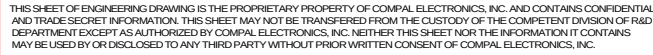




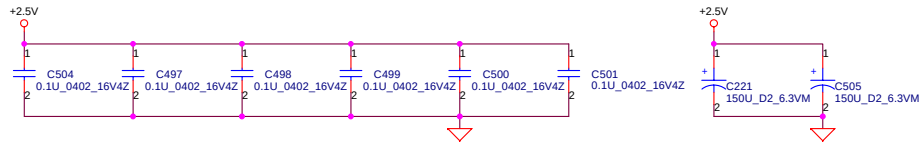
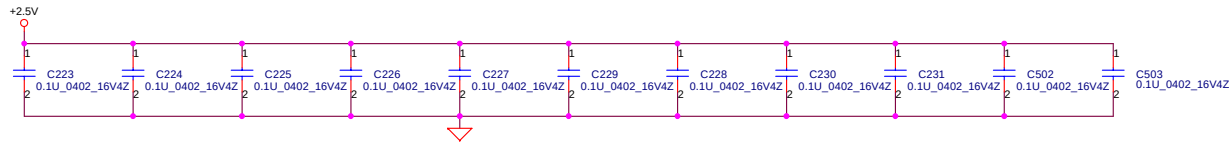
Compal Electronics, Inc.			
Title			
SCHEMATIC, M/B LA-1991			
Size	Document Number	Rev	
	401266	1A	
Date:	星期五, 九月 05, 2003	Sheet	8 of 45

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

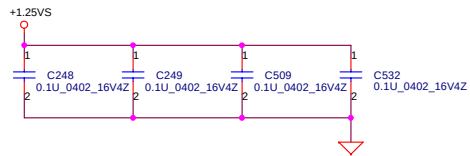
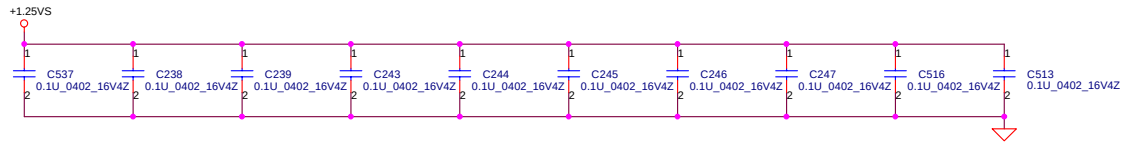
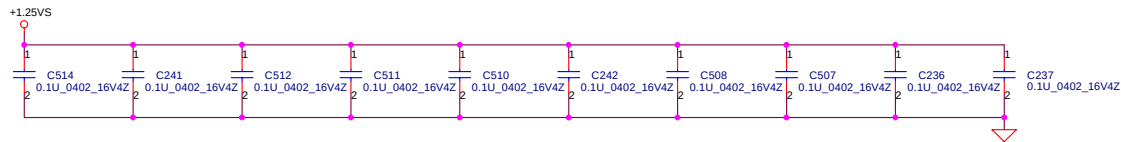
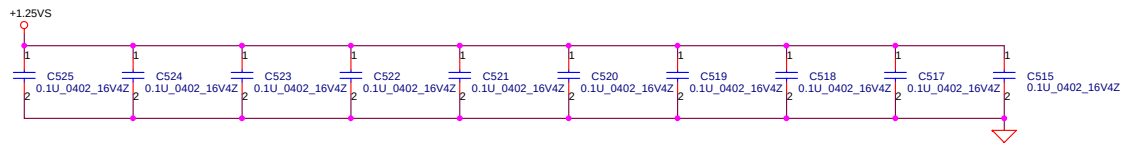
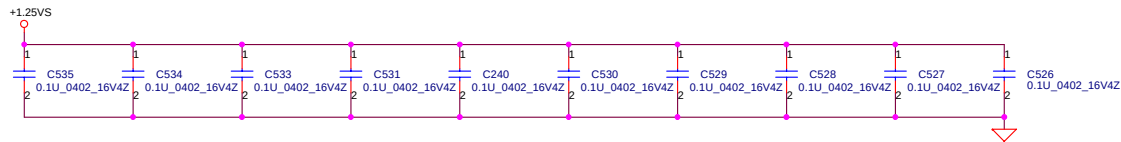
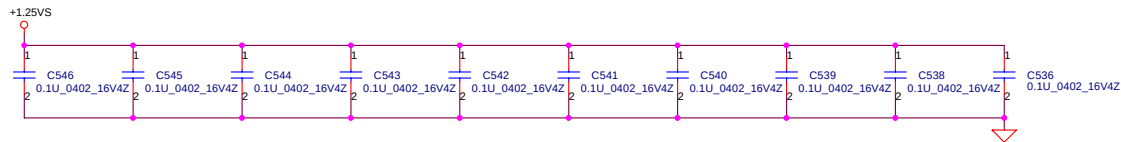




Layout note :
Distribute as close as possible
to DDR-SODIMM.



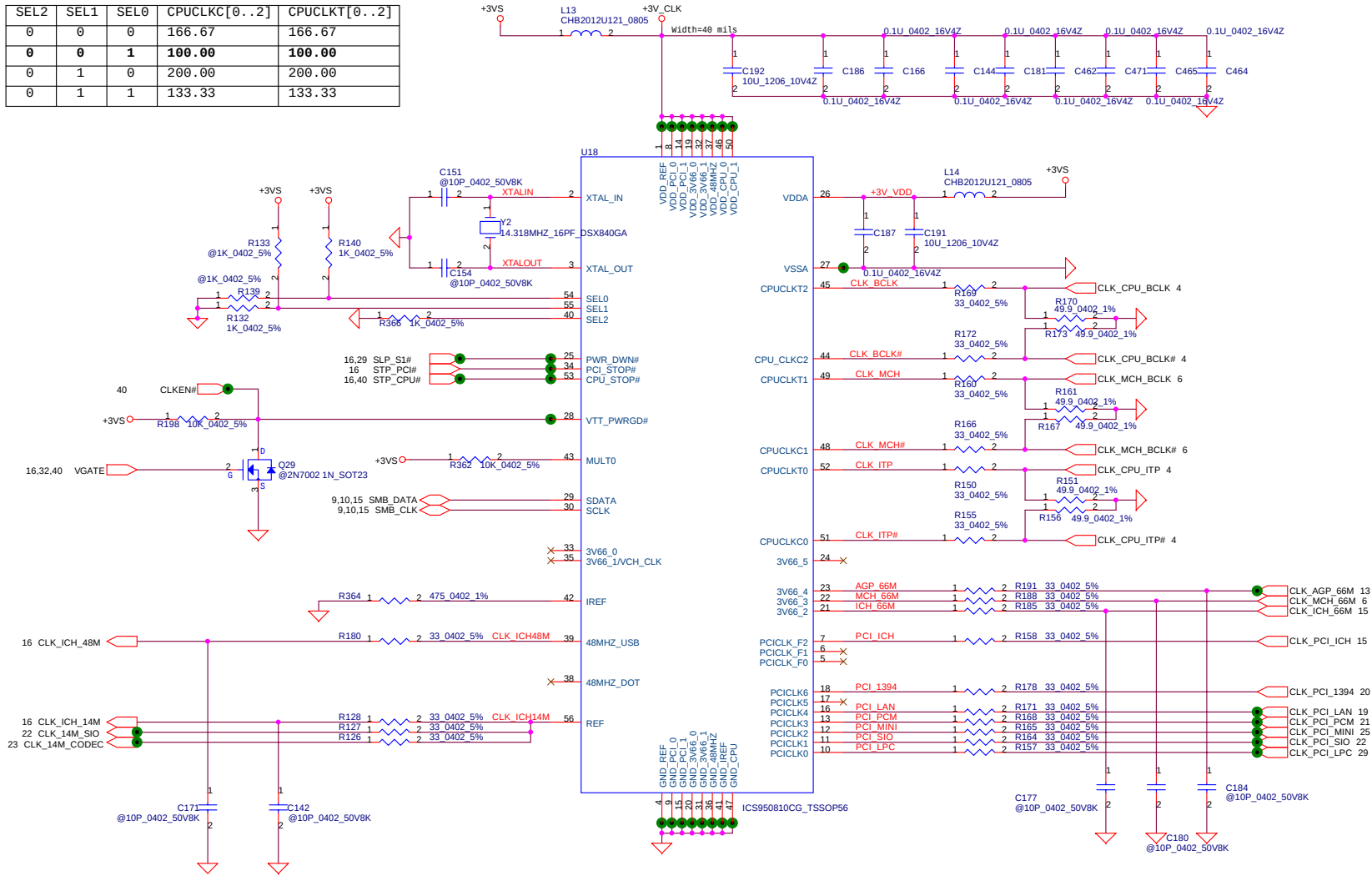
Layout note :
Place one cap close to every 2 pull up resistors termination to
+1.25V



THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Title			
SCHEMATIC, M/BLA-1991			
Size	Document Number		Rev
	401266		1A
Date:	星期五, 九月 05, 2003	Sheet	11 of 45

SEL2	SEL1	SEL0	CPUCLKC[0..2]	CPUCLKT[0..2]
0	0	0	166.67	166.67
0	0	1	100.00	100.00
0	1	0	200.00	200.00
0	1	1	133.33	133.33

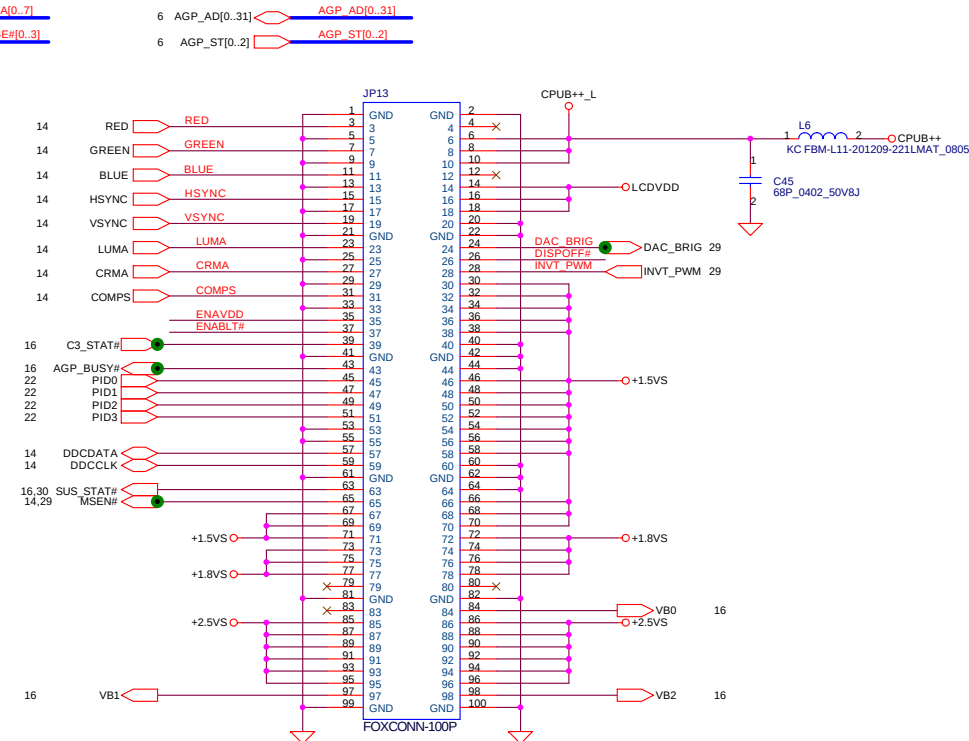
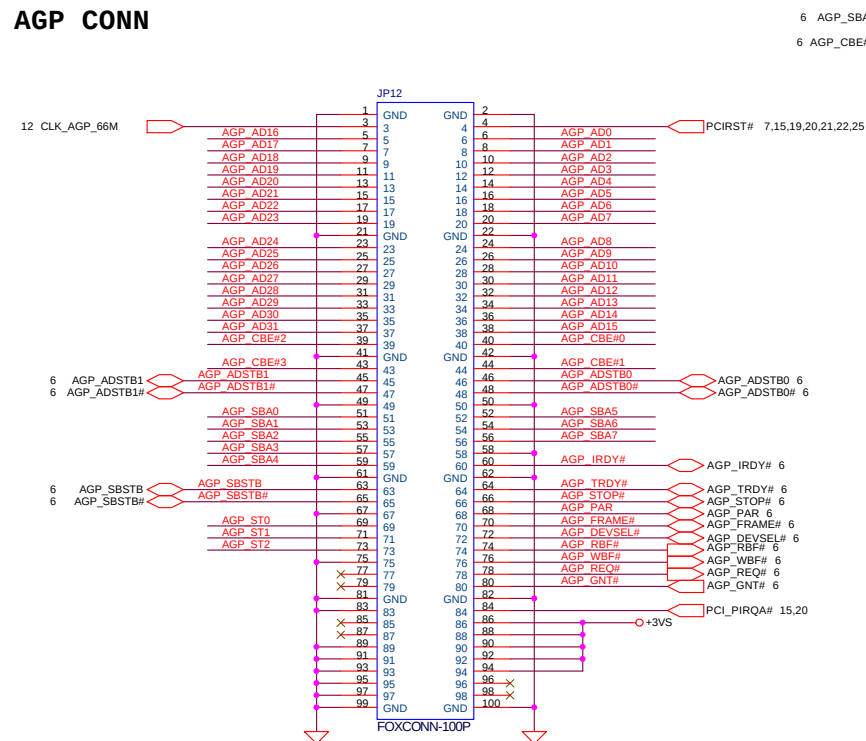


