

Product System (PS)

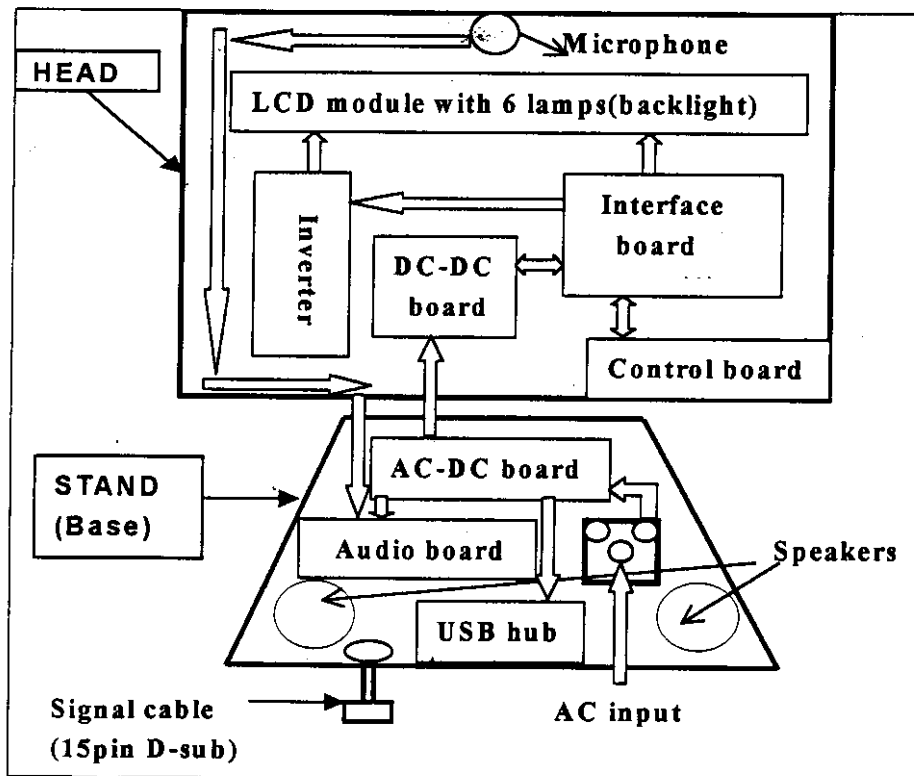
Subject: Circuit Operating Theory	Part No.:	Rev.: 0
Project Code: 99.L0872.001	Doc. No. 318-C01	Page 1 of 11
Model Name: FP855	Effective date:	

III. Introduction:

The FP855 is an 18.1" SXGA(1280x1024) 24 bits color TFT LCD monitor with multi-media function and an optional USB hub. It's an analog interface LCD monitor with an undetachable 15 pins D-sub signal cable and it's compliant with VESA specification to offer a smart power management and power saving function. It also offers OSD menu for users to control the adjustable items and get some information about this monitor, and the best function is to offer users an easy method to set all adjustable items well just by pressing one key, we called it "i-key"(intelligent key) which can auto adjusting all controlled items.

II. Block diagram

The FP855 consists of a head and a stand(base). The head consists of a LCD module with 6 lamps, an Inverter, an Interface board, a DC-DC board, a Control board and a microphone. The stand consists of an AC-DC board, an Audio board, two speakers and an optional USB hub. The block diagram is shown as below,



Product System (PS)

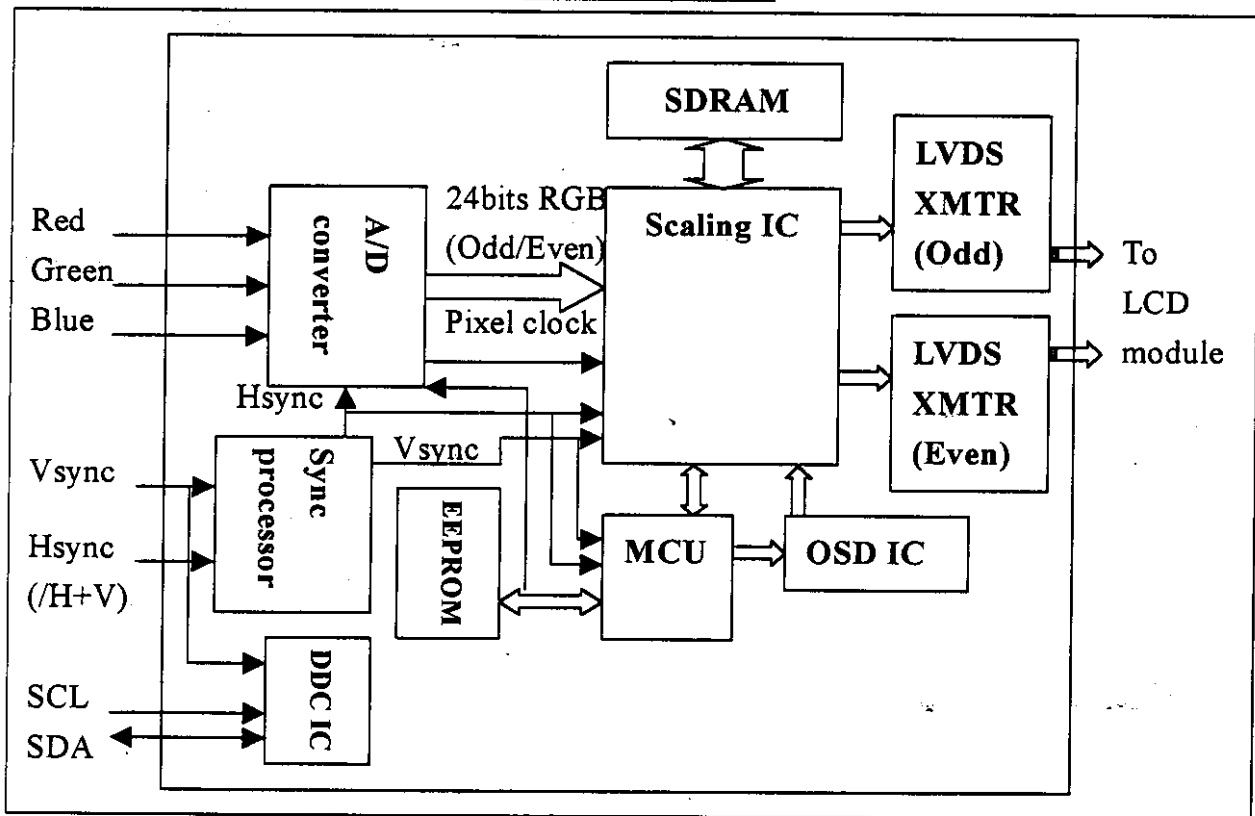
Subject: Circuit Operating Theory	Part No.: 318-C01	Rev.: 0
Project Code: 99.L0872.001	Doc. No. 318-C01	Effective date
Model Name: FP855		Page 2 of 11

III. Circuit operation theory:

A.) HEAD:

A-1.) Interface board diagram:

Interface Board

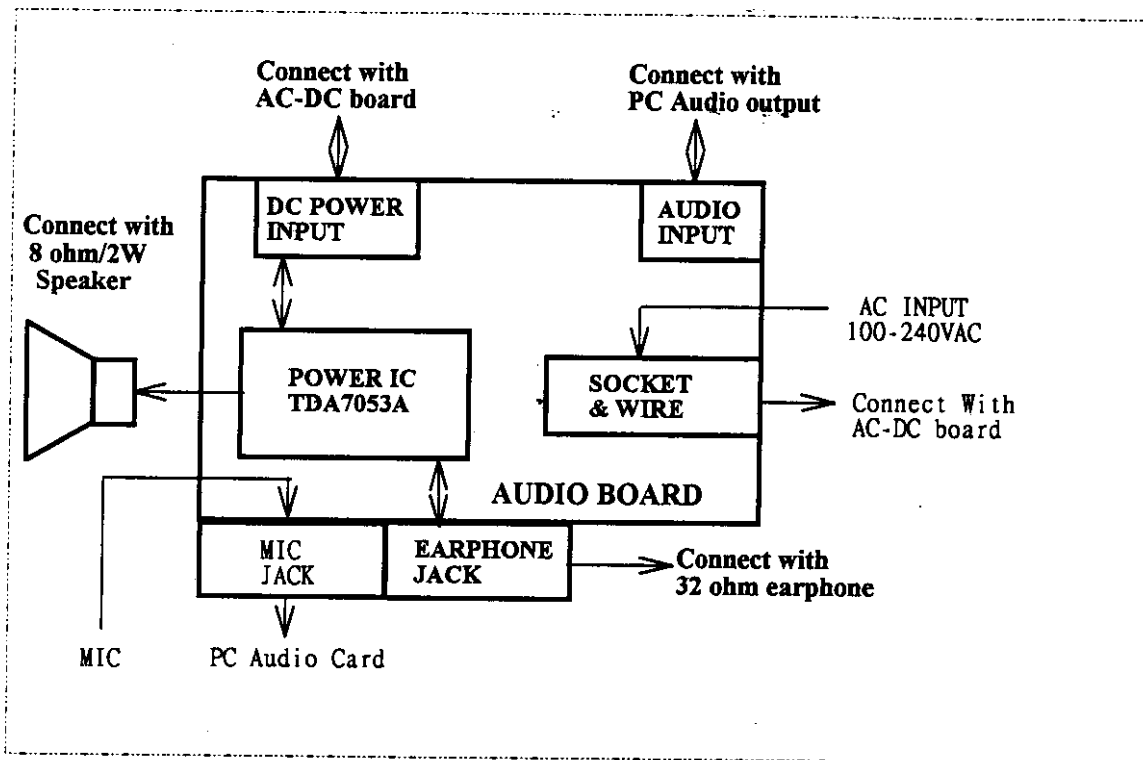


(a) Circuit operation theory:

