

DevTerm

Assembly Guidelines



Open-source

Open-source
hardware

Open-design



Highly Hackable

Easy assembly
design

clockworkpi.com



help@clockworkpi.com



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DevTerm Important Reminders

En De Cn Jp

Warning

- Suffocation risk! The product contains small parts.
- Please keep the electronic parts and components away from static electricity, humidity, strong magnetic fields, and avoid outdoor environments to prevent damage.
- Please observe local laws and regulations for the use of Wi-Fi and radio.

Assembly Precautions

- Attention! The product is not a toy, and is unsuitable for users under the age of 11.
- Attention! Users aged between 11 and 16 may only assemble the product with adult supervision.
- Attention! Please read the user guide and follow the steps specified to assemble the product.

Use Of Tools And Precautions

- Modeling scissors or scissors of the right size are essential tools for assembly.
- Take measures to protect yourself from "splashing" to ensure safety while cutting.

- Cut the plastic as smoothly as possible to prevent the risk of skin cuts from sharp edges.
- The assembly does not require professional skills nor tools (glue and soldering iron).
- Previous experience with assembling models may help you put the product together quickly.

Precautions For Use

- DevTerm can only be used or stored indoors at a temperature of 0-35 degrees Celsius.
- Do not use DevTerm's USB port to charge other electronic devices such as smartphones.
- The thermal printer produces a lot of heat while working. Do not touch the printing module to avoid scalding.
- Please ensure a Micro SD card with the correct operating system has been inserted into DevTerm before booting.
- Please use a high-quality phone charger (5V 2A) and USB-C cable to power and charge the product.

Use Of 18650 Rechargeable Li-ion Battery

- Attention! Rechargeable li-ion batteries are NOT included in the package.
You need to buy two 18650 batteries by yourself.
- Please buy 18650 batteries that are certified in accordance to local laws and regulations.
- In the DevTerm battery container, "+" marks the positive electrode, and "-" the negative electrode. Please make sure that the 18650 batteries are inserted in the appropriate directions.

Get Support

If you encounter any problem related to the product and its assembly and use, please visit <https://forum.clockworkpi.com> or send an email to help@clockworkpi.com with a detailed description of your problem or request. We will offer you technical support in a timely manner.

Join The Clockwork Online Community

To discuss and share with DevTerm players and developers, you can visit <https://forum.clockworkpi.com>. A community of innovative players from across the world and the Clockwork team are waiting for you!

- Clockwork Tech LLC reserves the legal right to interpret these "important reminders".
- The Company cannot be held responsible for any component damage, property loss or personal injury caused by the use of non-compliant batteries, improper use of batteries, and incorrect charging methods.

Warnung

- Erstickungsgefahr! Das Produkt enthält winzige Teile.
- Bitte halten Sie elektronische Bauteile von statischer Elektrizität, feuchter Umgebung, starken Magnetfeldern, Außenbereichen usw. fern, um Schäden zu vermeiden.
- Bitte befolgen Sie die örtlichen Gesetze für die Genehmigung von Funknutzungen wie Wi-Fi.

Montagehinweise

- Achtung! Dieses Produkt ist kein Spielzeug und nicht für Benutzer unter 11 Jahren geeignet.
- Achtung! Benutzer im Alter von 11–16 Jahren sollten unter Aufsicht von Erwachsenen montieren.
- Achtung! Bitte lesen Sie die Gebrauchsanleitung und befolgen Sie bei der Montage unbedingt die in der Anleitung angegebenen Schritte.

Verwendung von Montagewerkzeugen und Vorsichtsmaßnahmen

- Für die Montage wird eine Modellbauschere oder eine Schere in der passenden Größe benötigt.
- Bitte schützen Sie sich vor herumfliegenden Splittern, um einen sicheren Schneideprozesses zu gewährleisten.

- Bitte glätten Sie die Schnittkanten an Kunststoffteilen, damit keine scharfen Grate zurückbleiben, die eine Schnittgefahr darstellen.
- Für den Montageprozess sind keine besonderen Fachkenntnisse oder Spezialwerkzeuge, kein Klebstoff und kein Lötkolben erforderlich.
- Erfahrung im Zusammenbau von Modellen kann Ihnen helfen, den Montageprozess schneller abzuschließen.

Verwendungshinweise

- Verwenden oder lagern Sie DevTerm in Innenräumen bei 0–35 Grad Celsius.
- Verwenden Sie den USB-Anschluss des DevTerm nicht zum Laden anderer elektronischer Geräte, wie z. B. eines Mobiltelefons.
- Thermodrucker erzeugen während des Betriebs hohe Temperaturen. Bitte berühren Sie das Druckmodul nicht, wenn der Drucker in Betrieb ist, um Verbrennungen zu vermeiden.
- Vergewissern Sie sich vor dem Einschalten, dass die Micro-SD-Karte mit dem richtigen Betriebssystem in das DevTerm eingelegt ist.
- Bitte verwenden Sie ein hochwertiges Mobiltelefon-Ladegerät (5V 2A) und ein USB-C-Kabel für die Stromversorgung und den Ladebetrieb.

Verwendungshinweise zu aufladbaren 18650 Lithium-Ionen-Akkus

- Achtung! Das DevTerm-Paket "enthält keine aufladbaren Lithium-Ionen-Akkus des Formats 18650", Sie müssen selbst zwei 18650 Akkus kaufen.
- Bitte kaufen Sie Akkus, die nach den örtlichen Vorschriften zertifiziert und geprüft sind und den Spezifikationen der Bauform 18650 entsprechen.
- In der DevTerm-Akkuhalterung steht die Markierung "+" für Pluspol und "-" für Minuspol. Die 18650 Akkus müssen in der angezeigten Richtung eingelegt und eingerastet werden.

Technischer Support

Wenn Sie Probleme mit dem Produkt, der Montage oder der Verwendung haben, können Sie sich an <https://forum.clockworkpi.com> wenden oder an help@clockworkpi.com schreiben. Beschreiben Sie Ihr Problem oder Ihren Bedarf und wir werden Ihnen umgehend Unterstützung bieten.

Treten Sie der Clockwork-Online-Community bei

Alle Themen, die Sie mit DevTerm-Spielern und -Entwicklern besprechen oder teilen möchten, können Sie gerne auf <https://forum.clockworkpi.com> diskutieren, wo innovative Spieler und Clockwork-Teams aus der ganzen Welt gespannt sind, von Ihnen zu hören!

- Clockwork Tech LLC behält sich das Recht vor, diese wichtigen Hinweise im Rahmen der gesetzlichen Möglichkeiten auszulegen.
- Wir haften nicht für Schäden an Geräten oder Personen, die durch die Verwendung nicht konformer Akkus, unsachgemäßen Gebrauch von Akkus oder durch die Verwendung falscher Lademethoden entstehen.

警告

- 窒息危险！产品内含细小零件。
- 请将电子元器件远离静电、潮湿环境、强磁场、室外等区域，以免造成损坏。
- WI-FI等无线电使用许可请遵循当地法律。

组装前提示

- 注意！本产品不是玩具，不适合11岁以下用户使用。
- 注意！11-16岁用户请在成人监护下进行组装。
- 注意！请阅读说明书，请务必按照说明书提示的步骤进行组装。

组装工具的使用及注意事项

- 模型剪或尺寸适合的剪刀是必要使用的组装工具。
- 请采取飞溅防护以确保剪切过程的安全。
- 请尽可能将塑料切口处清理平滑，避免留下尖锐形状造成割伤风险。
- 组装过程无需具备特别的专业技巧或专业工具，无需使用胶水和烙铁。
- 拼装模型的经验可以帮助您更快完成组装过程。

使用注意事项

- 请在 0-35 摄氏度的室内环境中使用或者存放 DevTerm。
- 请勿使用 DevTerm 的 USB 端口给其他电子设备充电，例如给手机进行充电。
- 热敏打印机在工作时会产生高温，打印机工作时请勿触摸打印模块，避免烫伤。
- 在开机前请确保 DevTerm 已插入装载有正确的操作系统的 Micro SD 卡。
- 请使用高质量的手机充电器（5V 2A）及 USB-C 线缆进行供电和充电操作。

有关18650充电锂电池的使用提示

- 注意！DevTerm包装中“不含有任何充电锂电池”，您需要自行采购两节18650型电池。
- 请选择经过当地法规认证的，合格的，符合18650型号规格的电池。
- DevTerm 电池盒中的标记“+”代表正极；“-”代表负极，标记必须与18650 电池上的标记方向一致并安装稳妥。

获得支持

- 如果您遇到任何产品、组装、使用上的问题，您可以前往 <https://forum.clockworkpi.com> 或致信 help@clockworkpi.com 描述您遇到的问题或需求，我们将及时为您提供支持。

