AnsaldoSTS

IT-1029

MICROLOK® II

Troubleshooting Flowcharts

January 2009
Revision 1.a

PROPRIETARY NOTICE

IMPORTANT NOTICE

ASTS USA constantly strives to improve our products and keep our customers apprised of changes in technology. Following the recommendations contained in the attached service manual will provide our customers with optimum operational reliability. The data contained herein purports solely to describe the product, and does not create any warranties.
Within the scope of the attached manual, it is impossible to take into account every eventuality that may arise with technical equipment in service. Please consult an ASTS USA local sales representative in the event of any irregularities with our product.
ASTS USA expressly disclaims liability resulting from any improper handling or use of our equipment, even if these instructions contain no specific indication in this respect. We strongly recommend that only approved ASTS USA spare parts are used as replacements.

REVISION HISTORY

REV.	ISSUE DATE	REVISION DESCRIPTION	AUTHOR	APPROVAL DATE
0.a	November 14, 2005	First draft	ejb	
0.1	December 8, 2005	Revised per comments	ejb	
0.2	May 1, 2006	Revisions per comments, revised Fig 1-10.	ejb	
0.3	June 9, 2006	Attached new doc template.	ejb	
0.4	February 12, 2007	Formatting corrections	ejb	
0.5	April 17, 2007	Revised Fig 1-3 and Fig 2-3	ejb	
0.6	June 13, 2007	Revised headers for Section 1	ejb	
0.7	November 14, 2007	Applied new Headers/Footers from standard template	ejb	LIRR Wood training PTC training 12/07
0.8	May 13, 2008	Changed copyright to '08 Replace "Ver." with "Rev." Replace doc "Version" with "Revision" Simplified printing	ejb	
0.9	May 27, 2008	Simplified printing	ejb	
1.0	January 8, 2009	Revised: • Year/corporate changes • Figure 2-2 • Figure 2-3	ejb	For Bangladesh training (1/19/09) DART CMGC1
1.a	January 29, 2009	Revised: • Logo changes		

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1 TROUBLESHOOTING MICROLOK II

1.1 Introduction

This troubleshooting process is based upon the following assumptions:

- The system in question has been in normal operation for a period of time without failure.
- Commercial input power is available and been checked (including fuses).
- Battery power is available and adequate (including fuses).
- Verify +12VDC, –12VDC, and +5VDC on the cardfile.
- No external variables (e.g., trenching in the vicinity of the location, or track work) has altered the location's physical status.
- The maintainer performing the troubleshooting has a working familiarity with the MICROLOK® II System.

If work has been performed on the cardfile check the following first:

- Ensure that all PCBs are firmly seated in the cardfile.
- Ensure the PCB top rear I/O connectors are firmly attached to the cardfile rear.
- Ensure that all addressable PCBs have address jumpers installed.

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1.2 Purpose

These charts provide a common ground for maintainer-engineer collaboration in the troubleshooting process.

The engineer can refer to a given flowchart confident that the first response maintainer has performed the flowchart steps and thereby perform a better assessment of the problem.