A basic operation theory for this interface board is to convert analog signals of Red, Green and Blue to digital signals of Red, Green and Blue, and by the internal PLL circuit of A/D converter to generate the pixel clock to output to the scaling IC, then the scaling IC use the SDRAM to be the frame buffer to process the different input signals which are operating in the specification of the A/D converter and the scaling IC, finally the scaling IC output the digital RGB data, the fixed frequency of Hsync, Vsync and pixel clock to LCD panel driver IC by LVDS transmission.

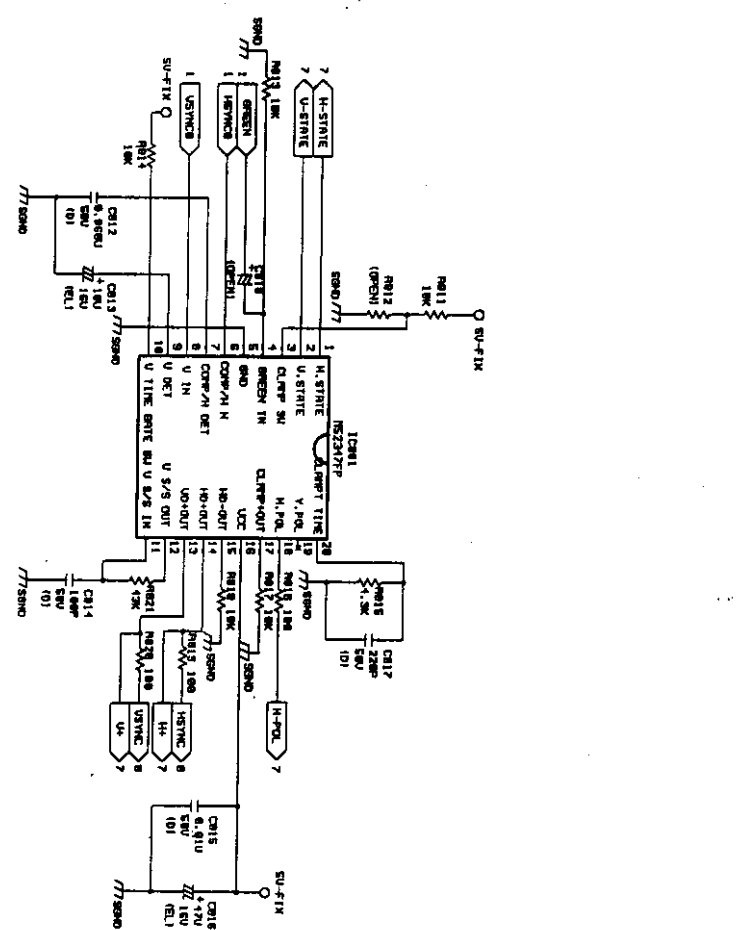
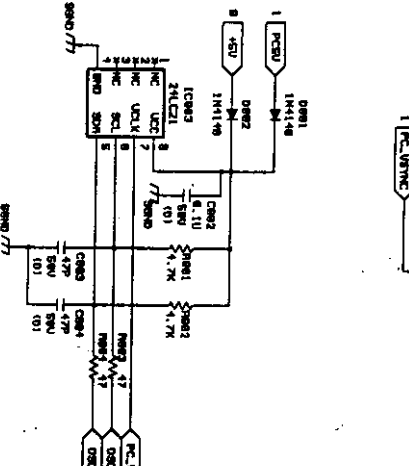
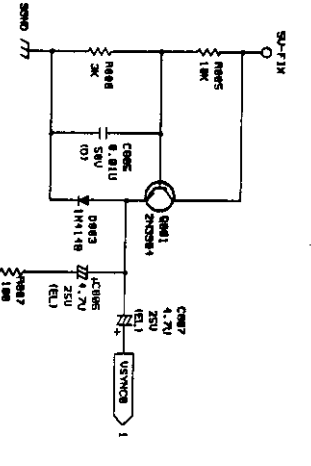
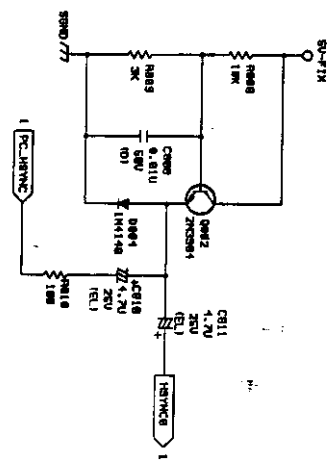
☐ Product System (PS)

Subject: Circuit Operating Theory	Part No.:	Rev.: 0
	Doc. No. 318-C01	
Project Code: 99.L0872.001	Effective date	Page 8 of 11
Model Name: FP855		



The Audio Speaker is consist of a Audio board. The Audio Speaker have DC Volumn control, Earphone jack , use 28mmX40mm Speaker (2W/per chennal), power supply from AC-DC board and Audio input from PC Audio output (Line Out) .

- (a) **Power IC:** Use Philips POWER IC TDA7053A. The IC are stereo BTL output amplifiers with DC Volume control. The devices are designed for use in TV and monitor, but are also suitable for battery-Fed portable recorders and radios. Use +12V from AC-DC Board and connect speaker to offer 1W per chennal.
- (b) **DC Power Input:** To supply +12V to be VCC source Voltage for TDA7053A and connected with AC-DC board.
- (c) **Audio Input:** connect with PC Audio output in 3.5mm to 3.5mm signal line.
- (d) **Speaker:** Use 8 ohm and 28mmX40mm speaker (1W/per chennal)
- (e) **DC Volumn Control:** The two DC volume control stages are integrated into the input stages so that no Coupling capacitors are required and a low offset voltage is still maintained. The minimum supply voltage also remains low. If the DC volume control voltage falls below 0.4V, the device will switch to the mute mode.
- (H) **Earphone jack:** To connect 32 ohm earphone.