加入 clockwork 在线社区

- 任何想与 DevTerm 玩家及开发者讨论或分享的话题，欢迎前往 <https://forum.clockworkpi.com>，来自世界各地的具有创新精神的玩家和 clockwork 团队，热忱期待您的加入！

- Clockwork Tech LLC 针对此重要提示保留在合法范围内的解释权。
- 因使用非合规电池或不当使用电池，以及使用错误的充电方式而造成的器件损坏或人身财产伤害，本公司恕不承担赔偿责任。

DevTermに関する重要な注意事項

警告

- 窒息の危険があります!本製品には小さな部品が含まれています。
- 本製品は、静電気がある場所、湿気の多い場所、磁場の強い場所の付近や、屋外等には置かないでください。本製品の動作不良や故障につながるおそれがあります。
- Wi-Fiなどの無線通信の使用許可是、お住まいの地域の法律に従ってください。

組み立て前の注意事項

- 注意!本製品はおもちゃではありません。11歳未満のお子さまは使用しないでください。
- 注意!11~16歳のお子さまは、保護者の監視のもとで組み立ててください。
- 注意!この説明書をよくお読みの上、ここに書かれた手順で組み立ててください。

組み立てに使用する道具と注意事項

- 組み立てには、必ずクラフトニッパーまたはサイズの合ったハサミを使用します。
- 飛び散った破片などでケガをしないように、適切な保護を行ってください。
- プラスチックの切り口はできるだけ平らに処理してください。尖ったままでは、ケガをするおそれがあります。
- 組み立てに特別な専門的技術や専門道具は必要ありません。接着剤やはんだごては不要です。
- 模型を組み立てた経験があると、組み立てが早く終わる可能性があります。

使用に関する注意事項

- DevTermの使用または保管は、気温0~35°Cの室内で行ってください。
- DevTermのUSBポートは、スマートフォンなどの他の電子機器の充電に使用しないでください。
- 感熱式プリンターは作動時に高温になる場合があります。プリンターが作動している間は、プリンターモジュールに触らないでください。やけどするおそれがあります。

- 起動する前に、適切なOSを搭載したMicro SDカードがDevTermに挿入されていることを確認してください。
- 高品質のスマートフォン充電器(5V 2A)とUSB-Cケーブルを使用して、給電・充電を行ってください。

18650リチウムイオン充電池に関する注意事項

- 注意!DevTermに「リチウムイオン充電池は含まれていません」。18650型のリチウムイオン充電池2本はご自身でご用意ください。
- 現地法規の認証を受けた合格製品で、18650型規格に適合した電池を購入してください。
- DevTermのバッテリーケースにある「+」は正極、「-」は負極を表しています。この向きと18650型電池の向きを合わせて、しっかりとはめてください。

お問い合わせ先

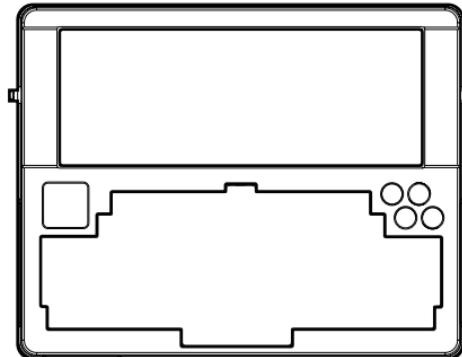
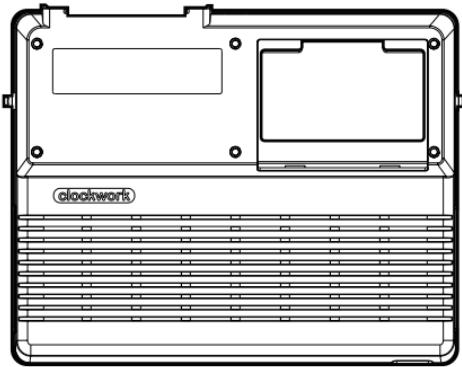
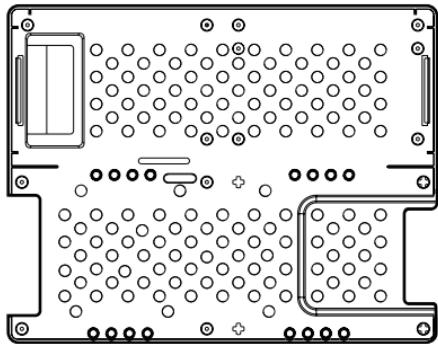
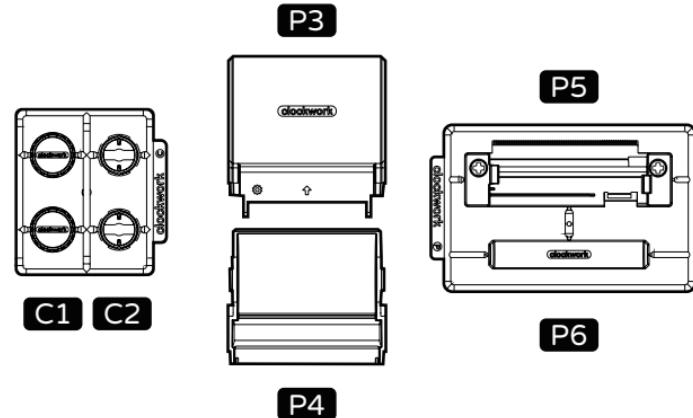
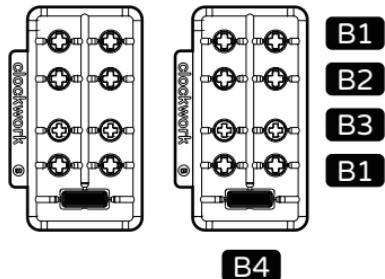
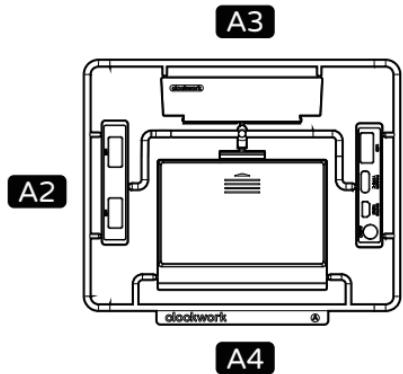
- 製品、組み立て、使用に関する問題がありましたら、<https://forum.clockworkpi.com>にアクセスいただくか、help@clockworkpi.comにメールにてお問い合わせください。迅速に対応させていただきます。

Clockworkオンラインコミュニティ

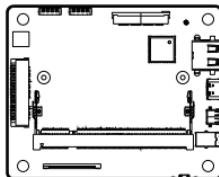
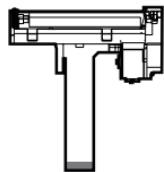
- DevTermのユーザーや開発者とのコミュニケーションを希望される方は、ぜひ<https://forum.clockworkpi.com>にアクセスしてください。世界中のイノベーションマインドを持ったプレイヤーやClockworkチームが、あなたの参加を心からお待ちしております。

- Clockwork Tech LLCは、この重要な注意事項について合法的範囲の解釈権を留保します。
- 不適切な電池の使用、電池の不適切な取り扱い、または誤った充電方法により、器物損害または人身障害、財産損害を起こした場合、当社は賠償責任を負いかねます。