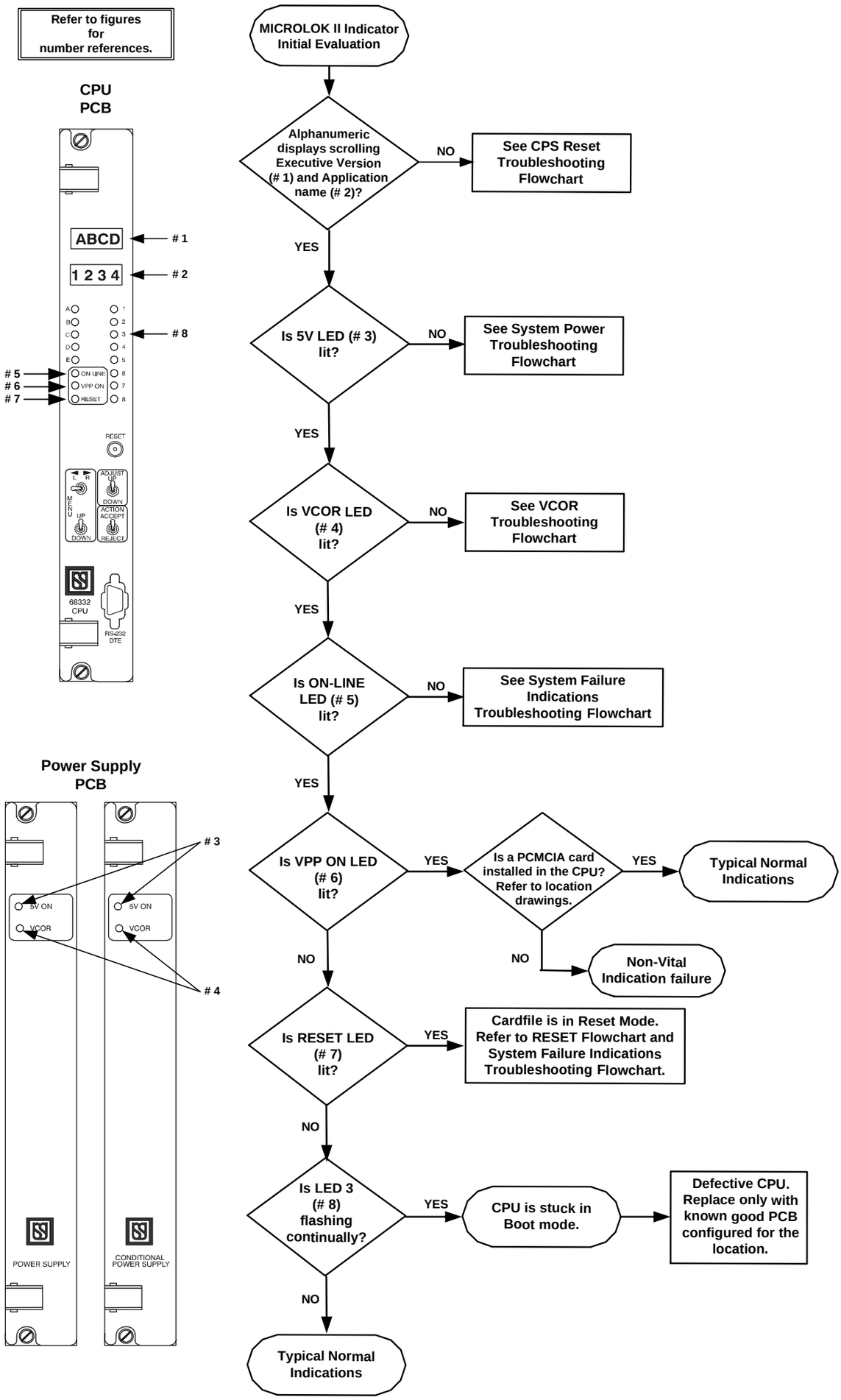

Figure 1-1. MICROLOK II Initial Indication Evaluation

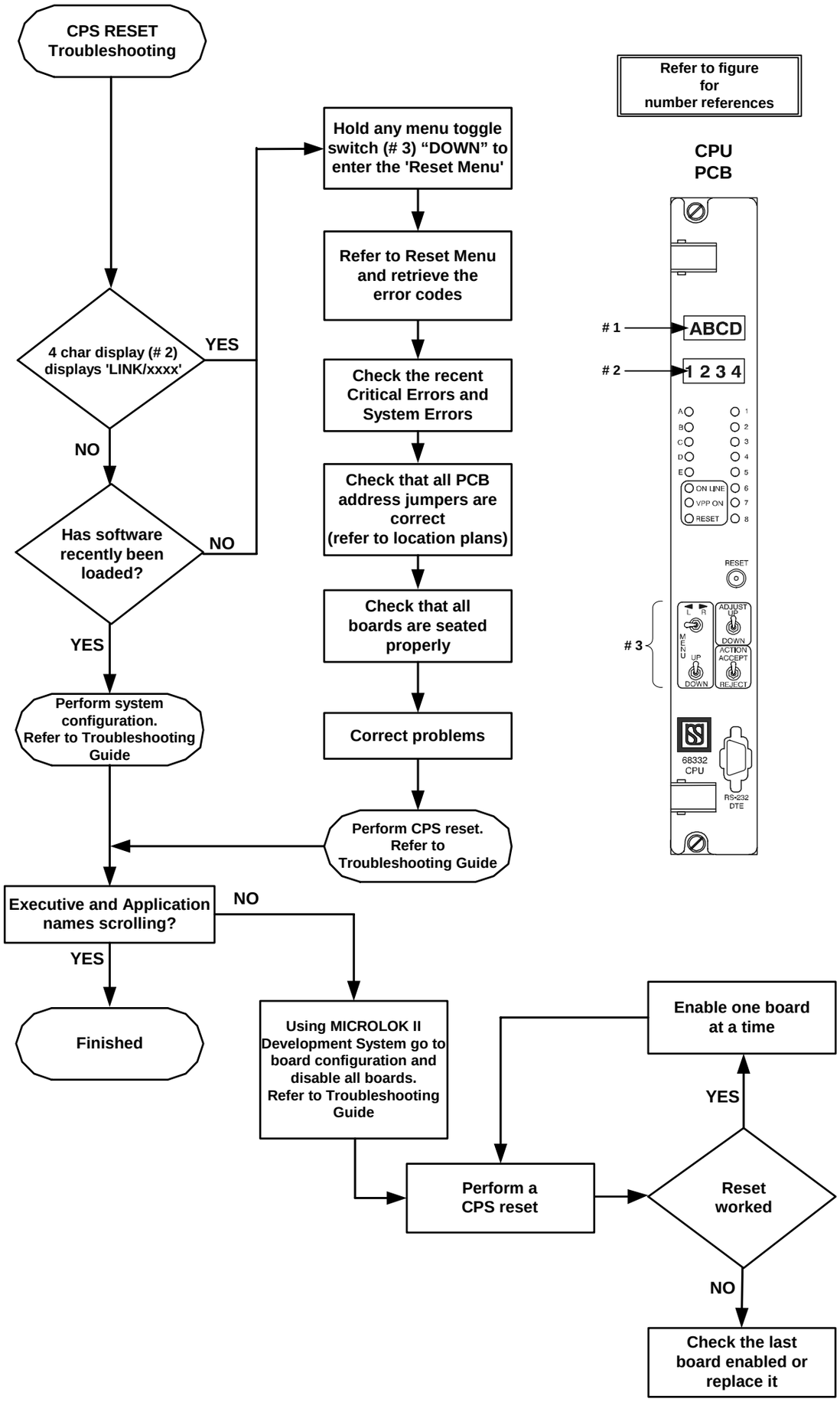

Figure 1-2. CPS Reset Troubleshooting Flowchart

