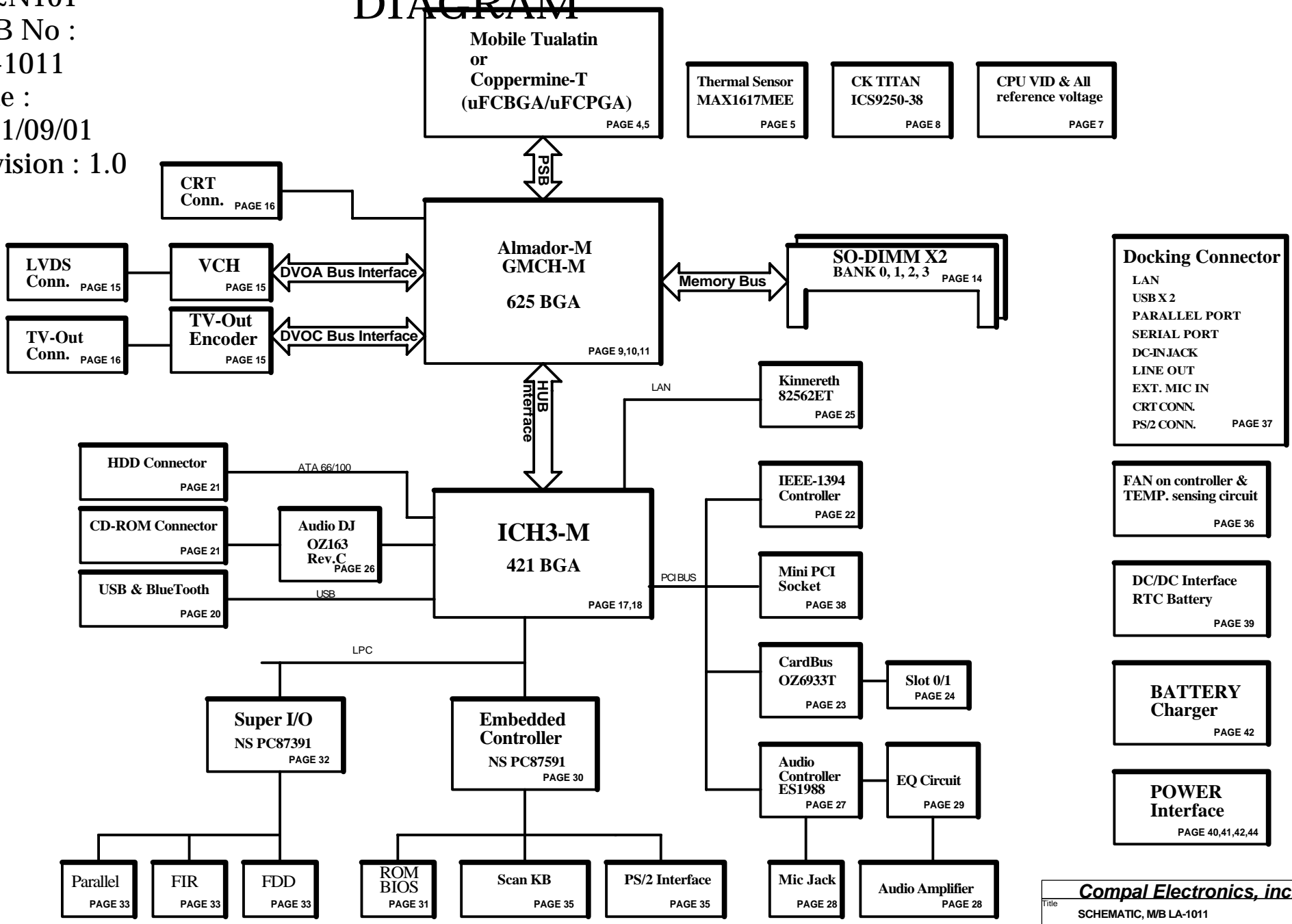


Model Name :
 N32N101
 PCB No :
 LA-1011
 Date :
 2001/09/01
 Revision : 1.0

BLOCK DIAGRAM

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 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-1011		
Size Custom	Document Number 401174	Rev 1A
Date:	Friday, September 21, 2001	Sheet 2 of 46

Voltage Rails

Power Plane	Description	S1	S3	S5
VIN	Adapter power supply (19V)	N/A	N/A	N/A
B+	AC or battery power rail for power circuit.	N/A	N/A	N/A
+VCC_H_CORE	Core voltage for CPU	ON	OFF	OFF
+VTT	1.2V switched power rail for CPU AGTL Bus	ON	OFF	OFF
+1.5V_ALW	1.5V always on power rail	ON	ON	ON*
+1.5V_SW	AGP 4X	ON	OFF	OFF
+1.8V_ALW	1.8V always on power rail	ON	ON	ON*
+1.8V_SW	1.8V switched power rail	ON	OFF	OFF
+2.5V	2.5V power rail	ON	ON	OFF
+2.5V_MRIMM	2.5V switched power rail	ON	OFF	OFF
+3V_ALW	3.3V always on power rail	ON	ON	ON*
+3V	3.3V power rail	ON	ON	OFF
+3V_SW	3.3V switched power rail	ON	OFF	OFF
+5V_ALW	5V always on power rail	ON	ON	ON*
+5V	5V power rail	ON	ON	OFF
+5V_SW	5V switched power rail	ON	OFF	OFF
+12V_ALW	12V always on power rail	ON	ON	ON*
+12V_SW	12V switched power rail	ON	OFF	OFF
RTCVCC	RTC power	ON	ON	ON

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

External PCI Devices

Device	IDSEL#	REQ#/GNT#	Interrupts
LAN	(AD24 internal)		
CardBus	AD20	2	PIRQA/PIRQB
Audio Controller	AD19	3	PIRQD
Mini-PCI	AD18	1	PIRQC
Mini-PCI(LAN)	AD22	4	PIRQD
IEEE-1394 Controller	AD16	0	PIRQA

EC SM Bus1 address

Device	Address
Smart Battery	0001 011X b
EEPROM	1010 000X b

EC SM Bus2 address

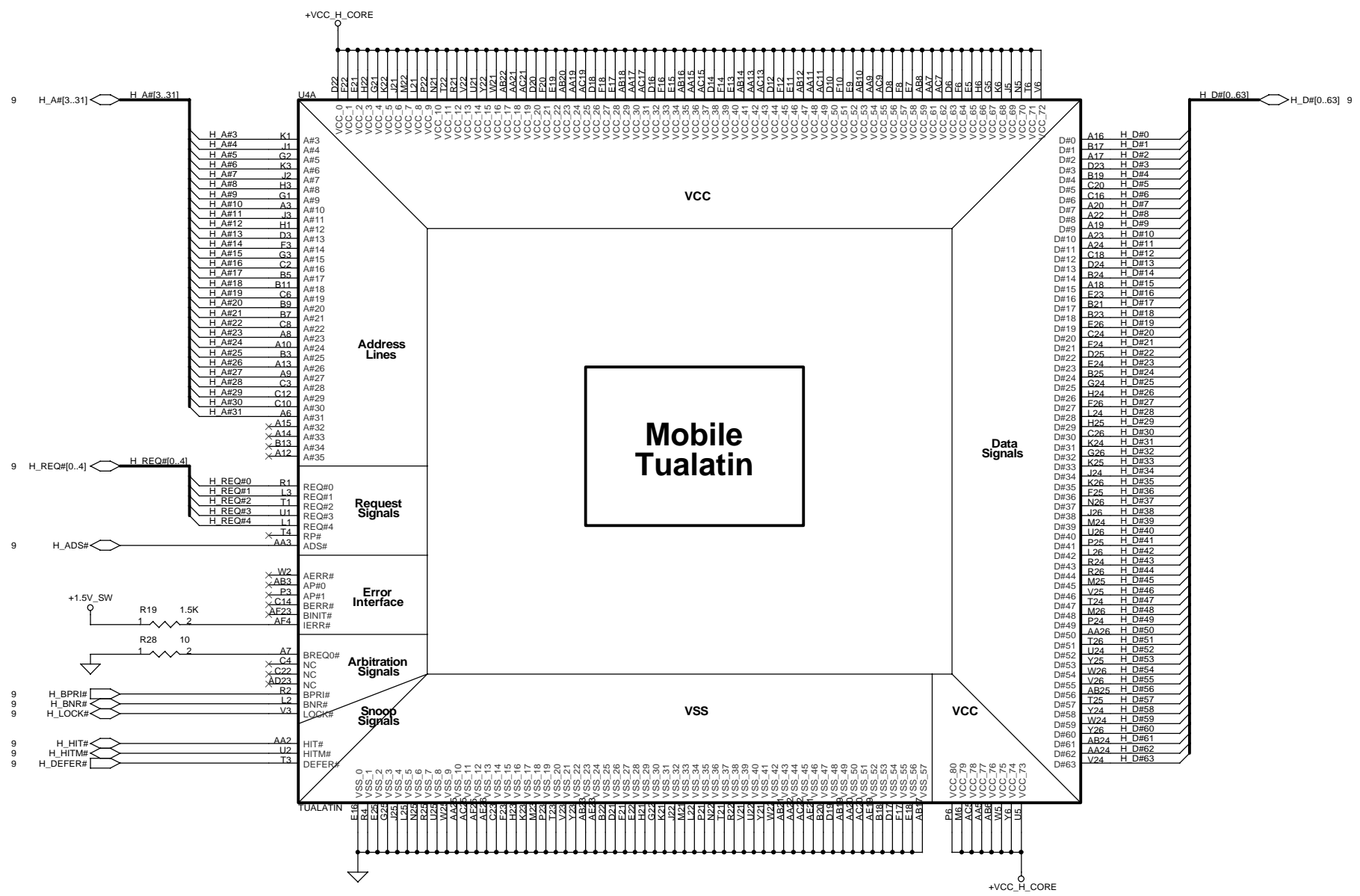
Device	Address
MAX1617MEE	1001 110X b
OZ163	0011 0100 b
Docking	0011 011X b
DOT Board	XXXX XXXXb

ICH3 SM Bus address

Device	Address
SODIMM	1010 000X b
Clock Gen.	1101 001X b

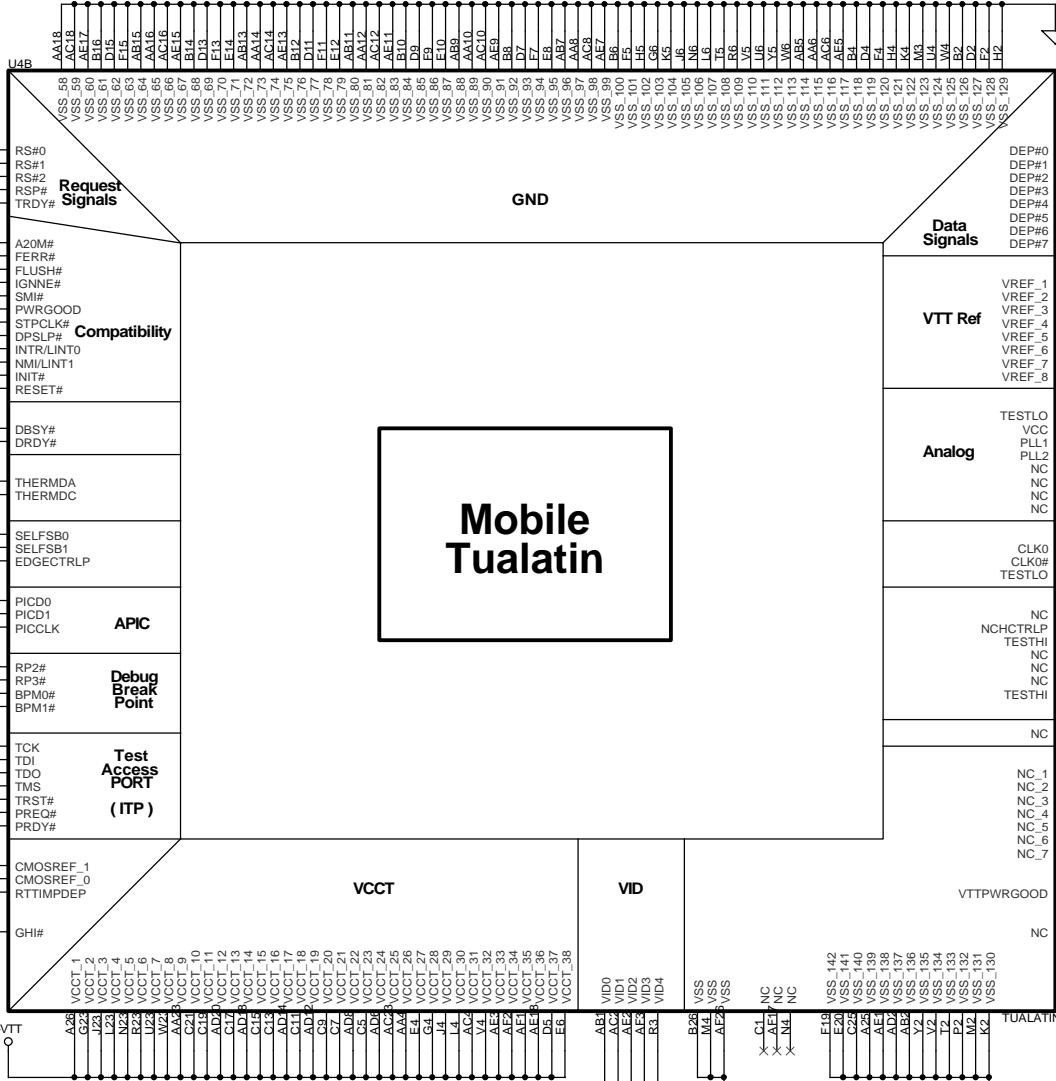
P.S:Default Resistor & Capacitor's package are 0402.
Default 8P4R package is 0402.

Compal Electronics, inc.		
SCHEMATIC, M/B LA-1011		
Size Custom	Document Number 401174	Rev 1A
Date:	Friday, September 21, 2001	Sheet 3 of 46



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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Mobile Tualatin

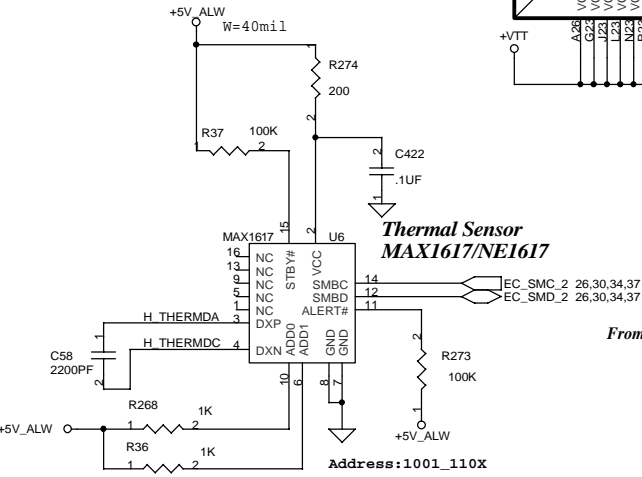


Place H_RESET# R267
R272<0.1* from 56.2_1%
U6

RP1
8 TESTLO1
7 TESTLO2
6 TESTHI2
5 TESTHI1
8P4R_1K

Note:
GHI# Pull-Up internally
But pull high too weak

**Thermal Sensor
MAX1617/NE1617**



From 87591

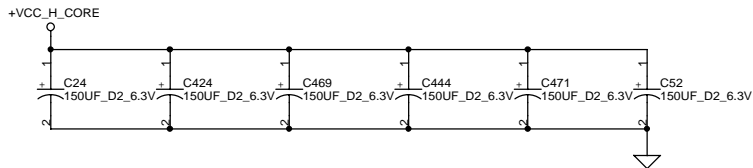
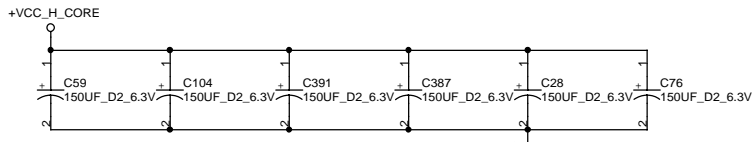
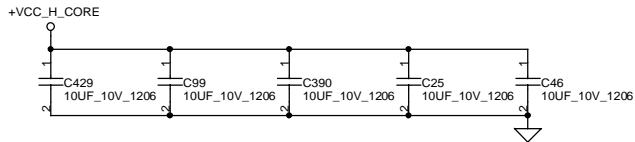
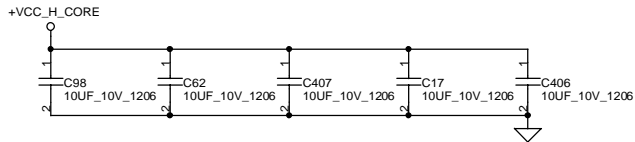
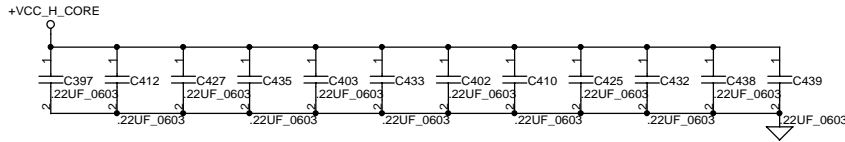
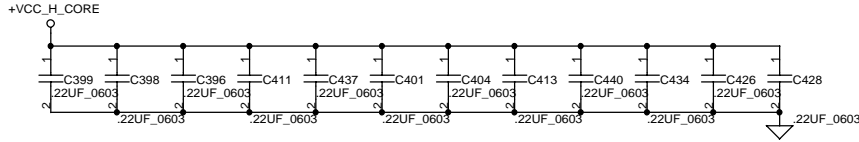
Address:1001_110X

Compal Electronics, inc.		
SCHEMATIC, M/B LA-1011		
Size	Document Number	Rev
Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 5 of 46

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

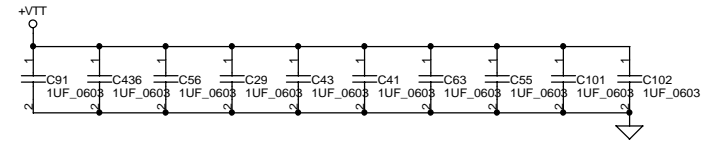
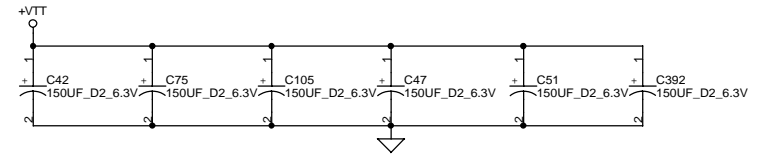
Layout note :

Place close to CPU, Use 2-3 vias per PAD.
Place .47uF caps underneath balls on solder side.
Place 10uF caps on the peripheral near balls.
Use 2-3 vias per PAD.



Layout note :

Place close to CPU,
Use 2 vias per PAD.



Tualatin

D4	D3	D2	D1	D0	CPU_Core(V)	QS(MP)
0	1	0	0	1	1.40V	
0	1	1	0	0	1.15V	

Coppermine-T

D4	D3	D2	D1	D0	CPU_Core(V)	ES(before MP)
0	0	0	0	1	1.70V	
0	1	0	0	0	1.35V	

D4	D3	D2	D1	D0	CPU_Core(V)	QS(MP)
0	0	0	0	1	1.70V	
0	1	0	0	0	1.35V	

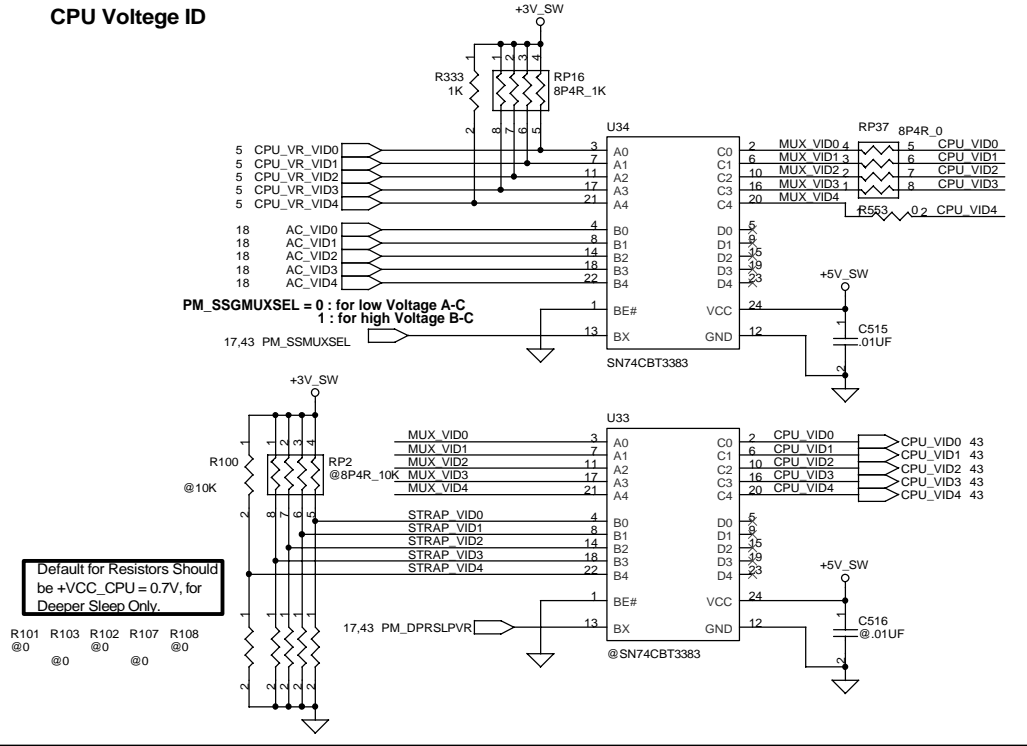
Compal Electronics, inc.

SCHEMATIC, M/B LA-1011

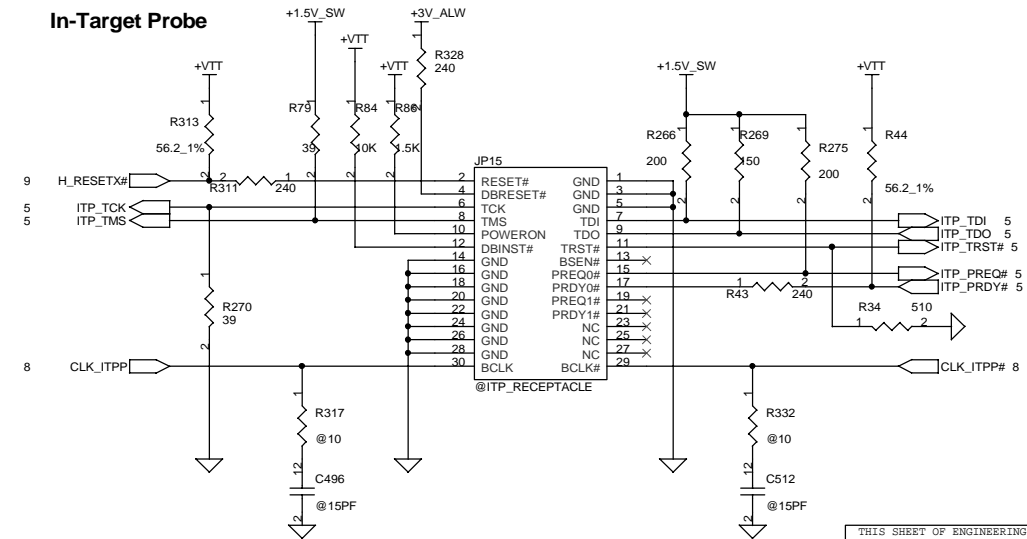
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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

Size	Document Number	Rev
Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 6 of 46

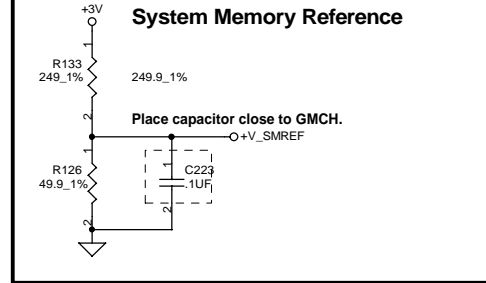
CPU Voltage ID



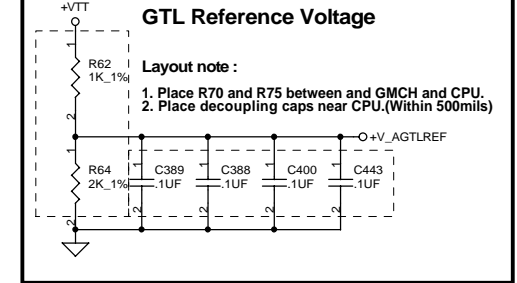
In-Target Probe



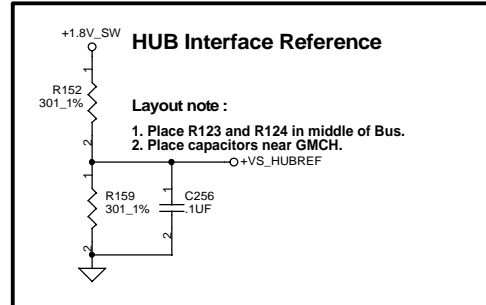
System Memory Reference



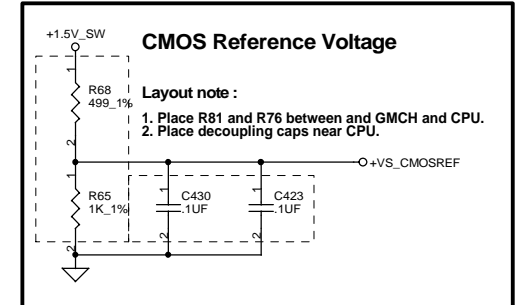
GTL Reference Voltage



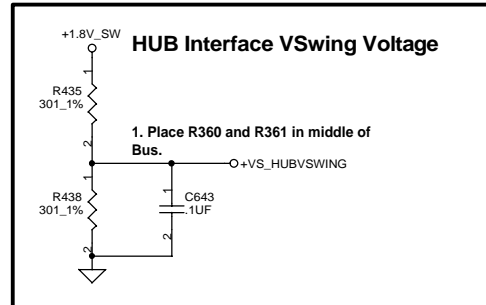
HUB Interface Reference



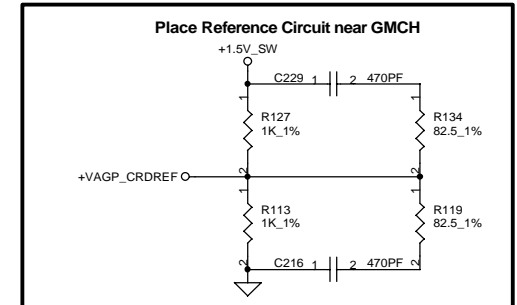
CMOS Reference Voltage



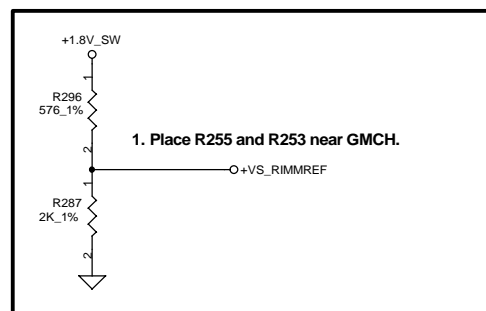
HUB Interface VSwing Voltage



Place Reference Circuit near GMCH



HUB Interface Reference

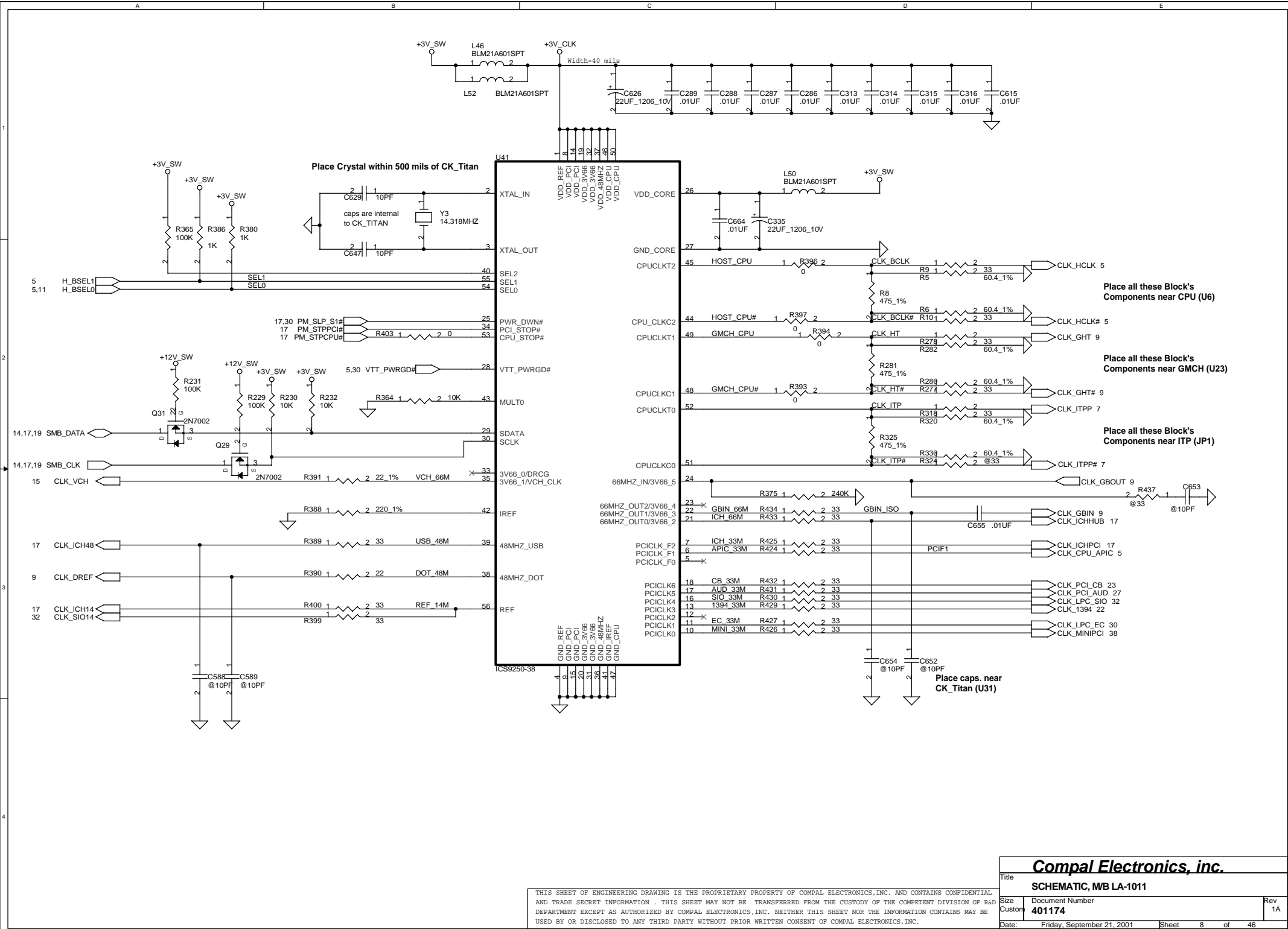


Compal Electronics, inc.

