TROUBLE SHOOTING GUIDE FOR NOTEBOOK 5026

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5026 N/B MAINTENANCE

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1. DEFINITION OF CONNECTORS & SWITCHES

- J1 : POWER JACK
- J2 : CRT VIDEO CONNECTOR
- J3 : SERIAL PORT (SIO)
- J4 : PARALLEL PORT(PIO)
- J5 : USB PORT (UNAVAILABLE DUE TO BIOS NOT SUPORTED)
- J6 : DOCKING STATION
- J7 : BACKLIGHT CONNECTOR
- J8 : VOLTAGE SELECTION FOR LED PANEL
- J9 : LCD INDICATOR CONNECTOR
- J10 : LCD MODULE CONNECTOR
- J11 : LEFT SPEAKER CONNECTOR
- J12 : RIGHT SPEAKER CONNECTOR
- J14 : INTERNAL KEYBOARD CONNECTOR
- J15 : TOUCHPAD CONNECTOR
- J16 : DIMM MODULE CONNECTOR
- J17 : DIMM MODULE CONNECTOR
- J18 : PCMCIA CARD CONNECTOR
- J19 : EXTENSION MEMORY BOARD CONNECTOR
- J501 : VIDEO CAPTURE CARD CONNECTOR
- J502 : LINE-IN
- J503 : SPEAKER OUT
- J504 : FDD/MO/HDD2 CONNECTOR
- J505 : MICROPHONE-IN
- J506 : COOL FAN CONNECTOR
- J507 : MODEN CARD CONNECTOR
- J508 : BATTERY CONNECTOR
- J509, J510 : DC/DC BOARD CONNECTOR
- J511 : PS/2 KEYBOARD & MOUSE CONNECTOR
- J512 : HARD DISK
- J513 : FDD/CDROM/MO/HDD2 CONNECTOR
- SW1 : COVER SWITCH
- SW2 : POWER SWITCH
- SW3, SW4 : TOUCHPAD BUTTON
- SW501 : VOLTAGE SELECTION OF CPU CORE
- SW502 : CONFIGURATION SWITCH

DC / DC BOARD

- J3 : BATTERY PACK CONNECTOR

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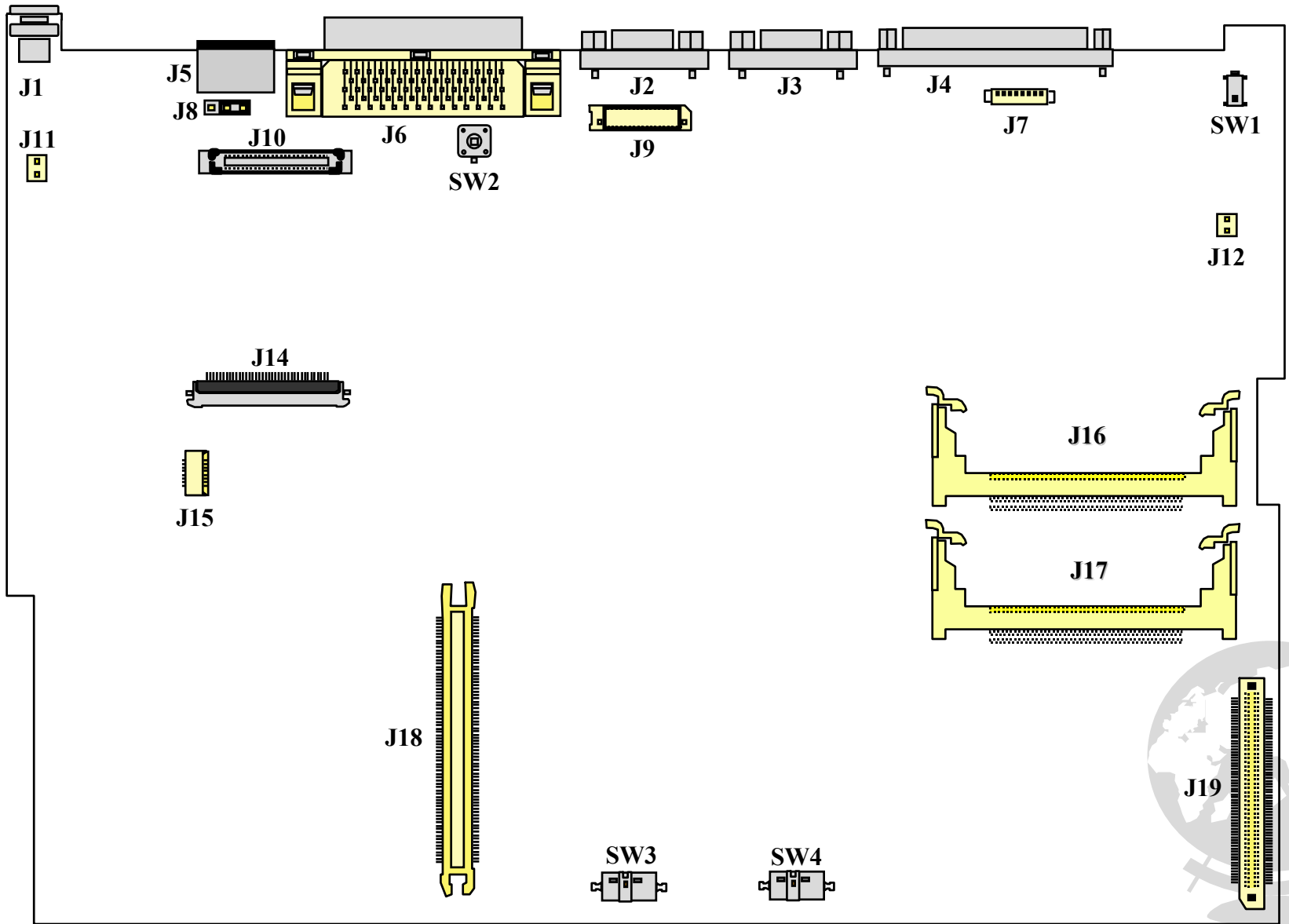
2 . LOCATION OF CONNECTORS & SWITCHES



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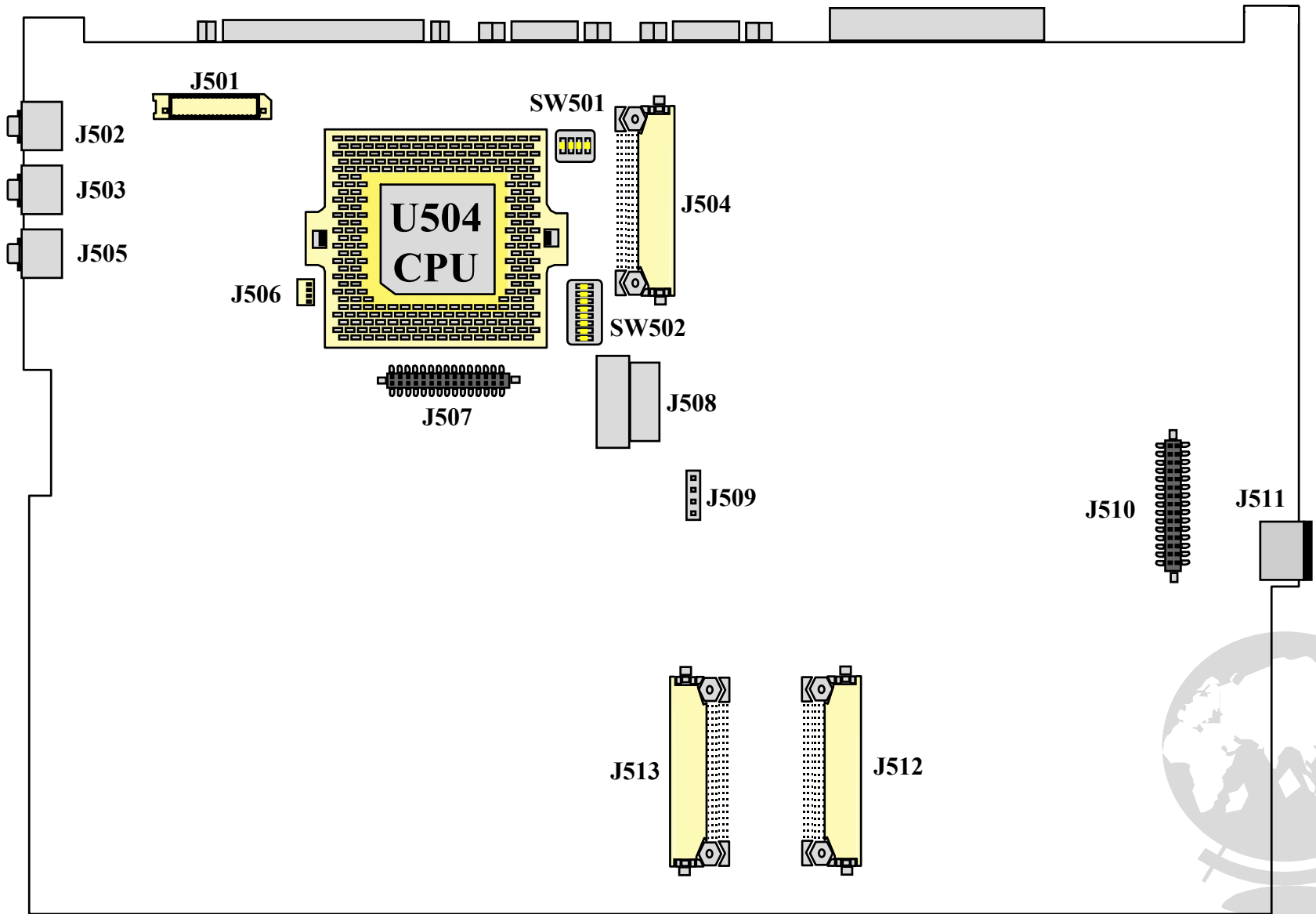

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3. MAJOR COMPONENTS

1. U504 PENTIUM PROCESSOR

2. U20 UM8891-N PCI BRIDGE & MEMORY/CACHE CONTROLLER

3. U35 UM8886-N PCI OT ISA BRIDGE

4. U41 UM8892-N DATA PATH CONTROLLER

5. U11 Trident 9385F VGA CONTROLLER

6. U13 NS PC87338 SUPER I/O CONTROLLER

7. U43 CL-PD6730 PCMCIA CONTROLLER

8. U18 80C51 KEYBOARD CONTROLLER

9. J16, J17 OPTIONAL DIMM SOCKETS

10. J19 EXTENSION MEMORY BOARD

11. U52, U53, U54, U55 2M ON BOARD VIDEO RAM

12. U22 U29 256K L2 CACHE

13. U15 28F010 FLASHABLE SYSTEM BIOS

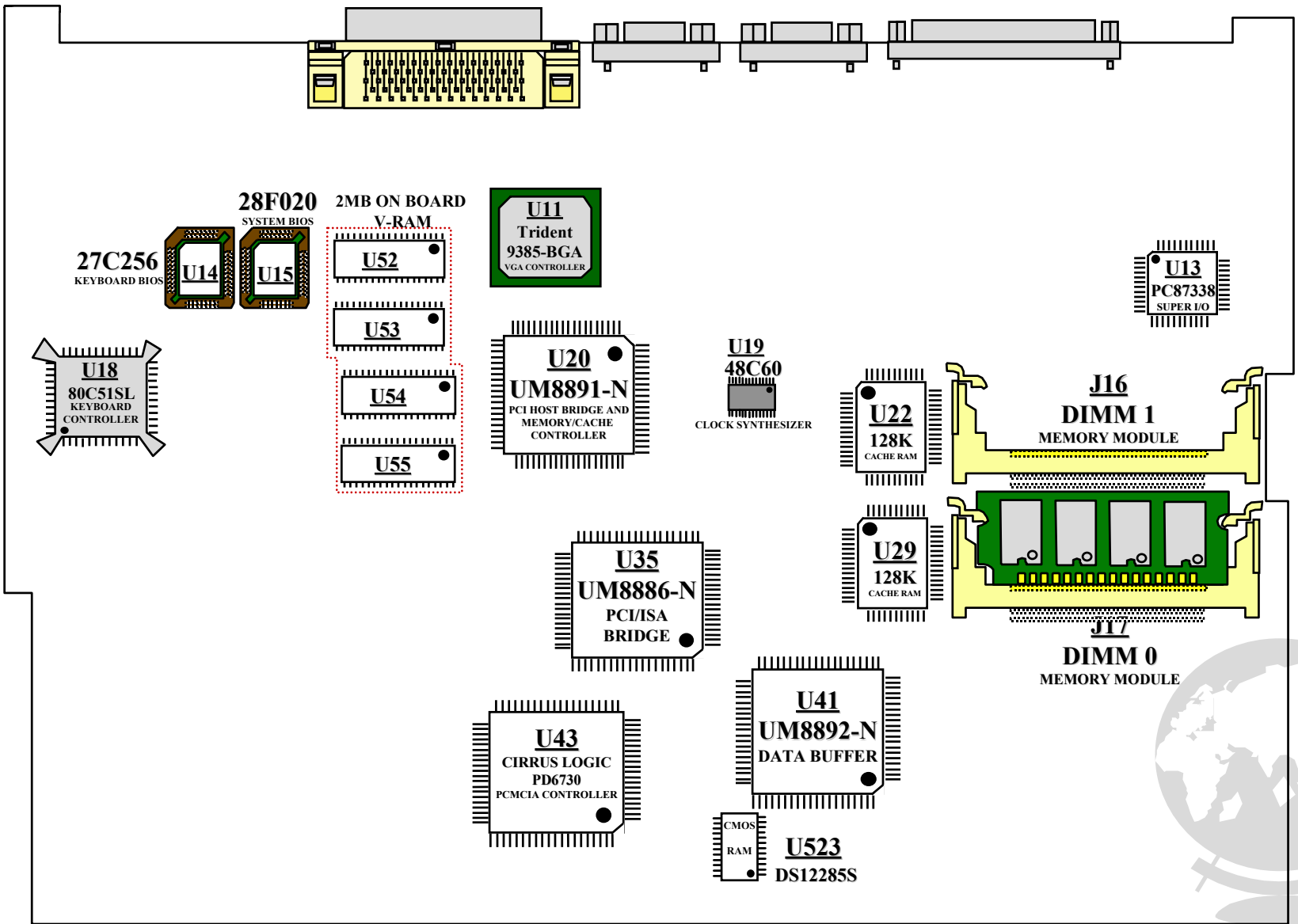
14. U14 27C256 KEYBOARD BIOS

15. U19 W48C60 CLOCK GENERATOR

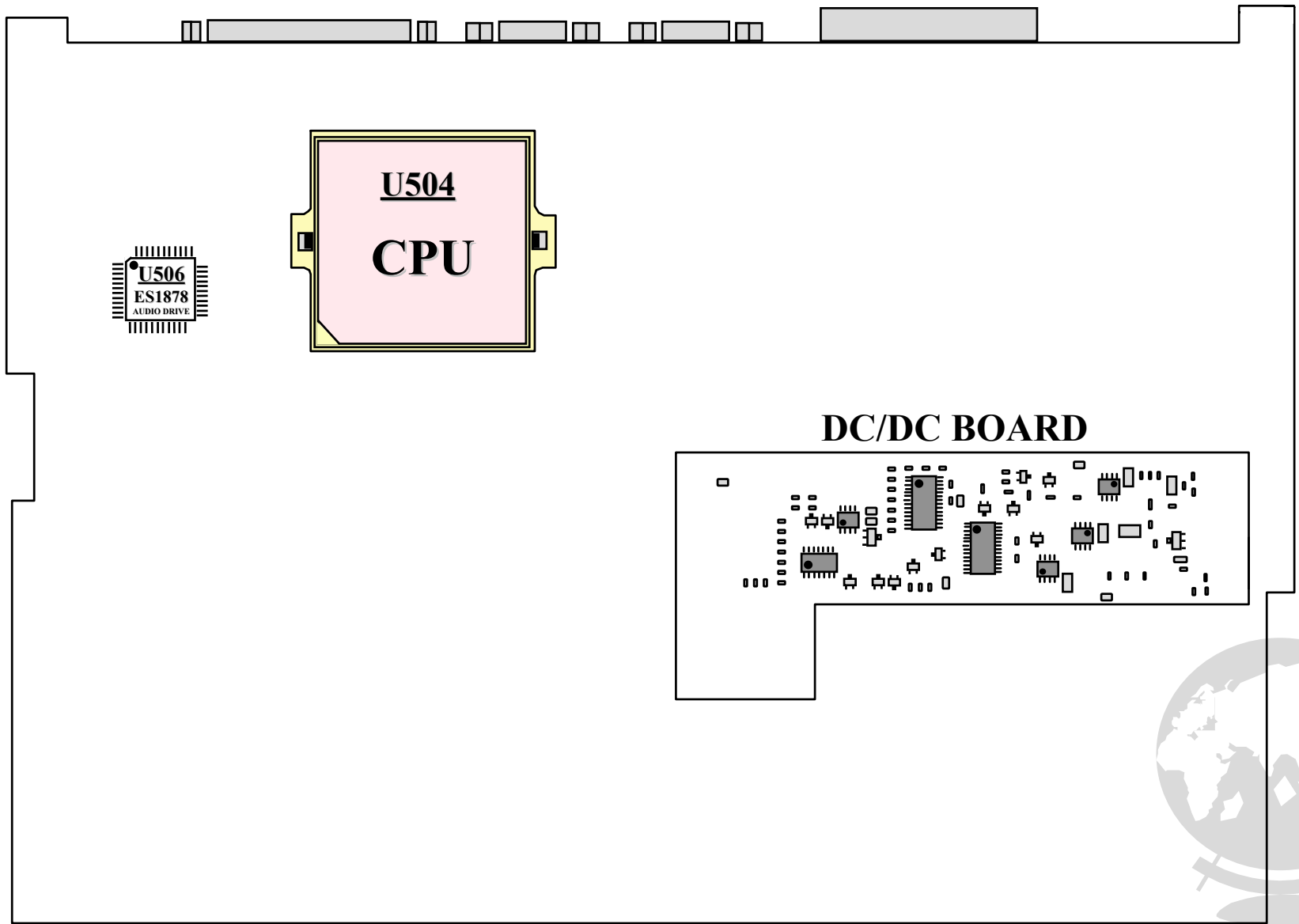
16. U506 ESS1878 AUDIO CONTROLLER

17. U46 DS12885 RTC CONTROLLER

4. LOCATION OF MAJOR COMPONENTS



4. LOCATION OF MAJOR COMPONENTS



5. PIN DESCRIPTIONS OF MAJOR COMPONENTS

5.1 PENTIUM MICROPROCESSOR (P54LM)

SYMBOL	TYPE	DESCRIPTION
A20M#	I	WHEN THE ADDRESS BIT 20 MASK PIN IS ACTIVE, THE 20 (A20) PENTIUNM MICORPROCESSOR MASKS PHYSICAL ADDRES BIT BEFORE PERFORMING A LOOKUP TO THE INTERNAL CACHE OR EMULATES THE ADDRESS WRAPAROUND AT THE AMB DRIVING A MEMORY BUS CYCLE ONTO THE BUSES. A20M# BOUNDARY THAT OCCUS ON THE 8086/8088.
A31-A5 A4-A3	I/O O	A31-A3 COMPRISE THR PENTIUME ,ICROPROCESSOR'S ADDRES BUS.
ADS#	I/O	WHEN ACTIVE ,THE ADDRESS STATUS OUTPUT INDICATES THAT A VALID BUS CYCLE DEFINITION AND ADDRESS ARE AVAILABLE ON THE BUS CYCLE DEFINITION AND BUS LINES.
AHOLD	I	THE ADDRESS HOLD REQUEST INPUT ALLOWS ANOTHER BUS MASTER ACCESS TO PENTIUM MICROPROCESSOR'S ADDRESS BUS FOR A CACHE INVALIDATION, BACK INVALIDATION, OR INQUIRE CYCLE.
AP	I/O	THE PENTIUM PROCESS GENERATES ADDRESS PARITY DURING MEMORY WRITE OPERATIONS AND CHECK ADDRESS PARITY DURING CACHE INVALIDATION CYCLES(ADDRESS BUS SNOOPING).
APCHK#	O	THE PENTIUM PROCESS ASSERTS THE ADDRES PARITY CHECK OUTPUT WHEN AN ADDRES BUS PARITY ERROD IS DETECTED APCHK# IS ASSERTED 2 CLOCK CYCLES AFTER EADS# IS SAMPLE ACTIVE. APCHK$ REMAIN ACTIVE FOR ON CLOCK CYCLE.
[APICHEN] OR PICD1	I/O	APIC ENABLE.
BE0#	O	BYTE ENABLE,PATH0 (D7-D0).
BE1#	O	BYTE ENABLE,PATH1 (D15-D8).
BE2#	O	BYTE ENABLE, PATH 2 (D23-D16).
BE3#	O	BYTE ENABLE, PATH3 (D31-D24).
BE4#	O	BYTE ENABLE, PATH4 (D39-D32).
BE5#	O	BYTE ENABLE, PATH5 (D47-D40).
BE6#	O	BYTE ENABLE, PATH6 (D55-D48).
BE7#	O	BYTE ENABLE, PATH7 (D63-D56).

SYMBOL	TYPE	DESCRIPTION
BF	I	THE BUS FREQUENCY SIGNAL(BF) DETERMINES THE I/O BUS TO PROCESSOR CORE FREQUENCY RATIO.
BOFF#	I	ENSURE THAT THE PROCESSOR DOESN'T FETCH STALE DATA FROM MAIN MEMORY.
BP3-2	O	THE BREAK POINT OUTPUTS INDICATE THAT A BREAKPOINT MATCH HAS BEEN DETECTED THROUGH THE BRESKPOINT REGISTER.
BP/PM1:0	O	BREAKPOINT AND PERFORMANCE MONITORING PINS.
BRDY#	I	THE BURS READY INPUT INDICATES THAT THE CURRENTLY ADDRESSED DEVICE HAS PRESENTED VALID DATA ON THE DATA BUS PINS IN RESPONSE TO A READ OR THAT CURRENTLY ADDRESSED DEVICE HAS ACCEPTED DATA FROM THE PENTIUM CPU IN RESPONSE TO A WRITE.
BRDCY#	I	THE BURS READY INPUT INDICATES THAT THE LEVEL 2 CACHE HAS PRESENTED VALID DATA ON THE DATA BUS PINS IN RESPONSE TO A READ OR THAT THE LEVEL 2 CACHE HAS ACCEPTED DATA FROM THE PENTIUM CPU IN RESPONSE TO A WRITE.
BREQ#	O	THE INTERNAL CYCLE PENDING OUTPUT INDICATES THAT THE PENTIUM MICROCESSOR HAS A BUS CYCLE REQUEST PENDING.
BT3-BT0	NA	BRANCH TRACE LINES ARE DRIVEN DURING A BRANCH TRACE SPECIAL CYCLE.
BUSCHK#	I	THE BUS CHECK ALLOWS SYSTEM DESIGNERS TO NOTIFY THE CPU. IF A BUS CYCLE HAS NOT COMPLETED SUCCESSFULLY.
CACHE#	I/O	CACHE# SIGNAL IS ACTIVE WHEN INFORMATION IS BEGIN TRANSFREED BETWEEN EXTERNAL MEMORY AND AN INTERNAL CACHE.
CLK	I	CLOCK PROVIDES THE FUNDAMNTAL TIMING AND THE INTERNAL OPERATING FREQUENCY FOR THEE PENTIUM MICROPROCESSOR
CPUTYP	I	CPU TYPE PIN SAMPLED BY THE PROCESSOR AT THE TRAILING-EDGE OF RESET TO DETERMINE WHETHER IT IS PRIMARY OR THE DUAL PROCESSPR .

5. PIN DESCRIPTIONS OF MAJOR COMPONENTS

5.1 PENTIUM MICROPROCESSOR (P54LM)

SYMBOL	TYPE	DESCRIPTION
D7:D0	I/O	DATA PATH ZERO.
D15:D8	I/O	DATA PATH ONE.
D23:D16	I/O	DATA PATH TWO.
D31:D24	I/O	DATA PATH THREE.
D39:D32	I/O	DATA PATH FOUR.
D47:D40	I/O	DATA PATH FIVE.
D55:D48	I/O	DATA PATH SIX.
D63:D56	I/O	DATA PATH SEVEN.
D/C#	I/O	DATA OR CONTROL. AT THE START OF BUS CYCLE, THE PENTIUM PROCESSOR SETS THIS LINE HIGH IF DATA WILL BE TRANSFERED DURING THE CURRENT BUS CYCLE, OTHERWISE SETS IT TO LOW.
D/P#	O	DUAL/PRIMARY. THIS IS AN OUTPUT OF PRIMARY PROCESSOR AND IS NOT USED BY THE DUAL PROCESSOR. IT ASSERTED (LOW) BY THE PRIMARY PROCESSOR WHEN IT HAS ACQUIRED PRIVATE BUS OWNERSHIP AND HAS INITIATED A BUS CYCLE
DP0	I/O	PARITY BIT FOR DATA PATH 0, D7:D0.
DP1	I/O	PARITY BIT FOR DATA PATH 1, D15:D8.
DP2	I/O	PARITY BIT FOR DATA PATH 2, D23:D16.
DP3	I/O	PARITY BIT FOR DATA PATH 3, D31:D24.
DP4	I/O	PARITY BIT FOR DATA PATH 4, D39:D32.
DP5	I/O	PARITY BIT FOR DATA PATH 5, D47:D40.
DP6	I/O	PARITY BIT FOR DATA PATH 6, D55:D48.
DP7	I/O	PARITY BIT FOR DATA PATH 7, D63:D56.
DPEN#	I/O	DUAL PROCESSOR ENABLE.
EADS#	I	THE EXTERNAL ADDRESS STROBE SIGNAL INDICATES THAT A VALID EXTERNAL ADDRESS HAS BEEN DRIVEN ONTO THE PENTIUM'S A4:A31 ADDRESS LINES BY ANOTHER MASTER.
EWBE#	I	THE EXTERNAL WRITE BUFFER EMPTY IS USED TO ENSURE THAT MEMORY OPERATIONS OCCUR IN ORDER OF EXECUTION.
FLUSH#	I	THE CACHE FLUSH INPUT FORCES FORCES THE PENTIUM ROCESSOR TO FLUSH THE CONTENTS IN OF ITS INTERNAL CACHE.
FERR#	O	FLOATING-POINT ERROR OUTPUT PIN IS DRIVEN ACTIVE WHEN A FLOATING-POINT ERROR OCCURS.

SYMBOL	TYPE	DESCRIPTION
FRCMC#	I	THE FUNCTOIN REDUNDANCY CHECKING MASTER/CHECKER# PIN IS SAMPLED BY THE PENTIUM MICROPROCESSOR DURING RESET TO DETERMINE WHETHER THE MICROPROCESSOR SHOULD BE CONFIGED AS A FUNCTIONAL REDUNDANCY MASTER OR CHECKER.
HIT#	I/O	THE HIT# SIGNAL ACTIVE TO INDICATE A SNOOP HIT IN EITHER THE INTERNAL CODE OR DATA CACHE.
HITM#	I/O	THE PENTIUM MICOPROCESSOR DRIVES THE HIT MODIFIED SIGNAL ACTIVE TO INDICATE A SNOOP HIT TO A MODIFIED LINE IN THE DATA CACHE.
HLDA	I/O	BUS HOLD ACKNOWLEDGE.
HOLD	I	THE BUS HOLD REQUEST INPUT ALLOWS ANOTHER BUS MASTER TO GAIN COMPLETE CONTROL OF THE PENTIUM'S LOCAL BUSES.
IBT	NA	THE INSTRUCTION BRANCH TAKEN SIGNAL IS DRIVEN ACTIVE FOR ONE CLOCK CYCLE WHEN PENTIUM MICROPROCESSOE EXECUTES AN INSTRUCTION RESULTING IN AN EXECUTION BRANCH.
IERR#	O	INTERNAL ERROR IS ASSERTED WHEN A PARITY ERROR IS ENCOUNTERED INSIDE THE PENTIUM MICROPROCESSOR.
IGNNE#	I	IGNORE NUMERIC ERROR INPUT IS ASSERTED BY EXTERNAL LOGIC THE PENTIUM MICROPROCESSOR WILL IGNORE A NUMERIC ERROR. AND CONTINUE EXECUTING NON-CONTROL FLOATING-POINT INSTRUCTIONS.
INIT	I	PENTIUM MICROCESSOR INIT INPUT HASTHE SAME EFFECT AS THE RESET SIGNAL EXCEPT THAT THE FOLLOWING RETAIN THE VALUES.
INTR	I	THIS IS MASKABLE INTERRUPT REQUEST INPUT.
INV	I	THE INVALIDATE INPUT TELLS THE PENTIUM MICROPROCESSOR WHETHER THE CACHE LINE STATE SHOULD BE MARKED INVALIDATED OR SHARED AS A RESULT OF SNOOP HIT.
IU	NA	THE IU SIGNAL DICATED THAT AN INSTRUCTION IN THE "u" PIPLINE HAS COMPLETED EXECUTION.
IV	NA	THE IU SIGNAL DICATED THAT AN INSTRUCTION IN THE "V" PIPLINE HAS COMPLETED EXECUTION.

5. PIN DESCRIPTIONS OF MAJOR COMPONENTS

5.1 PENTIUM MICROPROCESSOR (P54LM)

SYMBOL	TYPE	DESCRIPTION
KEN#	I	THE CACHE ENABLE PIN IS SAMPLED TO DETERMINE IF THE CURRENT BUS CYCLE IS CACHEABLE.
LINT0 OR INTR	I	IF THE PROCESSOR'S LOCAL APIC IS ENABLE, THIS IS THE LINT0 INPUT TO THE APIC.
LOCK#	I/O	THE LOCK# SIGNAL IS ASSERTED WHEN THE PENTIUM MICROPROCESSOR WANTS TO RUN MULTIP BUS CYCLES WITHOUT HAVING THE BUSES TAKEN AWAY BY ANOTHER BUS MASTER.
M/IO#	I/O	MEMORY OR I/O. AT THE START OF BUS CYCLE, THE PENTIUM PROCESSOR SETS THIS LINE HIGH IF ADDRESSING A MEMORY LOCATION AND LOW IF ADDRESSING AN I/O LOCATION.
NA#	I	THE NEXT ADDRESS INPUT INDICATES THAT THE MEMORY SUBSYSTEM IS CAPABLE FO TAKING ADVANTAGE OF THE PENTIUM MICROPROCESSOR'S ADDRESS PIPELINING.
NMI	I	NON-MASKABLE INTERRUPT REQUEST.
PBREQ#	I/O	PRIVATE BUS REQUEST. ONLY USED IN DUAL PROCESSOR SYSTEM.
PBGNT#	I/O	PRIVATE BUS GRANT. ONLY USED IN DUAL PROCESSOR SYSTEM.
PCHK#	O	SEE DP0.
PCD	O	PAGE CACHE DISABLE.
PEN#	I	PARITY ENABLE.
PHIT#	I/O	PARIVATE BUS HIT. PHIT# IS AN OUTPUT FROM THE LRM AND AN INPUT TO THE MRM. TIS USED IN A DUAL PROCESSOR SYTEM.
PHITM#	I/O	PRIVATE BUS HIT ON MODIFIED LINE.
PICCLK	I	PROGRAMMABLE INTERRUPT CONTROLLER CLOCK.
PICDO OR DEPN#	I/O	PROGRAMMABLE INTERRUPT CONTROLLER DATA LINE0.
PICD1 OR APICEN	I/O	PROGRAMMABLE INTERRUPT CONTROLLER DATA LINE1.
PRDY	O	PROBE READY ASSERTED BY THE PROCESSOR WHEN IT HAS STOPPED EXECUTION IN RESPONSE TO THE R/S# SIGNAL BEING ASSERTED LOW.
PWT	O	THE PAGE WRITE-THROUGHT PIN REFLECTS THE STATE OF THE PAGE ATTRIBUTE BIT.

SYMBOL	TYPE	DESCRIPTION
RESET	I	1.KEEPS THE MICROPROCESSOR FROM OPERATING UNTIL THE POWER SUPPLY VOLTAGES HAVE COME UP AND STSBILIZED. 2.FORCES KNOWN DEFAULT VALUES INTO THE PENTIUM PROCESSOR REGISTER.
R/S#	I	RUN/STOP. WHEN SET HIGH, THE PROCESSOR IS PERMITTED TO RUN NORMALLY WHEN SET LOW, THE PROCESSOR CEASES TO EXECUTE INSTRUCTIONS AND ENTERS PROBE MODE.
SCYC	I/O	SPLIT CYCLE IS VALID FOR LOCKED BUS CYCLES OLY. SCYC IS ASSERTED WHEN A LOCKED TRANSFER RESULTS IN A MISALIGNED MW MORY ACCESS.
SMI#	I	SYSTEM MANAGEMENT INTERRUPT INFORMS THE PROCESSOR THAT A SYSTEM MANAGEMENT INTERRUPT ROUTINE RESIDING IN SYSTEM MANAGEMENT ADDRESS SPACE NEEDS TO BE PERFORMED.
SMIACT#	O	SYSTEM MANAGEMENT INTERRUPT ACKNOWEDGW INFORMS EXTERNAL LOGIC THAT THE PROCESSOR IS IN SYSTEM MANAGEMENT MODE.
TCK	I	TEST CLOCK. USED TO CLOCK STATE INFORMATION AND DATA INTO AND OUT OF DEVICE DURING BOUNDARY SCAN.
TDI	I	TEST INPUT. USED TO SHIFT DATA AND INSTRUCTIONS INTO THE TEST ACCESS PORT IN A SERIAL BIT STREAM.
TDO	O	TEST OUTPUT. USED TO SHIFT DATA OUT OF THE TEST ACCESS PORT IN A SERIAL BIT STREAM.
TMS	I	TEST MODE SELECT. USED TO CONTROL THE STATE OF THE TEST ACCESS PORT CONTROLLER.
TRST#	I	TEST RESET. USED TO FORCE THE TEST ACCESS PORT CONTROLLER INTO AN INITIALIZED STATE.
WB/WT#	I	THE WRITE-BACK OR WRITE THROUGH INPUT ALLOWS EXTERNAL LOGIC TO DETERMINE WHETHER A IS PLACED IN THE WRITE BACK OR WRITE THROUGH STATE.
W/R#	I/O	WRITE OR READ AT THE START OF A BUS CYCLE, THE PENTIUM PROCESSOR SETS THIS LINE HIGH IF THE CURRENT BUS CYCLE IS A WRITE BUS CYCLE W/R# IS SET LOW IF THE CURRENT BUS CYCLE IS A READ BUS CYCLE.

5. PIN DESCRIPTIONS OF MAJOR COMPONENTS

5.2 UM8891-N PCI HOST BRIDGE AND MEMORY/CACHE CONTROLLER

SYMBOL	TYPE	DESCRIPTION
CA4A	O	CACHE RAM ADDRESS BIT. FOR ASYNCHRONOUS SECONDARY CACHE RAM APPLICATION. IT PROVIDES SYSTEM ADDRESS BIT 4 FOR BANK A.
CA4B	O	CACHE RAM ADDRESS BIT. FOR ASYNCHRONOUS SECONDARY CACHE RAM APPLICATION. IT PROVIDES SYSTEM ADDRESS BIT 4 FOR BANK B.
CA3	O	CACHE RAM ADDRESS BIT. FOR ASYNCHRONOUS SECONDARY CACHE RAM APPLICATION. IT PROVIDES SYSTEM ADDRESS BIT 3. FOR SYNCHRONOUS SECONDARY CACHE RAM APPLICATION.
CRCSA#/CE#	O	CACHE RAM CHIP SELECT FOR BANK A.
CRCSB#/ADSC#	O	CACHE RAM CHIP SELECT FOR BANK B.
CROEA#/OE#	O	CACHE RAM OUTPUT ENABLE FOR BANK A.
CROEB#/ADV#	O	CACHE RAM OUTPUT ENABLE FOR BANK A.
CRW [7:0]	O	CACHE RAM WRITE CONTROL. SECONDARY CACHE RAM WRITE CONTROL SIGNALS WITH RESPECT TO EACH BYTE.
TA[7:0]	I/O	ADDRESS TAG RAM DATA.
TRWR#	O	ADDRESS TAG RAM WRITE CONTROL SIGNAL.
PALTH	O	PROCESS ADDRESS LATCH CONTROL SIGNAL.
MDPERR#	I	MEMORY DATA PARITY ERROR. INPUT FROM UM8892N. INDICATES THERE IS A PARITY ERROR ON MD BUS.
ADPAR	I	PCI DATA PARITY. INPUT FROM UM8892N. FOR 32-BIT DATA BUS PARITY.
PDCTL[3:0]	O	PCI DATA BUS CONTROL. OUTPUT TO UM8892N. CONTROL PD BUS DIRECTION AND LATCH FUNCTIONS.
MDCTL[3:0]	O	MEMORY DATA BUS CONTROL. OUTPUT TO UM8892N. CONTROL THE MD BUS DIRECTION AND LATCH FUNCTION.
ADCTL[3:0]	O	PCI DATA BUS CONTROL. OUTPUT TO UM8892N. CONTROL AD BUS DIRECTION AND LATCH FUNCTION.
AD[31:0]	I/O	32-BIT PCI ADDRESS AND DATA BUS.
FRAME#	I/O	PCI BUS TRDY# SIGNAL. CYCLE FRAME. OUTPUT WHEN UM891N ACTS AS CURRENT PCI BUS INITIATOR; OTHERWISE, IT IS AN INPUT PIN. FRAME# IS DEASSERTED TO INDICATE THAT THE INITIATOR IS READY TO COMPLETE THE FINAL DATA PHASE.
PCICLK	I	PCI BUS CLOCK
CBE#[3:0]	I/O	PCI BUS COMMAND AND BYTE ENABLE SIGNALS
PAR	I/O	PCI BUS PARITY BIT
SERR#	O	PCI BUS SERR# SIGNAL
LOCK#	I/O	PCI BUS LOCK# SIGNAL. INDICATES A LOCK CYCLE.
STOP#	I/O	PCI BUS STOP# SIGNAL. OUTPUT WHEN UM8891 ACTS AS A TARGET OF PCI BUS CYCLE TO INDICATE THAT IT REQUESTS THE INITIATOR TO STOP THE TRANSACTION IN PROGRESS ON THE CURRENT DATA PHASE: OTHER IT IS AN OUTPUT PIN.
DEVSEL#	I/O	PCI BUS DEVSEL# SIGNAL. DEVICE SELECT. ASSERTED WHEN UM8891N DECODING LOGIC IS TRUE; OTHERWISE IT IS AN INPUT PIN.
TRDY#	I/O	PCI BUS TRDY# SIGNAL. TARGET READY. IT IS ASSERTED WHEN UM8891N IS READY TO COMPLETE THE CURRENT DATA PHASE.
IRDY#	I/O	PCI BUS IRDY# SIGNAL. INITIATOR READY. DURING A WRITE, IRDY# ASSERTED INDICATES THAT THE INITIATOR IS DRIVING VALID DATA ONTO THE DATA BUS. DURING A READ, IRDY# ASSERTED INDICATES THAT THE INITIATOR IS READY TO ACCEPT DATA FROM THE TARGET.
REQ#	O	PCI BUS REQUEST.
GNT#	I	PCI BUS GRANT.
MWE#	O	DRAM WRITE ENABLE
MA[11:0]	O	DRAM ADDRESS SIGNALS
CAS[7:0]	O	DRAM COLUMN SIGNAL STROBE

SYMBOL	TYPE	DESCRIPTION
RAS[5:0]	O	DRAM ROW SIGNAL STROBE
RAS[7:6]	O	DRAM ROW SIGNAL STROBE
PA[31:0]	I/O	PROCESSOR ADDRESS BUS.
PBE7#-PBE0#	I	BYTE ENABLE.
ADS#	I	ADDRESS STROBE. INDICATES THAT A NEW VALID BUS CYCLE IS CURRENTLY BEING DRIVEN BY THE CPU.
PMIO	I	MEMORY OR I/O ACCESS. DEFINES WHETHER THE CURRENT CPU CYCLE IS A MEMORY OR I/O ACCESS.
PWR	I	WRITE OR READ ACCESS. DEFINES WHETHER THE CURRENT CPU CYCLE IS A WRITE OR READ ACCESS.
PDC	I	DATA OR CODE ACCESS. DEFINES WHETHER THE CURRENT CPU CYCLE IS A DATA OR CODE ACCESS.
PLOCK#	I	BUS LOCK. INDICATES THAT CURRENT CPU BUS CYCLES SHOULD NOT BE INTERRUPTED. SUCH AS WHEN THE CPU IS RUNNING A READ-MODIFY-WRITE CYCLE OR INTERRUPT ACKNOWLEDGE CYCLE.
CACHE#	I	CACHE-ABILITY. INDICATES CPU INTERNAL CACHE-ABILITY FOR THE CURRENT CYCLE.
HITM#	I	HIT MISS TO A MODIFIED LINE. INDICATES THE CURRENT INQUIRE CYCLE HIT A MODIFIED LINE IN CPU DATA CACHE AND CPU WILL SCHEDULE A WRITE-BACK CYCLE TO THE BUS.
PHOLD	O	CPU HOLD.
PHLDA	I	CPU BUS HOLD ACKNOWLEDGE.
BOFF#	O	BACK-OFF. THIS SIGNAL IS USED TO FORCE CPU OFF THE BUS IN THE NEXT CLOCK.
KEN#	O	CACHE ENABLE.
BRDY#	O	BURST-OFF. THIS SIGNAL INDICATES TO THE CPU THAT THE VALID DATA IS ON THE DATA BUS IN RESPONSE TO A READ CYCLE, OR THE DATA PROVIDED BY CPU HAS BEEN ACCEPTED IN RESPONSE TO A WRITE CYCLE.
WBWT#	O	RESERVED
NA#	O	NEXT ADDRESS. THIS SIGNAL INDICATES TO THE CPU THAT UM8891 IS READY TO ACCEPT A NEW BUS CYCLE.
INVOT4	O	INVALIDATION REQUEST. THIS SIGNAL INDICATES TO THE CPU TO DETERMINE THE FINAL STATE OF A CACHE LINE AS A RESULT OF AN INQUIRE HIT.
EADS#	O	EXTERNAL ADDRESS STROBE.
SMIACT#	I	SYSTEM MANAGEMENT INTERRUPT ACTIVE. INDICATES THAT THE CPU IS OPERATING IN SMM.
SUSPA	I	SUSPENT ACKNOWLEDGE FOR CYRIX CPU
REFRESH#	I	REFREAH REQUEST INPUT
RESET	I	RESET. THIS IS A SIGNAL OF 8891N
CLK	I	CPU CLOCK INPUT
CLKDC	I	INPUT FROM UM8886N TO NOTIFY UM8891N
CLKRUN#	O	RESERVED
SCLKCTL	O	SSYNCHRONOUS SRAM CLOCK CONTROL.
CPUPD	I	NOTIFY UM8891N THAT CPU IS POWER-DOWN OR CLOCK DC..
891BUSY#	O	RESERVED
TESTI	I	TEST INPUT MUST BE LOW
TESTO	O	TEST OUTPUT VCC5
VCC5		5V POWER FOR PCI INTERFACE LOGIC
VCC3		3.3V POWER FOR CPU INTERFACE
VCCD		POWER FOR DRAM INTERFACE
VCCS		POWER FOR CACHE SRAM INTTERFACE PINS
GND		GROUNDING.