PARTS LIST



P2

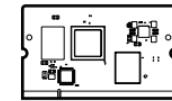


P1

M1

M1A

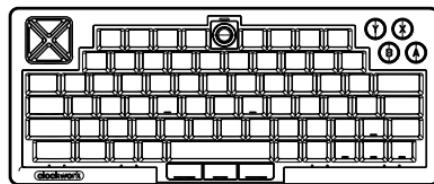
M1B



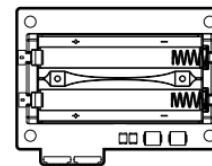
M2

M2C

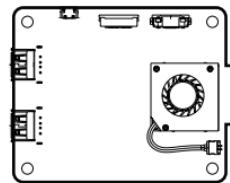
CORE



M3



M4



M5



M5S

MicroSD

A. Mount the Screen

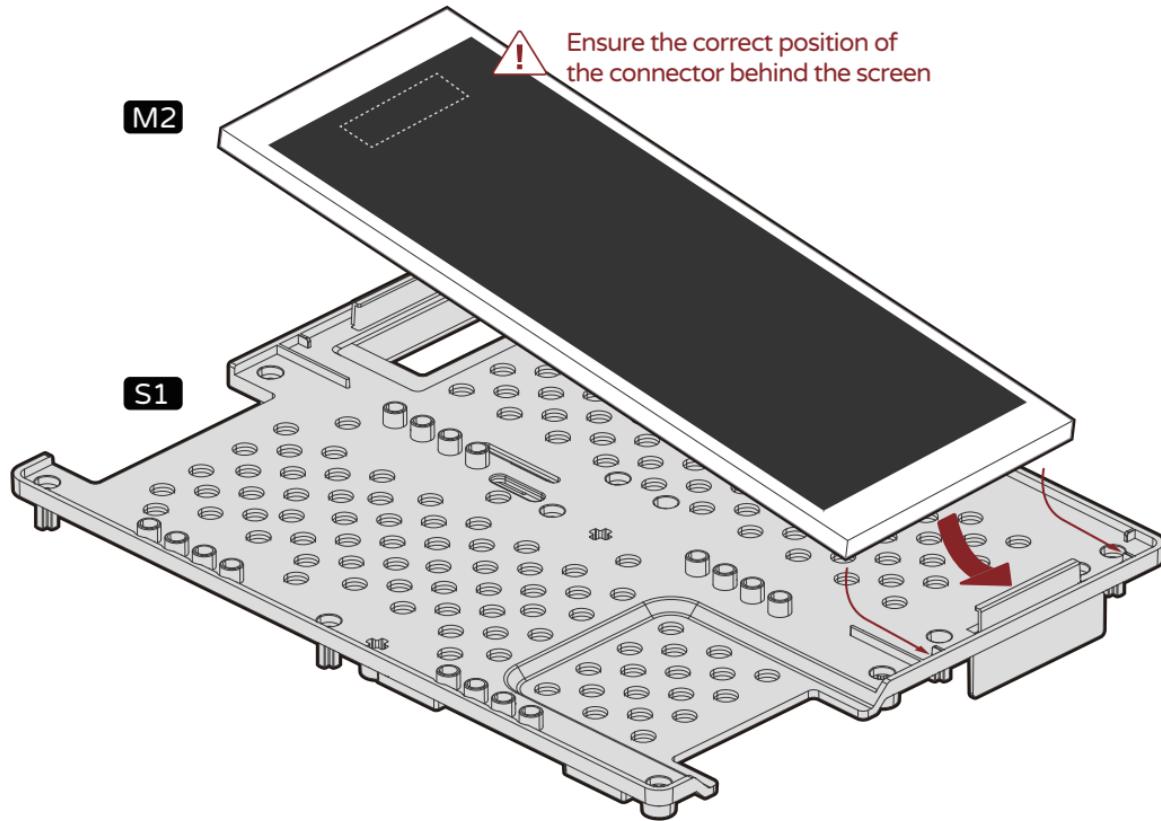
This ultrawide 6.8-inch IPS screen with a full viewing angle has been carefully selected for you. Its aspect ratio has reached an astonishing 16:6 (a typical retro-style proportion). The resolution is 1280x480, which is precisely equal to dual VGA. We hope this screen can bring you a vintage-feeling, focused, and immersive experience.

Parts List: **S1** **M2**

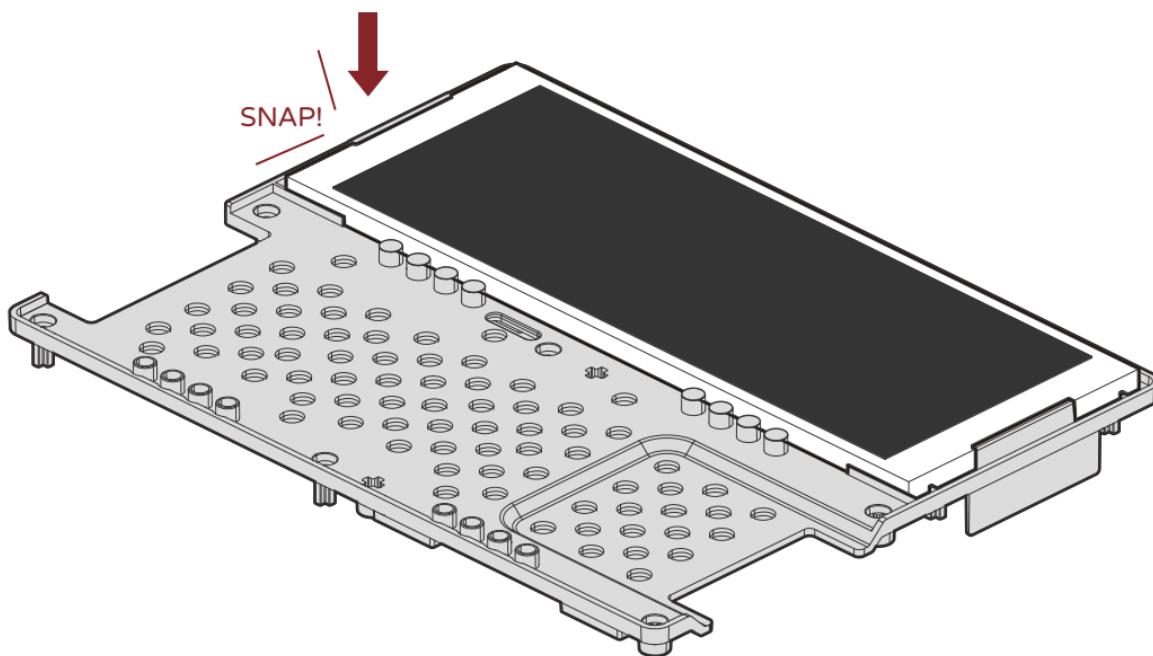
WARNING

- FRAGILE! Handle Carefully.