Schematic, M/B LA-1011

Title	Schematic, M/B LA-1011		Rev	1A
Size	Document Number	401174	Date:	Friday, September 21, 2001
Customer	Sheet	7	of	46

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.



Place Crystal within 500 mils of CK_Titan

Place all these Block's Components near CPU (U6)

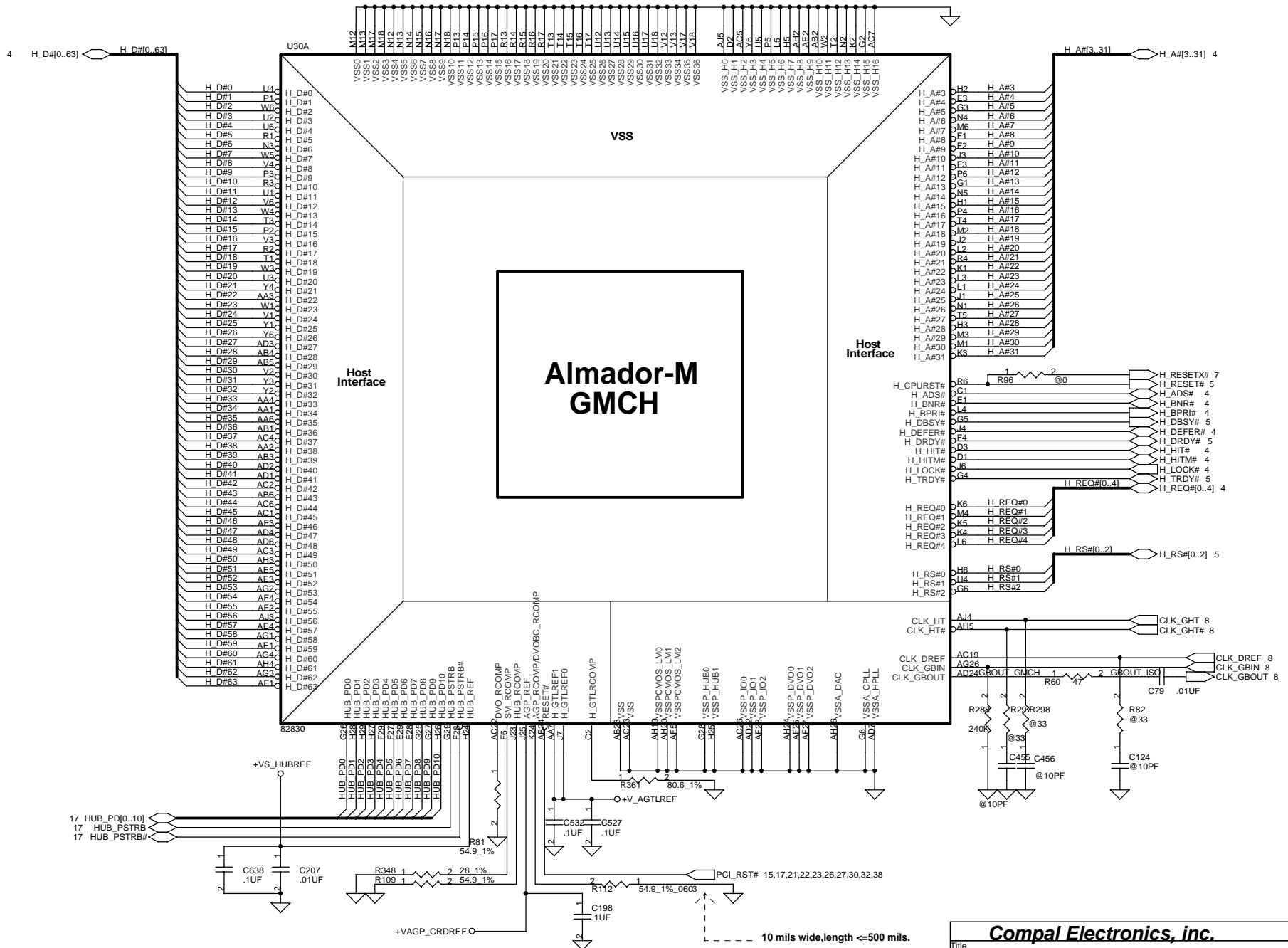
Place all these Block's Components near GMCH (U23)

Place all these Block's Components near ITP (JP1)

Place caps. near CK_Titan (U31)

Compal Electronics, inc.			
SCHEMATIC, M/B LA-1011			
Title	Document Number	Rev	
401174		1A	
Date:	Friday, September 21, 2001	Sheet	8 of 46

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

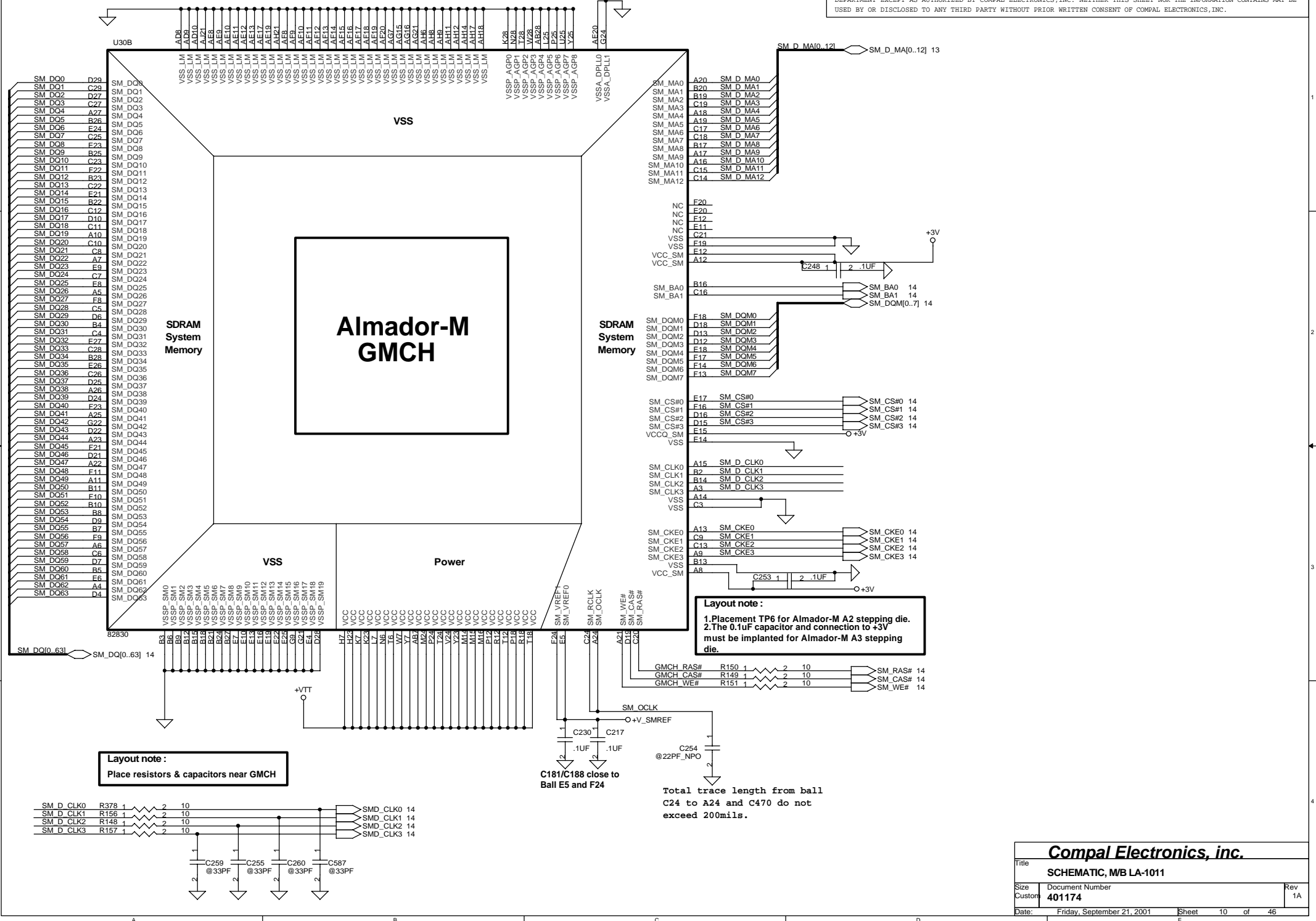


Compal Electronics, inc.

SCHEMATIC, M/B LA-1011

Title		
Size Custom	Document Number	Rev
	401174	1A
Date:	Friday, September 21, 2001	Sheet 9 of 46

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.



Almador-M GMCH

**SDRAM
System
Memory**

**SDRAM
System
Memory**

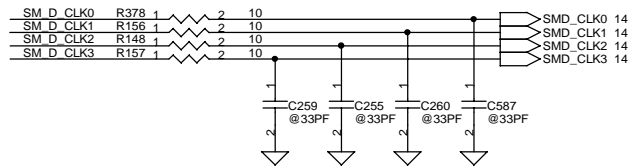
VSS

Power

Layout note:
1.Placement TP6 for Almador-M A2 stepping die.
2.The 0.1uF capacitor and connection to +3V must be implmented for Almador-M A3 stepping die.

Layout note:
Place resistors & capacitors near GMCH

Total trace length from ball
C24 to A24 and C470 do not exceed 200mils.



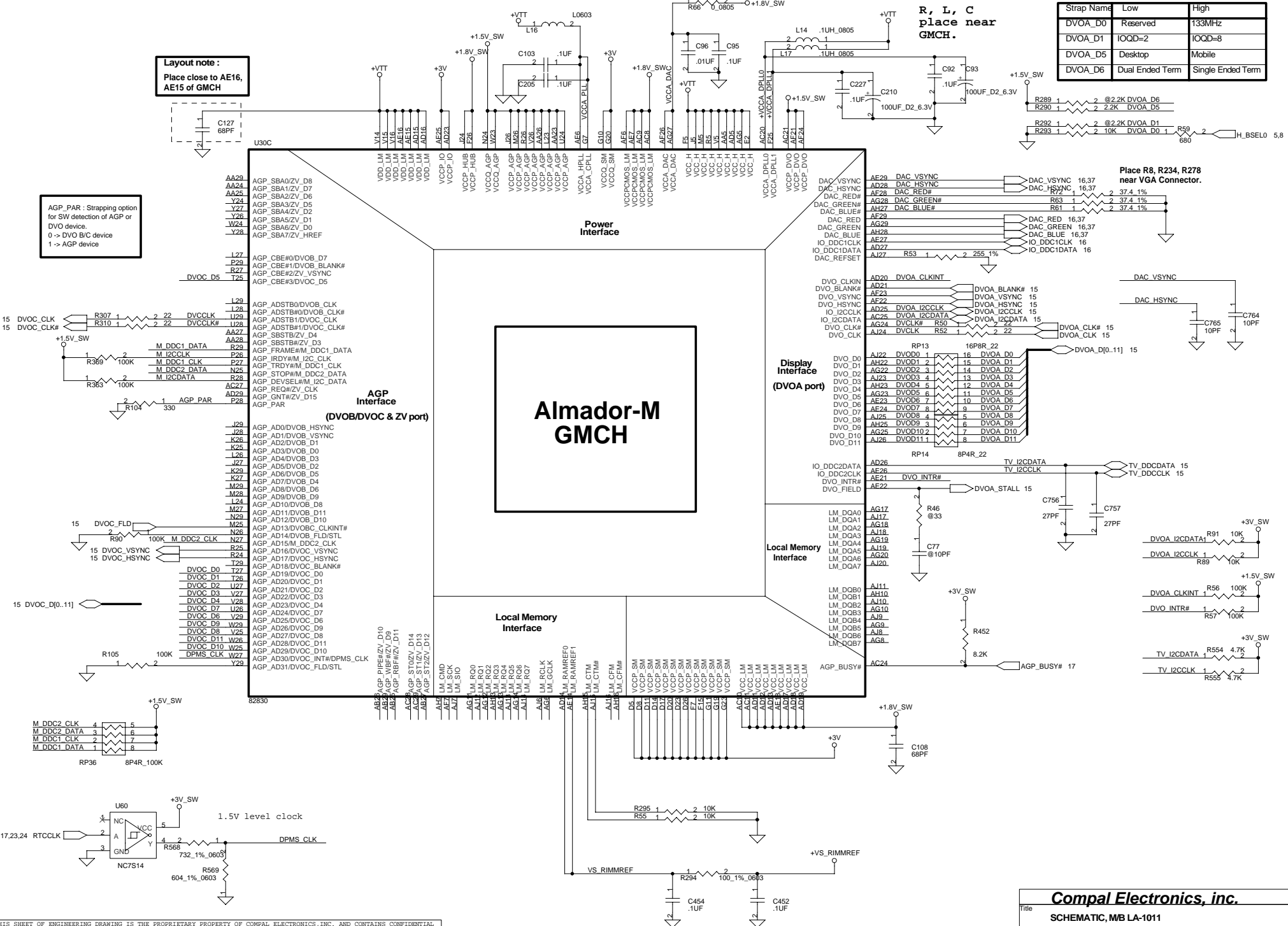
C181/C188 close to Ball E5 and F24

Layout note:
Place close to AE16, AE15 of GMCH

AGP_PAR : Strapping option for SW detection of AGP or DVO device.
0 -> DVO B/C device
1 -> AGP device

Strap Name	Low	High
DVOA_D0	Reserved	133MHz
DVOA_D1	IOQD=2	IOQD=8
DVOA_D5	Desktop	Mobile
DVOA_D6	Dual Ended Term	Single Ended Term

Almador-M GMCH



R, L, C place near GMCH.

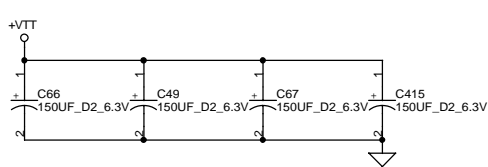
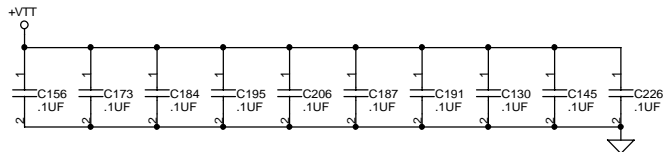
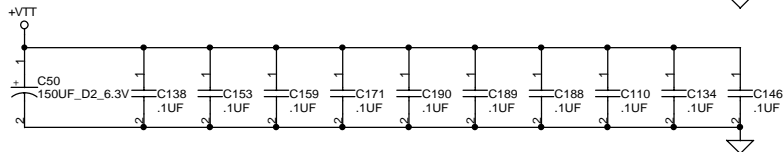
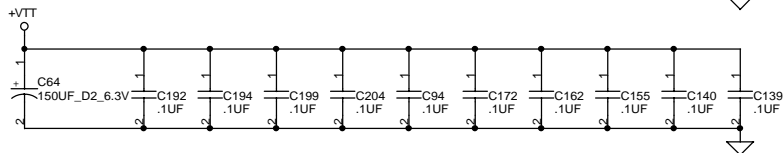
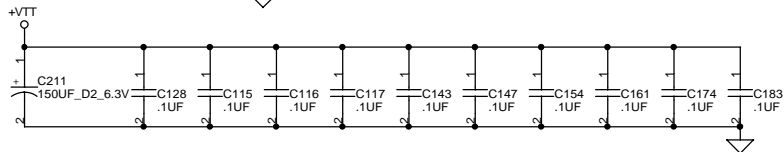
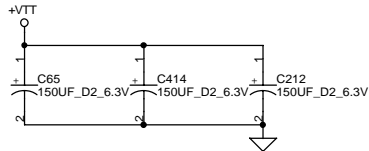
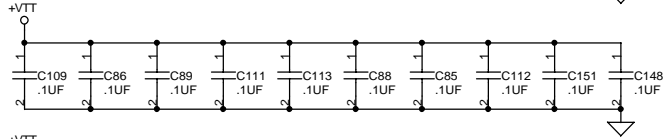
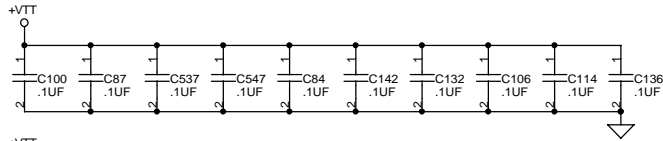
Place R8, R234, R278 near VGA Connector.

Compal Electronics, inc.		
Title	SCHEMATIC, M/B LA-1011	
Size	Document Number	Rev
Custor	401174	1A
Date:	Friday, September 21, 2001	Sheet 11 of 46

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

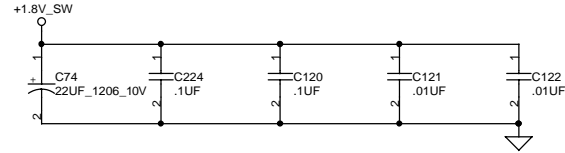
Layout note :

Distribute as close as possible to GMCH Processor Quadrant .



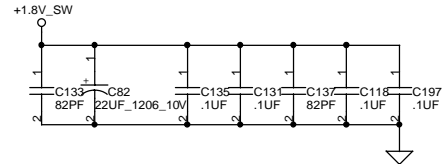
Layout note :

Distribute as close as possible to VCCPCMOS_LM .



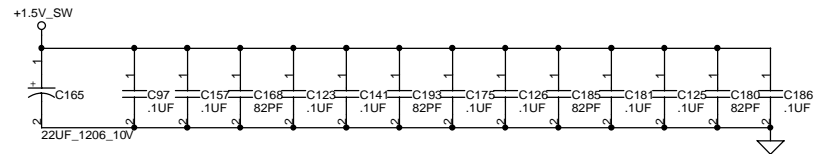
Layout note :

Distribute as close as possible to GMCH Local Memory Quadrant .



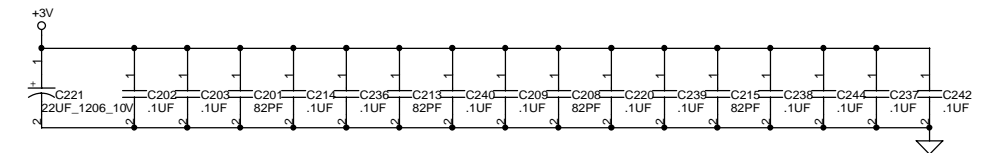
Layout note :

Distribute as close as possible to GMCH AGP/DVO Quadrant .



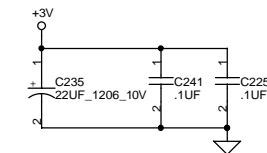
Layout note :

Distribute as close as possible to GMCH System Memory Quadrant .



Layout note :

Distribute as close as possible to IO Quadrant .

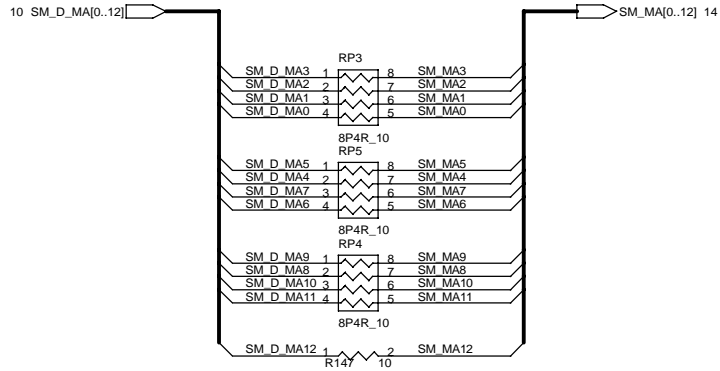


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION . THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. . NEITHER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

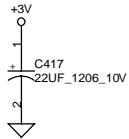
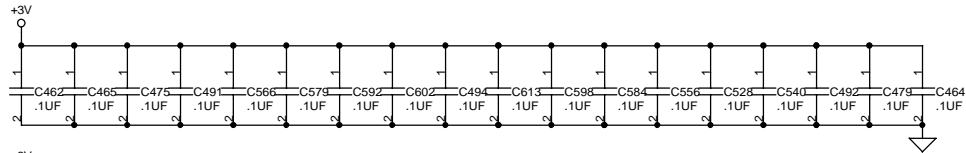
Compal Electronics, inc.

SCHEMATIC, M/B LA-1011

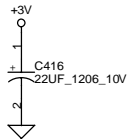
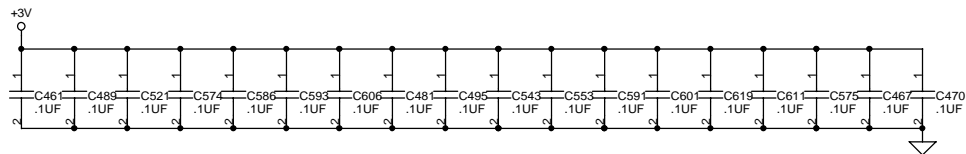
Title	SCHEMATIC, M/B LA-1011	
Size	Document Number	Rev
Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 12 of 46



Layout note :
 One .1uF cap per power pin .
 Place each cap close to SODIMM(DIMM 0) pin .

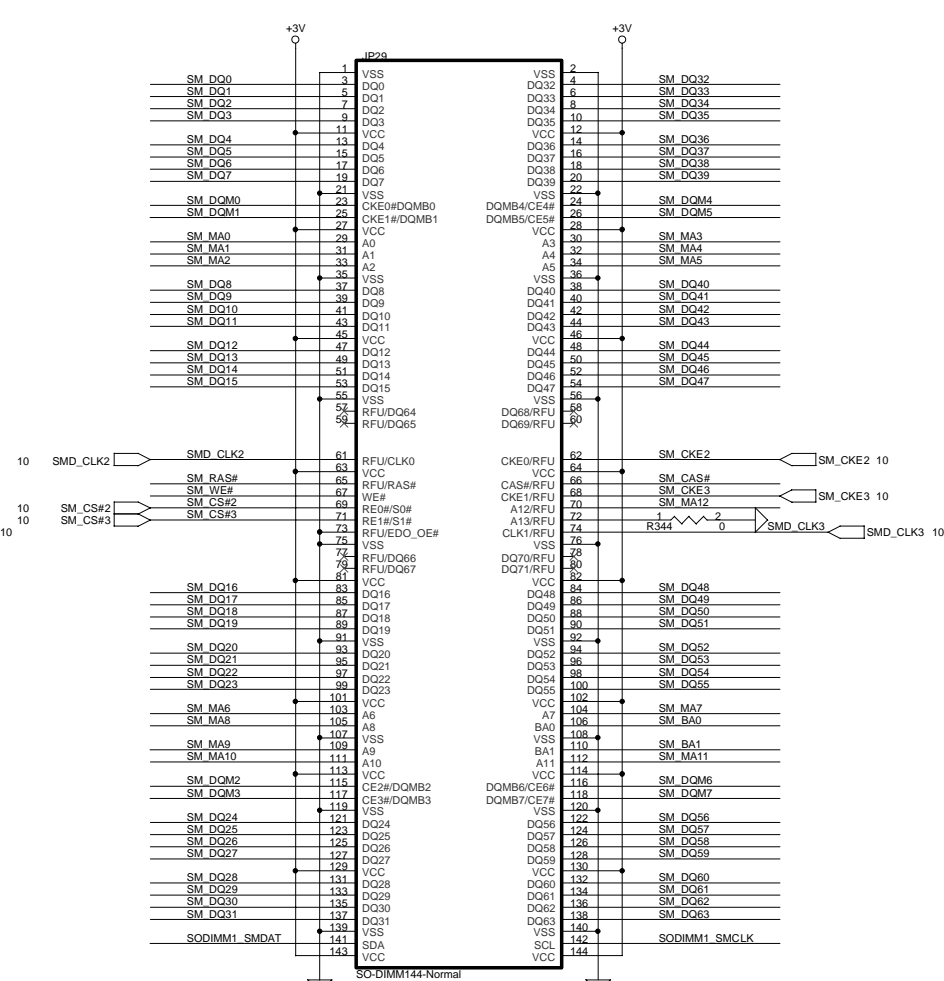
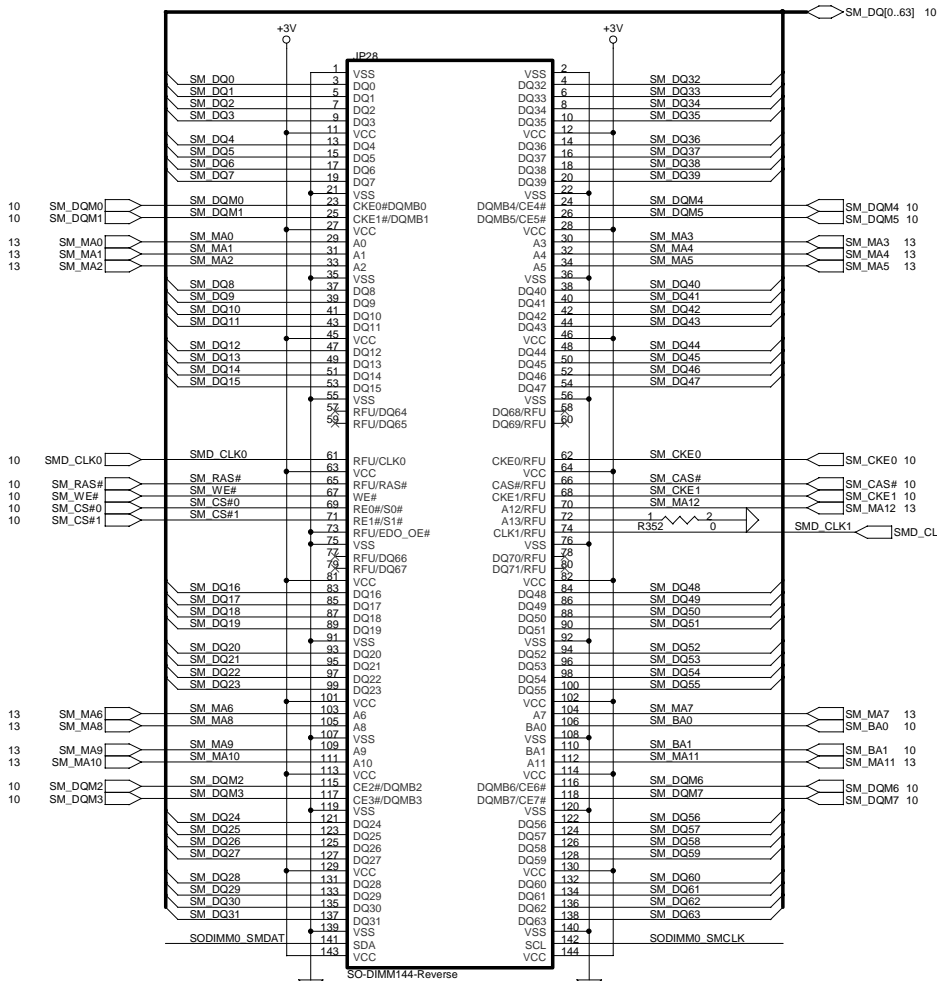


Layout note :
 One .1uF cap per power pin .
 Place each cap close to SODIMM(DIMM 1) pin .