5. PIN DESCRIPTIONS OF MAJOR COMPONENTS

5.3 UM8892-N DATA PATH CONTROLLER

SYMBOL	TYPE	DESCRIPTION
PD[63:0]	I/O	CPU DATA BUS DATA BUS DIRECTION AND INTERNAL LATCH ARE CONTROLLED BY PDCTL 3-0. FOUR BUFFERS STORE PD TO MD DATA.AND FOUR BUFFERS STORE PD TO AD DATA.
MD[63:0]	I/O	MEMORY DATA BUS DATA BUS DIRECTION AND INTERNAL LATCH ARE CONTROLLED BY MDCTL2-0 ONE BUFFER STORES MD TO AD DATA.
AD[31:0]	I/O	PCIAD BUS DATA BUS DIRECTION AND INTERNAL LATCH ARE CONTROLLED BY ADCTL3-0. TWO 32-BIT BUFFERS STORE AD TO PD DATA,AND TWO 32-BIT BUFFERS STORE AD TO MD DATA
MDCTL[3:0]	I	MEMORY DATA BUS CONTROL.INPUT FROM UM8891N,CONTROL MD(MEMORY DATA)BUS DIRECTION AND LATCH FUNCTION.
PDCTL[3:0]	I	CPU DATA BUS CONTROL. INPUT FROM UM8891N,CONTROL PD(CPU DATA_BUS DIRECTION AND LATCH FUNCTION.
ADCTL[3:0]	I	PCIDATA BUS CONTROL. INPUT FROM UM8891N,CONTROL AD(CPU DATA_BUS DIRECTION AND LATCH FUNCTION.
MDPERR#	O	MEMORY DATE PARITY ERROR.OUTPUT TO UM8891N,INDICATING A PARITY ERROR OCCURRED ON MD BUS.(64-BIT MD PARITY CHECK)
CLK	I	CPU CLOCK
PCICLK	I	PCIBUS CLOCK
ADPAR	O	PCIDATA PARITY.OUTPUT TO UM8891N,FOR 32-BIT PCIDATA PARITY(EVEN PARITY)
DP[7:0]	I/O	PARITY FO MD BUS.
VCCD		POWER FOR DRAM INTERFACE.FOR 5V OR 3.3V DRAM APPLICATIONS.CONNECT THESE POWER PINTS TO 5V OR 3.3V
VCC5		POWER PINS FOR 5V
VCC3		POWER FOR 3.3V
GND		GROUNG

5. PIN DESCRIPTIONS OF MAJOR COMPONENTS

5.4 UMC UM8886-N PCI TO ISA BRIDGE

SYMBOL	TYPE	DESCRPTION
AD{31:0}	I/O	32 BIT PCI ADDRESS AND DATA BUS
C/BE{3:0}	I/O	PCI BUS COMMAND AND BYTE ENABLE SIGNALS
DEVSEL#	I/O	PCI BUS DEVESEL SIGNAL. THIS ACTS AS AN OUTPUT PIN WHEN THE IBC IS THE SLAVE OF PCI BUS CYCLE TRANSACTION: OTHERWISE. IT IS AN INPUT PIN.
TRDY#	I/O	PCI BUS TRDY SIGNAL. THIS ACTS AN OUTPUT PIN WHEN THE IBC IS THE SLAVE OF PCI BUS CYCLE TRANSACTION: OTHERWISE. IT IS AN INPUT PIN.
IRDY#	I/O	PCI BUS IRDY SIGNAL. THIS ACTS AS AN OUTPUT PIN WHEN THE IBC ISSUES A CYCLE TO PCI BUS OTHERWISE. IT IS AN INPUT PIN.
FRAME#	I/O	PCI BUS FRAME SIGNAL. THIS ACTS AS AN OUTPUT PIN WHEN THE IBC ISSUES A CYCLE TO PCI BUS OTHERWISE. IT IS AN INPUT PIN.
IDSEL	I	PCI BUS IDSEL INPUT SIGNAL. IDSEL IS USED AS CHIP SELECT DURING CONFIGURATION READ AND WRITE TRANSACTION.
PAR	O	PCI BUS PARITY BIT.
SERR#	I	SYSTEM ERROR. UPON SAMPLING THIS PIN ACTIVE. THE IBC GENERATES AN NMI TO THE CPU.
LOCK#	I	PCI BUS LOCK SIGNAL TO INDICATE LOCK CYCLE.
STOP#	I/O	PCI BUS STOP SIGNAL. THIS ACTS AS AN OUTPUT PIN WHEN THE IBC IS THE SLAVE OF PCI BUS CYCLE TRANSACTION: OTHERWISE. IT IS AN INPUT PIN.
INT{D:A}	I	PCI BUS INTERRUPT REQUEST A. B. C. D.
BCLK	O	ISA BUS CLOCK OUTPUT.
BALE	O	BUS ADDRESS LATCH ENABLE.
SA{19:0}	O	SYSTEM ADDRESS BUS SA{19:0}. SA{19:0} ARE OUTPUT. EXCEPT DURING ISA MASTER CYCLES.
LA{18:17}/ MIRQ{0:1}	I/O	LATCH-ABLE ADDRESS BUS LA{23:17} OR MOTHERBOARD STEERABLE IRQ REQUESTS. IN NORMAL/PNP MODE, LA{23:17} ARE OUTPUT, EXCEPT DURING ISA MASTER CYCLES; IN DOCK/EXPAND MODE, THEY BECOME THE ADDITIONAL IRQ ROUTE WHICH WILL BE STEERED TO INTERNAL 8259S.
LA19/ UNDOCKSMI	I/O	LATCH-ABLE ADDRESS BUS LA19 OR UN-DOCKING REQUEST BY ASSERT SMI#. IN NORMAL/PNP MODE, IT IS LA19; IN DOCK/EXPAND MODE, IT IS ONE OF THE SMI# SOURCE FROM DOCKING STATION FOR USER WANT UN-DOCKING.
LA{23:20}	I/O	LATCH-ABLE ADDRESS BUS LA{23:20}. LA{23:20} ARE OUTPUT/EXCEPT DURING ISA MASTER CYCLES.
SBHE#	O	SYSTEM BUS HIGH ENABLE INDICATES THE HIGH BYTE ON THE ISA DATA BUS SD{15:8} IS VALID.
SD{15:0}	I/O	16 BIT ISA SYSTEM DATA BUS.
IOR#	O	ISA I/O READ COMMAND.
IOW#	O	ISA I/O WRITE COMMAND.
MEMR#	O	ISA MEMORY READ COMMAND.
MEMW#	O	ISA MEMORY WRITE COMMAND.

SYMBOL	TYPE	DESCRPTION
SMEMR#	O	ISA SYSTEM MEMORY READ COMMAND.
SMEMW#	O	ISA SYSTEM MEMORY WRITE COMMAND.
IOCS16#	I	16-BIT I/O. THIS SIGNAL INDICATES THAT BUS SIZE OF CURRENT ISA I/O SLAVE IS 16 BITS.
MEMCS16#	I/O	16-BIT MEMORY. THIS PIN INDICATES THAT THE BUS SIZE OF CURRENT ISA MEMORY SLAVE IS 16 BIT.
0WS#/ACIN	I	NO WAIT STATES. THIS SIGNAL IS ASSERTED BY ISA SLAVE IN ORDER TO SHORTEN THE CYCLE.
IOCHRDY	I/O	CHANNEL READY. IOCHRDY IS USED BY ISA SLAVES TO INSERT WAIT STATES.
MASTER#	I	16-BIT MASTER. INDICATES THAT A 16-BIT ISA MASTER HAS CONTROL OF THE ISA BUS.
AEN	O	ISA BUS AEN SIGNAL. WHEN HIGH. INDICATES THAT DMA OR REFRESH CONTROLS THE ISA BUS.
IOCHCK#/ CLKRUN#	I	I/O CHANNEL CHECK. IBC WILL GENERATE NMI TO CPU UPON SAMPLING THIS PIN ACTIVE; CLKRUN IS RESERVED FOR FUTURE USE.
REFRESH#	I/O	I/O SYSTEM REFRESH CONTROL. OUTPUT TO ISA BUS WHEN CONVERTING SYSTEM TIMER TICKS INTO REFRESH CYCLE.
CPUREQ	I	CPU REQUEST. CPU INITIATOR REQUESTS THE PCI BUS.
CPUGNT	O	CPU GRANT ARBITER HAS GRANTED PCI BUS TO CPU INITIATOR.
REQ0#/ COVERSW#	I	PCI MASTER REQUEST 0. FOR REEQUESTS INITIATED FROM PCI BUS MASTER. COVERSW FROM EXTERNAL LCD COVER SWITCH TO INFORM THE PMU THAT THE LCD COVER HAD BEEN CLOSED SO THAT PMU CAN FORCE SYSTEM TO ENTER SUSPEND MODE.
REQ1#	I	PCI MASTER REQUEST 1.
REQ2#/ 891BUSY#/ DK_REQB# /SDATA2	I	PCI MASTER REQUEST 2 OR DOCKING REQUEST A.. IN NORMAL/PNP MODE, IT IS THE REQUEST INITIATED FROM PCI BUS MASTER OR 891 BUSY IS RESERVED FOR FUTURE USE; IN DOCK/EXPAND MODE, IT IS THE PCI BUS REQUEST FROM DOCKING STATION.
REQ3#/ COVERSW#	I	PCI MASTER REQUEST 3. THIS PIN ALSO ACTS AS "COVERSW" FROM EXTERNAL LCD COVER SWITCH TO INFORM THE PMU THAT LCD COVER HAD BEEN CLOSED SO THAT PMU CAN FORCE SYSTEM ENTER SUSPEND MODE.
GNT0#/ NCLKDC#	O	PCI MASTER GRANT 0. ARBITER HAS GRANTED PCI BUS MASTER OR AS NCLKDC# UM8886N WILL FORCE NCLKDC# LOW TO INFORM UM8891 THAT CPU CLOCK WILL BE DC.
GNT1#	O	PCI MASTER GRANT 0.
GNT2#/ SUSP#/ DK_DACKB #/SDATA3	O	PCI MASTER GRANT 2 OR SUSPEND REQUEST TO CPU FOR STOPPING CPU CLOCK OR DOCK DMA ACKNOWLEDGE B /SERIAL DATA 3. IN NORMAL/PNP MODE, THE ARBITER HAS GRANTED PCI BUS TO PCI BUS MASTER; IN DOCK/EXPAND MODE, IT IS THE ACKNOWLEDGE TO PCI DMA REQUEST FROM DK_DREQB# OR SERIAL DATA OUTPUT TO DOCKING STATION.

5. PIN DESCRIPTIONS OF MAJOR COMPONENTS

5.4 UMC UM8886-N PCI TO ISA BRIDGE

SYMBOL	TYPE	DESCRPTION
GNT3# / NCLKDC#	O	PCI MASTER GRANT 3. OR NCLKDC# UM 8886N WILL FORCE NCLKDC# TO LOW TO INFORM UM 8891 THAT CPU CLOCK WILL BE D£.
X32K	I	32K CLOCK INPUT.
DREQ{0,1,3}/ MDRQ{2:0}/ MUXSEL{2:0}	I	DMA REQUEST. THESE SIGNALS ARE USED TO REQUEST DMA SERVICE OR TO GRANT CONTROL OF THE EXPANSION BUS TO ISA MASTER. IN NORMAL MODE, THE DREQn ARE NOT STEERABLE; IN PNP/DOCK MODE, THEY ARE STEERABLE TO OTHER DMA CHANNEL REQUEST; IN EXPAND MODE, THEY BECOME THE SELECT SIGNAL OF EXTERNAL DMA REQUEST MULTIPLEXER
DREQ2/ MUXIN	I	DMA REQUEST CHANNEL_2 OR MULTIPLEX INPUT. IN NORMAL/PNP/DOCK MODE, IT IS DMA CHANNEL_2 REQUEST FOR FLOPPY; IN EXPAND MODE, IT IS INPUT FROM THE MULTIPLEXER OUTPUT OF ALL EXTERNAL DMA REQUEST.
DREQ5/ DSPWROK	I	DMA REQUEST CHANNEL_5 OR DOCK STATION POWER OKAY.
DREQ6/ CD#	I	DMA REQUEST CHANNEL_6 OR CARD DETECTED. IN NORMAL/PNP MODE, IT IS DEDICATED AS DMA CHANNEL_6 REQUEST; IN DOCK/EXPAND MODE, IT IS INDICATOR OF THE DOCK-ON.
DREQ7/ DK_REQA#/ SDATA1	I	DMA REQUEST CHANNEL_7 OR DOCKING REQUEST A. IN NORMAL/PNP MODE, IT IS DEDICATED AS DMA CHANNEL_7 REQUEST; IN DOCK/EXPAND MODE, IT IS THE PCIBUS REQUEST FROM DOCKING STATION.
DACK{0,1,3}#/ MDACK{2:0}# /DAC{2:0}	B	DMA ACKNOWLEDGE. THE IBC ASSERTED THESE OUTPUT LINES TO INDICATE THAT THE DMA DEVICE HAS BEEN GRANTED SERVICE. IN NORMAL MODE, THE DACK{0,1,3}# ARE NOT STEERABLE; IN PNP/DOCK MODE, THEY ARE STEERABLE; IN EXPAND MODE, THEY ARE THE ENCODED FROM DACK{3:0,7:5}# DACK3 WILL BE INPUT WHEN RESET FOR SELECTING THE NORMAL/PNP/DOCK/EXPAND MODE
DACK2#/ CD1#	B	DMA ACKNOWLEDGE CHANNEL 2 /CARD DETECT PIN 1.
DACK5#/ ENBUF#	B	DMA ACKNOWLEDGE 5 OE ENABLE THE DOCKING CONNECTOR SIGNAL BUFFERS.
DACK6#/ UNDOCKGNT	B	DMA ACKNOWLEDGE 6 /NOTEBOOK PC UN-DOCKING GRANTED.
DACK7#/ DK DACKA#/ SCLK	O	DMA ACKNOWLEDGE 7 /DOCK DMA ACKNOWLEDGE A /SERIAL CLOCK. IN NORMAL/PNP MODE IT IS DACK7# FUNCTION; IN DOCK/EXPAND MODE IT IS THE ACKNOWLEDGE TO PCI DMA REQUEST FROM DK_DREQA#.
EOP	I/O	END OF PROCESS. IN INPUT MODE. THIS PIN IS USED BY THE DMA DEVICE TO STOP CURRENT DMA TRANSFER. IN OUTPUT MODE. DMA CONTROLLER ASSERTS EOP TO INDICATE TO THE ACTIVE DMA DEVICE THAT THE TRANSFER HAS REACHED THE TERMINAL COUNT.
IRQ1	I	ISA BUS INTERRUPT REQUEST 1.
IRQ{7:3}	I	ISA BUS INTERRUPT REQUEST {7:3}
IRQ8	I	RTC INTERRUPT REQUEST.
IRQ{12:9}	I	ISA BUS INTERRUPT REQUEST {12:9}
IRQ{15:14}	I	ISA BUS INTERRUPT REQUEST {15:14}
INTR	O	MASKABLE INTERRUPT TO CPU.
NMI	O	NONMASKABLE INTERRUPT TO CPU.
SMI#	I/O	SYSTEM MANAGEMENT INTERRUPT. OUTPUT TO CPU TO REQUEST SMM SERVICE. INPUT FROM CPU INDICATES THAT CPU HAS ENTERED SMM MODE.
STPCLK#	O	CPU SLOW DOWN /STOP CLOCK CONTROL.

SYMBOL	TYPE	DESCRPTION
PWRLCH2	O	LATCH SIGNAL TO LATCH PMC OUTPUT PINS FROM SD{7:0} TO GENERATE PMC0-5, PMC8 AND CKGENPD.
PWRLCH1	O	LATCH SIGNAL TO LATCH PMC OUTPUT PINS FROM SD{7:0} TO GENERATE PMC6, PMC7/SUSP, PMC8, PMC9 AND CLKSEL{2:0}.
EXTSMI#	I	EXTERNAL SMI1.
SMIACT#	I	SYSTEM MANAGEMENT INTERRUPT ACKNOWLEDGE FROM INTEL SL ENHANCED CPU.
PCICLKI	I	PCIBUS CLOCK INPUT TO THE IBC.
CLKIN	I	OSCILLATOR CLOCK INPUT TO GENERATE CPU AND PCICLOCKS.
OSC	I	TIME BASE 14.318 MHZ CLOCK INPUT.
HCLK	O	CLOCK OUTPUT TO CPU HOST.
PCICLK0	O	CLOCK OUTPUT TO PCIBUS.
CPURST	O	CPU RESET. THIS PIN IS USED TO INITIALIZE CPU.
RSTDRV	O	RSTDRV. THIS PIN IS USED TO RESET ENTIRE SYSTEM, EXCEPT THE CPU.
KBCLK	I/O	KEYBOARD CONTROLLER CLOCK. CLOCK OUTPUT TO THE 8742.
RC/PGP0	I/O	RESETS INPUT FROM 8042, OR ACTS AS PROGRAMMABLE INPUT, OR OUTPUT PIN 0.
GA20/PGP1/ LDEV#	I/O	ADDRESS A20 GATE FROM 8042. OR ACTS AS PROGRAMMABLE INPUT/OUTPUT PIN 1. OR ACTS AS LOCAL DEVICE INPUT FROM VL BUS.
ROMCS#/ KBCS#	O	ROMCS AND KBCS. DUAL FUNCTION PIN. FOR I/O CYCLES, THIS PIN IS KBCS: FOR MEMORY CYCLES, IT IS ROMCS.
SPKR	O	SPEAKER DRIVE OUTPUT.
XDEN/PGP3/ TCRAMWR	O	XD BUS DIRECTION CONTROL. OR ACTS AS PROGRAMMABLE OUTPUT PIN 3. OR AS TCRAMWR TO READ/WRITE EXTERNAL 4KB RTC.
RTCAS	O	RTC ADDRESS LATCH.
RTCWR	O	RTC WRITE COMMAND.
RTCRD	O	RTC READ COMMAND.
IDE1FX	O	IDE 1FX CHIP SELECT.
IDE3FX	O	IDE 3FX CHIP SELECT.
ONOFF#/ ACIN	I	"ON/OFF" SWITCH INPUT TO PMU. SWITCHES BETWEEN FULL-ON MODE AND SUSPEND MODE OR ACTS AS ACIN.
LB1/LB2	I	LOW BATTERY 1 OR LOW BATTERY 2 INPUT.
IDE17X / PGP3	O	IDE 17X CHIP SELECT. OR ACTS AS PROGRAMMABLE OUTPUT PIN 3.
IDE37X / PGP2	O	IDE 37X CHIP SELECT. OR ACTS AS PROGRAMMABLE OUTPUT PIN 2.
IDEHDEN	O	ENABLE IDE CYCLE.
A20M	O	MASK PROCESSOR ADDRESS 20: ACTIVE WHEN GA20 IS LOW OR I/O PORT 92H BIT 1 IS HIGH.
EXSMI2/LB2 /KBCLKI	I	EXTERNAL SMI INPUT 2 OR ACTS AS LOW BATTERY 2 INPUT OR KEYBOARD CLOCK INPUT.
FERR#	I	WHEN LOW INDICATES THAT A FLOATING POINT ERROR HAS OCCURRED.
IGNNE#	O	IGNNE IS ASSERTED LOW TO INSTRUCT THE CPU TO IGNORE A NUMERIC ERROR AND CONTINUE EXECUTING NON-CONTROL FLOATING POINT INSTRUCTIONS.
TEST	I	THIS PIN USED FOR TESTING ONLY FOR NORMAL OPERATION IT SHOULD BE PULLED HIGH.
VCC5		+5V VOLT POWER SUPPLY.
VCC3		3.3-VOLT POWER SUPPLY.

6. SWITCH AND JUMPER SETTING

1.SW502:SELECTING CPU SPEED

CPU SPEED	SW502			
	PIN1	PIN2	PIN6	PIN7
100MHZ	OFF	OFF	OFF	OFF
120MHZ	OFF	ON	ON	OFF
133MHZ	OFF	ON	OFF	OFF
150MHZ	ON	ON	ON	OFF
*166MHZ	ON	ON	OFF	OFF
*200MHZ	ON	OFF	OFF	OFF

* MMX CPU CAN BE SUPPORTED ON THE 5026 PCBA REV.2H1 AND LATER VERSION.

2.SW502:DISCHARGING CMOS

	SW502
	PIN 8
RESET RTC	ON
NORMAL	OFF

3.J8:VOLTAGE SELECTION FOR LCD PANEL

J8	VOLTAGE OF LCD PANEL
1 - 2	5V
2 - 3	3V

4.SW501:SETTING CPU CORE VOLTAGE

VOLTAGE	SW501			
	PIN1	PIN2	PIN3	PIN4
1.8	OFF	OFF	OFF	OFF
1.9	ON	OFF	OFF	OFF
2.0	OFF	ON	OFF	OFF
2.1	ON	ON	OFF	OFF
2.2	OFF	OFF	ON	OFF
2.3	ON	OFF	ON	OFF
2.4	OFF	ON	ON	OFF
2.5	ON	ON	ON	OFF
2.6	OFF	OFF	OFF	ON
2.7	ON	OFF	OFF	ON
2.8	OFF	ON	OFF	ON
2.9	ON	ON	OFF	ON
3.0	OFF	OFF	ON	ON
3.1	ON	OFF	ON	ON
3.2	OFF	ON	ON	ON
3.3	ON	ON	ON	ON

5026 N/B MAINTENANCE

7. SYSTEM VIEW AND DISASSEMBLY

- 7.1 SYSTEM VIEW

MODULAR COMPONENTS

- 7.2 LEFT AND RIGHT BAY DEVICES
- 7.3 PRIMARY HARD DISK DRIVE
- 7.4 MEMORY EXPANSION CARD
- 7.5 CPU
- 7.6 FAX/MODEM/VOICE CARD
- 7.7 LCD

BASE UNIT COMPONENTS

- 7.8 KEYBOARD
- 7.9 ON-BOARD MEMORY
- 7.10 DC/DC BOARD
- 7.11 VIDEO-CAPTURE/TV-ONLY CARD
- 7.12 SYSTEM BOARD
- 7.13 TOUCHPAD

5026 N/B MAINTENANCE

7.1 SYSTEM VIEW

7.1.1 RIGHT-SIDE VIEW (FIGURE 7-1)

1. FLOPPY DISK DRIVE.
2. MICROPHONE CONNECTOR.
3. AUDIO OUTPUT CONNECTOR.
4. AUDIO INPUT CONNECTOR.
5. IR PORT.
6. 5V POWER CONNECTOR (MANUFACTURING OPTION).
7. VIDEO IN CONNECTOR (MANUFACTURING OPTION).
8. VIDEO OUT CONNECTOR.
9. PHONE LINE CONNECTOR (OPTIONAL).

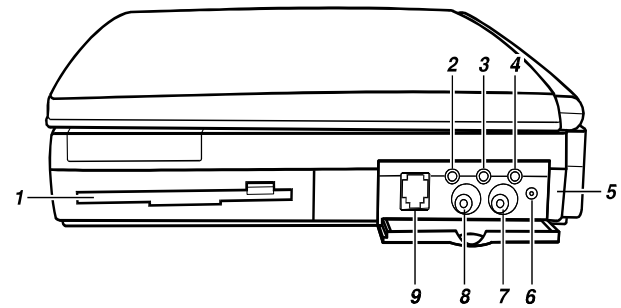


FIGURE 7-1. RIGHT-SIDE VIEW

7.1.2 LEFT-SIDE VIEW (FIGURE 7-2)

1. BATTERY PACK.
2. AUXILIARY DEVICE PORT.
3. PC CARD SLOTS.
4. HARD DISK DRIVE.

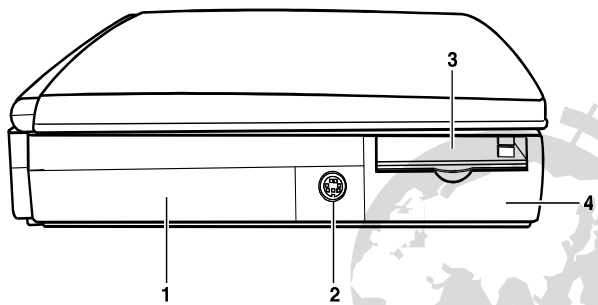


FIGURE 7-2. LEFT-SIDE VIEW

7.1.3 REAR VIEW (FIGURE 7-3)

1. FEET.
2. KENSINGTON LOCK ANCHOR.
3. PARALLEL PORT.
4. SERIAL PORT.
5. VGA PORT.
6. EXPANSION CONNECTOR.
7. POWER CONNECTOR.

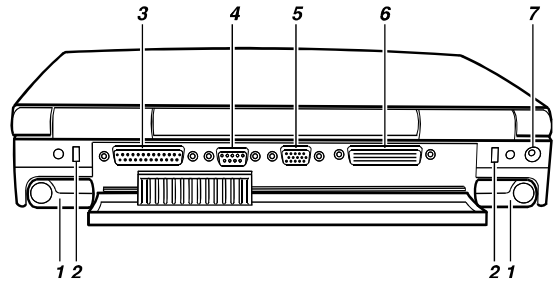


FIGURE 7-3. REAR VIEW

7.1.4 TOP-OPEN VIEW (FIGURE 7-4)

TO OPEN THE COVER, SLIDE THE COVER LATCH TOWARD THE RIGHT AND LIFT THE COVER.

1. POWER BUTTON.
2. STEREO SPEAKER SET.
3. LED DISPLAY.
4. MICROPHONE.
5. CONTRAST CONTROL (NOT EXISTING FOR A TFT LCD PANEL).
6. INDICATORS PANEL.
7. KEYBOARD.
8. TOUCHPAD.

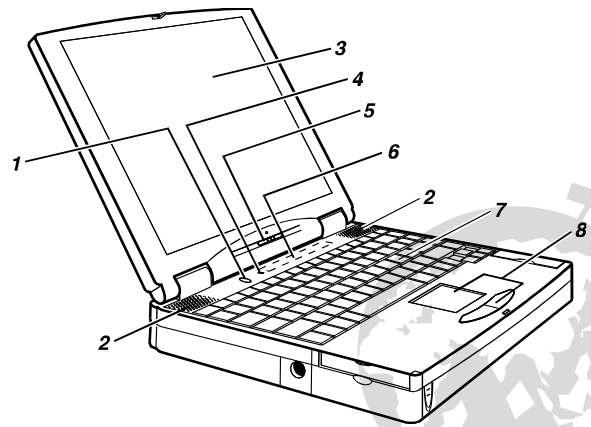


FIGURE 7-4. TOP-OPEN VIEW

7.2 LEFT AND RIGHT BAY DEVICES

THE LEFT AND RIGHT BAYS OF THE NOTEBOOK ARE DESIGNED FOR MULTIPLE OPTIONS.
THE LEFT BAY CAN ACCOMMODATE THE FOLLOWING DEVICES:

- ★ BATTERY PACK (DEFAULT)
- ★ AC ADAPTER
- ★ CARTRIDGE-REMOVABLE HARD DISK DRIVE
- ★ SECONDARY HARD DISK DRIVE
- ★ FLOPPY DISK DRIVE

THE RIGHT BAY CAN ACCOMMODATE THE FOLLOWING DEVICES:

- ★ FLOPPY DISK DRIVE (DEFAULT)
- ★ CD-ROM DRIVE
- ★ BATTERY PACK
- ★ CARTRIDGE-REMOVABLE HARD DISK DRIVE
- ★ SECONDARY HARD DISK DRIVE
- ★ MO DRIVE

DISASSEMBLY

1. PLACE THE NOTEBOOK UPSIDE DOWN.
2. TO REMOVE THE LEFT BAY DEVICE AND RIGHT BAY DEVICE, PRESS THEIR LOCKING LATCHES TOWARD THE UNLOCKED POSITION AND PULL OUT THE MODULES.

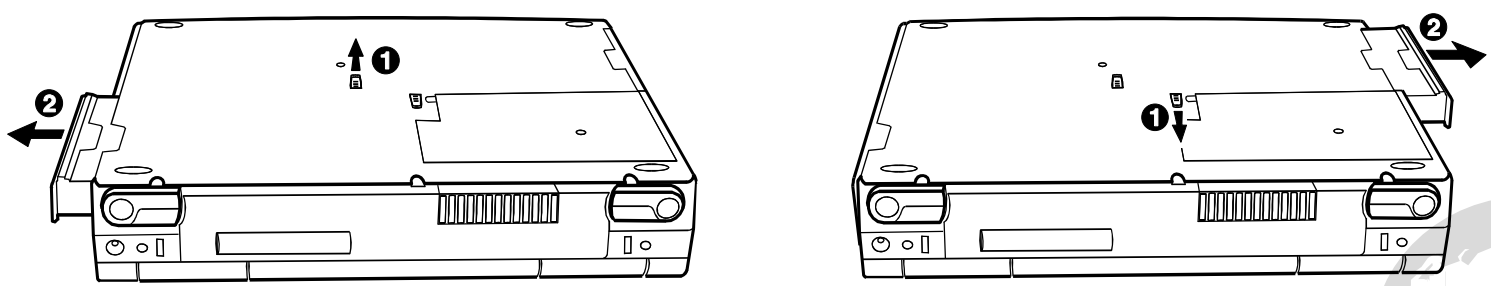


FIGURE 7-5. REMOVING THE LEFT AND RIGHT BAY DEVICES

REASSEMBLY

1. SLIDE THE DEVICE MODULE INTO THE BAY. MAKE SURE THE LOCKING LATCH IS IN THE LOCKED POSITION.

7.3 PRIMARY HARD DISK DRIVE

1. REMOVE THE HARD DISK DRIVE COMPARTMENT COVER BY PRESSING THE LOCKING LATCH DOWN AND OPENING THE COVER.

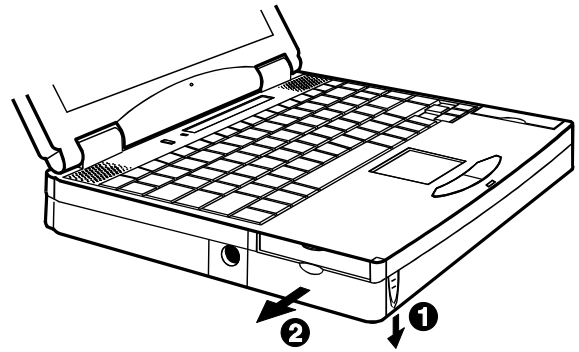


FIGURE 7-6. REMOVING THE HARD DISK DRIVE COVER

2. TO PULL THE HARD DISK DRIVE MODULE OUT OF THE COMPARTMENT, FOLLOW THESE STEPS:
   a. SLIDE THE LOCKING LATCH ON THE HARD DISK DRIVE MODULE TOWARD THE RIGHT (UNLOCKED POSITION).
   b. PRESS DOWN THE LOCKING LATCH ON THE FRONT OF THE NOTEBOOK, AND, WHILE KEEPING THE LATCH DOWN, PULL THE HANDLE OF THE HARD DISK DRIVE MODULE OUTWARDS.

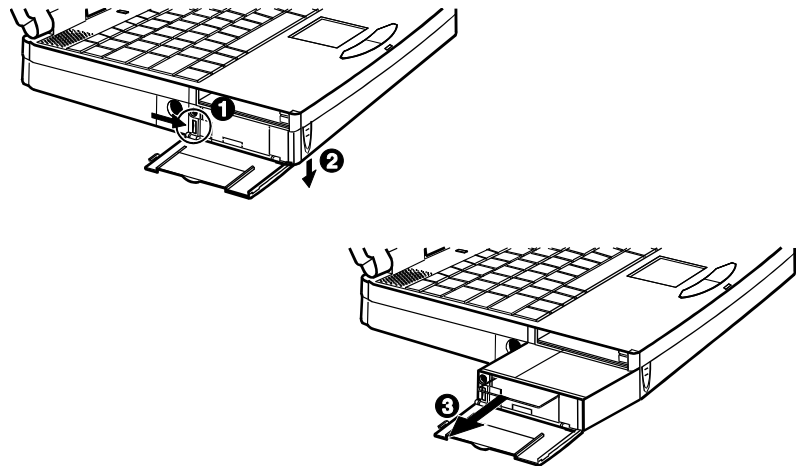


FIGURE 7-7. REMOVING THE HARD DISK DRIVE

3. TO SEPARATE THE HARD DISK DRIVE FROM ITS BRACKET, REMOVE TWO SCREWS ON EACH SIDE AND TWO SCREWS ON THE CONNECTOR CARD.

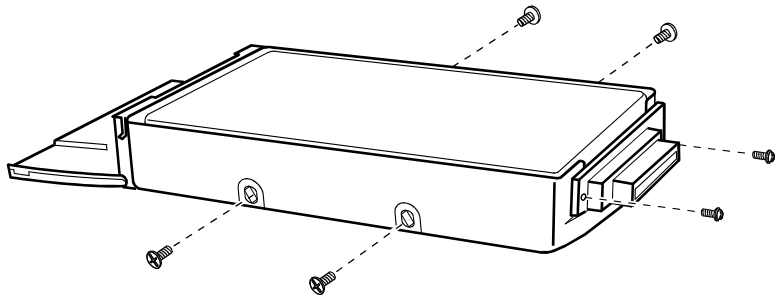


FIGURE 7-8. REMOVING THE HARD DISK DRIVE BRACKET

4. PULL OUT THE CONNECTOR CARD TO UNPLUG THE CONNECTOR.

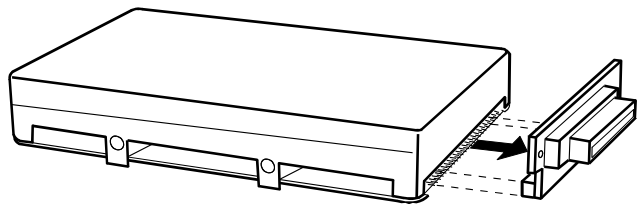


FIGURE 7-9. REMOVING THE HARD DISK DRIVE CONNECTOR CARD

REASSEMBLY

1. IF USING A NEW BRACKET AND CONNECTOR CARD, YOU NEED TO ATTACH THE INSULATION MATERIAL FOLLOWING THESE STEPS:

   TEAR OFF THE STRIP FROM THE INSULATION STICKER AND ATTACH THE STICKER TO THE CONNECTOR CARD AS SHOWN FIGURE 7-10 (LEFT).

   TEAR OFF THE STRIP FROM THE INSULATION PLATE AND ATTACH THE PLATE TO THE HARD DISK DRIVE BRACKET AS SHOWN FIGURE 7-10 (RIGHT).