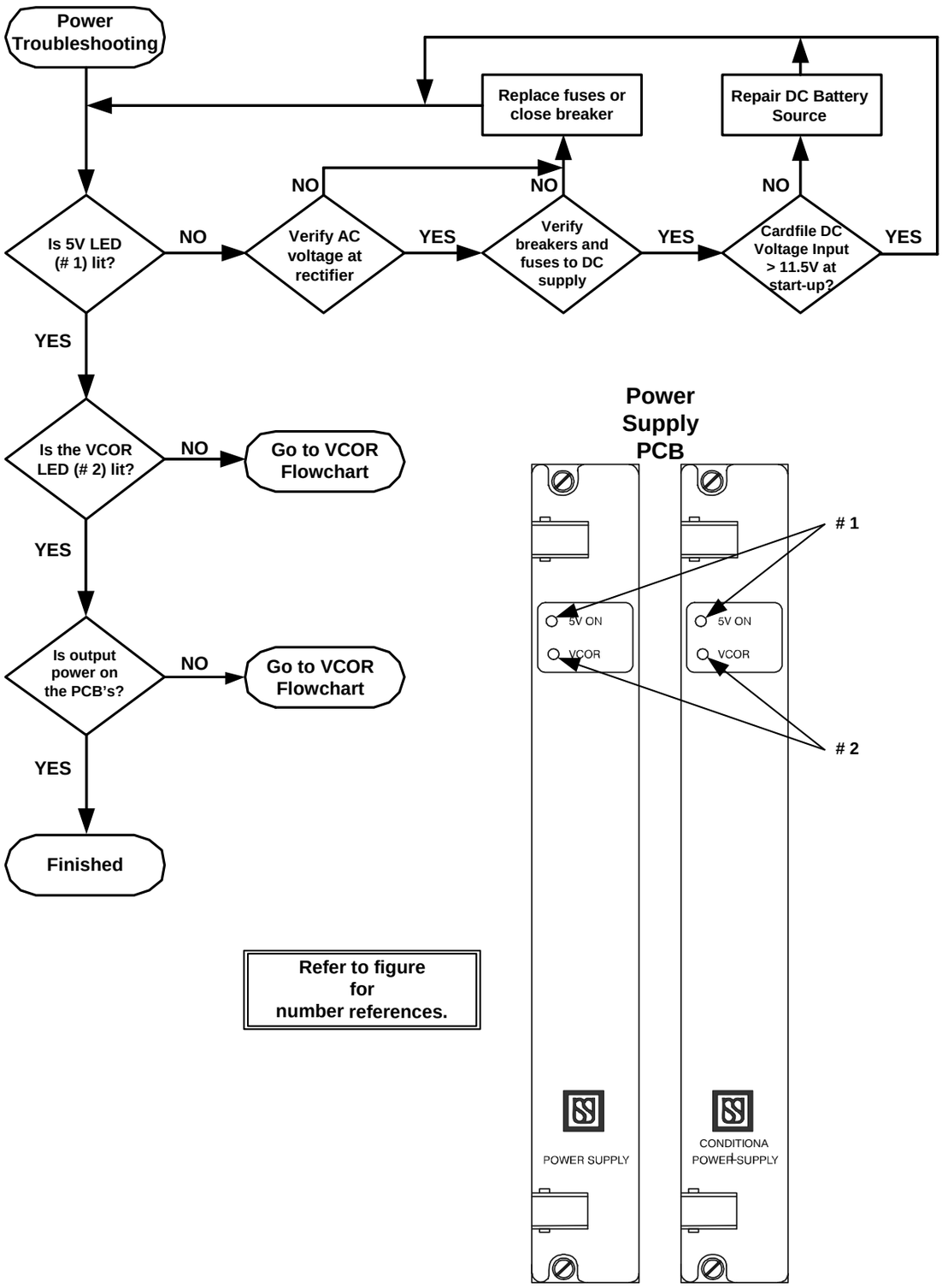

Figure 1-3. System Power Troubleshooting Flowchart

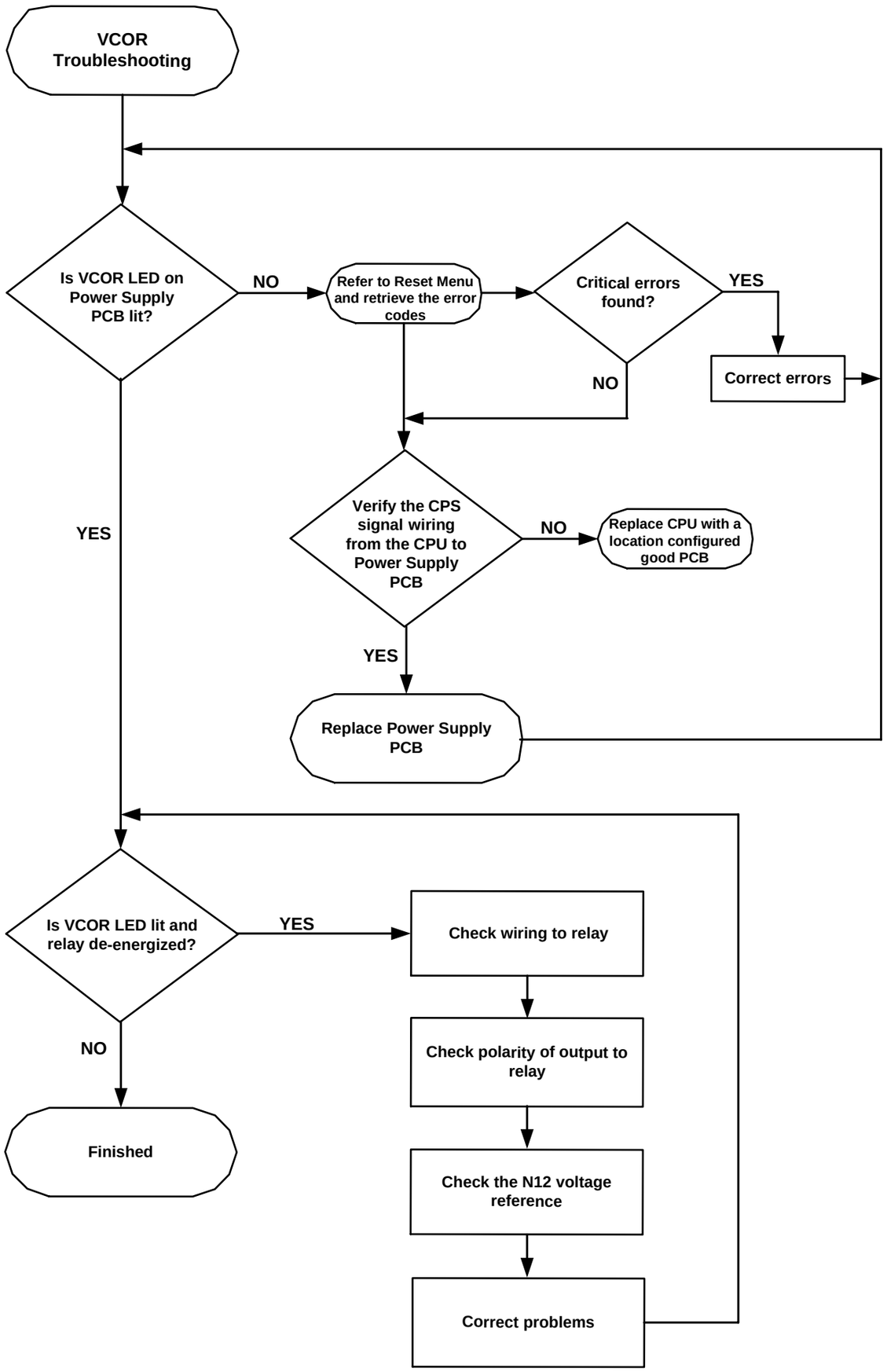

Figure 1-4. VCOR Troubleshooting Flowchart