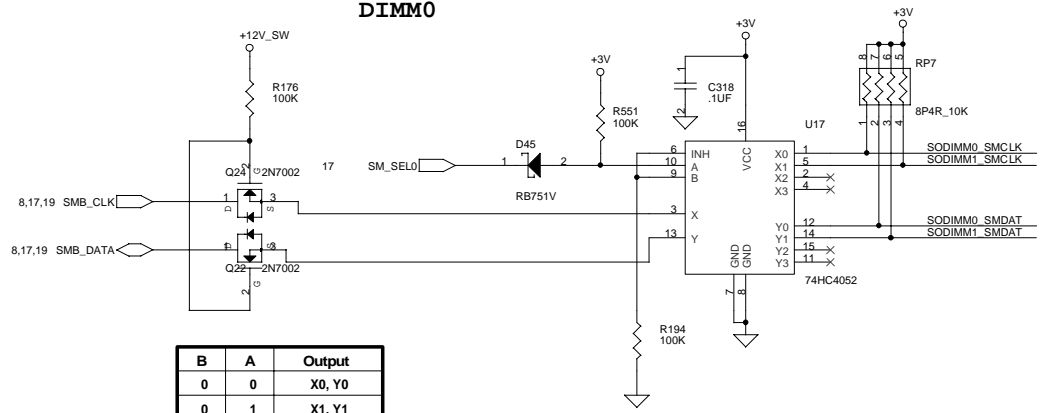
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION . THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION 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-1011			
Size	Document Number	Rev	
Custom	401174	1A	
Date:	Friday, September 21, 2001	Sheet	13 of 46



DIMM0

DIMM1



B	A	Output
0	0	X0, Y0
0	1	X1, Y1
1	0	X2, Y2
1	1	X3, Y3

System SMBus Selector

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

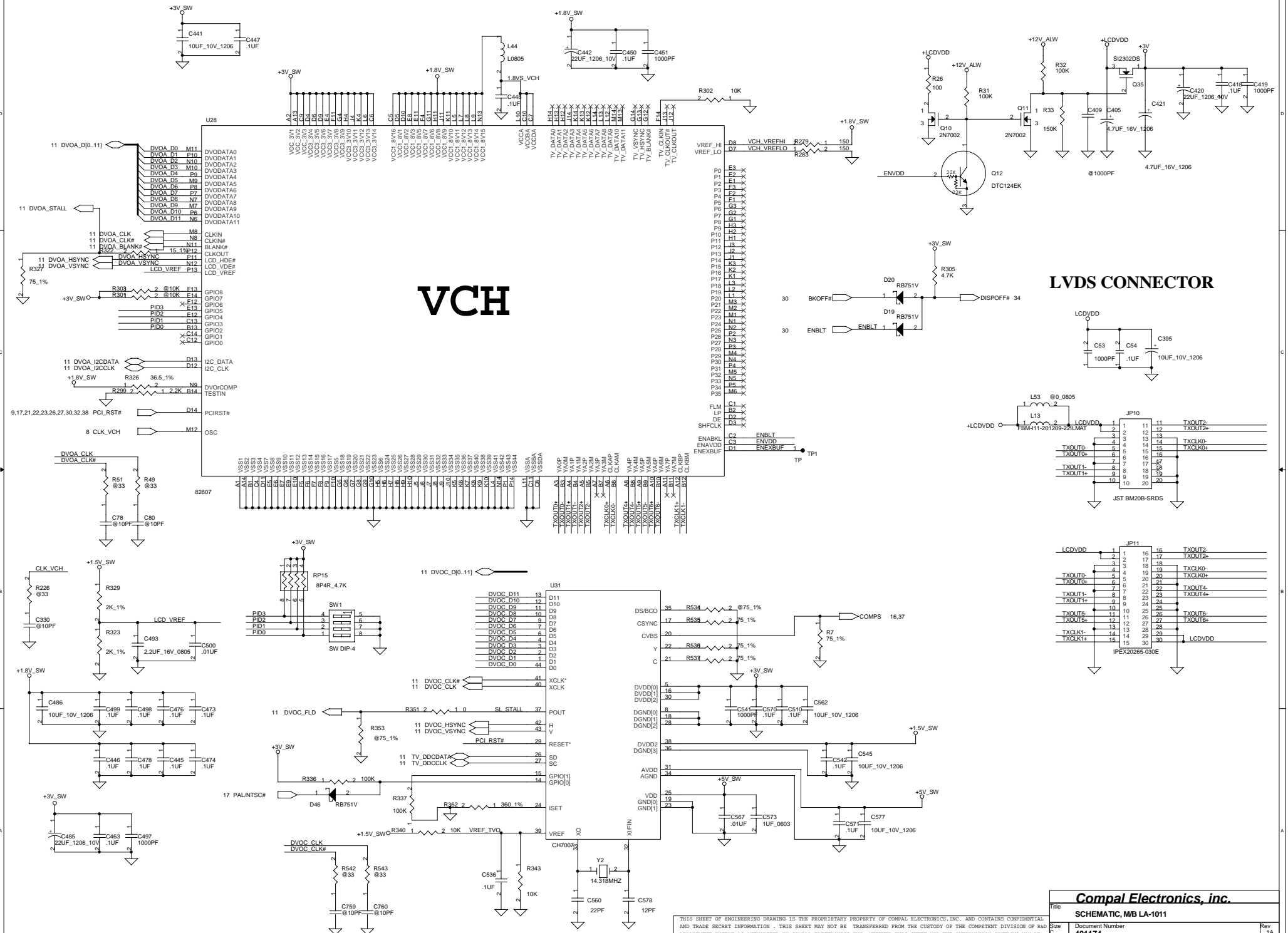
Compal Electronics, inc.

Title: **SCHEMATIC, MB LA-1011**

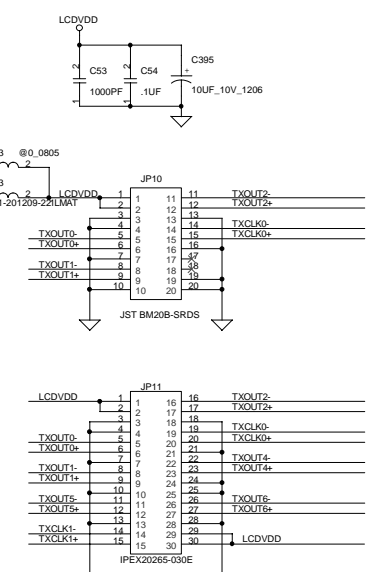
Size: Document Number
 Custom: **401174**

Date: Friday, September 21, 2001 Sheet 14 of 46

VCH

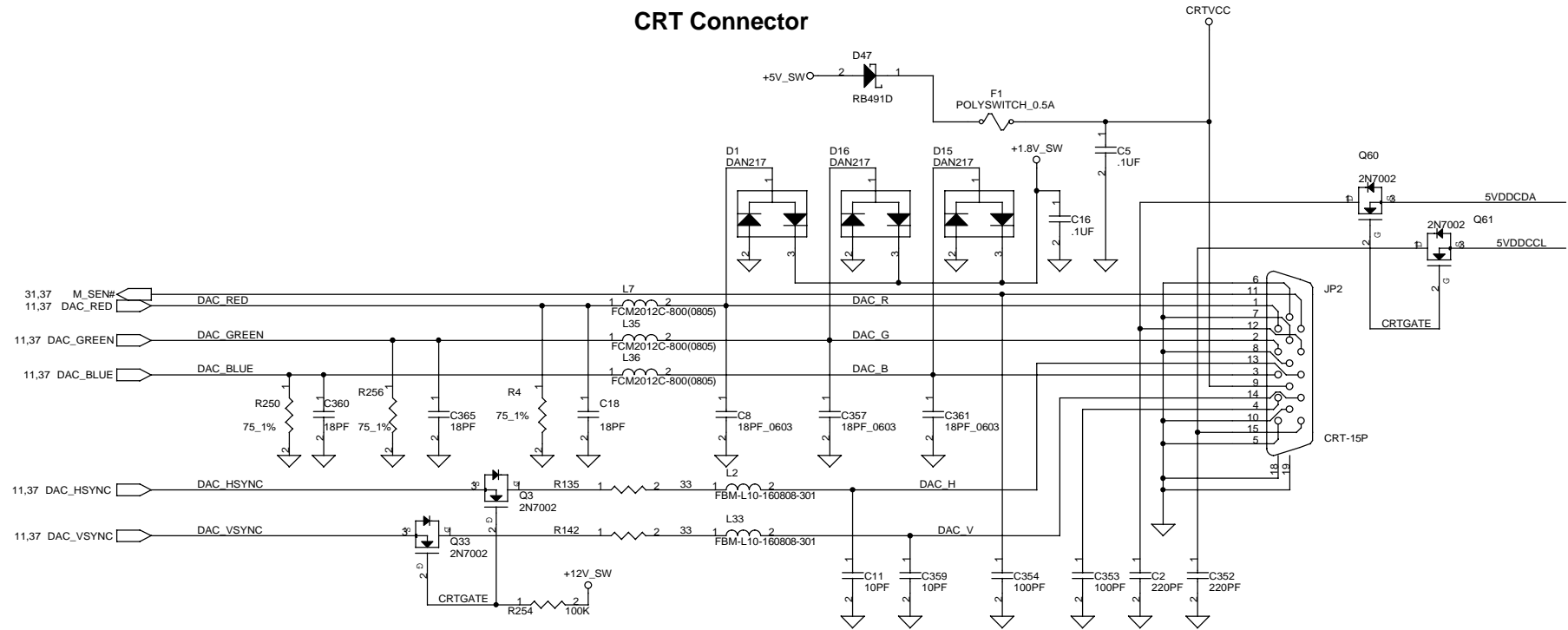


LVDS CONNECTOR



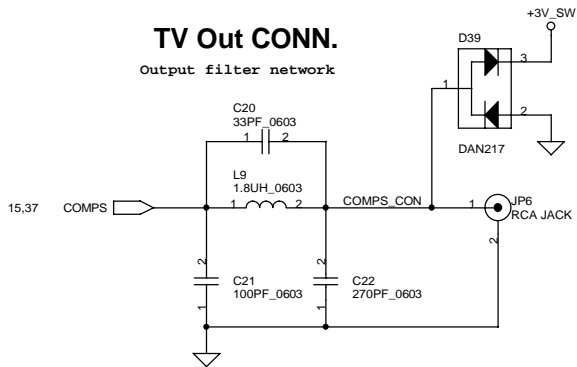
Compal Electronics, Inc.		
File	SCHEMATIC, MB LA-1011	
Size	Document Number	Rev
C	401174	1A
Date	Friday, September 21, 2001	Sheet 15 of 46

CRT Connector

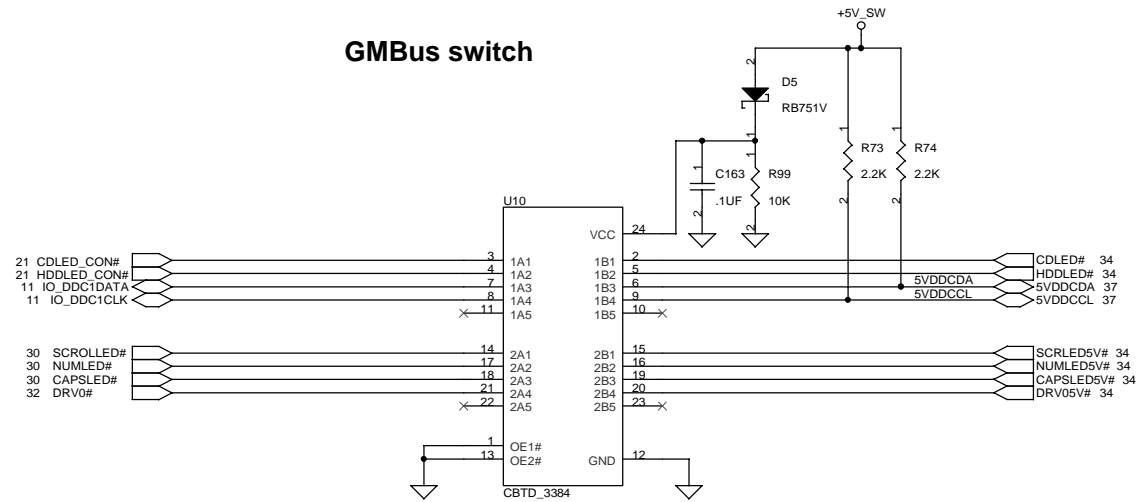


TV Out CONN.

Output filter network



GMBus switch

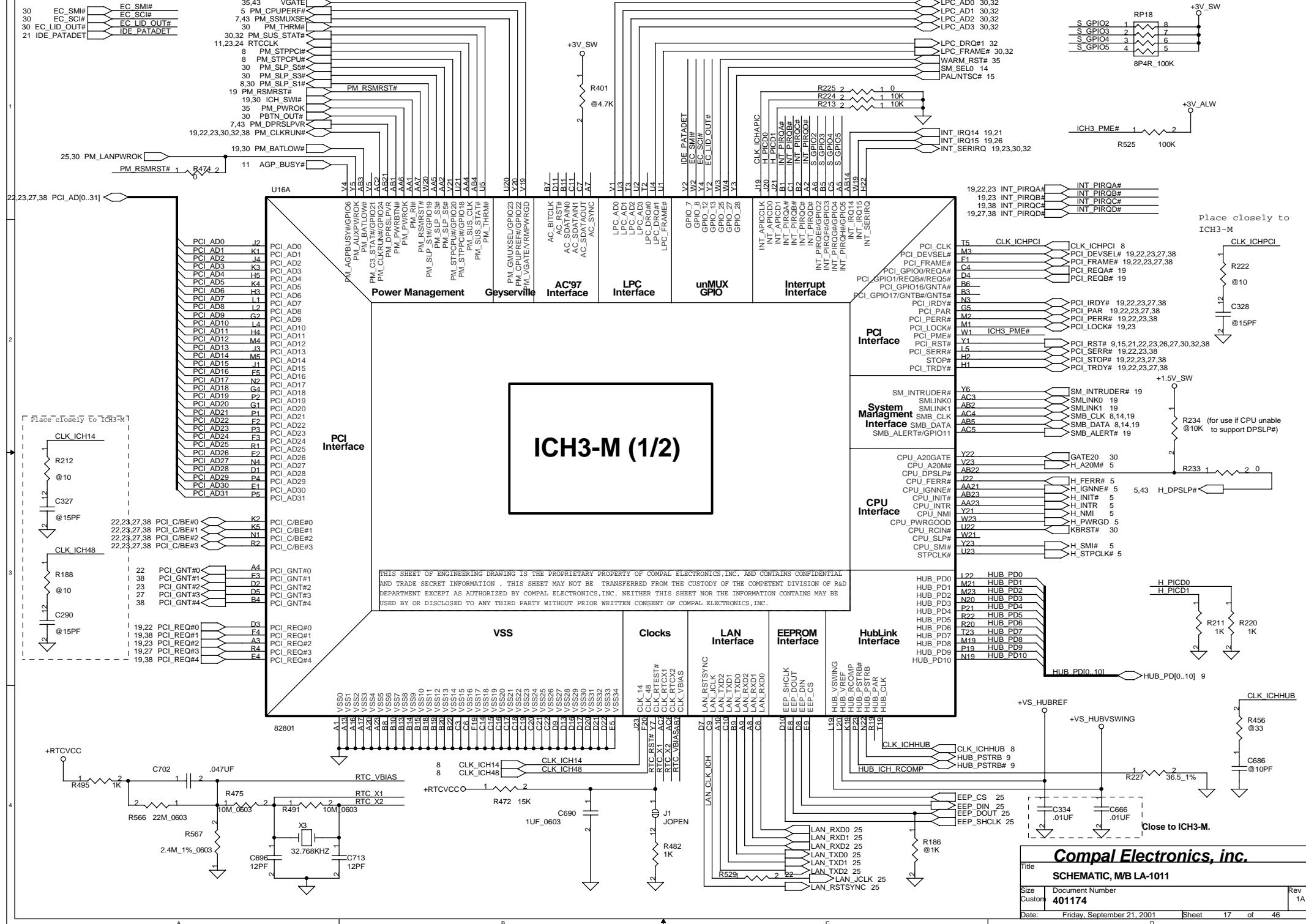


Compal Electronics, inc.

SCHEMATIC, M/B LA-1011

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

Title	SCHEMATIC, M/B LA-1011	
Size	Document Number	Rev
Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 16 of 46



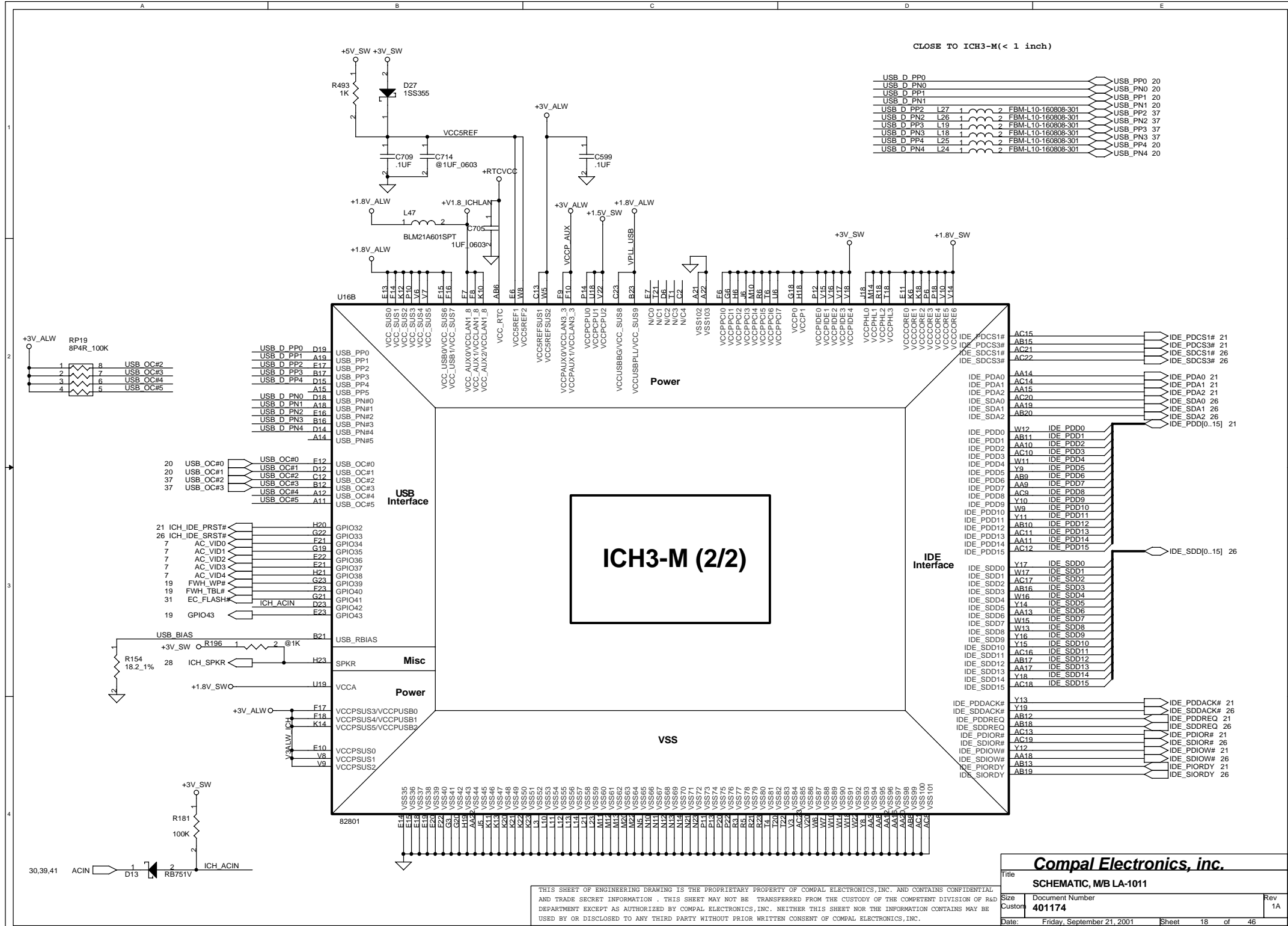
ICH3-M (1/2)

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 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-1011

Title	SCHEMATIC, M/B LA-1011	
Size	Document Number	Rev
Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 17 of 46



CLOSE TO ICH3-M (< 1 inch)

USB D PP0		USB_PP0	20
USB D PN0		USB_PN0	20
USB D PP1		USB_PP1	20
USB D PN1		USB_PN1	20
USB D PP2	L27	F18	37
USB D PN2	L26	F17	37
USB D PP3	L19	F10	37
USB D PN3	L18	F9	37
USB D PP4	L25	F15	20
USB D PN4	L24	F14	20

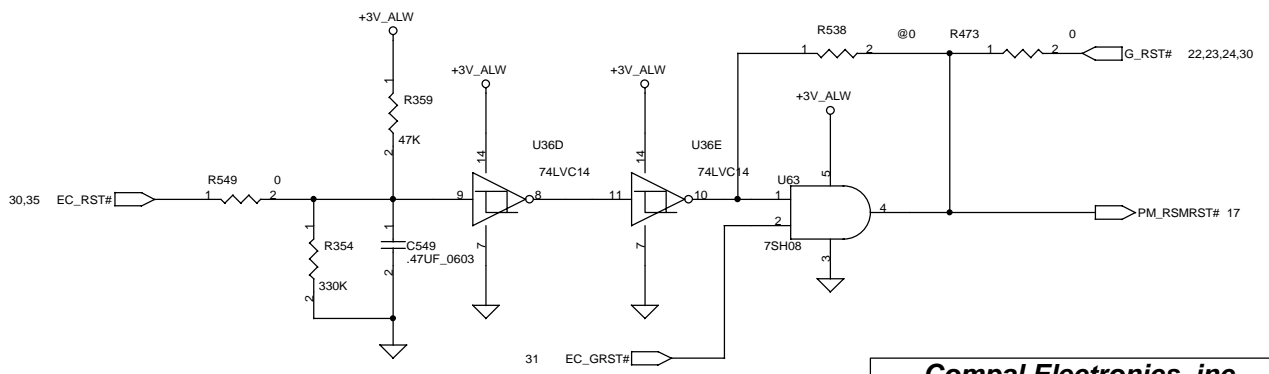
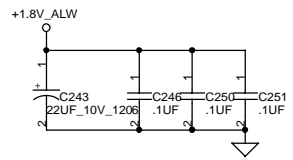
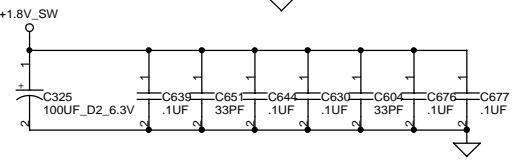
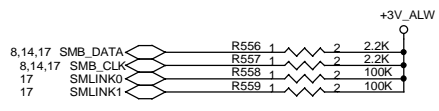
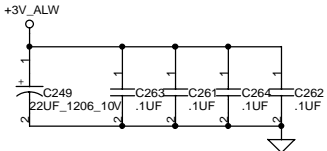
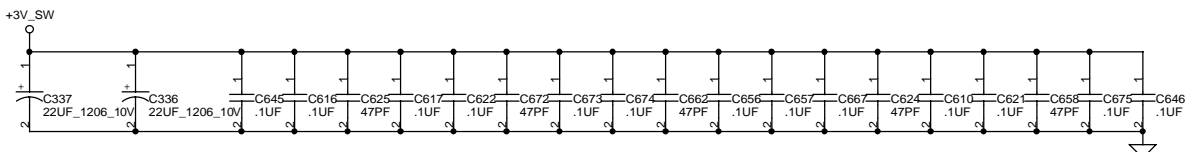
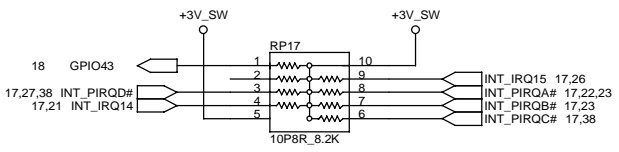
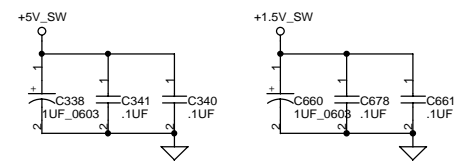
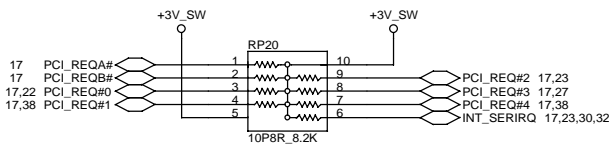
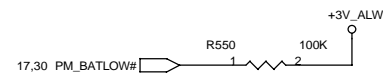
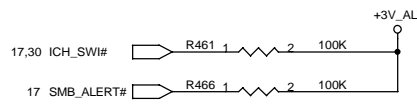
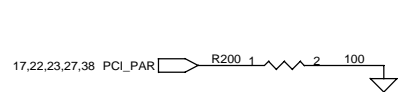
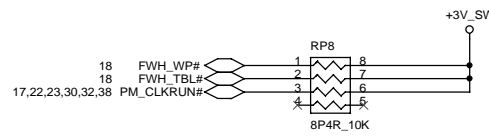
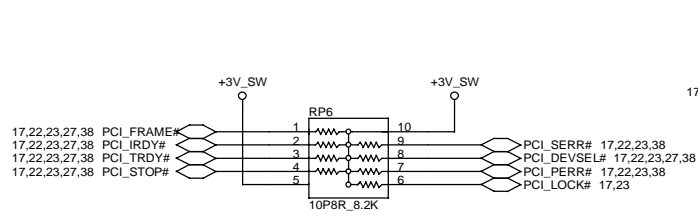
ICH3-M (2/2)

Compal Electronics, inc.