Clock Generator

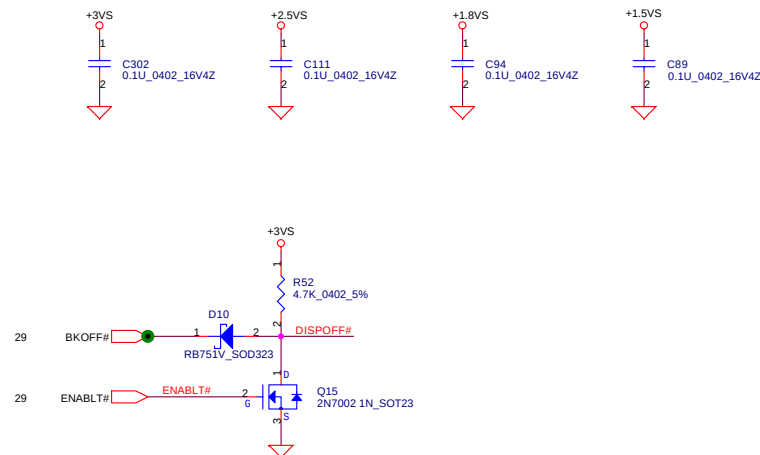
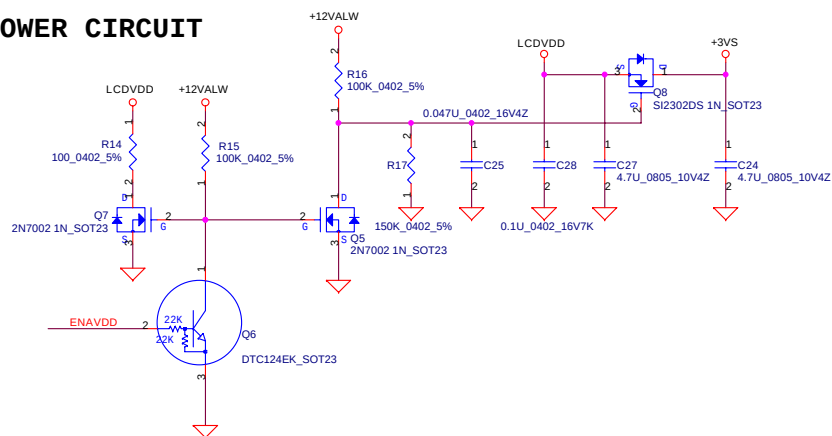
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
SCHEMATIC, M/BLA-1991			
Title	Document Number	Rev	
	401266	1A	
Date:	星期五, 九月 05, 2003	Sheet	12 of 45

AGP CONN

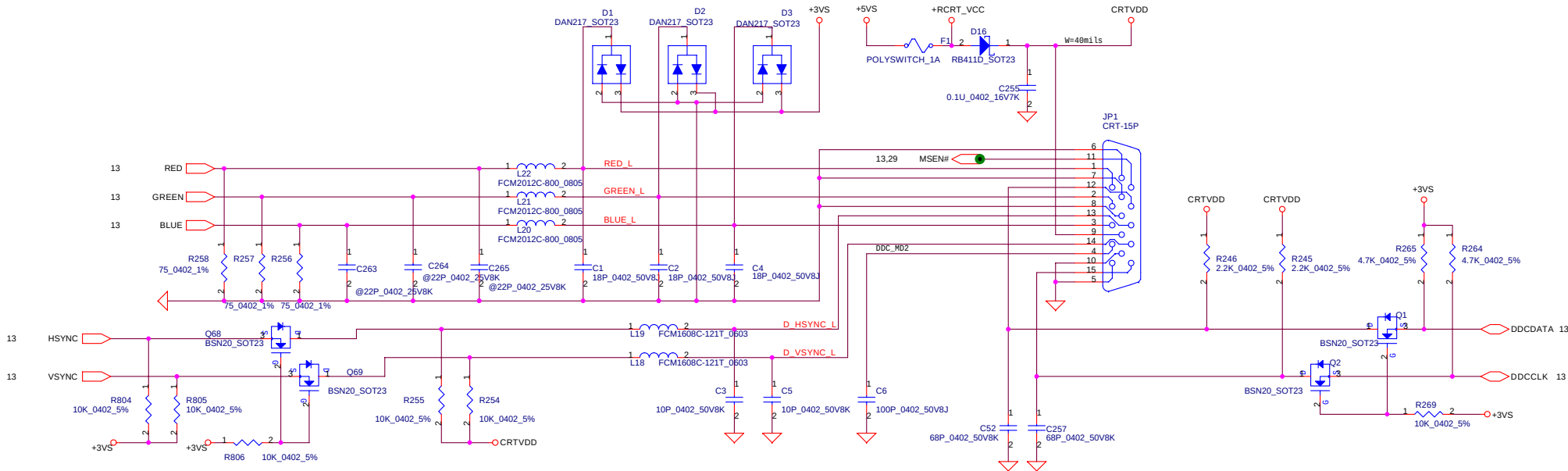


LCD POWER CIRCUIT

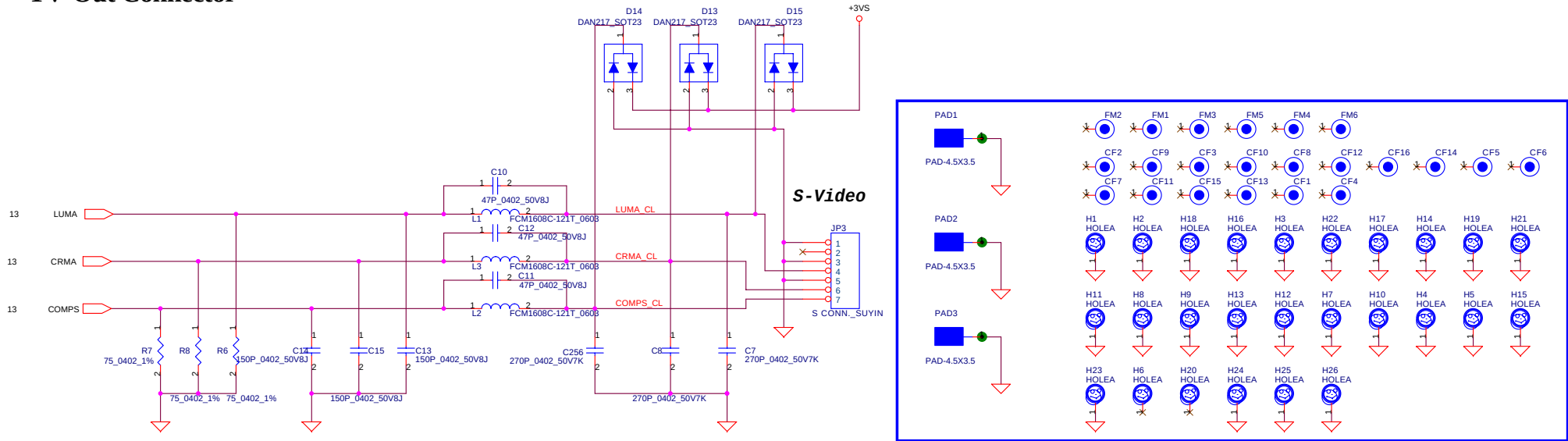


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

CRT Connector

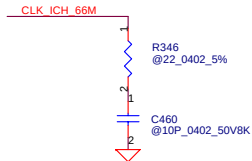
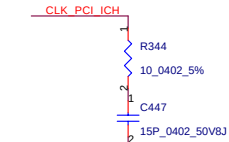


TV-Out Connector

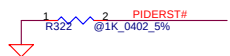
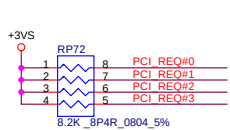
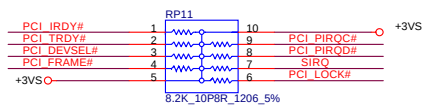
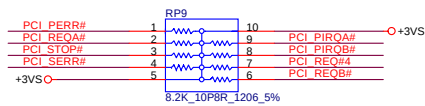


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
Title			
SCHEMATIC, M/BLA-1991			
Size	Document Number	Rev	
	401266	1A	
Date:	星期五, 九月 05, 2003	Sheet	14 of 45



PCI Pullups



19,20,21,25 PCI_AD[0..31] PCI_AD[0..31]

19,20,21,25 PCI_CBE#0 PCI_CBE#0
19,20,21,25 PCI_CBE#1 PCI_CBE#1
19,20,21,25 PCI_CBE#2 PCI_CBE#2
19,20,21,25 PCI_CBE#3 PCI_CBE#3

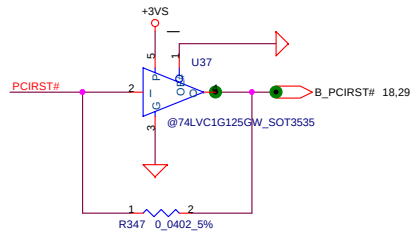
20 PCI_REQ#0 PCI_REQ#0
19 PCI_REQ#1 PCI_REQ#1
21 PCI_REQ#2 PCI_REQ#2
25 PCI_REQ#3 PCI_REQ#3
25 PCI_REQ#4 PCI_REQ#4

20 PCI_GNT#0 PCI_GNT#0
19 PCI_GNT#1 PCI_GNT#1
21 PCI_GNT#2 PCI_GNT#2
25 PCI_GNT#3 PCI_GNT#3
25 PCI_GNT#4 PCI_GNT#4

12 CLK_PCI_ICH CLK_PCI_ICH
19,20,21,25 PCI_FRAME# PCI_FRAME#
19,20,21,25 PCI_DEVSEL# PCI_DEVSEL#
19,20,21,25 PCI_IRDY# PCI_IRDY#
19,20,21,25 PCI_PAR# PCI_PAR#
19,20,21,25 PCI_PERR# PCI_PERR#

7,13,19,20,21,22,25 PCIRST# PCIRST#
19,20,21,25 PCI_SERR# PCI_SERR#
19,20,21,25 PCI_STOP# PCI_STOP#
19,20,21,25 PCI_TRDY# PCI_TRDY#

18 PIDERST# PIDERST#
18 SIDERST# SIDERST#



ICH4

SM I/F

INTRUDER# INTRUDER#
SMLINK0 SMLINK0
SMLINK1 SMLINK1
SMB_CLK SMB_CLK 9,10,12
SMB_DATA SMB_DATA 9,10,12
SMB_ALERT#/GPI11 GPI11

CPU I/F

A20GATE A20GATE
A20M# A20M#
DPSLP# DPSLP# 4,7
FERR# FERR#
IGNNE# IGNNE#
INIT# INIT#
INTR INTR
NMI# NMI#
CPU_PWRGOOD CPU_PWRGOOD
RCIN# RCIN#
SLP# SLP#
SM# SM#
STPCLK# STPCLK#

HUB I/F

HUB_P0# HUB_P0#
HUB_P1# HUB_P1#
HUB_P2# HUB_P2#
HUB_P3# HUB_P3#
HUB_P4# HUB_P4#
HUB_P5# HUB_P5#
HUB_P6# HUB_P6#
HUB_P7# HUB_P7#
HUB_P8# HUB_P8#
HUB_P9# HUB_P9#
HUB_P10# HUB_P10#
CLK66 CLK_ICH_66M
H_STB# HUB_PSTRB#
H_STB# HUB_PSTRB#
HICOMP HUB_VREF
HUB_VSWING HUB_VREF

Interrupt I/F

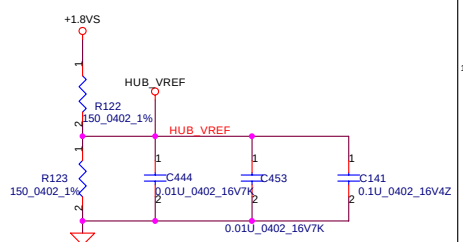
APICCLK APICCLK
APICD0 APICD0
APICD1 APICD1
PCI_PIRQA# PCI_PIRQA#
PCI_PIRQB# PCI_PIRQB#
PCI_PIRQC# PCI_PIRQC#
PCI_PIRQD# PCI_PIRQD#
PCI_PIRQE# PCI_PIRQE#
PCI_PIRQF# PCI_PIRQF#
PCI_PIRQG# PCI_PIRQG#
PCI_PIRQH# PCI_PIRQH#
PD_IRQ14 PD_IRQ14
SD_IRQ15 SD_IRQ15
SIRQ SIRQ

EEPROM I/F

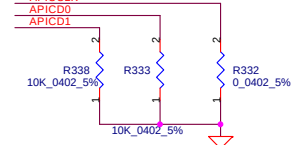
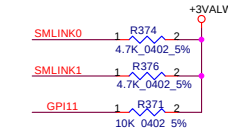
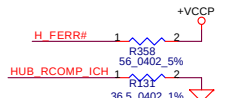
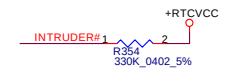
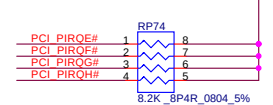
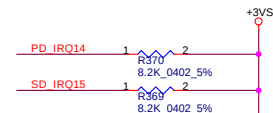
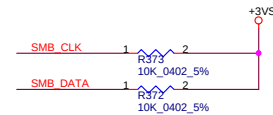
EE_CS EE_CS
EE_IN EE_IN
EE_OUT EE_OUT
EE_SHCLK EE_SHCLK

LAN I/F

LAN_RXD0 LAN_RXD0
LAN_RXD1 LAN_RXD1
LAN_RXD2 LAN_RXD2
LAN_TXD0 LAN_TXD0
LAN_TXD1 LAN_TXD1
LAN_TXD2 LAN_TXD2
LAN_CLK LAN_CLK
LAN_RST# LAN_RST#

