
Product Management Procedure



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What is a miniPCB?

A miniPCB is a printed circuit board that contains a layout of an electronic circuit.

A miniPCB has a mechanical design that is consistent with numerous similar miniPCBs.

A miniPCB has an interface connector that is simple and economical.

A miniPCB has educational documentation that is approved by an engineer.

A miniPCB is sold in minimum-order-quantities determined by the PCB panel size.

This document is available for free as a download from the GitHub repository:

<https://github.com/miniPCB>

This document is associated with the miniPCB Channel on YouTube:

<https://www.youtube.com/@minipcb>

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1. PURPOSE

The purpose of this document is to provide a system for managing the life cycle of miniPCBs.

2. SCOPE

The scope of this document is all outputs from the miniPCB™ development procedure.

3. RESPONSIBILITIES

Chief Engineer is responsible for maintaining this procedure.

Engineer developing a miniPCB is responsible for adhering to this procedure.

4. TERMINOLOGY AND ABBREVIATIONS

Terminology and abbreviations used throughout the miniPCB project are consistent with the definitions presented in this section.

Table 1 – Definitions and Abbreviations

TERM	DEFINITION
PCB	Printed Circuit Board, Bare Board
PCBA	Printed Circuit Board Assembly, Bare Board + Parts + Assembly
SMD	Surface mount device
THD	Through hole device

5. PROCEDURE

5.1. LIFE CYCLE

Each miniPCB will be at one of the following phases:

5.1.1. IDEA PHASE

Purpose: Generate ideas for miniPCBs and record those ideas in the Product Catalog.

Activities: Creative thinking and early prototyping.

Conclusion: A kickoff video for a miniPCB development project.

5.1.2. DEVELOPMENT PHASE

Purpose: Develop miniPCBs and publish deliverables to the GitHub repository.

Activities: Design and development work.

Conclusion: A hardware release video for a miniPCB development project.

5.1.3. ACTIVE PHASE

Purpose: Help as many students and teachers as possible.

Activities: Procurement and order fulfillment.

Conclusion: A hardware obsolescence video changing a miniPCB status from Active to Obsolete.

5.1.4. OBSOLETE PHASE

Purpose: Provide a record for past efforts of the miniPCB project.

Activities: Refer customers to replacement products.

6. REFERENCES

miniPCB™ Design Standard

miniPCB™ Product Catalog

ECObase Template

TESTbase Template

7. CHANGE AND LIABILITY NOTICE

This document is subject to change without notice. While effort has been made to ensure the accuracy of the material contained within this document, Nolan Manteufel shall under no circumstances be liable for incidental or consequential damages or related expenses resulting from the use of this document.

8. TRADEMARK NOTICE

miniPCB is a trademark of Nolan Manteufel.

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WORDMARK	FIGUREMARK	FIGUREMARK
miniPCB™		

9. REVISION HISTORY

REV	DESCRIPTION	ECO	DATE
A	Initial Release	1013	15JAN2023
B	Moved sections included in Initial Release to the miniPCB Quality Manual. Added sections Idea, Prototype, Released, and Obsolete phases.	1015	16JAN2023
C	Revised wording throughout.	1026	29OCT2023