SCHEMATIC, M/B LA-1011

Size Custom	Document Number 401174	Rev 1A
Date: Friday, September 21, 2001	Sheet 18	of 46

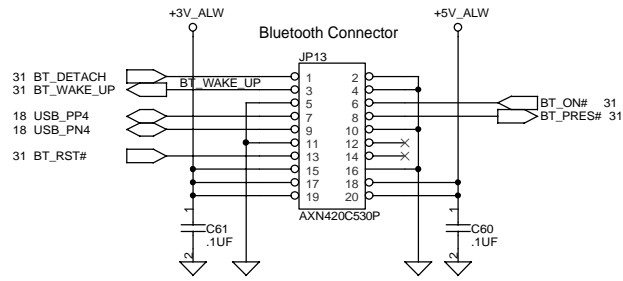
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



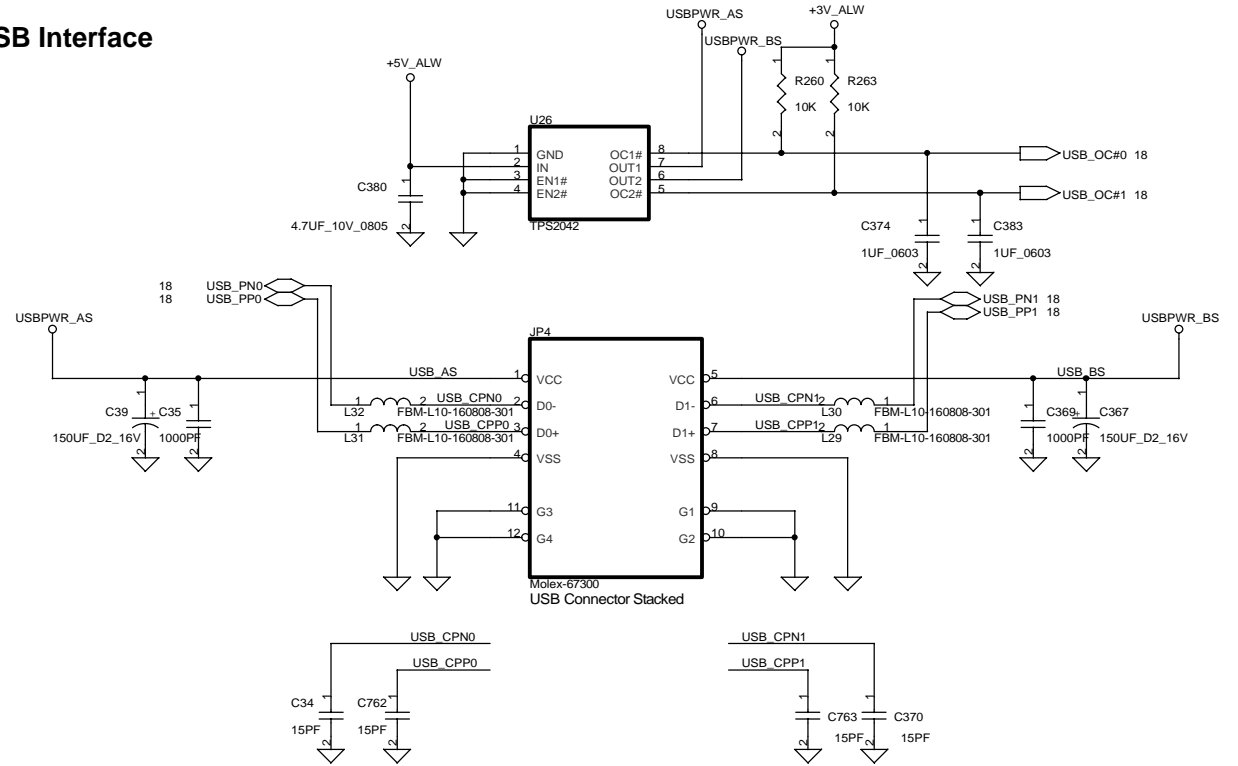
Compal Electronics, inc.		
SCHEMATIC, M/B LA-1011		
Title	Document Number	Rev
Size Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 19 of 46

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

BlueTooth Interface

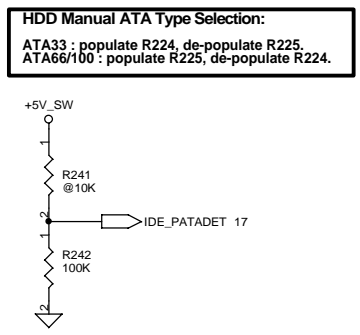
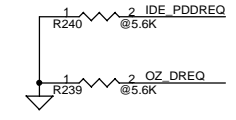
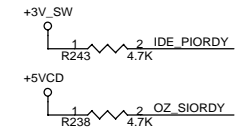
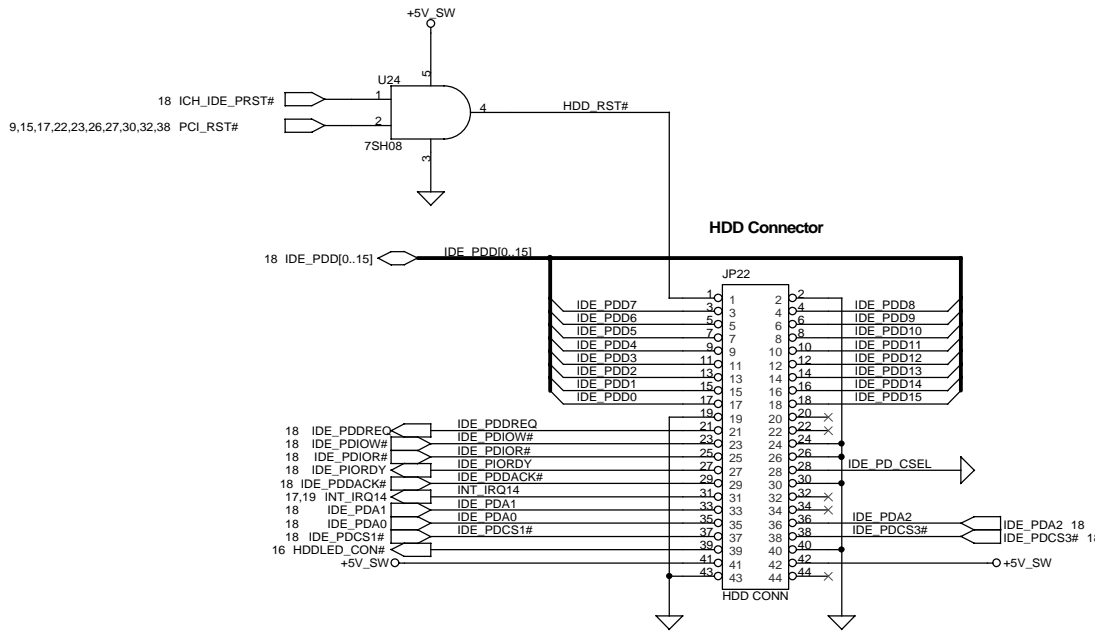


USB Interface



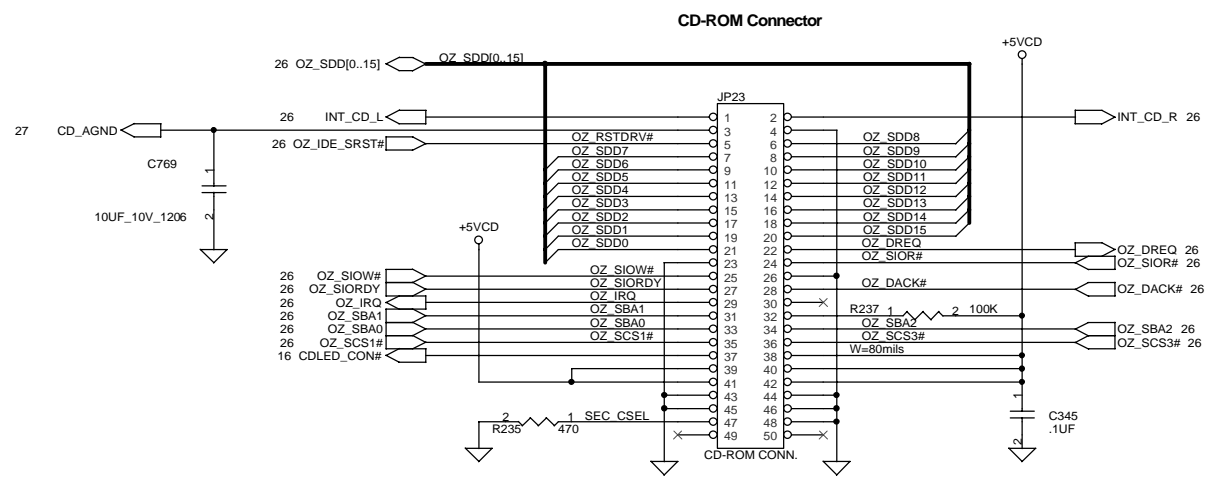
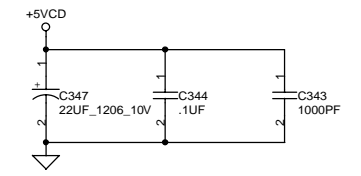
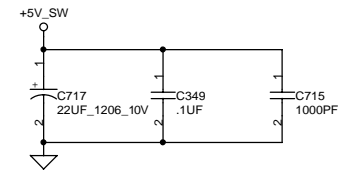
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION 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-1011			
Title	Document Number	Rev	
Size Custom	401174	1A	
Date:	Friday, September 21, 2001	Sheet	20 of 46



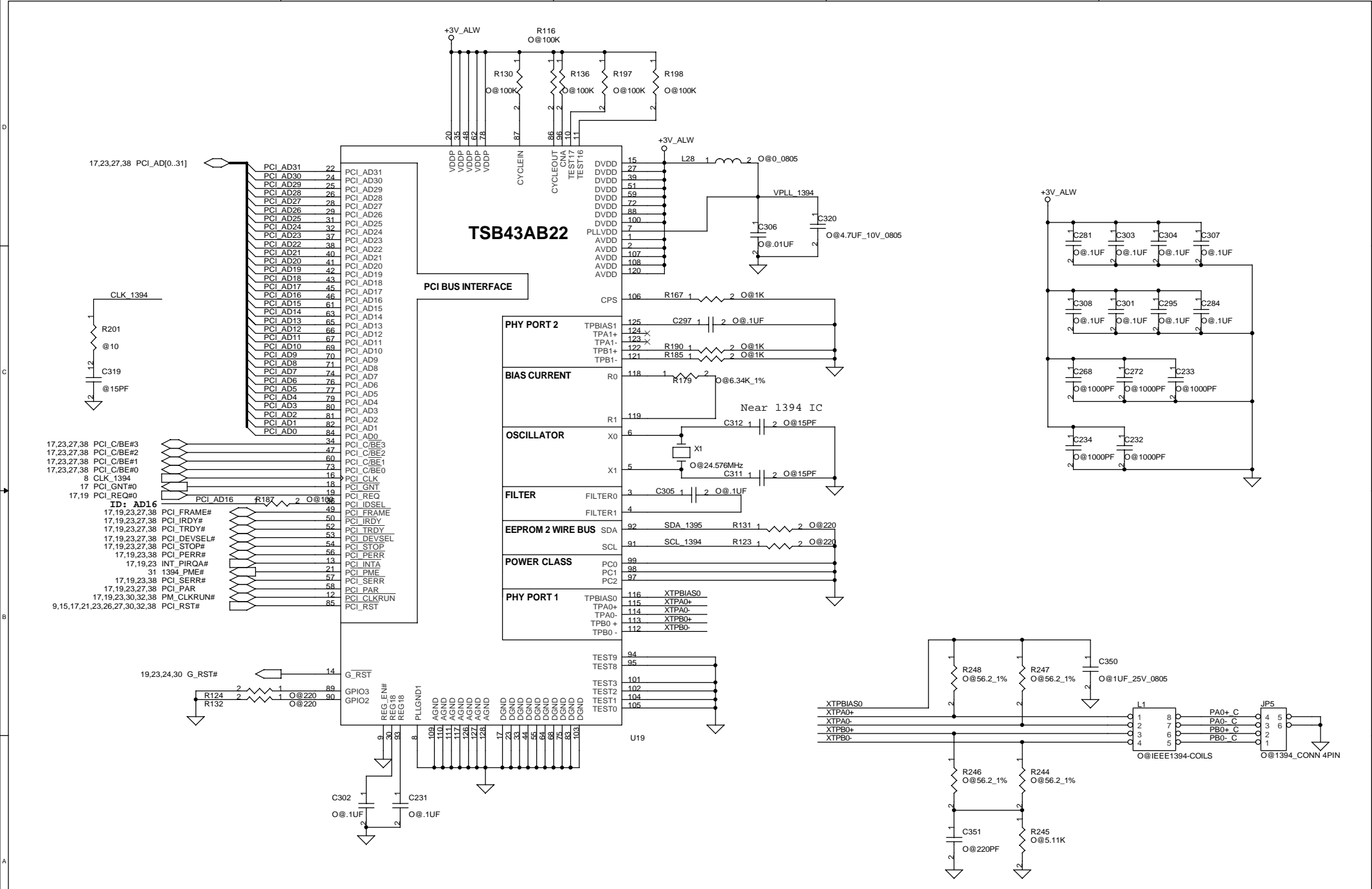
Layout note :
Place capacitors near HDD connector .

Layout note :
Place capacitors near CD-ROM connector .



Compal Electronics, inc.		
Title		
SCHEMATIC, M/B LA-1011		
Size	Document Number	Rev
Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 21 of 46

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 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-1011

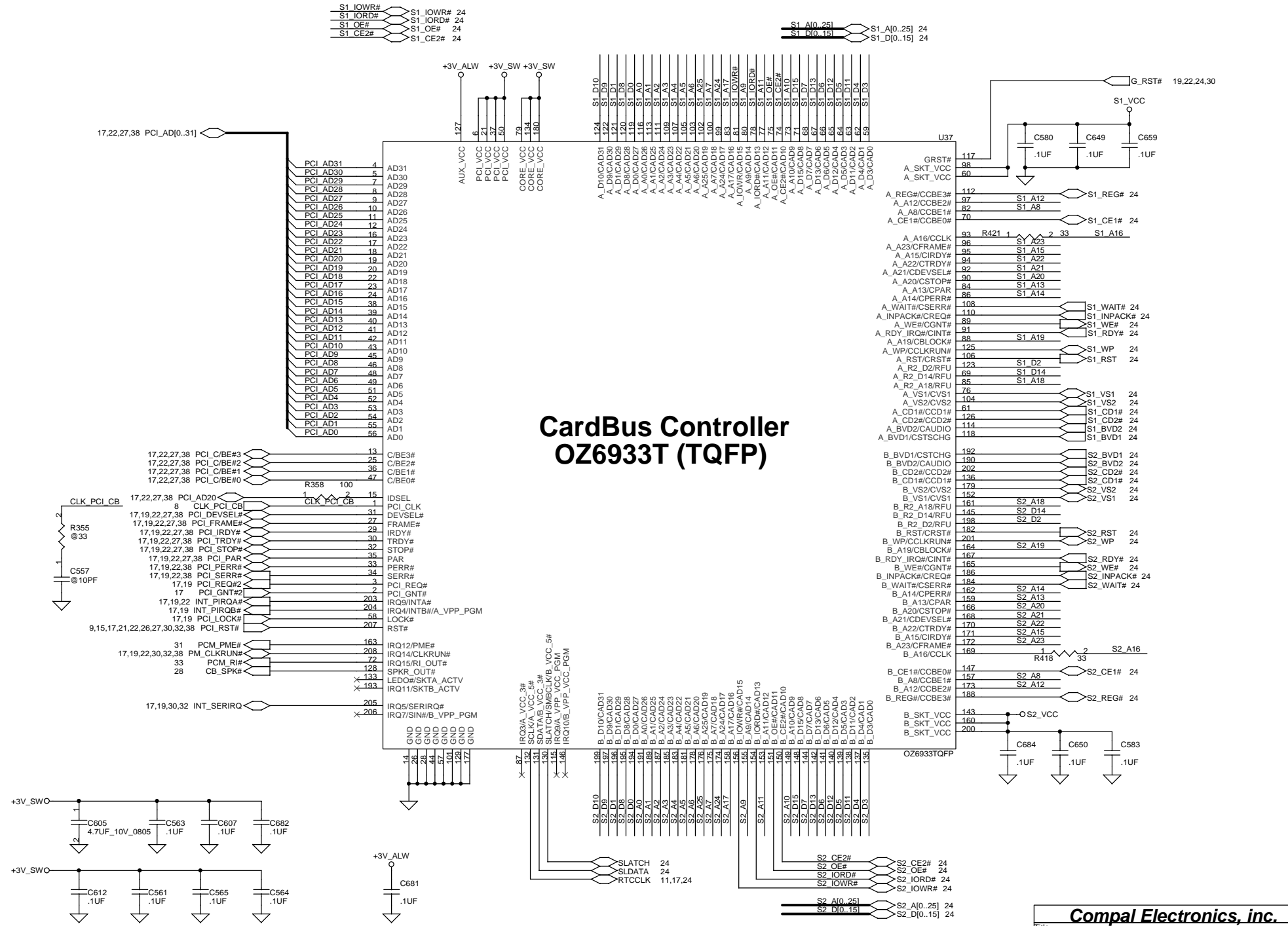
Title	Document Number	Rev
Size	401174	1A
Date:	Friday, September 21, 2001	Sheet 22 of 46

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

S1_IOWR# S1_IOWR# 24
 S1_IORD# S1_IORD# 24
 S1_OE# S1_OE# 24
 S1_CE2# S1_CE2# 24

S1_A[0..25] S1_A[0..25] 24
 S1_D[0..15] S1_D[0..15] 24

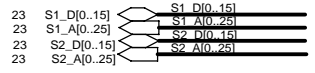
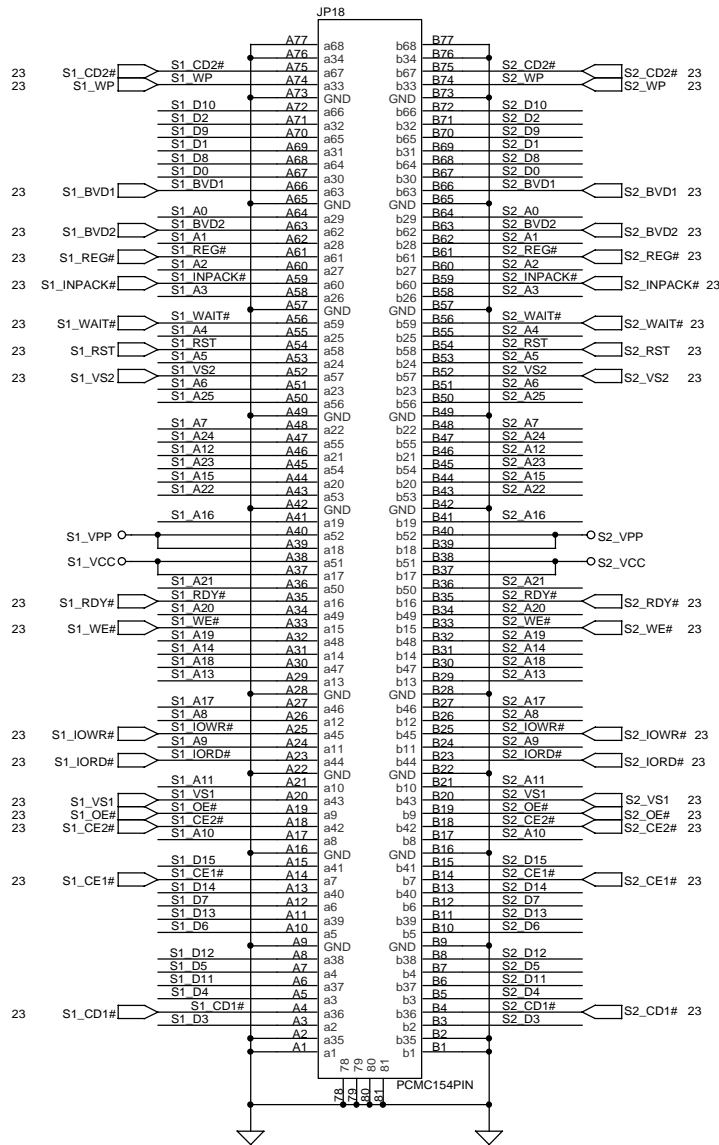
CardBus Controller OZ6933T (TQFP)



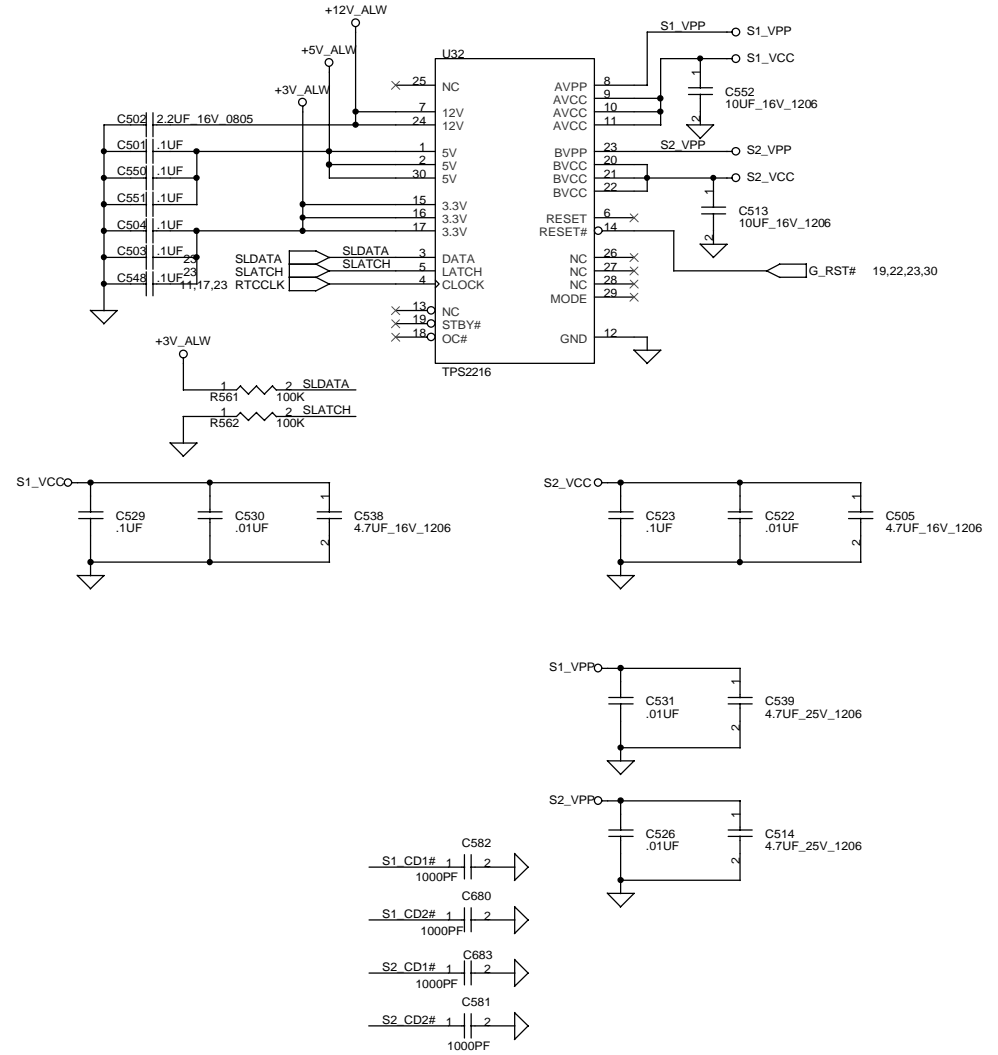
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION 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-1011		
Size Custom	Document Number 401174	Rev 1A
Date:	Friday, September 21, 2001	Sheet 23 of 46

CARDBUS SOCKET



PCMCIA POWER CTRL.

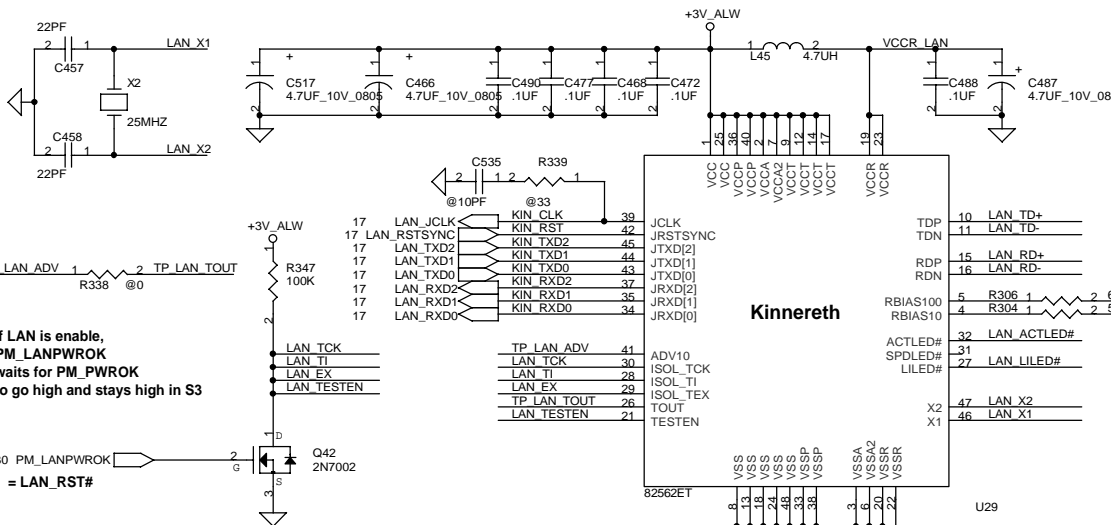


Compal Electronics, inc.