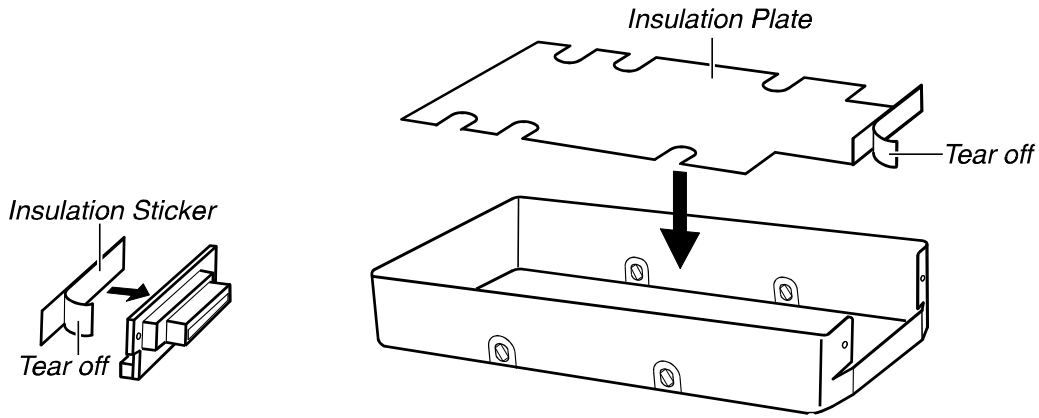


FIGURE 7-10. SECURING THE INSULATION MATERIAL

2. ALIGN THE CONNECTOR CARD WITH THE HARD DISK DRIVE CONNECTOR AND FIRMLY PLUG THE CONNECTOR. (REFER TO FIGURE 7-9 EARLIER).
3. ATTACH THE HARD DISK DRIVE TO THE BRACKET. SECURE WITH TWO SCREWS ON EACH SIDE AND TWO SCREWS ON THE CONNECTOR CARD. (SEE FIGURE 7-8 EARLIER).
4. FIT THE HARD DISK DRIVE MODULE INTO THE COMPARTMENT AND SLIDE THE LOCKING LATCH TOWARD THE LEFT (THE LOCKED POSITION) TO SECURE THE HARD DISK DRIVE MODULE IN PLACE.
5. CLOSE THE HARD DISK DRIVE COMPARTMENT COVER.

7.4 MEMORY EXPANSION CARD DISASSEMBLY

1. PLACE THE NOTEBOOK UPSIDE DOWN.
2. TO REMOVE THE MEMORY EXPANSION CARD COMPARTMENT COVER:
   a. TEMPORARILY REMOVE THE RIGHT BAY DEVICE. (SEE SECTION 7.2 DISASSEMBLY).
   b. REMOVE THE BOTTOM SCREW AS SHOWN IN FIGURE 7-11.
   c. PLACE THE NOTEBOOK BACK TO THE UPRIGHT POSITION. OPEN THE TOP COVER AND DETACH THE COMPARTMENT COVER FROM THE CHASSIS.

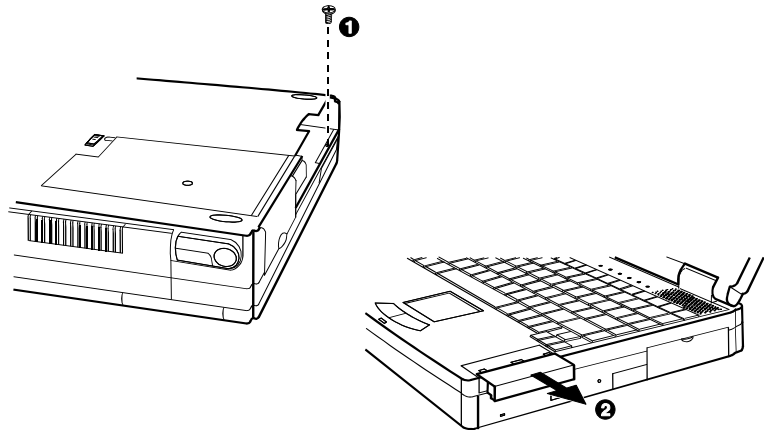


FIGURE 7-11. OPENING THE MEMORY EXPANSION CARD COMPARTMENT COVER

3. LIFT THE OUTER EDGE OF THE MEMORY EXPANSION CARD TO UNPLUG THE CONNECTOR AND PULL THE CARD OUT THE COMPARTMENT.

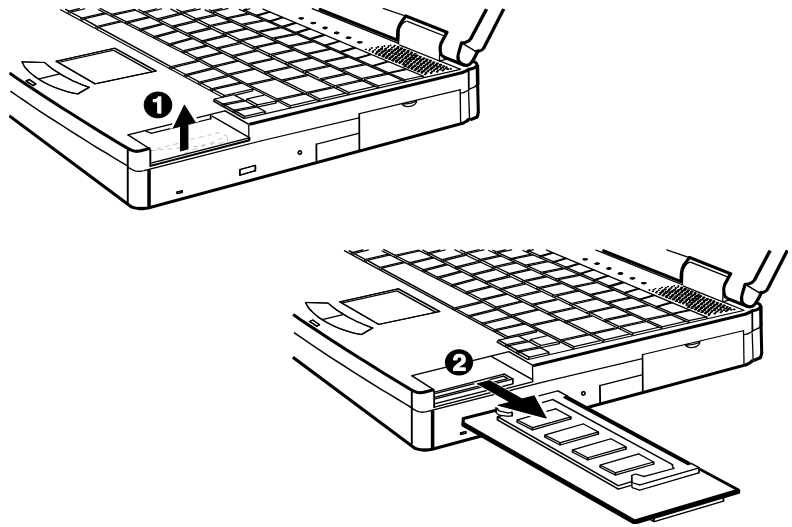


FIGURE 7-12. REMOVING THE MEMORY EXPANSION CARD

REASSEMBLY

1. WITH THE CONNECTOR ON THE MEMORY EXPANSION CARD FACING DOWN AND OUTWARDS, SLIDE THE CARD INTO THE COMPARTMENT AND PRESS DOWN THE OUTER EDGE TO FIRMLY PLUG THE CONNECTOR INTO THE SOCKET ON THE SYSTEM BOARD.
2. REPLACE THE MEMORY EXPANSION CARD COMPARTMENT COVER AND SECURE WITH ONE SCREW. (REFER TO FIGURE 7-11 EARLIER).
3. REPLACE THE RIGHT BAY DEVICE.

7.5 CPU

DISASSEMBLY

1. PLACE THE NOTEBOOK UPSIDE DOWN.
2. REMOVE THE SCREW ON THE CPU AND FAX/MODEM/VOICE CARD COMPARTMENT COVER. SLIDE THE COVER TOWARD THE RIGHT TO OPEN IT.

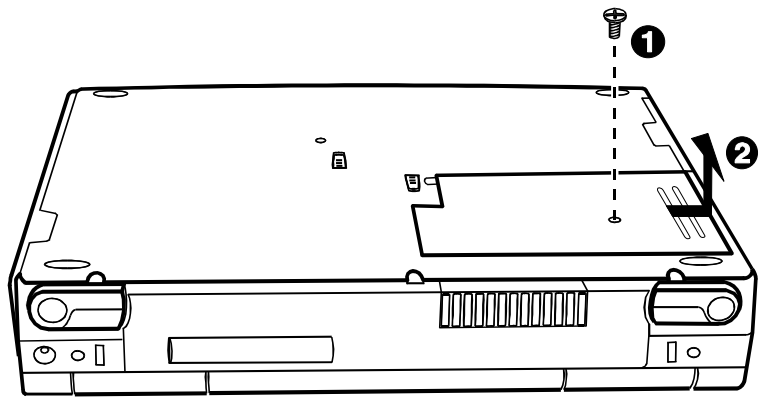


FIGURE 7-13. REMOVING THE CPU AND FAX/MODEM/VOICE CARD COMPARTMENT COVER

3. TO REMOVE THE HEAT SINK, FOLLOW THESE STEPS:
   a. REMOVE THE TWO SCREWS SECURING THE HEAT SINK TO THE SYSTEM BOARD.
   b. IF THE HEAT SINK HAS A COOLING FAN INSIDE IT, UNPLUG THE FAN POWER CORD FROM J506 ON THE SYSTEM BOARD.

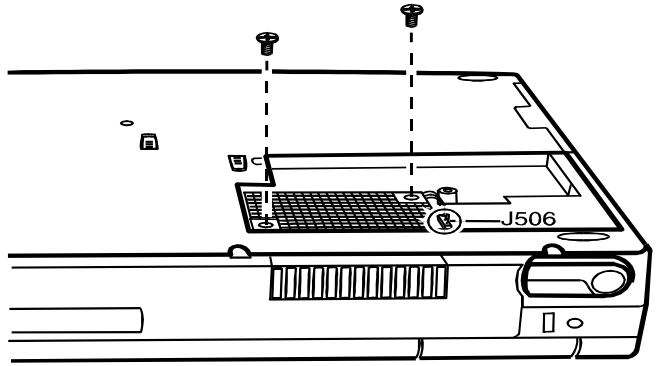


FIGURE 7-14. REMOVING THE HEAT SINK

5. TO REMOVE THE CPU, INSERT A FLAT SCREWDRIVER TO THE OPEN SIDE OF THE SOCKET AND PUSH THE SCREWDRIVER TOWARD THE CPU TO LOOSEN THE CPU.

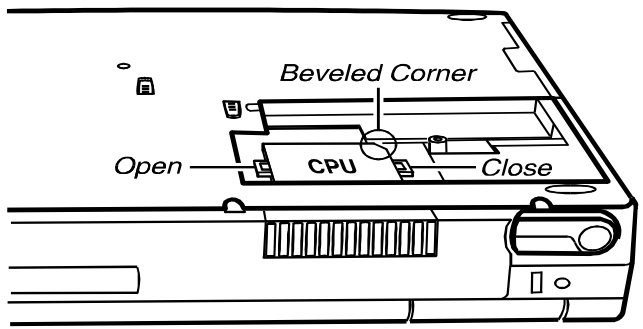


FIGURE 7-15. REMOVING THE CPU

REASSEMBLY

1. WHEN INSTALLING A NEW CPU, ATTACH THE THERMAL PAD(S) AND SPACER TO THE PIN SIDE AND TOP OF THE CPU AS DESCRIBED BELOW.

THERE ARE FIVE KINDS OF THERMAL PADS: 35*35*0.5mm (BLUE), 20*20*1.0mm(BLUE), 20*20*1.0mm(YELLOW), 15*15*0.5mm(YELLOW) AND 9*9*1.5mm(YELLOW).

IF INSTALLING SPGA CPU, ATTACH THE THERMAL PAD 35*35*0.5mm(BLUE) TO THE TOP OF THE CPU AND ATTACH THE SPACER, THERMAL PAD 15*15*0.5mm (YELLOW) TO THE CENTER OF THE CPU ON THE PIN SIDE.(SEE FIGURE 7-16).

IF INSTALLING TCP CPU, ATTACH THE THERMAL PAD 20*20*1.0mm(BLUE) TO THE TOP OF THE CPU AND ATTACH THE 9*9*1.5mm(YELLOW) TO THE CENTER OF THE CPU ON THE PIN SIDE. (SEE FIGURE 7-16).

IF INSTALLING TCP CPU, ATTACH THE THERMAL PAD 20*20*1.0mm(BLUE) TO THE TOP OF THE CPU AND ATTACH THE 20*20*1.0mm(YELLOW) TO THE CENTER OF THE CPU ON THE PIN SIDE. (SEE FIGURE 7-16).

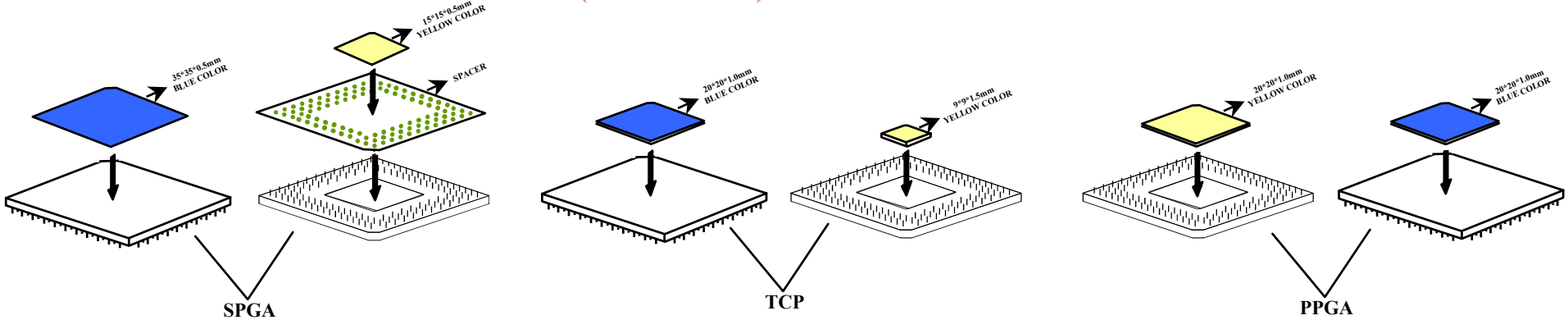


FIGURE 7-16. ATTACHING THE THERMAL PAD OR SPACER TO THE CPU

2. TO INSTALL THE CPU, ALIGN THE BEVELED CORNER ON THE CPU WITH THE BEVELED CORNER OF THE SOCKET AND INSERT THE CPU PINS INTO THE HOLES. INSERT A FLAT SCREWDRIVER TO THE CLOSE SIDE (SEE FIGURE 7-15 EARLIER) OF THE SOCKET AND PUSH THE SCREWDRIVER TOWARD THE CPU TO SECURE THE CPU IN PLACE. (SEE FIGURE 7-15 EARLIER).
3. RECONNECT THE FAN POWER CORD, IF EXISTING, TO J506 ON THE SYSTEM BOARD. ATTACH THE HEAT SINK TO THE CPU AND SECURE WITH TWO SCREWS.
4. MAKE SURE SW501 AND SW502 ARE SET ACCORDING TO THE CPU INSTALLED. (SEE SECTION 6. SWITCH AND JUMPER SETTING).
5. REPLACE THE COMPARTMENT COVER AND SECURE WITH ONE SCREW.

7.6 FAX/MODEM/VOICE CARD DISASSEMBLY

1. UNPLUG THE PHONE LINE CONNECTOR, IF CONNECTED
2. PLACE THE NOTEBOOK UPSIDE DOWN.
3. REMOVE THE CPU AND FAX/MODEM/VOICE CARD COMPARTMENT COVER BY REMOVING ONE SCREW AND SLIDING THE COVER TOWARD THE RIGHT TO OPEN THE COVER. (SEE FIGURE 7-13 EARLIER).
4. REMOVE ONE SCREW AND PULL UP ONE END OF THE CARD TOUNPLUG THE CONNECTOR FROM THE SYSTEM BOARD AND THEN LIFT IT FREE.

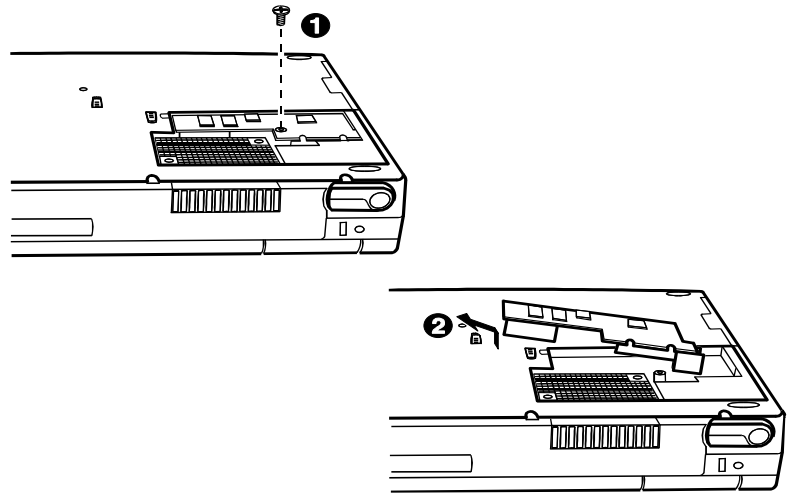


FIGURE 7-17. REMOVING THE FAX/MODEM/VOICE CARD

REASSEMBLY

1. HOLD THE FAX/MODEM/VOICE CARD AT AN ANGLE SO THAT THE PHONE LINE CONNECTOR IS POINTED TOWARDS THE OPENING ON THE NOTEBOOK. INSERT THE PHONE LINE CONNECTOR INTO THE OPENING AND PRESS THE OTHER END TO PLUG THE OTHER CONNECTOR INTO THE SOCKET ON THE SYSTEM BOARD. FASTEN ONE SCREW TO SECURE THE CARD IN PLACE.
2. REPLACE THE COMPARTMENT COVER AND SECURE WITH ONE SCREW.

7.7 LCD ASSEMBLY

DISASSEMBLY

1. REMOVE THE HINGE COVER BY INSERTING A FLAT SCREWDRIVER TO THE NOTCH AND PUSH THE COVER UPWARD TO PRY IT OUT. REPEAT THE SAME WITH THE OTHER HINGE COVER.

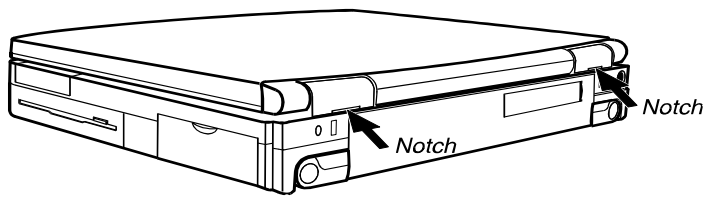


FIGURE 7-18. REMOVING THE HINGE COVERS

2. OPEN THE TOP COVER. REMOVE THE INDICATORS PANEL COVER BY FIRST LIFTING THE HINGES AND THEN DETACHING THE LOWER TABS.

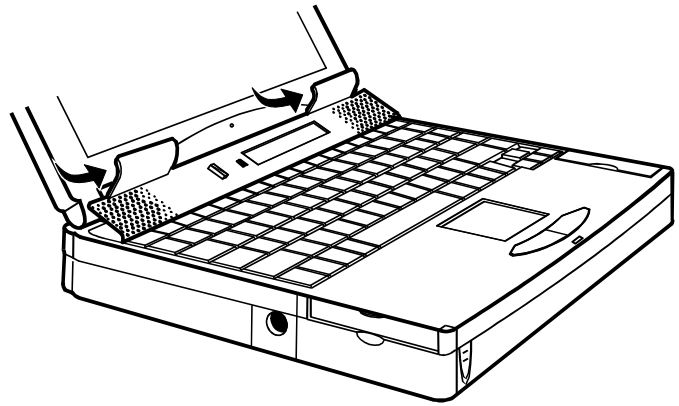


FIGURE 7-19. REMOVING THE INDICATORS PANEL

3. UNPLUG THE LCD TWO CABLE CONNECTORS FROM THE SYSTEM BOARD. (SEE FIGURE 7-20).
4. REMOVE FOUR SCREWS FROM THE HINGES. NOW YOU CAN SEPARATE THE UPPER COVER/SCREEN ASSEMBLY FROM THE BASE UNIT.

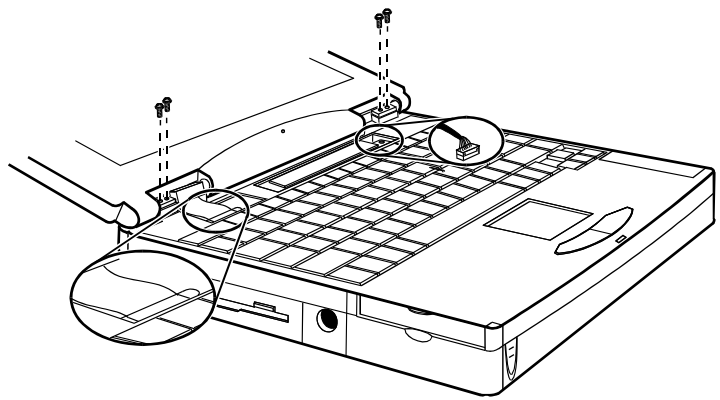


FIGURE 7-20. REMOVING SCREWS FROM THE HINGES AND UNPLUGGING CONNECTORS

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IF YOU WANT TO REMOVE THE FLAT PANEL (SCREEN) INSIDE THE LCD ASSEMBLY, FOLLOW THESE STEPS:
1. REMOVE THE TWO RUBBERS AND THE TWO SCREWS UNDERNEATH. NOW YOU CAN SEPARATE THE LCD FRAME FROM THE HOUSING.

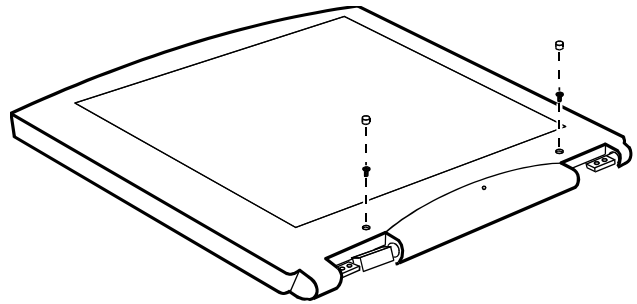


FIGURE 7-21. REMOVING THE LCD FRAME

2. TO REMOVE THE LCD, UNPLUG ALL THE CONNECTORS AND REMOVE FOUR SCREWS.

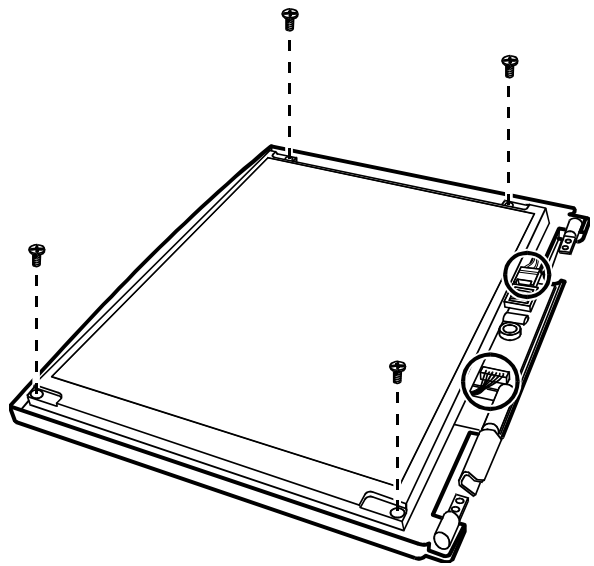


FIGURE 7-22. REMOVING THE FLAT PANEL SCREEN

REASSEMBLY

TO REASSEMBLE THE FLAT PANEL (SCREEN), FOLLOW THESE STEPS:
1. RECONNECT THE CONNECTORS AND REPLACE FOUR SCREWS. (SEE FIGURE 7-22 EARLIER).
2. FIT THE LCD FRAME BACK TO THE HOUSING AND REPLACE THE TWO SCREWS AND RUBBERS. (SEE FIGURE 7-21 EARLIER).

TO REASSEMBLE THE LCD ASSEMBLY, FOLLOW THESE STEPS:
1. ATTACH THE LCD ASSEMBLY TO THE BASE UNIT AND SECURE WITH FOUR SCREWS ON THE HINGES. (SEE FIGURE 7-20 EARLIER).
2. RECONNECT THE TWO CONNECTORS. (SEE FIGURE 7-20 EARLIER).
3. REPLACE THE INDICATORS PANEL.
4. REPLACE THE HINGE COVERS. WHEN REPLACING THE HINGE COVER, ALIGN THE EDGES OF THE COVER WITH THE SLOTS ON THE NOTEBOOK AND SLIDE THE COVER ALL THE WAY DOWN ALONG THE SLOTS AS SHOWN BELOW.

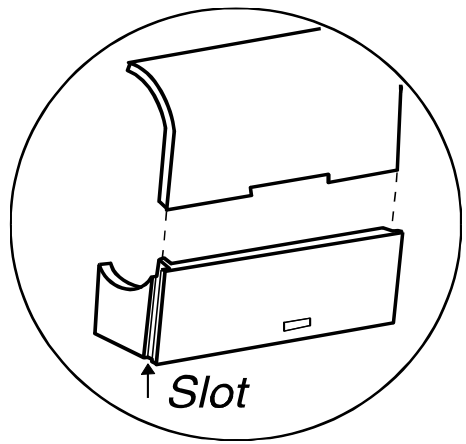


FIGURE 7-23. ALIGNING THE HINGE COVERS

7.8 KEYBOARD DISASSEMBLY

1. REMOVE THE INDICATORS PANEL LOCATED ABOVE THE KEYBOARD. (SEE SECTION 7.7 DISASSEMBLY STEP 1 TO 2).
2. REMOVE THE KEYBOARD BY LIFTING THE UPPER EDGE AND THEN DETACHING THE LOWER TABS.

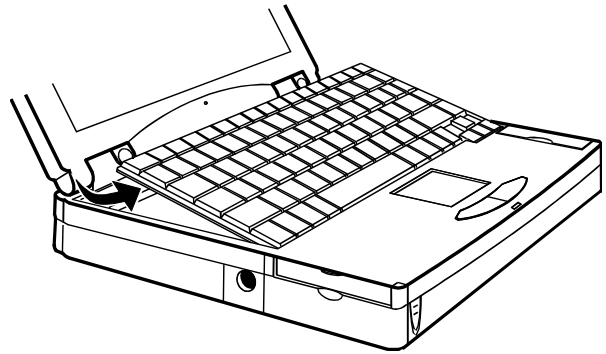


FIGURE 7-24. REMOVING THE KEYBOARD

3. UNPLUG THE KEYBOARD CABLE.

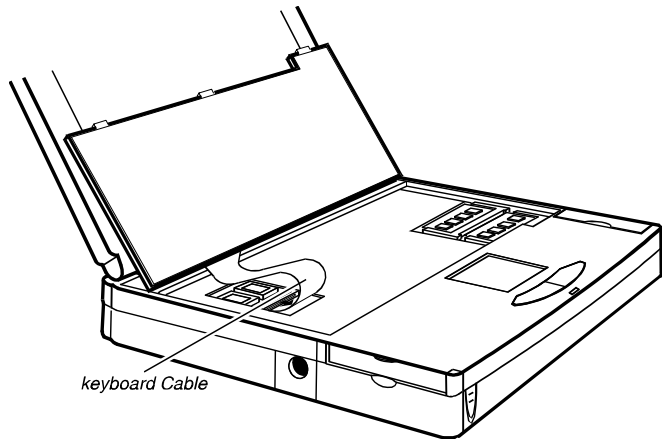


FIGURE 7-25. UNPLUGGING THE KEYBOARD CABLE

REASSEMBLY

1. RECONNECT THE KEYBOARD CABLE.
2. REPLACE THE KEYBOARD.
3. REPLACE THE INDICATORS PANEL.
4. REPLACE THE HINGE COVER. (SEE SECTION 7.7 REASSEMBLY STEP 4).

7.9 ON-BOARD MEMORY

DISASSEMBLY

1. REMOVE THE KEYBOARD WITHOUT UNPLUGGING THE KEYBOARD CABLE. (SEE SECTION 7.8 DISASSEMBLY STEPS 1 TO 2).
2. LOCATE THE DIMM SOCKETS.

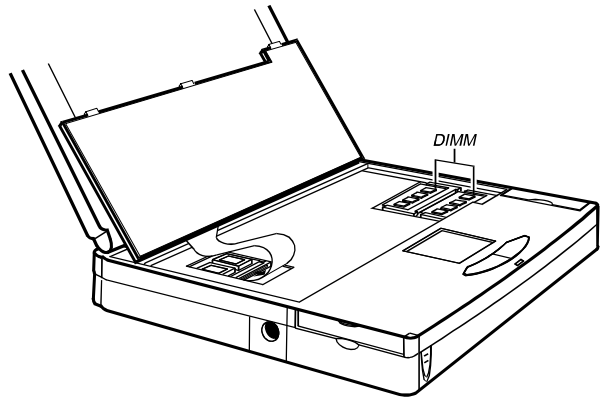


FIGURE 7-26. ACCESSING THE DIMM

3. TO REMOVE THE DIMM, PULL THE RETAINING CLIPS OUTWARDS AND THEN PULL THE DIMM.

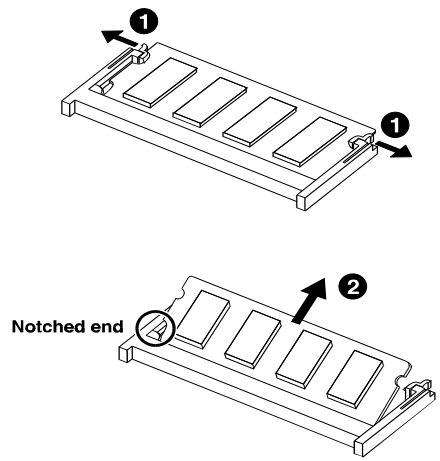


FIGURE 7-27. REMOVING THE DIMM

REASSEMBLY

1. TO INSTALL THE DIMM, ALIGN THE DIMM's NOTCHED END WITH THE SOCKET's CORRESPONDING END AND FIRMLY INSERT THE DIMM INTO THE SOCKET AT AN ANGLE. (SEE FIGURE 7-27). THEN PUSH DOWN UNTIL THE RETAINING CLIPS LOCK THE DIMM INTO POSITION.
2. REPLACE THE KEYBOARD AND INDICATERS PANEL. (SEE SECTION 7.8 REASSEMBLY).

7.10 DC/DC BOARD

DISASSEMBLY

1. REMOVE THE LCD ASSEMBLY. (SEE SECTION 7.7 DISASSEMBLY).
2. REMOVE THE KEYBOARD. (SEE SECTION 7.8 DISASSEMBLY).
3. REMOVE THE LEFT AND RIGHT BAY DEVICES. (SEE SECTION 7.2 DISASSEMBLY).
4. REMOVE THE HARD DISK. (SEE SECTION 7.3 DISASSEMBLY).
5. REMOVE THE MEMORY EXPANSION CARD IF IT EXISTS. (SEE SECTION 7.4 DISASSEMBLY).
6. REMOVE SEVEN BOTTOM SCREWS.

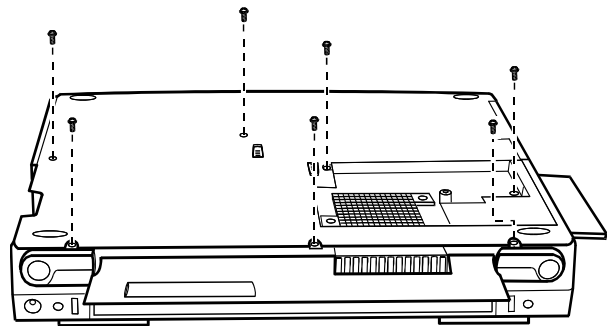


FIGURE 7-28. REMOVING THE BOTTOM SCREWS

7. TO REMOVE THE CHASSIS, FIRST OPEN THE NOTEBOOK REAR AND RIGHT CONNECTOR COVERS (SEE FIGURE 7-28), THEN DETACH THE CHASSIS FROM THE BASE UNIT.
8. REMOVE THE DC/DC BOARD BY LIFTING IT UP TO UNPLUG THE CONNECTORS.

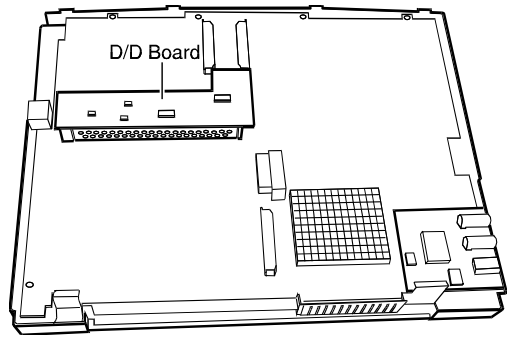


FIGURE 7-29. REMOVING THE DC/DC BOARD

REASSEMBLY

1. RECONNECT THE DC/DC BOARD CONNECTOR TO THE SYSTEM BOARD.
2. WITH THE NOTEBOOK REAR AND RIGHT SIDE CONNECTOR COVERS OPEN, ATTACH THE CHASSIS TO THE BASE UNIT.
3. REPLACE THE SEVEN BOTTOM SCREWS. (SEE FIGURE 7-28).
4. REPLACE THE MEMORY EXPANSION CARD. (SEE SECTION 7.4 REASSEMBLY).
5. REPLACE THE HARD DISK DRIVE. (SEE SECTION 7.3 REASSEMBLY).
6. REPLACE THE LEFT AND RIGHT BAY DEVICES. (SEE SECTION 7.2 REASSEMBLY).
7. REPLACE THE KEYBOARD. (SEE SECTION 7.8 REASSEMBLY).
8. RELACE THE LCD ASSEMBLY. (SEE SECTION 7.7 REASSEMBLY).

7.11 VIDEO-CAPTURE CARD/TV-ONLY CARD DISASSEMBLY

1. REMOVE THE LCD ASSEMBLY. (SEE SECTION 7.7 DISASSEMBLY).
2. REMOVE THE KEYBOARD. (SEE SECTION 7.8 DISASSEMBLY).
3. REMOVE THE LEFT AND RIGHT BAY DEVICES. (SEE SECTION 7.2 DISASSEMBLY).
4. REMOVE THE HARD DISK DRIVE. (SEE SECTION 7.3 DISASSEMBLY).
5. REMOVE THE MEMORY EXPANSION CARD IF IT EXISTS. (SEE SECTION 7.4 DISASSEMBLY).
6. REMOVE SEVEN BOTTOM SCREWS. (SEE FIGURE 7-28).
7. TO REMOVE THE CHASSIS, FIRST OPEN THE NOTEBOOK REAR AND RIGHT SIDE CONNECTOR COVERS, THEN DETACH THE CHASSIS FROM THE BASE UNIT.
8. REMOVE THE VIDEO-CAPTURE CARD OR TV-ONLY CARD BY REMOVING ONE SCREW.

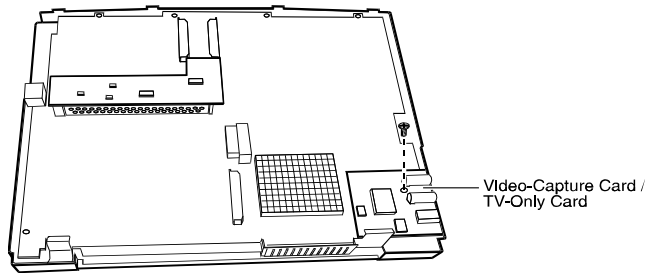


FIGURE 7-30. REMOVING THE VIDEO-CAPTURE/TV-ONLY CARD

REASSEMBLY

1. RECONNECT THE VIDEO-CAPTURE CARD OR TV-ONLY CARD TO THE SYSTEM BOARD AND SECURE WITH ONE SCREW.
2. WITH THE NOTEBOOK REAR AND RIGHT SIDE CONNECTOR COVERS OPEN, ATTACH THE CHASSIS TO THE BASE UNIT.
3. REPLACE THE SEVEN BOTTOM SCREWS. (SEE FIGURE 7-28).
4. REPLACE THE MEMORY EXPANSION CARD. (SEE SECTION 7.4 REASSEMBLY).
5. REPLACE THE HARD DISK DRIVE. (SEE SECTION 7.3 REASSEMBLY).
6. REPLACE THE LEFT AND RIGHT BAY DEVICES. (SEE SECTION 7.2 REASSEMBLY).
7. REPLACE THE KEYBOARD. (SEE SECTION 7.8 REASSEMBLY).
8. RELACE THE LCD ASSEMBLY. (SEE SECTION 7.7 REASSEMBLY).

7.12 SYSTEM BOARD.

DISASSEMBLY

1. REMOVE THE LCD ASSEMBLY. (SEE SECTION 7.7 DISASSEMBLY).
2. REMOVE THE KEYBOARD. (SEE SECTION 7.8 DISASSEMBLY).
3. UNPLUG THE TOUCHPAD CONNECTOR FROM THE SYSTEM BOARD. (SEE FIGURE 7-33 LATER).
4. REMOVE THE LEFT AND RIGHT BAY DEVICES. (SEE SECTION 7.2 DISASSEMBLY).
5. REMOVE THE HARD DISK DRIVE. (SEE SECTION 7.3 DISASSEMBLY).
6. REMOVE THE MEMORY EXPANSION CARD IF IT EXISTS. (SEE SECTION 7.4 DISASSEMBLY).
7. REMOVE SEVEN BOTTOM SCREWS. (SEE FIGURE 7-28).
8. TO REMOVE THE CHASSIS, FIRST OPEN THE NOTEBOOK REAR AND RIGHT SIDE CONNECTOR COVERS, THEN DETACH THE CHASSIS FROM BASE UNIT.
9. REMOVE THE DC/DC BOARD BY LIFTING IT UP. (SEE FIGURE 7-29).
10. REMOVE THE VIDEO-CAPTURE CARD OR TV-ONLY CARD BY REMOVING ONE SCREW. (SEE FIGURE 7-30).
11. TO REMOVE THE HEAT SINK, FOLLOW THESE STEPS:
    a. REMOVE THE TWO SCREWS SECURING THE HEAT SINK TO THE SYSTEM BOARD.
    b. IF THE HEAT SINK HAS A COOLING FAN INSIDE IT, UNPLUG THE FAN POWER CORD FROM J506 ON THE SYSTEM BOARD.