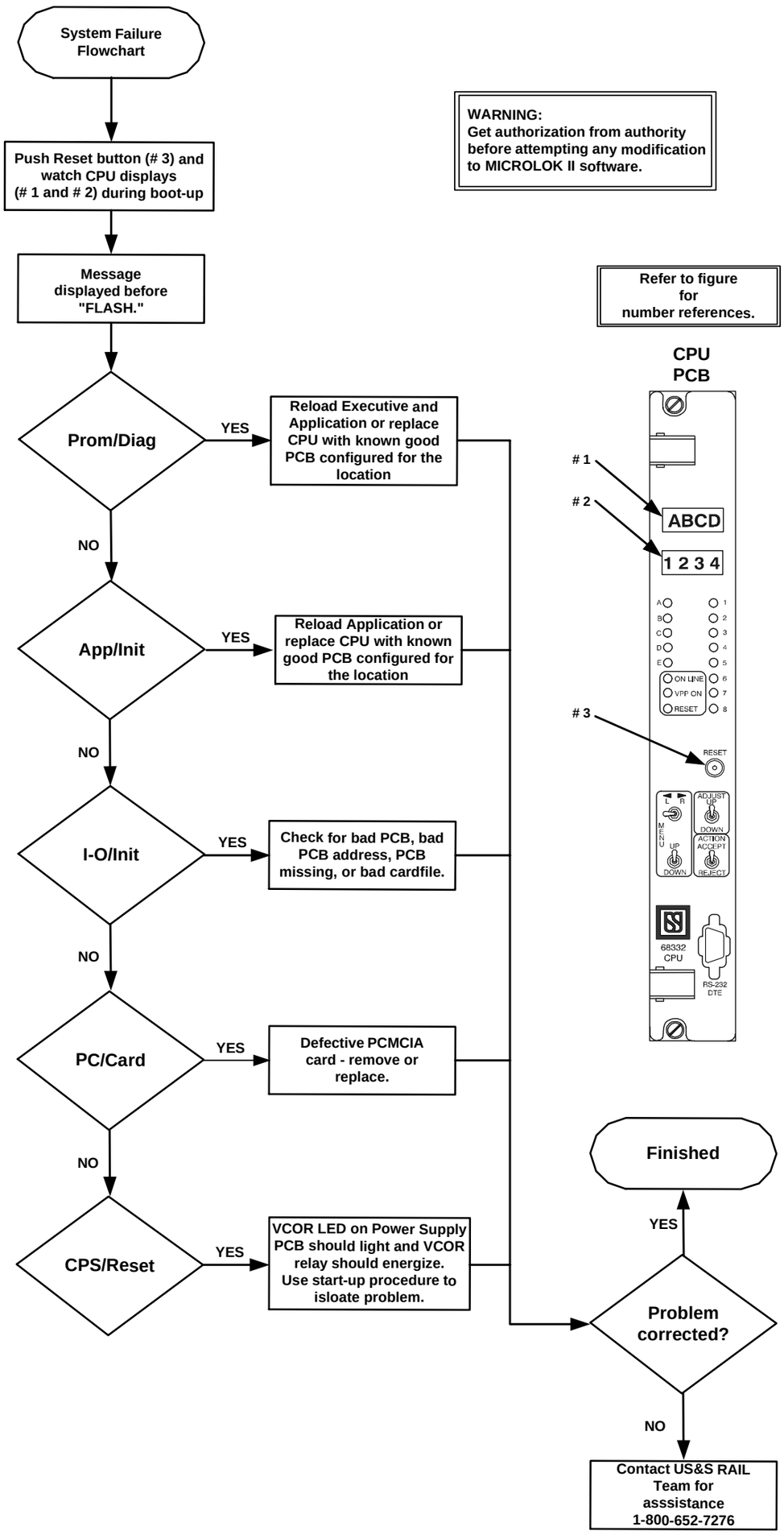

Figure 1-5. MICROLOK II System Failure Indications

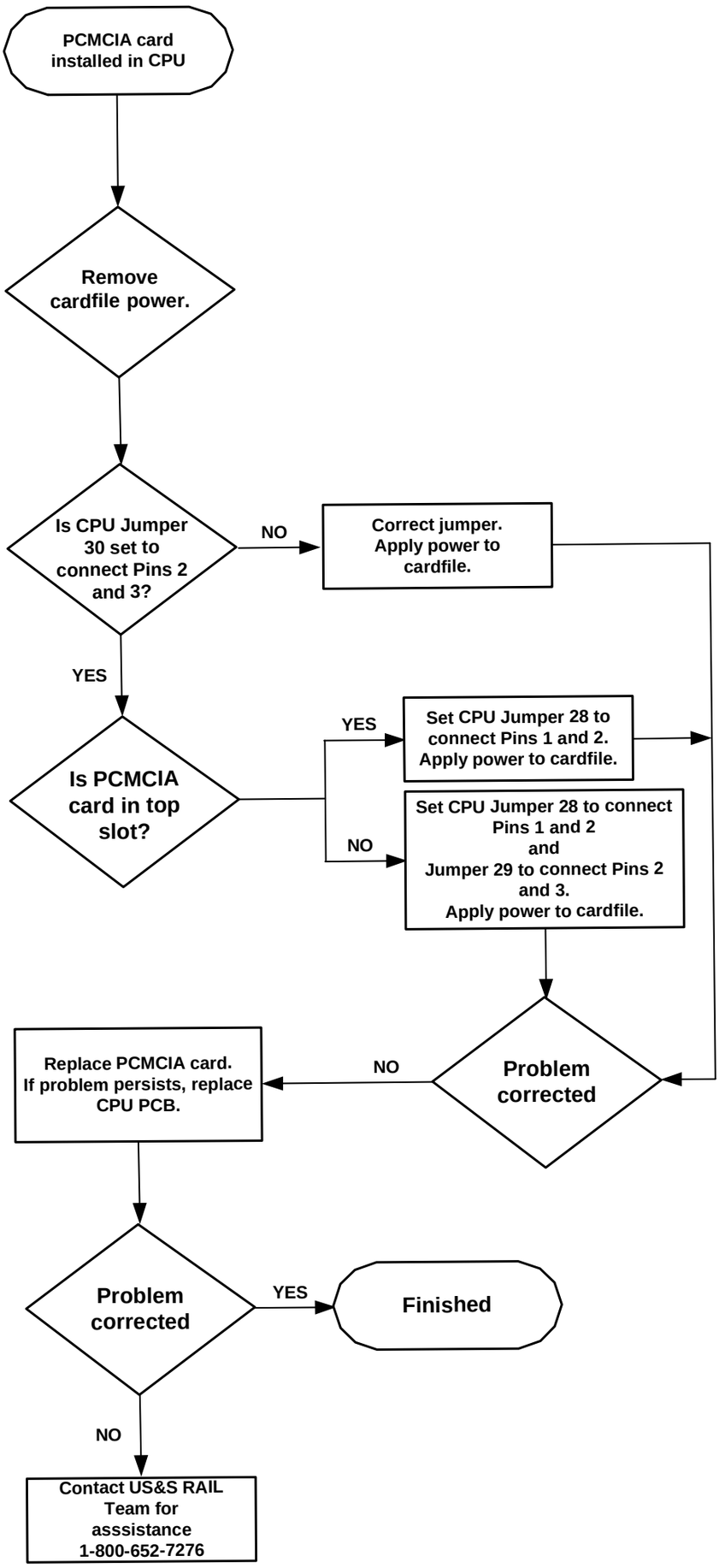

Figure 1-6. PCMCIA Troubleshooting Flowchart