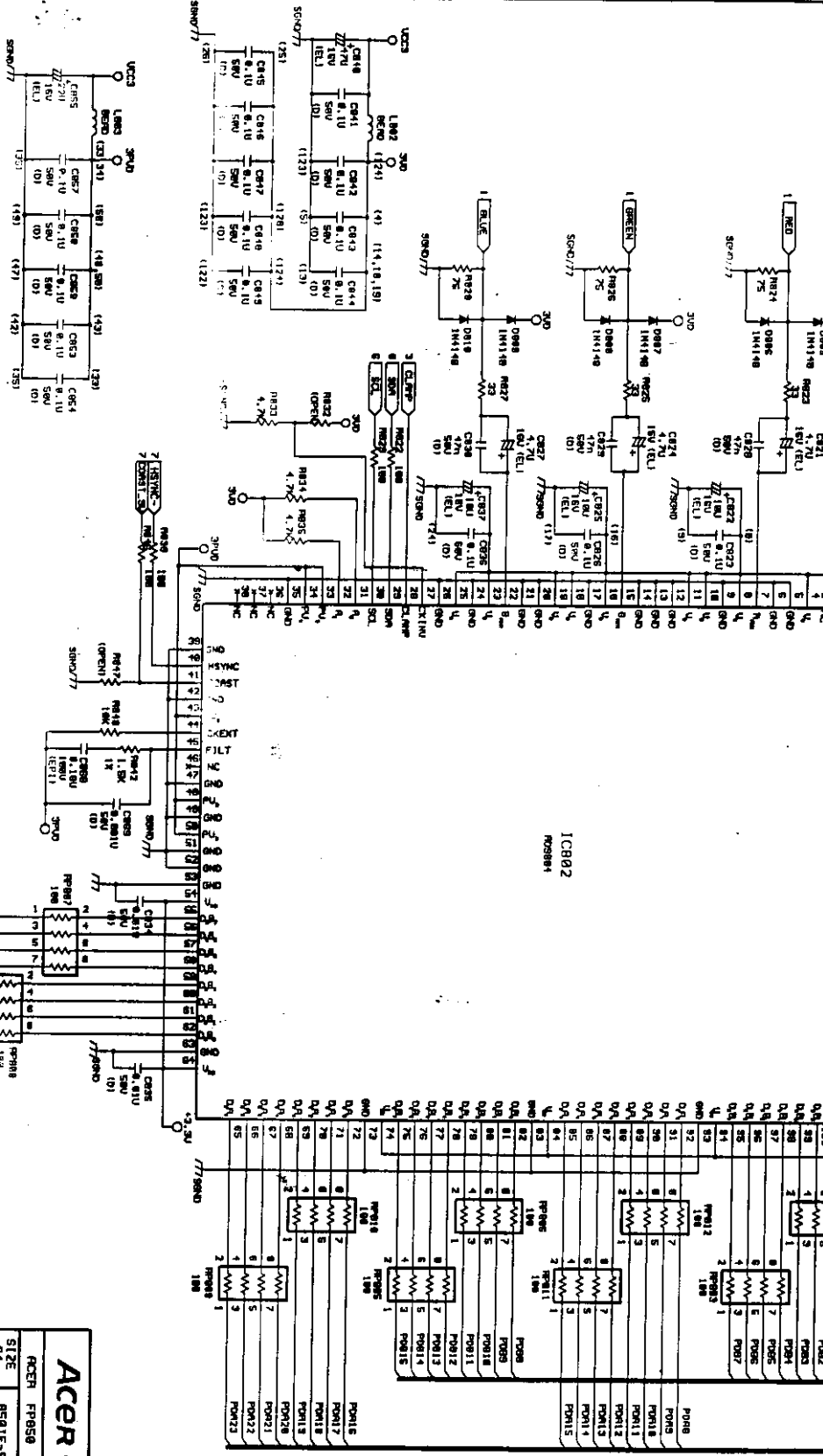
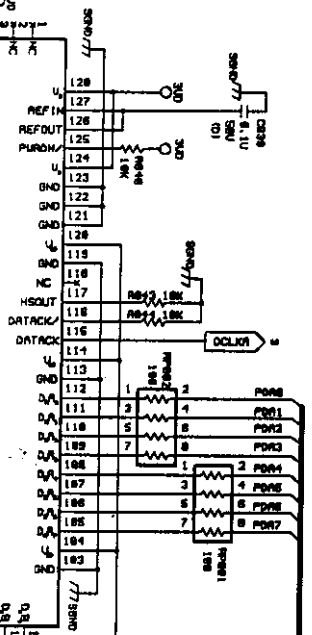
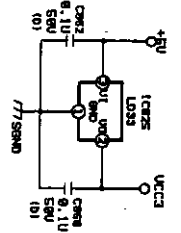
FP885



ACER 宏碁電腦股份有限公司
Acer Peripherals, Inc.

RCER FP888 (INPUT, CKT 1) SCHEMATIC			
SIZE	8501F-SS-SCH	FRB	Doc.No. REV.
R#	SS	284-C&L	8
DATE :	6/15/1999	Sheet	1 OF 9
Project Code:	91.76662.061		
Prepared By	GRIS PENG	Reviewed By	ELLY HUNG
	6/15 '99		6/18 '99

NOTES: 1. Resistor values are in ohm, K=1,000 ohm, M=1,000,000 ohm
2. All resistors are 1/8 watt, 5% except where otherwise indicated
3. ∇ Represents PCB common ground.

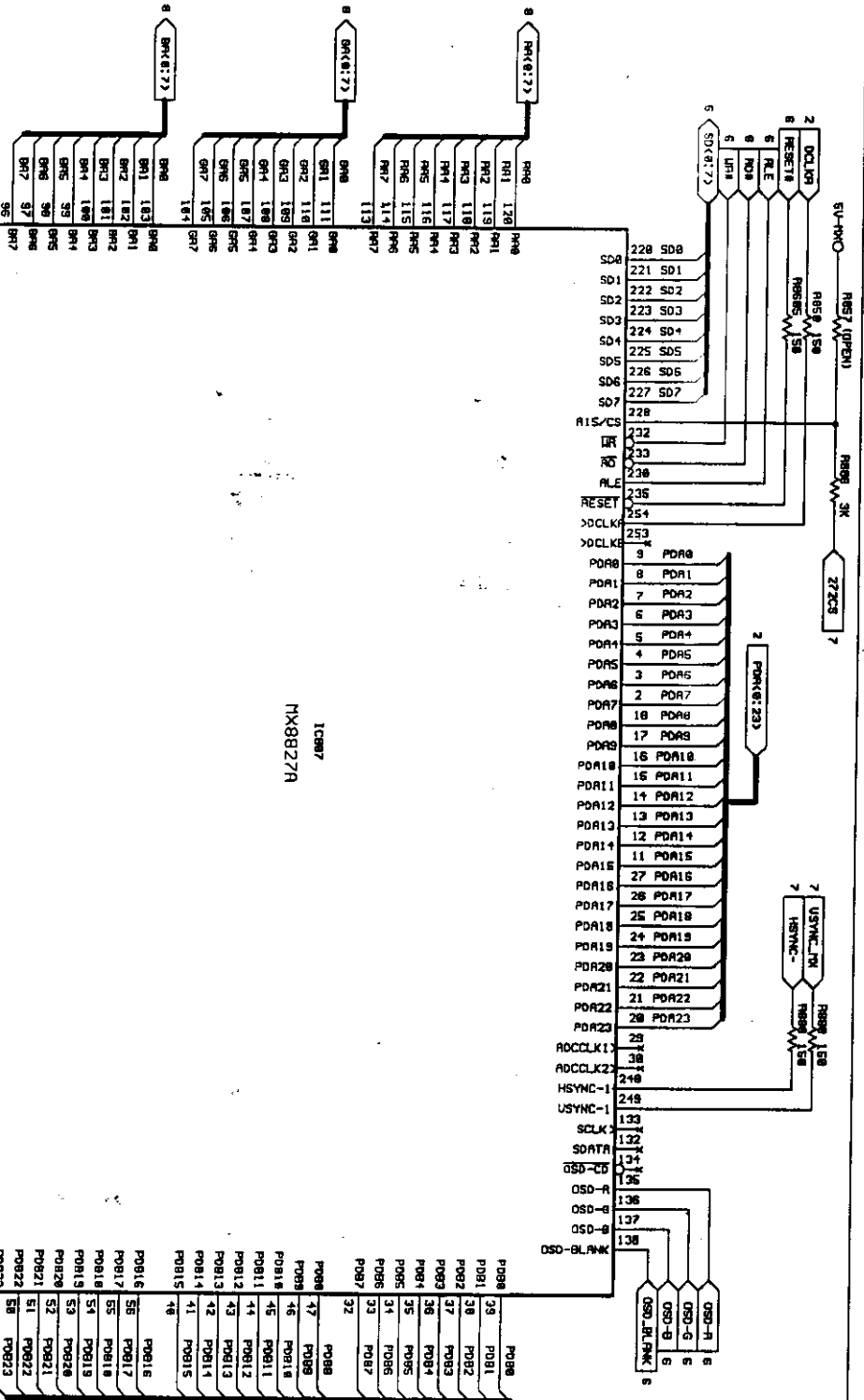


NOTE: Resistor values are in ohm, K=1,000 ohm, M=1,000,000 ohm
 2. All resistors are 1/8 watt, 5% except where otherwise indicated
 3. //7 represents PCB common ground.



宏碁電腦股份有限公司
 Acer Peripherals, Inc.