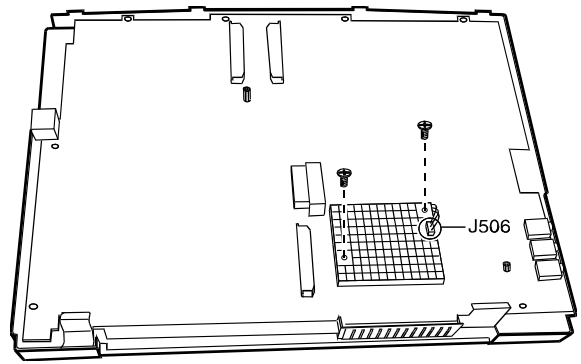


FIGURE 7-31. REMOVING THE HEAT SINK

12. REMOVE THE SIX SCREWS AND TWO HEXNUT SCREWS THAT SECURE THE SYSTEM BOARD TO THE BASE UNIT.

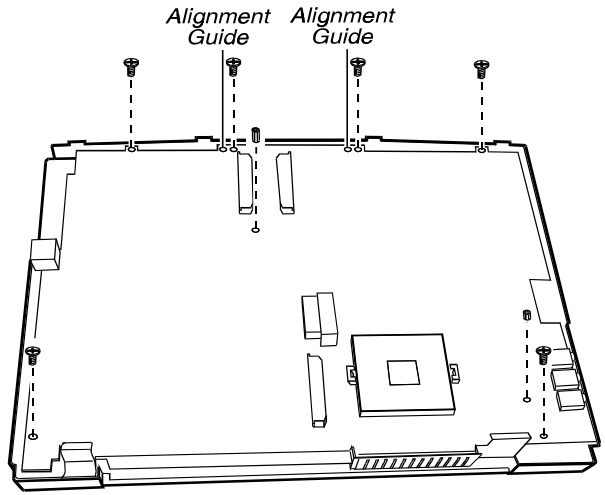


FIGURE 7-32. REMOVING THE SIX SCREWS AND TWO HEXNUT SCREWS FROM SYSTEM BOARD

13. LIFT THE SYSTEM BOARD FREE.

REASSEMBLY

1. WITH THE TWO SMALL CROSSES AS THE ALIGNMENT GUIDE, ATTACH THE SYSTEM BOARD TO THE BASE UNIT. (SEE FIGURE 2-32 EARLIER).
2. REPLACE THE TWO HEXNUT SCREWS AND SIX SCREWS TO THE SYSTEM BOARD. (SEE FIGURE 7-32 EARLIER).
3. RECONNECT THE FAN POWER CORD, IF EXISTING, TO J506 ON THE SYSTEM BOARD. ATTACH THE HEAT SINK TO THE CPU, AND SECURE WITH TWO SCREWS. (SEE FIGURE 7-31).
4. REPLACE THE VIDEO-CAPTURE CARD OR TV-ONLY CARD. (SEE SECTION 7-11 REASSEMBLY STEP 1).
5. REPLACE THE DC/DC BOARD. (SEE SECTION 7.10 REASSEMBLY STEP 1).
6. WITH THE NOTEBOOK REAR AND RIGHT SIDE CONNECTOR COVERS OPEN, ATTACH THE CHASSIS TO THE BASE UNIT.
7. REPLACE THE SEVEN BOTTOM SCREWS. (SEE FIGURE 7-28).
8. REPLACE THE MEMORY EXPANSION CARD. (SEE SECTION 7.4 REASSEMBLY).
9. REPLACE THE HARD DISK DRIVE. (SEE SECTION 7.3 REASSEMBLY).
10. REPLACE THE LEFT AND RIGHT BAY DEVICES. (SEE SECTION 7.2 REASSEMBLY).
11. RECONNECT THE TOUCHPAD CONNECTOR TO THE SYSTEM BOARD. (SEE FIGURE 7-33 LATER).
12. REPLACE THE KEYBOARD. (SEE SECTION 7.8 REASSEMBLY).
13. REPLACE THE LCD ASSEMBLY. (SEE SECTION 7.7 REASSEMBLY).

7.13 TOUCHPAD DISASSEMBLY

1. REMOVE THE KEYBOARD WITHOUT UNPLUGGING THE KEYBOARD CABLE. (SEE SECTION 7.8 DISASSEMBLY STEPS 1 TO 2).
2. UNPLUG THE TOUCHPAD CABLE.

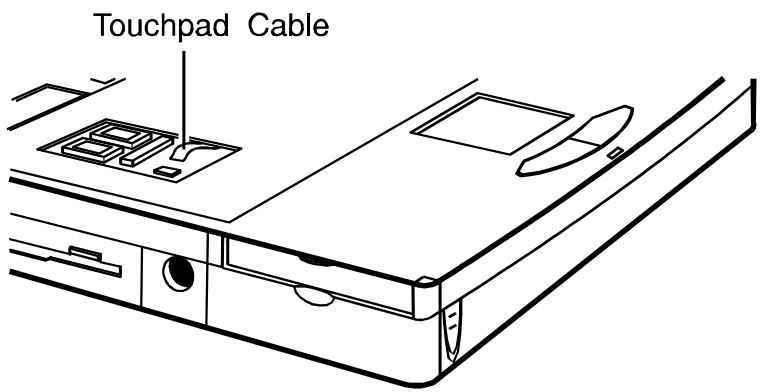


FIGURE 7-33. UNPLUGGING THE TOUCHPAD CABLE

3. REMOVE THE SYSTEM BOARD. (SEE SECTION 7.12 DISASSEMBLY).
4. REMOVE THE TOUCHPAD BY REMOVING TWO SCREWS.

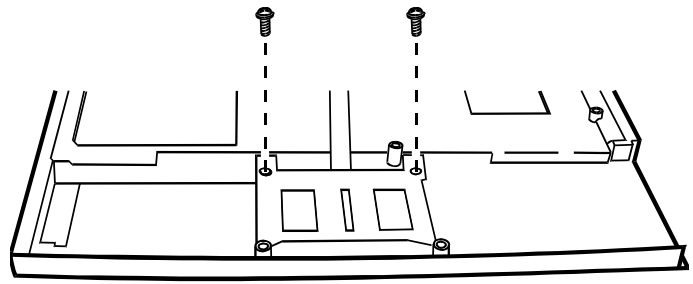


FIGURE 7-34. REMOVING THE TOUCHPAD

REASSEMBLY

1. REPLACE THE TWO SCREWS. (SEE FIGURE 7-34).
2. REPLACE THE SYSTEM BOARD. (SEE SECTION 7.12 REASSEMBLY).
3. RECONNECT THE TOUCHPAD CABLE.
4. REPLACE THE KEYBOARD.

8. MAINTENANCE DIAGNOSTICS

8.1 INTRODUCTION

EACH TIME THE COMPUTER IS TURNED ON, THE SYSTEM BIOS RUNS A SERIES OF INTERNAL CHECKS ON THE HARDWARE. THIS POWER-ON SELF TEST (POST) ALLOWS THE COMPUTER TO DETECT PROBLEMS AS EARLY AS THE POWER-ON STAGE. ERROR MESSAGES OF POST CAN ALERT YOU TO THE PROBLEMS OF YOUR COMPUTER.

IF AN ERROR IS DETECTED DURING THESE TESTS, YOU WILL SEE AN ERROR MESSAGE DISPLAYED ON THE SCREEN. IF THE ERROR OCCURS BEFORE THE DISPLAY IS INITIALIZED,THEN THE SCREEN CANNOT DISPLAY THE ERROR MESSAGE. ERROR CODES OR SYSTEM BEEPS ARE USED TO IDENTIFY A POST ERROR THAT OCCURS WHEN THE SCREEN IS NOT AVAILABLE.

THE VALUE FOR THE DIAGNOSTIC PORT (378H) IS WRITTEN AT THE BEGINNING OF THE TEST. THEREFORE, IF THE TEST FAILED, THE USER CAN DETERMINE WHERE THE PROBLEM OCCURRED BY READING THE LAST VALUE WRITTEN TO PORT 378H BY THE PIO DEBUG BOARD PLUG AT PIO PORT.

8. MAINTENANCE DIAGNOSTICS

8.2 ERROR CODES

FOLLOWING IS A LIST OF ERROR CODES IN SEQUENCE DISPLAY ON THE PIO DEBUG BOARD.

CODE	BEEP	DESCRIPTION
02		VERIFY REAL MODE
04		GET PCU TYPE
06		INITIALIZE SYSTEM HARDWARE
08		INITIALIZE CHIPSET REGISTERS WITH INITIAL POST VALUES
09		SETIN POST FLAG
0A		INITIALIZE CPU REGISTERS
0C		INITIALIZE CACHE TO INITAIAL POST VALUES
0E		INITIALIZE I/O
0F		INITIALIZE THE LOCAL BUS IDE
10		INITIALIZE POWER MANAGEMENT
11		LOAD ALTERNATE REGISTERS WITH INITIAL POST VALUES
12		JUMP TO USERPATCH0
14		INITIALIZE KEYBOARD CONTROLLER
16	2-2-3	BIOS ROM CHECKSUM
18		8254 TIMER INITIALIZATION
1A		8237 DMA CONTROLLER INITIALIZATION
1C		RESET PROGRAMMABLE INTERRUPT CONTROLLER
20	3-1-1	TEST DRAM REFRESH
22	3-1-3	TEST 8742 KEYBOARD CONTROLLER
24		SET ES SEGMENT REGISTER TO 4GB
28		AUTOSIZE DRAM
2A		CLEAR 512K BASE RAM
2C	3-4-1	TEST 512K BASE ADDRESS LINES
2E	3-4-3	TEST 512K BASE MEMORY
32		TEST CPU BUS-CLOCK FREQUENCY
34		TEST CMOS RAM
35		INITIALIZE ALTERNATE CHIPSET REGISTERS.
37		REINITIALIZE THE CHIPSET(MB ONLY)
38		SHADOW SYSTEM BIOS ROM
39		REINITIALIZE THE CAHE(MB ONLY)

(TO BE CONTINUED)

CODE	BEEP	DESCRIPTION
3A		AAUTOSIZE CACHE
3C		CONFIGURE ADVANCED CHIPSET REGISTERS
3D		LOAD ALTERNATE REGISTERS WITH CMOS VALUES
40		SET INITIAL CPU SPEED
42		INITIALIZE INTERRUPT VECTORS
44		INITIALIZE BIOS INTERRUPTS
46	2-1-2-3	CHECK ROM COYRIGHT NOTICE
47		INITIALIZE MANAGER FOR PCIOPTION ROMS
48		CHECK VIDEO CONFIGURATION AGAINST CMOS
49		INITIALIZE PCIBUS AND DEVICES
4A		INITIALIZE ALL VIDEO ADAPTER IN SYSTEM
4C		SHADOW VIDEO BIOS ROM
4E		DISPLAY COPYRIGHT NOTICE
50		DISPLAY CPU TYPE AND SPEED.
51		INITIALIZE EISA BOARD.
52		TEST KEYBOARD
54		SET KEY CLICK IF ENABLED.
56		ENABLED KEYBOARD.
58	2-2-3-1	TEST FOR UNEXPECTED INTERRUPTD
5A		DISPLAY PROMPT "PRESS F2 TO ENTER SETUP"
5C		TEST RAM BETWEEN 512 AND 640KB
60		TEST EXTENDED MEMORY.
62		TEST EXTENDED MEMORY ADDRES LINES
64		JUMP TO USERPATCH1
66		CONFIGURE ADVANCED CACHER REGISTERS
68		ENABLE EXTERNAL AN CPU CACHES
6A		DISPLAY EXTERNAL CACHE SIZE
6C		DISPLAY SHADOW MESSAGE
6E		DISPLAY NON-DISPOSABLE SEGMENTS
70		DISPLAY ERROR MESSAGES

8. MAINTENANCE DIAGNOSTICS

CODE	BEEP	DESCRIPTION
72		CHECK FOR CONFIGURATION ERRORS
74		TEST REAL-TIME CLOCK
76		CHECK FOR KEYBOARD ERRORS
7C		SET UP HARDWARE INTERRUP VECTORS
7E		TEST COPROCESSOR IF PRESENT
80		DISABLE ONBOARD I/O PORTS
82		DETECT AN INSTALL EXTERNAL RS232 PROTS
84		DETECT AN INSTALL EXTERNAL PARALLEL PROTS
86		RE-INITIALIZE ONBOARD I/O PORTS
88		INITAILIZE BIOS DATA AREA
8A		INITIALIZE EXTENDED BIOS DATA AREA
8C		INITIALIZE FLOPPY CONTROLLER
90		INITIALIZE HARD-DISK CONTROLLER
91		INITIALIZE LOCAL-BUS HARD-DISK CONTROLLER
92		JUMP TO USERPATCH2
93		BULID MPTABL FOR MULIT-PROCESSOR BOARDS
94		DISABLE A20 ADDRESS LINE
96		CLEAR HUGE ES SEGMENT REGISTER
98		SEARCH FOT OPTION ROMS
9A		SHADOW OPTION ROMS
9C		SET UP POWER MANAGEMENT
9E		ENABLE HARDWARE INTERRUPTS
A0		SET TIME OF DAY
A2		CHECK KEY CLOCK
A4		INITAILZETYPEMATIC RATE
A8		ERASE F2 PROMPT
AA		SCAN FOR F2 KEY STROKE
AC		ENTER SETUP
AE		CLEAR IN-POST FLAG
B0		CHECK FOR ERRORS

CODE	BEEP	DESCRIPTION
B2		POST DONE-PREPARE TO BOOT OPERATING SYSTEM
B4		ONE BEEP
B6		CHECK PASSWORD(OPTIONAL)
B8		CLEAR GLOBAL DESCRIPTOR TABLE
BC		CLEAR PARITY CHECKERS
BE		CLEAR SCREEN(OPTION)
BF		CECK VIRUS AND BACKUP REMMINDERS
C0		TRY TO BOOT WITH INT19
D0		INTERRUPT HANDLER ERROR
D2		UNKNNOW INTERRUPT ERROR
D4		PENDING INTERRUPT ERROR
D6		INITIALIZE OPTION ERROR
D8		SHUTDOWN ERROR
DA		EXTENDED BLOCK MOVE
DC		SHUTDOWN 10 ERROR
		THE FOLLOWING ARE FOR BOOT BLOCK IN FLASH ROM
E2		INITIALIZE THE CHIPSET
E3		INITAILIZE REFRESH COUNTER
E4		CHECK FOR FORCED FLASH
E5		CHECK HW STATUS OF ROM
E6		BIOS ROM IS OK
E7		DO A COMPLETE RAM TEST
E8		DO OEM INITIALIZATION
E9		INITIALIZE INTERRUPT CONTROLLERREAD IN THE BOOTSTRAP CODE
EA		READ IN THE BOOTSTRAP CODE
EB		INITIALIZE ALL VECTORS
EC		BOOT THE FLASH PROGRAM
ED		INITIALIZE TH BOOT DEVICE
EE		BOOT CODE WAS READ OK

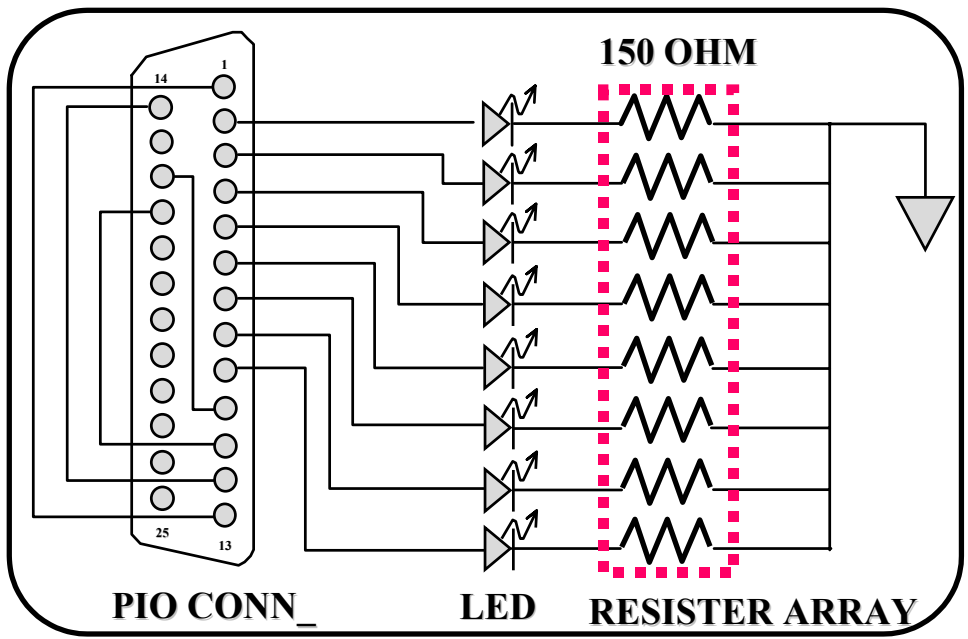
8. MAINTENANCE DIAGNOSTICS

8.3 PIO PORT (378H) DIAGNOSTIC TOOLS

A. PARTS USED:

- LED * 8
- RESISTER ARRAY, 10PIN, 150 OHM * 1
- PIO CONNECTOR * 1

B. CIRCUIT:



PIN1 : STROBE ↔ PIN 13 : SLCT
PIN10: ACK# ↔ PIN 16 : INT#
PIN11: BUSY ↔ PIN 17 : SELIN#
PIN12: PTERR ↔ PIN 14 : AUTOFD#
PIN{9:2}: PD{7:0}

9. TROUBLE SHOOTING

9.1 NO POWER

9.2 NO DISPLAY

9.3 VGA CONTROLLER FAILURE

9.4 LCD NO DISPLAY

9.5 EXTERNAL MONITOR NO DISPLAY

9.6 MEMORY TEST ERROR

9.7 KEYBOARD TEST ERROR

9.8 TRACK PAD/BALL TEST ERROR

9.9 DISKETTE DRIVE TEST ERROR

9.10 HARD DRIVE OR CD-ROM TEST ERROR

9.11 CMOS TEST ERROR

9.12 SIO PORT TEST ERROR

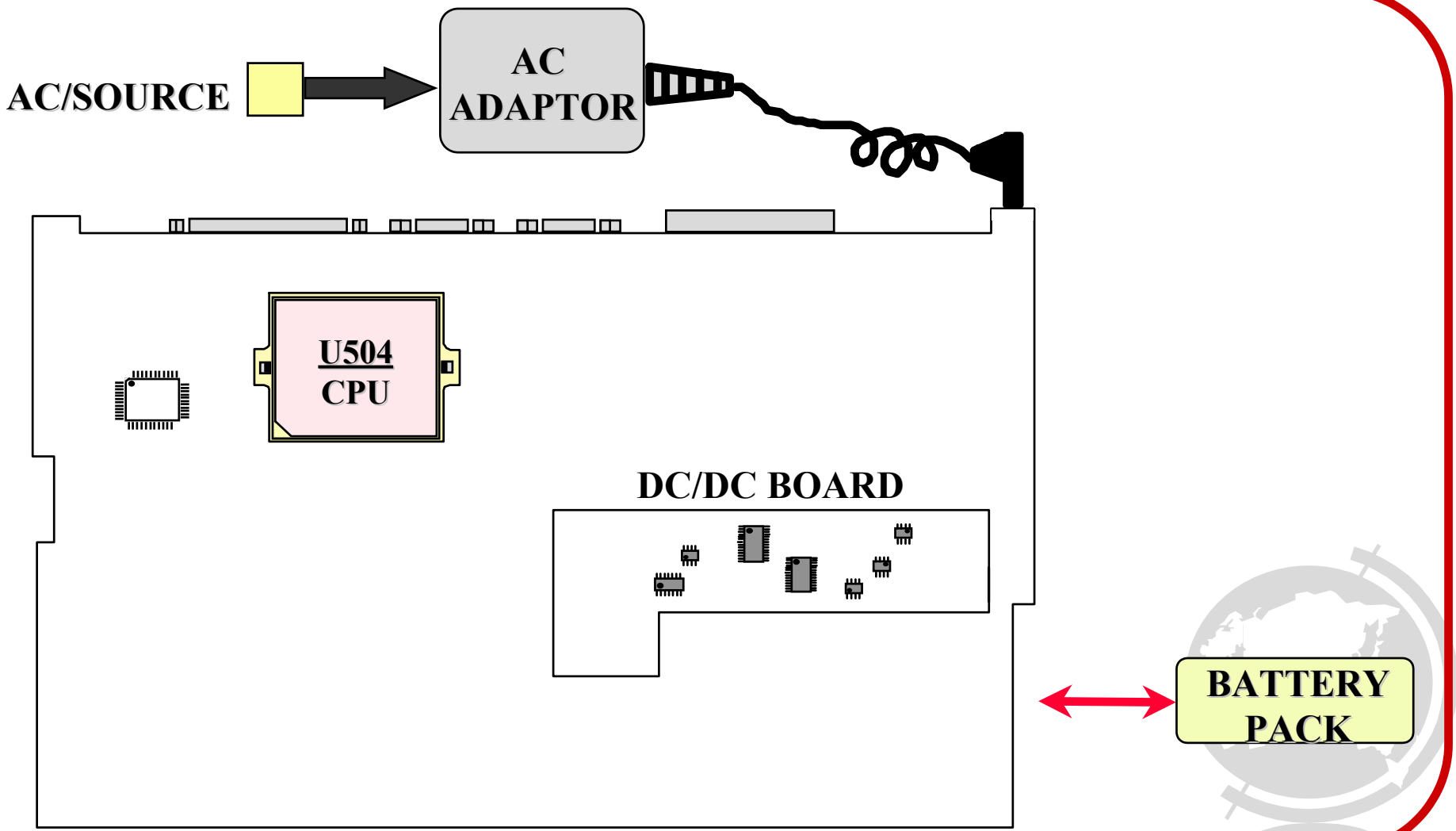
9.13 PIO PORT TEST ERROR

9.14 BATTERY RE-CHARGE FAILURE

9.1 NO POWER

SYMPTOM:

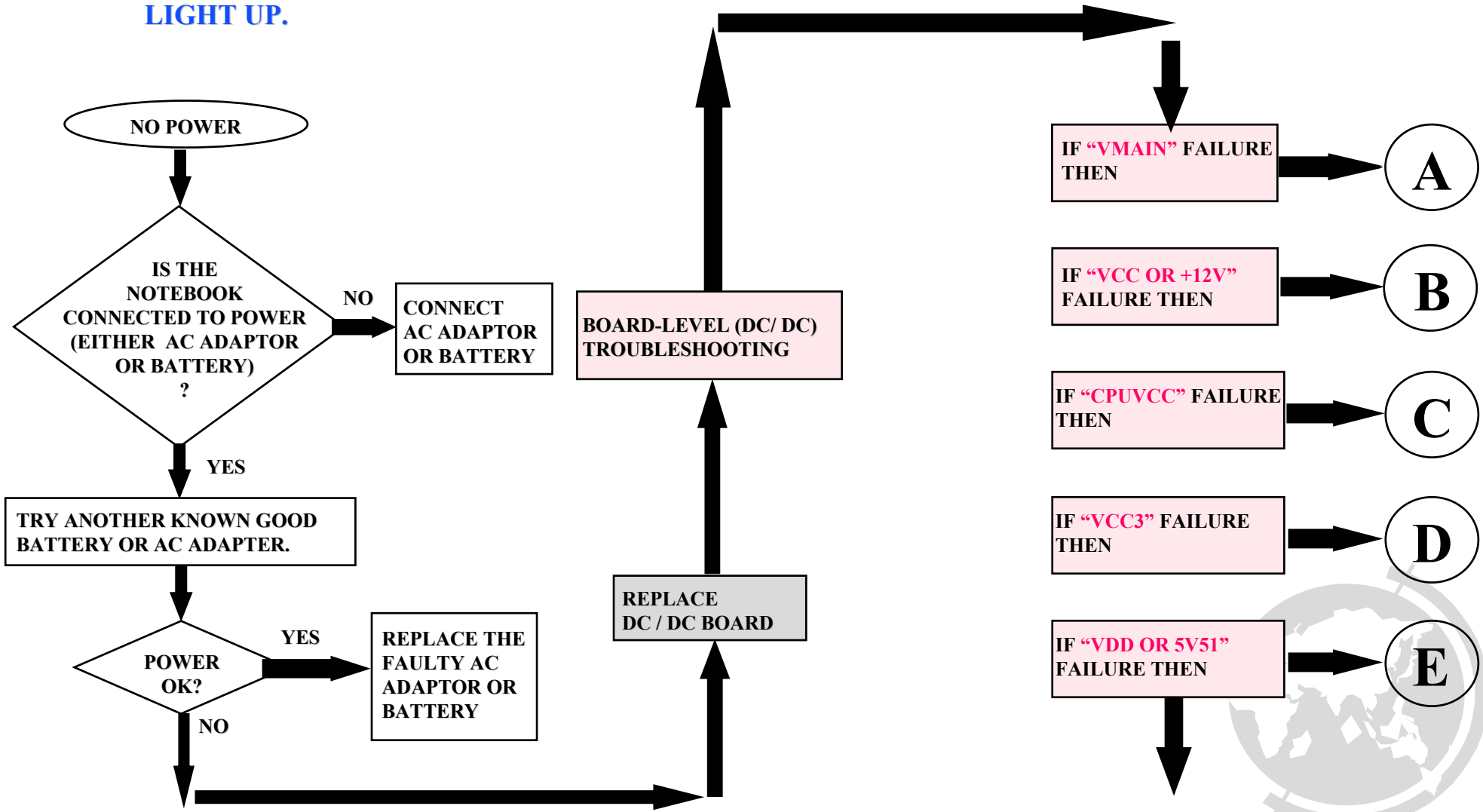
WHEN THE POWER BUTTON IS PRESSED, NOTHING HAPPENS, POWER INDICATOR IS NOT LIGHT UP.



5026 N/B MAINTENANCE

9.1 NO POWER

SYMPTOM:
WHEN THE POWER BUTTON IS PRESSED, NOTHING HAPPENS, POWER INDICATOR IS NOT LIGHT UP.



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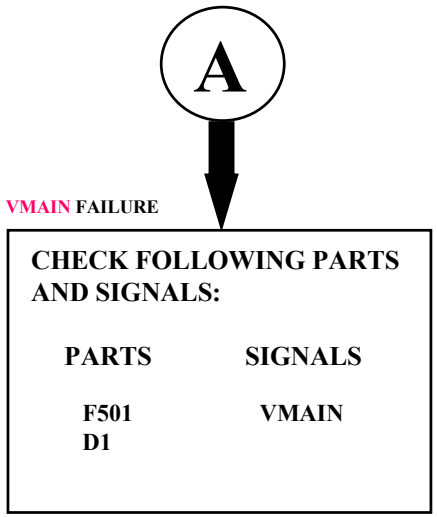
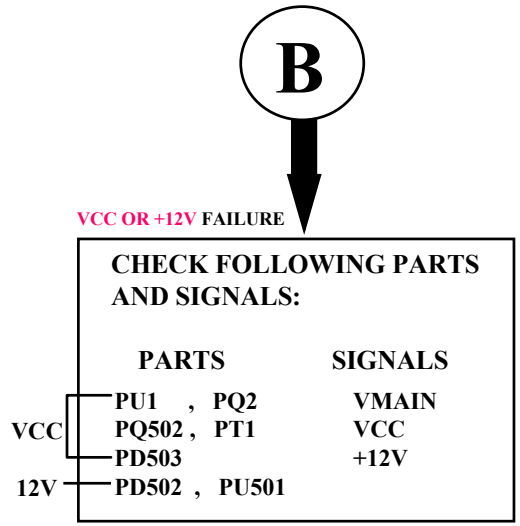
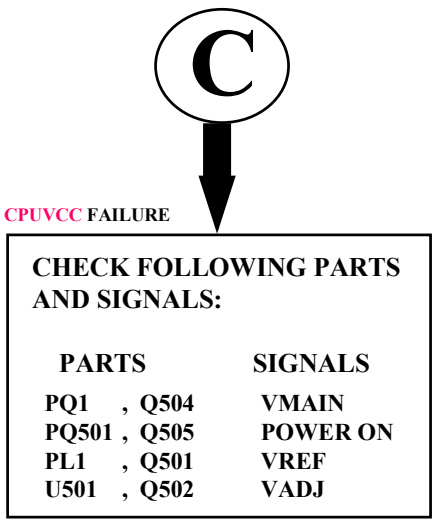
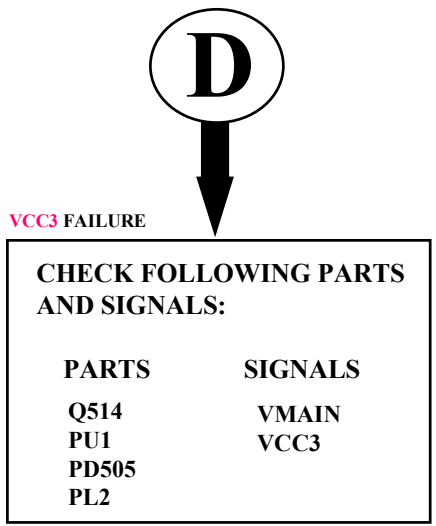
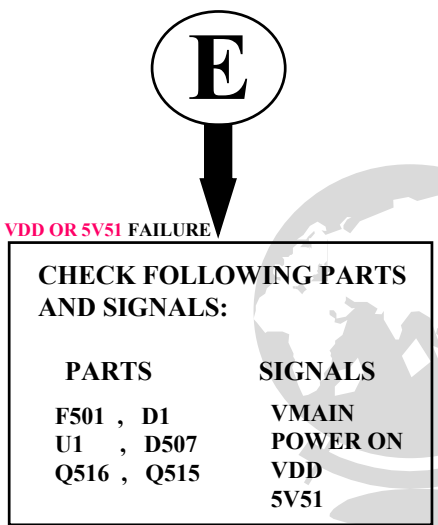






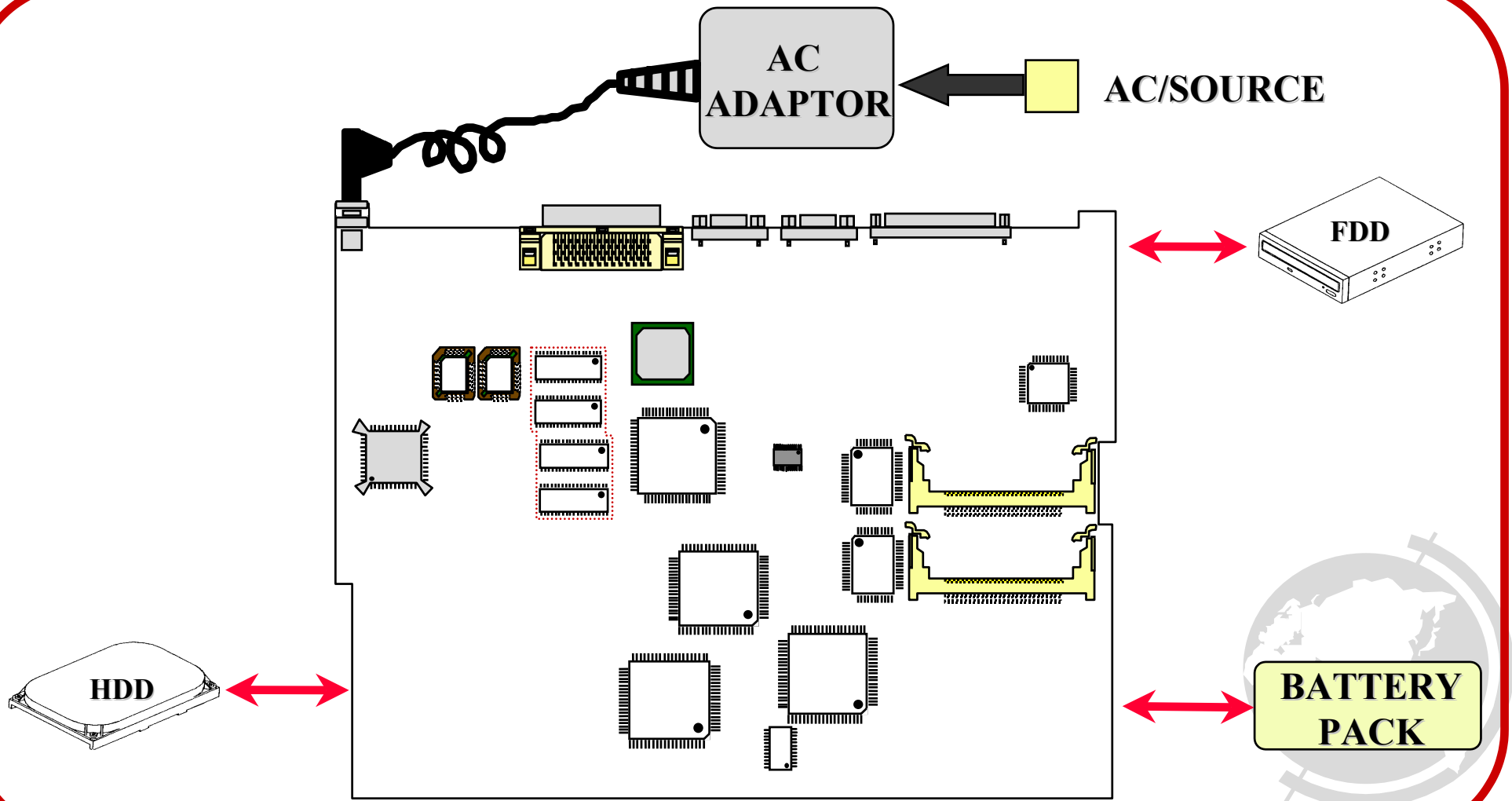




9.2 NO DISPLAY (SYSTEM FAILURE)

SYMPTOM:

THERE IS NO DISPLAY ON BOTH LCD AND MONITOR AFTER POWER ON ALTHOUGH THE LCD AND MONITOR ARE KNOWN-GOOD.



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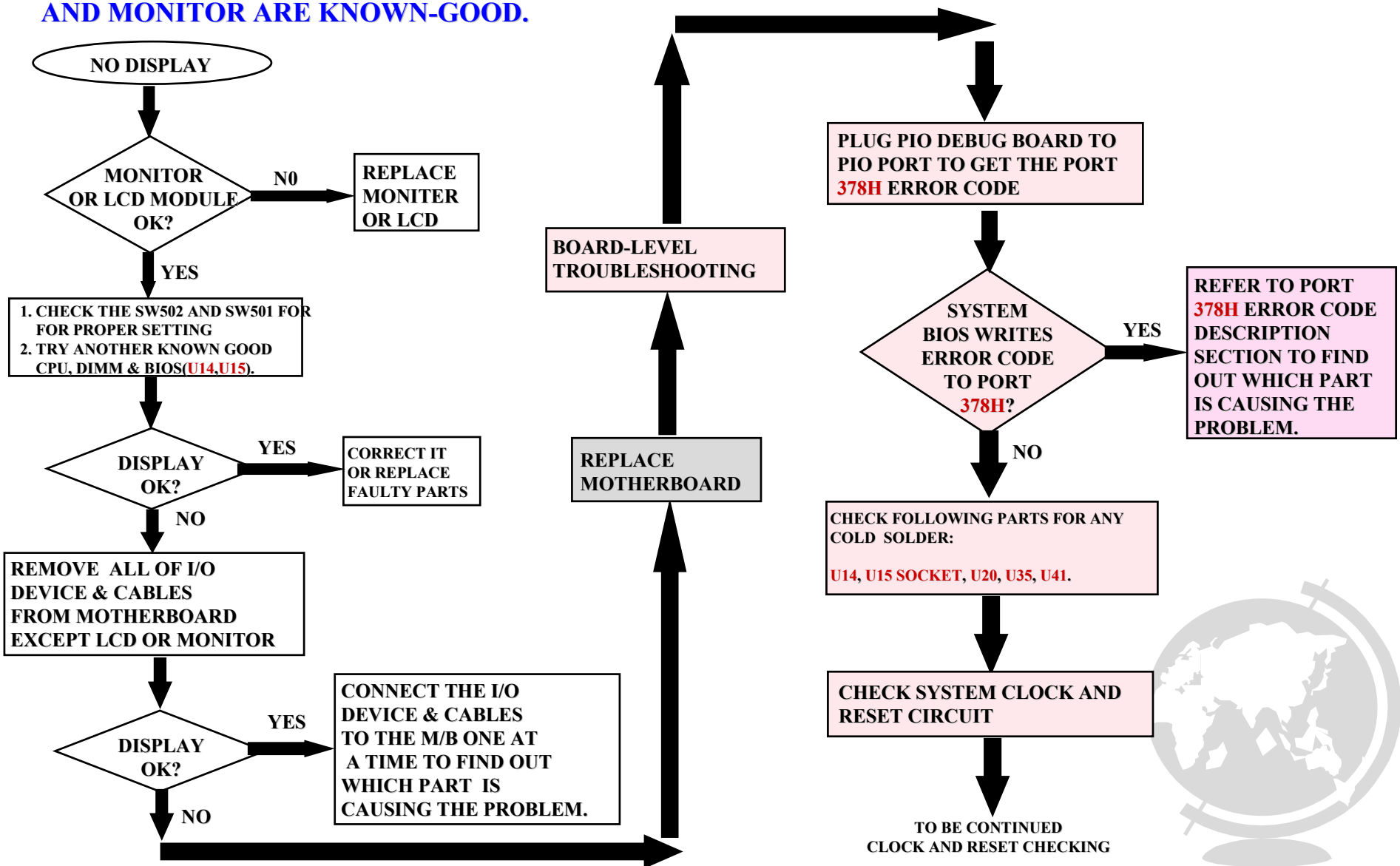
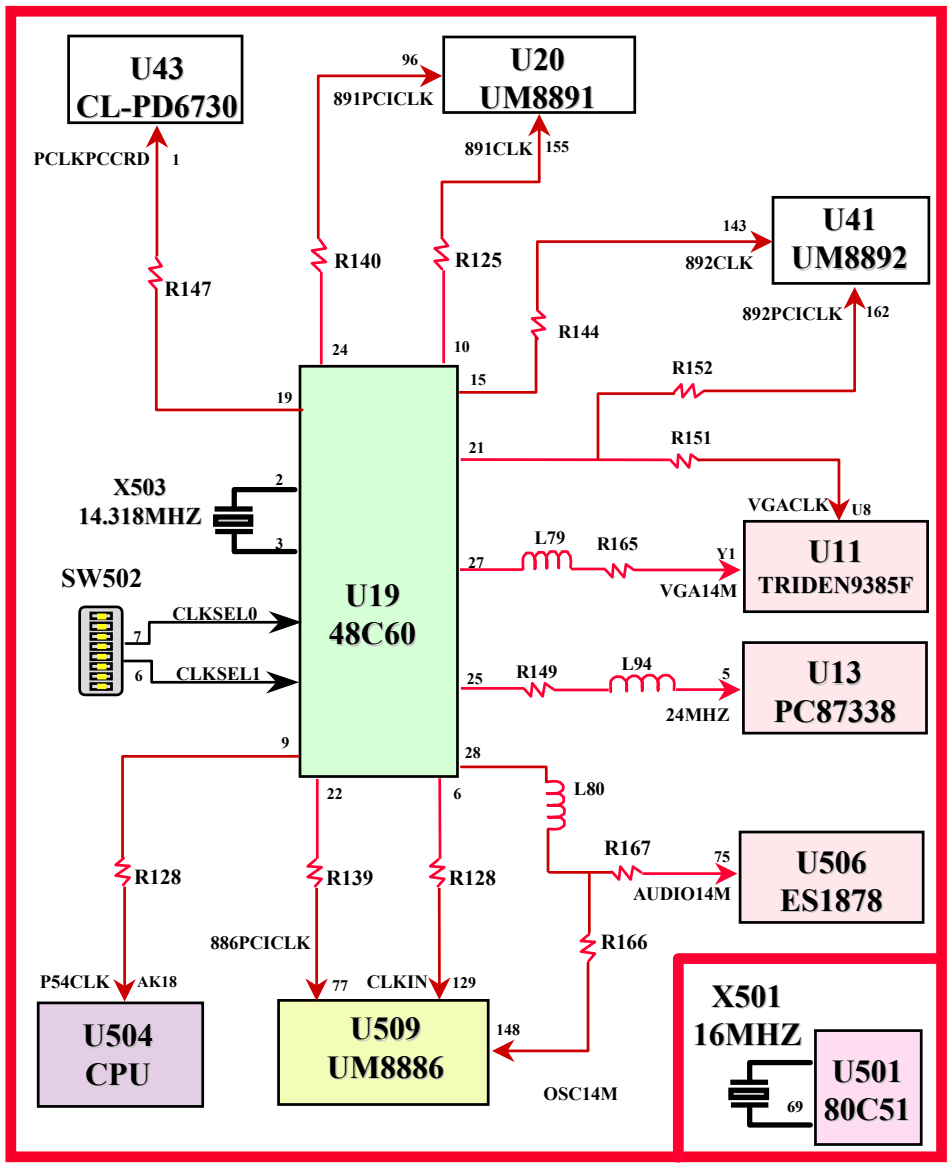
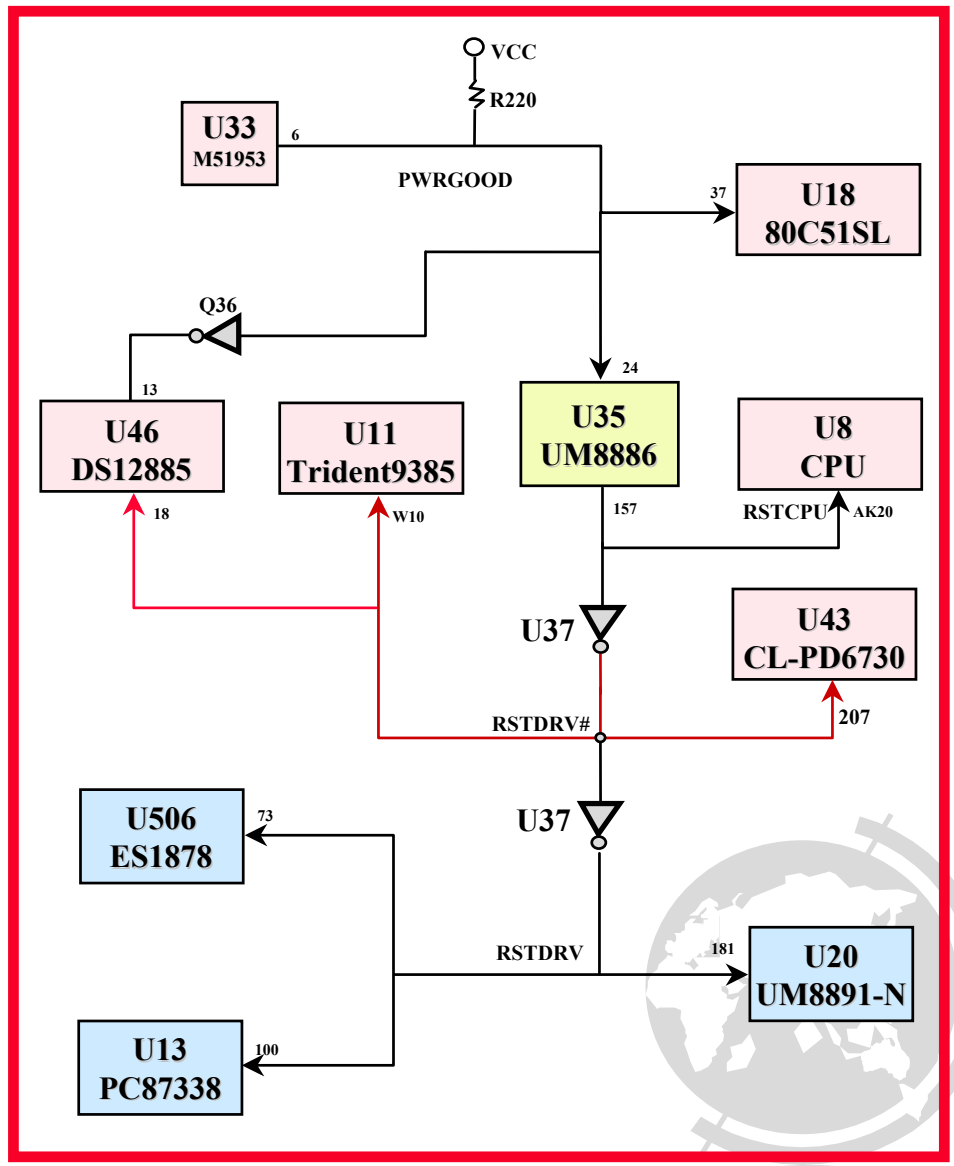