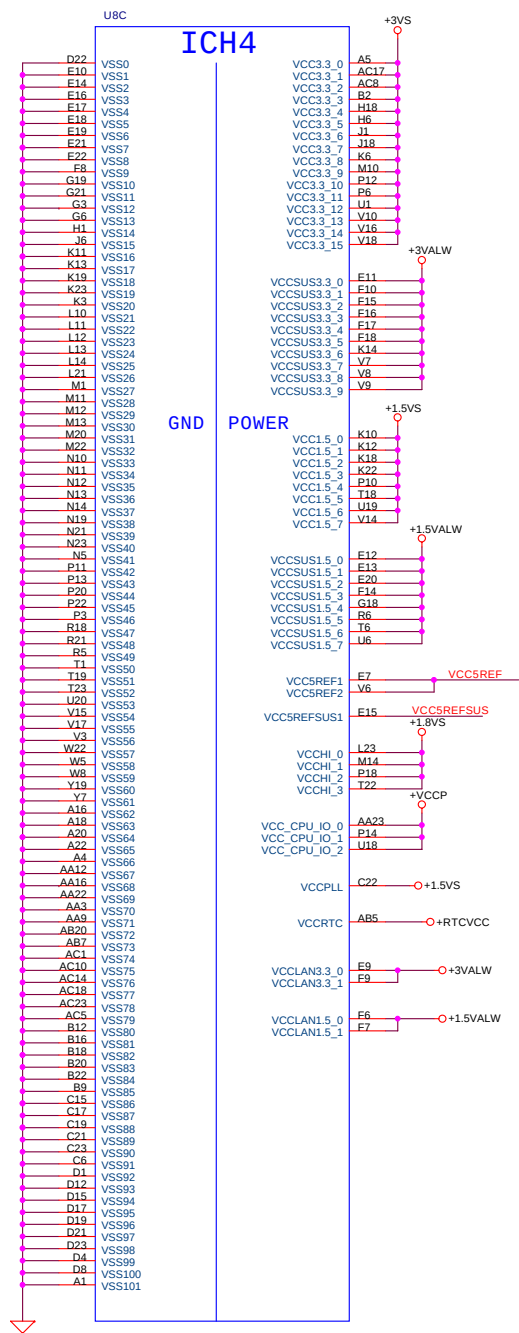


Note: R122, R123 placement center of MCH and ICH4M

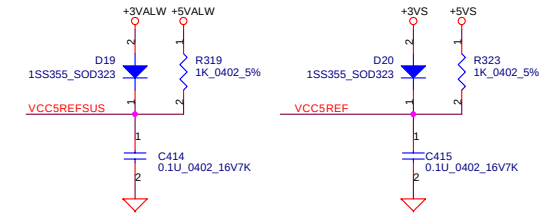
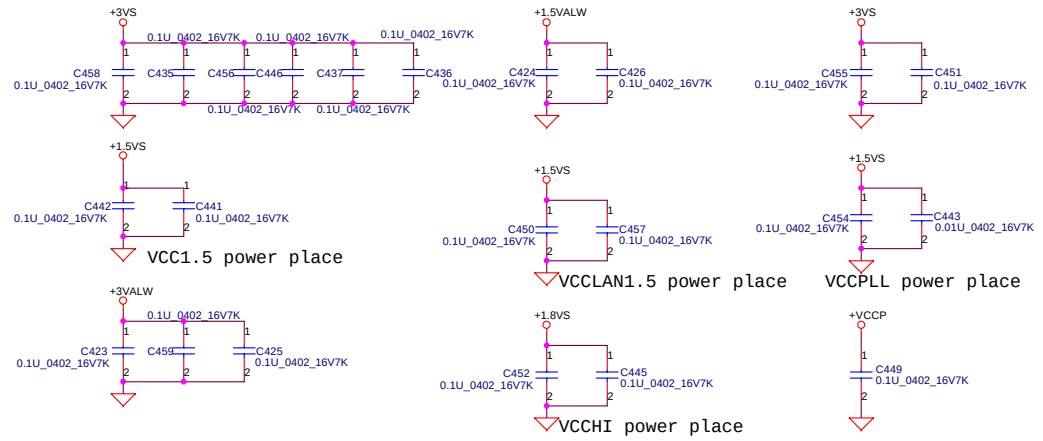


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

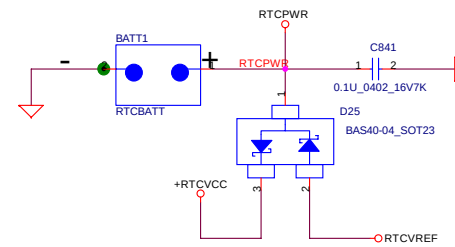
Compal Electronics, Inc.			
SCHEMATIC, M/BLA-1991			
Size	Document Number	Rev	
	401266	1A	
Date:	星期五, 九月 05, 2003	Sheet	15 of 45



FW82801DBM_BGA421

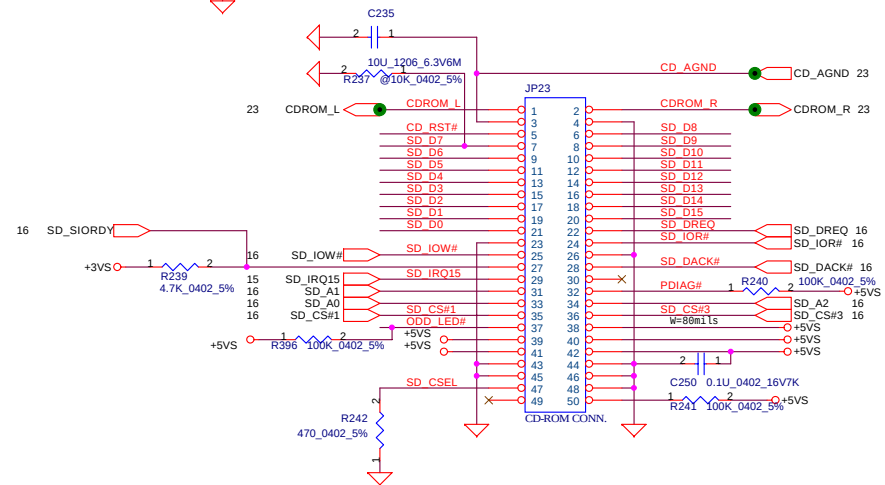
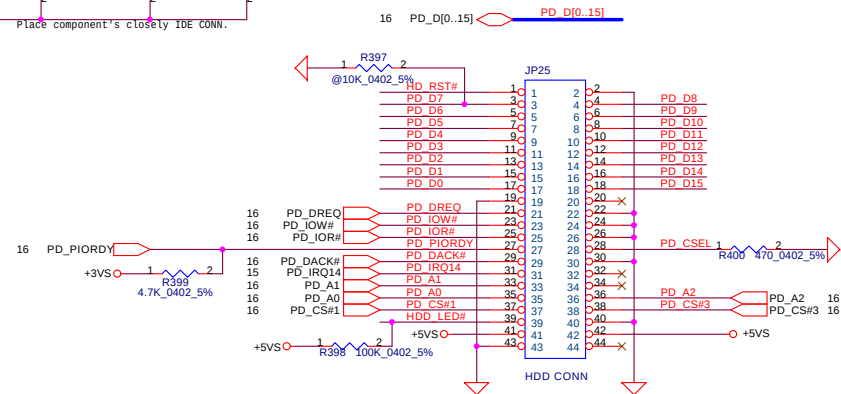
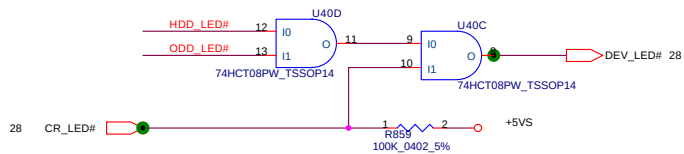


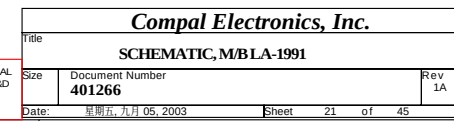
RTC Battery



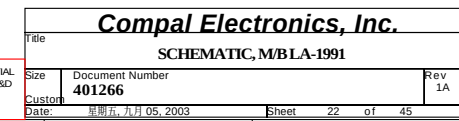
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
SCHEMATIC, M/BLA-1991			
Title	Size	Document Number	Rev
		401266	1A
Date:	星期五, 九月 05, 2003	Sheet	17 of 45

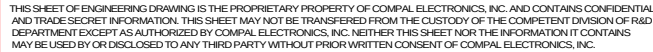


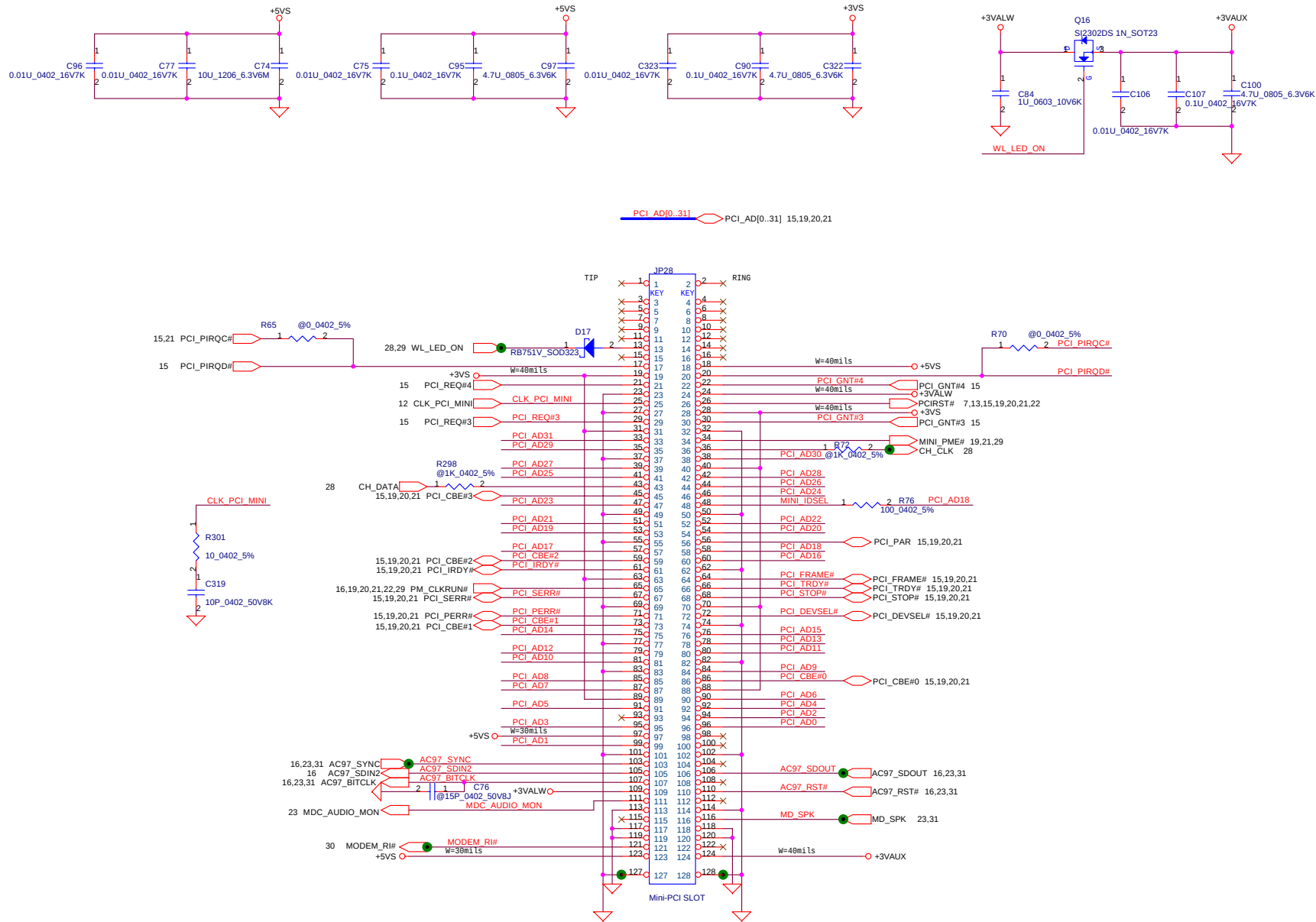


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.



THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

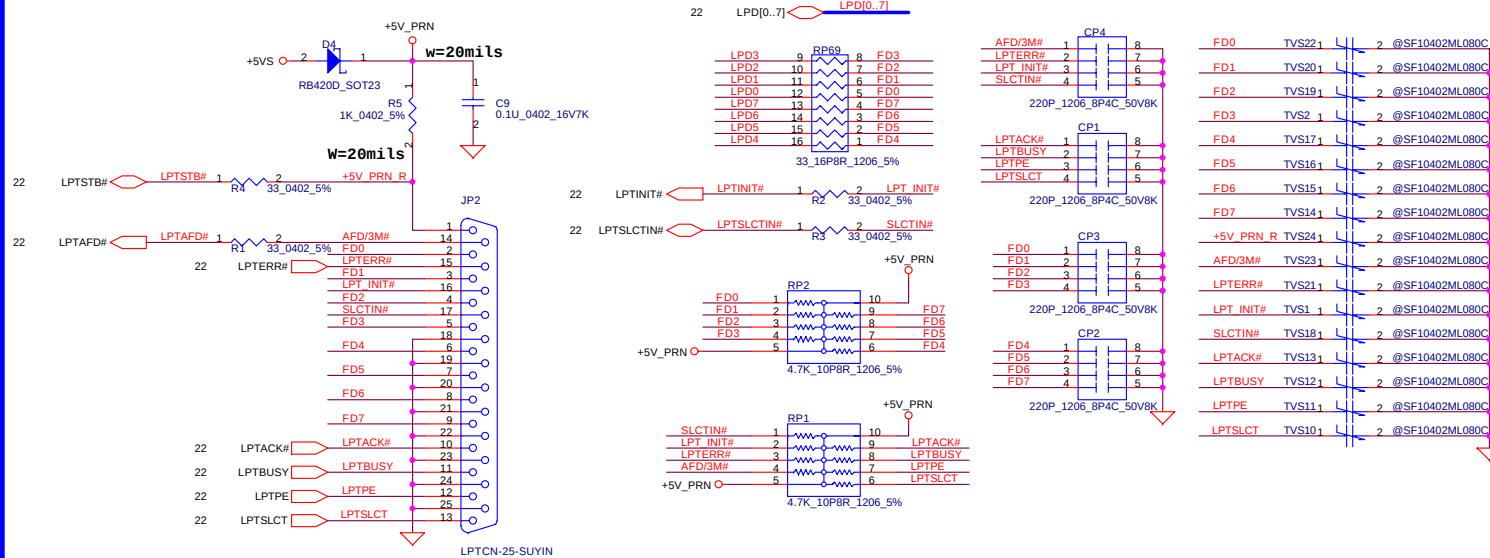




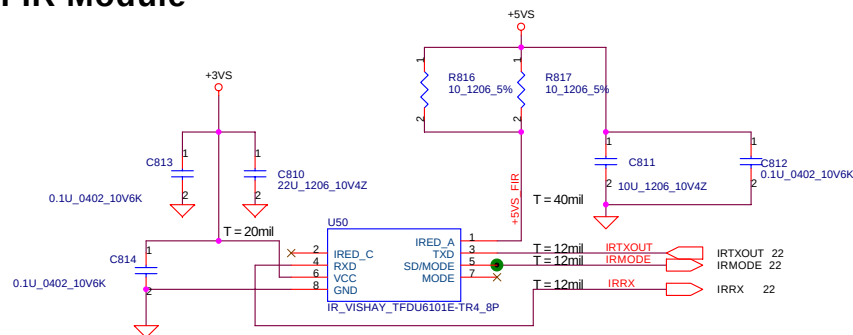
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
Title			
SCHEMATIC, MBLA-1991			
Size	Document Number	Rev	
	401266	1A	
Date:	星期五, 九月 05, 2003	Sheet	25 of 45

Parallel Port



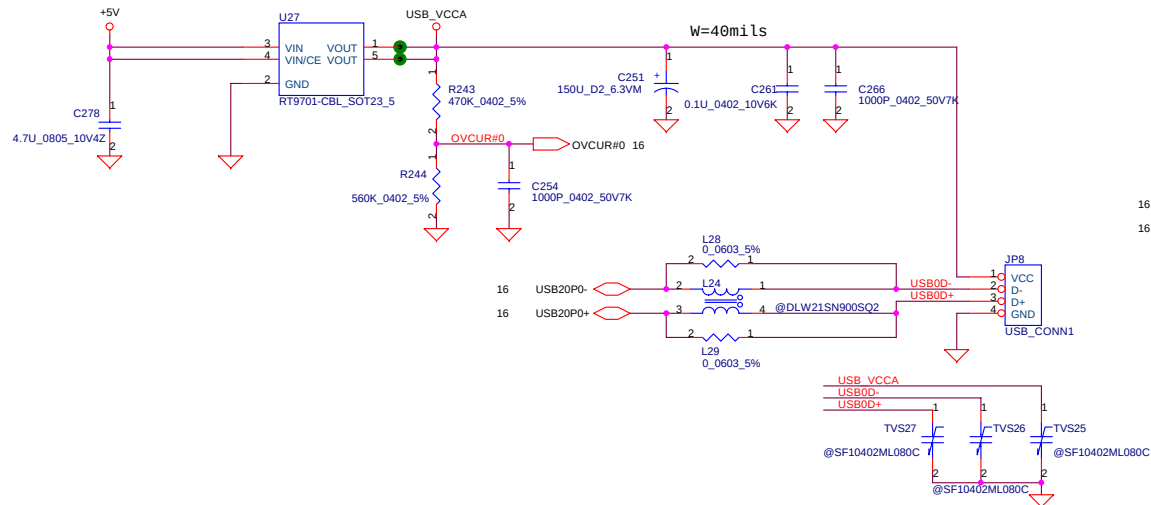
FIR Module



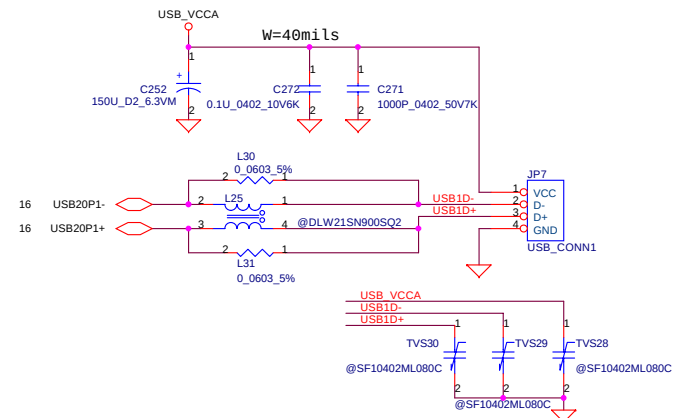
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc. Title SCHEMATIC, M/B LA-1991		
Size	Document Number 401266	Rev 1A
Date	日期: 九月 05, 2003	Sheet 26 of 45

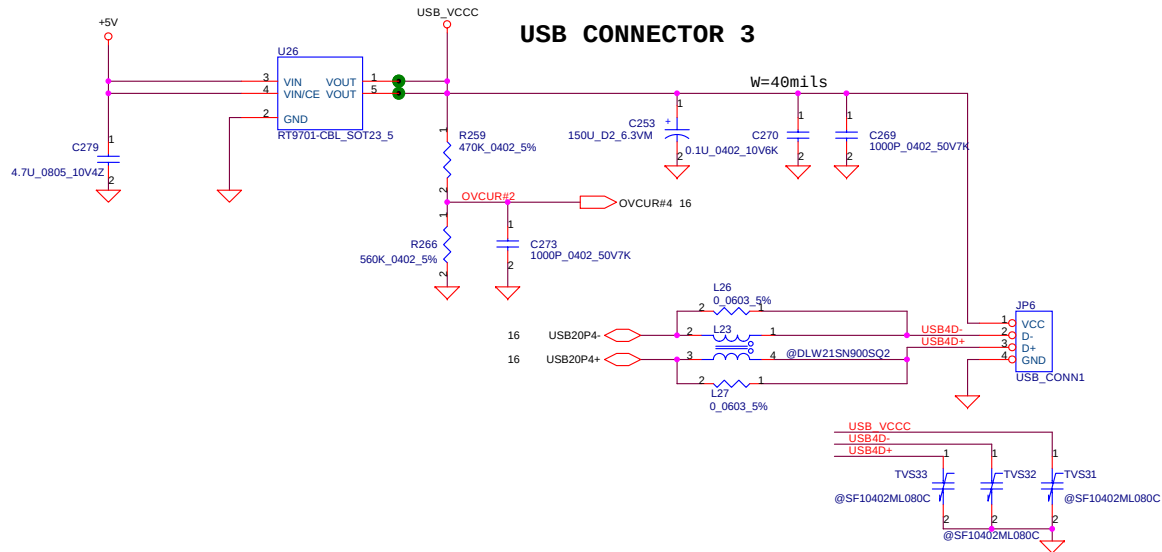
USB CONNECTOR 1



USB CONNECTOR 2



USB CONNECTOR 3



THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.

SCHEMATIC, M/BLA-1991

Size	Document Number	Rev
Custom	401266	1A
Date:	星期五, 九月 05, 2003	Sheet 27 of 45

T/P & LED CONN.

T/P & LED CONN.

Module Pins (Left):

- 30 DOT_D7
- 30 DOT_D6
- 30 DOT_D5
- 29,31 KSO10
- 29,31 KSO11
- 29,31 KSO12
- 29,31 KSO13
- 29 KSO14
- 29 KSO15
- 29 KSO16
- 29 KSO17
- 31 ASPIRE#
- 30 SUSP_LED#
- 25,29 WL_LED_ON
- 30 POWER_LED#
- 18 DEV_LED#
- 30 FULL_LED#
- 30 CHARGING_LED#
- 29 TP_CLK
- 29 TP_DATA
- 29,31 KSO17

Module Pins (Right):

- 50
- 49
- 48
- 47
- 46
- 45
- 44
- 43
- 42
- 41
- 40
- 39
- 38
- 37
- 36
- 35
- 34
- 33
- 32
- 31
- 30
- 29
- 28
- 27
- 26

System Components (Right):

- DOT_D0 30
- DOT_D1 30
- DOT_D2 30
- DOT_D3 30
- DOT_D4 30
- LID_SW# 29
- DOT_R/W 30
- DOT_CS# 30
- DOT_RS 30
- 51_ON# 31,34
- EC_ACT# 30
- BACKLED# 30
- BT_LED# 29
- +5VS
- +5VALW
- C815 0.1uF_0402_10V6K
- IPEX_20004-050E

Connections:

- INT_MIC (25) to 50
- DOT_D7 (30) to 49
- DOT_D6 (30) to 48
- DOT_D5 (30) to 47
- DOT_D4 (30) to 46
- LID_SW# (29) to 45
- DOT_R/W (30) to 44
- DOT_CS# (30) to 43
- DOT_RS (30) to 42
- 51_ON# (31,34) to 41
- EC_ACT# (30) to 40
- BACKLED# (30) to 39
- BT_LED# (29) to 38
- +5VS to 37
- +5VALW to 36
- SUSP_LED# (30) to 35
- WL_LED_ON (25,29) to 34
- POWER_LED# (30) to 33
- DEV_LED# (18) to 32
- FULL_LED# (30) to 31
- CHARGING_LED# (30) to 30
- TP_CLK (29) to 29
- TP_DATA (29) to 28
- KSO17 (29,31) to 27
- KSO16 (29) to 26
- KSO15 (29) to 25
- KSO14 (29) to 24
- KSO13 (29,31) to 23
- KSO12 (29,31) to 22
- KSO11 (29,31) to 21
- KSO10 (29,31) to 20
- KSO9 (29,31) to 19
- KSO8 (29,31) to 18
- KSO7 (29) to 17
- KSO6 (29) to 16
- KSO5 (29) to 15
- KSO4 (29) to 14
- KSO3 (29,31) to 13
- KSO2 (29,31) to 12
- KSO1 (29,31) to 11
- KSO0 (29,31) to 10
- KSO17 (29,31) to 9
- KSO16 (29) to 8
- KSO15 (29) to 7
- KSO14 (29) to 6
- KSO13 (29,31) to 5
- KSO12 (29,31) to 4
- KSO11 (29,31) to 3
- KSO10 (29,31) to 2
- KSO9 (29,31) to 1
- KSO8 (29,31) to 0

INT_KBD_CONN.

KS[0..7] 29,31
KS0[0..15] 29

JP21

KS015	1	2	KS015
KS010	3	4	KS010
KS011	5	6	KS011
KS014	7	8	KS014
KS013	9	10	KS013
KS012	11	12	KS012
KS03	13	14	KS03
KS06	15	16	KS06
KS08	17	18	KS08
KS07	19	20	KS07
KS04	21	22	KS04
KS02	23	24	KS02
KS10	25	26	KS10
KS01	27	28	KS01
KS05	29	30	KS05
KS13	31	32	KS13
KS12	33	34	KS12
KS00	35	36	KS00
KS15	37	38	KS15
KS14	39	40	KS14
KS09	41	42	KS09
KS16	43	44	KS16
KS17	45	46	KS17
KS11	47	48	KS11

ACES_85203-2402

CP7

KS13	1	2
KS05 <td>3<td>4</td></td>	3 <td>4</td>	4
KS01 <td>6<td>7</td></td>	6 <td>7</td>	7
KS10 <td>8<td>9</td></td>	8 <td>9</td>	9

100P_1206_8P4C_50V8

CP9

KS014	1	2
KS011 <td>3<td>4</td></td>	3 <td>4</td>	4
KS010 <td>6<td>7</td></td>	6 <td>7</td>	7
KS015 <td>8<td>9</td></td>	8 <td>9</td>	9

100P_1206_8P4C_50V8

CP6

KS14	1	2
KS15 <td>3<td>4</td></td>	3 <td>4</td>	4
KS00 <td>6<td>7</td></td>	6 <td>7</td>	7
KS12 <td>8<td>9</td></td>	8 <td>9</td>	9

100P_1206_8P4C_50V8

CP10

KS06	1	2
KS03 <td>3<td>4</td></td>	3 <td>4</td>	4
KS02 <td>6<td>7</td></td>	6 <td>7</td>	7
KS13 <td>8<td>9</td></td>	8 <td>9</td>	9

100P_1206_8P4C_50V8

CP5

KS17	1	2
KS16 <td>3<td>4</td></td>	3 <td>4</td>	4
KS09 <td>6<td>7</td></td>	6 <td>7</td>	7
KS11 <td>8<td>9</td></td>	8 <td>9</td>	9

100P_1206_8P4C_50V8

CP8

KS02	1	2
KS04 <td>3<td>4</td></td>	3 <td>4</td>	4
KS07 <td>6<td>7</td></td>	6 <td>7</td>	7
KS08 <td>8<td>9</td></td>	8 <td>9</td>	9

100P_1206_8P4C_50V8

CardReader CONN.

The diagram illustrates the wiring for the CardReader CONN. The connections are as follows:

- SPKR+ (24)** and **SPKL+ (24)** connect to pins 1 and 2 of J32.
- INT_MIC** connects to pin 3 of J32.
- MIC_IN (23)** connects to pin 4 of J32.
- HP_PLUG (24)** connects to pin 5 of J32.
- USB20P2+ (16)** and **USB20P2- (16)** connect to pins 6 and 7 of J32.
- +3VS** connects to pin 8 of J32.
- +5VS** connects to pin 9 of J32.
- C495 (0.1u_0402_10V6K)** and **C199 (0.1u_0402_10V6K)** are connected to the +3VS and +5VS lines, respectively.