ACER FR858 (R03884.DKT) SCHEMATICS	Doc. No.	FR8
SIZE R4	8501-SS-SCH	284-C01
DATE: 6/15/1989	Sheet	2 OF 9
Project Code: 51.28982.001	Prepared By	DAIS RWB
	Reviewed By	ELLY HUNN
	Approved By	RCS WU
		6/15 '89



88	RB0	88	088
89	RB1	89	089
90	RB2	90	090
91	RB3	91	091
92	RB4	92	092
93	RB5	93	093
94	RB6	94	094
95	RB7	95	095
96	RB8	96	096
97	RB9	97	097
98	RB10	98	098
99	RB11	99	099
100	RB12	100	100
101	RB13	101	101
102	RB14	102	102
103	RB15	103	103
104	RB16	104	104
105	RB17	105	105
106	RB18	106	106
107	RB19	107	107
108	RB20	108	108
109	RB21	109	109
110	RB22	110	110
111	RB23	111	111
112	RB24	112	112
113	RB25	113	113
114	RB26	114	114
115	RB27	115	115
116	RB28	116	116
117	RB29	117	117
118	RB30	118	118
119	RB31	119	119
120	RB32	120	120
121	RB33	121	121
122	RB34	122	122
123	RB35	123	123
124	RB36	124	124
125	RB37	125	125
126	RB38	126	126
127	RB39	127	127
128	RB40	128	128
129	RB41	129	129
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131	RB43	131	131
132	RB44	132	132
133	RB45	133	133
134	RB46	134	134
135	RB47	135	135
136	RB48	136	136
137	RB49	137	137
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184	RB96	184	184
185	RB97	185	185
186	RB98	186	186
187	RB99	187	187
188	RB100	188	188
189	RB101	189	189
190	RB102	190	190
191	RB103	191	191
192	RB104	192	192
193	RB105	193	193
194	RB106	194	194
195	RB107	195	195
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198	RB110	198	198
199	RB111	199	199
200	RB112	200	200

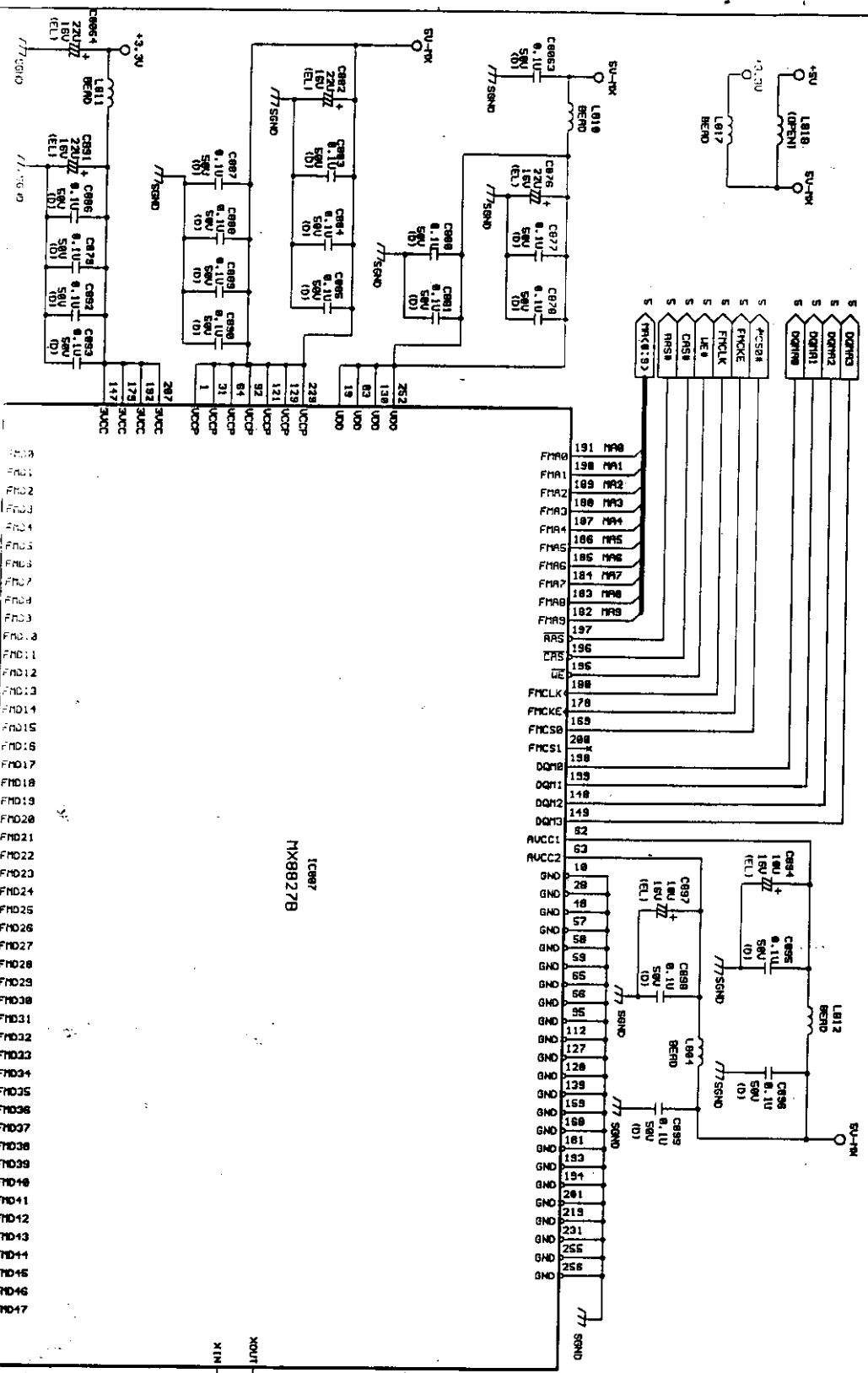
RB02	RB03	FUNCTION
OPEN	OPEN	Direct mode
4.7K	OPEN	Reserved
4.7K	OPEN	Indirect mode
4.7K	4.7K	Set I/O Bus

ACER 明基電腦股份有限公司
Acer Peripherals, Inc.

RCER FP856 (09L282-1.CKT) SCHEMATIC
 SIZE: 8501F-S5.SCH
 DATE: 6/15/1999
 Project Code: 91.706102.001

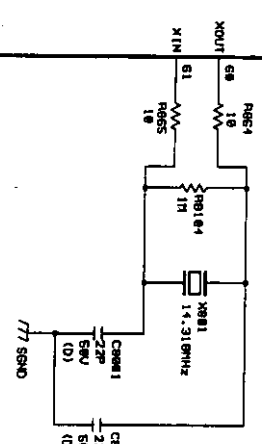
Prepared By	CHRIS PENG	Reviewed By	ELEVEN KANG	Approved By	REX HU
Date	6/15/99	Date	6/15/99	Date	6/15/99

NOTICE: Resistor values are in Ω , k, M, or ∞ if not followed by 000 ohm
 2. All resistors are 1/8 watt, 5% except where otherwise indicated
 3. ∞ represents PCB common ground.



MD0	210	FMD0
MD1	211	FMD1
MD2	216	FMD2
MD3	217	FMD3
MD4	211	FMD4
MD5	212	FMD5
MD6	211	FMD6
MD7	211	FMD7
MD8	211	FMD8
MD9	201	FMD9
MD10	201	FMD10
MD11	201	FMD11
MD12	205	FMD12
MD13	204	FMD13
MD14	201	FMD14
MD15	202	FMD15
MD16	177	FMD16
MD17	176	FMD17
MD18	175	FMD18
MD19	174	FMD19
MD20	173	FMD20
MD21	172	FMD21
MD22	171	FMD22
MD23	170	FMD23
MD24	167	FMD24
MD25	166	FMD25
MD26	165	FMD26
MD27	164	FMD27
MD28	163	FMD28
MD29	162	FMD29
MD30	161	FMD30
MD31	160	FMD31
MD32	158	FMD32
MD33	167	FMD33
MD34	158	FMD34
MD35	166	FMD35
MD36	164	FMD36
MD37	163	FMD37
MD38	162	FMD38
MD39	161	FMD39
MD40	160	FMD40
MD41	146	FMD41
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MD45	142	FMD45
MD46	141	FMD46
MD47	140	FMD47