9.2 NO DISPLAY (SYSTEM FAILURE)

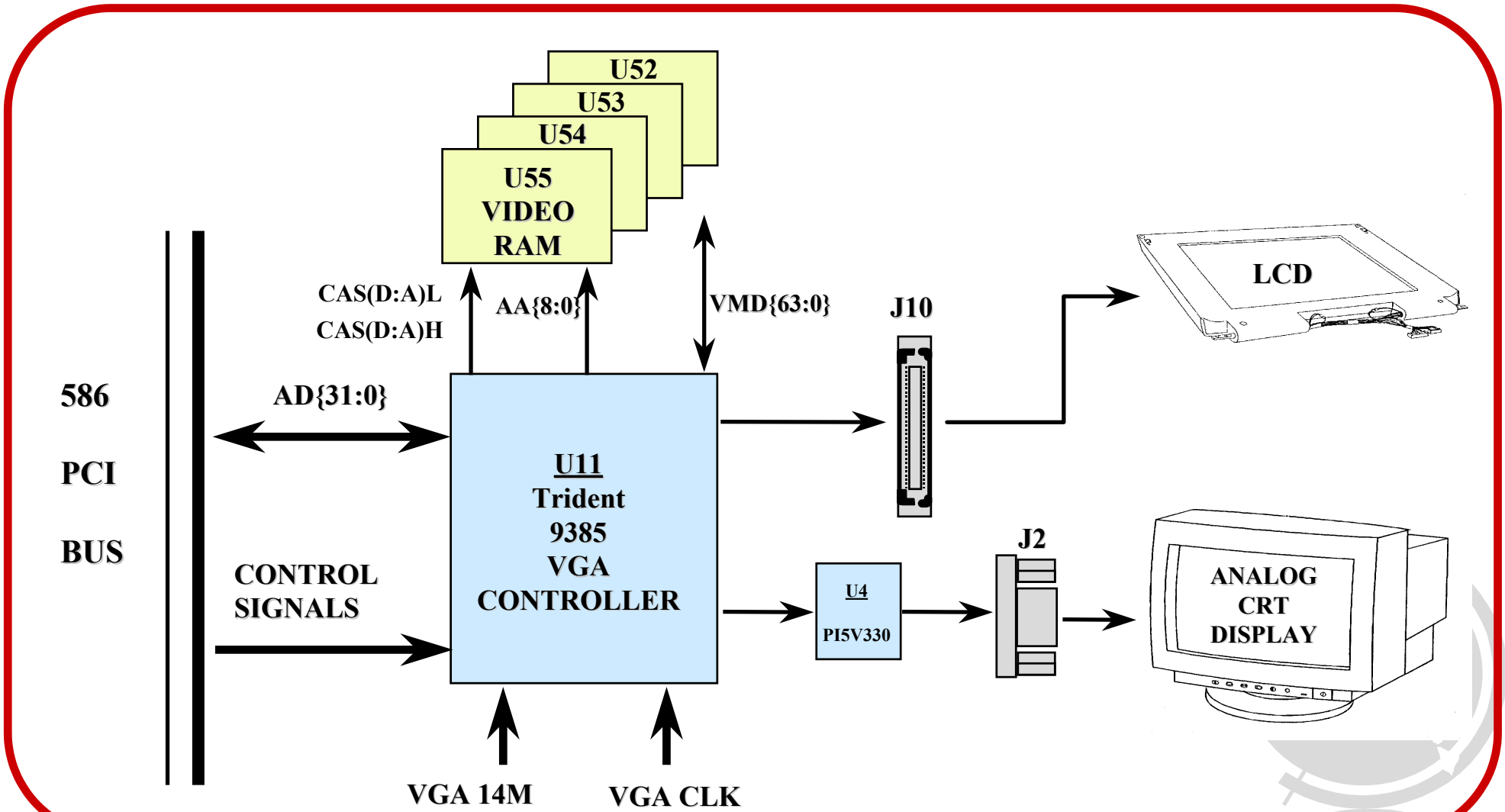
*******CLOCK AND RESET CIRCUIT CHECKING*******





9.3 VGA CONTROLLER FAILURE

SYMPTOM:
THERE IS NO DISPLAY ON BOTH LCD AND MONITOR ALTHOUGH POWER-ON-SELF-TEST IS PASSED.



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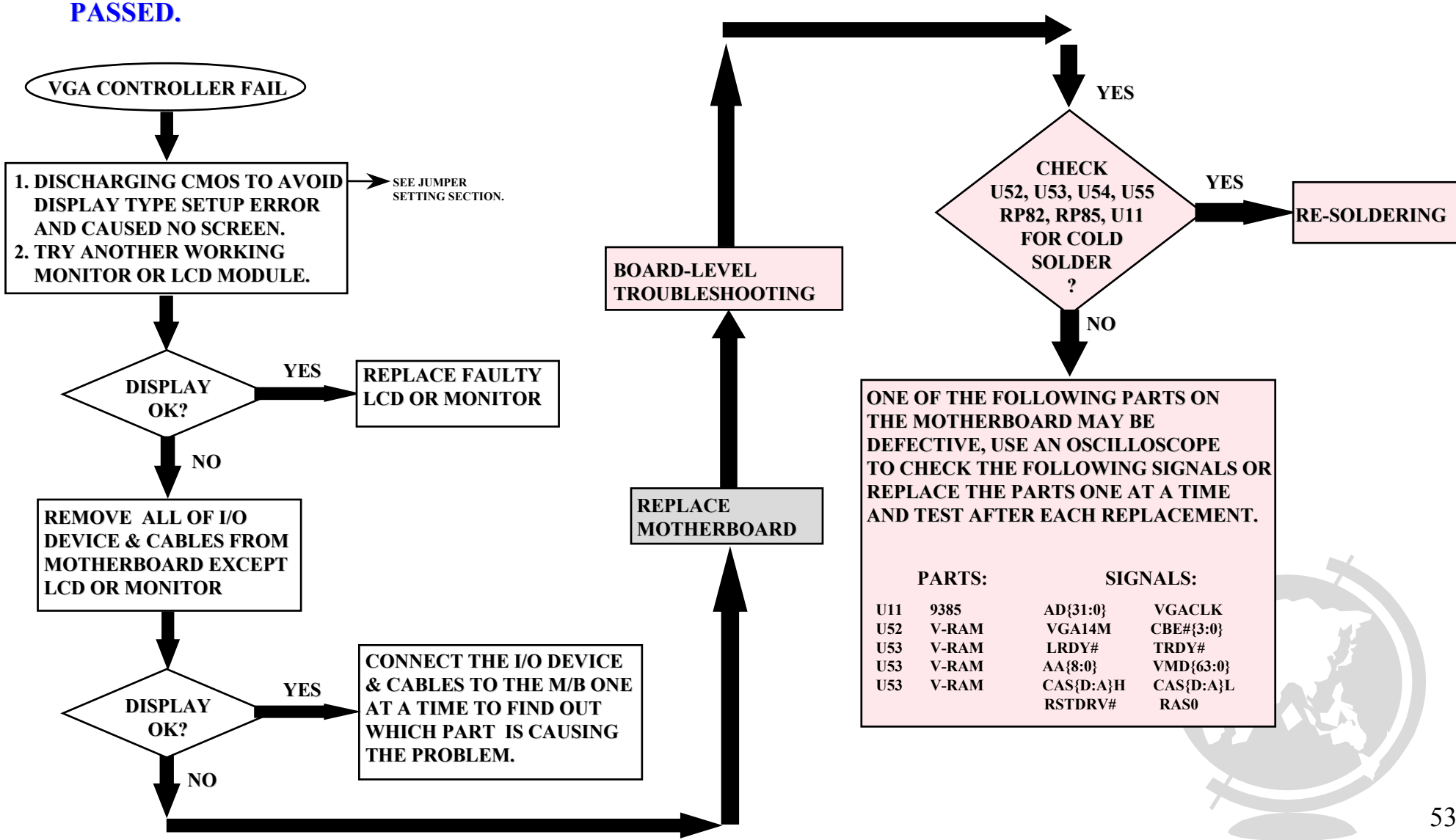
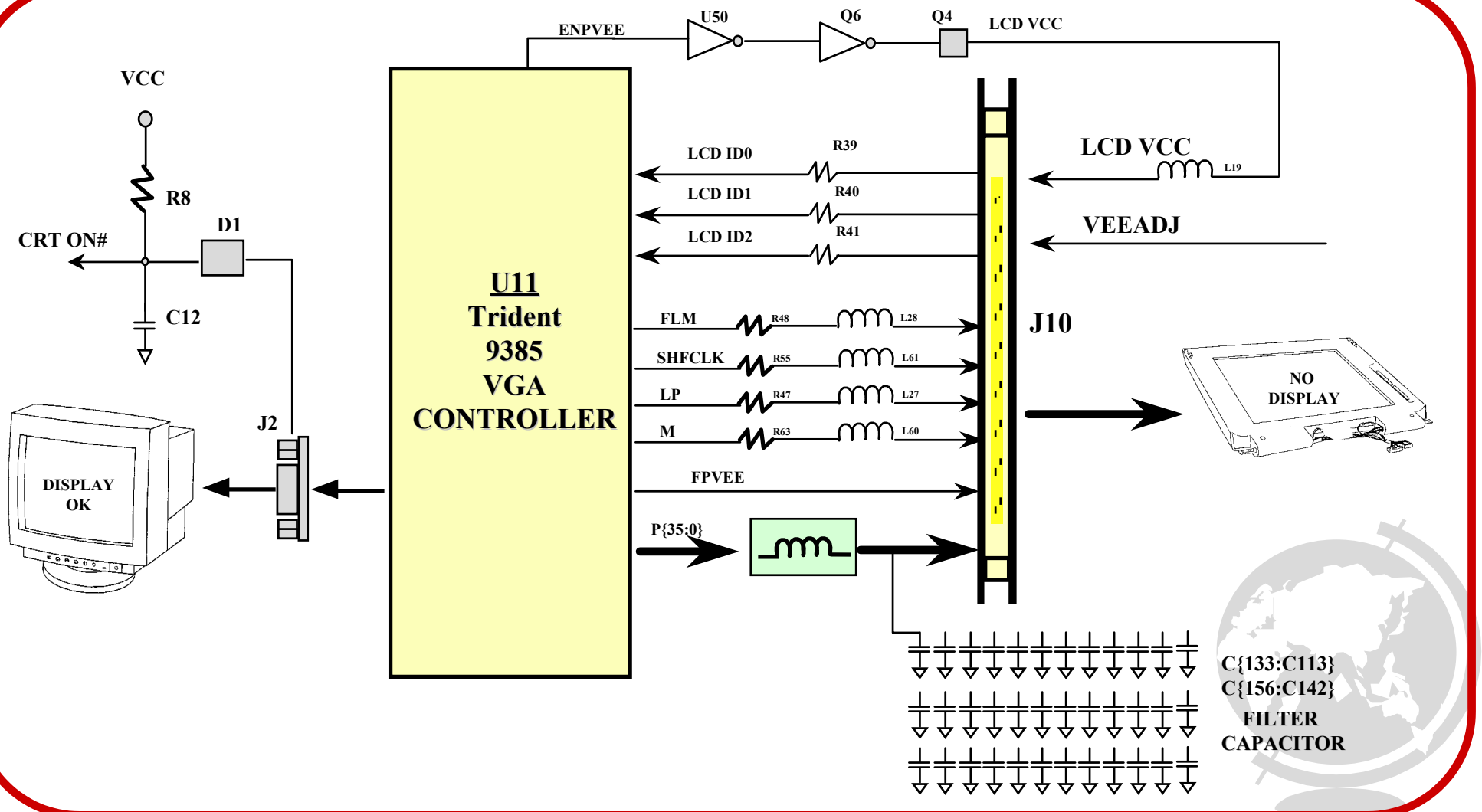


9.4 LCD NO DISPLAY OR PICTURE ABNORMAL

SYMPTOM:

THE LCD SHOWS NOTHING OR ABNORMAL PICTURE, BUT IT IS OK FOR EXTERNAL MONITOR.



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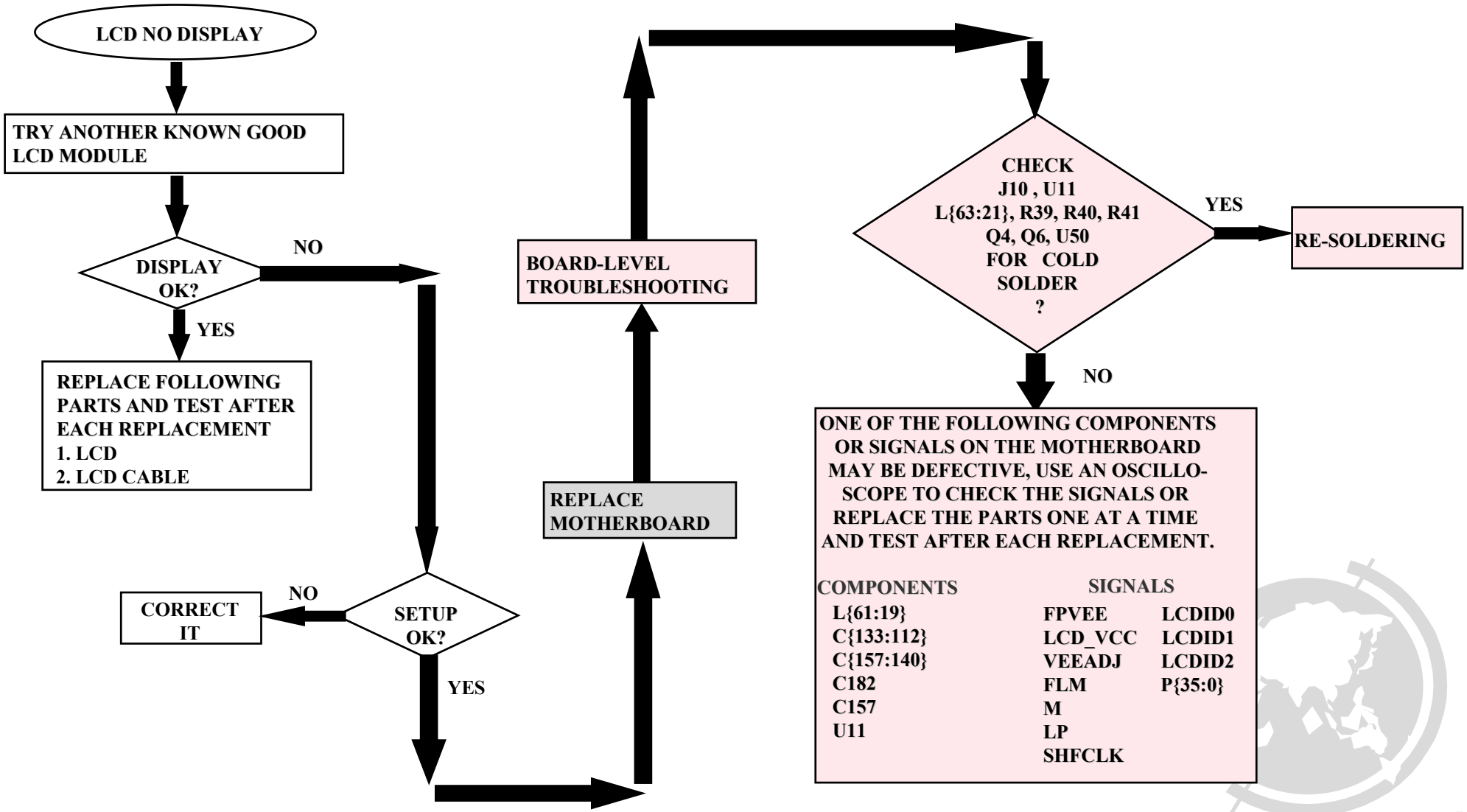
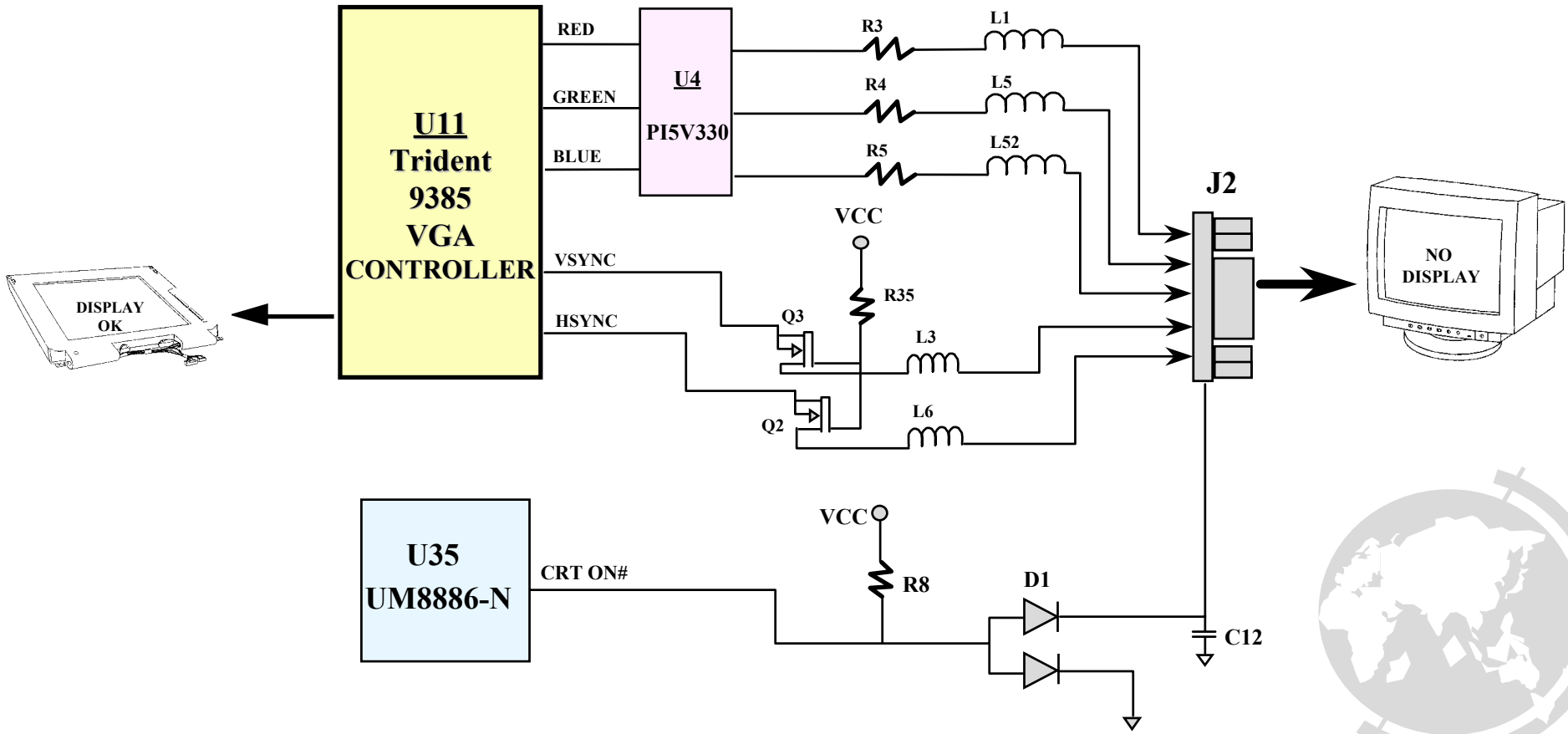


9.5 EXTERNAL MONITOR NO DISPLAY OR COLOR ABNORMAL

SYMPTOM:

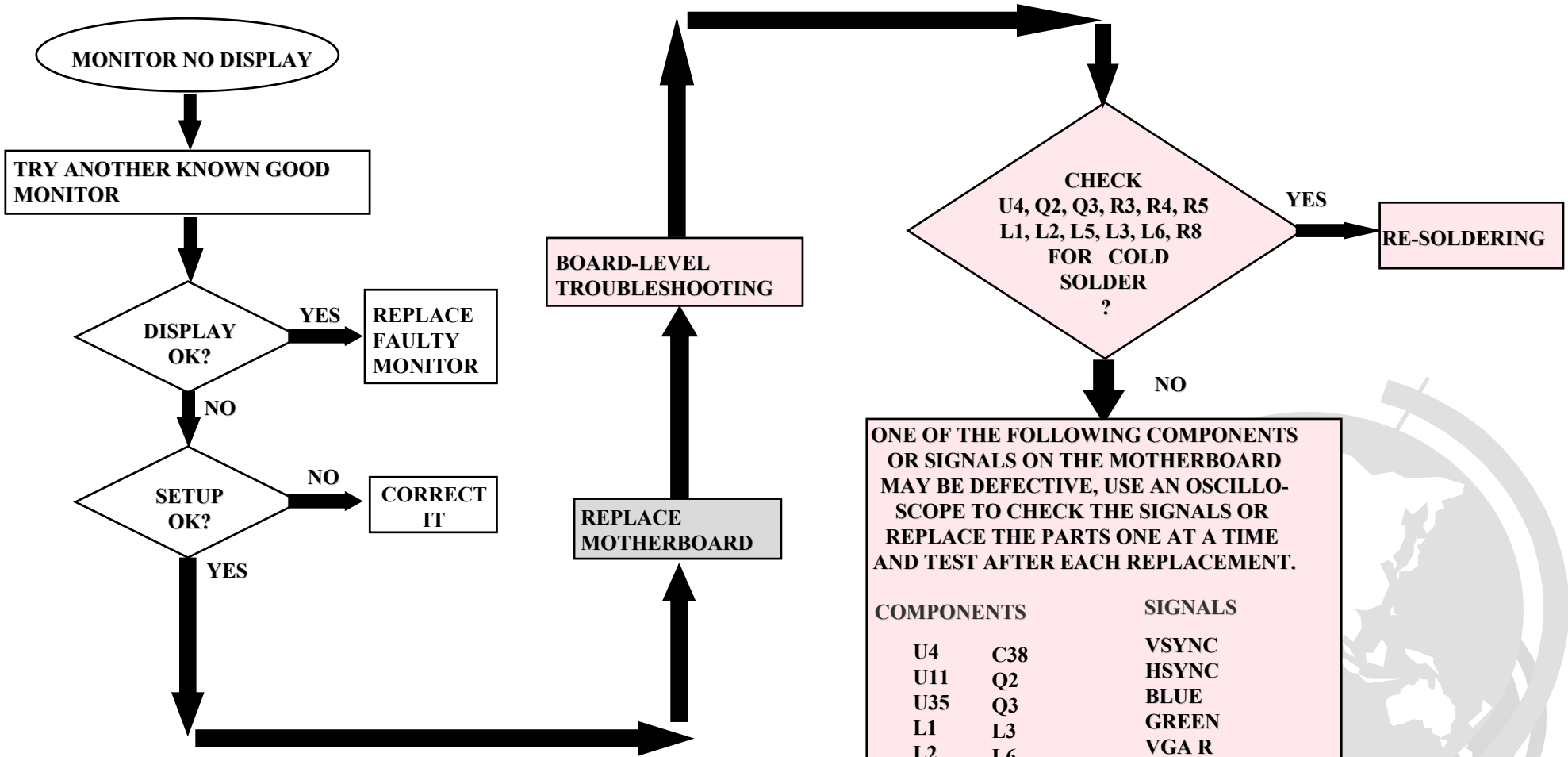
THE CRT MONITOR SHOWS NOTHING OR ABNORMAL COLOR, BUT IT IS OK FOR LCD.



9.5 EXTERNAL MONITOR NO DISPLAY OR COLOR ABNORMAL

SYMPTOM:

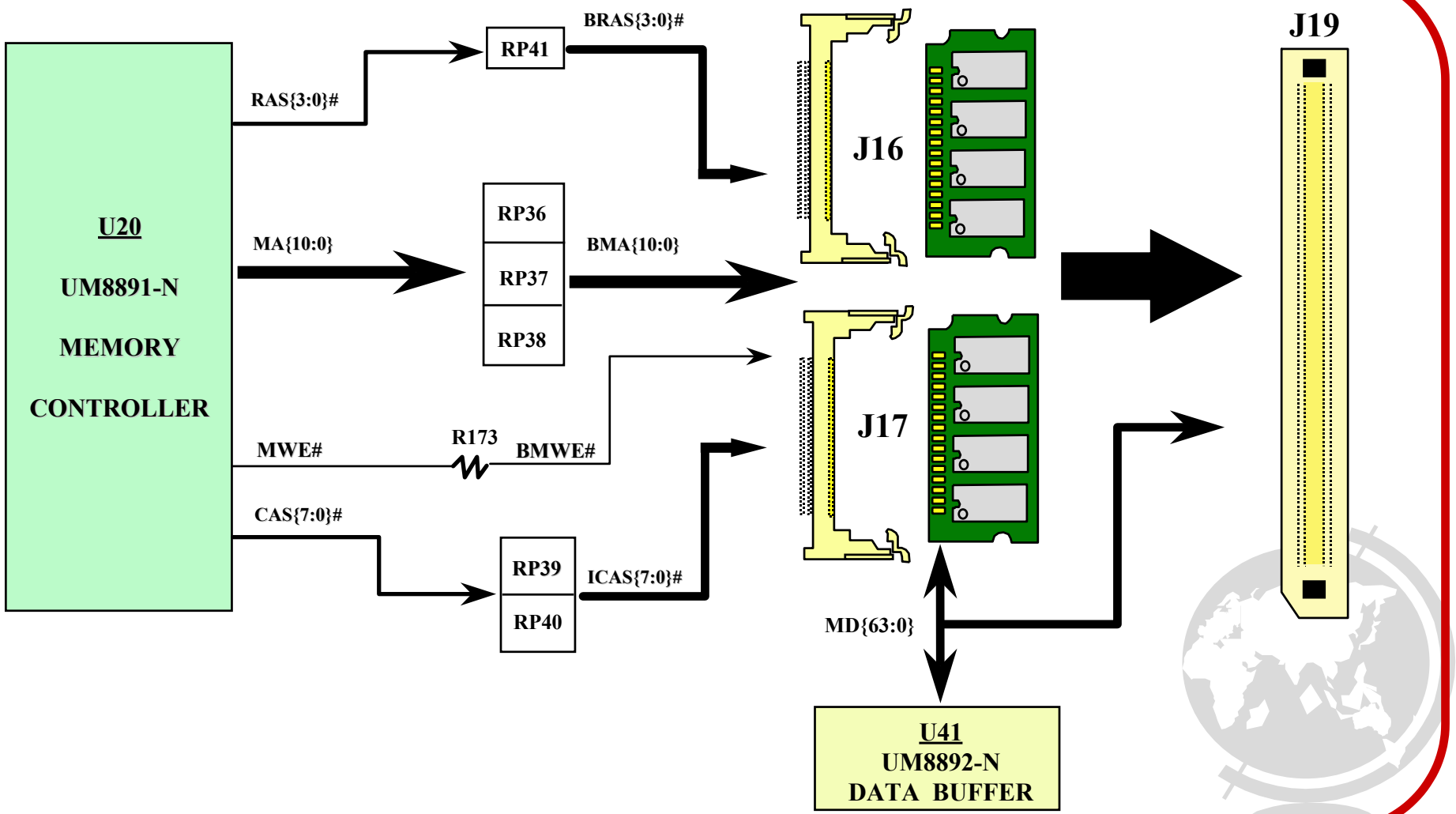
THE CRT MONITOR SHOWS NOTHING OR ABNORMAL COLOR, BUT IT IS OK FOR LCD.



9.6 MEMORY TEST ERROR

SYMPTOM:

PIO DEBUG BOARD SHOWS THE PORT 378H ERROR CODE IS STOPPED AT 20H, 2CH ,2EH OR MEMORY EXTENSION FAILURE.



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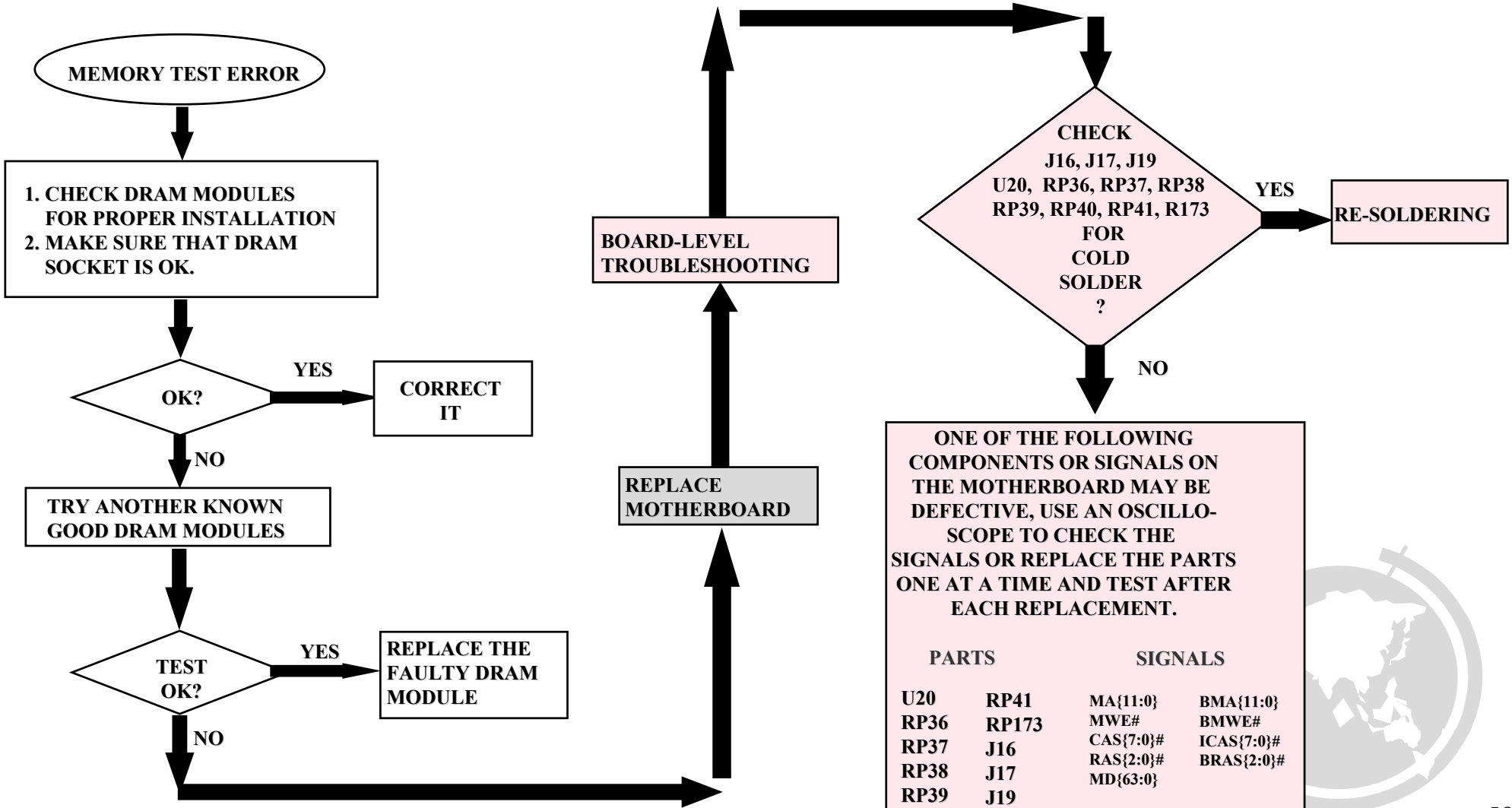
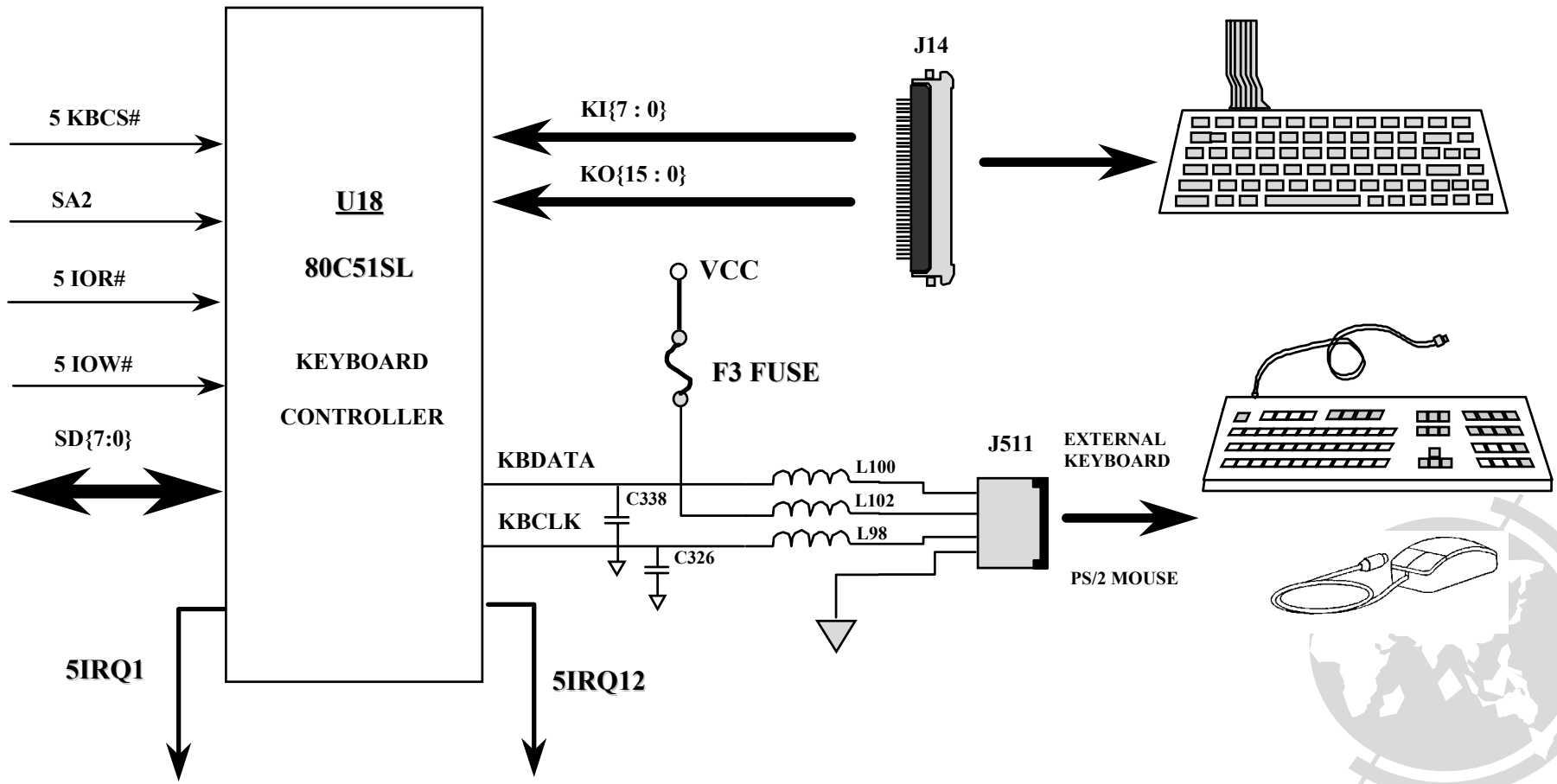