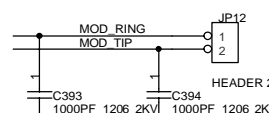
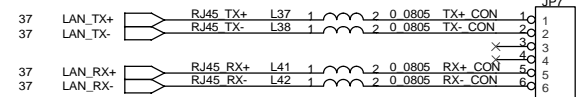
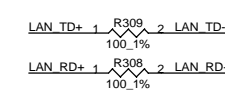
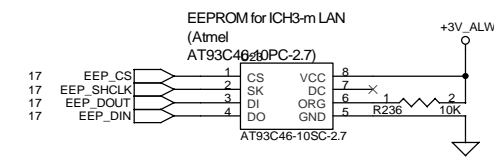
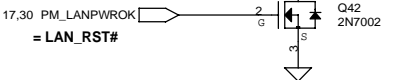
SCHEMATIC, M/B LA-1011

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 CONTAINED THEREIN MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

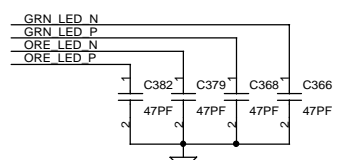
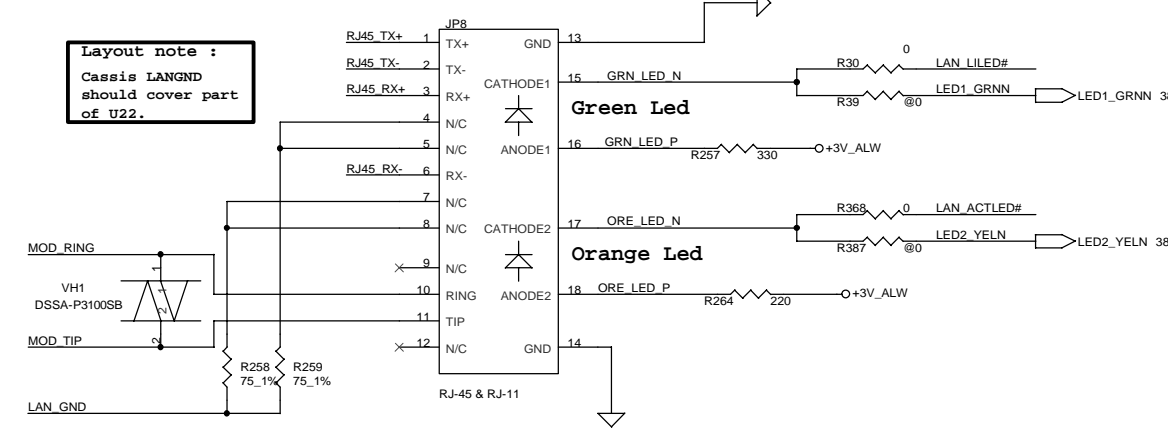
Size	Document Number	Rev
Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 24 of 46



If LAN is enable, PM_LANPWROK waits for PM_PWROK to go high and stays high in S3

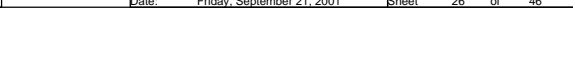
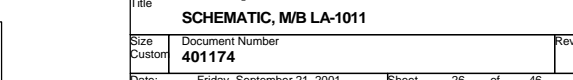
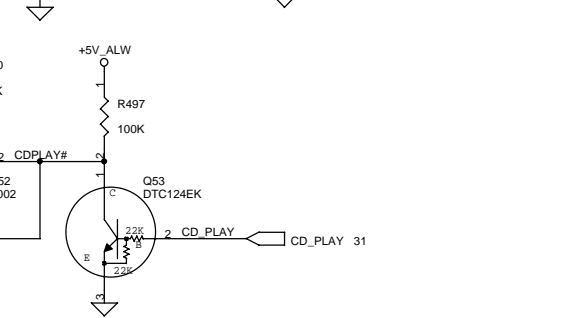
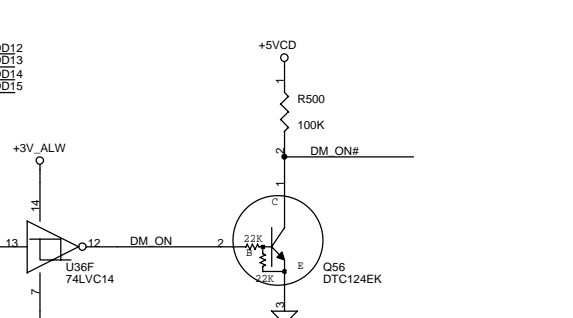
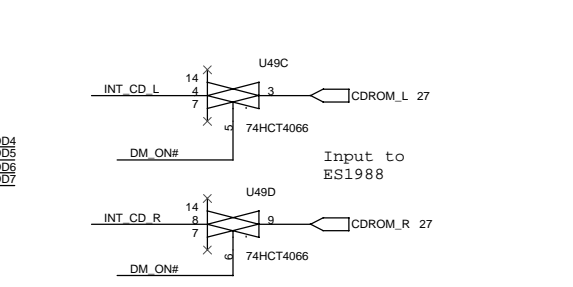
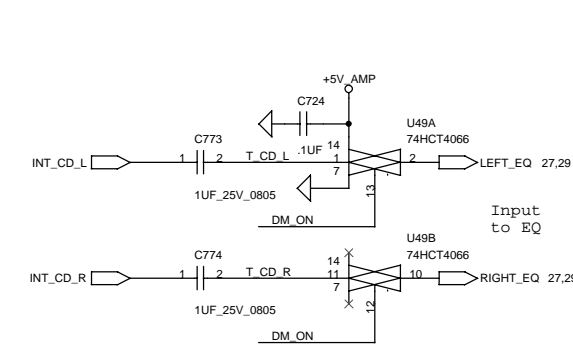
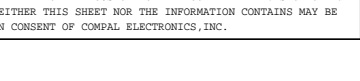
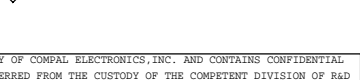
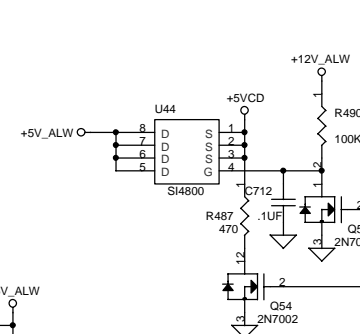
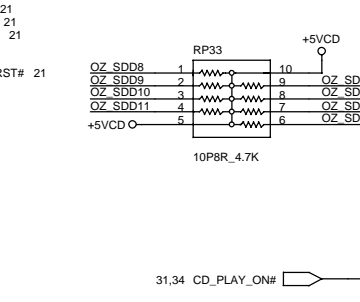
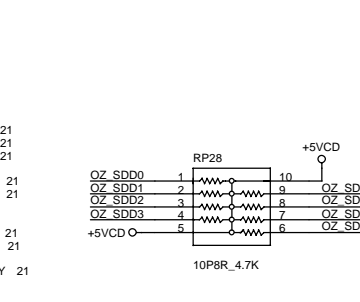
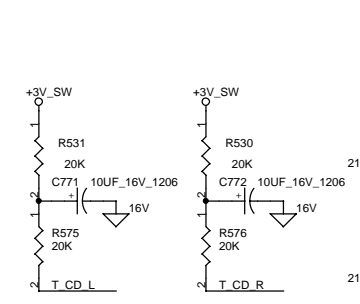
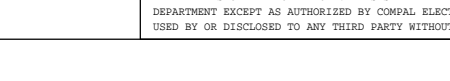
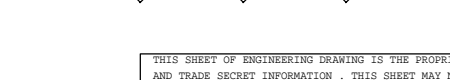
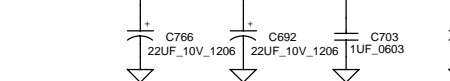
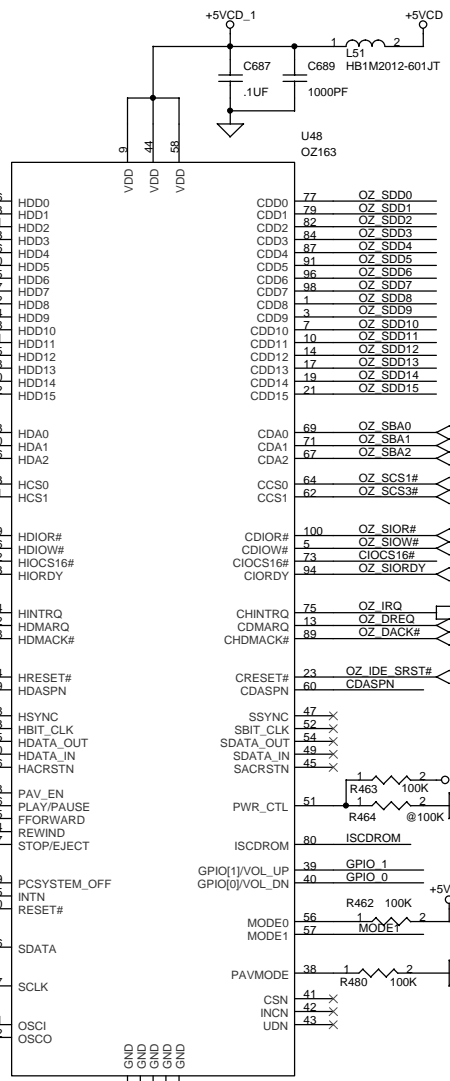
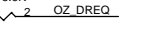
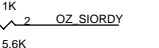
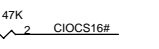
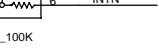
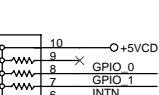
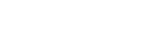
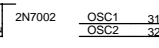
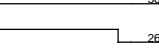
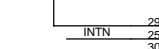
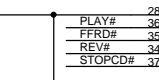
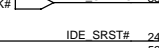
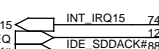
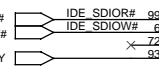
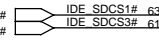
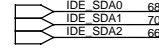
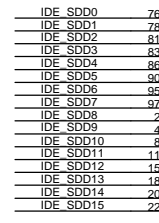
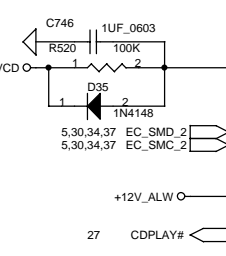
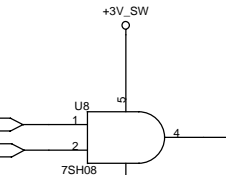
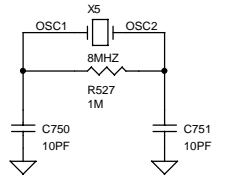
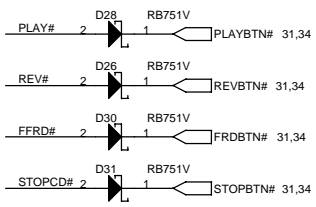
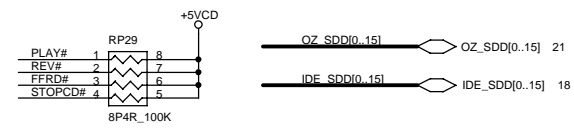


Layout note : Cassis LANGND should cover part of U22.



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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

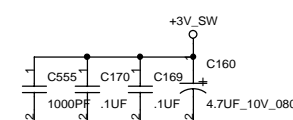
Compal Electronics, inc.		
SCHEMATIC, M/B LA-1011		
Title	Document Number	Rev
Size Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 25 of 46



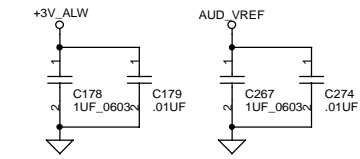
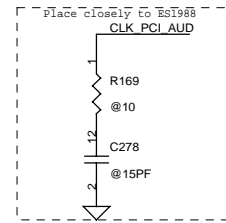
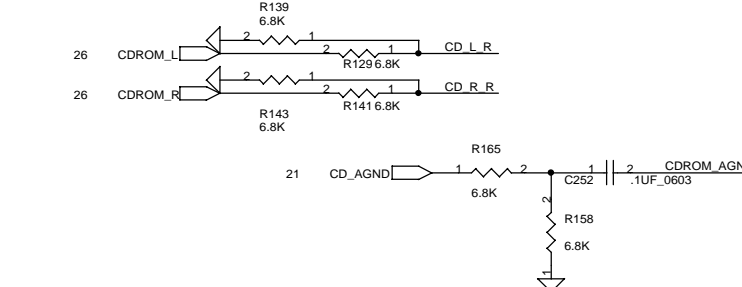
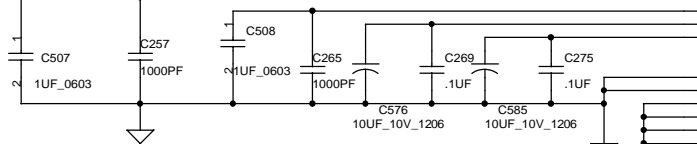
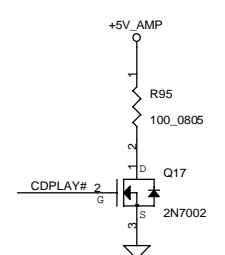
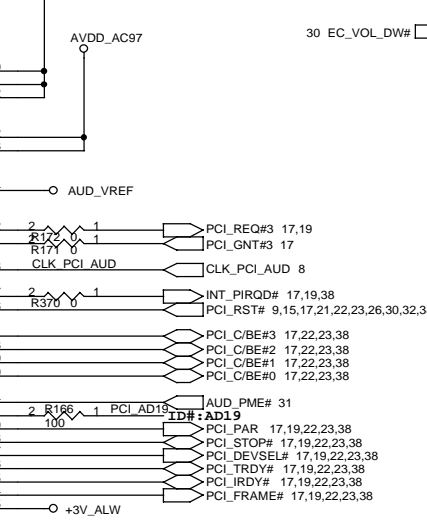
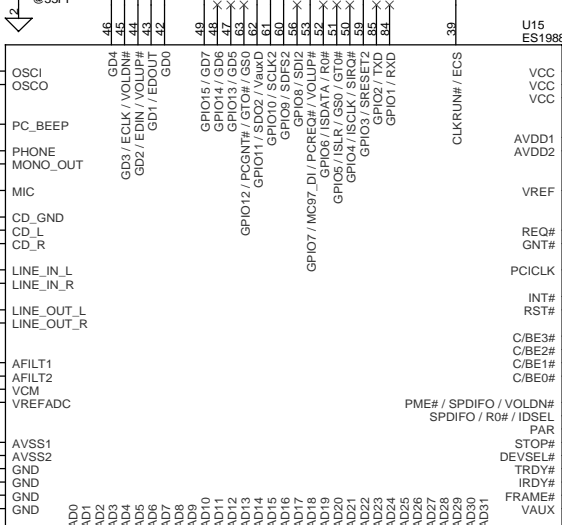
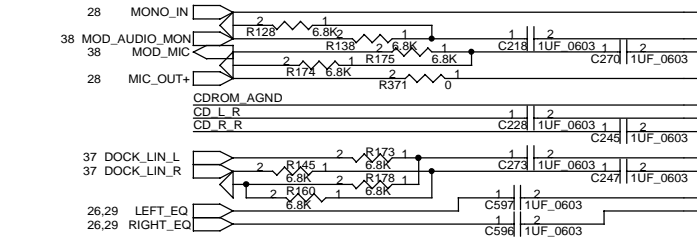
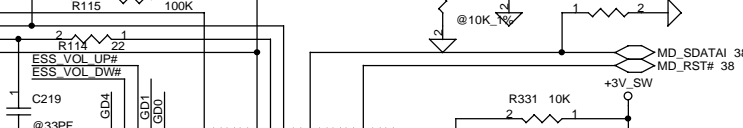
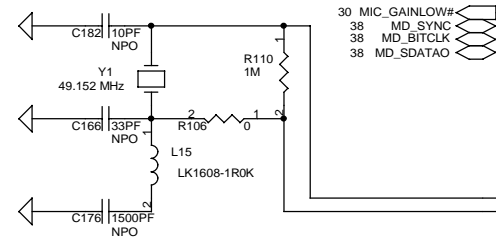
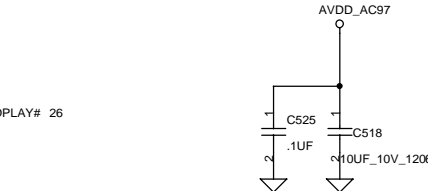
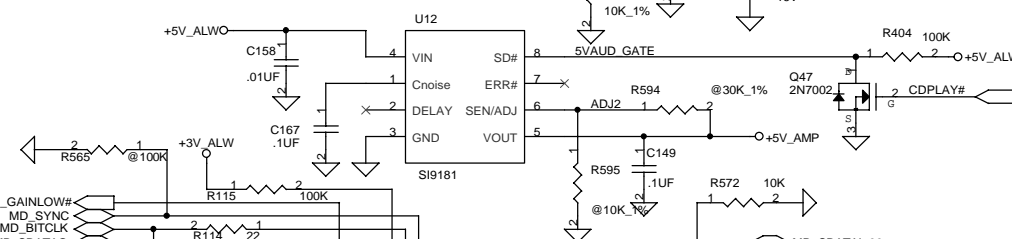
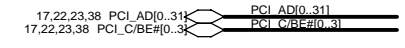
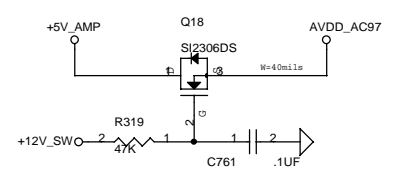
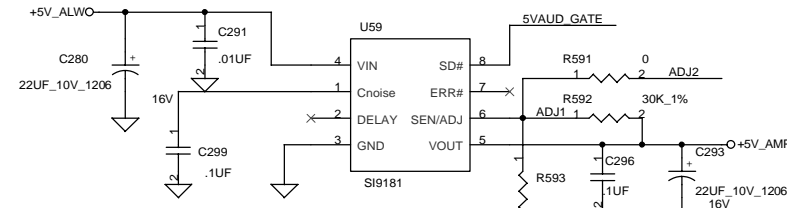
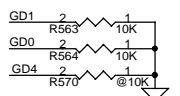
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION 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-1011	
Size	Document Number	Rev
Custom	401174	1.
Date:	Friday, September 21, 2001	Sheet 26 of 46

Rev	1A

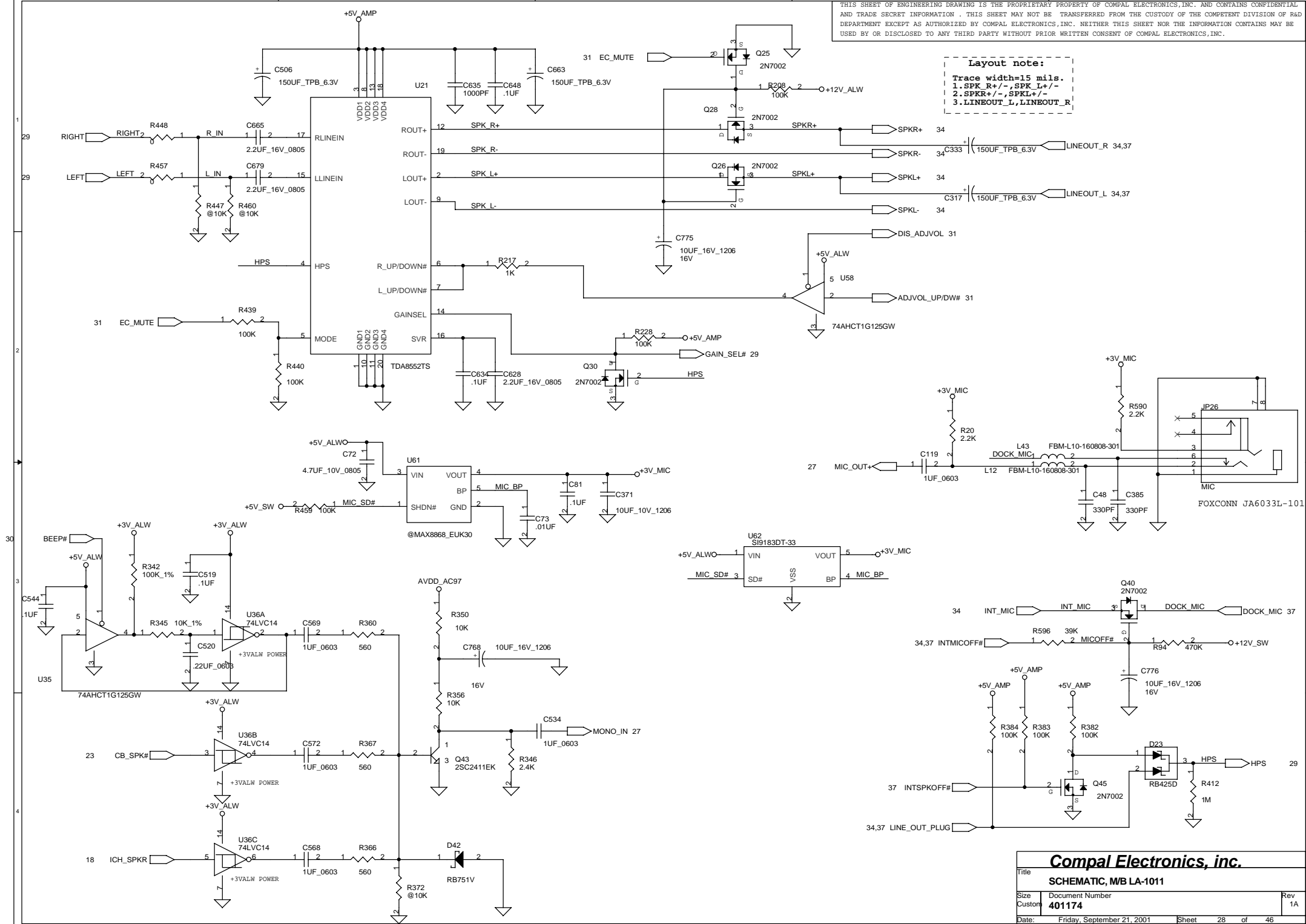


Place component's to ES1988

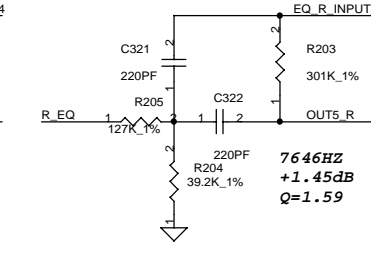
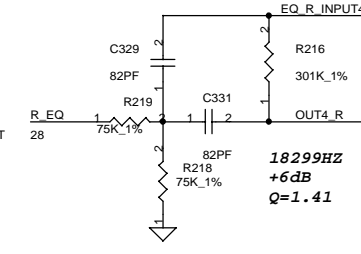
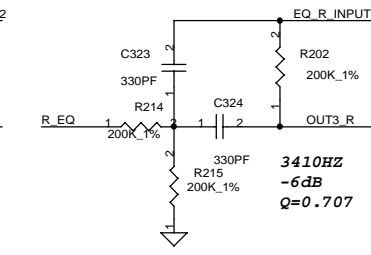
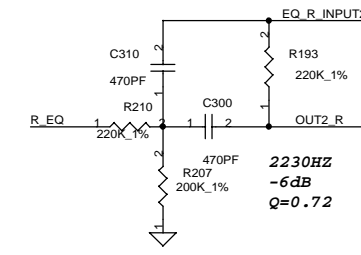
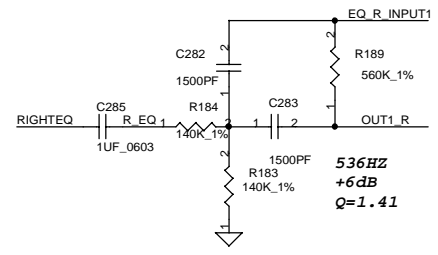
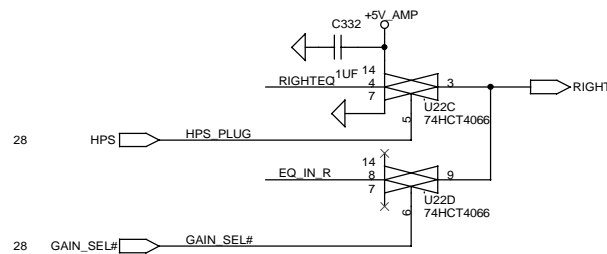
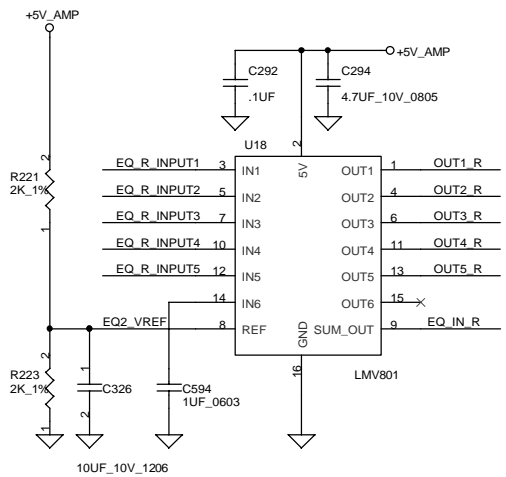
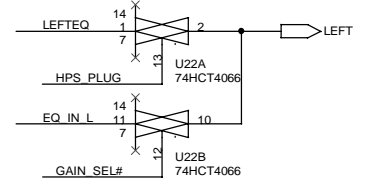
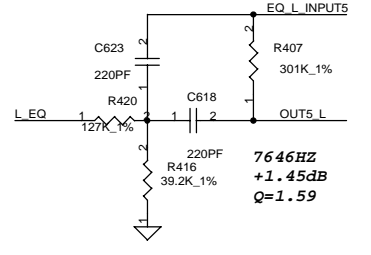
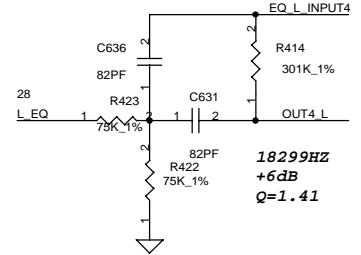
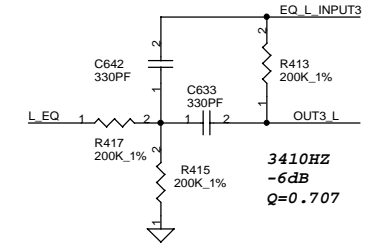
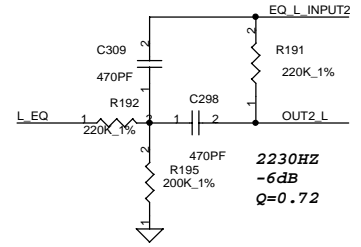
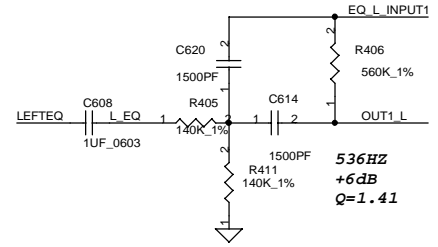
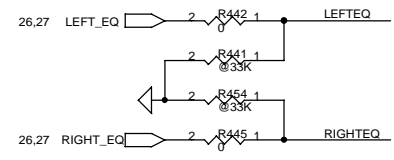
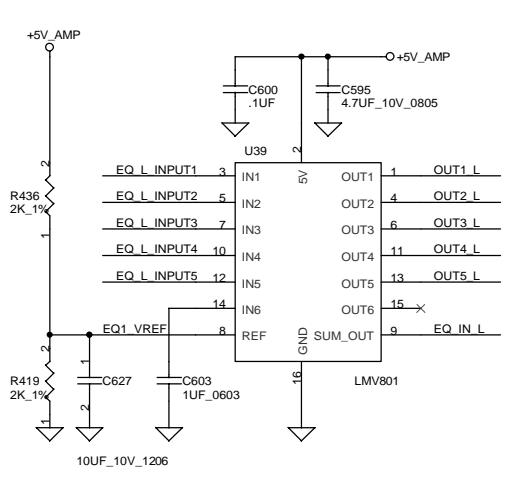


THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION CONTAINED 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-1011		
Size Custom	Document Number 401174	Rev 1A
Date:	Friday, September 21, 2001	Sheet 27 of 46



Layout note:
 Trace width=15 mils.
 1.SPKR+/-, SPKL+/-
 2.SPKR+/-, SPKL+/-
 3.LINEOUT_L, LINEOUT_R

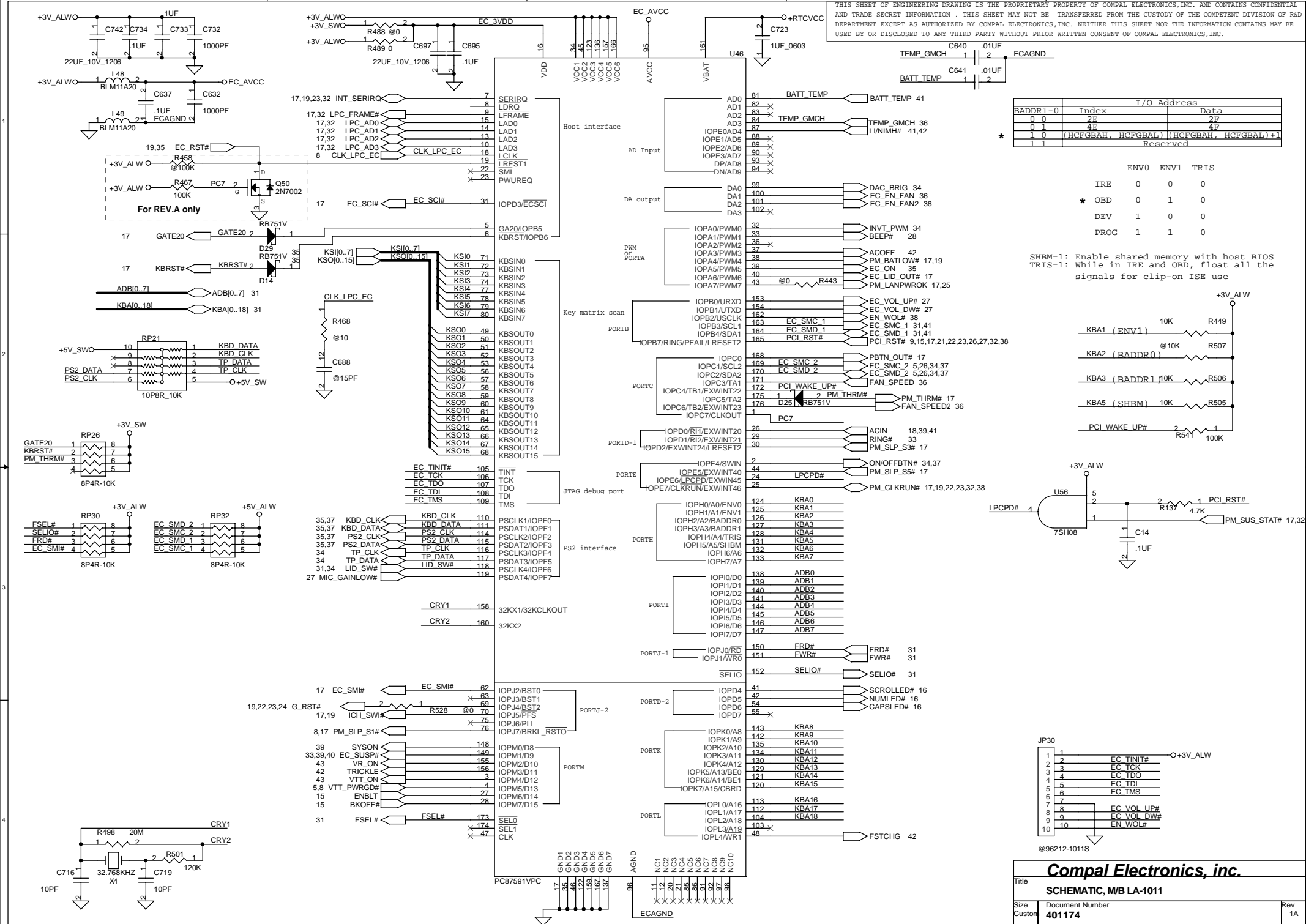


Compal Electronics, inc.