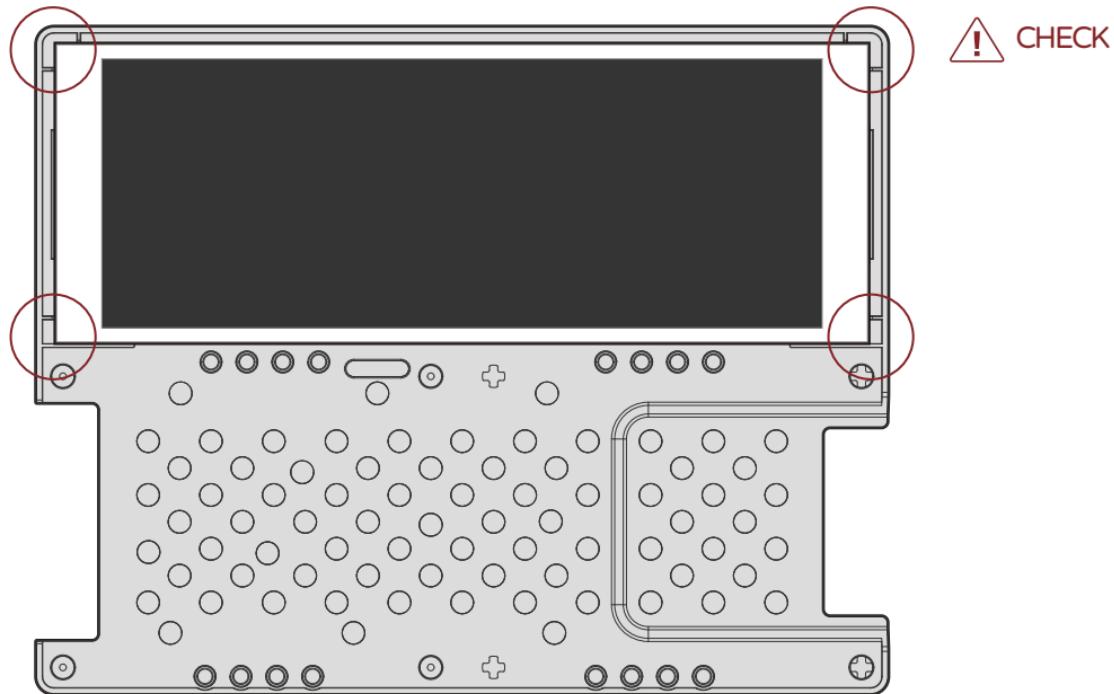
A1

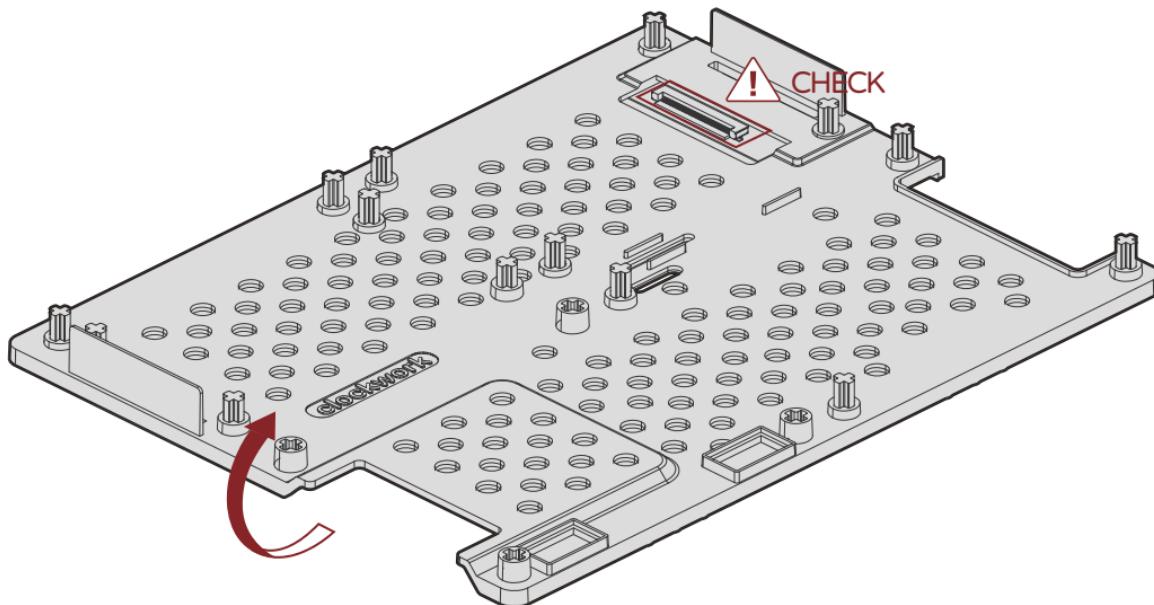


A2



A3





B. Mount the Mainboard

ClockworkPi v3.14 integrates up to 12 interfaces in the ultra-small size of 95x77mm, ensuring sufficient connectivity for your work and entertainment. Following an easy-to-upgrade modular design of CPU and memory, it allows you to freely choose a suitable "Core" for various application scenarios.

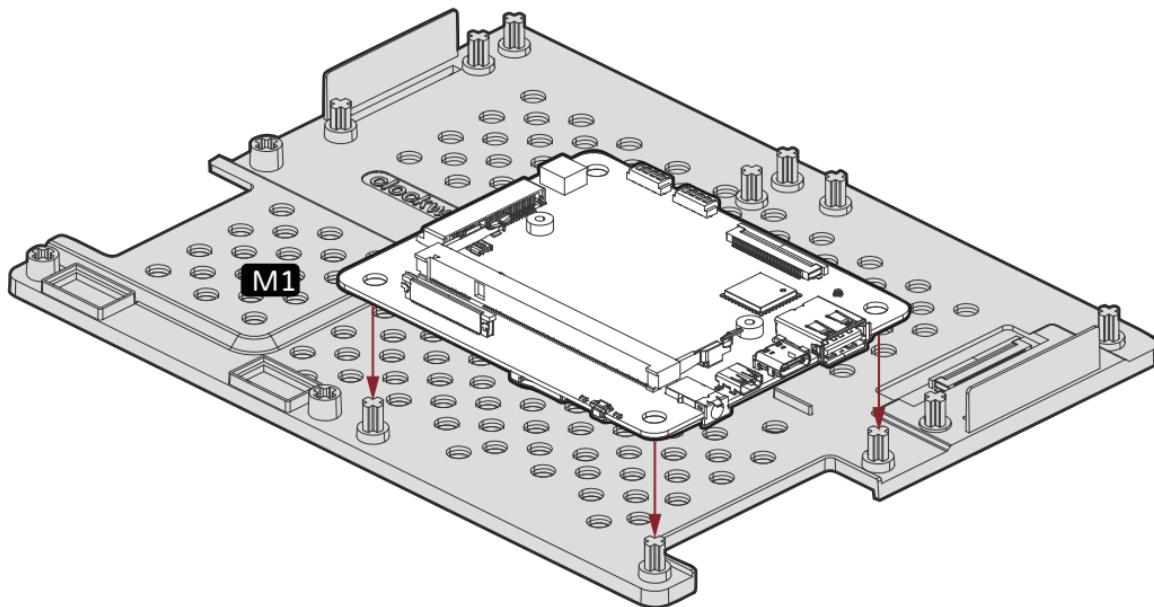
ClockworkPi v3.14 is compatible with the Raspberry Pi CM3 series, which means that your work on the Raspberry Pi can be "teleported" to a portable terminal in seconds.

Parts List: **M1** **B2** X4

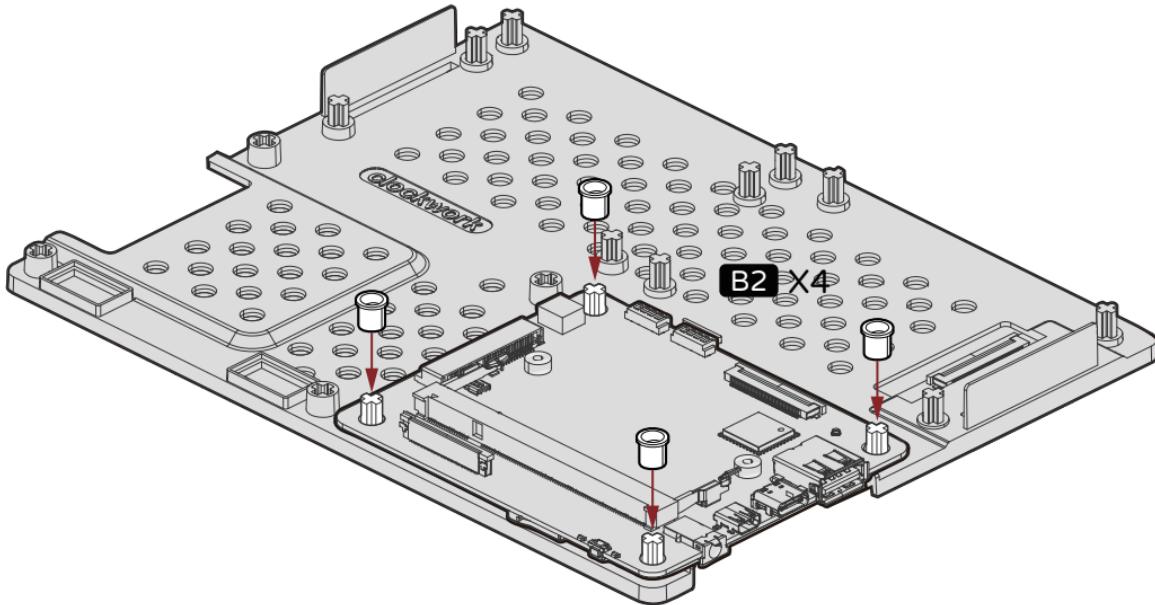
WARNING

- Electrostatic-sensitive device!

B1



B2



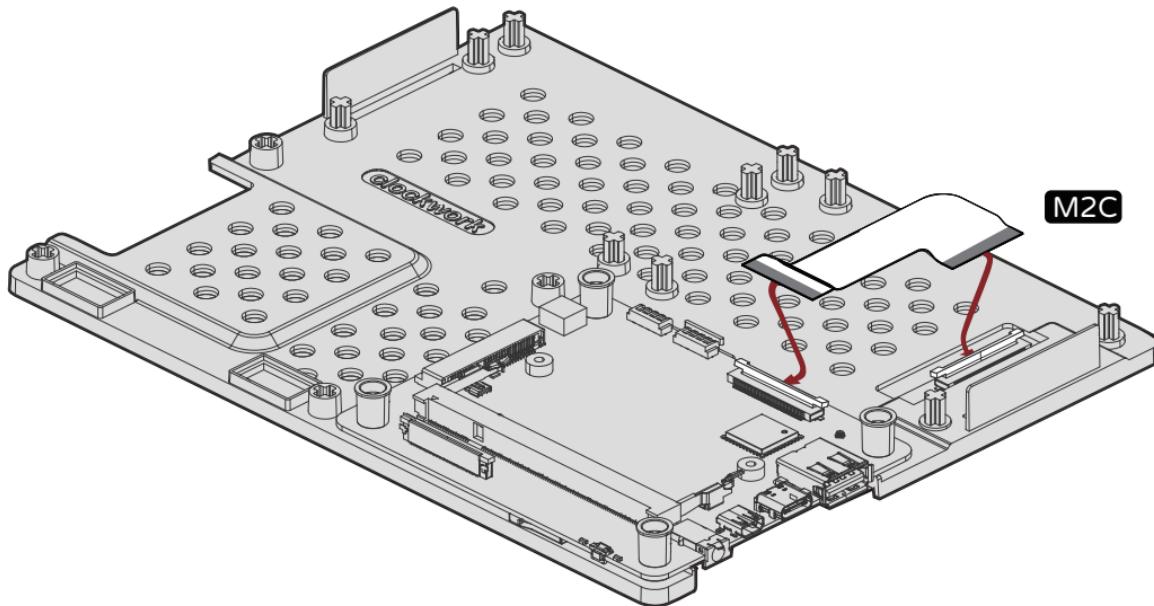
C. Connect the Screen & the Mainboard

Parts List: [M2C](#)