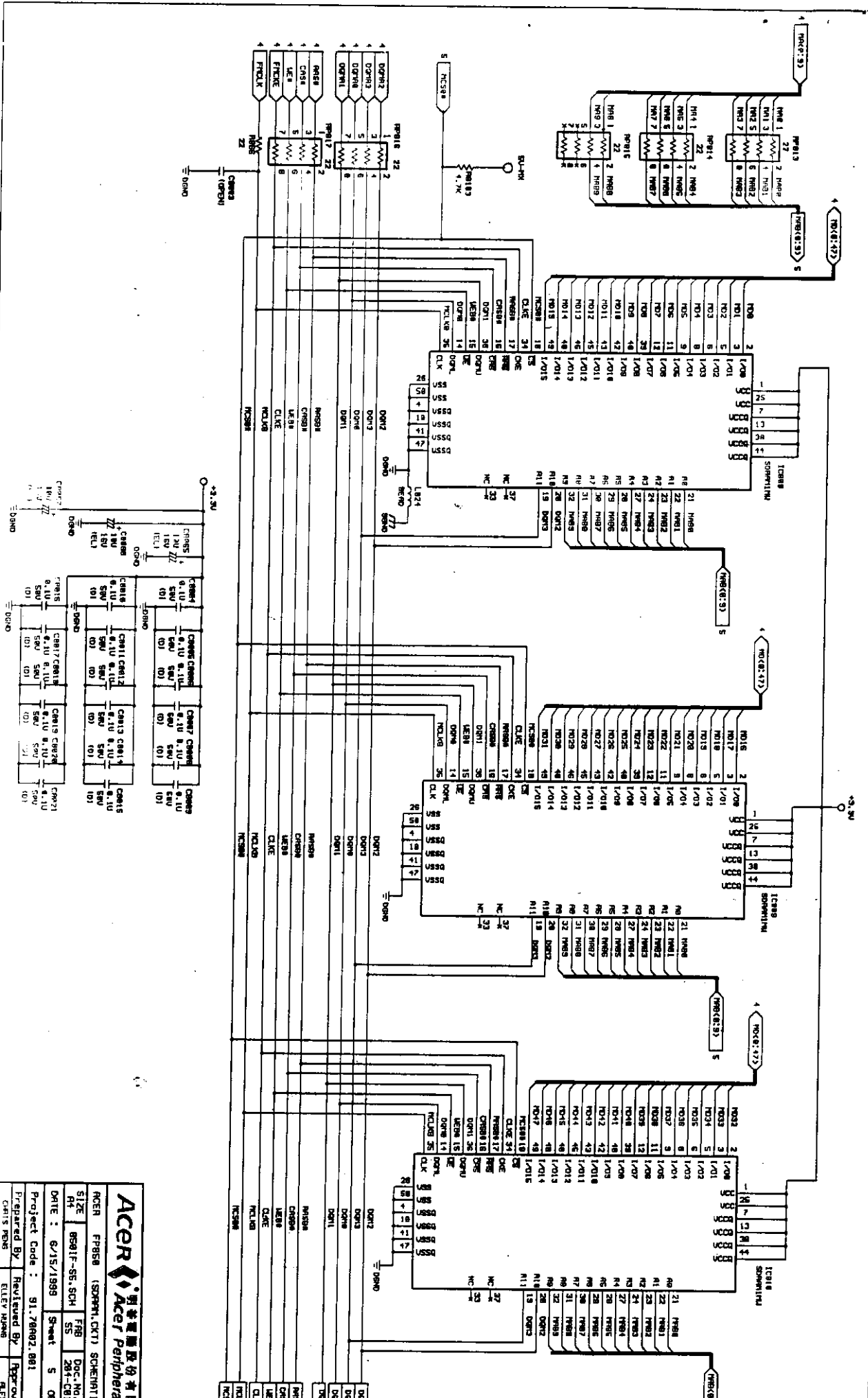
IC887
MX8827B



NOTES: Resistor values are in Ohm, K=1,000 Ohm, M=1,000,000 Ohm
 2. All resistors are 1/8 watt, 5% except where otherwise indicated
 3. ∇ represents PCB common ground.

ACER 明基電腦股份有限公司
Acer Peripherals, Inc.

PCER	FP858 (88L282-2.CKT) SCHEMATIC		
SIZE	FAB	Doc No.	1
RT	8501F-S5.SCH	SS	204-C01
DATE	8/15/1999	Sheet	4 OF
Project Code	91.79602.001	Prepared By	CHEN JH
Reviewed By	ELIY WANG	Approved	8/15 '99

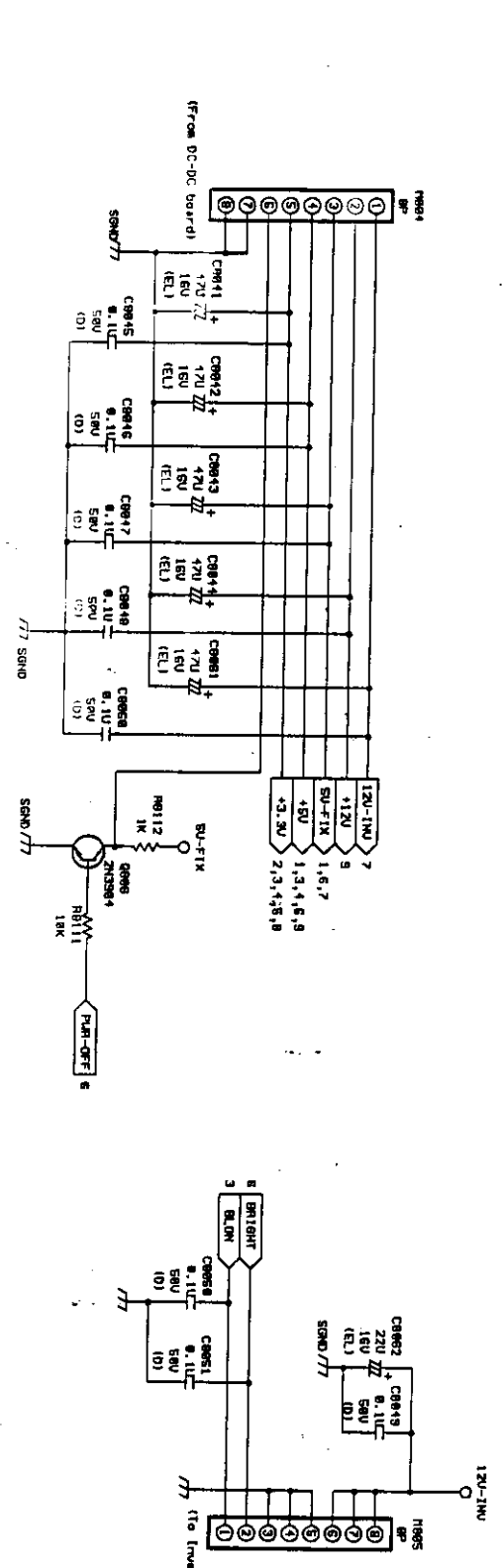
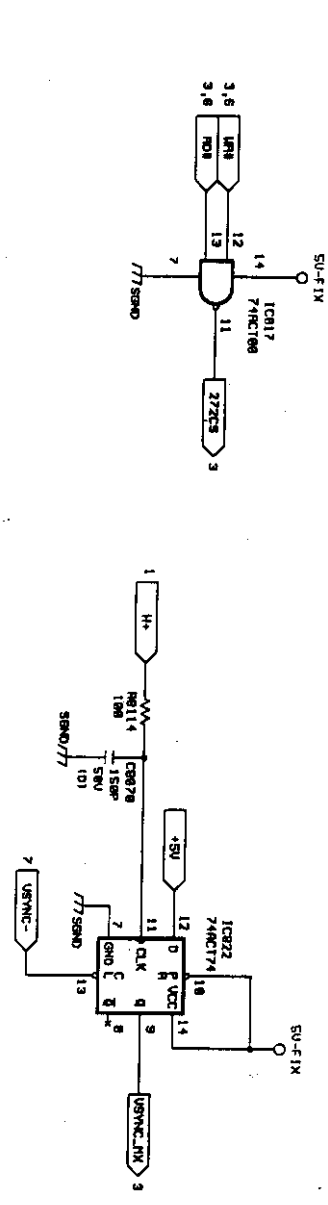
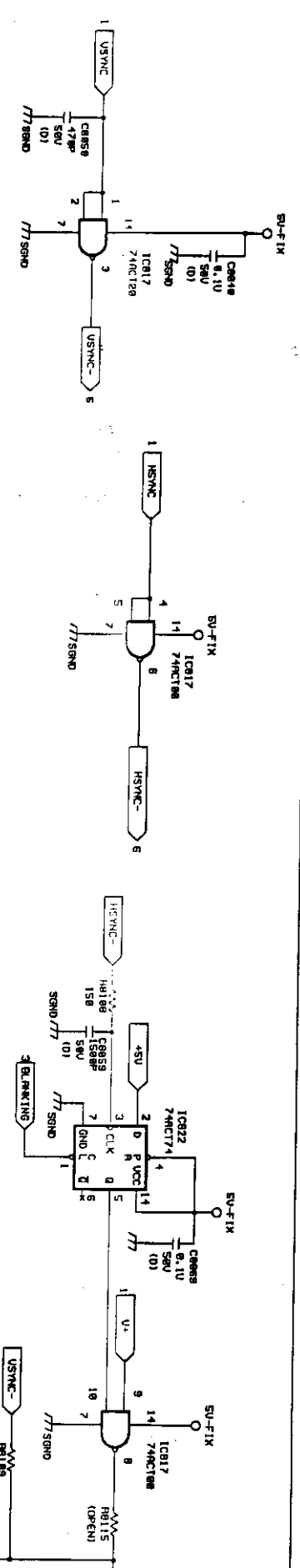


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Acer Peripherals, Inc.