9.7 KEYBOARD TEST ERROR (INCLUDING EXTERNAL KEYBOARD & PS/2 MOUSE)

SYMPTOM:

1. ERROR MESSAGE OF KEYBOARD FAILURE IS SHOWN OR ANY KEY DOESN T WORK.
2. PIO DEBUG BOARD SHOWS THE PORT 378H ERROR CODE IS STOPPED AT 22H



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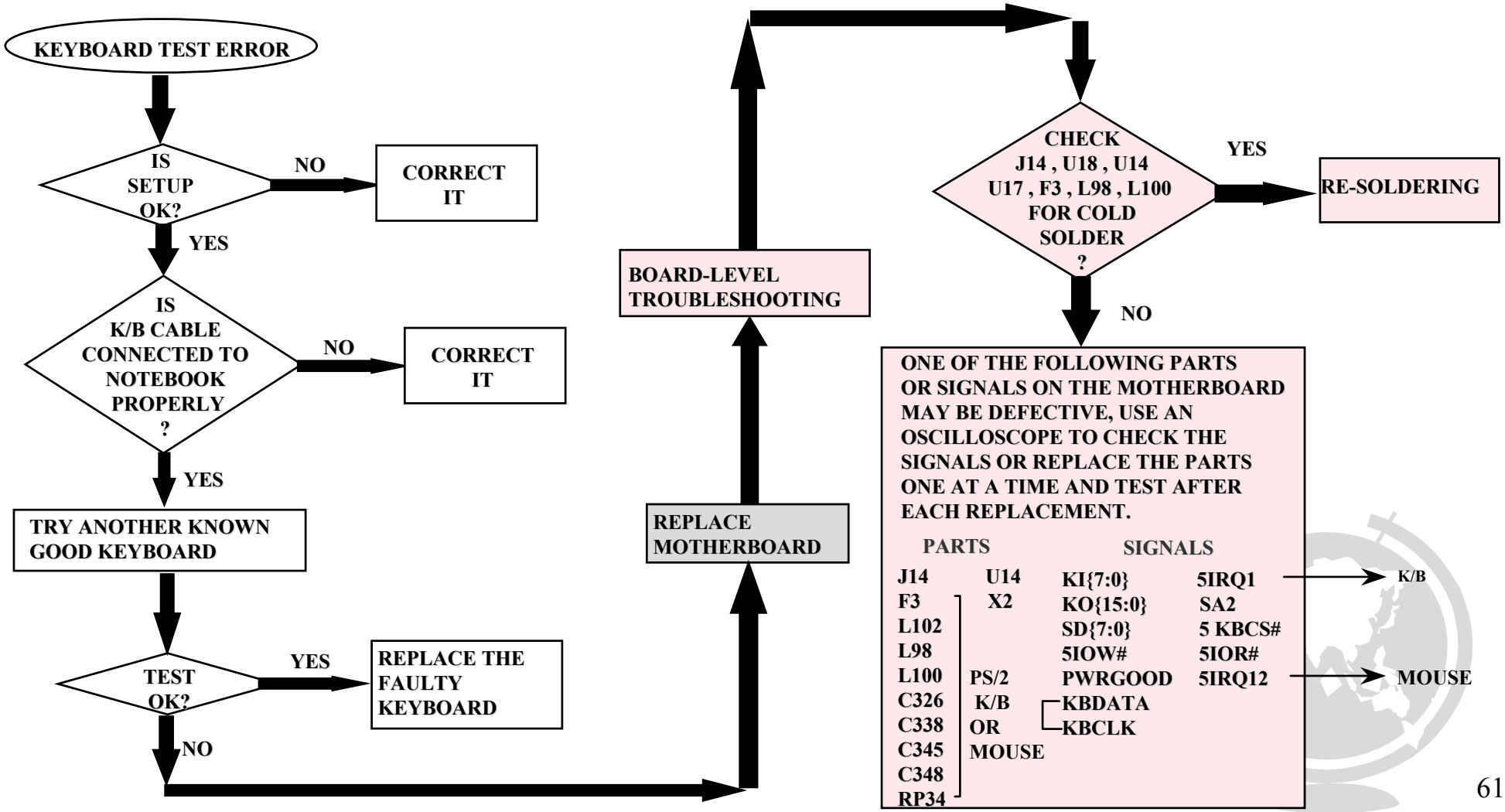
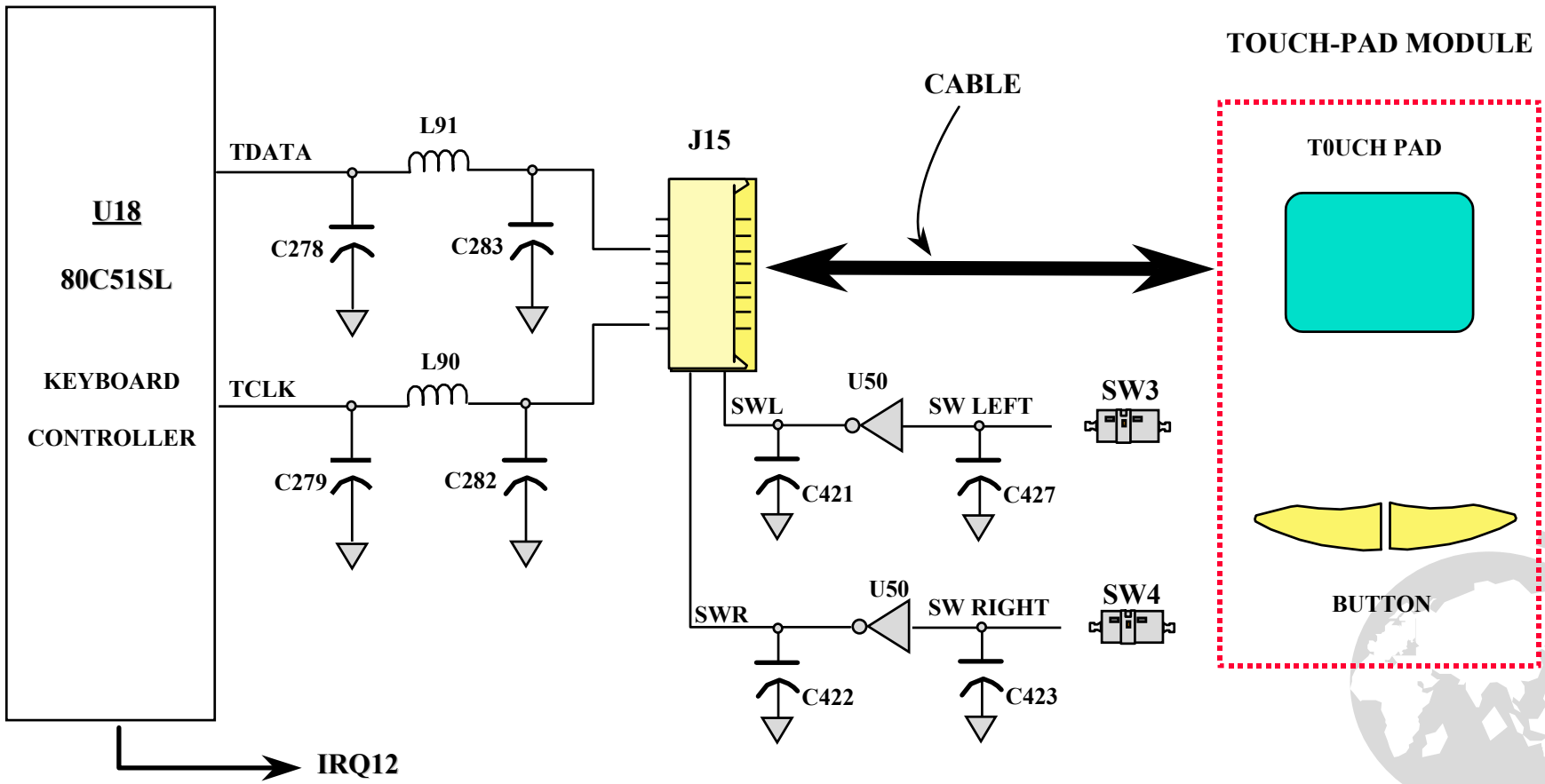


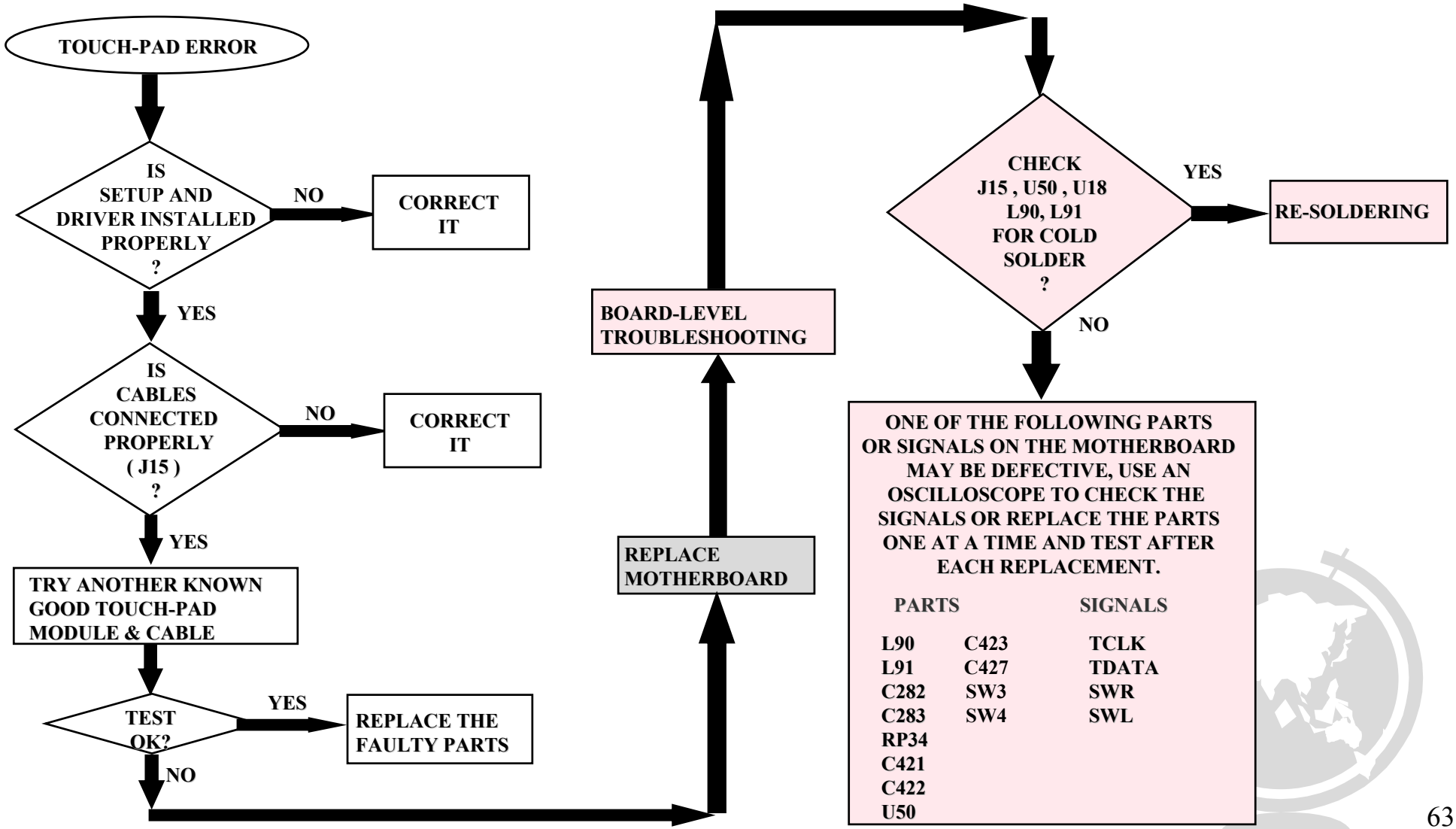
9.8 TOUCH-PAD TEST ERROR

SYMPTOM:
AN ERROR MESSAGE IS SHOWN WHEN THE TOUCH-PAD IS ENABLED.



9.8 TOUCH-PAD TEST ERROR

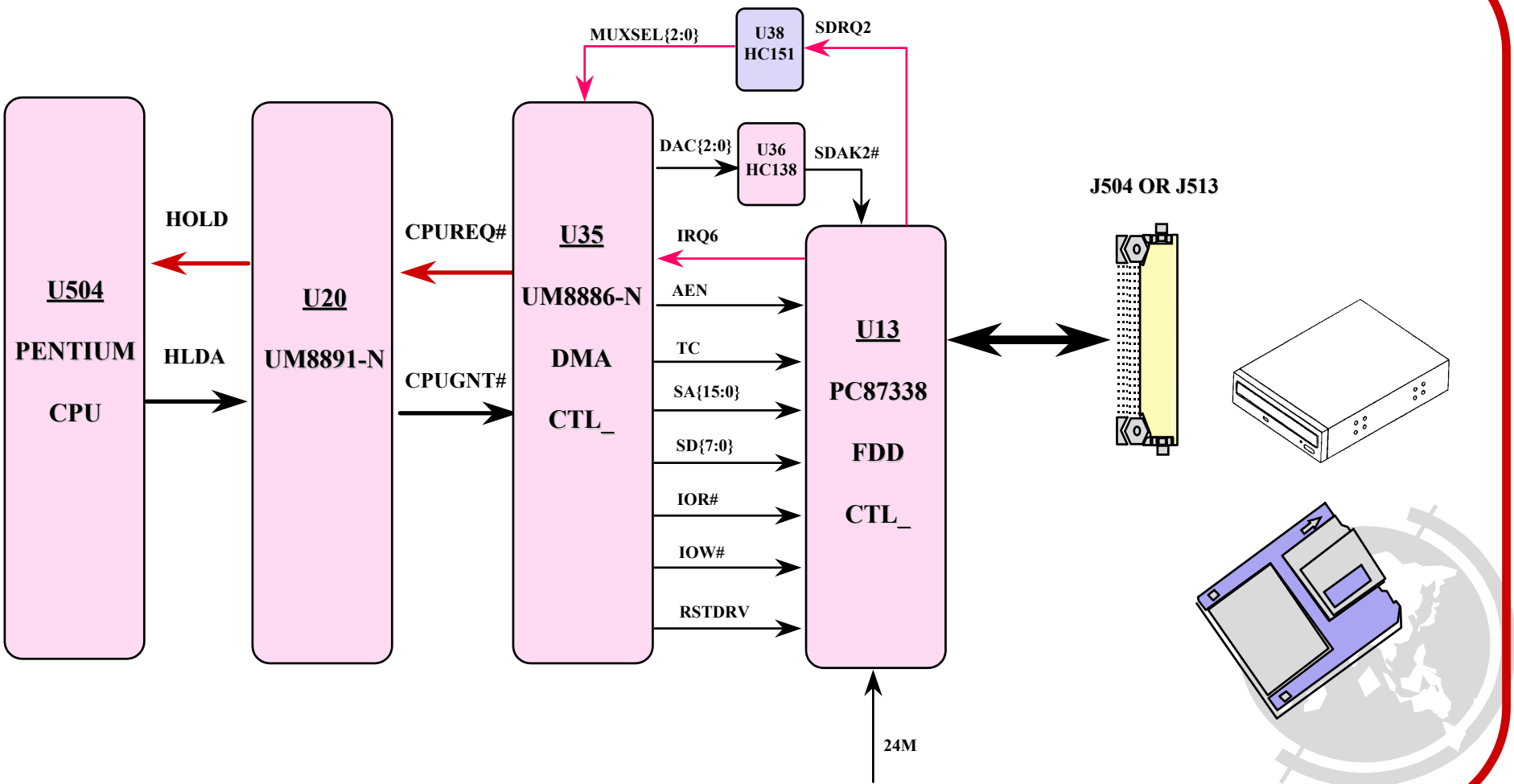
SYMPTOM:
AN ERROR MESSAGE IS SHOWN WHEN THE TOUCH-PAD IS ENABLED.



9.9 DISKETTE DRIVE TEST ERROR

SYMPTOM:

AN ERROR MESSAGE IS SHOWN WHILE LOADING DATA FROM DISK TO SYSTEM.



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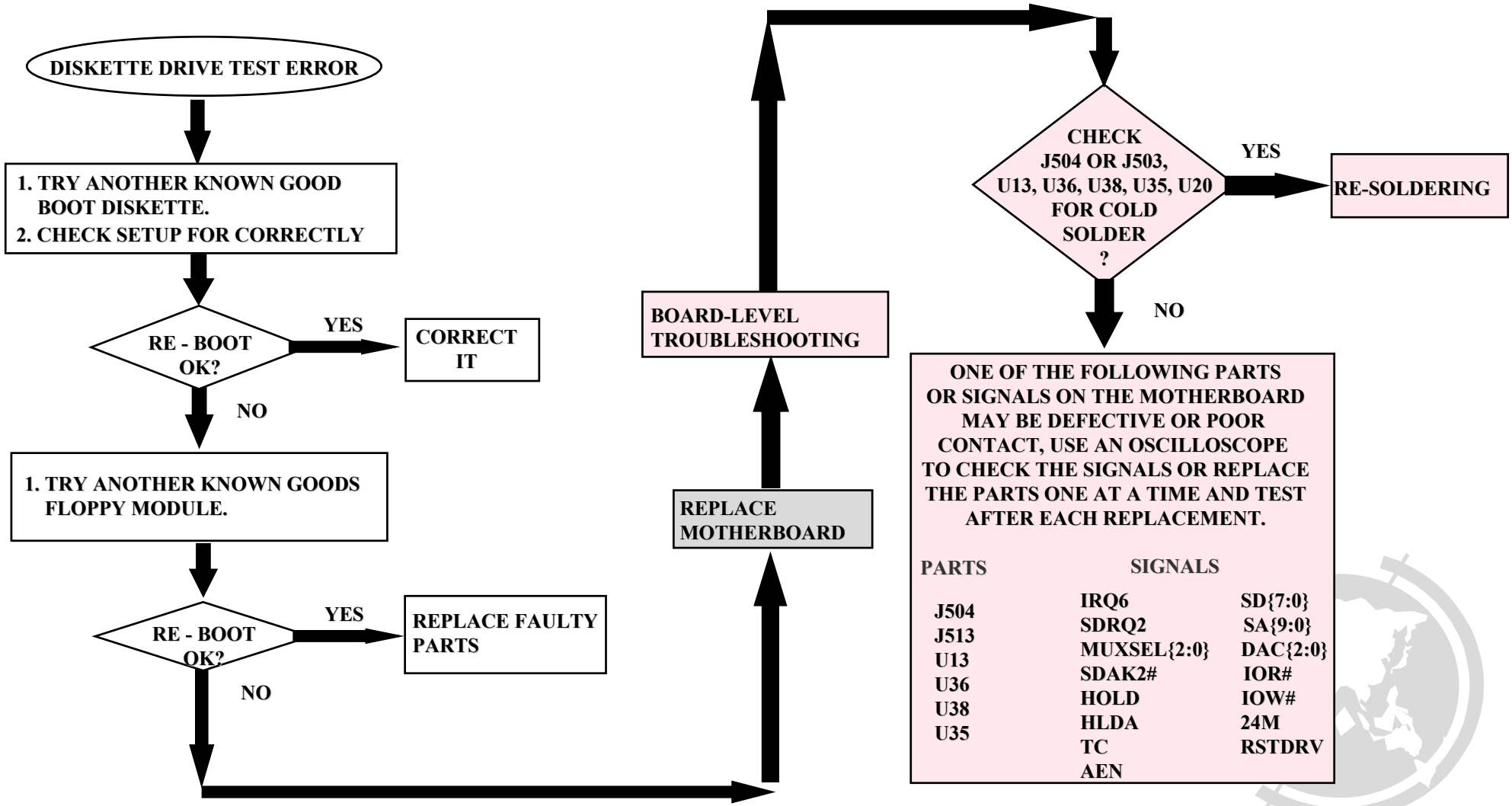
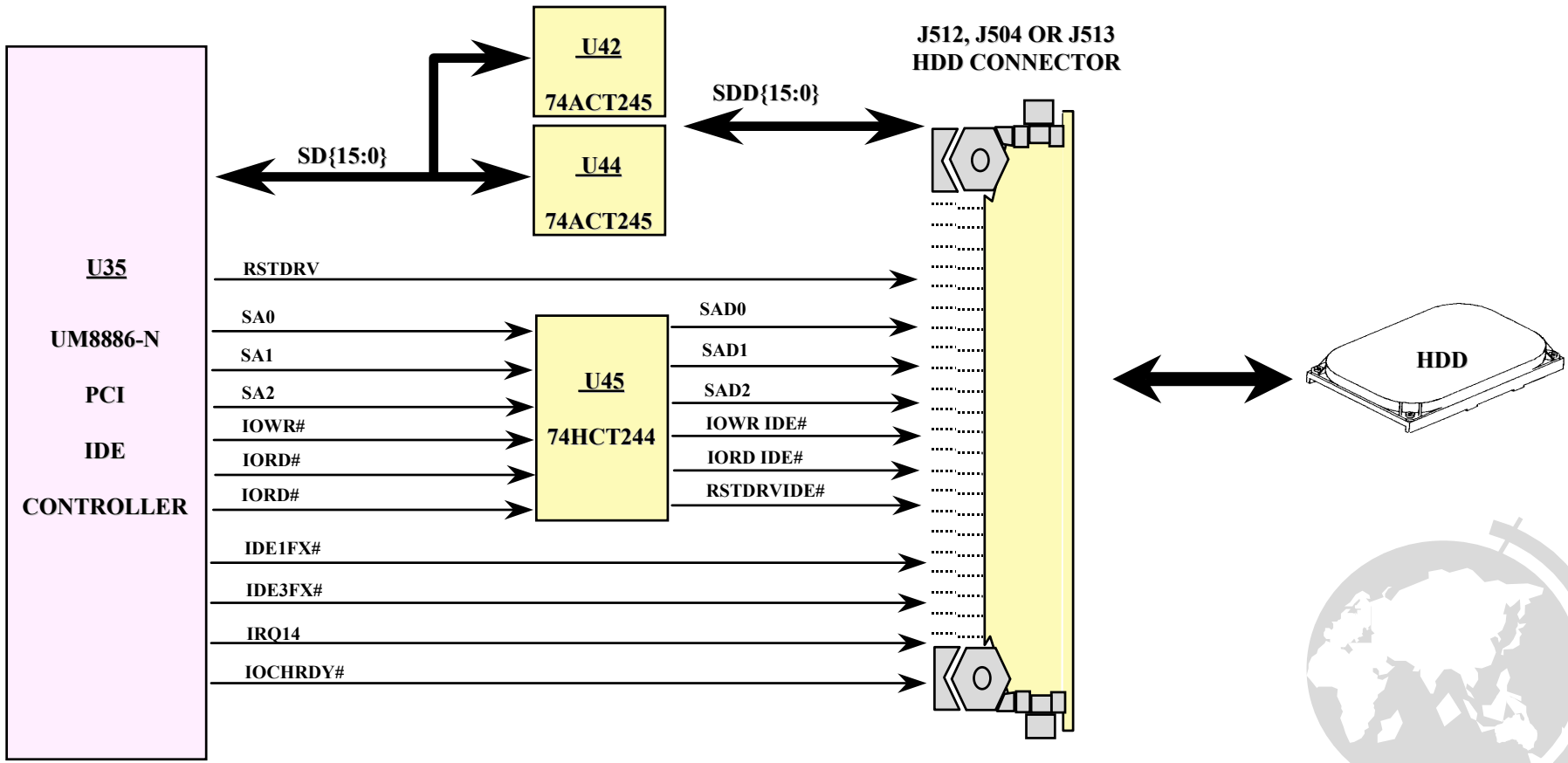


9.10 HARD DRIVE TEST ERROR

SYMPTOM:

EITHER AN ERROR MESSAGE IS SHOWN, OR THE DRIVE MOTOR SPINS NON-STOP, WHILE READING DATA FROM OR WRITING DATA TO HARD-DISK.



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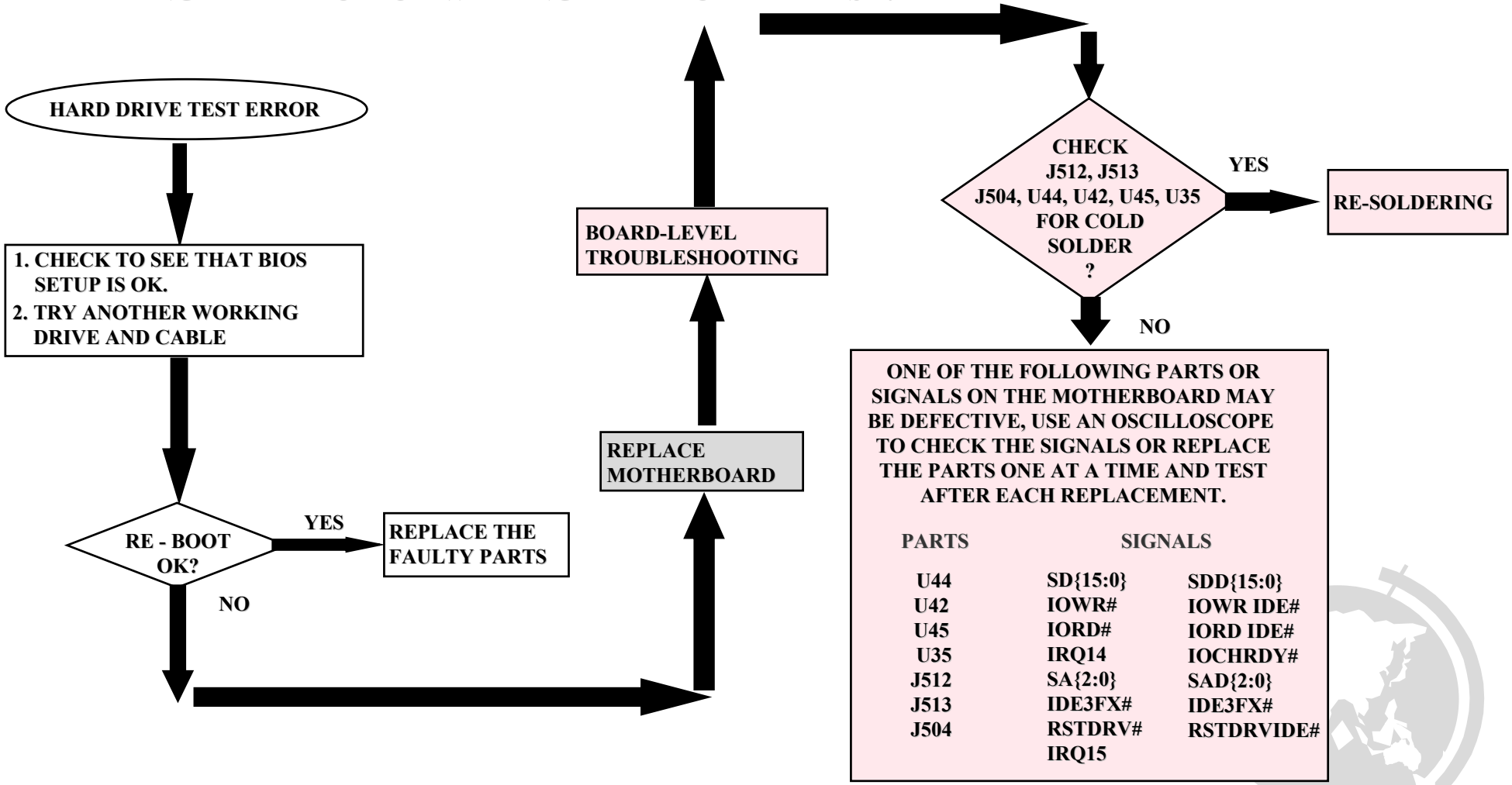
SYMPTOM:

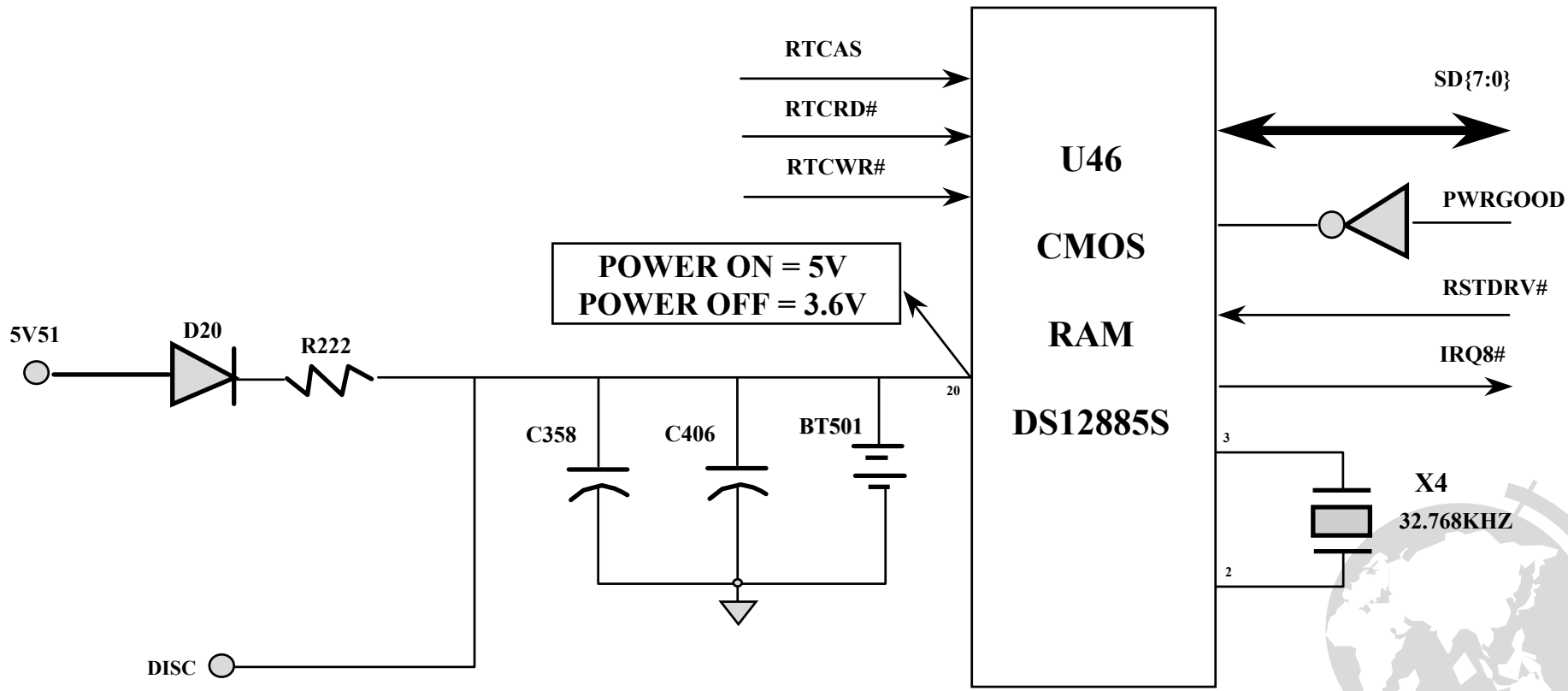
EITHER AN ERROR MESSAGE IS SHOWN, OR THE DRIVE MOTOR SPINS NON-STOP, WHILE READING DATA FROM OR WRITING DATA TO HARD-DISK.



9.11 CMOS TEST ERROR

SYMPTOM:

1. ERROR CODE IS STOPEED AT 34H.
2. CMOS DATA LOST, OR INACCURATE SYSTEM TIME & DATE.



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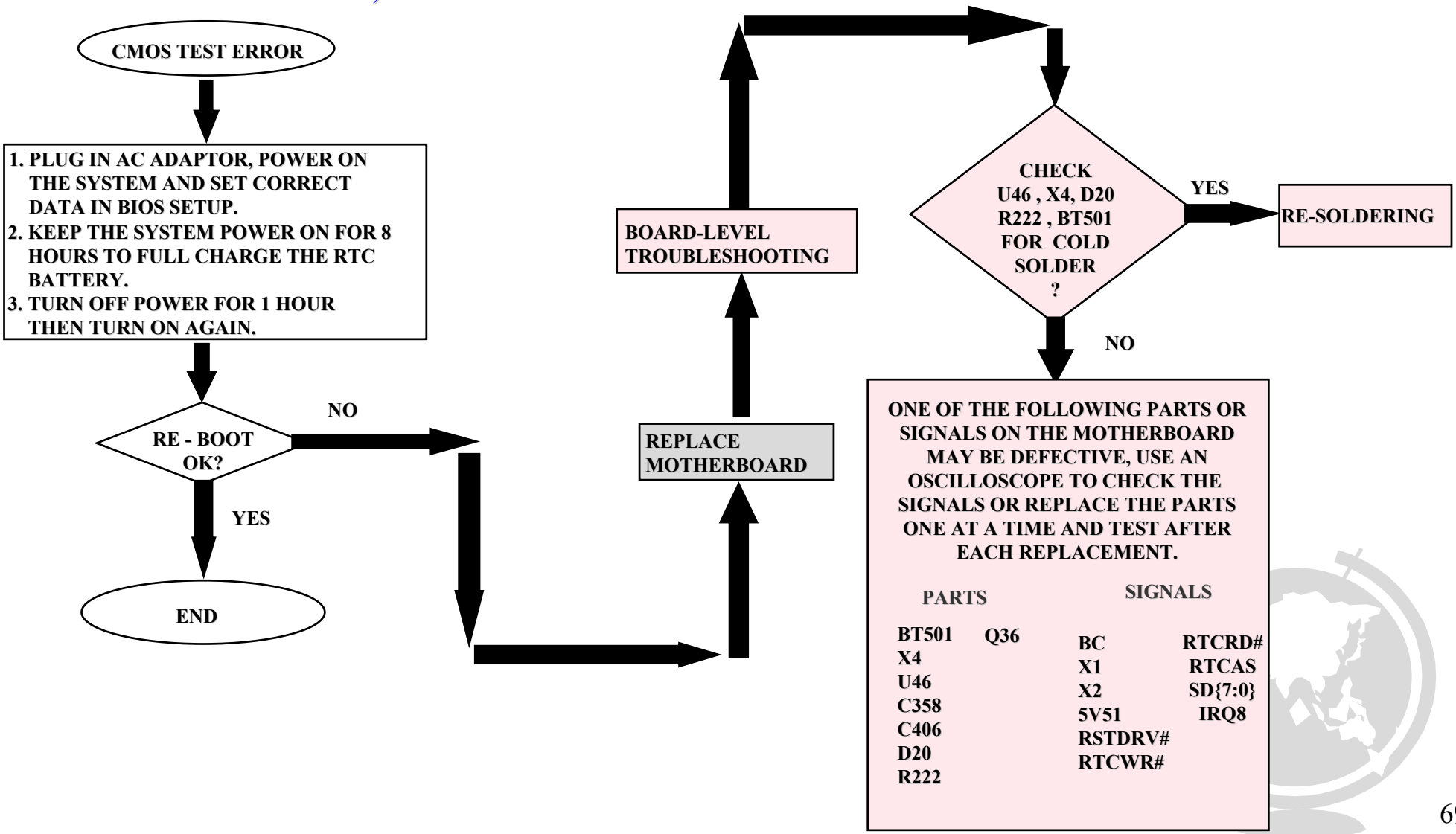
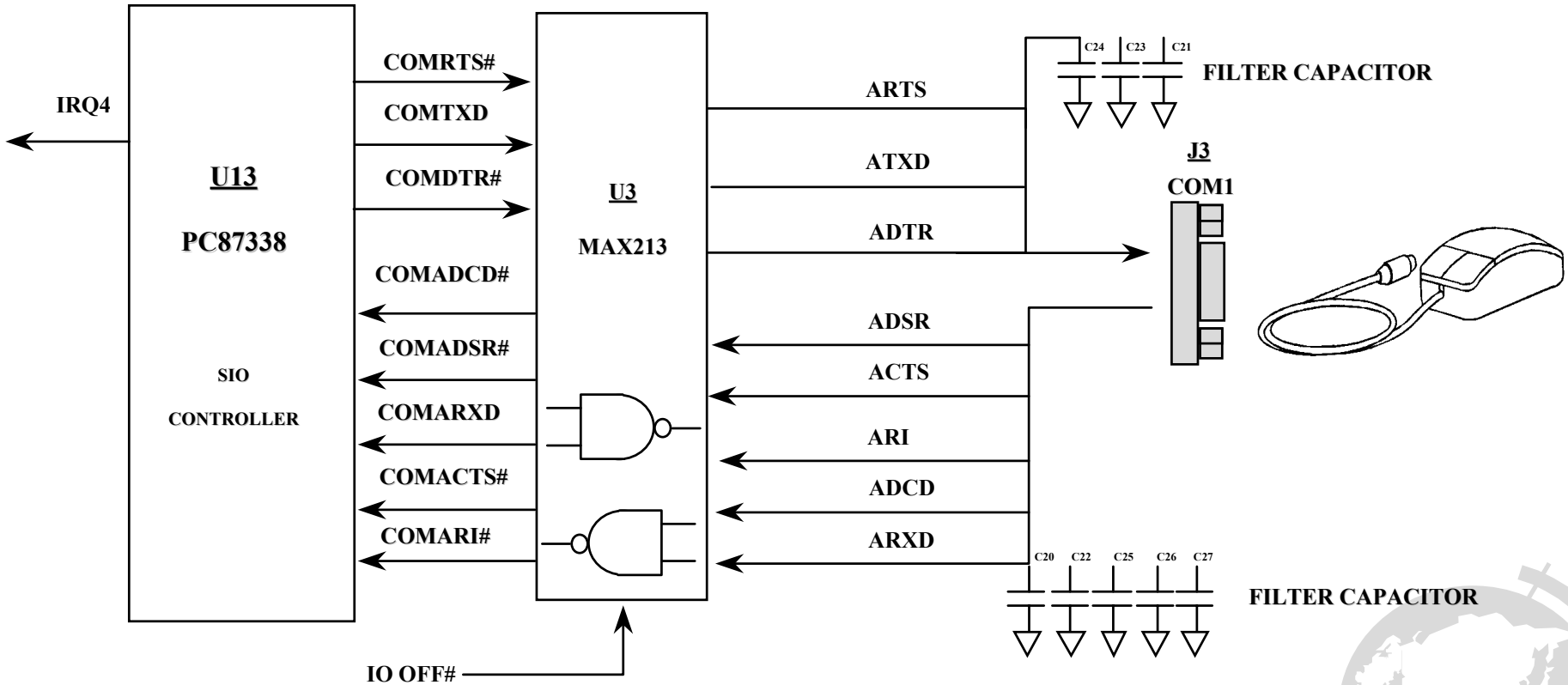
2. CMOS DATA LOST, OR INACCURATE SYSTEM TIME & DATE.



9.12 SIO PORT TEST ERROR

SYMPTON:

AN ERROR DISPLAY OCCURS WHEN A MOUSE OR OTHER I/O DEVICE IS INSTALLED.