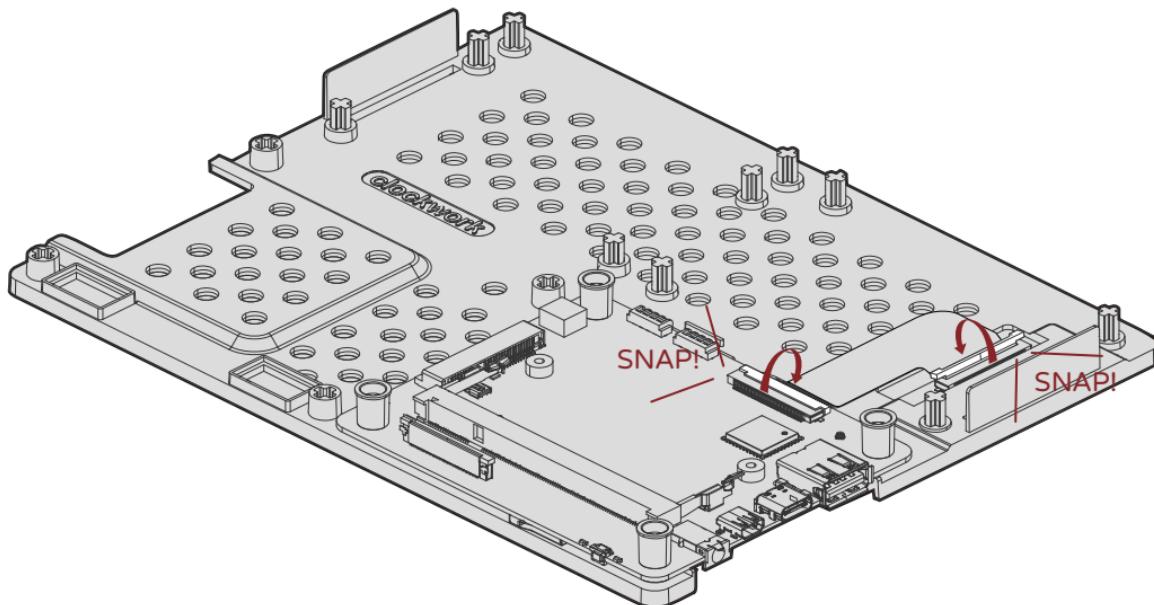
WARNING

- FRAGILE! Handle Carefully.

C1



C2



D. Mount the Core

The Core has a variety of models, please refer to <https://clockworkpi.com/devterm> for details.

Parts List: **CORE** **M1B** X2

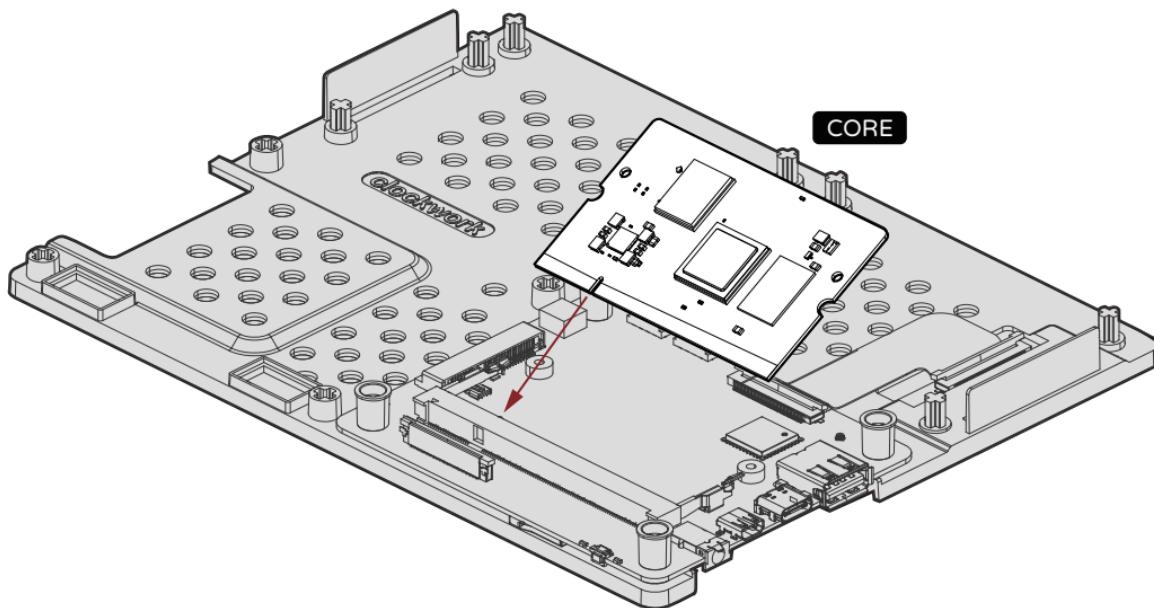
WARNING

- Electrostatic-sensitive Device.
- FRAGILE! Handle Carefully.