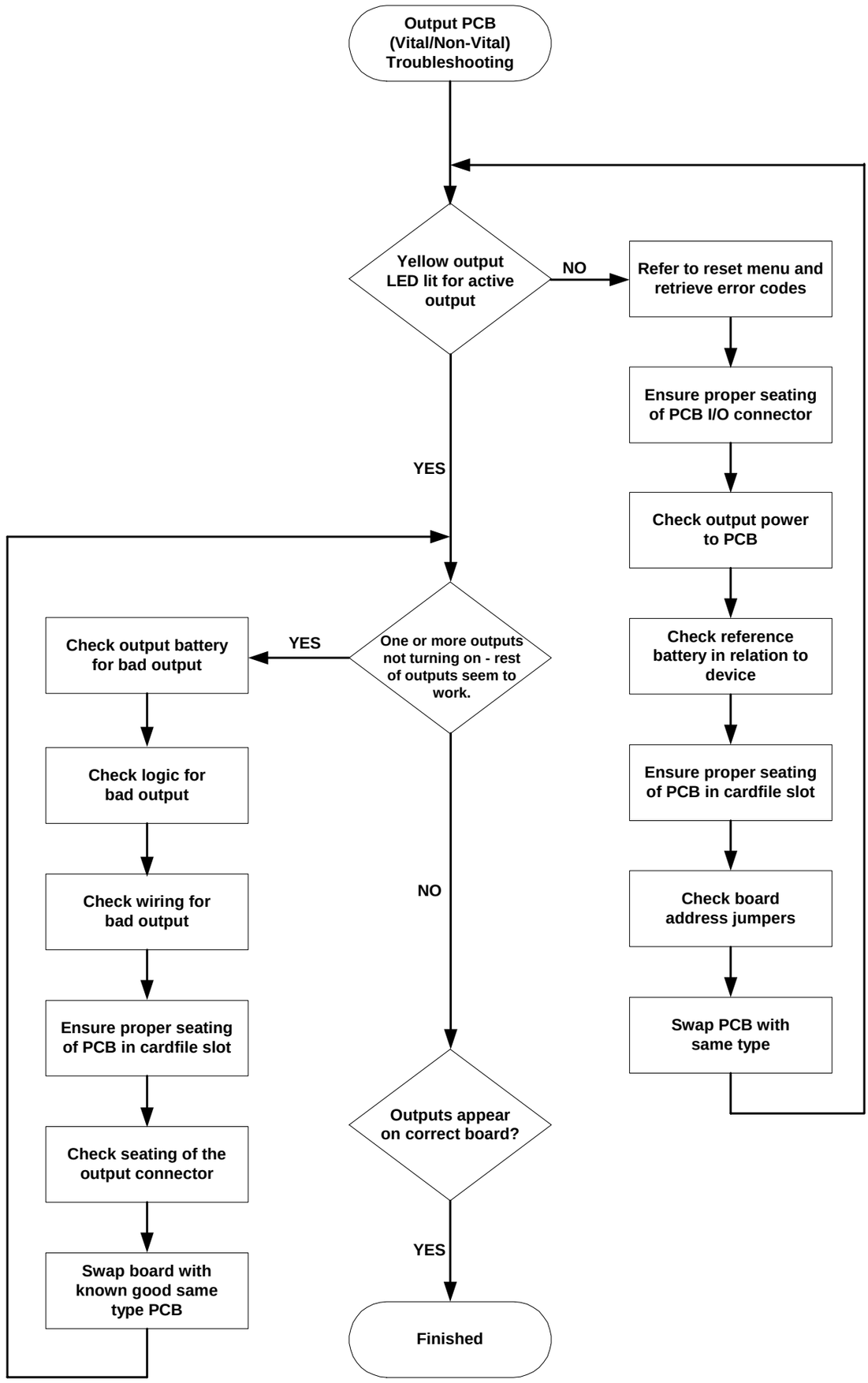

Figure 1-7. Output PCB Troubleshooting Flowchart

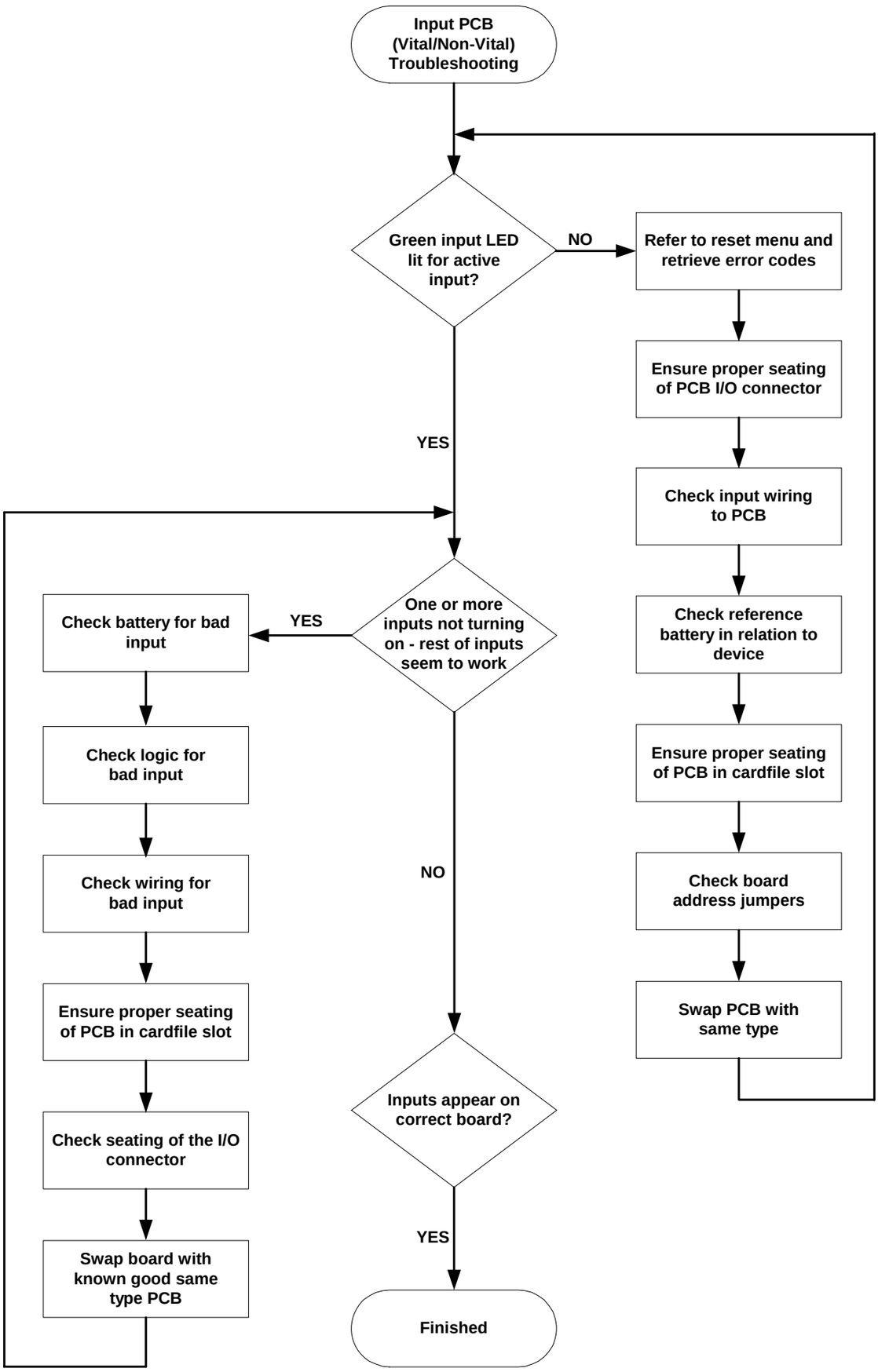

Figure 1-8. Input PCB Troubleshooting Flowchart