[illegible]

Keep +3VALW for ENE, +3VS for NS

+3VALW

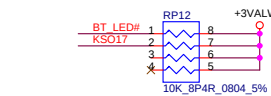
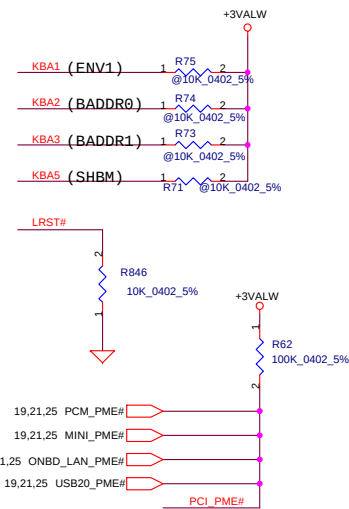
EC_AVCC

RTCVCC

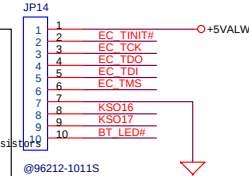
BADDR1-0	Index	I/O Address	Data
0 0	2E		2F
0 1	4E		4F
1 0	(HCFGBAH, HCFGBAL)	(HCFGBAH, HCFGBAL)+1	
1 1		Reserved	

	ENV0	ENV1	TRIS
IRE	0	0	0
* OBD	0	1	0
DEV	1	0	0
PROG	1	1	0

SHBM=1: Enable shared memory with host BIOS
TRIS=1: While in IRE and OBD, float all the signals for clip-on ISE use



EC DEBUG port



For KB910
Pin16 : Change to +3VALW (R841)
Pin36 : Reserve for SCI#
Pin165 : PCIRST# pull low 10K (R846)
Pin125,126,127,131 : Remove 591 pull up resistor
Pin158 : R94 remove
Pin160 : Change R93 to 0 ohm
Pin11,12,105,124,128 : Add 00101 strap pin

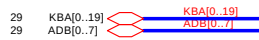
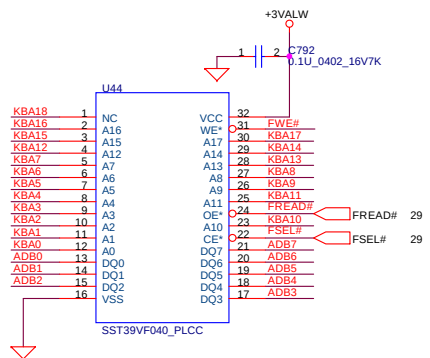
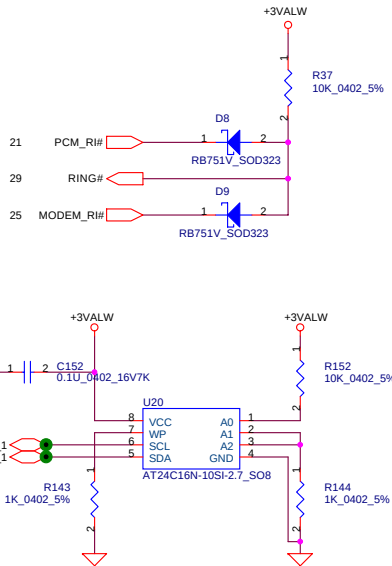
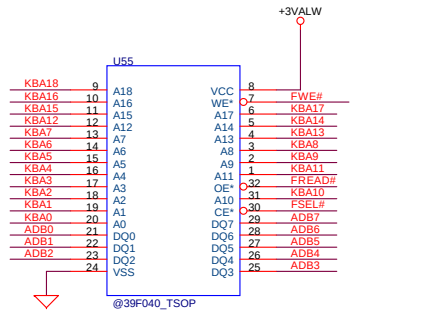
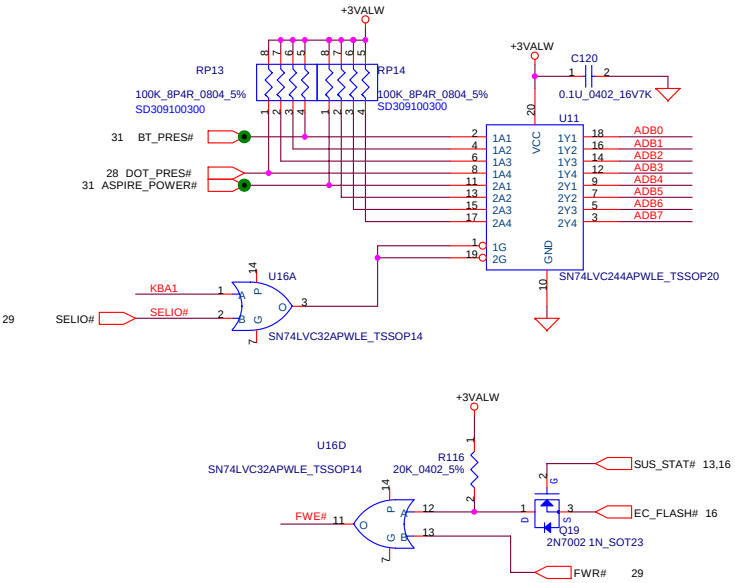
Compal Electronics, Inc.

SCHEMATIC, M/B LA-1991

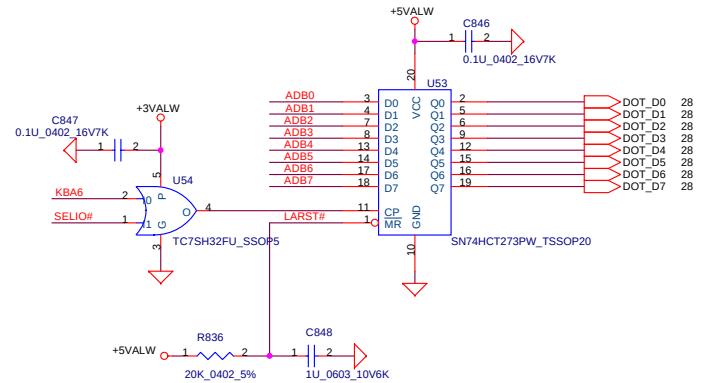
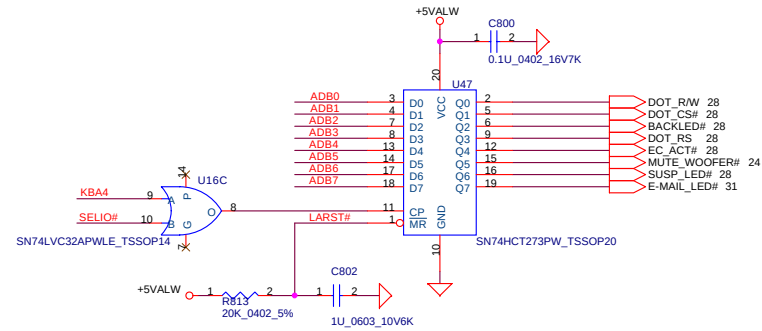
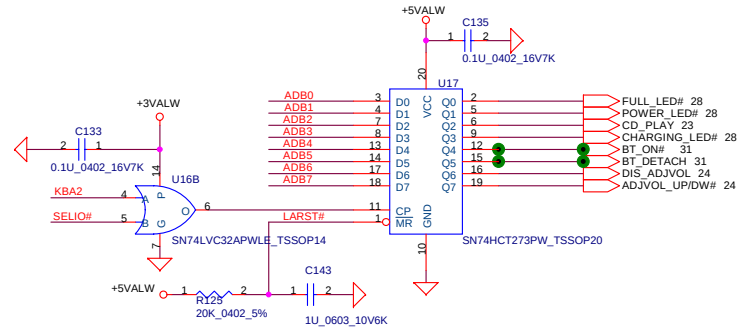
Size	Document Number	Rev
	401266	1A
Date	2003.05.05	Sheet 29 of 45

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

INPUT

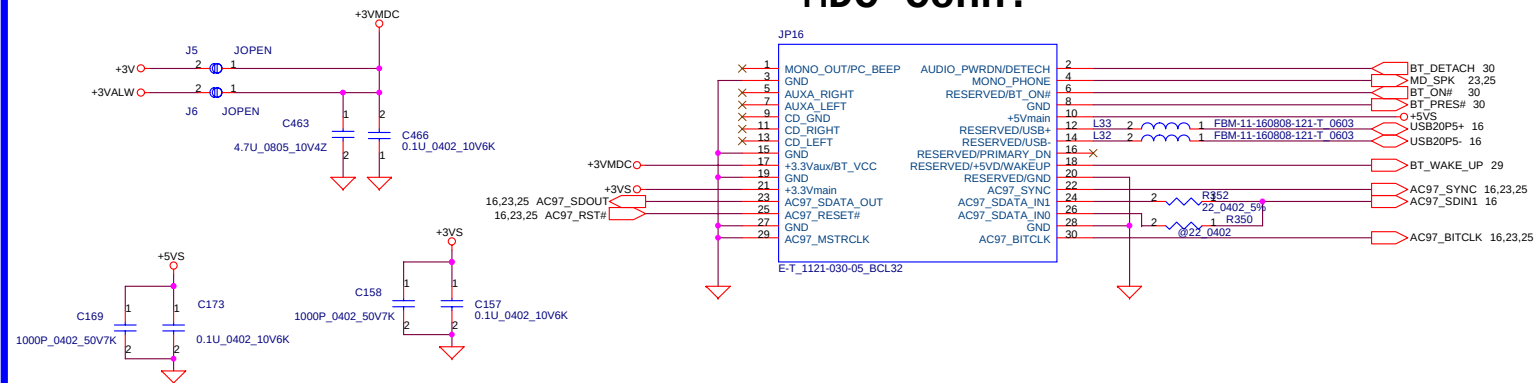


OUTPUT

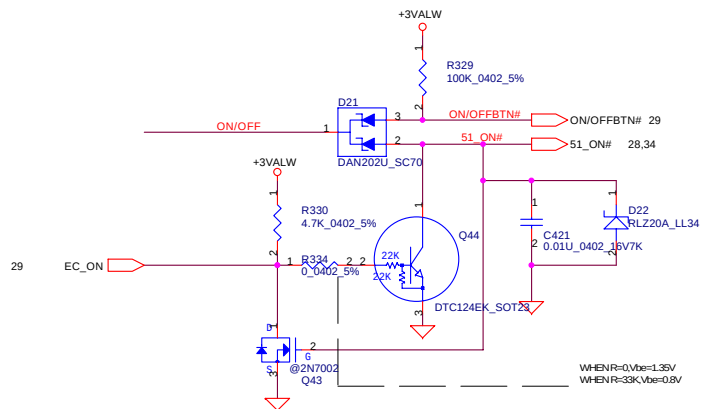


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

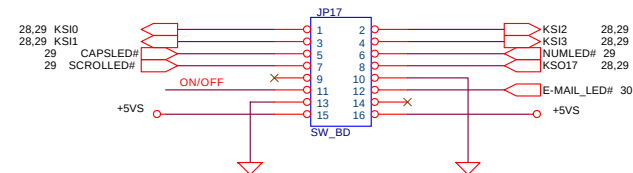
MDC Conn.



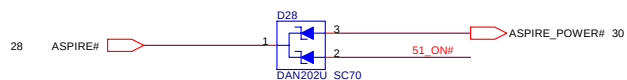
ON/OFF BUTTON



SWITCH CONN



ASPIRE POWER

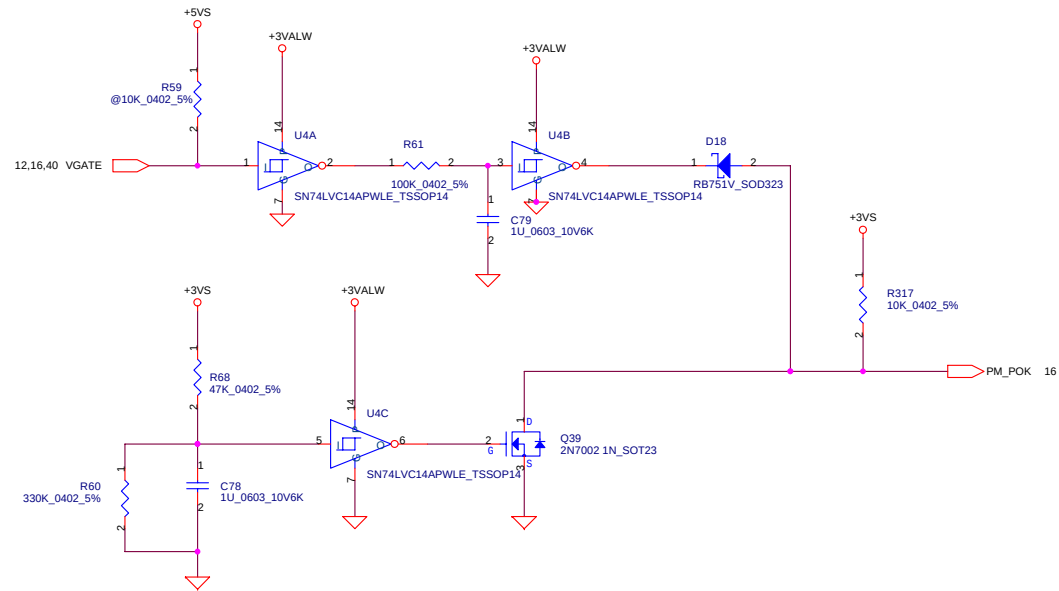


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.