RCER	FP858 (SOP8) CKT	SCHEMATIC
SIZE	8581F-S5, SCH	F88
R4	284-C81	REV 6
DATE	6/15/1999	SHEET 5 OF 9

Project Code : 91.78982.881

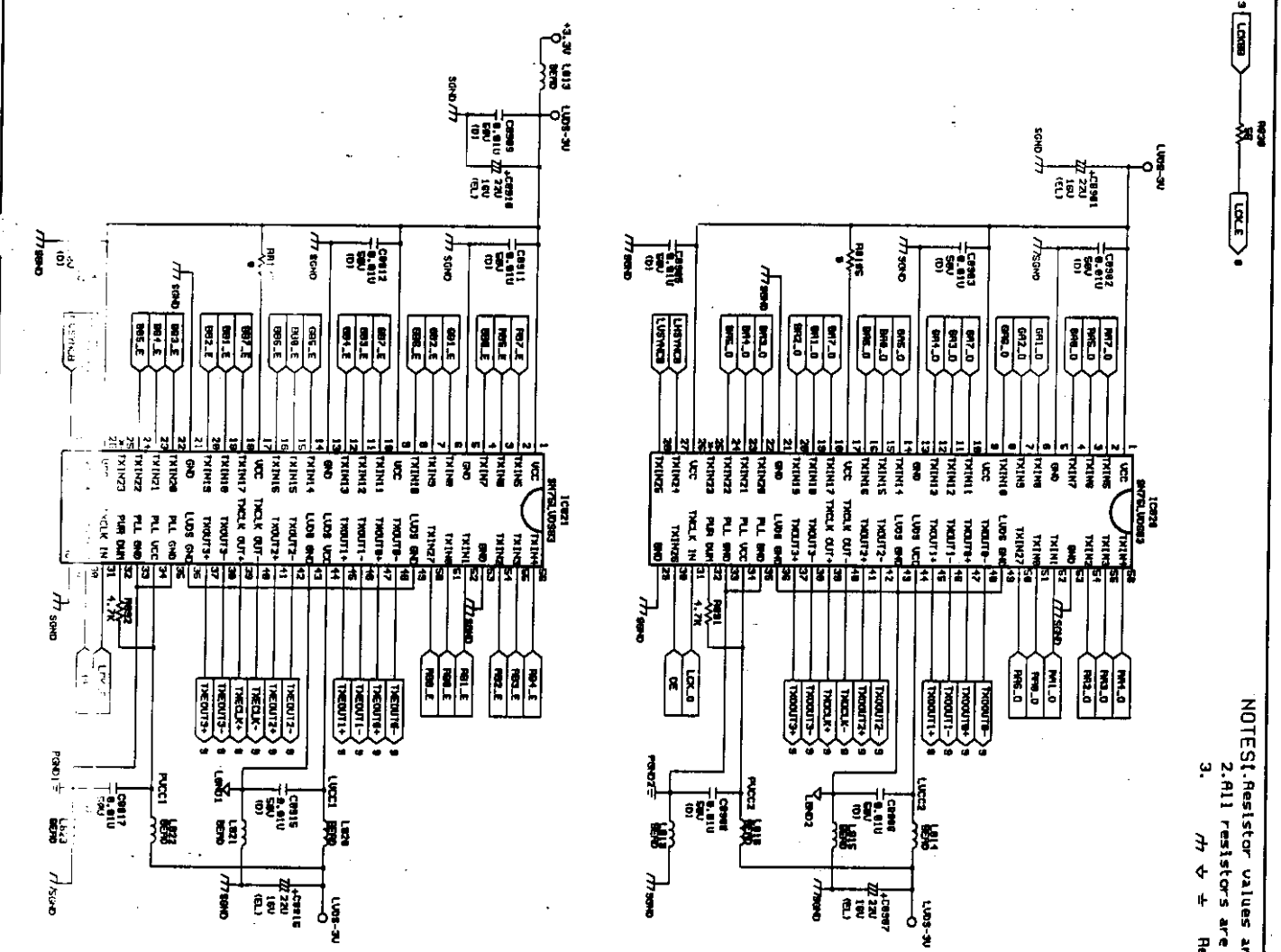
Prepared By	Reviewed By	Approved By
CHEN PING	ELEV HUNG	CHEN MI
6/15 '99	6/15 '99	6/15 '99



2. All resistors are 1/8 watt, 5% except where otherwise indicated.
 3. ∇ Represents PCB common ground.

ACER		宏碁電腦股份有限公司 Acer Peripherals	
RCER FP858 (CONN. CKT) SCHEMATIC			
SIZE	858TF-SS.SCH	FR8	Doc. No.
DATE	6/15/1998	SS	284-C01
Project Code	91.70022.001	Sheet	7 of 7
Prepared By	Revised By	Approved	
CHRIS POK	EILEY WANG	ALICE WU	
6/15 '98	6/15 '98	6/15 '98	

NOTE: Resistor values are in ohm, K=1,000 ohm, M=1,000,000 ohm
 2. All resistors are 1/8 watt 5% except where otherwise indicated
 3. // ± Represents PCB common ground.



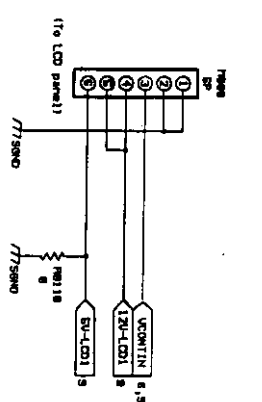
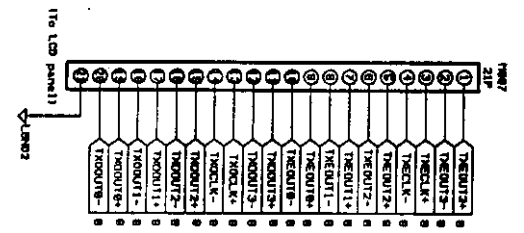
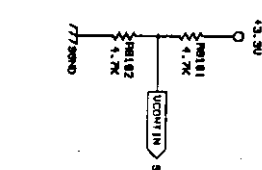
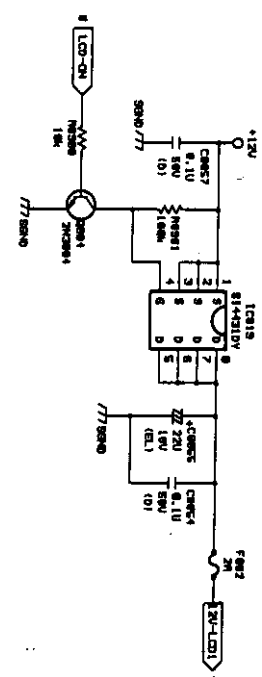
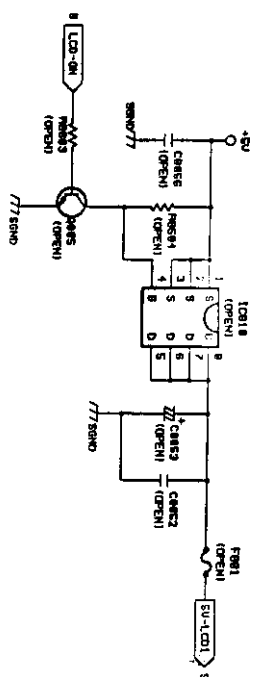
IC901 & IC921	MODEL	STATUS
IC901	74LS00	OPEN
IC921	74LS00	OPEN

ACER 宏碁電腦股份有限公司
Acet Peripherals, Inc.