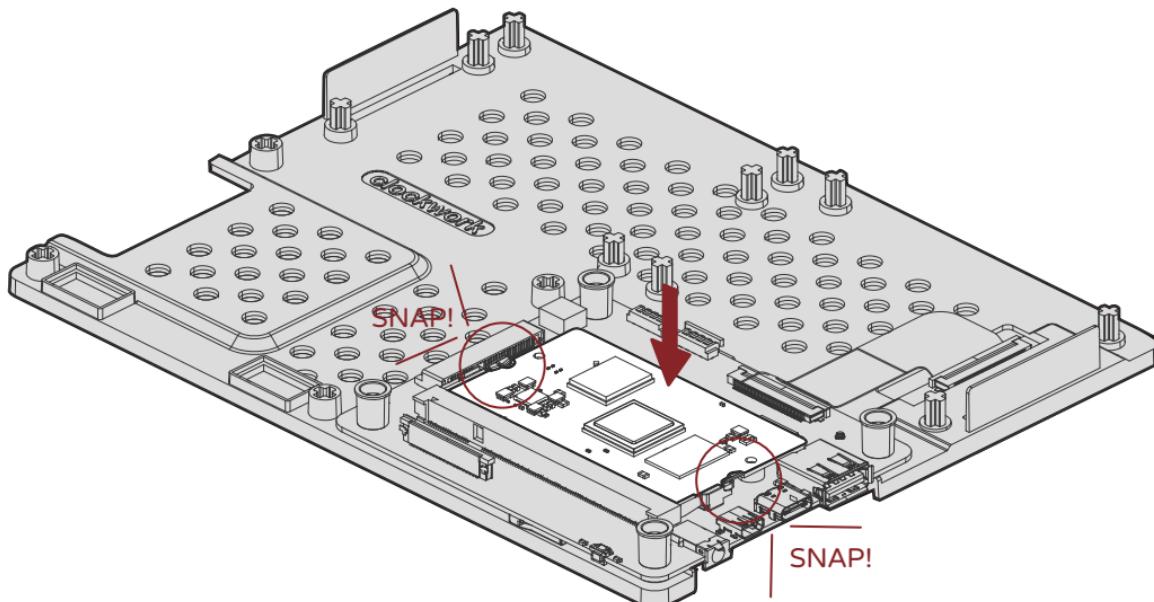
Recommended tools

- Screwdriver

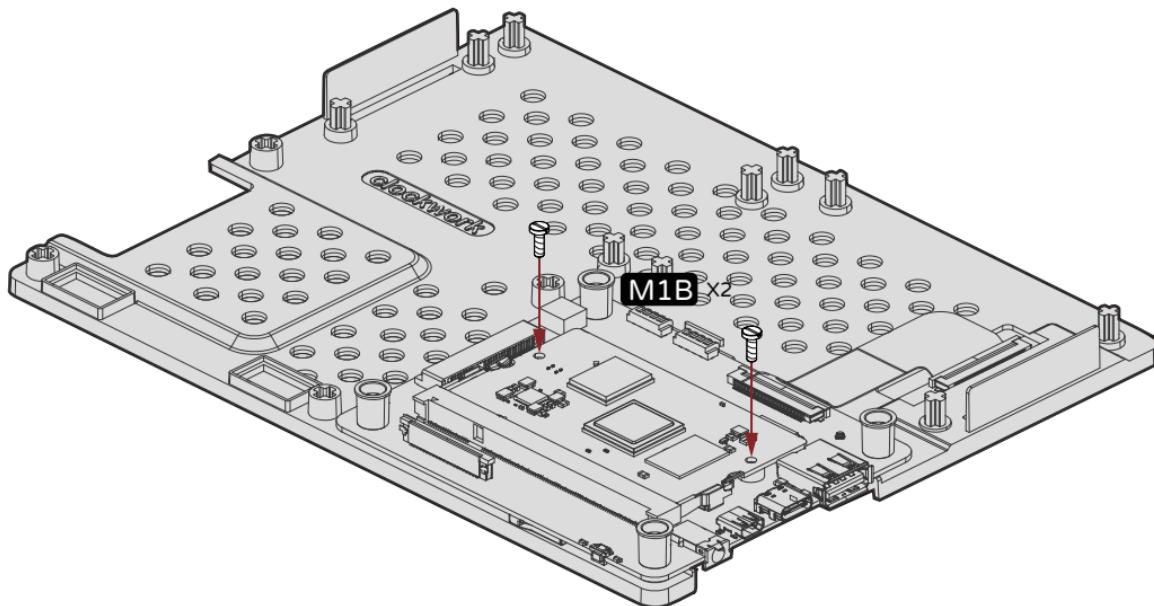
D1



D2



D3



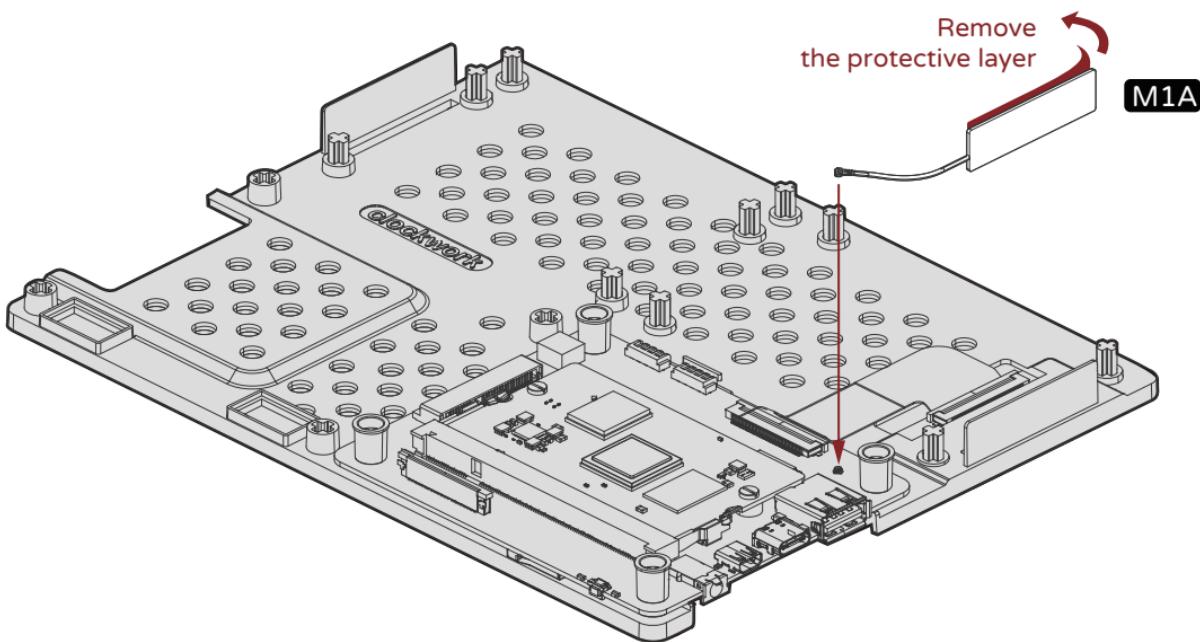
E. Install the Antenna

Parts List: **M1A**

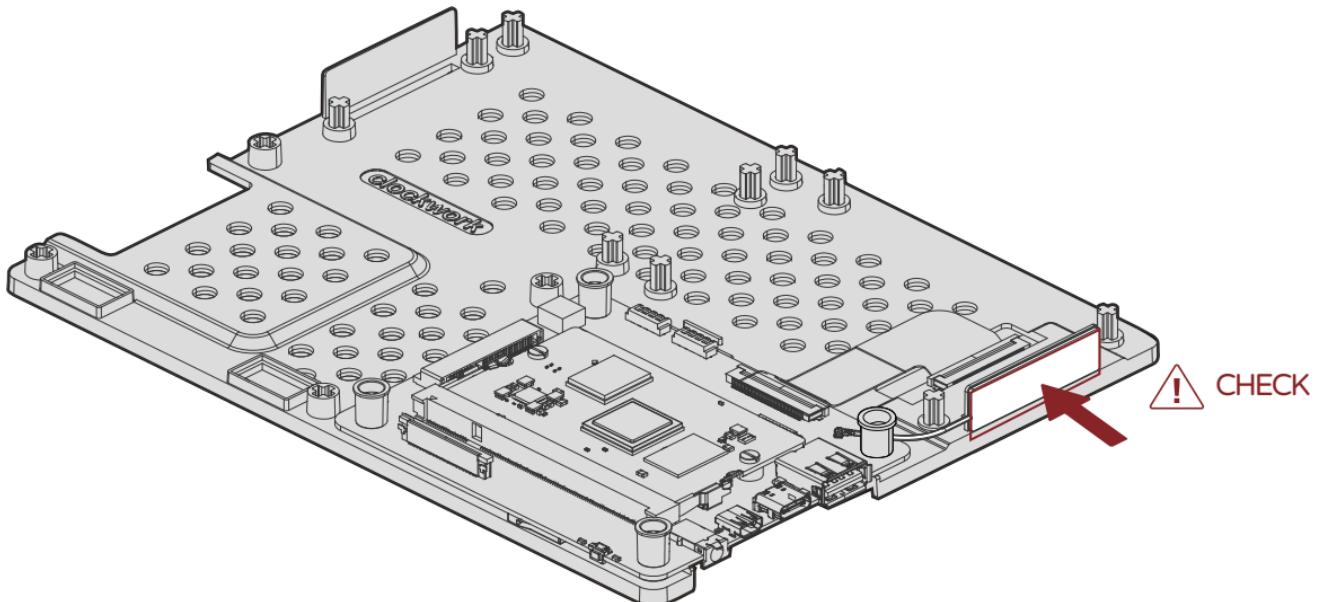
WARNING

- FRAGILE! Handle Carefully.