SCHEMATIC, M/B LA-1991

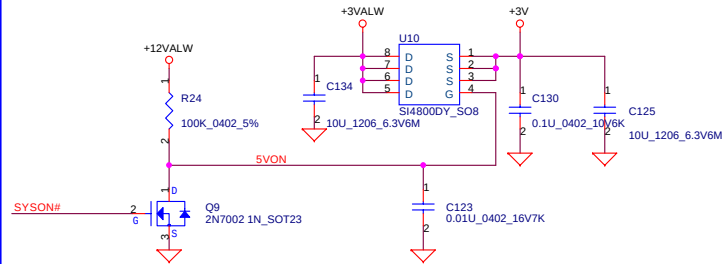
Size	Document Number	Rev
	401266	1A
Customer		
Date:	星期五 九月 05, 2003	Sheet 31 of 45



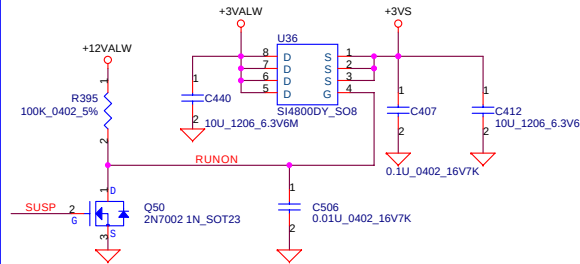
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
Title			
SCHEMATIC, M/BLA-1991			
Size	Document Number		Rev
	401266		1A
Date	星期日, 九月 05, 2003	Sheet	32 of 45

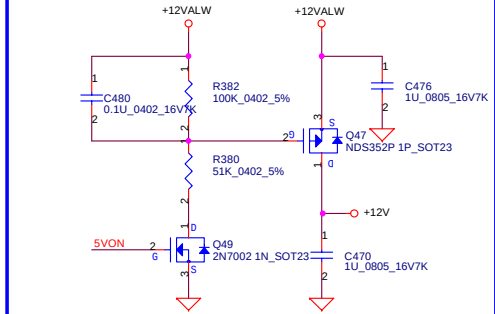
+3VALW to +3V Transfer



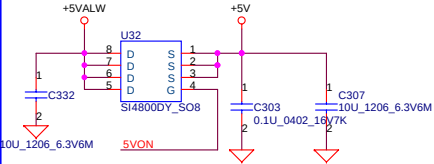
+3VALW to +3VS Transfer



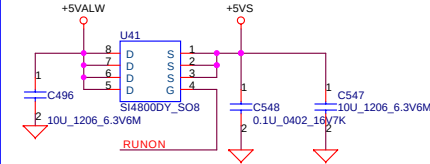
+12VALW TO +12V Transfer



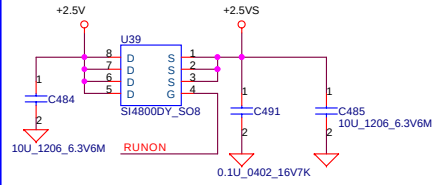
+5VALW to +5V Transfer



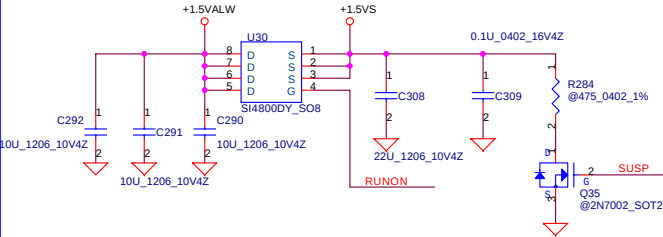
+5VALW to +5VS Transfer



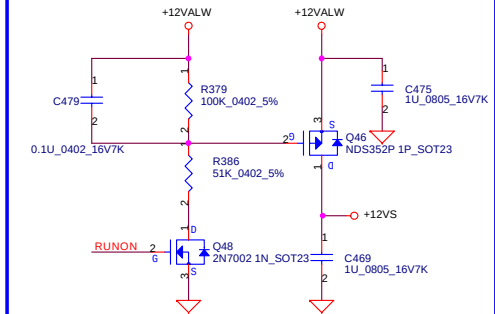
+2.5V to +2.5VS Transfer



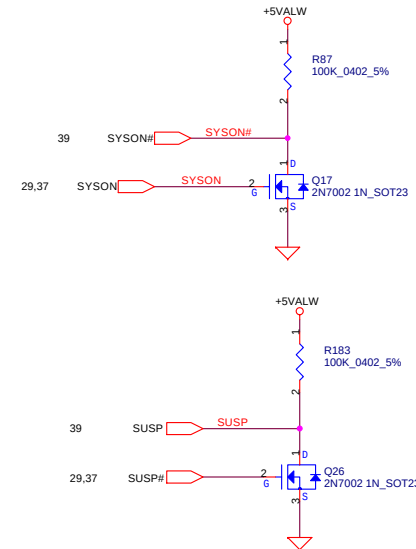
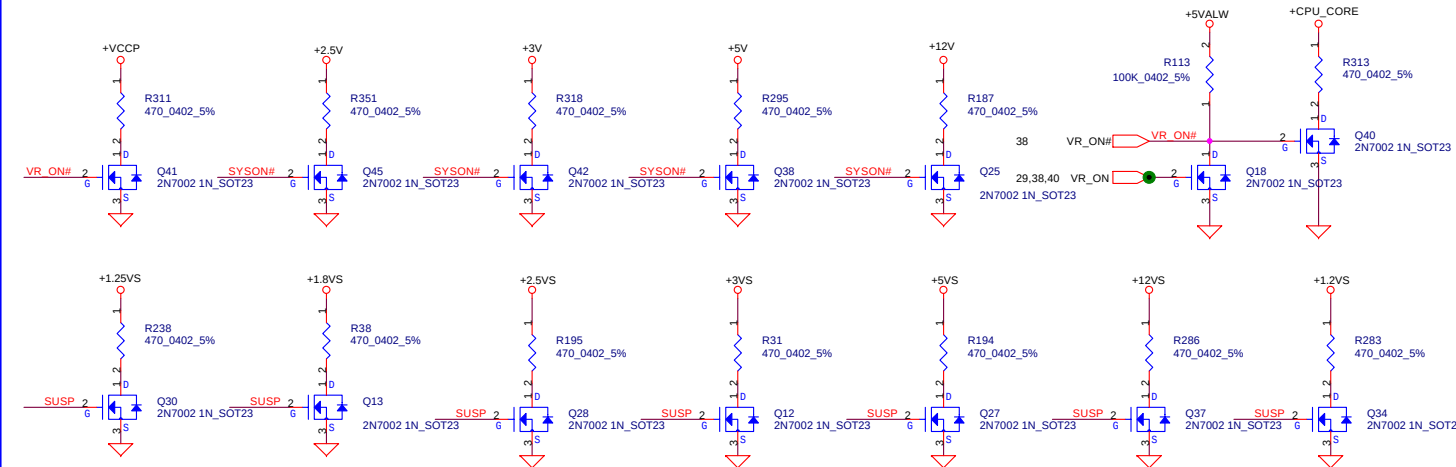
+1.5VALW to +1.5VS Transfer



+12VALW TO +12VS Transfer



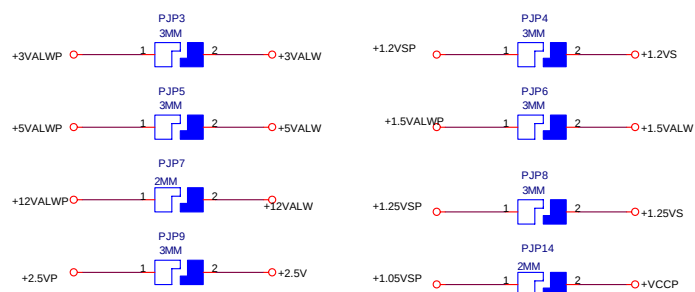
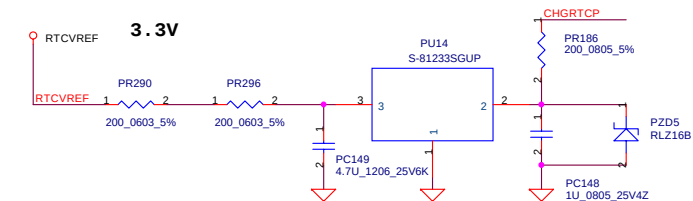
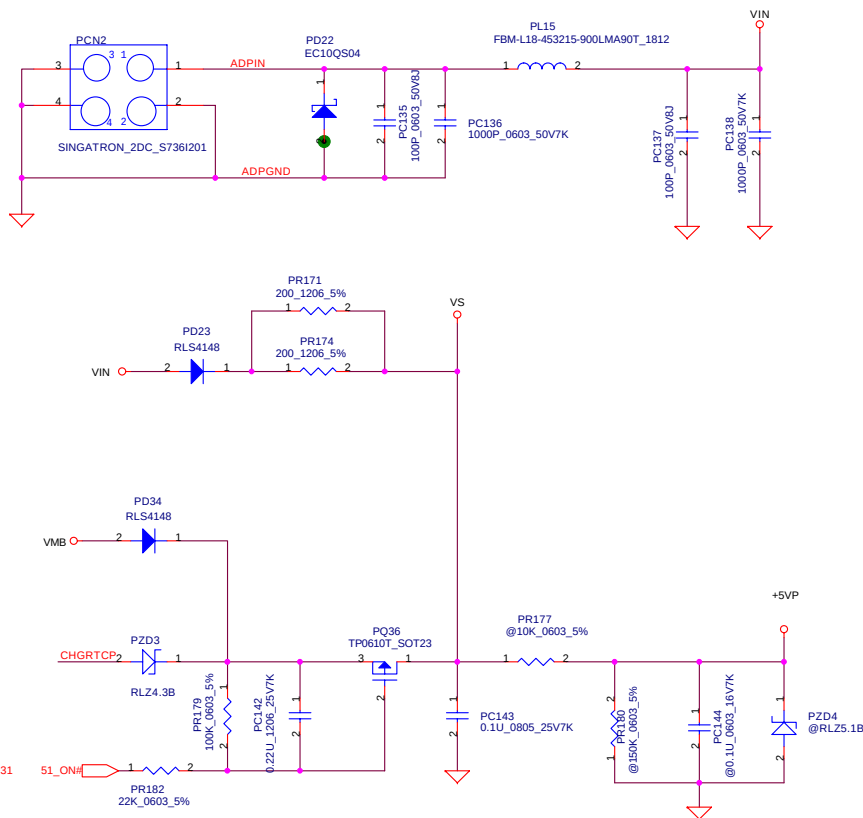
Discharge circuit



Compal Electronics, Inc.

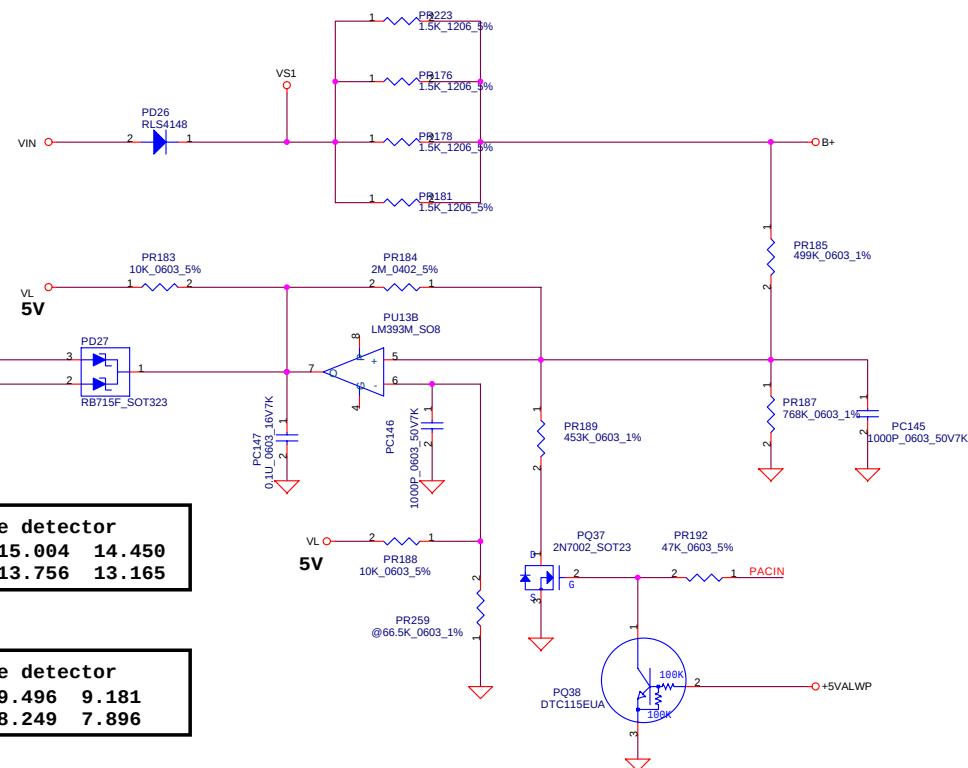
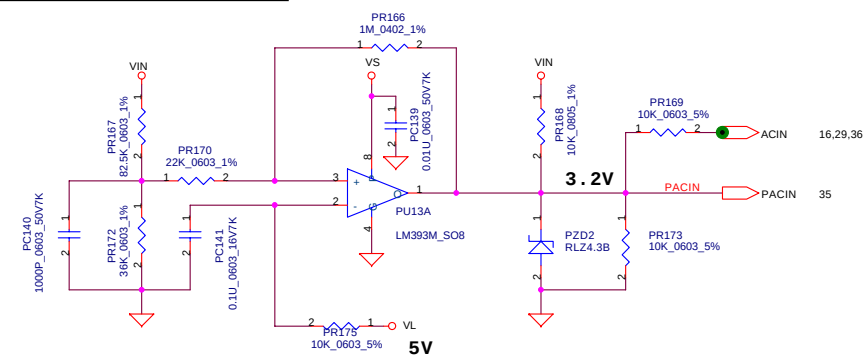
Title			
SCHEMATIC, MBLA-1991			
Size	Document Number	Rev	
	401266	1A	
Date:	Sheet	of	45
日期: 九月 05, 2003	33	45	

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.