PCB P956 (L905 TRANSMITTER CKT) SCHEMATICS

SIZE: 8581F-S5 SCH F88 Dec. No. FEB-284-C81
 DATE: 1/15/1999 Sheet 8 OF 9

Project Code: 91.7892.001
 Prepared By: ELEY HARRIS
 Checked By: W/IS 98
 Approved By: W/IS 98

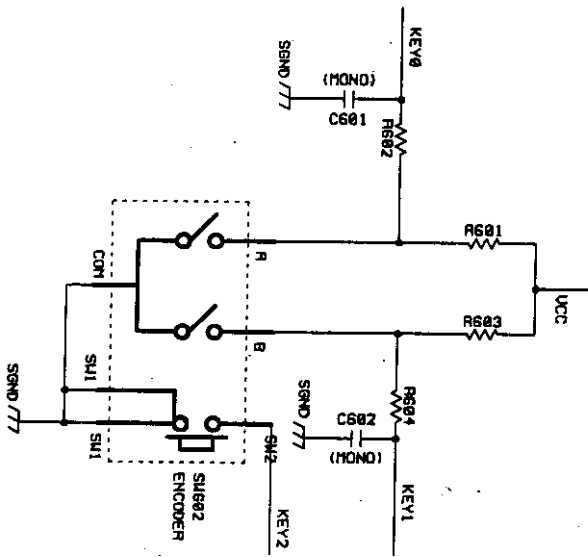
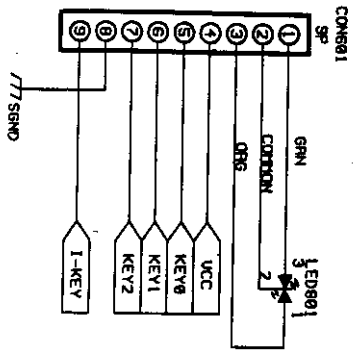


Part Type	QMS	RHS87	RHS84	CMB57	CMB53	CMB52	FMS1	MHS2	MHS10
IC10	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	4.7K	0
IC11	OPEN	OPEN	10K	10K	OPEN	OPEN	OPEN	4.7K	0
IC12	OPEN	OPEN	10K	10K	OPEN	OPEN	OPEN	4.7K	0
IC13	OPEN	OPEN	10K	10K	OPEN	OPEN	OPEN	4.7K	0
IC14	OPEN	OPEN	10K	10K	OPEN	OPEN	OPEN	4.7K	0
IC15	OPEN	OPEN	10K	10K	OPEN	OPEN	OPEN	4.7K	0
IC16	OPEN	OPEN	10K	10K	OPEN	OPEN	OPEN	4.7K	0
IC17	OPEN	OPEN	10K	10K	OPEN	OPEN	OPEN	4.7K	0
IC18	OPEN	OPEN	10K	10K	OPEN	OPEN	OPEN	4.7K	0
IC19	OPEN	OPEN	10K	10K	OPEN	OPEN	OPEN	4.7K	0
IC20	OPEN	OPEN	10K	10K	OPEN	OPEN	OPEN	4.7K	0

ACER 宏碁電腦股份有限公司
Acer Peripherals, Inc.

ACER	FRB5B	(OUTPUT CKT)	SCHENITICS
SIZE	6501F-SS.SCH	FAB	Doc No.
REV	SS	281-081	REV.
DATE	1/15/1999	Sheet	9 OF 9
Project Code	51.70002.001		
Drawn By	CHRIS FENG	Reviewed By	REX HU
DATE	6/15/98	DATE	6/15/98

3. Represents PCB common ground.

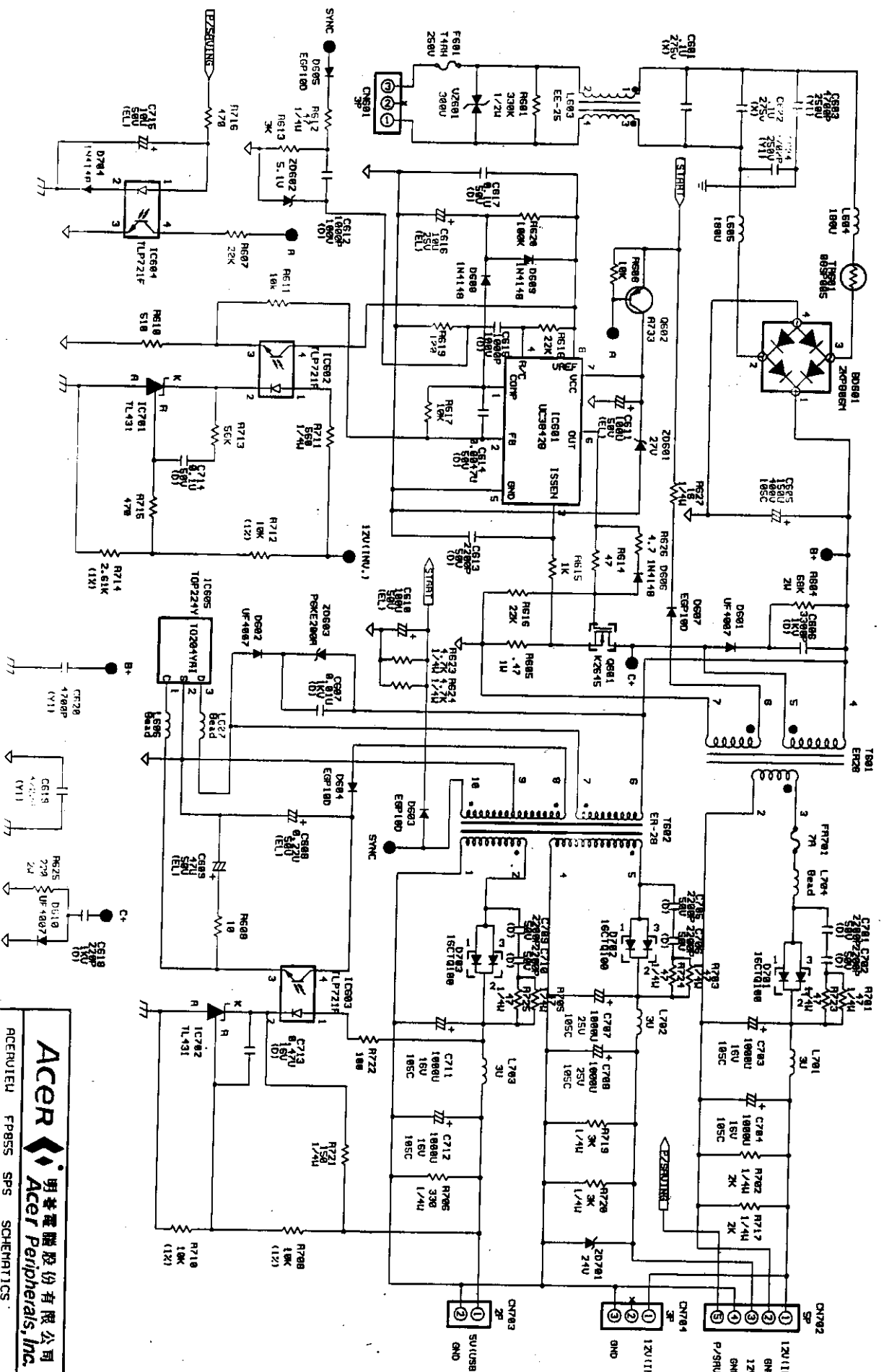


- NOTES:
1. Resistor values are in ohm, K=1,000 ohm, M=1,000,000 ohm
 2. All resistors are 1/8 watt, 5% except where otherwise indicated
 3. ∇ Represents PCB common ground.

ACER 明基電腦股份有限公司
Acer Peripherals

RCERUIEM 2651X SCHEMATICS

SIZE R4	CONTROL.SCH	FRR S1	Doc.No. 204-C01
DATE : 9/10/1998	Sheet 1	OF	
Project Code, 91.71002.001			
Prepared By	Reviewed By	Approved By	