PIN DEFINITION OF SIO PORT:

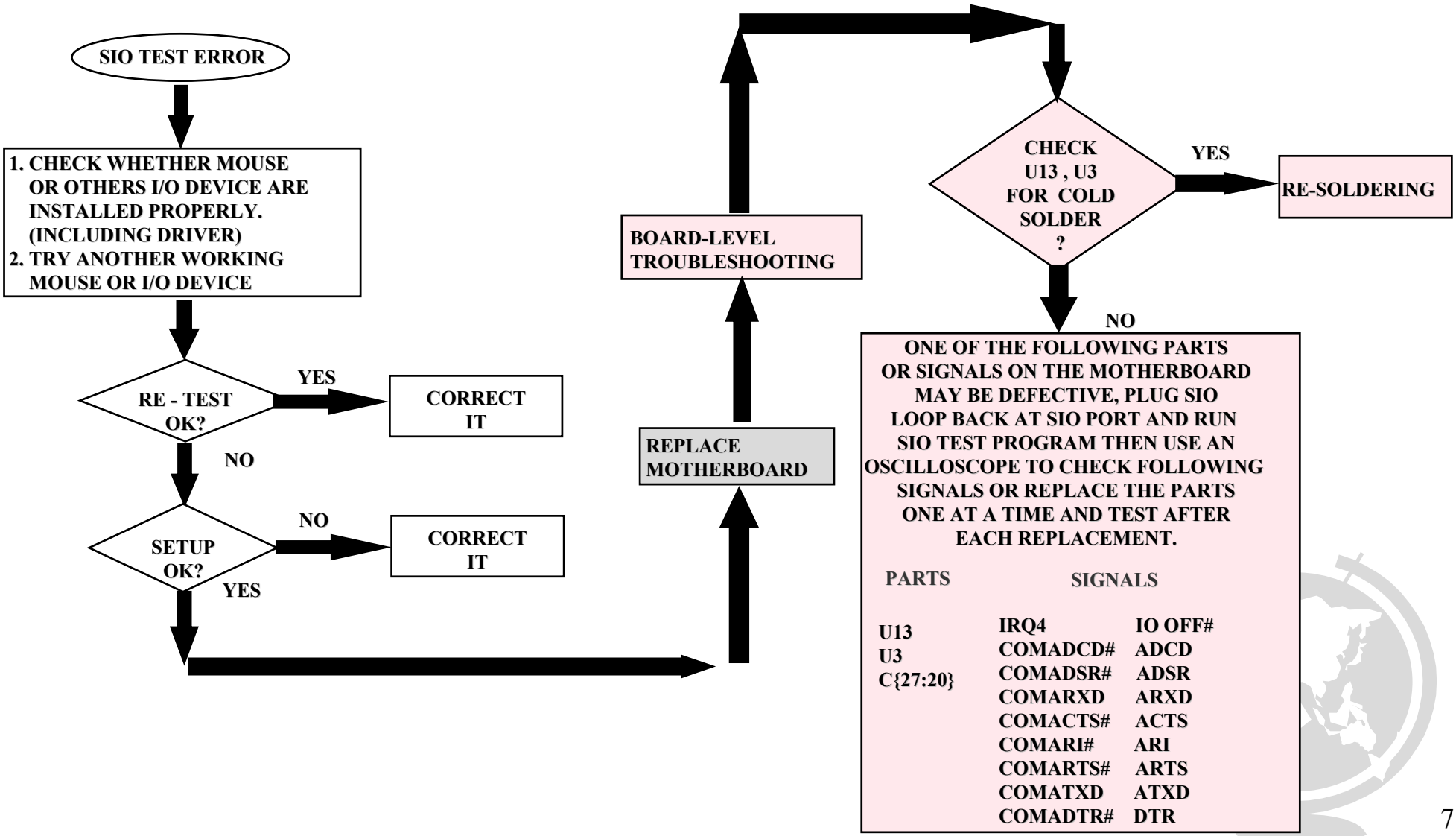
PIN 1	DCD	DATA CARRIER DETECT	PIN 6	DSR	DATA SET READY
PIN 2	RD	RECEIVE DATA	PIN 7	RTS	REQUEST TO SEND
PIN 3	TD	TRANSMIT DATA	PIN 8	CTS	CLEAR TO SEND
PIN 4	DTR	DATA TERMINAL READY	PIN 9	RI	RING INDICATOR
PIN 5	SG	SIGNAL GROUND			

LOOPBACK CONNECTOR FOR SIO TEST:

PIN 1,4,6	SHORT
PIN 2,3	SHORT
PIN 7,8,9	SHORT

9.12 SIO PORT TEST ERROR

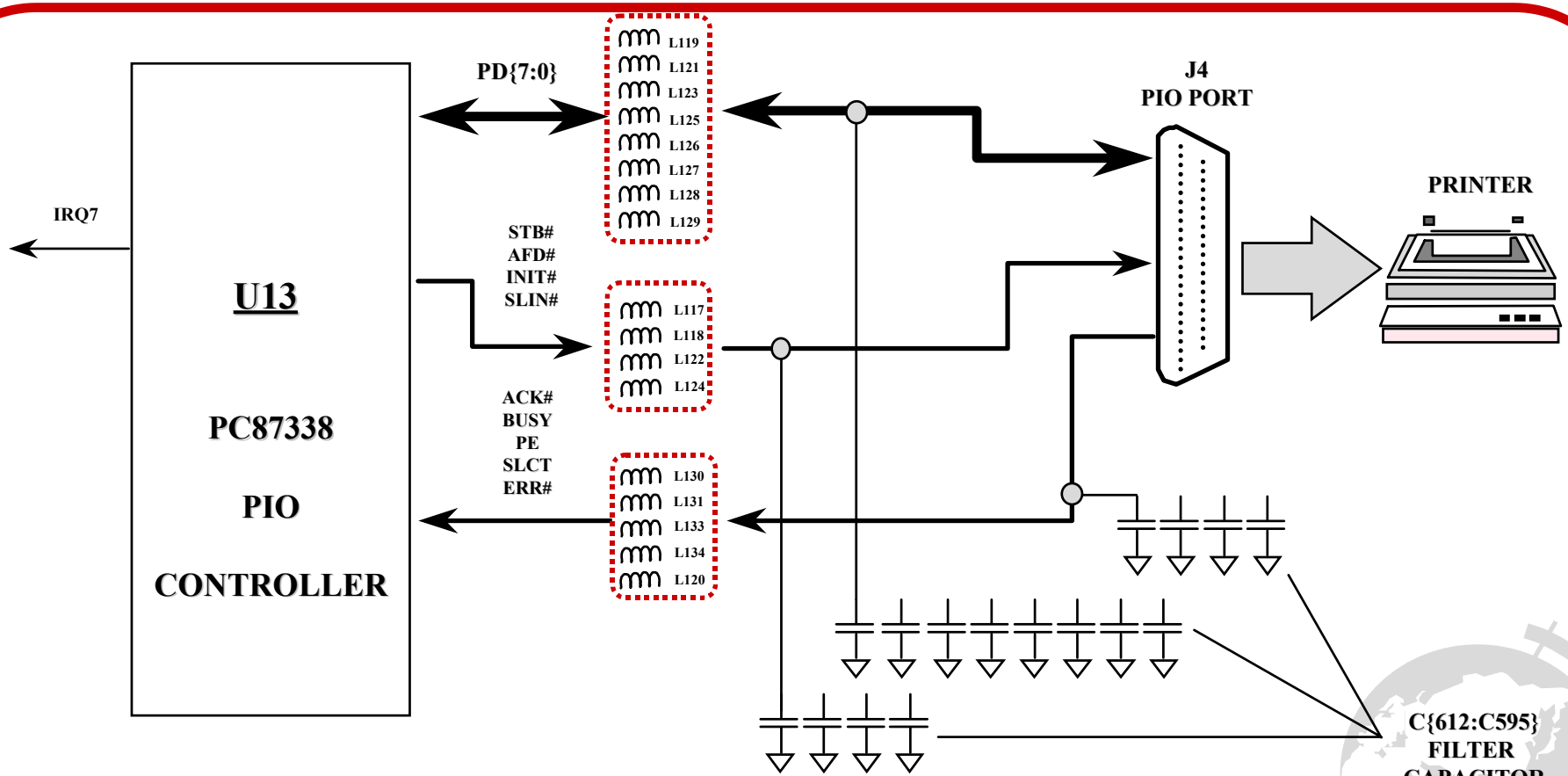
SYMPTON:
AN ERROR DISPLAY OCCURS WHEN A MOUSE OR OTHER I/O DEVICE IS INSTALLED.



9.13 PIO PORT TEST ERROR

SYMPTON:

WHEN A PRINT COMMAND IS ISSUED, PRINTER PRINTS NOTHING OR GARBAGE.



PIN DEFINITION OF PIO PORT

PIN 1	STB	STROBE SIGNAL	PIN 14	AFD	AUTO LINE FEED
PIN 2-9	D0 -D7	PARALLEL PORT DATA BUS D0 TO D7	PIN 15	ERR	ERROR AT PRINTER
PIN 10	ACK	ACKNOW LEDGE HANDSHANK	PIN 16	INIT	INITIATE OUTPUT
PIN 11	BUSY	BUSY SIGNAL	PIN 17	SLIN	PRINTER SELECT
PIN 12	PE	PAPER END	PIN 18-25:		SIGNAL GROUND
PIN 13	SLCT	PRINTER SELECTED			

LOOPBACK CONNECTOR FOR PIO TEST:

PIN 1,13	SHORT	PIN 10,16	SHORT
PIN 2,15	SHORT	PIN 11,17	SHORT
PIN 12,14	SHORT		

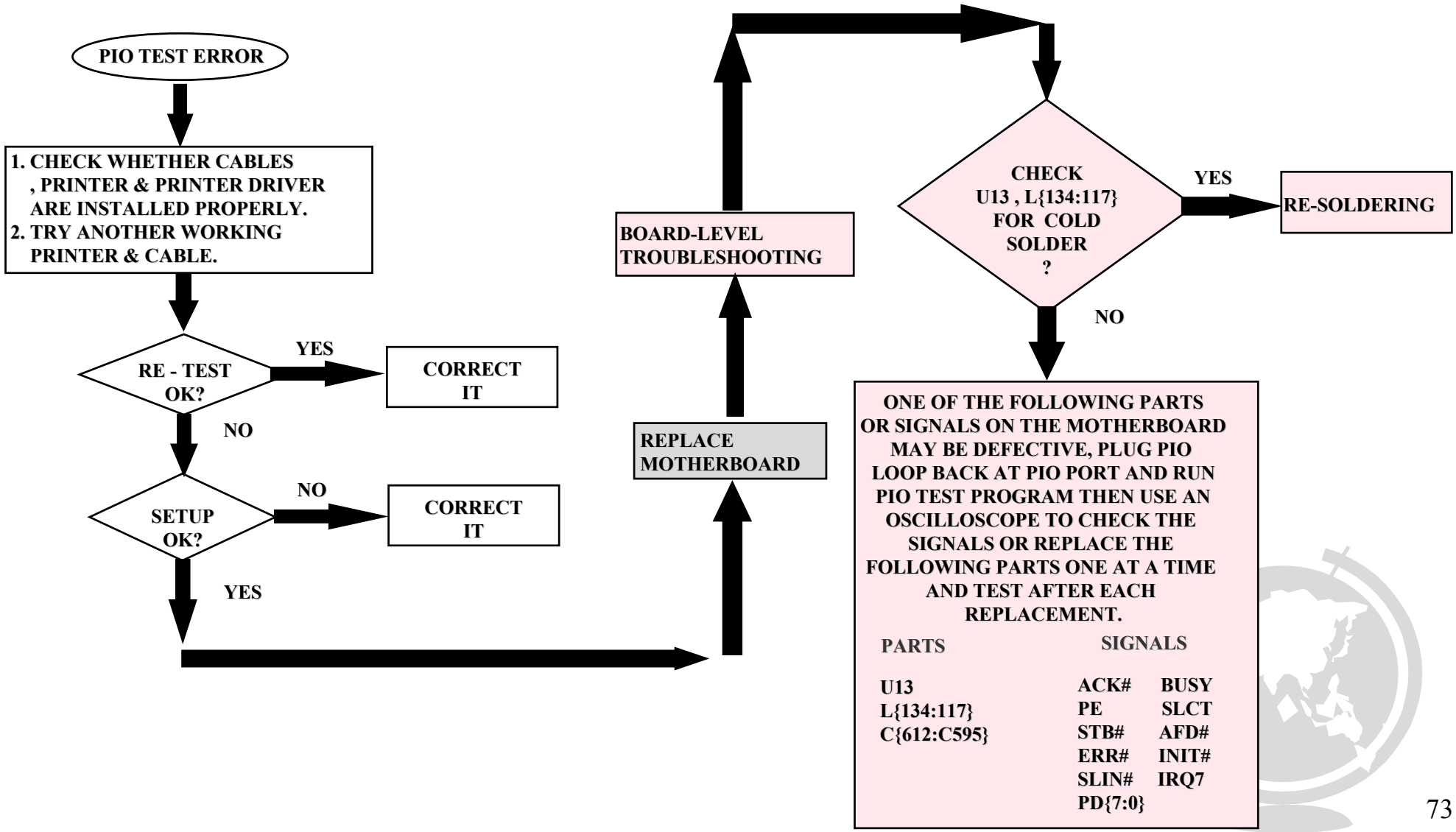
LOOPBACK CONNECTOR FOR EPP TEST:

PIN 1,2,4,6,8	SHORT
PIN 3,5,7,9,16	SHORT
PIN 18,19,20,21,22,23,24,25	SHORT

9.13 PIO PORT TEST ERROR

SYMPTON:

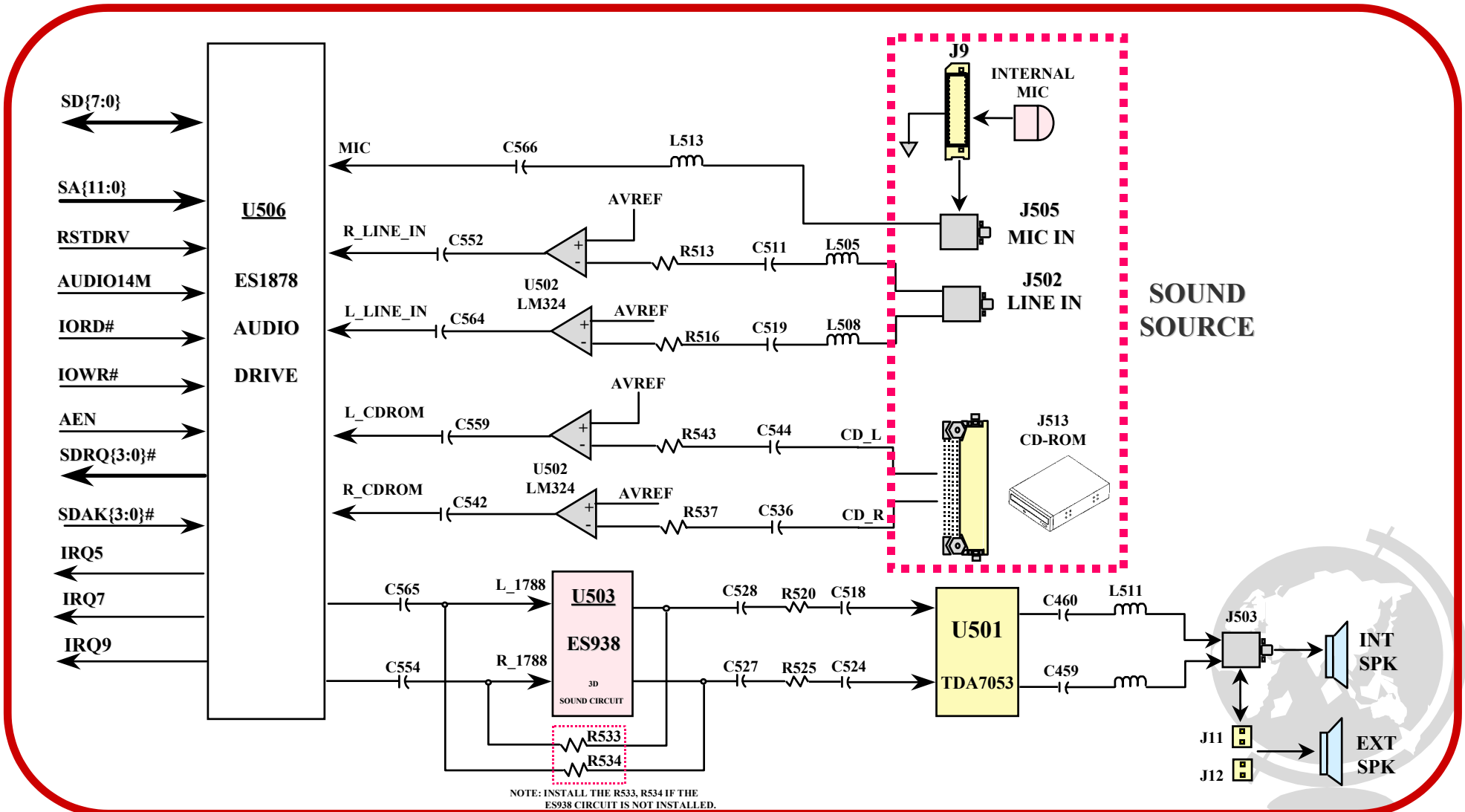
WHEN A PRINT COMMAND IS ISSUED, PRINTER PRINTS NOTHING OR GARBAGE.



9.14 AUDIO DRIVE FAILURE

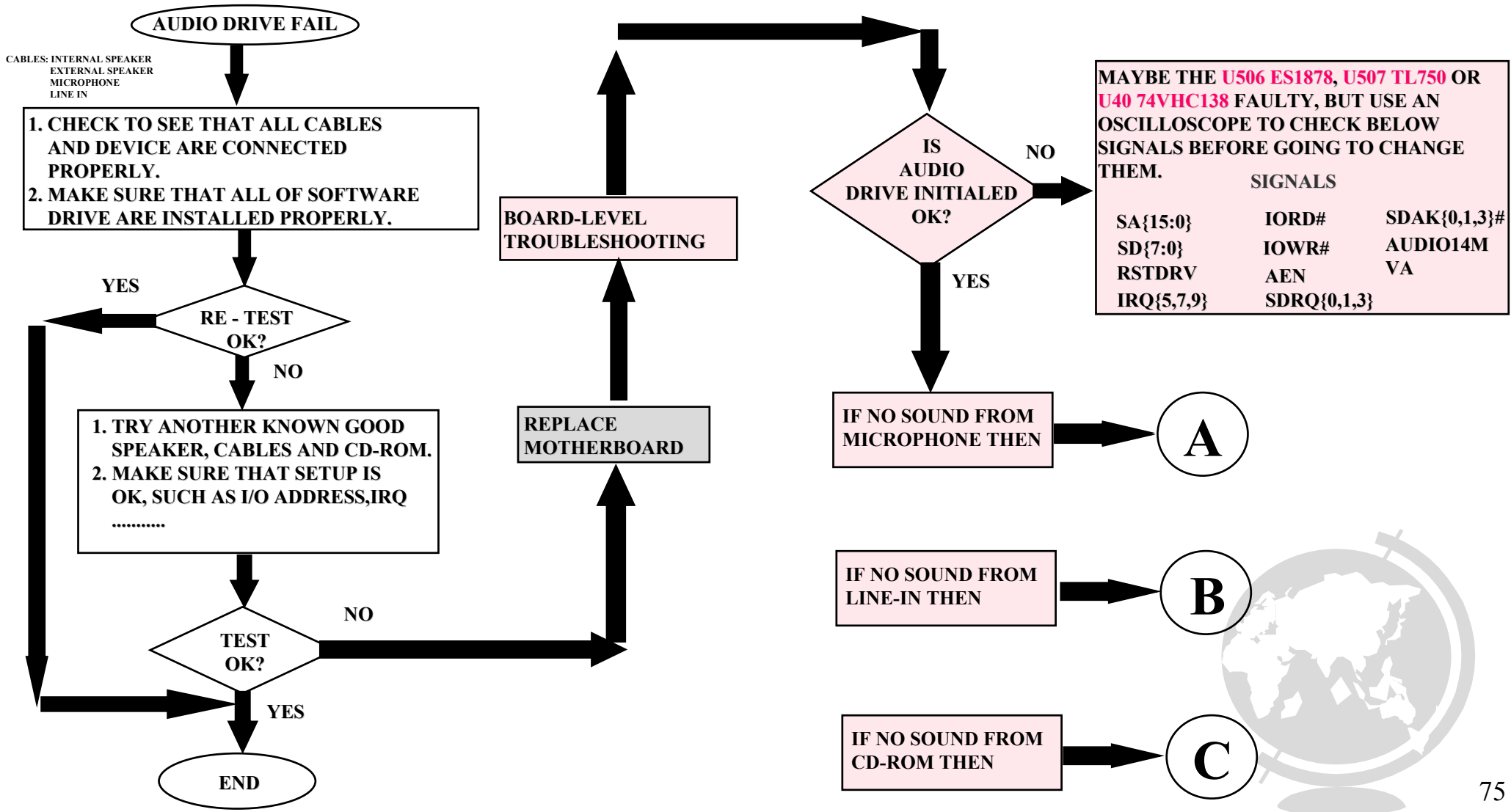
SYMPTON:

NO SOUND FROM SPEAKER AFTER AUDIO DRIVE IS INSTALLED.



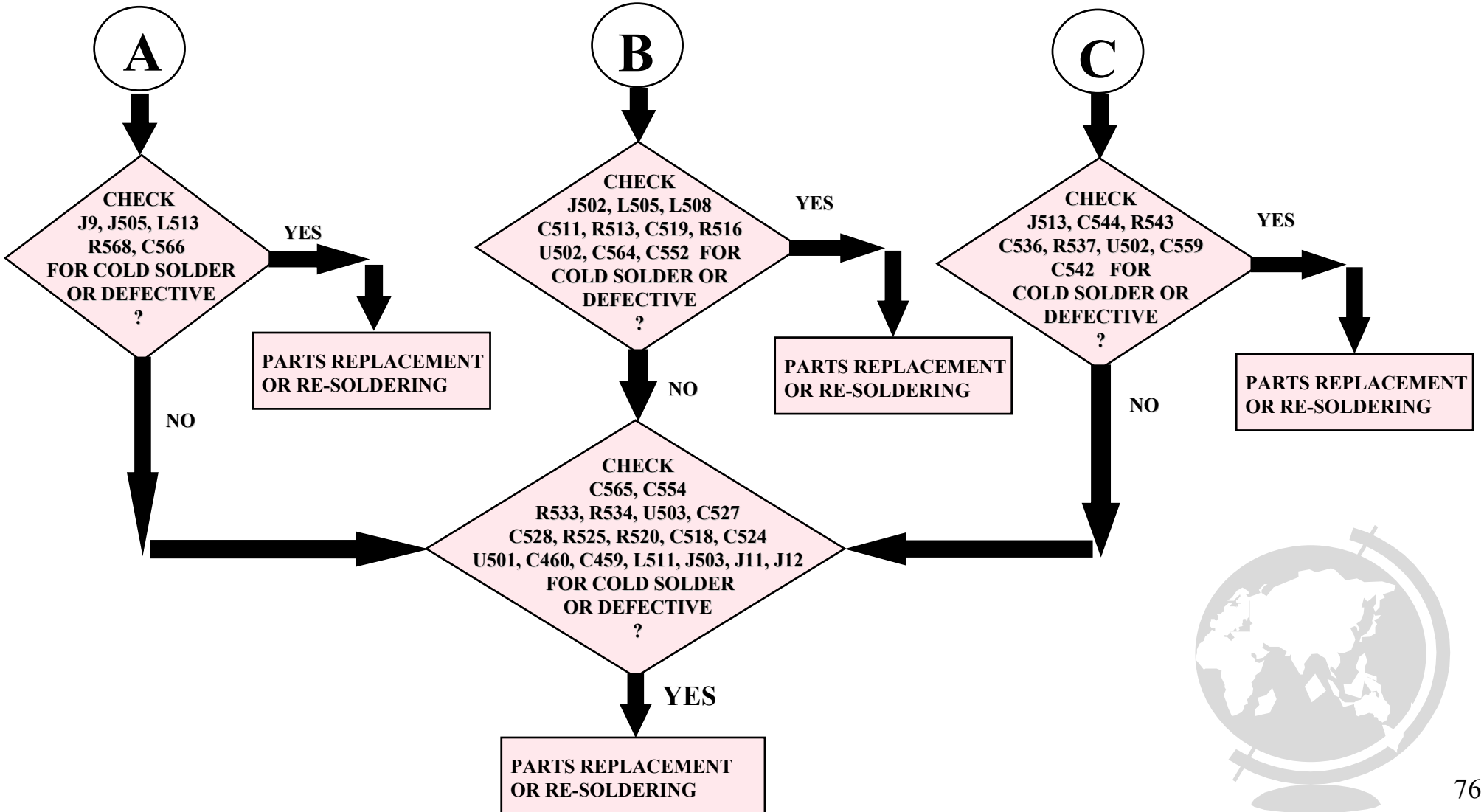
9.14 AUDIO DRIVE FAILURE

SYMPTON:
NO SOUND FROM SPEAKER AFTER AUDIO DRIVE IS INSTALLED OR NO SOUND FROM CD-ROM, MICROPHONE AND LINE IN.



9.15 AUDIO DRIVE FAILURE

SYMPTON:
NO SOUND FROM SPEAKER AFTER AUDIO DRIVE IS INSTALLED OR NO SOUND FROM CD-ROM, MICROPHONE AND LINE IN.



10. EXPLODED VIEWS

12. SYSTEM BLOCK DIAGRAM & SCHEMATICS

10. EXPLODED VIEWS

10. EXPLODED VIEWS

10. EXPLODED VIEWS

10. EXPLODED VIEWS

10. EXPLODED VIEWS

10. EXPLODED VIEWS

10. EXPLODED VIEWS

10. EXPLODED VIEWS

10. EXPLODED VIEWS

10. EXPLODED VIEWS

10. EXPLODED VIEWS

11. SPARE PARTS LIST

11.1 MODULE LEVEL & ACCESSORY KIT

11.2 COMPONENT LEVEL

- MOTHERBOARD
- ICON LCD BOARD
- IR BOARD
- BATTERY VIEW-BOARD
- DC/DC BOARD

11.3 MECHANICAL LEVEL (HOUSING, COVER,…..)

11.4 LCD MIT KIT

- LCD 12.1” TFT
- LCD 12.1” DSTN
- LCD 11.3” DSTN

11. SPARE PARTS LIST

11.1 MODULE LEVEL & ACCESSORY KIT

***** MODULE LEVEL SPARE PARTS LIST *****	
P/N	DESCRIPTION
526266470001	PC;5026X/SE-X1-0/EN-1 M/1
411664700001	PWA;PWA-5026 MOTHER BD
411664700006	PWA;PWA-5026 INVERTER BD
411664700016	PWA;PWA-5026 ICON LCD BD
411664700024	PWA;PWA-5026 D/D-1 BD
411664700026	PWA;PWA-5026 T/P SW BD
411664700027	PWA;PWA-5026 IR BD
411664700014	PWA;PWA-5026 ADPT BD
411664700018	PWA;PWA-5026 BATT-VIEW BD,NIMH-3
441664700021	LCD ASSY;S/D SANYO 11.3,5026
441664700027	LCD ASSY;S/T,GSTAR,12.1,5026
441664700026	LCD ASSY;S/D SP 12.1,5026
441664700001	AC ADPT ASSY;5026
441664700061	BATT ASSY;12V/3.5AH,NIMH,SANYO,5
523410290013	FD DRIVE;1.44M,3.5",FD-05HF-4630
531013890021	KBD;87,EN,K9504,5026
531013890022	KBD;90,JP,K9504,5026
531013890023	KBD;87,GR,K9504,5026
531013890062	KBD;90,JP,K950418B-2,PITCHING

***** SPARE PARTS LIST FOR ACCESSORY KITS *****		
P/N	DESCRIPTION	LOCATION
ACCESSORY KIT;AK-5026-EN		
561566470001	MANUAL;USER'S,EN,5026	
565166470001	S/W;1.44M,UTILITY DRIVE,5026	
222600050108	ENVELOPE;3.5" FD,PVC,COMMON	
242661900008	LABEL;3.5",EN,ALL COMMON	
551103200013	FLOPPY DISKETTE;3.5",1.44MB,2HD	
565166470002	S/W;1.44M,AUDIO DRIVE,5026	
222600050108	ENVELOPE;3.5" FD,PVC,COMMON	
242661900008	LABEL;3.5",EN,ALL COMMON	
551103200013	FLOPPY DISKETTE;3.5",1.44MB,2HD	
565166470003	S/W;1.44M,VGA DRIVE,5026	
222600050108	ENVELOPE;3.5" FD,PVC,COMMON	
242661900008	LABEL;3.5",EN,ALL COMMON	
551103200013	FLOPPY DISKETTE;3.5",1.44MB,2HD	
332810000033	PWR CORD;125V/7A,2P,BLACK,AMERIC	
561566470002	MANUAL;QUICK REF,EN,5026	
422664700001	CABLE ASSY;A/D TO CHASSIS,35MM,5	
461664700001	PACKING KIT;5026	
222600020009	PE BUBBLE BAG;10"*8",COMMON	
222600020012	PE BAG;310*450,T.08,COMMON	
221663920002	CARTON;INNER,AK,LP486	
221662320006	CARTON;PC,3020F,NON-BRAND	
227664700001	END CAP;5026	

11. SPARE PARTS LIST

11.2 COMPONENT LEVEL (MOTHERBOARD)

***** MOTHERBOARD SPARE PARTS LIST *****		
P/N	DESCRIPTION	LOCATION
411664700001	PWA;PWA-5026 MOTHER BD	
242600000001	LABEL;PAL,20*5MM,COMMON	
242600000121	LABEL;PENTIUM NOTEBIOS,PHOENIX	
242600000122	LABEL;PNP NOTEBIOS,PHOENIX	
242663400002	LABEL;PCM PLUS PHOENIX,4022G	
242901300011	LABEL;BAR CODE,IB,BBU	
370102010502	SPC-SCREW;M2 L5,NIB,K-HD,727	
371102010010	SCREW;M2L4,FLT(+),NIW	
371102011201	SCREW;M2 L12,FLT(+),NIW	
375102030010	NUT-HEX;M2,2,NIW	
411664700022	PWA;PWA-5026 V3 M/B,W/O BIOS	
314100327205	XTAL;32.768KHZ,20PPM,FUND.,6FP,2	X 4
331030003004	CON;HDR,MA,3P*1,2.54MM,ST	J8
331030004007	CON;HDR,FM,4P,,1,ST,DOUBLE BASE	J509
331040008005	CON;HDR,MA,4P*2,2MM,R/A	J514
331040010002	CON;HDR,MA,10P,2MM,R/A,SUYIN	J508
331120003001	CON;HDR,SHROUD,MA,3P*1,1.25,ST	J506
331210020401	CON;EDGE,204P,1.0MM,R/A,AMP	J6
331650029604	IC SOCKET;296P,ZIF,ZIFPGA06	U 504
331720009004	CON;D,MA,9P,2.775,R/A	J3
331720015006	CON;D,FM,15P,2.29,R/A,3ROW	J2
331720025005	CON;D,FM,25P,2.775,R/A	J4
331840005002	CON;STEREO JACK,5P,R/A,D3.6,2 SW	J502,503,505
331872706019	CON;DIN,SKT,6P,MINI,R/A,PCB MT	J511
331910003003	CON;POWER JACK,3P,16VDC/3A	J1
338930010002	BATTERY PACK;LITHIUM,3V,39MAH	B T502
411664700023	PWA;PWA-5026 V3 SMT MOTHER BD	
271002000301	RES;0 ,1/10W,5% ,0805,SMT	L 61,109,110,R 289
271002000301	RES;0 ,1/10W,5% ,0805,SMT	L 109,110,R 289
271002221301	RES;220 ,1/10W,5% ,0805,SMT	R 17
271002681301	RES;680 ,1/10W,5% ,0805,SMT	R 46,52
271012000301	RES;0 ,1/8W,5% ,1206,SMT	R 68,72,237,257

***** MOTHERBOARD SPARE PARTS LIST *****		
P/N	DESCRIPTION	LOCATION
271071000002	RES;0 ,1/16W,0603,SMT	R 15,37,86,90,92
271071100302	RES;10 ,1/16W,5% ,0603,SMT	R 16,96,106,146,147,
271071101301	RES;100 ,1/16W,5% ,0603,SMT	R 138,191
271071102302	RES;1K ,1/16W,5% ,0603,SMT	R 11,38,57,95,222,
271071103302	RES;10K ,1/16W,5% ,0603,SMT	R 10,13,14,18,19,35,
271071104101	RES;100K ,1/16W,1% ,0603,SMT	R 193
271071104302	RES;100K ,1/16W,5% ,0603,SMT	R 8,42,54,71,103,164,
271071105101	RES;1M ,1/16W,1% ,0603,SMT	R 202
271071105301	RES;1M ,1/16W,5% ,0603,SMT	R 208
271071111101	RES;110 ,1/16W,1% ,0603,SMT	R 50
271071124311	RES;124K ,1/16W,1% ,0603,SMT	R 197
271071125301	RES;1.2M ,1/16W,5% ,0603,SMT	R 180
271071151302	RES;150 ,1/16W,5% ,0603,SMT	R 510
271071152302	RES;1.5K ,1/16W,5% ,0603,SMT	R 217
271071153301	RES;15K ,1/16W,5% ,0603,SMT	R 53,67,75,84
271071155301	RES;1.5M ,1/16W,5% ,0603,SMT	R 262
271071201301	RES;200 ,1/16W,5% ,0603,SMT	R 198
271071202301	RES;2K ,1/16W,5% ,0603,SMT	R 539
271071203101	RES;20K ,1/16W,1% ,0603,SMT	R 131
271071203302	RES;20K ,1/16W,5% ,0603,SMT	R 162,163,195
271071221302	RES;22 ,1/16W,5% ,0603,SMT	R 3-5,22-24
271071222302	RES;2.2K ,1/16W,5% ,0603,SMT	R 527,531,550
271071223302	RES;22K ,1/16W,5% ,0603,SMT	R 66
271071244301	RES;240K ,1/16W,5% ,0603,SMT	R 174
271071249311	RES;249K ,1/16W,1% ,0603,SMT	R 194
271071271301	RES;270 ,1/16W,5% ,0603,SMT	R 284
271071273301	RES;27K ,1/16W,5% ,0603,SMT	R 540,547
271071275301	RES;2.7M ,1/16W,5% ,0603,SMT	R 562,563
271071301311	RES;301K ,1/16W,1% ,0603,SMT	R 192
271071303301	RES;30K ,1/16W,5% ,0603,SMT	R 545
271071303301	RES;30K ,1/16W,5% ,0603,SMT	R 545
271071330302	RES;33 ,1/16W,5% ,0603,SMT	R 27,47,48,63,69,77,
271071472302	RES;4.7K ,1/16W,5% ,0603,SMT	R 59,64,65,81,89,91,

11. SPARE PARTS LIST

11.2 COMPONENT LEVEL (MOTHERBOARD)

***** MOTHERBOARD SPARE PARTS LIST *****		
271071473301	RES;47K ,1/16W,5% ,0603,SMT	R178,518,530
271071499111	RES;4.99K,1/16W,1% ,0603,SMT	R153
271071499311	RES;499K ,1/16W,1% ,0603,SMT	R182
271071750302	RES;75 ,1/16W,5% ,0603,SMT	R32-34
271071822301	RES;8.2K ,1/16W,5% ,0603,SMT	R288,561
271611000301	RP;0*4 ,8P ,1/16W,5% ,0612,SMT	RP52
271611100301	RP;10*4 ,8P ,1/16W,5% ,0612,SMT	RP36,37,38,41
271611102301	RP;1K*4 ,8P ,1/16W,5% ,0612,SMT	RP1-3,7
271611103301	RP,10K*4 ,8P ,1/16W,5% ,0612,SMT	RP4,22,24,27,30,32,
271611104301	RP;100K*4,8P ,1/16W,5% ,0612,SMT	RP31,45
271611220301	RP;22*4 ,8P ,1/16W,5% ,0612,SMT	RP28,29
271611222301	RP;2.2K*4,8P ,1/16W,5% ,0612,SMT	RP33,43
271611330301	RP;33*4 ,8P ,1/16W,5% ,0612,SMT	RP8,9,11-20,39,40,
271611331301	RP;330*4 ,8P ,1/16W,5% ,0612,SMT	RP61,65
271611472301	RP;4.7K*4,8P ,1/16W,5% ,0612,SMT	RP21,25,26,48,53,
271611822301	RP;8.2K*4,8P ,1/16W,5% ,0612,SMT	RP44,49,54,56,58-60,
272002105701	CAP;1U ,CR,16V ,-20+80%,0805,SM	C67,70,111,136,139,
272012225702	CAP;2.2U ,CR,16V ,+80-20%,1206,Y	C349
272012335701	CAP;3.3U ,CR,16V ,-20+80%,1206,S	C56,134
272072104702	CAP;.1U ,16V,+80-20%,0603,SMT	C48,49,55,91,99-101,
272072221301	CAP;220P ,16V,5% ,-30+85'C,0603,	C57-60,243,259,514,
272072224701	CAP;.22U ,16V ,+80-20%,0603,Y5V,	C511,518,519,524,
272072473401	CAP;.047U,16V ,10%,0603,Y5V,SMT	C593
272073180401	CAP;18P ,CR,25V ,10%,0603,NPO,S	C52-54,78,97,98
272075100701	CAP;10P ,50V ,+80-20%,0603,SMT	C231-233,240,241,
272075101701	CAP;100P ,50V ,+80-20%,0603,SMT	C20-27,36,50,75-77,
272075102701	CAP;1000P,50V ,+80-20%,0603,SMT	C12,62-64,96,189,
272075103702	CAP;.01U ,50V,+80-20%,0603,SMT	C4,61,66,159,171,
272075181301	CAP;180P ,50V ,5% ,0603,SMT	C13-17,28-35,39-47,
272075470701	CAP;47P ,50V ,+80-20%,0603,SMT	C8,9,18,19,37,38,
272075472701	CAP;4700P,50V ,+80-20%,0603,SMT	C68,69
272075561701	CAP;560P ,CR,50V ,+80-20%,0603,S	C434,435
272412105501	CAP;1U ,TT,16V ,20%,3216,SMT	C357
272421475501	CAP;4.7U ,TT,10V,20%,3528	C295,537,540
272422106501	CAP;10U ,TT,16V ,20%,3528,SMT	C102,105,109,160,