VIN detector

17.905	17.233	16.587
17.391	16.737	16.073



ACIN

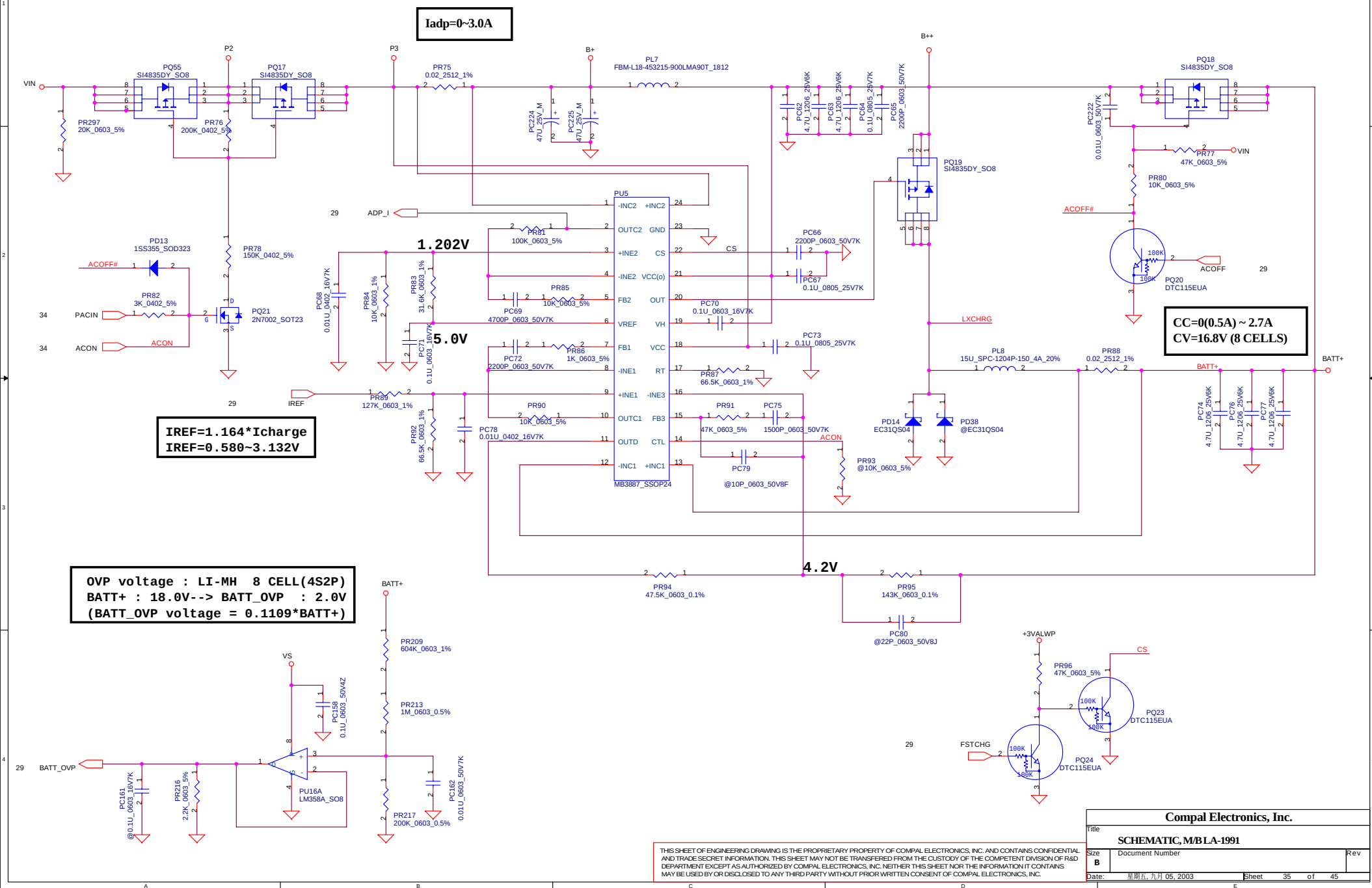
Precharge detector

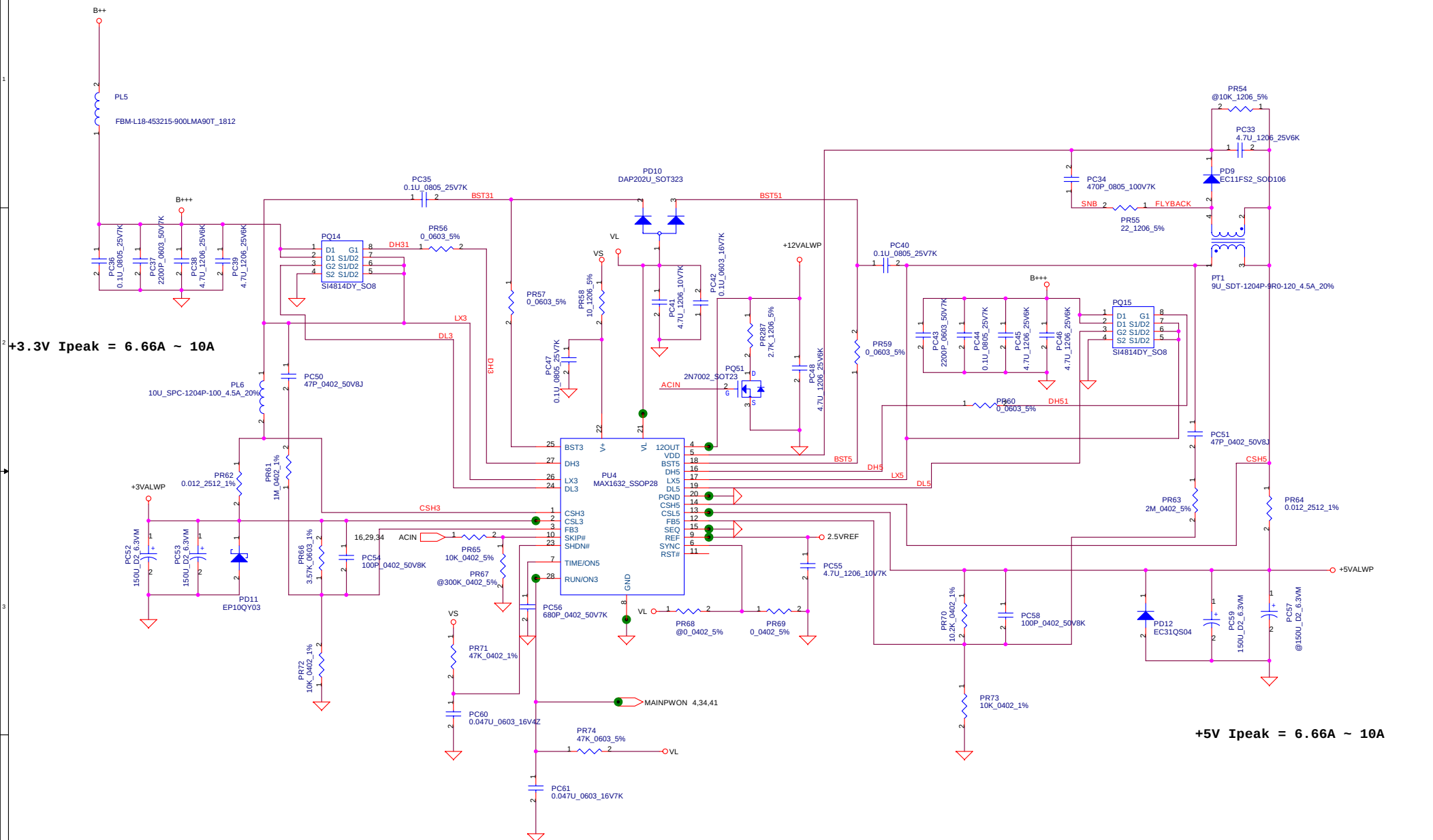
15.571	15.004	14.450
14.235	13.756	13.165

BAT ONLY

Precharge detector

9.817	9.496	9.181
8.481	8.249	7.896

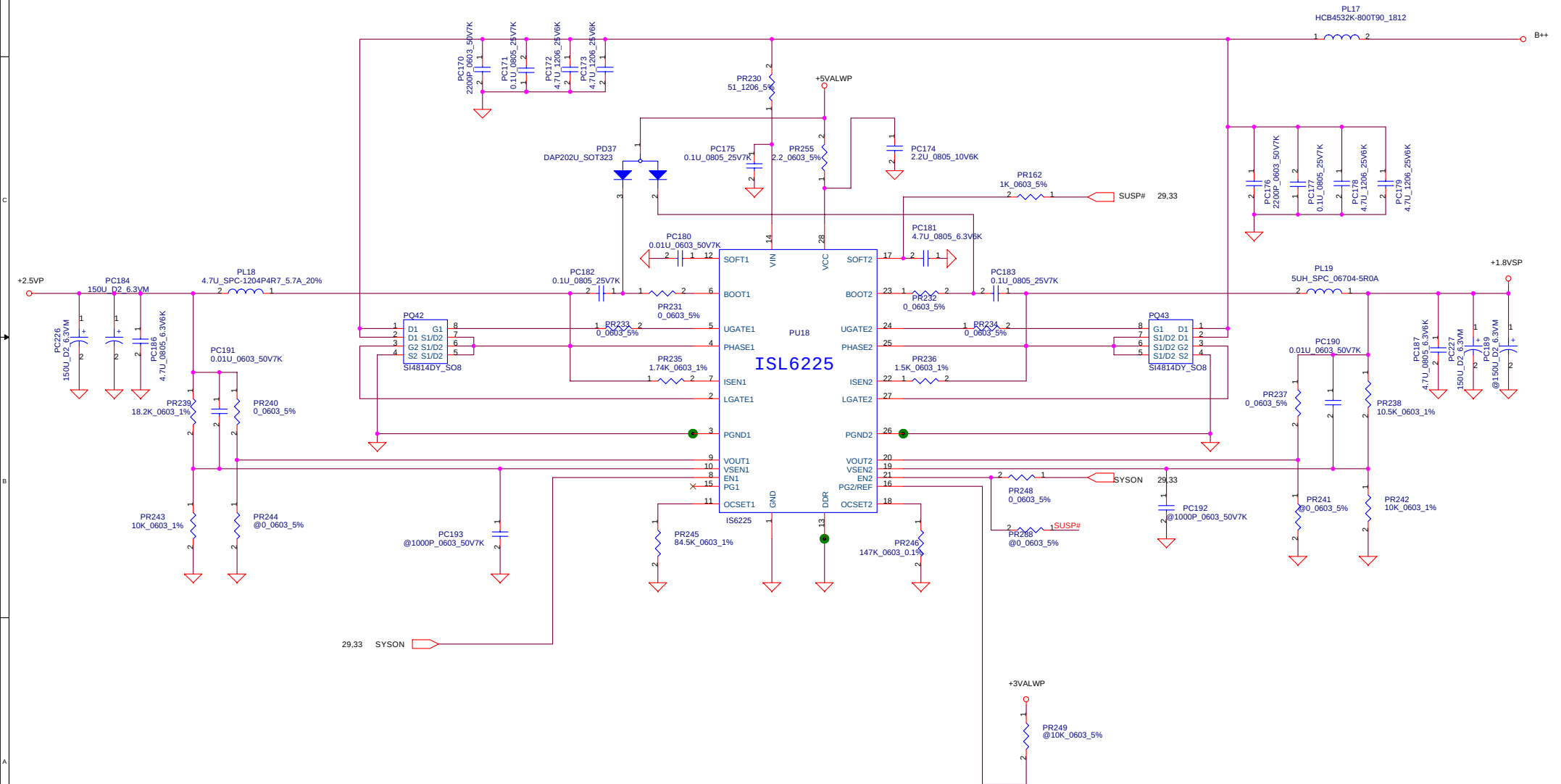




THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Title			SCHEMATIC, M/B LA-1991		
Size	Document Number				Rev
B					
Date:	星期五, 九月 05, 2003				Sheet 36 of 45

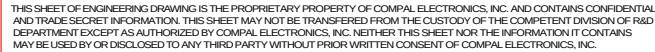
+2.5VP/+1.8VSP

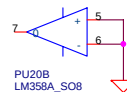
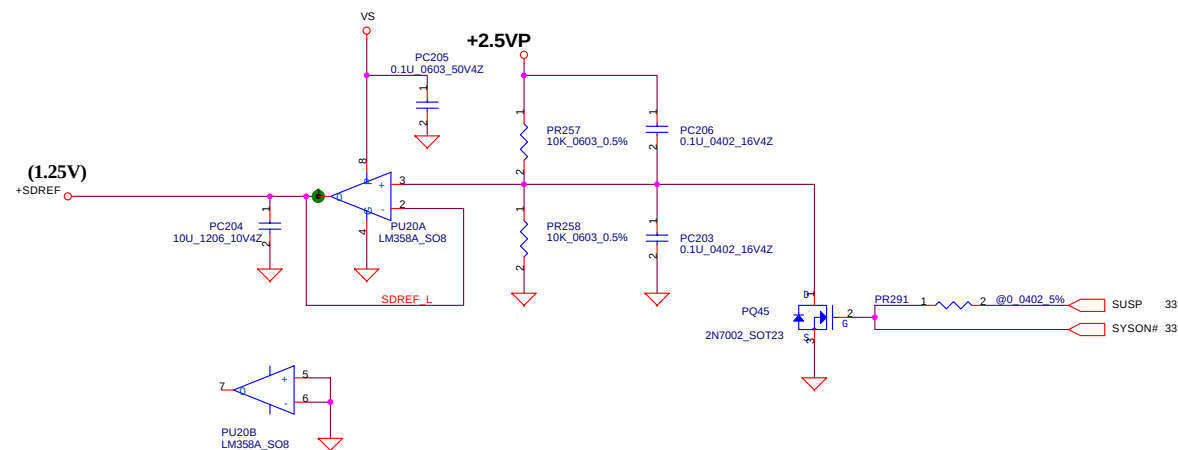
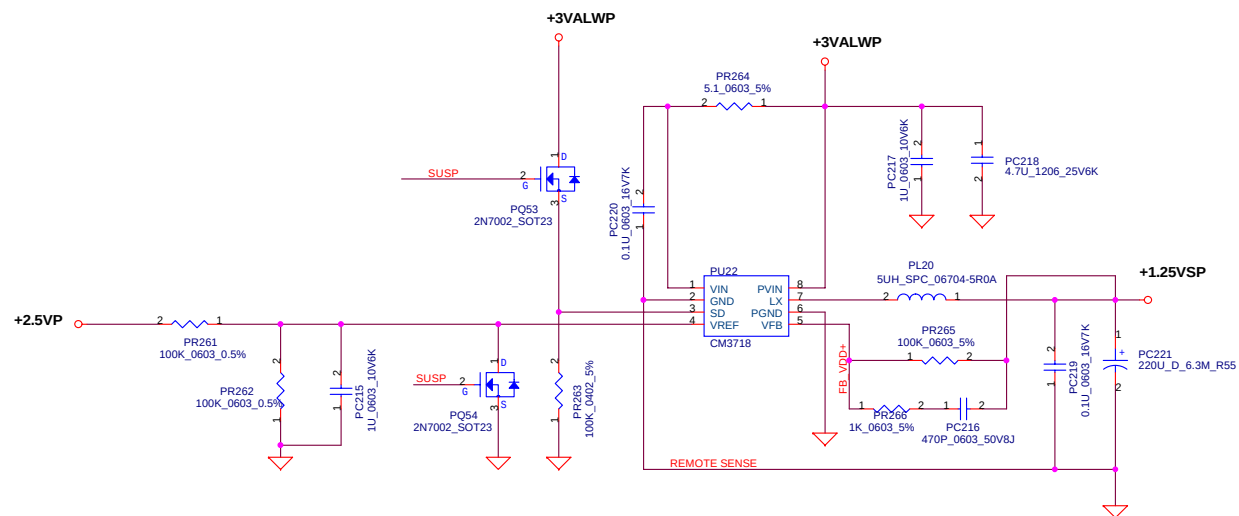