SCHEMATIC, M/B LA-1011

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

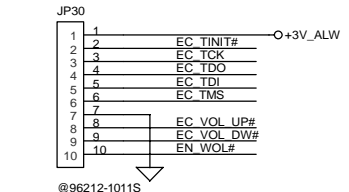
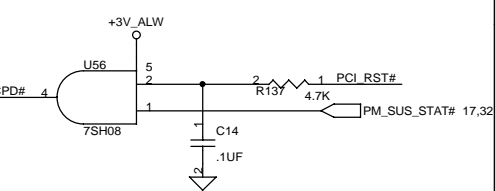
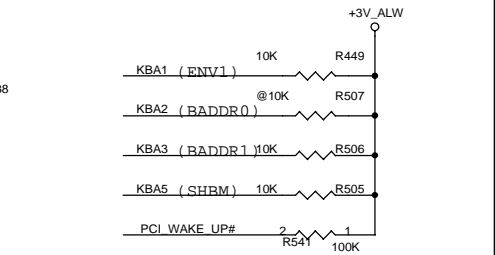
Title	SCHEMATIC, M/B LA-1011	
Size	Document Number	Rev
Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 29 of 46



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

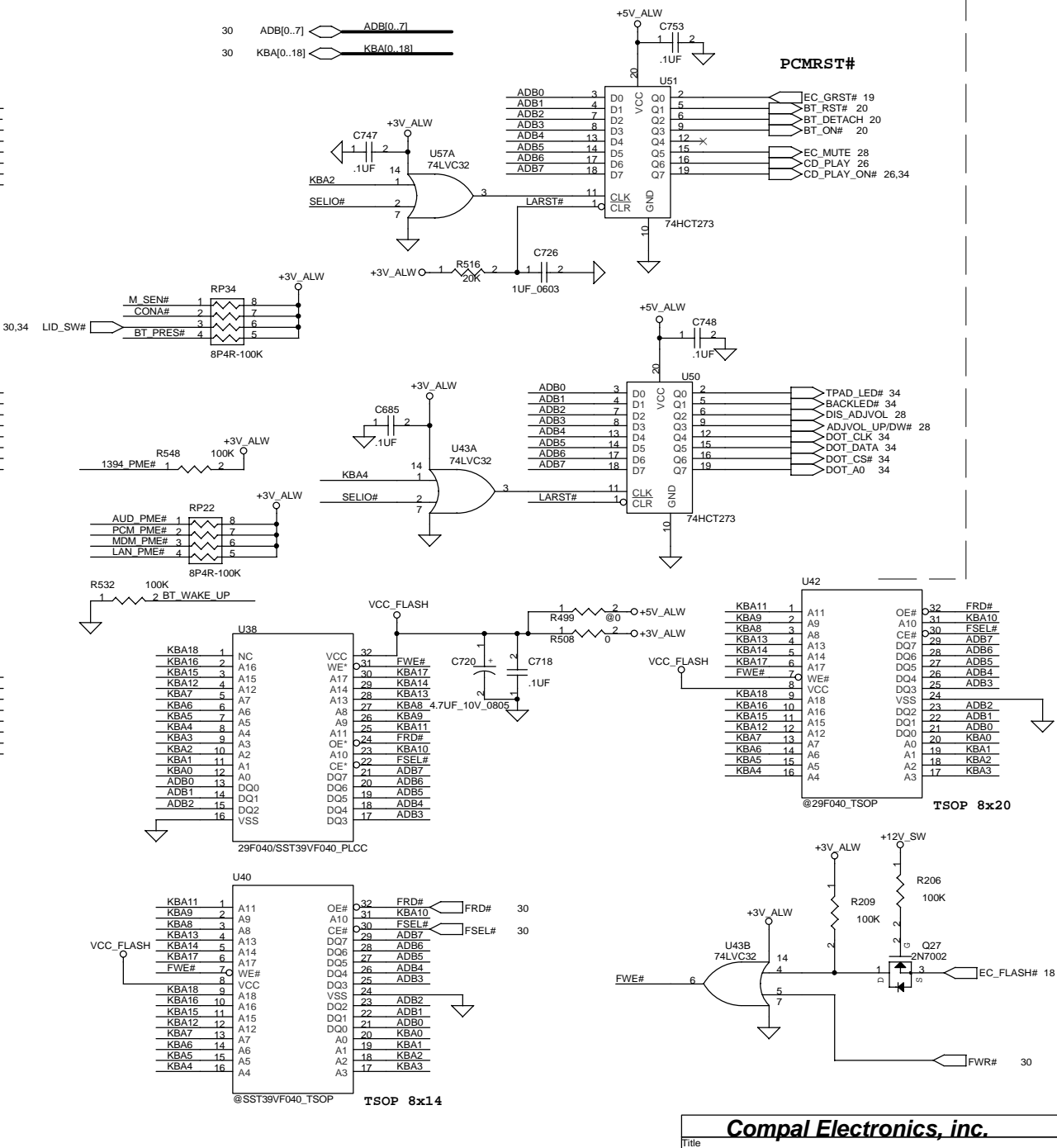
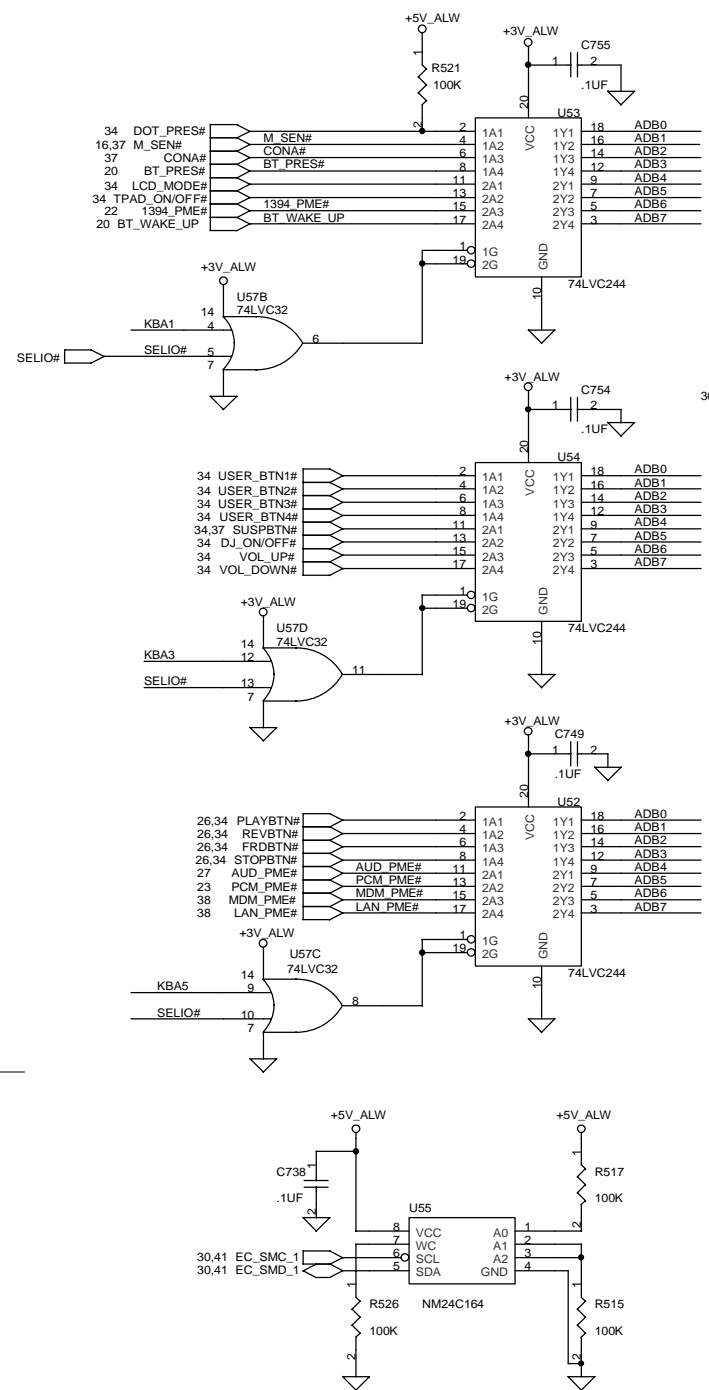
ENVO	ENV1	TRIS
IRE	0	0
OBD	0	1
DEV	1	0
PROG	1	0

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



INPUT

OUTPUT

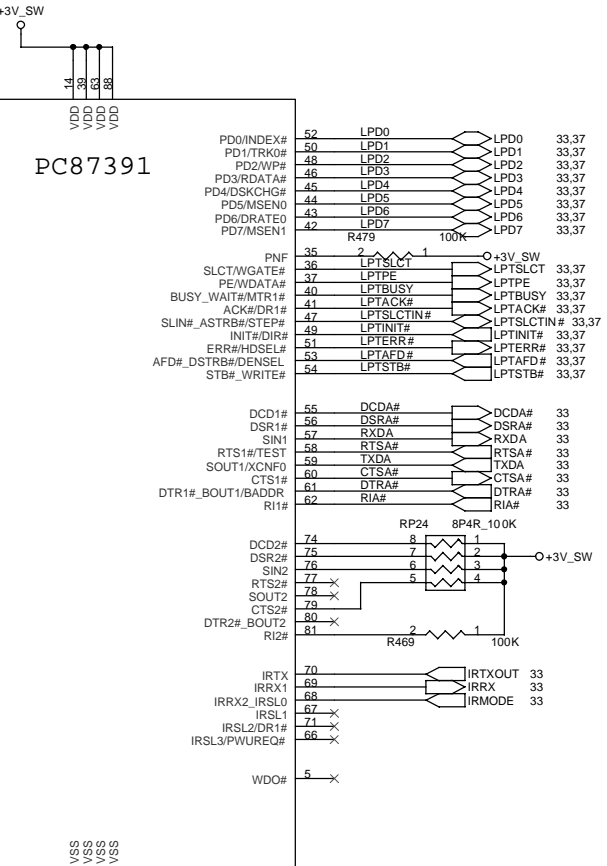
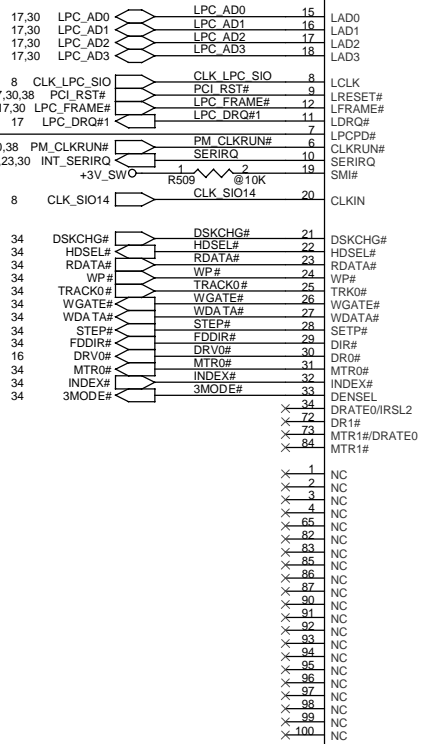
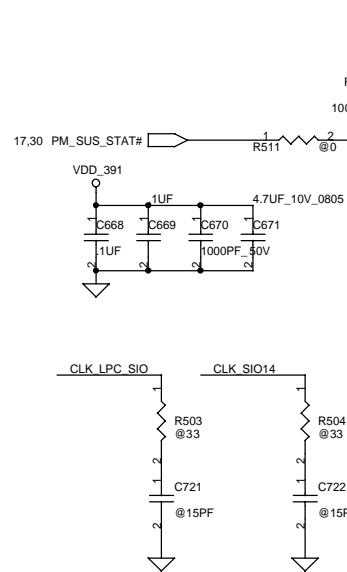


Compal Electronics, inc.

SCHMATIC, M/B LA-1011

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

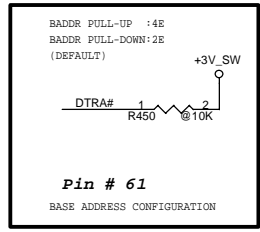
Size Custom	Document Number	Rev
401174		1A
Date:	Friday, September 21, 2001	Sheet 31 of 46



Signal	Pin #	Description
BADDR	61	BASE Address Selection "0": 2E-2F (Default) "1": 4E-4F
TEST	58	"0": Normal (Default) "1": Test Mode
XCNF[2:0]	90, 4, 59	2 1 0 Function
		x 0 0 No BIOS
		x 0 1 Normal Mode. XRDY disabled
		0 1 0 Latch Mode. XA12-19, XRDY enabled
		1 1 0 Latch Mode. GPIO10-17, XRDY enabled
0 1 1 Latch Mode. XA12-19, XRDY disabled		
1 1 1 Latch Mode. GPIO10-17, XRDY disabled		

*1.ROM SOLUTION for PC87391

*2.ROM SOLUTION for PC87393



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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

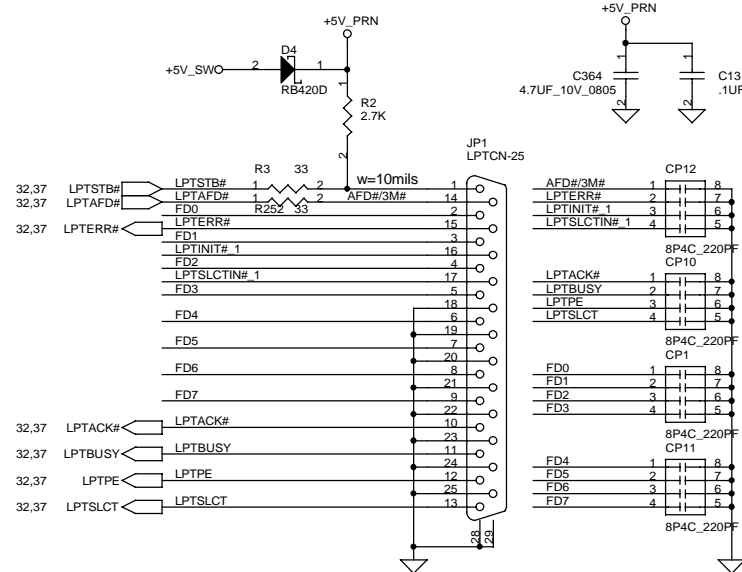
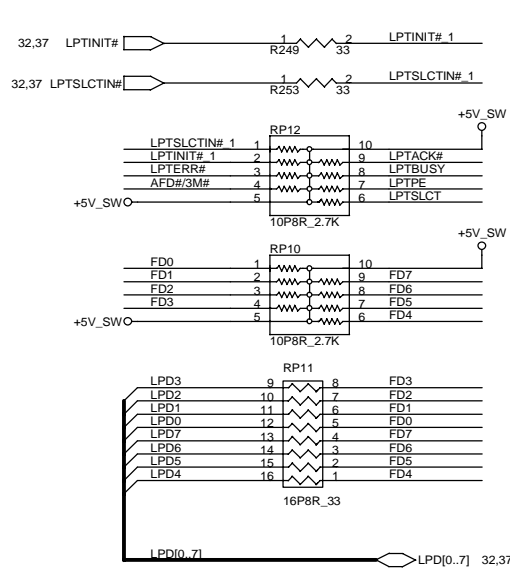
Compal Electronics, inc.

Title: SCHEMATIC, M/B LA-1011

Size: Custom Document Number: 401174 Rev: 1A

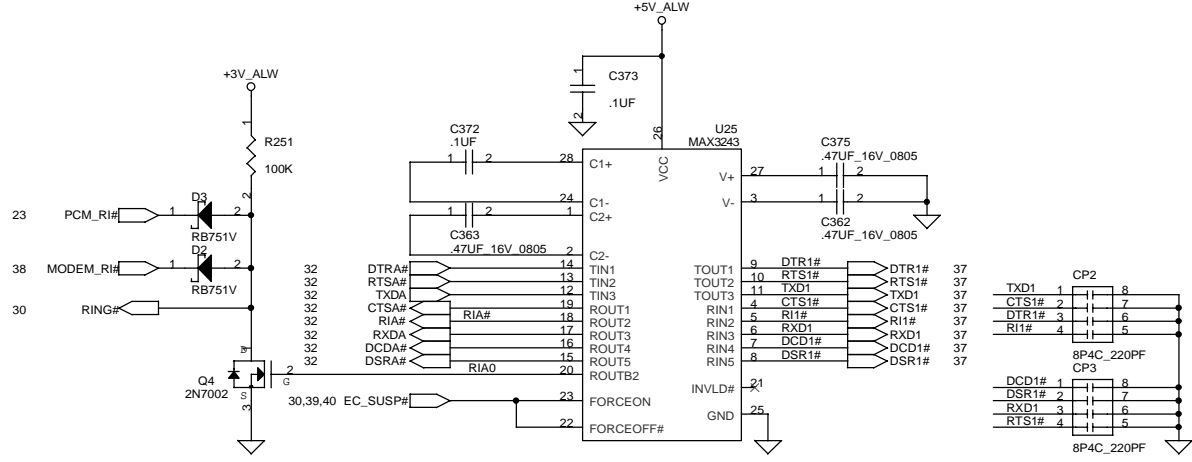
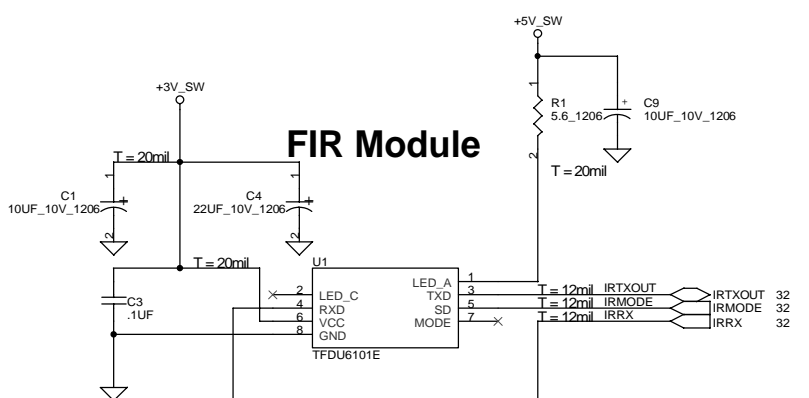
Date: Friday, September 21, 2001 Sheet: 32 of 46

PARALLEL



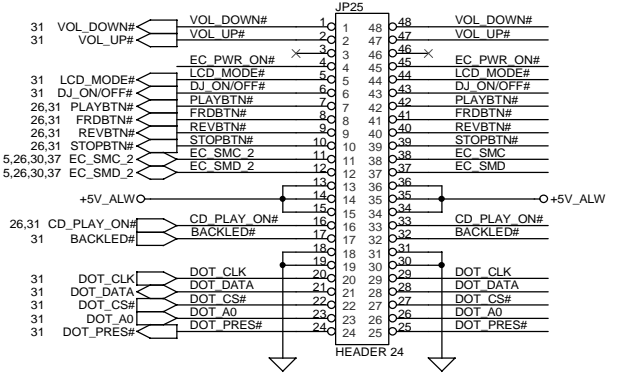
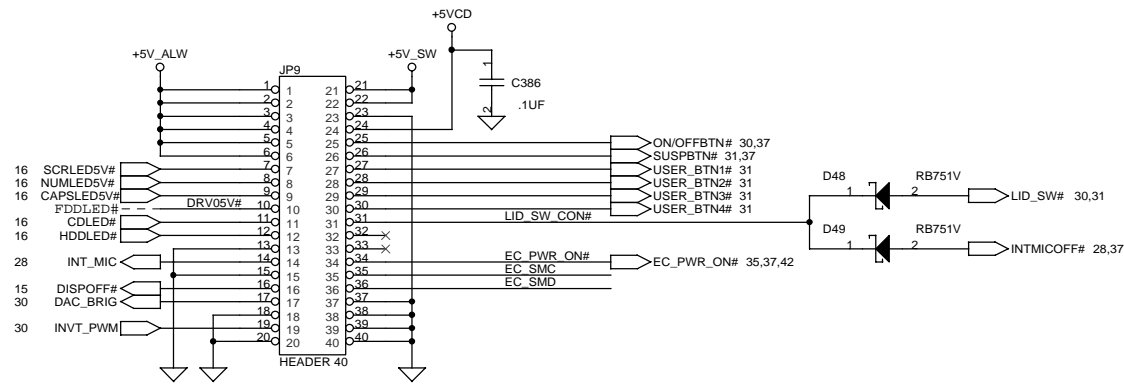
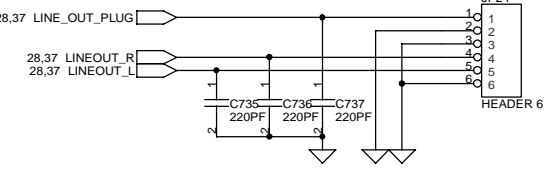
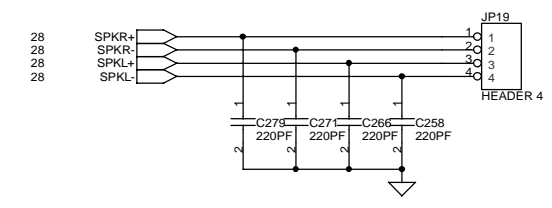
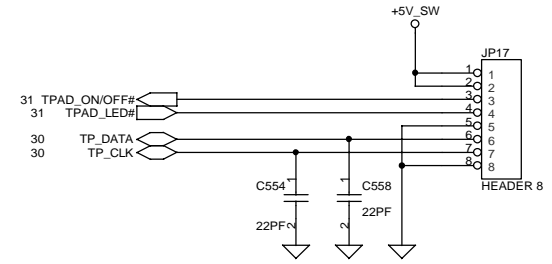
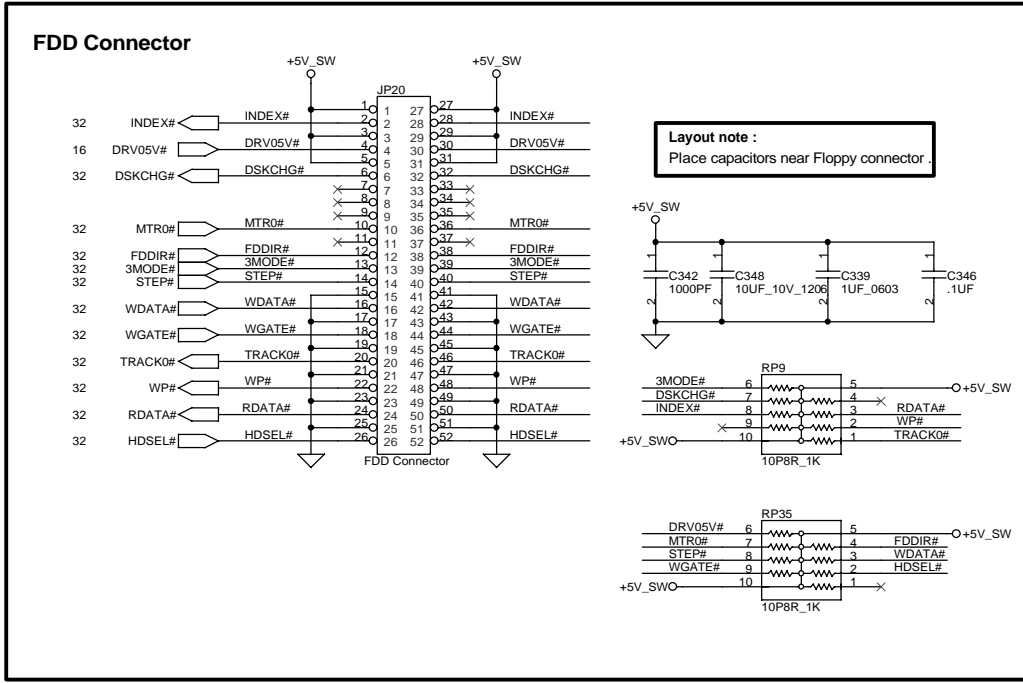
SERIAL

