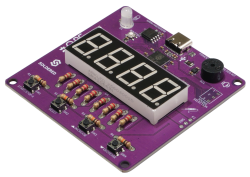
PRODUCT DATASHEET

Pomodoro Timer Solder Kit



333348

Build your own Pomodoro Timer with this solder kit, featuring a programmable timer, RGB LED, and customizable alerts for enhanced productivity.

Full product documentation, files and tutorials: **solde.red/333348**

CORE ATTRIBUTES

SKU **333348**

WEIGHT **29 g**

BARCODE **732388644506**

DESCRIPTION

Unlock your productivity while mastering soldering skills with our **Pomodoro Timer Solder Kit**. Transform the work-rest productivity technique into a desk accessory you built yourself. Some of the popular Pomodoro intervals are 25-minute work with 5-minute rest, or 45-minute work with 15-minute rest. This Level 2 solder kit challenges intermediate makers to assemble a fully programmable timer featuring a four digit 7-segment display, RGB LED, and customizable buzzer alerts. Whether you're a student studying in sessions, a professional managing work blocks, or a maker wanting to enhance your workspace, this kit combines practical productivity tools with hands-on electronics education.

Built around the **RP2040 microcontroller** and programmed in beginner-friendly **MicroPython**, this timer offers complete customization of work and rest periods in 5-minute increments. The WS2812B RGB LED provides instant visual feedback - red for work time, green for rest periods, and yellow warning when transitions approach. Four buttons control select/pause, reset, and time adjustment functions, different melodies you can select via jumpers ensure you'll never miss a session change. The compact 7×7cm PCB design sits perfectly on any desk, requiring only USB-C power to transform your productivity workflow.

This kit perfectly balances practical utility with advanced learning, teaching professionals soldering techniques while creating a useful productivity tool. Complete open-source design includes schematics, code. KiCad files, and 3D-printable enclosure files, enabling unlimited customization and learning opportunities. Easily re-program this kit in MicroPython yourself! The comprehensive documentation guides you through each assembly step while explaining the electronics principles behind this timer system.

TECHNICAL DETAILS

- **RP2040 Processor:** Dual-core ARM Cortex-M0+ at 133MHz with 264KB SRAM fully re-programmable via USB-C.
- A detailed step-by-step guide with assembly instructions is available

- **MicroPython Programmable:** Easily customize code and re-program using MicroPython.
- **4-Digit 7-Segment Display:** Provides clear, bright time visualization for easy readability.
- **Classic Pomodoro Cycle:** 25-minute work cycle and 5 minute rest by default
- **Intuitive Button Controls:** Simple start, pause, reset, and time adjustment functions with tactile switches.
- **RGB Status LED:** WS2812B LED offers instant visual feedback on timer status (work, rest, config or incoming state change).
- **Selectable Audio Alerts:** Onboard buzzer with 4 jumper-selectable melodies to signal session changes.
- Write and add your own buzzer melodies in MicroPython!
- **USB-C Connectivity:** Modern and convenient power and prog<ramming connection via a single USB-C cable.
- **Intermediate Soldering Kit:** A Level 2 kit that challenges makers with through-hole components for skill advancement.
- **Fully Open Source:** All design files, including schematics, KiCad layouts, and 3D-printable case models, are available for modification.
- **Compact Desk Footprint:** The 7×7cm PCB is designed to fit perfectly on any desk or workspace.
- **Customizable Enclosure:** Includes 3D-printable enclosure files for creating a personalized and protective case.

SPECIFICATIONS

IS SOLDER KIT	True

LINKS

Full Documentation	https://docs.soldered.com/pomodoro-timer-solder-kit/overview/
Assembly Guide	https://docs.soldered.com/pomodoro-solder-kit/assembly-guide/
Pinout	https://cms.soldered.com/products/333348/media/333348_pinout-png_fc484d.svg

GALLERY