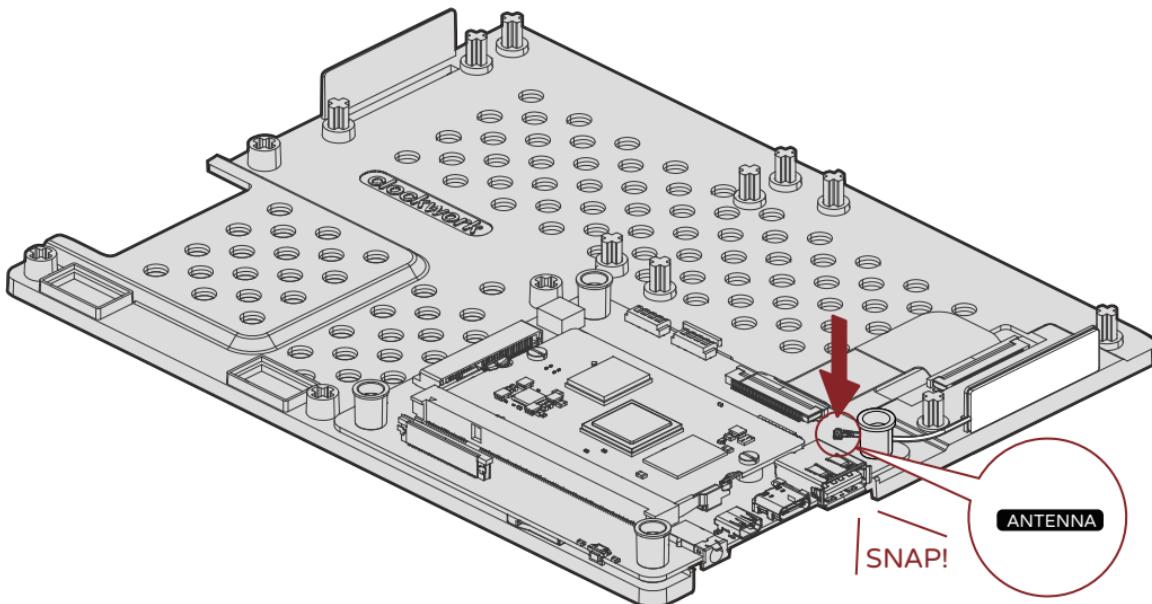
E1



E2



E3



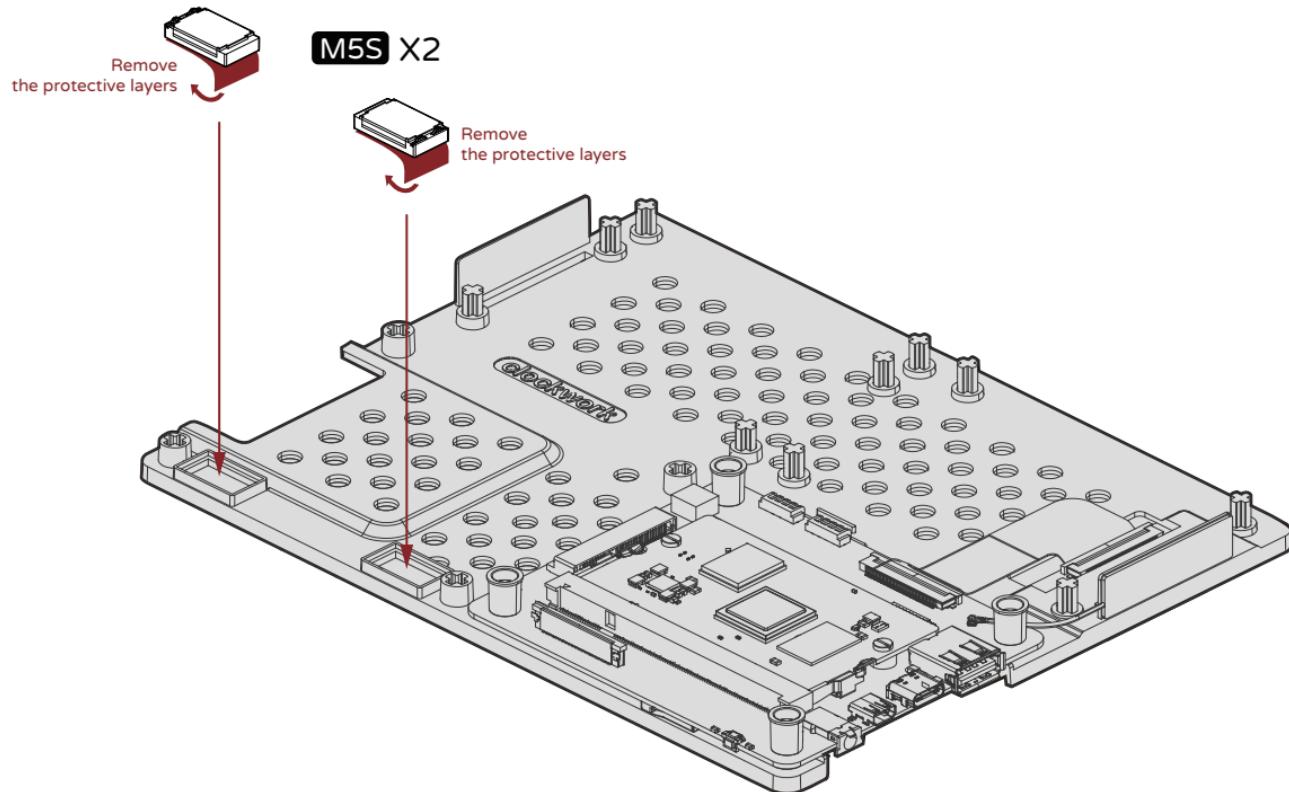
F. Paste the Speakers

Parts List: **M5S** X2

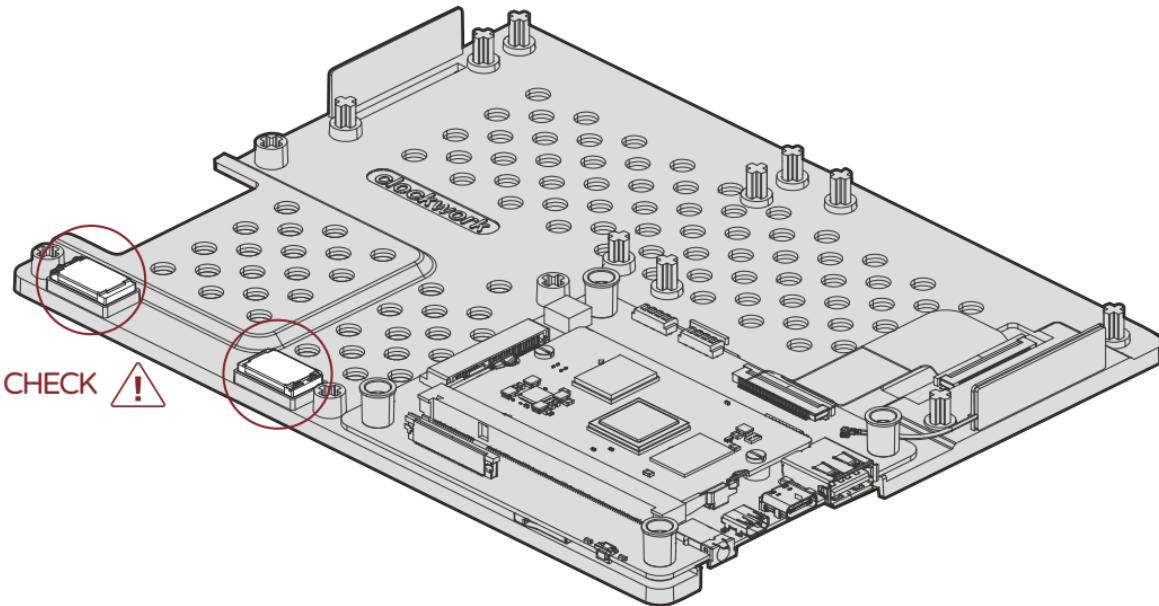
WARNING

- Remove The Protective Layer Before Installation.

F1



F2



G. Mount the Ext. Module

Parts List: **M5** **B3** X4

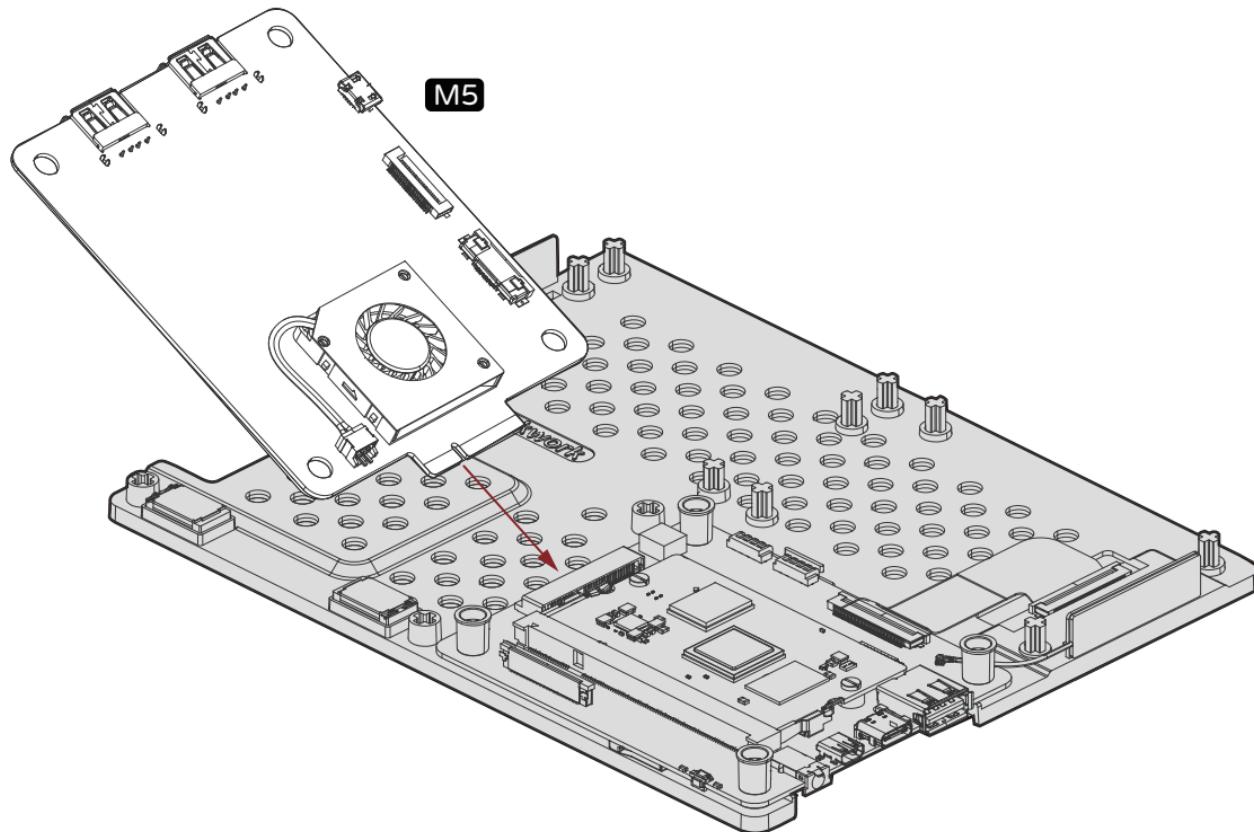
WARNING

- Electrostatic-sensitive Device.