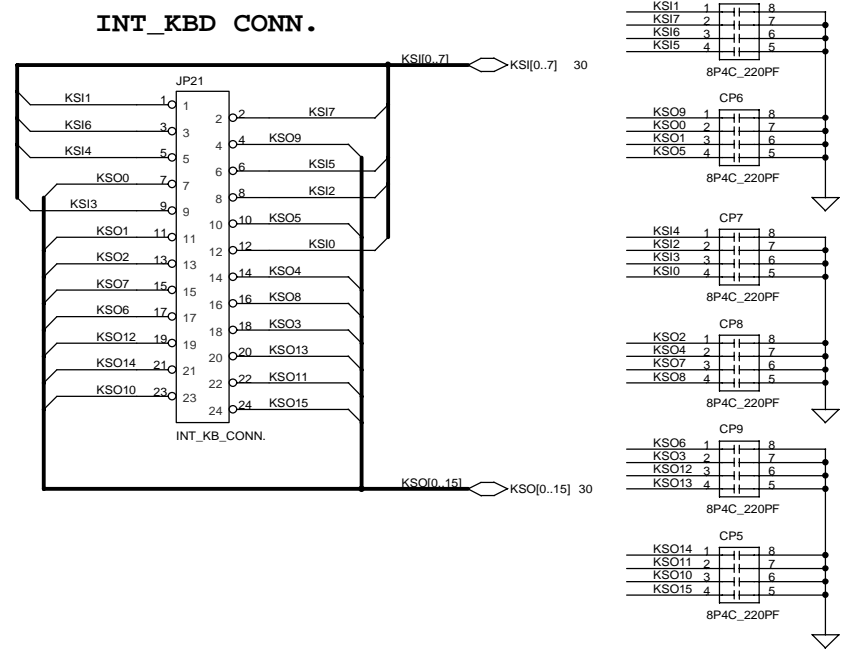
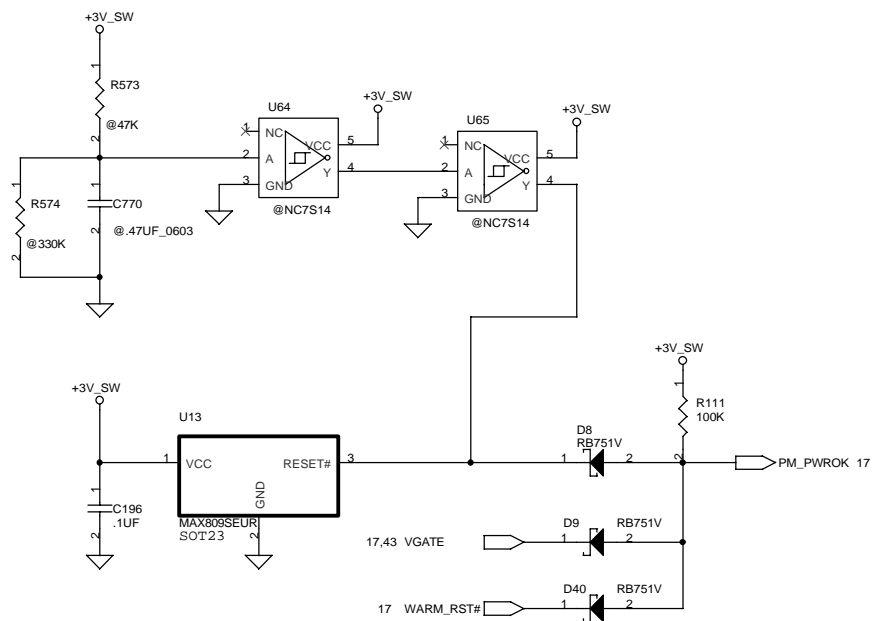
FIR Module



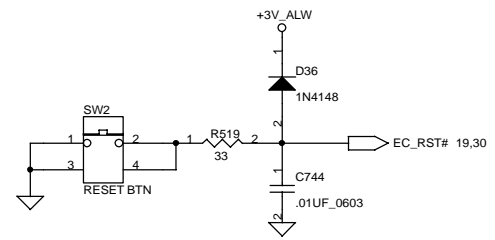
Compal Electronics, inc.			
SCHEMATIC, M/B LA-1011			
Title	Document Number	Rev	
	401174	1A	
Date:	Friday, September 21, 2001	Sheet	33 of 46

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

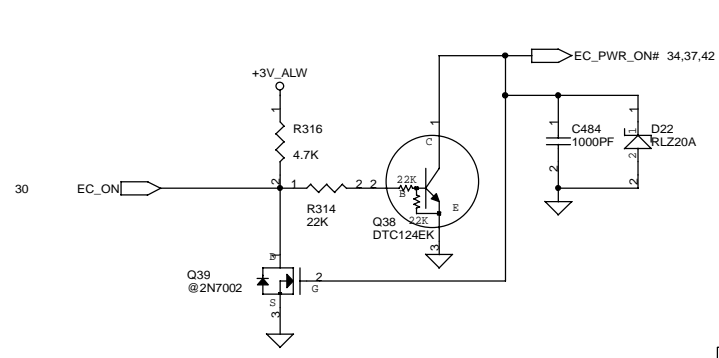




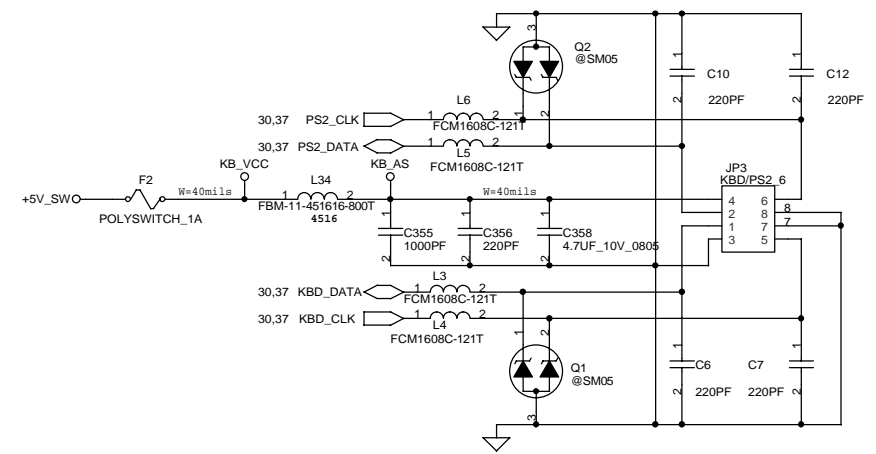
Reset Button



Power ON

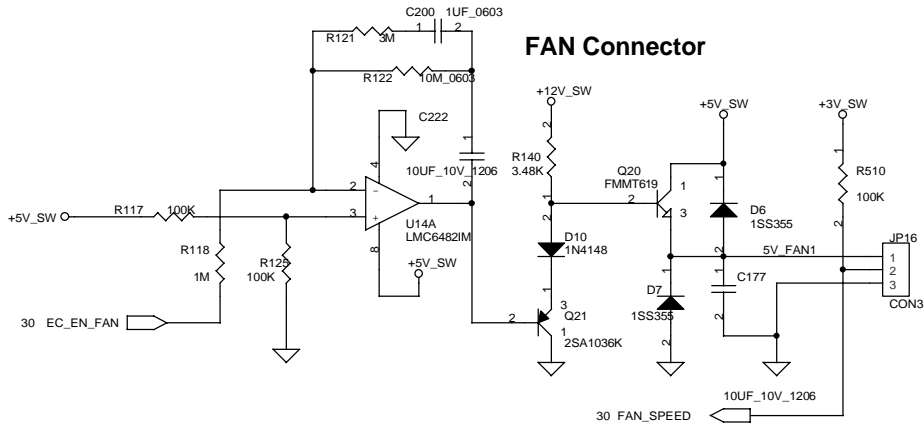


PS2 CONN.



Compal Electronics, inc.		
SCHEMATIC, M/B LA-1011		
Title	Document Number	Rev
Size Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 35 of 46

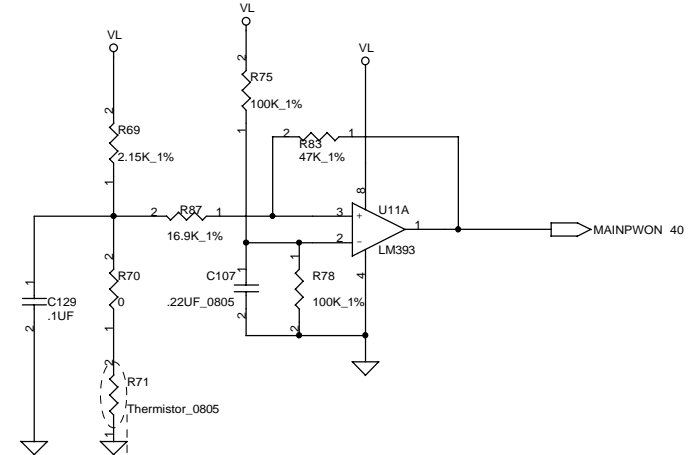
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS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



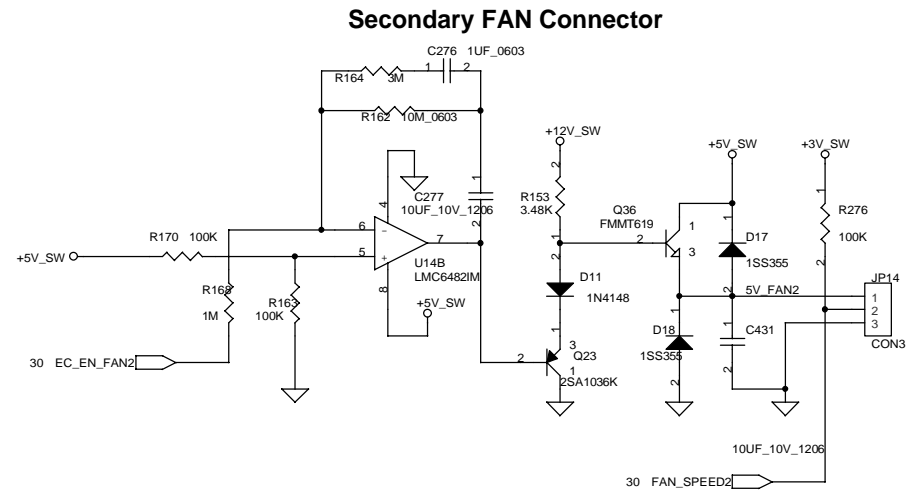
FAN Connector

The temperature sensing and Over-Hot shutdown circuit.

Place this block circuit close to CPU.

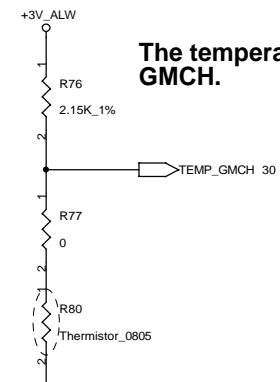


Layout note :
Place a copper ground plan from CPU and place the Thermistor upper this ground plan.



Secondary FAN Connector

The temperature sensing for GMCH.

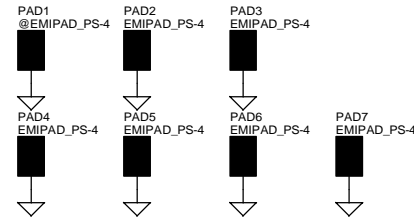


Layout note :
Place a copper ground plan from GMCH and place the Thermistor upper this ground plan.

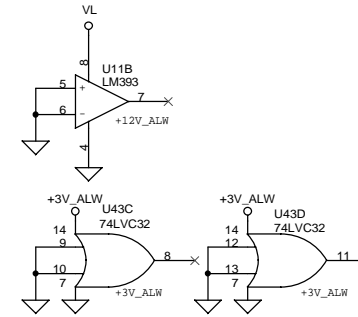
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION 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-1011			
Size Custom	Document Number 401174	Rev 1A	
Date:	Friday, September 21, 2001	Sheet	36 of 46

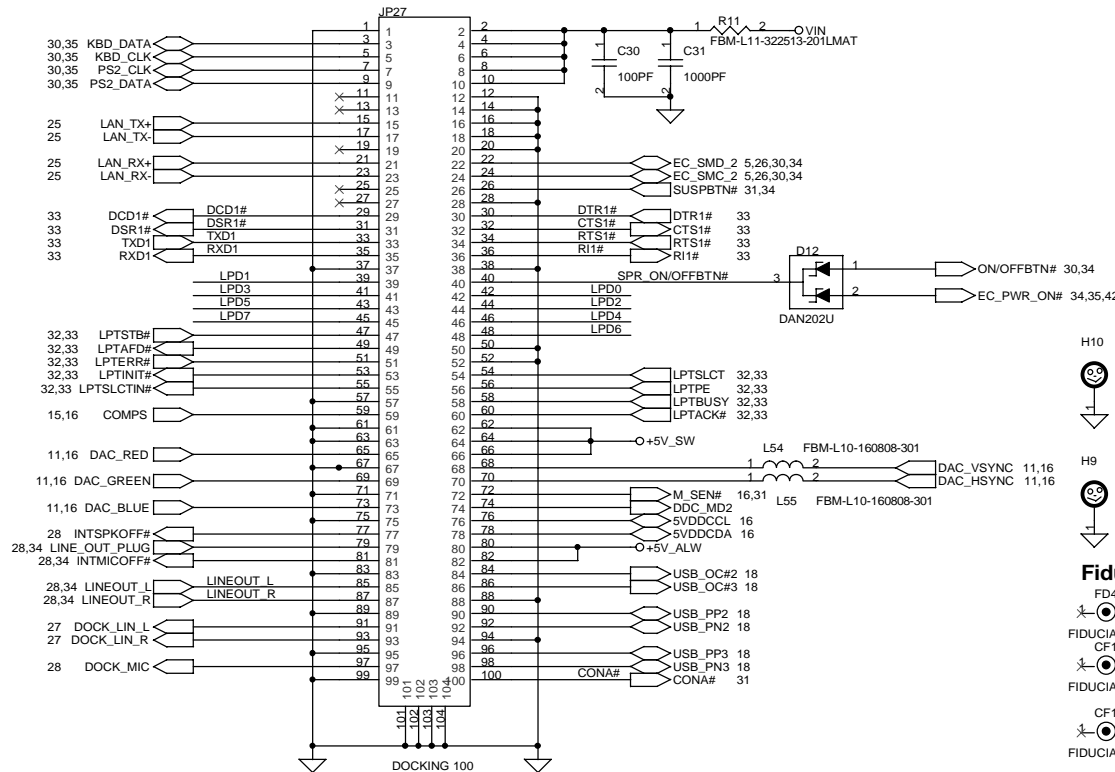
EMI Finger



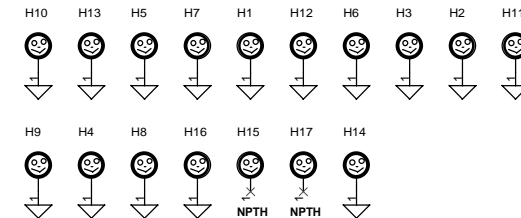
Unused IC parts.



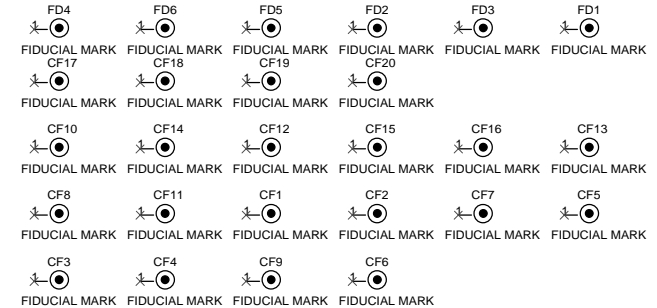
DOCKING 100 PIN



Screw Hole



Fiducial Mark

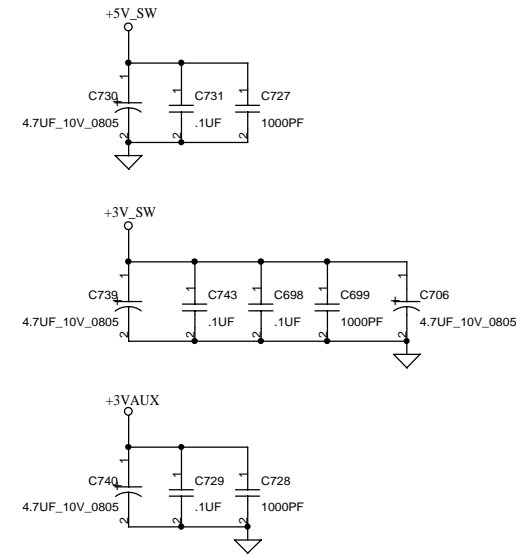
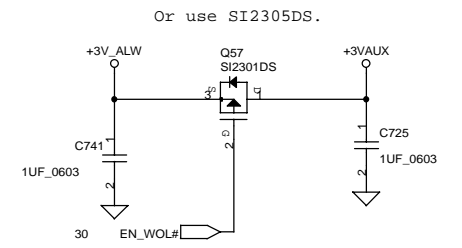
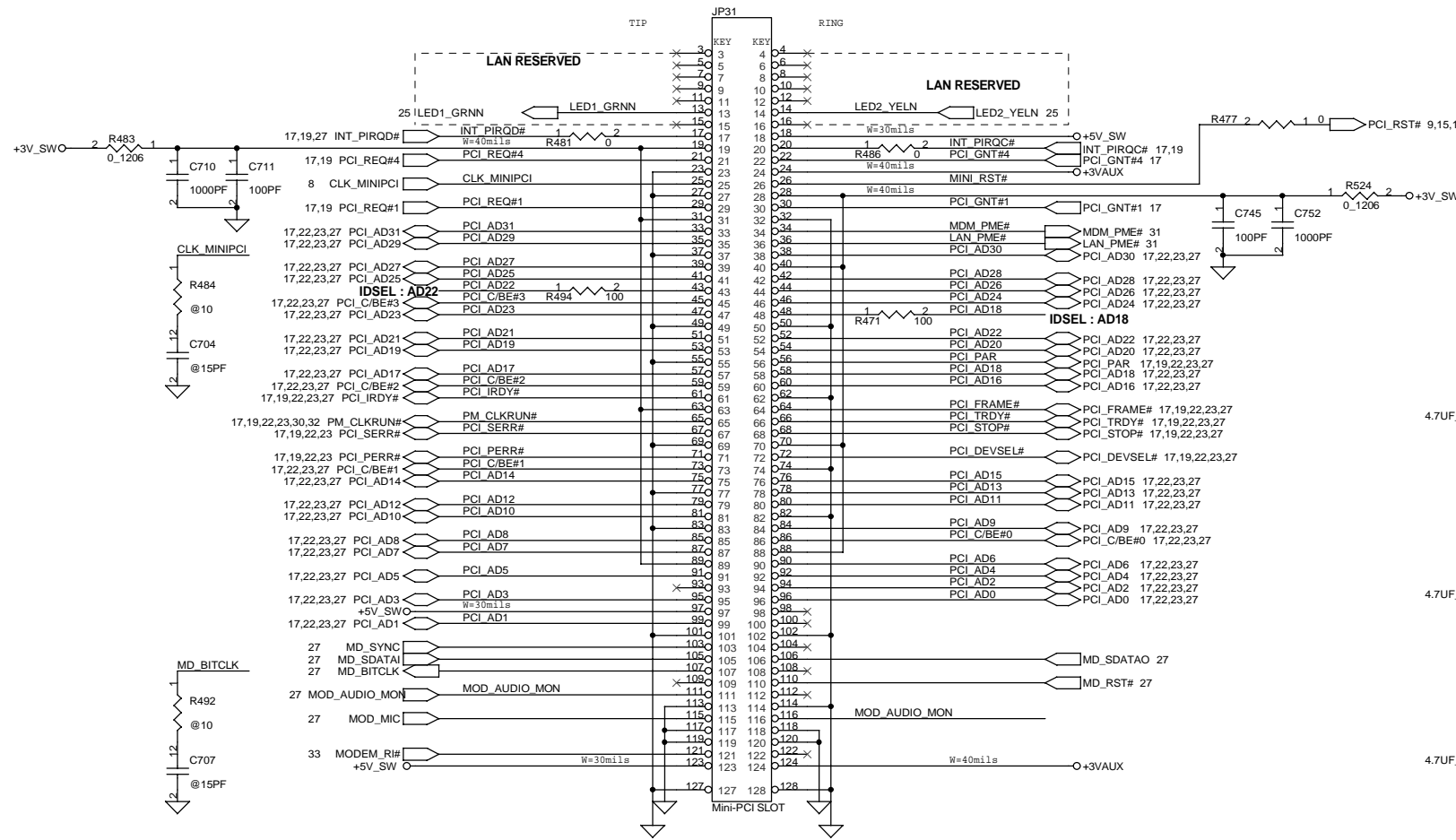


Compal Electronics, inc.

SCHEMATIC, M/B LA-1011

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

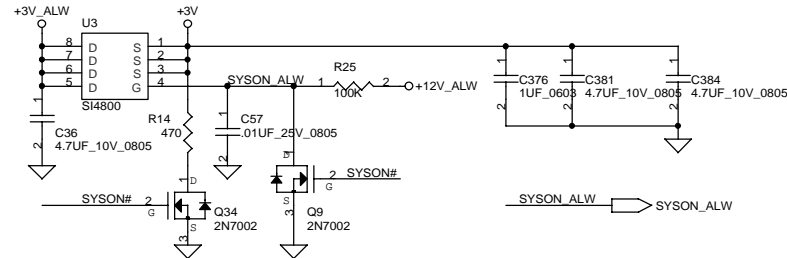
Size	Document Number	Rev
Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 37 of 46



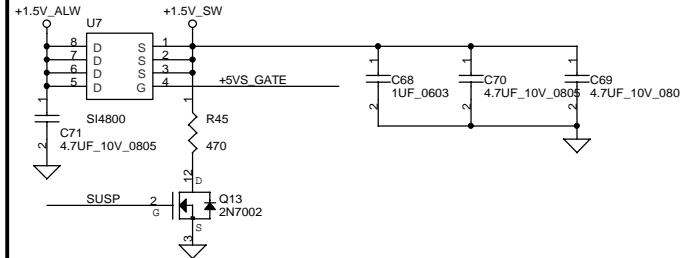
Compal Electronics, inc.		
Title		
SCHEMATIC, M/B LA-1011		
Size	Document Number	Rev
Custom	401174	1A
Date:	Friday, September 21, 2001	Sheet 38 of 46

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

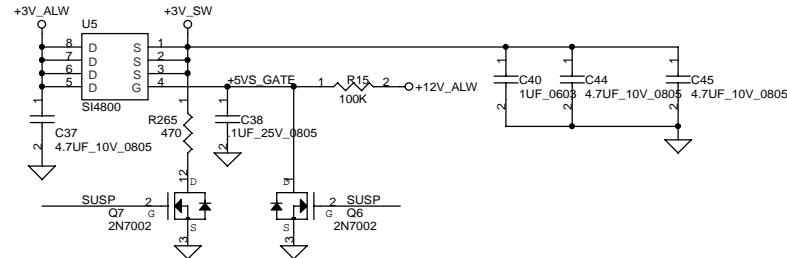
+3V_ALW TO +3V Transfer



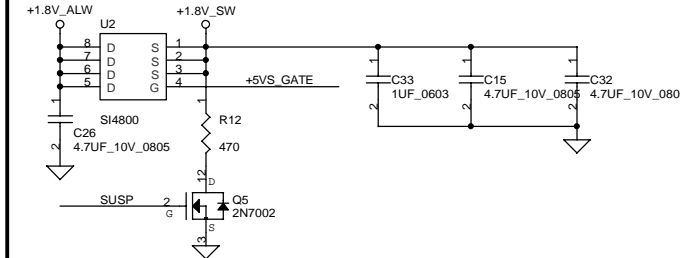
+1.5V TO +1.5V_SW Transfer



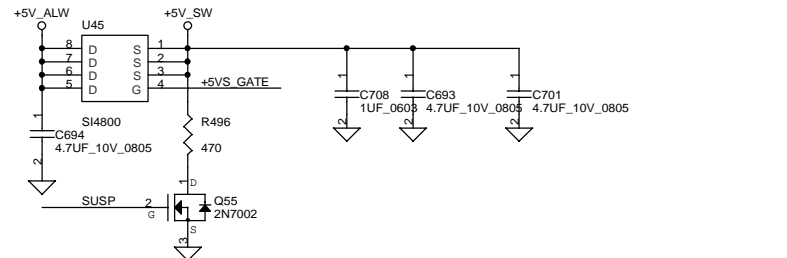
+3V_ALW TO +3V_SW Transfer



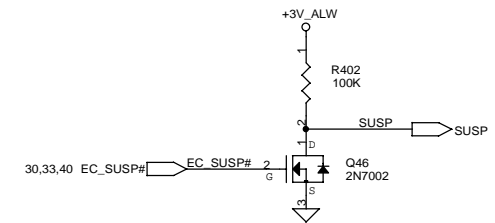
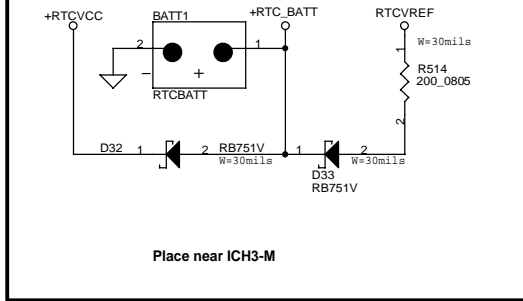
+1.8V_ALW TO +1.8V_SW Transfer



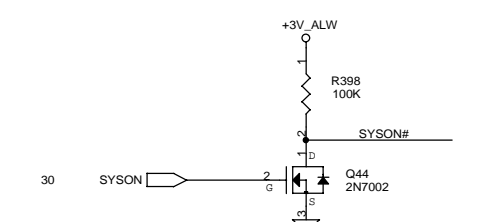
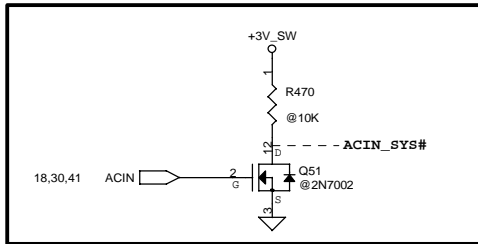
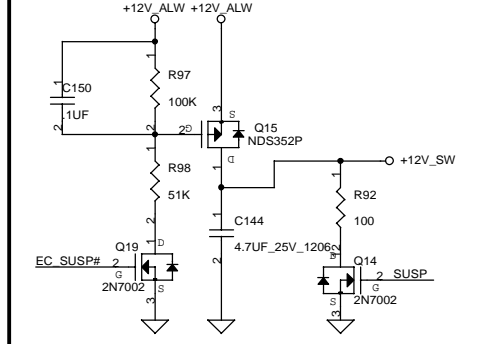
+5V_ALW TO +5V_SW Transfer