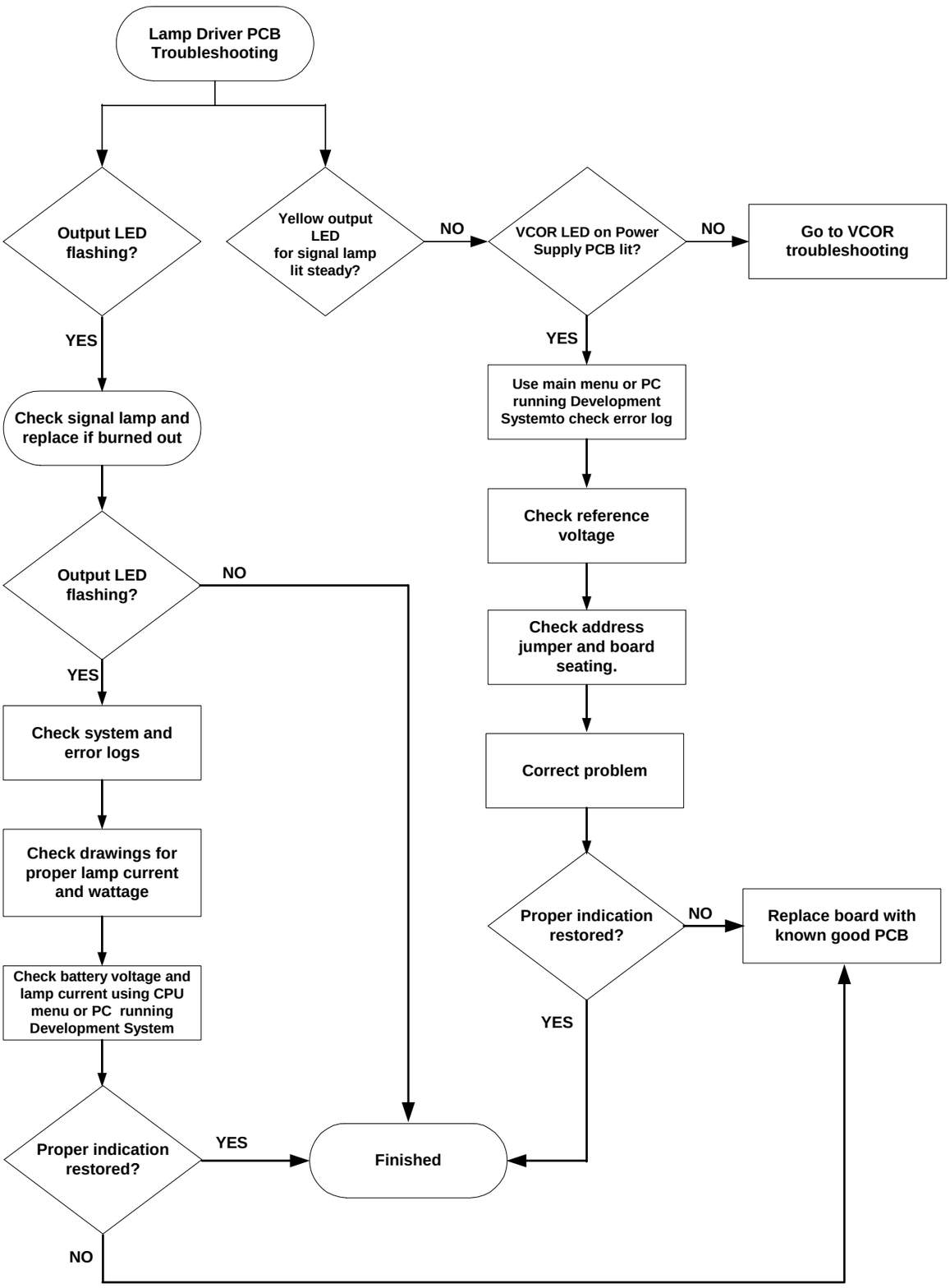

Figure 1-9. Vital Lamp Driver Troubleshooting Flowchart

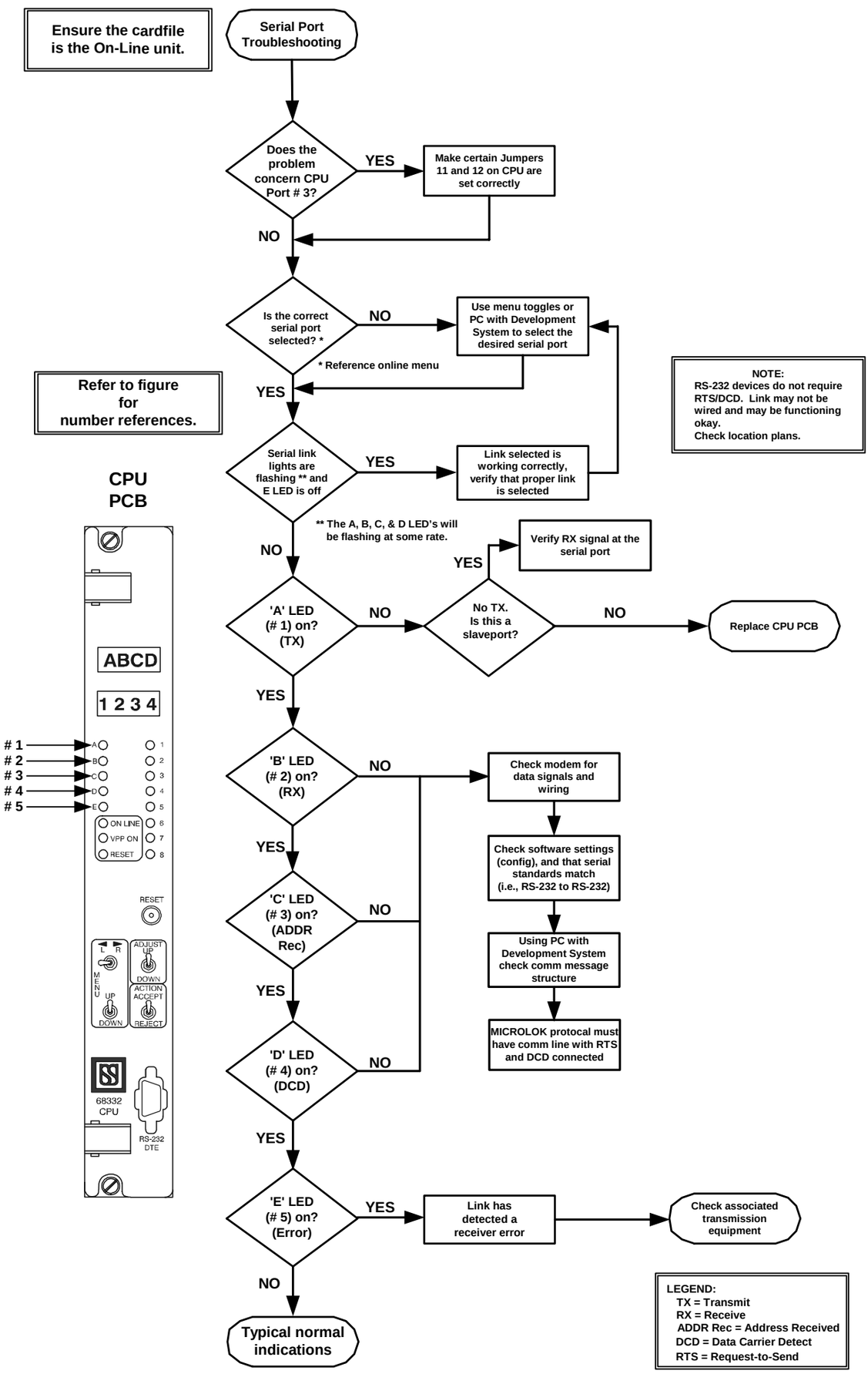

