PCB DESIGN

Skill Tree: Color in the Boxes

Color in the boxes of anything you've already completed, visualize your skills and identify your skill gaps. Get inspired to try new things and tailor the skill tree to suit your own journey by swapping in your own goals.

(set your own goal)



(set your own goal)

Use a reflow oven to solder a PCB

圕

Contribute to someone else's open source project

(set your own goal)

Use a pick & place machine design with OSHWA OSHW Design a flex

Teach a class on

Design a 3+

PCB Design

layer PCB

Mill a PCB

from a copper sheet

(set your own goal)

Register a

or flex-rigid PCB Design a PCB Use a solderpot

8 Sell a PCB online

Design a PCB with a real time clock

(set your own goal)

F

Design a PCB with a speaker or buzzer

Order an Aluminum PCB

Use a BGA in a PCB

Use gold fingers in a design

4)

Use 0402 size parts on a PCB 8

Design a PCB with **EEPROM**

with a display

Document

your PCB Design

Design a PCB with a non standard shape

Order a PCB in any colour but

Use an Autorouting tool

> Use 0603 size SMD parts on a PCB

in a project 0

Use thermal vias

Design a multilayei

PCB with more than 2

Design a PCB including both SMD and through hole parts

Design an enclosure for a PCB

Green **%**

Chemically etch a PCB yourself

卫 器

Use 0805 size SMD parts on a PCB

Use a hotplate to rework a PCB

Use USB in a PCB design

Use a vacuum pen to assemble

Design a PCB Badge or business card

Design a PCB with an embedded

Assemble something with a QFN

Design with CMOS or TTL Logic with no firmware

a PCB

Debug a project with a logic analyzer

controller

Use an ultrasonic cleaner to clean a **PCB** \$

Assemble

Use a solder paste stencil to assemble lots of PCBs

••••

PCB

Order a PCB

for the first time

Get a PCB assembled by the factory

design with multiple parts

Panelize a

Make a design with RGB LEDs

Design a PCB with

Art on the Silkscreen

layer

something with a QFP

Design an SMD

Calculate trace width for power capacity Se se

Debug a project with an oscilloscope

Repair a broken

유 Learn SMD component codes

Get something wrong and re-order a board

finish on a PCB o a

Use ENIG

Get something wrong and apply a hot fix to the board

Teach a friend how to design a PCB

Design a simple PCB 8

4 Find a footprint

Export Gerber Files

331

* 8

Use SMD tweezers in a project

Desolder / Resolder

Through hole parts on a

PCB

Create your own footprint જિલ્લ

Watch tutorials or read a book on PCB design software from a library ၹၹၯ امصور

Install PCB

design software

file to PCB →+ %

Import Schematic

to clean a PCB

Learn to

read a schematic

Use alcohol

air for soldering SMD

Use hot

May 1 Learn to Solder

Test a PCB with a Multimeter

START HERE Name: .

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1 tile = 1 point

Total Score