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
Title			
SCHEMATIC, M/B LA-1991			
Size	Document Number		Rev
B			
Date:	星期五, 九月 05, 2003	Sheet	37 of 45

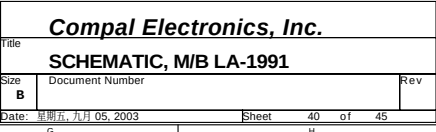
Compal Electronics, Inc.			
Title			
SCHEMATIC, M/B LA-1991			
Size	Document Number		Rev
B			
Date: 星期五, 九月 05, 2003	Sheet	38	of 45

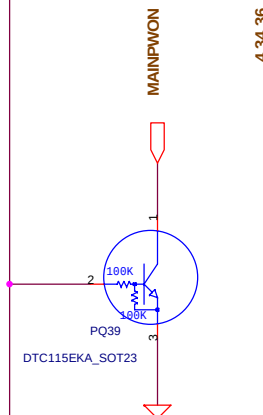
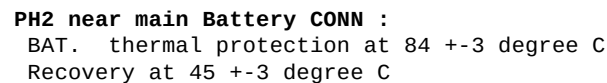
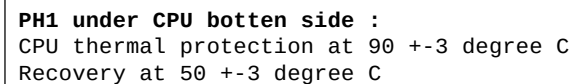




THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS

Compal Electronics, Inc.			
Title			
SCHEMATIC, M/BLA-1991			
Size	Document Number		Rev
Date: 星期五, 九月 05, 2003	Sheet	39 of 45	





A1-TEST 2003/05/28

- 1. P18 : Add C854 1U_0603
- 2. P23 : Add C849,C850 1U_0603 for LINEIN
- 3. P24 :
 - 1. Add Q71 2N7002 for mute sub woofer
 - 2. Add R839 0_0402 for pass through
 - 3. C795 change to 0.1U_0603
 - 4. R809, R810 change to 10K_0402
 - 5.Add R840,C853,C851,C852,R838 for reserve
- 4. P25 : Q16 change to SI2302_N for high active signal
- 5. P29 : Change from NS87591L to KB910
 - A. Add R841,R843,R845 0_0402
 - B. Add R846,R852,R853,R849,R855,R851 10K_0402
 - C. Delete R94 ,R93, R71,R73,R75

A2-TEST 2003/05/28

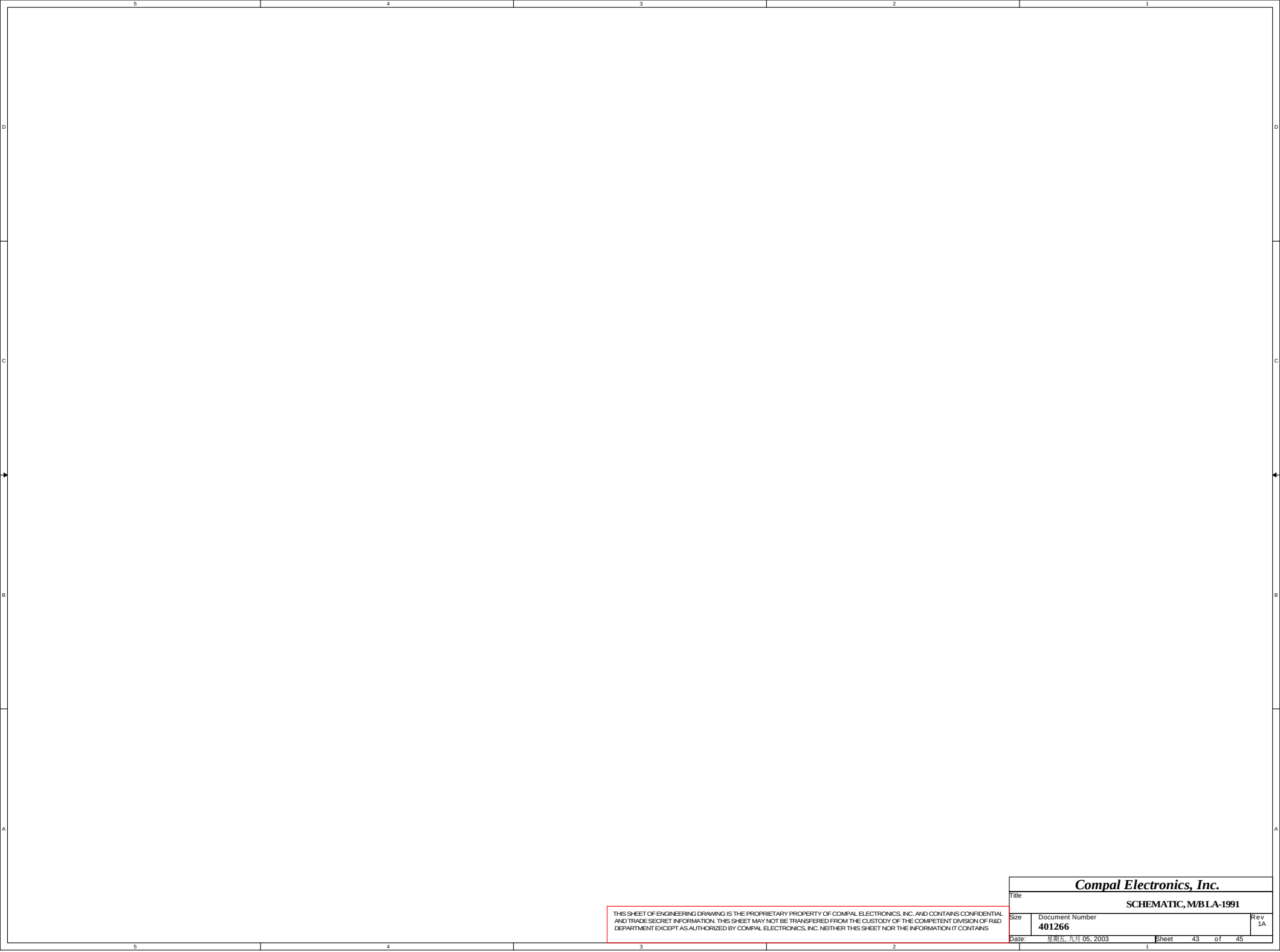
- 1. P29 : Remove R841 , Add R71
- 2. P23 : Add C855,C856= 0.1U_0402

B-regression TEST 2003/09/02

- 1. P29 : Add C857
- 2. P31: Add D28

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
Title			
SCHEMATIC, M/BLA-1991			
Size	Document Number		Rev
	401266		1A
Date:	星期五, 九月 05, 2003		Sheet 42 of 45



THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS

Compal Electronics, Inc.			
Title			
SCHEMATIC, M/BLA-1991			
Size	Document Number		Rev
401266			1A
Date:	星期五, 九月 05, 2003		Sheet 43 of 45

REV: 0.2D

1. To change the mute circuitry for SI build.
 - a. Connect EAPD (pin U22.47) to JP24.2 and reserve a 0_0402_5% (R431) resistor for testing.
 - b. Install R162 (0_0402_5%) and no install R163.
 - c. Add R432 (100K_0402_5%) and Q51 (2N7002) to invert EAPD signal for amplifier and mute LED.

REV: 0.2E

1. For EMI requirement.
Add C204 0.1U_0402_16V4Z
2. To exchange TP and PS2 signals for EC requirement.
3. For cost down plan.
To exchange the capacitor of C83,C136 from 150U_D2_6.3VM to 100U_6.3V_M.

REV: 0.2F

1. For cost down plan.
Move audio line-out BLOCK capacitor from TP to MB. To add C565,C566 100U_6.3V_M.
2. For solving audio noise when IR active. (A2C039)
 - a. Del C206.
 - b. To change C492 from 150U_D2_6.3VM to 10U_1206_6.3V7K.
3. For EMI requirement.
Add R435~R440 0_0402_5%.

REV: 0.2G

1. For solving power LED signal wrong on PR/APR side.
 - a. Add R441 1K_0402_5%.
 - b. Q52 2N7002.
2. For solving power button must be pressed twice issue.
 1. Add D27 RB751V.
 2. Add R330 4.7K_0402_5%.
 3. Change R345 from 10K_0402_5% to 100K_0402_5%.
3. Per HPQ requirement to change audio component.
To change C174 and C201 to 0.022U_0603_25V7K.

REV: 0.2H (For SI gerber)

1. Per HPQ requirement to change audio component.
To change R427 from 20K_0402_5% to 39.2K_0402_1%.

REV: 0.3 (For SI SMT)

1. Per HPQ requirement to change LED color from BLUE to GREEN.
 - a. Change D5,D6,D7,D26 from HSMB-C172_BLUE_0805 to HSMG-C170_GRN_0805.
 - b. Change R9,R10,R11,R421 from 140_0402_1% to 330_0402_5%.
2. To improve RTC crystal accuracy.
Change C190,C203 from 12P_0402_50V8J to 15P_0402_50V8J.

REV: 0.3A (For PV Build)

1. Per HPQ requirement to add FET to shut off power to the Bluethumb module.
 - a. Add Q53 SI2301DS.
 - b. Add C568 1U_0603_10V6K.
 - c. Add C570 0.01U_0402_16V7K.
 - d. Add C571 0.1U_0402_16V7K.
 - e. Add C569 4.7U_0805_6.3V6K.
 - f. Add Q54 2N7002.
 - g. Add R442 100K_0402_5%.
 - h. Del R424.
 - i. Change Q16.2 signal source from Wireless_OFF# to Wireless_OFF.
2. For supporting WLAN and BT devices exist in the same system.
 - a. Connect Mini-PCI JP28-36 to Bluethumb JP32-7 using a series resistor of 1K_0402_5% (R72).
 - b. Connect Mini-PCI JP28-43 to Bluethumb JP32-6 using a series resistor of 1K_0402_5% (R298).

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS

Compal Electronics, Inc.			
Title		SCHEMATIC, M/BLA-1991	
Size	Document Number	Rev	
	401266	1A	
Date:	星期五, 九月 05, 2003	Sheet	44 of 45

Item	Reason for change	PG #	Modify List	Date	B.Ver #
1	ME add a limit area, layout place not enough	38	delete PR6 change PR12 from 0_0603_5% to 0_0402_5% change PR15 from 10K_0603_1% to 10K_0402_1%	2003.06.18	
2	Customer request change adapter. The Vin voltage changed to 18V(minimum). So, we need to change Vin detector and Pre-charge detector	34	change PR170 from 100K_0603_1% to 73.2K_0603_1% change PR172 from 39K_0603_1% to 40.2K_0603_1% change PR187 from 732K_0603_1% to 768K_0603_1% change PR189 from 402K_0603_1% to 453K_0603_1%	2003.06.23	
3	For common parts design		change PR166 from 1M_0603_1% to 1M_0402_1% change PR184 from 2M_0603_5% to 2N_0402_5% change capacitor from 4.7U_1210_25V to 4.7U_1206_25V of all location (PC62,PC63,PC74,PC76,PC77,PC38,PC39, PC45,PC46,PC172,PC173,PC178,PC179,PC3,PC4,PC9, PC10,PC86,PC87,PC88,PC101,PC102,PC103,PC48,PC33, PC218) change PC164 and PC149 from SE035475Z07 to SE142475K00	2003.07.16	
4	delete unnecessary 0ohm resister		delete PR247,PR19,PR109,PR113,PR115,PR116,PR117,PR118, PR107,PR125,PR127,PR132,PR135,PR137,PR254,PR79, PR260,PR292,PR119	2003.07.16	
5	adjust Vin detector	34	change PR170 from 73.2K_0603_1% to 22K_0603_1% change PR172 from 40.2K_0603_1% to 36K_0603_1% change PR167 from 84.5K_0603_1% to 82.5K_0603_1%	2003.07.21	
6	adjust PACIN voltage from 3.3V to 3.2V	34	change PR168 from 8.2K_0805_5% to 10K_0805_1%	2003.9.01	
7	EMI test failure	40	change PR105 and PR140 from 0_0603_5% to 2.2_0603_5%	2003.9.01	

THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Compal Electronics, Inc.			
Title			
SCHEMATIC, M/B LA-1991			
Size	Document Number		Rev
B	401266		
Date:	星期五, 九月 05, 2003		Sheet 45 of 45

www.s-manuals.com