Figure 1-10. Serial Communications Troubleshooting Flowchart

2 MICROLOK II CPU MENUS

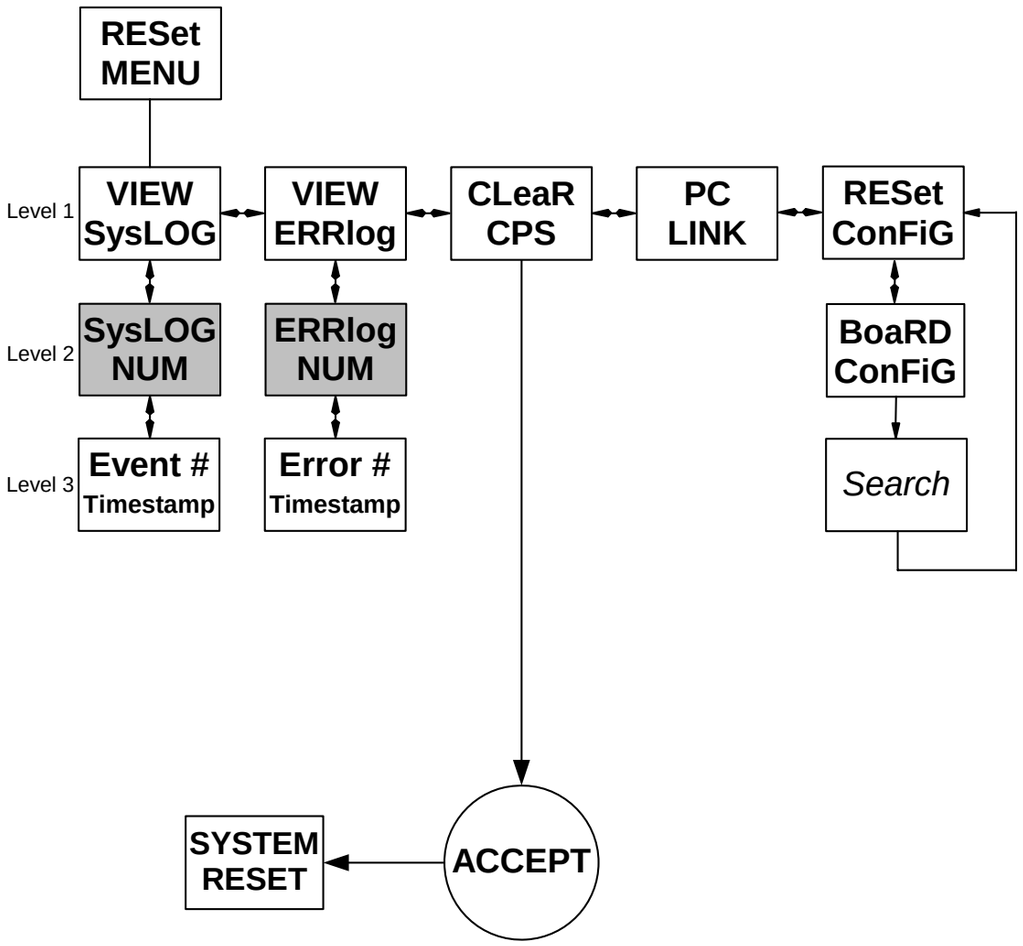

Figure 2-1. CPU Reset Menu – A

(System without Configurable PCBs)