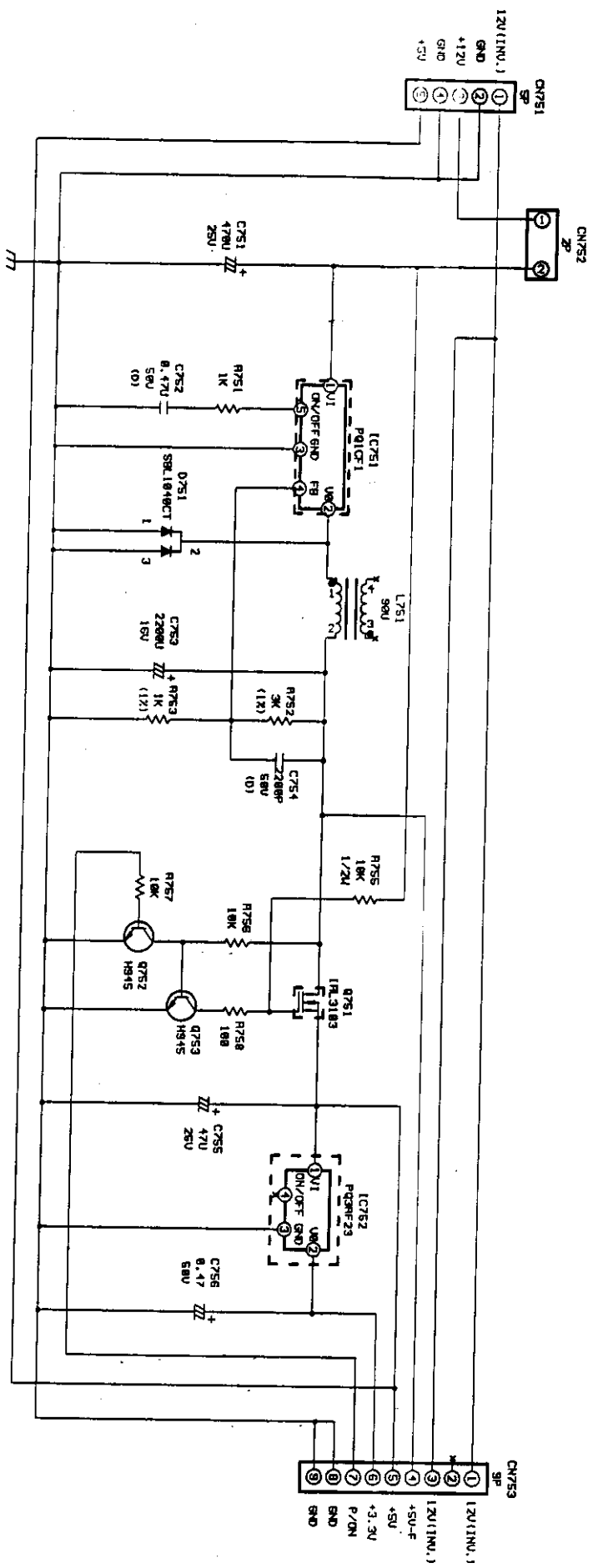


NOTE: Component values are in Ohms, K=1,000 Ohms, M=1,000,000 Ohms.
 1. All components are to be mounted on a PCB where applicable.
 2. All components are to be mounted on a PCB where applicable.
 3. All components are to be mounted on a PCB where applicable.

ACER 宏碁電腦股份有限公司
Acer Peripherals, Inc.

ACERULEU FP85S SPS SCHEMATICS

SIZE	FRB	Doc.No.	REV.
R4	S1	204-C01	1
DATE :	15/07/19-9	Sheet	1 OF 1
Project Code:			
Prepared By	Reviewed By	Approved By	



NOTES: Resistor values are in ohms, 1,000 ohm; 1,000,000 ohm
 2. All resistors are 1/8 watt except where otherwise indicated
 3. All dimensions represent PCB common standard.

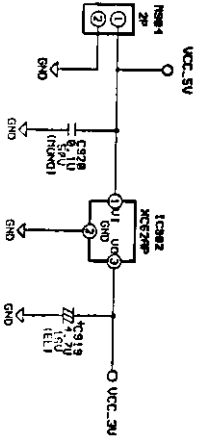
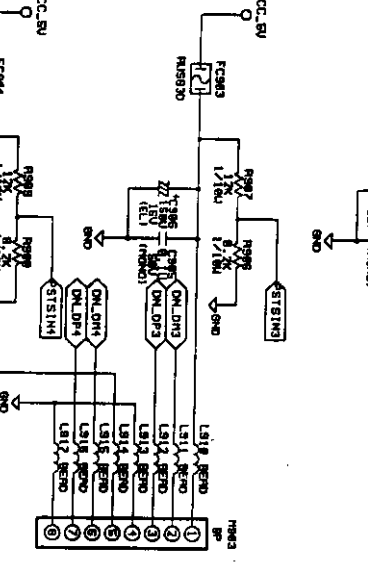
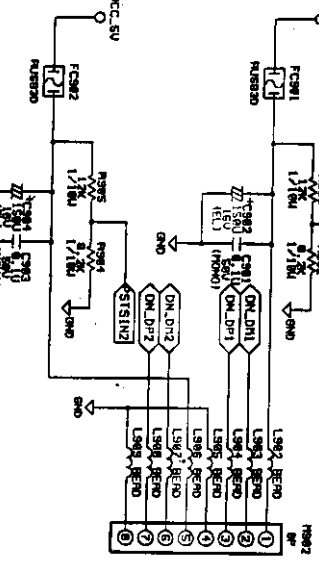
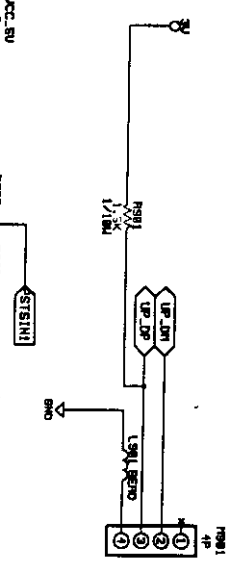
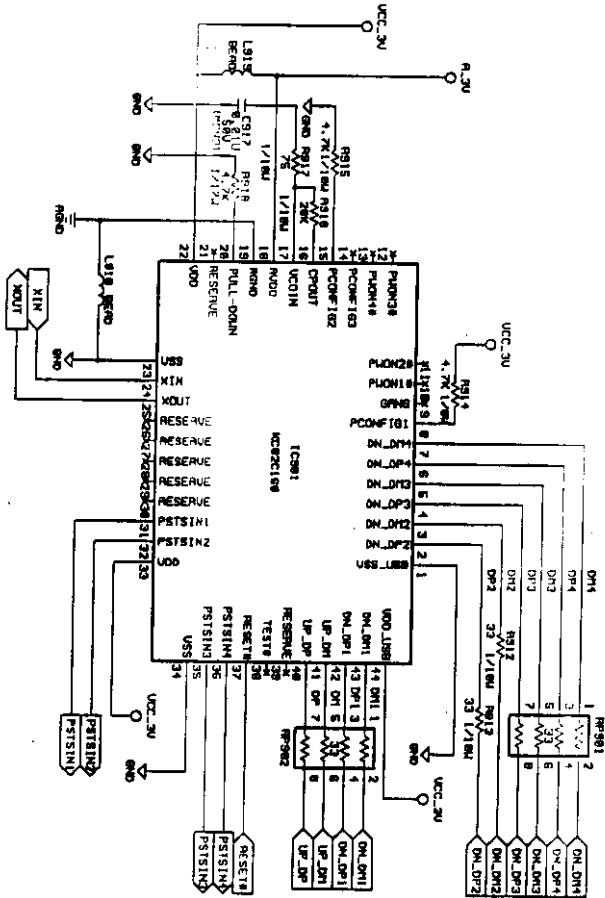
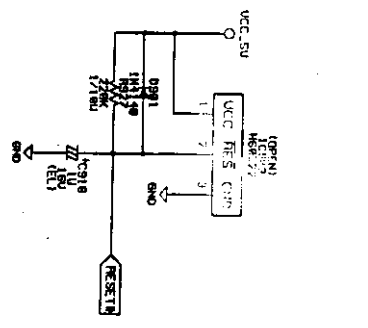
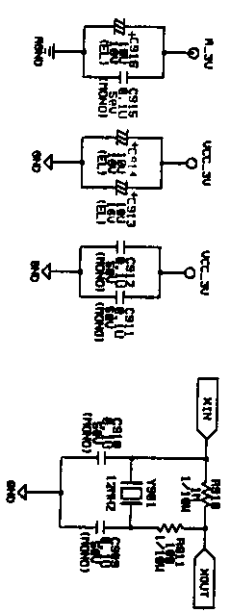
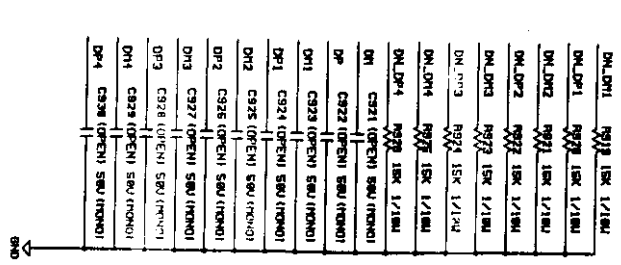
ACER 宏碁電腦股份有限公司
Acer Peripherals, Inc.

ACERVIEW FP88S SPS SCHEMATICS

SIZE: FAB Doc. No. REV.
 DATE: 16/7/1999 Sheet 1 OF 1

Project Code: _____

Prepared By: _____ Reviewed By: _____ Approved By: _____



NOTES: 1. Resistor values are in ohm, K=1,000 ohm, M=1,000,000 ohm
 2. All resistors are 1/8 watt, 5% except where otherwise indicated
 3. Represents PCB common ground.



72371 (USB_HUB_GKT) SCHEMATIC

SIZE	257JU-S1.SCH	FR8	Doc.No.	REU
DATE	4/1/1898	S1	284-CB3	8
Project Code	91_71202_001	Sheet	1	of 1
Prepared By	CHHS NEWB	Reviewed By	MINZ CHEN	Approved By
DATE	4/2/98		4/2/98	