***** MOTHERBOARD SPARE PARTS LIST *****		
272431105501	CAP;100U ,TT,6.3V,20%,7343,SMT	C161,172,174,175,
272431105501	CAP;100U ,TT,6.3V,20%,7343,SMT	C161,172,175
273000010003	FERRITE CHIP;30OHM/100MHZ,4332	L17-19,67,69,95,
273000053228	INDUCTOR;2.2UH,5%,3225,SMT	L501
273000110006	FERRITE CHIP;105OHM/100MHZ,3216	L503,514
273000130001	FERRITE CHIP;120OHM/100MHZ,1608	L8,16,89,98,100,102,
273000130002	FERRITE CHIP;80OHM/100MHZ,1608,S	L79,80,94,84
273000130006	FERRITE CHIP;600OHM/100MHZ,,2A,1	L11,12,505,507,508,
273000150002	FERRIET CHIP;120OHM/100MHZ,2012	L1-7,9,10,13-15
274011600403	XTAL;16MHZ,50PPM,MA406,SMT	X2
274013276102	XTAL;32.768KHZ,50PPM,FUND,CITIZE	X5
274041431402	XTAL;14.318MHZ,50PPM,SMT,CM309	X1
281674244002	IC;74ACT244,OCT BUF/DRIVE,TSSOP,	U45
281674245001	IC;74ACT245,OCT TRANSCEIV,SSOP,2	U42,44
282074338401	IC;74CBT3384DBQ,O SWITCH,QSOP,2	U6
282153238401	IC;PI5C32X384C,BUS SWITCH,QVSOP	U5,9,10
282574004007	IC;74AHC04,HEX INVERTER,TSSOP,14	U26
282574004008	IC;74AHCU04,HEX INVERTER,TSSOP,	U49
282574008005	IC;74AHC08,QUAD 2-I/P AND,TSSOP,	U56
282574014003	IC;74VHC14,HEX INVERTER,SSOP,14P	U37
282574014004	IC;74AHC14,HEX INVERTER,TSSOP,14	U50
282574032005	IC;74AHC32,QUAD 2-I/P OR,TSSOP,1	U48
282574074004	IC;74AHC74,DUAL D F/F,TSSOP,14P	U32
282574123003	IC;74VHC123,RETRI M/RESET,SSOP,	U34
282574138002	IC;74VHC138,3/8 LINE DECOD,SSOP,	U36,40
282574151001	IC;74VHC151,8 CHANNEL MUX,SOL,1	U38
282574244005	IC;74AHC244,OCT,BUF/DRIVE,TSSOP	U24,30,39
282574245004	IC;74AHC245,OCT TRANSCE.,TSSOP,2	U23
282574373003	IC;74VHC373,OCT D-TRAN,SSOP,20P	U17,47,51
282574374002	IC;74VHC374,OCT 3-ST D F/F,SSOP,	U16,21
283600003005	IC;SRAM,8K*8,12NS,SOJ,28P	U27
283603000002	IC;SRAM,32K*32,8NS,TQFP,100P	U22,29
284108891006	IC;UM8891BE-N/DYS,PBC,TQFP,208P	U20
284108892005	IC;UM8892BE-N/DYS,DPC,TQFP,208P	U41
284500938001	IC;ES938B,3D EFFECT,SSOP,28P	U503

11. SPARE PARTS LIST

11.2 COMPONENT LEVEL (MOTHERBOARD)

***** MOTHERBOARD SPARE PARTS LIST *****		
284501878001	IC;ES1878S,AUDIO DRIVE,TSSOP,100	U 506
284502563001	IC;MIC2563,CARDBUS PWR CTRL,SSO	U 25
284504860005	IC;W48C60-405,CLK GEN/BUF,SSOP,2	U 19
284505330001	IC;PI5V330,WIDEBAND/VIDEO,QSOP,	U 4
284506730001	IC;CL-PD6730,PC CARD CTRL,PQFP,2	U 43
284508228001	IC;82C28,INTERRUPT/PWR CTRL,SOL	U 31
284508886007	IC;UM8886BF-N/BYS,IBC,PQFP,208P	U 35
284509385001	IC;CYBER9385F,VGA CTRL,BGA,256P	U 11
284580051001	IC;80C51SL-BG,KBD CTLR,PQFP,100P	U 18
284587338002	IC;PC87338VJG,SUPER I/O,TQFP,100	U 13
286100072001	IC;TL072CD,OP-AMP,SO,8P	U 505
286100324001	IC;LM324M,QUAD OP AMP,SO,14P	U 502
286100372014	IC;TLC372CD,DUAL COMP,SO	U 28
286107053001	IC;TDA7053AT,STEREO AMP,2*.5W,SO	U 501
286200213001	IC;MAX213,RS-232,SSOP,28P	U 3
286329201001	IC;MIC29201-5.0BU,VOL REG,TO-263	U 507
286351953001	IC;M51953B,VOL OUT SYS RESTER,SO	U 33
286512885001	IC;DS12885S,REAL TIME CLOCK,SOL	U 46
288200144001	TRANS;DTC144WK,NPN,SMT	Q 6-8,11-19,21,24,25,
288200352001	TRANS;NDS352P,DMOS,TO-236AB	Q 9,23
288203904010	TRANS;MMBT3904L,NPN,Tr35NS,TO2	Q 28
288203906018	TRANS;MMBT3906L,PNP,Tr35NS,TO2	Q 20,22
288209410001	TRANS;SI9410DY,N-MOSFET,.04OHM	Q 4
288209958001	TRANS;NDS9958,DUAL N&P MOSFET	Q 5
288227002001	TRANS;2N7002LT1,N-CHANNEL FET	Q 2,3
291000010402	CON;HDR,MA,4P*1,2MM,ST,SMT	J20,21
291000010802	CON;HDR,MA,8P*1,1.25,ST,SMT,HIRO	J7
291000011403	CON;HDR,MA,70P*2,.6MM,ST,SMT	J19
291000011601	CON;HDR,MA,80P*2,.635MM,ST,SMT	J18
291000014004	CON;HDR,FM,20P*2,.8,ST,SMT,HRS	J9
291000014006	CON;HDR,MA,20P*2,1.27,ST,SMT	J507

***** MOTHERBOARD SPARE PARTS LIST *****		
291000015002	CON;HDR,FM,25P*2,.8MM,ST,SMT	J501
291000016002	CON;HDR,MA,30P*2,.8MM,ST,SMT	J10
291000025202	CON;HDR,MA,26P*2,.635MM,H11,R/A	J504,512,513
291000150804	CON;FPC/FFC,8P,1MM,R/A,2CONTAC	J15
291000152401	CON;FPC/FFC,24P,1MM,R/A,ELCO	J14
291000610032	IC SOCKET;32P,PLCC,TIN,W/O PEGS,	U 14
291000410201	CON;WFR,MA,2P,1.25,ST,SMT/MB	J11,12
291000627204	DIMM SOCKET;72P,.635,GLD,H5.5,SM	J16,17
295000010102	FUSE;FAST,3A,32V,1206,SMT,CERAM	F1-3
297030101001	SW;TOGGLE,SPST,30V/.1A,SMT	SW 1
297100150002	SW;TACT,SPST,12V/.05A,SMT	SW 2
297120101005	SW;DIP,SPST,8P,50VDC,.1A,SMT,DHS	SW 501
297120101006	SW;DIP,SPST,16P,50VDC,.1A,SMT,DH	SW 502
316664700001	PCB;PWA-5026/M BD	R 00B
288100202002	DIODE;DAP202K,80V,SWITCH,DUAL,	D 8,9,18,21-23
288100217002	DIODE;DAN217,80V,SWITCH,SOT23	D 1
288100212001	DIODE;DAN212K,80V,SWITCH,SOT23	D 10,12,15
288100202001	DIODE;DAN202K,80V,SWITCH,SMT	D 13
273000130010	FERRITE CHIP;130OHM/100MHZ,1608	L 27-L 60
481664700001	F/W ASSY;SYS/VGA BIOS,5026	U 15
283420402003	IC;FLASH,256K*8-120,5V,PLCC32,BT	U 15
242600020904	LABEL;BLANK,PAPER 25.4*12.7	
283723003004	IC;DRAM,256K*16-60,EDO,SOJ-40,S-	U 52,53,54,55
271071224301	RES;220K ,1/16W,5% ,0603,SMT	R 566
271071474301	RES;470K ,1/16W,5% ,0603,SMT	R 565
273000150007	FERRITE CHIP;220OHM/100MHZ,2012	L 61
272075121401	CAP;120P ,CR,50V ,10%,0603,NPO,S	C 10,C 11
481664700002	F/W ASSY;KBD CTRL,5026	
283305402001	IC;EPROM,32K*8,120NS,CMOS,PLCC,3	U 25
242600020904	LABEL;BLANK,PAPER 25.4*12.7	
242600000158	LABEL;10*10,BLANK,COMMON,HI-TEMP	

11. SPARE PARTS LIST

11.2 COMPONENT LEVEL (ICON LCD BD, IR BD, BATTERY VIEW BD)

***** SPARE PARTS LIST FOR ICON LCD BD *****		
P/N	DESCRIPTION	LOCATION
411664700016	PWA;PWA-5026 ICON LCD BD	
411664700017	PWA;PWA-5026 SMT ICON LCD BD	
316664700004	PCB;PWA-5026/ICON LCD BD	R00B
272002105701	CAP;1U ,CR,16V ,-20+80%,0805,SM	C501,512
272072104702	CAP;.1U ,16V,+80-20%,0603,SMT	C502-511,513
291000014002	CON;HDR,MA,20P*2,.8MM,ST,GOLD,S	J501
271611103301	RP,10K*4 ,8P ,1/16W,5% ,0612,SMT	RP501
271002203301	RES;20K ,1/10W,5% ,0805,SMT	R501
271002104301	RES;100K ,1/10W,5% ,0805,SMT	R502,505,507,508,
271071105301	RES;1M ,1/16W,5% ,0603,SMT	R503,504,506,509,
271071473301	RES;47K ,1/16W,5% ,0603,SMT	R510,511
271071103302	RES;10K ,1/16W,5% ,0603,SMT	R512,515,518
271071000002	RES;0 ,1/16W,0603,SMT	R513,520
271071102302	RES;1K ,1/16W,5% ,0603,SMT	R516
286500555015	IC;TLC555C,TIMERS,SO	U501
282574086002	IC;74VHC86,QUAD 2I/P XOR,SSOP,14	U502-507
282574123003	IC;74VHC123,RETRI. M/RESET,SSOP,	U508
331130002006	CON;HDR,SHROUD,MA,2P*1,1.25,R/A	J502
413000020070	LCD;UTS-A429AV,5026 ICON	U1

***** SPARE PARTS LIST FOR IR BD *****		
411664700027	PWA;PWA-5026 IR BD	
288001100001	FIR;HSDL-1100,TRANSCEIVER,X07,SM	
411664700028	PWA;PWA-5026 SMT IR BD	U2
316664700031	PCB;PWA-5026/IR BD	
272075101701	CAP;100P ,50V ,+80-20%,0603,SMT	R00
272075472701	CAP;4700P,50V ,+80-20%,0603,SMT	C1,4,5
272072221301	CAP;220P ,16V,5% ,-30+85'C,0603,	C2
272431105501	CAP;100U ,TT,6.3V,20%,7343,SMT	C3
272072104702	CAP;.1U ,16V,+80-20%,0603,SMT	C6
272015474501	CAP;.47U ,CR,50V,20%,1206,Z5U	C7
272075103702	CAP;.01U ,50V,+80-20%,0603,SMT	C8
271013100301	RES;10 ,1/4W,5% ,1206,SMT	C9
271012561301	RES;560 ,1/8W,5% ,1206,SMT	R1,3,2,4
***** SPARE PARTS LIST FOR BATT- VIEW BOARD *****		
411664700018	PWA;PWA-5026 BATT-VIEW BD,NIMH-3	
271002101301	RES;100 ,1/10W,5% ,0805,SMT	
271002104101	RES;100K ,1/10W,1% ,0805,SMT	R1
271002204101	RES;200K ,1/10W,1% ,0805,SMT	R2,513,515,517
271002471301	RES;470 ,1/10W,5% ,0805,SMT	R501,504,506,510,
271002909311	RES;909K ,1/10W,1% ,0805,SMT	R505,507,509,511,
271045507101	RES;.05 ,1W ,1% ,2512,SMT	R516
272003104701	CAP;.1U ,CR,25V ,+80-20%,0805,Y	R3,4
286002014001	IC;BQ2014,GAS GAUGE,SO,16P	C501,502,504
288100032013	DIODE;BAS32L,VRRM75V,MELF,SOD	U501
288100062001	DIODE;RLZ6.2B,ZENER,SMT	D6,7
288202222001	TRANS;MMBT2222AL,NPN,TO236AB	D8
294011200004	LED;YE/GR,H1.1,L2,W1.25,CL170YG,	Q501
297040105002	SW;PUSH BUTTON,SPST,12V/50MA,4P	D1-5
316664700010	PCB;PWA-5026/BATT VIEW BD	SW1

11. SPARE PARTS LIST

11.2 COMPONENT LEVEL (DC/DC BOARD)

***** SPARE PARTS LIST FOR DC/DC BD *****		
411664700024	PWA;PWA-5026 D/D-1 BD	
312273306151	EC;330U,6.3V,20%,RA,D10,W/OS-CO	C1,PC4
312272205051	EC;22U,20V,M,RA,D6.3,-55+105,OS-	C2,C5
312271006358	EC;100U,25V,RA,M,D6.3*7,SGX,SANY	C4
328101002001	DIODE;HRW 1002A,10A,20V,TO-220AB	D1
331030004007	CON;HDR,FM,4P,.1,ST,DOUBLE BASE	J1
331030010007	CON;HDR,MA,10P*1,2.0MM,ST,GLD	J2
312273305354	EC;33U,25V,M,RA,D6.3*7,SGX,SA	PC1
312271006152	EC;100U,10V,M,RA,D6.3*9.8,OS-CO	PC5
313000020080	CHOKE;30UH,D.7*24T,RA,55130	PL1
313000020079	CHOKE;20UH,D.6*16T,RA,55040	PL2
313000020078	CHOKE COIL;15UH,D.7*16T/.2*32,55	PT1
411664700025	PWA;PWA-5026 SMT D/D-1 BD	
271045207101	RES;.02,1W,1%,2512,SMT	PR504
271071204101	RES;200K,1/16W,1%,0603,SMT	R5,R3
271071301311	RES;301K,1/16W,1%,0603,SMT	R547,R6
271071133311	RES;133K,1/16W,1%,0603,SMT	R7,R13
271071105101	RES;1M,1/16W,1%,0603,SMT	R14,R8
271071681111	RES;6.81K,1/16W,1%,0603,SMT	R15,R526
271071432211	RES;43.2K,1/16W,1%,0603,SMT	R16,R525
271071169311	RES;169K,1/16W,1%,0603,SMT	R543,R18
271013049301	RES;.04,1/4W,5%,1206,SMT	PR507
271071112101	RES;1.1K,1/16W,1%,0603,SMT	R501
271071472302	RES;4.7K,1/16W,5%,0603,SMT	R502
271012102301	RES;1K,1/8W,5%,1206,SMT	R504
271002220301	RES;22,1/10W,5%,0805,SMT	R505
271012272301	RES;2.7K,1/8W,5%,1206,SMT	R506
271071562301	RES;5.6K,1/16W,5%,0603,SMT	R517,R507
271071237311	RES;237K,1/16W,1%,0603,SMT	R509
271071287311	RES;287K,1/16W,1%,0603,SMT	R510,R542,R544
271071822301	RES;8.2K,1/16W,5%,0603,SMT	R512
271002391101	RES;390,1/10W,1%,0805,SMT	R515
271071123301	RES;12K,1/16W,5%,0603,SMT	R516
271071604211	RES;60.4K,1/16W,1%,0603,SMT	R518
271071549211	RES;54.9K,1/16W,1%,0603,SMT	R519
271071223302	RES;22K,1/16W,5%,0603,SMT	R520
271071474301	RES;470K,1/16W,5%,0603,SMT	R521,R522,R531,R532
271071221301	RES;220,1/16W,5%,0603,SMT	R538,R524

***** SPARE PARTS LIST FOR DC/DC BD *****		
271071203101	RES;20K,1/16W,1%,0603,SMT	R527
271071499111	RES;4.99K,1/16W,1%,0603,SMT	R528
271071823301	RES;82K,1/16W,5%,0603,SMT	R537,R539
271071499211	RES;49.9K,1/16W,1%,0603,SMT	R540,R541
286100339002	IC;LP339,ULTRA-LOW PWR COMP.,SO,	U3,U2
286303759001	IC;MB3759,SW REG.CTRL,PFP,16P	U501
271071103302	RES;10K,1/16W,5%,0603,SMT	PR1,R4,R10,R17,R21,
271071121311	RES;121K,1/16W,1%,0603,SMT	PR501,PR506
271045257101	RES;.025,1W,1%,2512,SMT	PR502
271002472301	RES;4.7K,1/10W,5%,0805,SMT	R1
271071224301	RES;220K,1/16W,5%,0603,SMT	R19,R20,R535
271071104101	RES;100K,1/16W,1%,0603,SMT	R12,PR503,PR505,
272073104501	CAP;.1U,25V,20%,0603,SMT	PC2,PC3,C3,PC6,C6,
272002105701	CAP;1U,CR,16V,-20+80%,0805,SM	C7,C511,C514
272013105501	CAP;1U,CR,25V,+80-20%,1206,S	C8,PC502
272075103501	CAP;.01U,50V,20%,0603,SMT	C12,C504,C506,C516,
272075102501	CAP;1000P,CR,50V,20%,0603,SMT	C512
272422106501	CAP;10U,TT,16V,20%,3528,SMT	PC7,C515
288100032013	DIODE;BAS32L,VRRM 75V,MELF,SOD-80	PD1,PD2,D501,D502,
288100202001	DIODE;DAN202K,80V,SWITCH,SMT	PD3,D506,D507
288101004024	DIODE;EC10QS04,RECT,40V,1A,CHIP,	PD501,PD502,PD504,
288100056001	DIODE;RLZ5.6B,ZENER,5.6V,5%,SMT	PD503
288227002001	TRANS;2N7002LT1,N-CHANNEL FET	Q1,Q3,Q4,Q7,Q504,
288203906018	TRANS;MMBT3906L,PNP,Tr35NS,TO236	Q2
288204435001	TRANS;SI4435DY,P-MOSFET,.035OHM,	Q5,Q6,Q8,Q9
288202222001	TRANS;MMBT2222AL,NPN,TO236AB	Q501,Q502,Q506,Q507,
288200144001	TRANS;DTC144WK,NPN,SMT	Q503,Q509,Q511,Q521
288200351001	TRANS;NDS351,N-MOSFET,.25HM,SOT-	Q505
288208936001	TRANS;NDS8936,N-MOSFET,.037OHM,S	Q514
288200356001	TRANS;NDS356P,DMOS,TO236AB	Q515
286300431004	IC;AIC431,.5%,ADJ SHUNT REG,SOT-	Q517
288204410001	TRANS;SI4410DY,N-MOSFET,.02OHM,S	PQ1,PQ2,PQ501,PQ502
286300786001	IC;MAX786CAI,PWM CTLR,DUAL,SSOP,	PU1
286317812001	IC;HA178L12UA,VOLT REGULATOR,SC-	PU501
291000014005	CON;HDR,FM,20P*2,1.27,ST,SMT	J3
273000010003	FERRITE CHIP;36OHM/100MHZ,4332	L1,L2
295000010009	FUSE;NORMAL,5A/32VDC,3216,SMT	F1,F2,F501
316664700002	PCB;PWA-5026/DD BD	R00C
326302950017	IC;LP2950CZ-5.0,VOL REGULATOR,TO	U1

11. SPARE PARTS LIST

11.3 MECHANICAL LEVEL(HOUSING, COVER,….. …….)

***** MECHANICAL SPARE PARTS LIST *****	
P/N	DESCRIPTION
HOUSING KIT;5026	
242664700004	LABEL;AGENCY-GLOBAL,5026
340664700005	COVER ASSY;I/O BTM CASE,5026
340664700006	COVER;SPEAKER ASSY,UPPER CASE,50
341664700004	SPRING;(LATCH,HDD),BTM CASE,5026
341664700006	SPRING PLATE;FOOT,BTM CASE,5026
341664700007	SPRING;SLIDE,BTM CASE,5026
341664700008	SPRING;(SUSPEND),UPPER CASE,5026
341664700009	SPRING;LCD,5026
341664700010	SPRING;CHANGE,BTM CASE,5026
341664700011	SHIELDING;I/O,M/B,5026
341664700012	SHIELDING;AUDIO,M/B,5026
341664700013	SHIELDING;PS/2,M/B,5026
341664700014	SHIELDING;BOTTOM,M/B,5026
341664700016	SHIELDING;TOP,UPPER CASE,5026
341664700017	HOLDER;R,UPPER CASE,5026
341664700018	HOLDER;CPU,M/B,5026
341664700020	INSULATOR;BOTTOM,M/B,5026
342664700007	BOTTOM SHIELD;HDD,5026
342664700024	SCREW ;M3,FOOT,BTM CASE,5026
343664700001	BRKT;I/O,UPPER CASE,5026
343664700002	PLATE;UPPER CASE,5026
344664700026	COVER;R,HINGE,UPPER CASE,5026
344664700027	COVER;L,HINGE,UPPPER CASE,5026
344664700029	BUTTON;(SUSPEND)COVER(SPEAKER),5
344664700030	BUTTON;TOUCH PAD,UPPER CASE,5026
344664700035	COVER;HDD,BTM CASE,5026
344664700037	COVER;CPU,BTM CASE,5026
344664700038	LENS;UPPER CASE,5026
344664700042	DOOR;AUDIO,BTM CASE,5026
344664700045	BUTTON;SLIDE,BTM CASE,5026
344664700046	HOOK;SLIDE,BTM CASE,5026
344664700047	FOOT;R,BTM CASE,5026

***** MECHANICAL SPARE PARTS LIST *****	
344664700048	FOOT;L,BTM CASE,5026
344664700049	BOTTOM CASE;5026
344664700050	UPPER CASE;5026
344664700052	PIPE;WIND,BTM CASE,5026
344664700067	DOOR;PCMCIA,DOOR/HDD,5026
344664700068	DOOR;CHANGE,BTM CASE,5026
344664700070	LATCH;HDD,BTM CASE,5026
344664700071	COVER;RAM,UPPER CASE,5026
345664700002	PAD;BTM CASE,5026
345664700003	RING;SPEAKER,M/B,5026
345664700005	COVER;FAX HOLE,5026
345664700006	COVER;VEDIO HOLE,5026
346664700003	INSULATOR;HDD,5026
346664700007	INSULATOR;HDD TOP,5026
370102610401	SPC-SCREW ;M2.6 L4,NIB,K-HD,727
370102610602	SPC-SCREW ;M2.6 L6,NIB,K-HD,727
370102612001	SPC-SCREW ;M2.6 L20,NIB,K-HD,727
370103010603	SPC-SCREW ;M3L4,K-HEAD(+),NIW
370103010604	SPC-SCREW ;M3L6,NIB,K-HD,727
371102010020	SCREW ;M2L5,FLT(+),NIB
373202610502	T-SCREW ;P,M2.6,L5,PAN(+),0,NIB
375120262008	NUT-HEX;M2.6,NIW
377102610001	STANDOFF;M2,6DP3.5H5L5,NYLOK
377102610002	STANDOFF;M2.6DP4.5H6L5,NYLOK
377102610003	STANDOFF;M2.6DP7.9H10.4L5,NYLOK
377102610004	STANDOFF;M2,6DP12.4H14.9L5,NYLOK
442057400502	TOUCH PAD MODULE;KGDDBA913A,5026
***** MECHANICAL SPARE PARTS FOR FDD *****	
FDD ASSY;1.44M,3.5",5026	
242664700001	LABEL;FDD,5026
340664700008	HOUSING COMP.;FDD,5026
344664700036	COVER;FDD,5026
421664700053	FPC ASSY;REM. FDD CON.,FPC,5026
523410290013	FD DRIVE;1.44M,3.5",FD-05HF-4630

11. SPARE PARTS LIST

11.4 LCD MIT KIT (LCD 12.1" TFT)

***** SPARE PARTS LIST FOR LCD 12.1" TFT *****		
P/N	DESCRIPTION	LOCATION
441664700027	LCD ASSY;S/T,GSTAR,12.1,5026	
413000020078	LCD;LP121S1,TFT,12.1",SVGA	
451664700007	LCD ME KIT;S/T,GSTAR,12.1,5026	
411664700006	PWA;PWA-5026 INVERTER BD	
421664700021	WIRE ASSY;INVERTER/MB,5026	
421664700026	WIRE ASSY;BACKLIGHT,IBM 12.1",50	
421664700067	FPC ASSY;LCD 12.1",GSTAR,TFT,502	
LCD ME KIT;S/T,GSTAR,12.1,5026		
340664700001	TILT UNIT;L,12.1"/11.3",5026	
340664700002	TILT UNIT;R,12.1"/11.3",5026	
341664700009	SPRING;LCD,5026	
344664700075	TUBE;LCD/FPC,LINK,5026	
344664700006	SLIDE LATCH;5026	
344664700007	HOOK;SLIDE LATCH,5026	
345664700004	CUSHION;SCREW,LCD,5026	
370102010301	SPC-SCREW;M2L3,NNIB,K-HD,727	
370103010604	SPC-SCREW;M3L6,NIB,727,NYLOK	
340664700030	COVER ASSY;12.1",LCD,GS,TFT,5026	
340664700031	HOUSING ASSY;12.1",LCD,GS,TFT,50	
345664700016	RUBBER;LCD FPC PAD-A,5026	
345664700019	SPONGE;LCD PAD,GSTAR,5026	
PWA;PWA-5026 INVERTER BD		
331040004001	CON;HDR,MA,4P,2.5,R/A	J2
313000020060	CHOKE COIL;200UH,10%,MPP,62T,NOB	L1
312166802641	CAP;.068U,POLY,100V,10%,MPR,AX	C3
271911502901	VR;5K ,.025W,20%,10MM,TOP,SMT	VR1
411664700007	PWA;PWA-5026 SMT INVERTER BD	
316664700003	PCB;PWA-5026/BACKLIT BD	R1

***** SPARE PARTS LIST FOR LCD 12.1" TFT *****		
P/N	DESCRIPTION	LOCATION
271002102301	RES;1K ,1/10W,5%,0805,SMT	R510,517
271002122301	RES;1.2K,1/10W,5%,0805,SMT	R511
271002103301	RES;10K ,1/10W,5%,0805,SMT	R502
271002152301	RES;1.5K,1/10W,5%,0805,SMT	R516
271002153301	RES;15K ,CF,1/10W,5%,0805,SMT	R514
271002154302	RES;150K,1/10W,5%,0805,SMT	R505
271002222301	RES;2.2K,1/10W,5%,0805,SMT	R501,509
271002472301	RES;4.7K,1/10W,5%,0805,SMT	R507
271002473301	RES;47K ,1/10W,5%,0805,SMT	R504,506,515
271002682301	RES;6.8K,1/10W,5%,0805,SMT	R513,508
271002104301	RES;100K,1/10W,5%,0805,SMT	R521
271002105301	RES;1M ,1/10W,5%,0805,SMT	R518,R519
271002204301	RES;200K,1/10W,5%,0805,SMT	R520
272003104701	CAP;.1U ,CR,25V,+80-20%,0805,Y	C1,502-504,506
272005102401	CAP;1000P,CR,50V,10%,0805,X7R	C501
272005103401	CAP;.01U,CR,50V,10%,0805,X7R	C507,508
272030330401	CAP;33P ,CR,3000V,10%,1808,SMT	C509
272002105701	CAP;1U ,CR,16V,-20+80%,0805,SM	C510
272003224701	CAP;.22U,CR,25V,+80-20%,0805,Y	C505
272433226401	CAP;22U ,TT,20V,10%,7343	C2
273001050009	XSFORMER;430mH,13T/2100T,CEPH145	T1
286303759001	IC;MB3759,SW REG.CTRL,PFP,16P	U501
288100032013	DIODE;BAS32L,VRRM 75V,MELF,SOD-80	D501,505
288100010001	DIODE;RLZ10B,ZENER,9.41-9.90,5%,	D503
288100202001	DIODE;DAN202K,80V,SWITCH,SMT	D504
288101004024	DIODE;EC10QS04,RECT,40V,1A,CHIP,	D1
288200144001	TRANS;DTC144WK,NPN,SMT	Q503
288200144002	TRANS;DTA144WK,PNP,SMT	Q504
288202182001	TRANS;2SJ182S,MOSFET,P-CH,DPAK	Q1
288202222001	TRANS;MMBT2222AL,NPN,TO236AB	Q501
288224672001	TRANS;2SC4672,NPN,SMT	Q502,505
291000010802	CON;HDR,MA,8P*1,1.25,ST,SMT,HIRO	J1
294011200002	LED;YEL,H1.5,0805,PY1102W,SMT	D2,502

11. SPARE PARTS LIST

11.4 LCD MIT KIT (LCD 12.1" DSTN)

***** SPARE PARTS LIST FOR LCD 12.1"DSTN *****		
P/N	DESCRIPTION	LOCATION
441664700026	LCD ASSY;S/D SP 12.1,5026	
413000020077	LCD;LM80C36,DSTN,12.1",SVGA,SHAR	
421664700062	FPC ASSY;LCD 12.1",SHARP,DSTN,50	R0
411664700006	PWA;PWA-5026 INVERTER BD	
451664700006	LCD ME KIT;S/D SP 12.1,5026	
421664700021	WIRE ASSY;INVERTER/MB,5026	R0
421664700027	WIRE ASSY;BACKLIGHT,SHP 12.1",50	
PWA;PWA-5026 INVERTER BD		
331040004001	CON;HDR,MA,4P,2.5,R/A	J2
313000020060	CHOKE COIL;200UH,10%,MPP,62T,NO	L1
312166802641	CAP;.068U,POLY,100V,10%,MPR,AX	C3
271911502901	VR;5K ,.025W,20%,10MM TOP,SMT	VR1
411664700007	PWA;PWA-5026 SMT INVERTER BD	
316664700003	PCB;PWA-5026/BACKLIT BD	R1
271002100301	RES;10 ,1/10W,5%,0805,SMT	R503,512
271002102301	RES;1K ,1/10W,5%,0805,SMT	R510,517
271002122301	RES;1.2K,1/10W,5%,0805,SMT	R511
271002103301	RES;10K ,1/10W,5%,0805,SMT	R502
271002152301	RES;1.5K,1/10W,5%,0805,SMT	R516
271002153301	RES;15K ,CF,1/10W,5%,0805,SMT	R514
271002154302	RES;150K ,1/10W,5%,0805,SMT	R505
271002222301	RES;2.2K ,1/10W,5%,0805,SMT	R501,509
271002472301	RES;4.7K ,1/10W,5%,0805,SMT	R507
271002473301	RES;47K ,1/10W,5%,0805,SMT	R504,506,515
271002682301	RES;6.8K ,1/10W,5%,0805,SMT	R513,508
271002104301	RES;100K ,1/10W,5%,0805,SMT	R521
271002105301	RES;1M ,1/10W,5%,0805,SMT	R518,R519
271002204301	RES;200K ,1/10W,5%,0805,SMT	R520
272003104701	CAP;.1U ,CR,25V ,+80-20%,0805,Y	C1,502-504,506
272005102401	CAP;1000P,CR,50V,10%,0805,X7R	C501
272005103401	CAP;.01U ,CR,50V,10%,0805,X7R	C507508
272030330401	CAP;33P ,CR,3000V,10%,1808,SMT	C509
272002105701	CAP;1U ,CR,16V ,-20+80%,0805,SM	C510

***** SPARE PARTS LIST FOR LCD 12.1"DSTN *****		
P/N	DESCRIPTION	LOCATION
272003224701	CAP;.22U ,CR,25V ,+80-20%,0805,Y	C505
272433226401	CAP;22U ,TT,20V ,10%,7343	C2
273001050009	XSFORMER;430mH,13T/2100T,CEPH14	T1
286303759001	IC;MB3759,SW REG CTRL,PFP,16P	U501
288100032013	DIODE;BAS32L,VRRM75V,MELF,SOD	D501505
288100010001	DIODE;RLZ10B,ZENER,9.41-9.90,5%,	D503
288100202001	DIODE;DAN202K,80V,SWITCH,SMT	D504
288101004024	DIODE;EC10QS04,RECT,40V,1A,CHIP,	D1
288200144001	TRANS;DTC144WK,NPN,SMT	Q503
288200144002	TRANS;DTA144WK,PNP,SMT	Q504
288202182001	TRANS;2SJ182S,MOSFET,P-CH,DPAK	Q1
288202222001	TRANS;MMBT2222AL,NPN,TO236AB	Q501
288224672001	TRANS;2SC4672,NPN,SMT	Q502505
291000010802	CON;HDR,MA,8P*1,1.25,ST,SMT,HIRO	J1
294011200002	LED;YEL,H1.5,0805,PY1102W,SMT	D2,502
295000010104	FUSE;FAST,1.5A,63VDC,1206,SMT	F1
LCD ME KIT;S/D SP 12.1,5026		
340664700001	TILT UNIT;L,12.1"/11.3",5026	
340664700002	TILT UNIT;R,12.1"/11.3",5026	
341664700009	SPRING;LCD,5026	
344664700075	TUBE;LCD/FPC,LINK,5026	
344664700005	SLIDE;BRIGHT,5026	
344664700006	SLIDE LATCH;5026	
344664700007	HOOK;SLIDE LATCH,5026	
345664700004	CUSHION;SCREW,LCD,5026	
370102010301	SPC-SCREW;M2L3,NNIB,K-HD,727	
370103010604	SPC-SCREW;M3L6,NIB,727,NYLOK	
340664700020	COVER ASSY;12.1" LCD DSTN,5026	
340664700025	HOUSING ASSY;12.1 LCD SHP DSTN,5	
345664700001	CUSHION;COVER,LCD,5026	
345664700016	RUBBER;LCD FPC PAD-A,5026	
345664700021	SPONGE;LCD PAD,SHP,5026	
225664300001	TAPE;INSULATION,AC04,5024	

11. SPARE PARTS LIST

11.4 LCD MIT KIT (LCD 11.3” DSTN)

***** SPARE PARTS LIST FOR LCD 11.3" DSTN *****		
P/N	DESCRIPTION	LOCATION
441664700021	LCD ASSY;S/D SANYO 11.3,5026	
413000020065	LCD;LM-FG53-22NTK,DSTN,11.3"	
411664700006	PWA;PWA-5026 INVERTER BD	
421664700021	WIRE ASSY;INVERTER/MB,5026	
421664700022	WIRE ASSY;BACKLIGHT,L,5026	
421664700058	FPC ASSY;LCD 11.3",SANYO,DSTN,50	
LCD ME KIT;S/D SANYO 11.3,5026		
340664700001	TILT UNIT;L,12.1"/11.3",5026	
340664700002	TILT UNIT;R,12.1"/11.3",5026	
341664700009	SPRING;LCD,5026	
222664810001	PROTECTING CLOTH;N/B,PITCHING	
222664810002	PROTECTING CLOTH;LCD/KEYBD,PITCH	
344664700075	TUBE;LCD/FPC,LINK,5026	
344664700005	SLIDE;BRIGHT,5026	
344664700006	SLIDE LATCH;5026	
344664700007	HOOK;SLIDE LATCH,5026	
345664700004	CUSHION;SCREW,LCD,5026	
370102010301	SPC-SCREW;M2L3,NNIB,K-HD,727	
370103010604	SPC-SCREW;M3L6,NIB,727,NYLOK	
370103010604	SPC-SCREW;M3L6,NIB,727,NYLOK	
340664700019	COVER ASSY;11.3" LCD DSTN,5026	
340664700022	HOUSING ASSY;11.3 LCD SYO DSTN,5	
421664700058	FPC ASSY;LCD 11.3",SANYO,DSTN,50	
421664700021	WIRE ASSY;INVERTER/MB,5026	
421664700024	WIRE ASSY;BACKLIGHT,SANYO 11.3,5	
PWA;PWA-5026 INVERTER BD		
331040004001	CON;HDR,MA,4P,2.5,R/A	J2
313000020060	CHOKE COIL;200UH,10%,MPP,62T,NOB	L1
312166802641	CAP;.068U,POLY,100V,10%,MPR,AX	C3
271911502901	VR;5K ,.025W,20%,10MM,TOP,SMT	VR1
411664700007	PWA;PWA-5026 SMT INVERTER BD	

***** SPARE PARTS LIST FOR LCD 11.3" DSTN *****		
P/N	DESCRIPTION	LOCATION
316664700003	PCB;PWA-5026/BACKLIT BD	R1
271002100301	RES;10 ,1/10W,5%,0805,SMT	R503,512
271002102301	RES;1K ,1/10W,5%,0805,SMT	R510,517
271002122301	RES;1.2K,1/10W,5%,0805,SMT	R511
271002103301	RES;10K ,1/10W,5%,0805,SMT	R502
271002152301	RES;1.5K,1/10W,5%,0805,SMT	R516
271002153301	RES;15K ,CF,1/10W,5%,0805,SMT	R514
271002154302	RES;150K,1/10W,5%,0805,SMT	R505
271002222301	RES;2.2K,1/10W,5%,0805,SMT	R501,509
271002472301	RES;4.7K,1/10W,5%,0805,SMT	R507
271002473301	RES;47K ,1/10W,5%,0805,SMT	R504,506,515
271002682301	RES;6.8K,1/10W,5%,0805,SMT	R513,508
271002104301	RES;100K,1/10W,5%,0805,SMT	R521
271002105301	RES;1M ,1/10W,5%,0805,SMT	R518,R519
271002204301	RES;200K,1/10W,5%,0805,SMT	R520
272003104701	CAP;.1U ,CR,25V,+80-20%,0805,Y	C1,502-504,506
272005102401	CAP;1000P,CR,50V,10%,0805,X7R	C501
272005103401	CAP;.01U,CR,50V,10%,0805,X7R	C507,508
272030330401	CAP;33P ,CR,3000V,10%,1808,SMT	C509
272002105701	CAP;1U ,CR,16V,-20+80%,0805,SM	C510
272003224701	CAP;.22U ,CR,25V,+80-20%,0805,Y	C505
272433226401	CAP;22U ,TT,20V,10%,7343	C2
273001050009	XSFORMER;430mH,13T/2100T,CEPH145	C1
286303759001	IC;MB3759,SW REG.CTRL,PFP,16P	U501
288100032013	DIODE;BAS32L,VRRM 75V,MELF,SOD-80	D501,505
288100010001	DIODE;RLZ10B,ZENER,9.41-9.90,5%,	D503
288100202001	DIODE;DAN202K,80V,SWITCH,SMT	D504
288101004024	DIODE;EC10QS04,RECT,40V,1A,CHIP,	D1
288200144001	TRANS;DTC144WK,NPN,SMT	Q503
288200144002	TRANS;DTA144WK,PNP,SMT	Q504
288202182001	TRANS;2SJ182S,MOSFET,P-CH,DPAK	Q1
288202222001	TRANS;MMBT2222AL,NPN,TO236AB	Q501
288224672001	TRANS;2SC4672,NPN,SMT	Q502,505
291000010802	CON;HDR,MA,8P*1,1.25,ST,SMT,HIRO	J1
294011200002	LED;YEL,H1.5,0805,PY1102W,SMT	D2,502
295000010104	FUSE;FAST,1.5A,63VDC,1206,SMT	F1