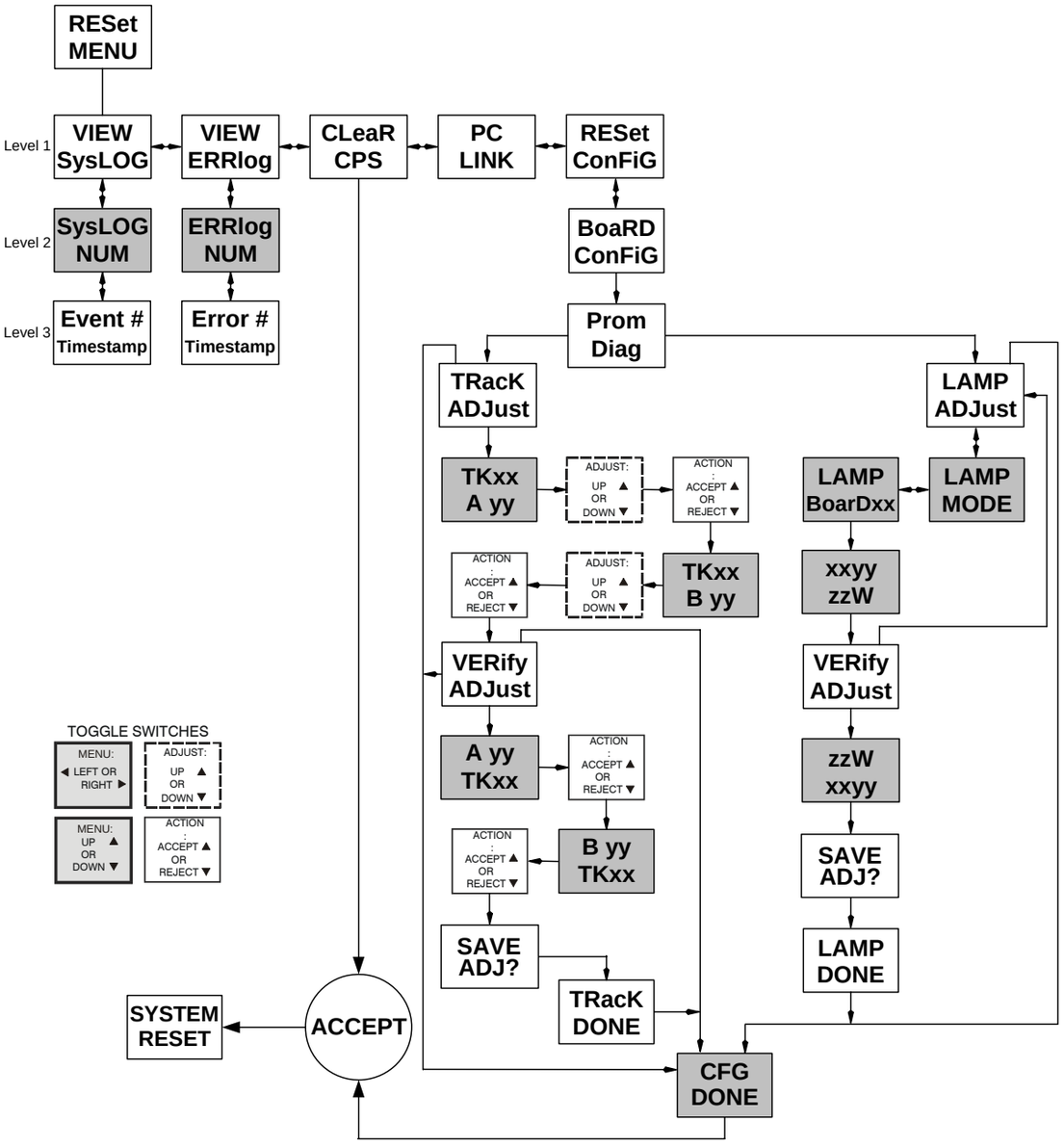

Figure 2-2. CPU Reset Menu – B

(System with Configurable PCBs)

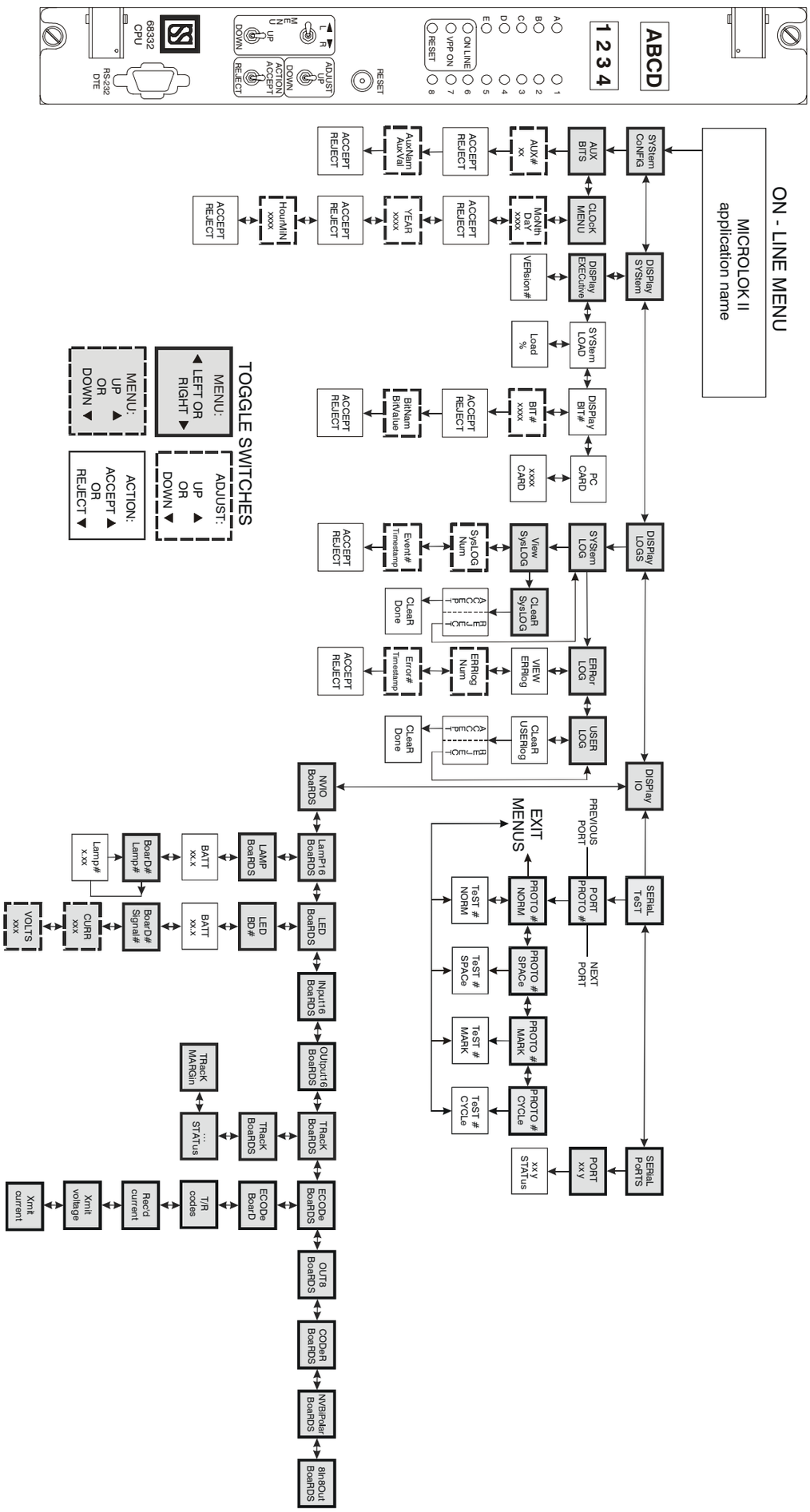

Figure 2-3. CPU Main Menu

3 NOTES

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