RTC Batt. Connector

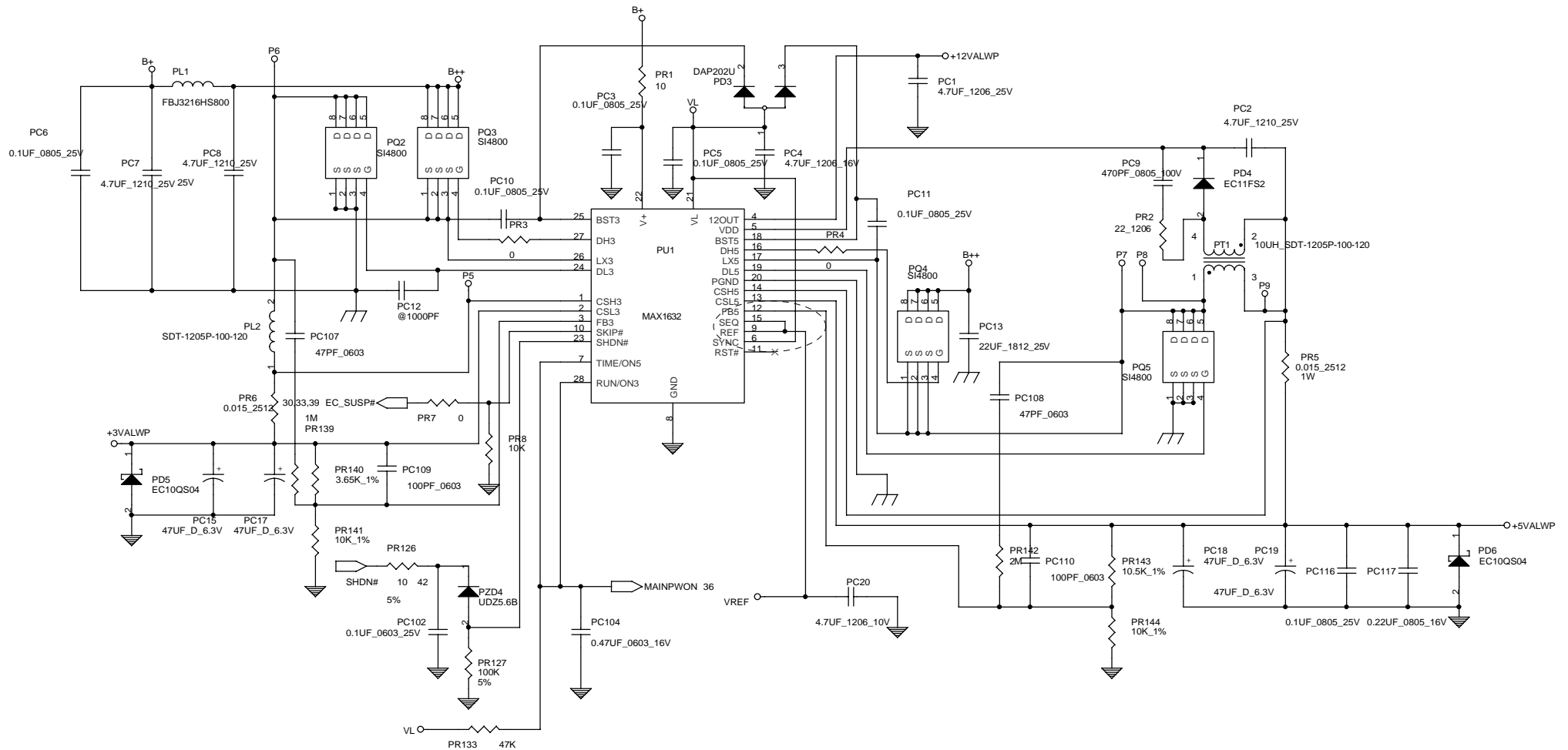


+12V_ALW TO +12V_SW Transfer



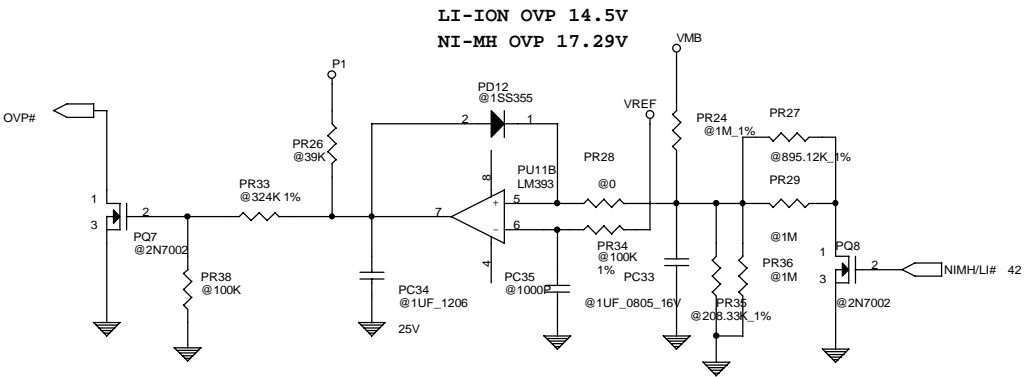
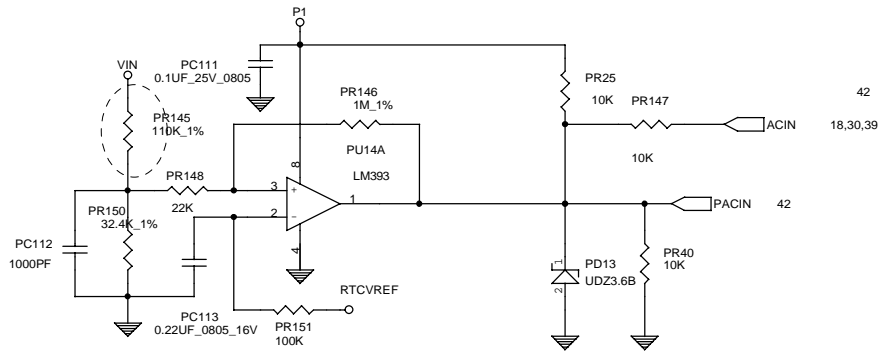
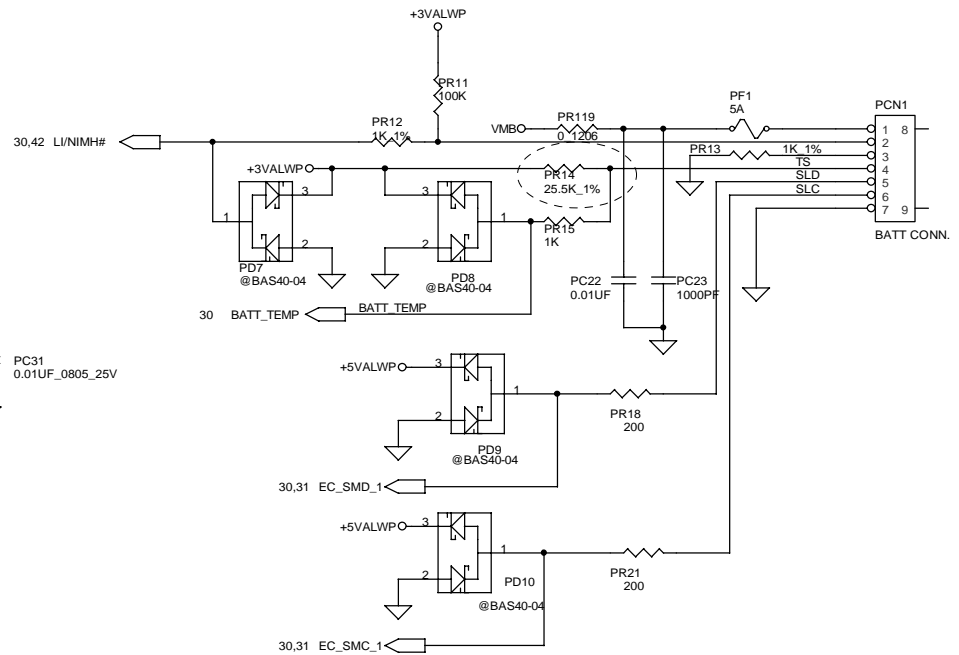
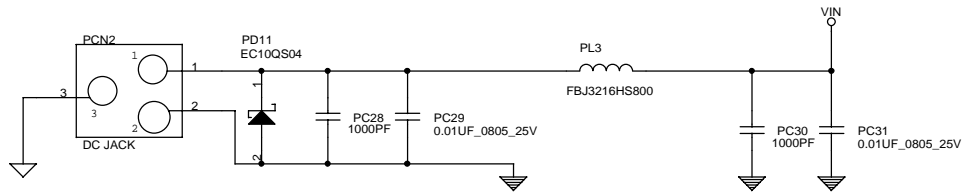
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION 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-1011		
Size Custom	Document Number 401174	Rev 1A
Date:	Friday, September 21, 2001	Sheet 39 of 46



Compal Electronics, inc.		
Title		
SCHEMATIC, M/B LA-1011		
Size	Document Number	Rev
Custom	401174	1A
Date:	Monday, September 24, 2001	Sheet 40 of 46

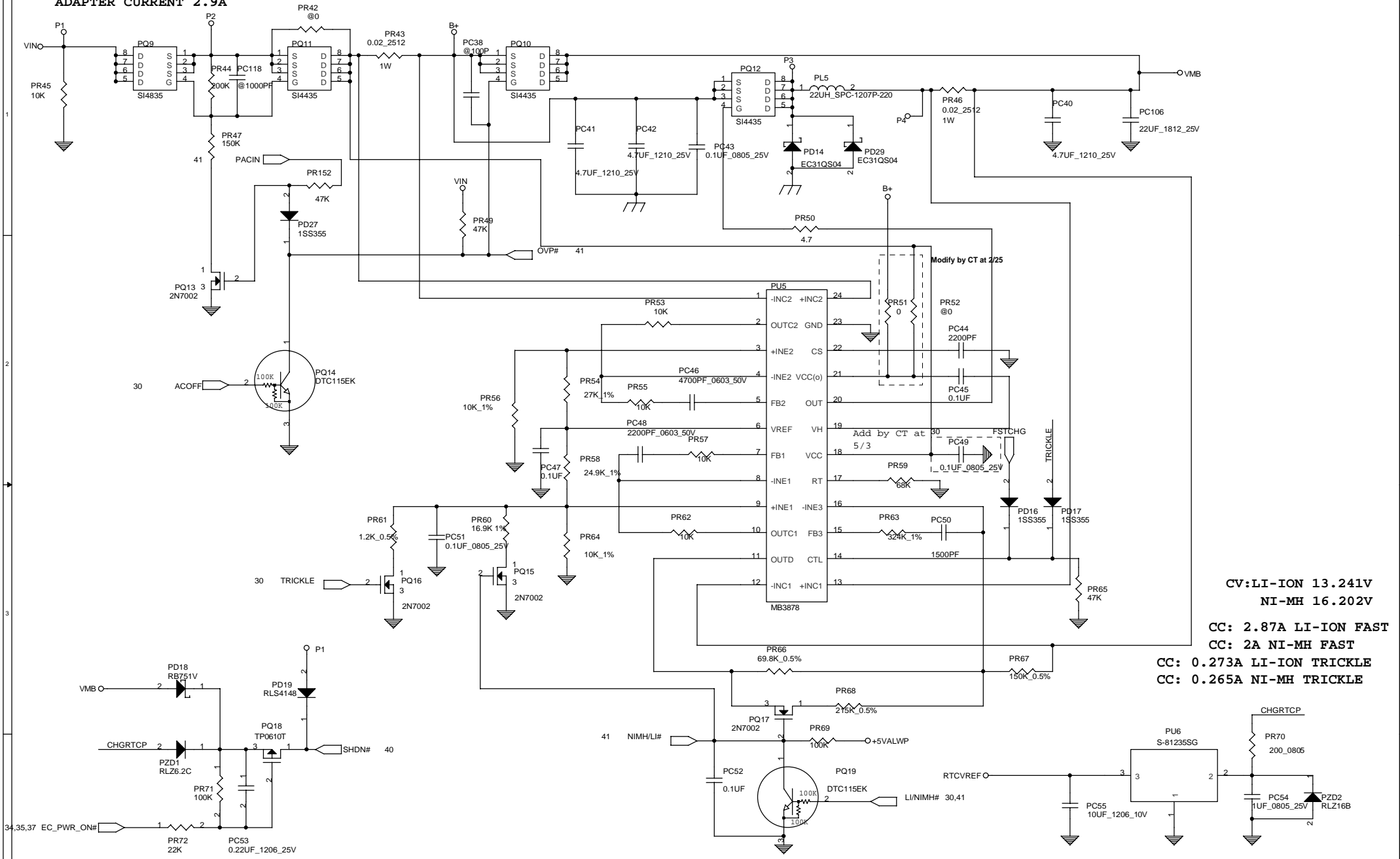
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION 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 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-1011	
Size	Document Number	Rev
Custom	401174	1A
Date:	Monday, September 24, 2001	Sheet 41 of 46

ADAPTER CURRENT 2.9A



CV: LI-ION 13.241V
NI-MH 16.202V

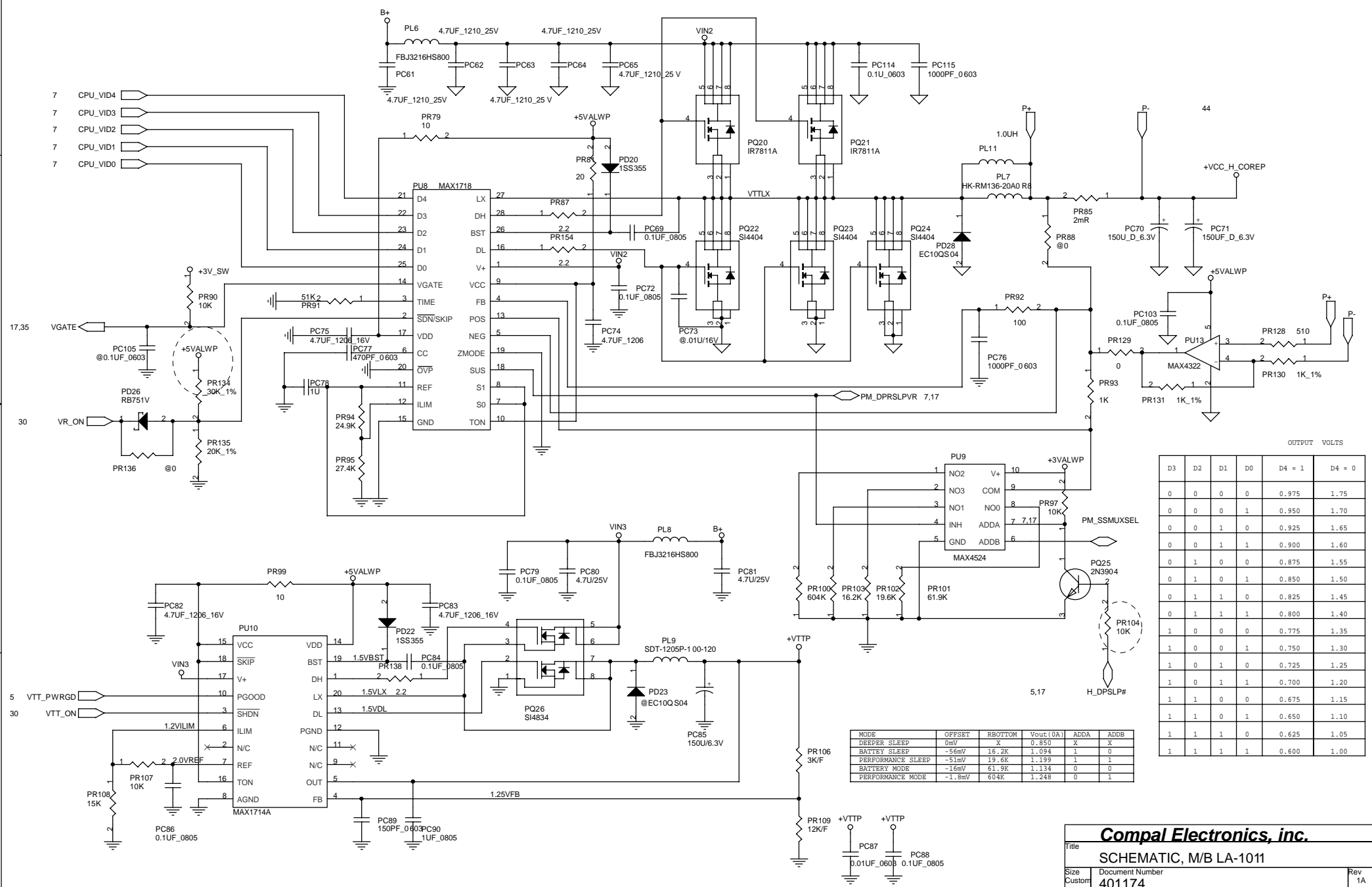
CC: 2.87A LI-ION FAST
CC: 2A NI-MH FAST
CC: 0.273A LI-ION TRICKLE
CC: 0.265A NI-MH TRICKLE

Compal Electronics, inc.

Schematic, M/B LA-1011

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

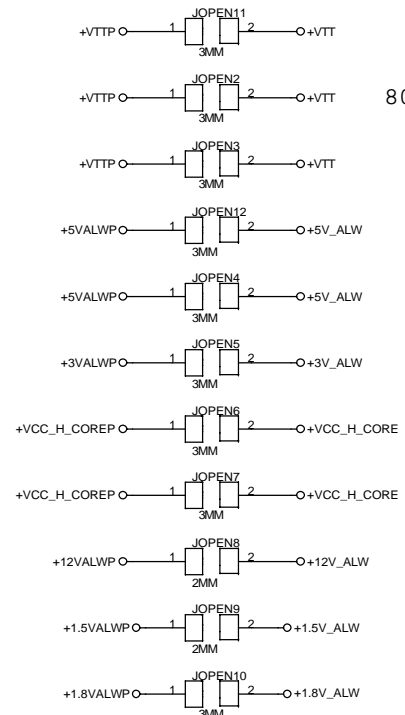
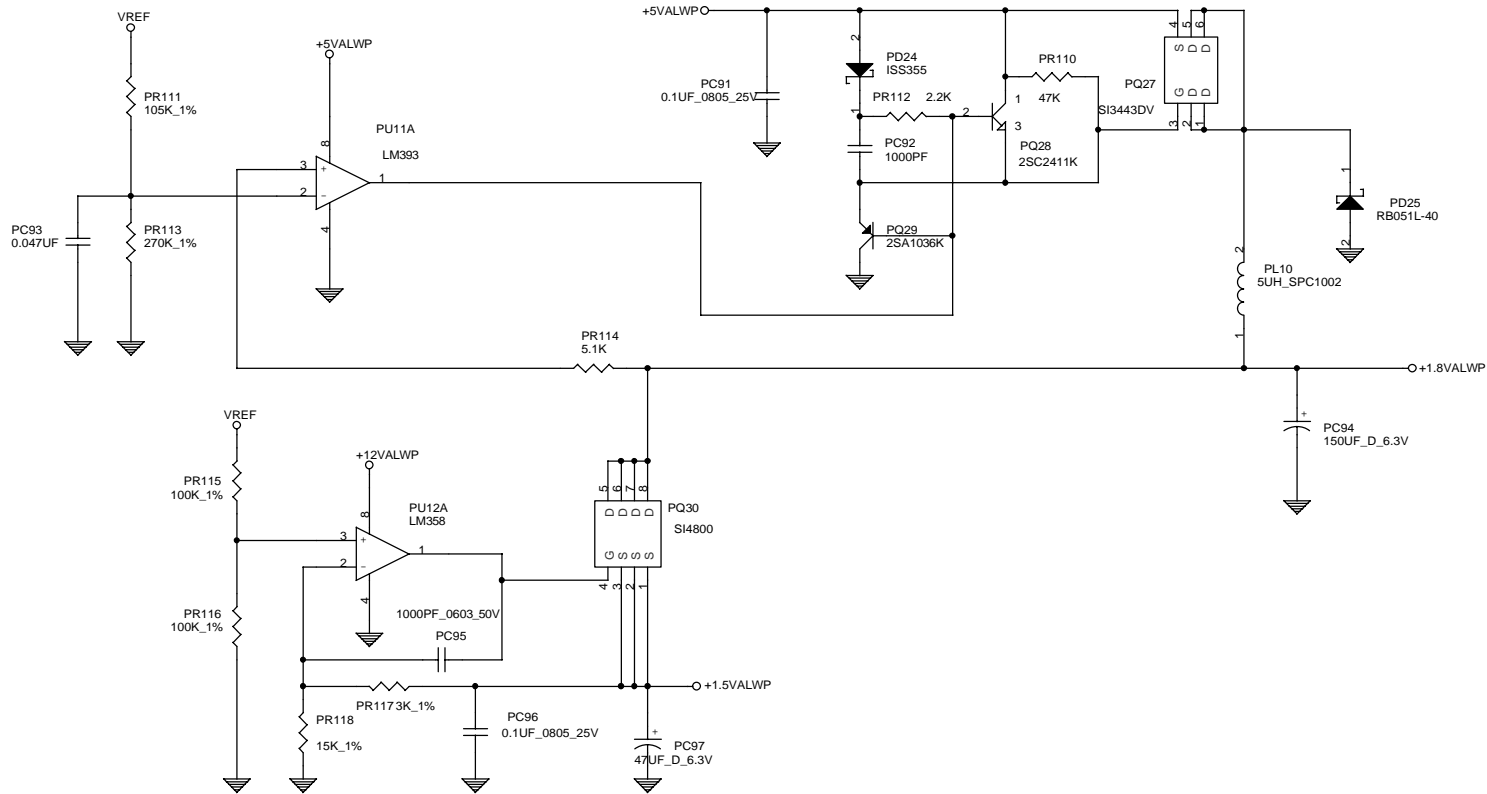
Size	Document Number	Rev
Custom	401174	1A
Date:	Monday, September 24, 2001	Sheet 42 of 46



OUTPUT VOLTS

D3	D2	D1	D0	D4 = 1	D4 = 0
0	0	0	0	0.975	1.75
0	0	0	1	0.950	1.70
0	0	1	0	0.925	1.65
0	0	1	1	0.900	1.60
0	1	0	0	0.875	1.55
0	1	0	1	0.850	1.50
0	1	1	0	0.825	1.45
0	1	1	1	0.800	1.40
1	0	0	0	0.775	1.35
1	0	0	1	0.750	1.30
1	0	1	0	0.725	1.25
1	0	1	1	0.700	1.20
1	1	0	0	0.675	1.15
1	1	0	1	0.650	1.10
1	1	1	0	0.625	1.05
1	1	1	1	0.600	1.00

MODE	OFFSET	RBOTTOM	Vout (OA)	ADDA	ADDB
DEEPER SLEEP	0mV	X	0.850	X	X
BATTERY SLEEP	-56mV	16.2K	1.094	1	0
PERFORMANCE SLEEP	-51mV	19.6K	1.199	1	1
BATTERY MODE	-16mV	61.9K	1.134	0	0
PERFORMANCE MODE	-1.8mV	604K	1.248	0	1



80mil

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 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-1011	
Size	Document Number	Rev
Custom	401174	1A
Date:	Monday, September 24, 2001	Sheet 44 of 46

Power PIR

Item	Fixed Issue	Reason for change	Page	Modify item	MB_Ver.	Phase
1		System shutdown	41	Add PR126,PC102,PZD4,PR127	0.2	EVT
2		Modify OTP function	41	Add PR132,PR133,PC104	0.2	EVT
3		Improve cpucore thermal and efficiency	43	Add PR128,PR129,PR130,PR131,PC103,PU13	0.2	EVT
4		Change VTTP OCP protect point	43	1.Change PR107 from 15K to 10K 2.Change PR108 from 10K to 15K	0.2	EVT
5		Eliminate +2.5VP	44	Delete PQ33,PQ34,PR122,PR121,PR123,PR124 PC99,PC98,PC100,PC101,PQ32	0.2	EVT
6		Change VTTP output voltage from 1.2V to 1.35V	43	Change PR106 from 2K to 3.57K	0.2	EVT
7		Change cpucore offset voltage	43	1.Change PR100 from 402K to 604K 2.Change PR101 from 64.5K to 61.9K 3.Change PR103 from 16.9K to 16.2K	0.2	EVT
8		Change cpucore deeper sleep mode output voltage	43	1.Connect S0 to REF 2.Connect S1 to REF	0.2	EVT
9		Avoid Vgate going low when cpu make speedstep transition	43	Add PR134,135,136 &PD26	0.2	EVT
10		EC can't detect the BATT. by PC87591	41	Change TS pin pull high voltage from +5VALWP to +3VALWP	0.3	DVT
11		Improved cpucore efficiency	43	1.Eliminate PR120 2.Change PR85 from 4m to 2m 3.connect Ton pin to VCC	0.3	DVT
12		Change VTTP OCP protection point	43	1.Change PR108 from 15K to 30K	0.3	DVT
13		To avoid mechanical interferenc	42	Add PC106		
14		Change geyserville function from MAX1718 to external	43	1.Delete PR73~76,PC56~60 2.Delete PR80,82,83,84.86 3.Connect PU8.19PIN to GND	0.3	DVT
15		To improve EMI issue	43	1.Add PR87 to PU8.28 PIN in series 2.Add PR138 to PU10.1 PIN in series	0.3	DVT
16		Delete redundant parts.	42 & 43	1. Delete PC39 on page 42. 2. Delete PD21 on page 43.	0.5	DVT

Compal Electronics, inc.

Title		
SCHEMATIC, M/B LA-1011		
Size A	Document Number 401174	Rev 1A
Date:	Friday, September 21, 2001	Sheet 45 of 46

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 CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

N32N101 Rev0.4 HISTORY LIST (PIR)

For C-Test 09/03/2001 Rev:1.0

Date	Page	Description
07/09	P11	SWAP DVOA_I2CCLK & DVOA_I2CDATA R105 REPLACEMENT
		DVOC_FLD CHANGE TO U30.M25
	P15	BOM ADD C560 22PF,C578 12PF BOM DEL R534 75_1%
	P16	R4,R256,R250 150_1% --> 75_1% ADD R135,R142 33
	P21	R243 PULL HIGH TO +3V_SW
	P35	BOM DEL Q39 2N7002
	P27	BOM DEL R570 10K
07/16	P30	Remove CDLED#,HDDLED#
	P37	Add D12 DAN202U
	P26	Add R530,R531 10K
	P31	ADD RP22 8P4R_10K R548 10K
	P16/21	HDDLED# LEVEL SHIFT
07/19	P38	BOM del R478, add R477 0 CONNECT JP31 Pin111 TO Pin116
	P27	C507,C508 1UF_0603
	P28	BOM DEL U61,ADD U62 SI9183DT-33
	P30	BOM DEL R458 10K
	P19	ADD R549 0,U63 7SH08
	P31	U51.2 EC_GRST#
07/23	P16	ADD D47 RB491 ADD Q61,Q61 2N7002
	P31	ADD R532 10K
07/25	P5	R37,R273 10K -> 100K
	P8	R365,R231,R229 10K -> 100K
	P11	R363,R369 4.7K -> 100K RP36 8P4R_4.7K -> 8P4R_100K
	P14	R194 10K -> 100K
	P15	RP15 8P4R_4.7K -> 8P4R_100K R337 10K -> 100K
	P17	RP18 8P4R_10K -> 8P4R_100K
	P18	RP19 8P4R_10K -> 8P4R_100K
	P19	R461,R466,R550 10K -> 100K R558,R559 4.7K -> 100K
	P21	R242 10K -> 100K
	P22	R130,R116,R136,R197,R198 4.7K -> 100K
	P24	R561,R562 10K -> 100K
	P25	R347 10K -> 100K
	P26	R462,R463,R480,R530,R531 10K -> 100K
		RP29 8P4R_10K -> 8P4R_100K RP27 10P8R_10K -> 10P8R_100K
	P27	R115 10K -> 100K
	P28	U35 74LVC125 -> 74AHCTG125GW R439 4.7K -> 100K
		R440 20K -> 100K Add U66 NC7ST32
	P30	R467,R541 10K -> 100K R449,R506,R505 1K -> 10K
	P31	RP22,RP34 8P4R_10K -> 8P4R_100K R548,R532 10K -> 100K
	P32	RP24 8P4R_10K -> 8P4R_100K R469,R479 10K -> 100K
	P35	R111 10K -> 100K
	P36	R276,R510 10K -> 100K
	P37	Add PAD4,5,6,7
	P39	R402,R398 10K -> 100K
07/27	P27/30	Add MIC_GAINLOW# IN U15.49 & U46.119
07/31	P27	R139,R143 33K->6.8K R129,R141 20K->6.8K
	P26	ADD R575,R576 10K C771,C772 10UF
08/01	P26	ADD C773, C774 1uF/25V

Date	Page	Description
08/03	P28	Remove U66, connect "EC_MUTE" to R439.1
	P37	Add D48, connect D48.3 to JP9.31, D48.1 to "LID_SW#", D48.2 to "INTMICOFF#"
08/16	P28	Add C775 parallel with pin R208.1 and GND, add a 2.2K ohm bias resistor R590 by +3V_MIC on pin JP26.3 and change R217 value from 2.2K ohm to 1K ohm.
09/03	P27	Change SI9181(U12 & U59) from fixed to adjustable version. Add 30Kohm resistor R592(R594) and 10Kohm resistor R593(R595) to make output voltage at 4.8V.
	P28	Add a 39Kohm serial resistor R596 and change R94 value from 100Kohm to 470Kohm to solve pop sound when Int-MIC mute.
	P34	Change D48 from one DAN202U to two RB751Vs.
	P7	Change R68 from 1Kohm_1% to 499ohm_1% and R65 from 2Kohm_1% to 1Kohm_1% by Intel recommended.
09/05	P27	Change C167, C299 value from .01uF to .1uF.

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-1011	
Size	Document Number	Rev
	401174	1A
Date:	Friday, September 21, 2001	Sheet 46 of 46