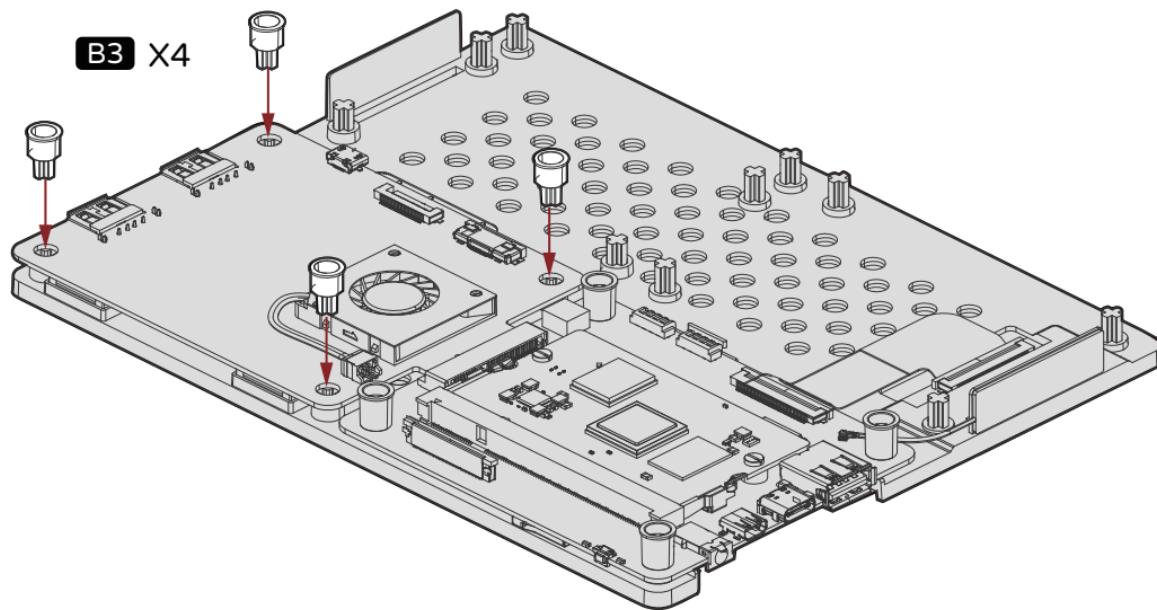
Recommended tools

- Side Cutters

G1



G2



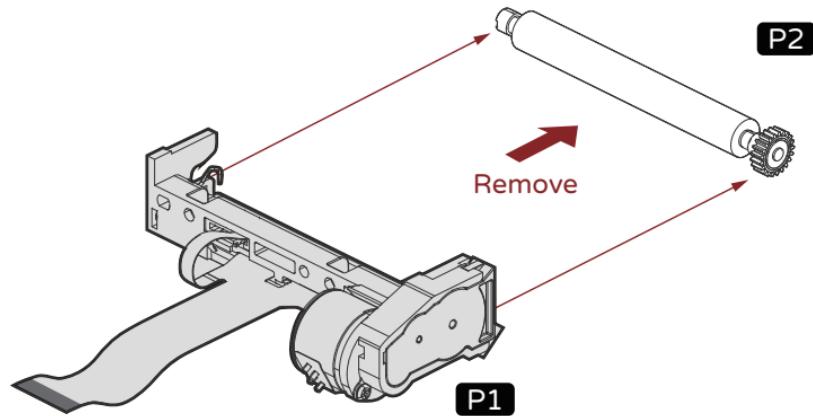
H. Assemble the Thermal Printer Module

Parts List: **P1** + **P2** **P5**

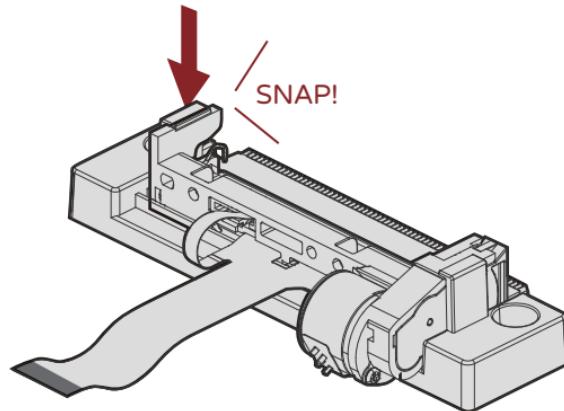
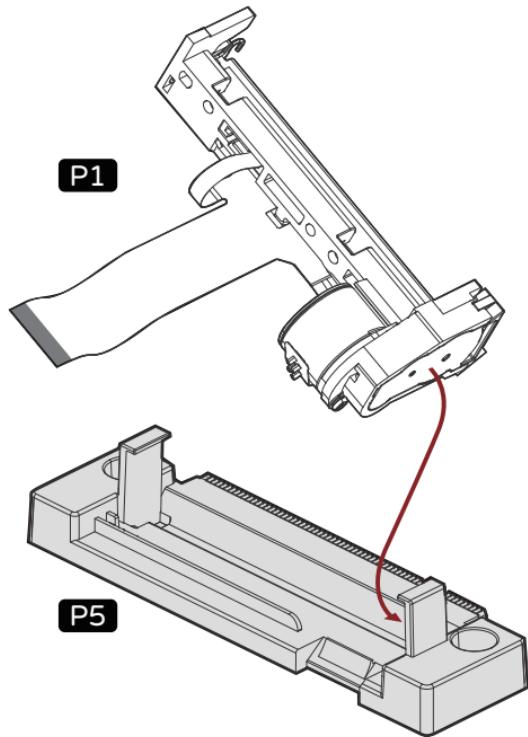
WARNING

- Electrostatic-sensitive Device.

H1



H2



P1 + P5

I. Mount the Thermal Printer Module

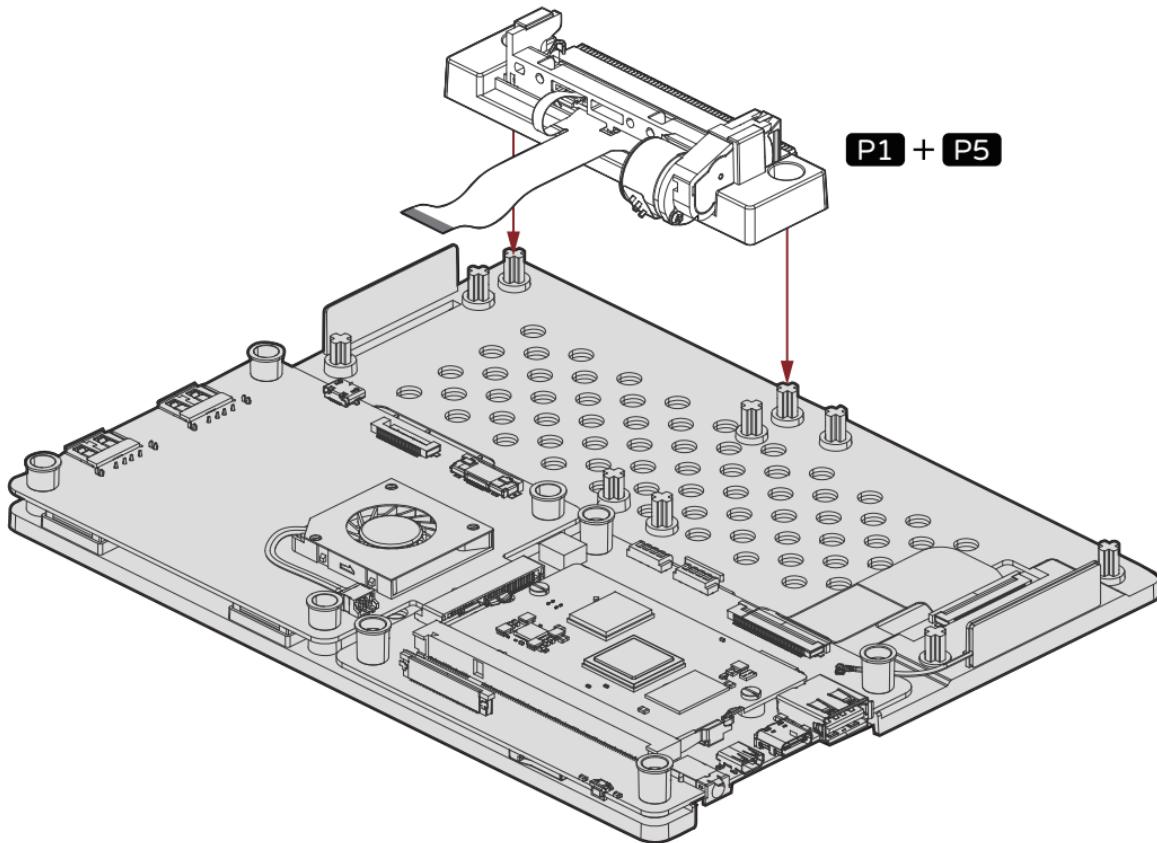
A 58mm Thermal Printer which supports 200 DPI high-speed monochrome printing.

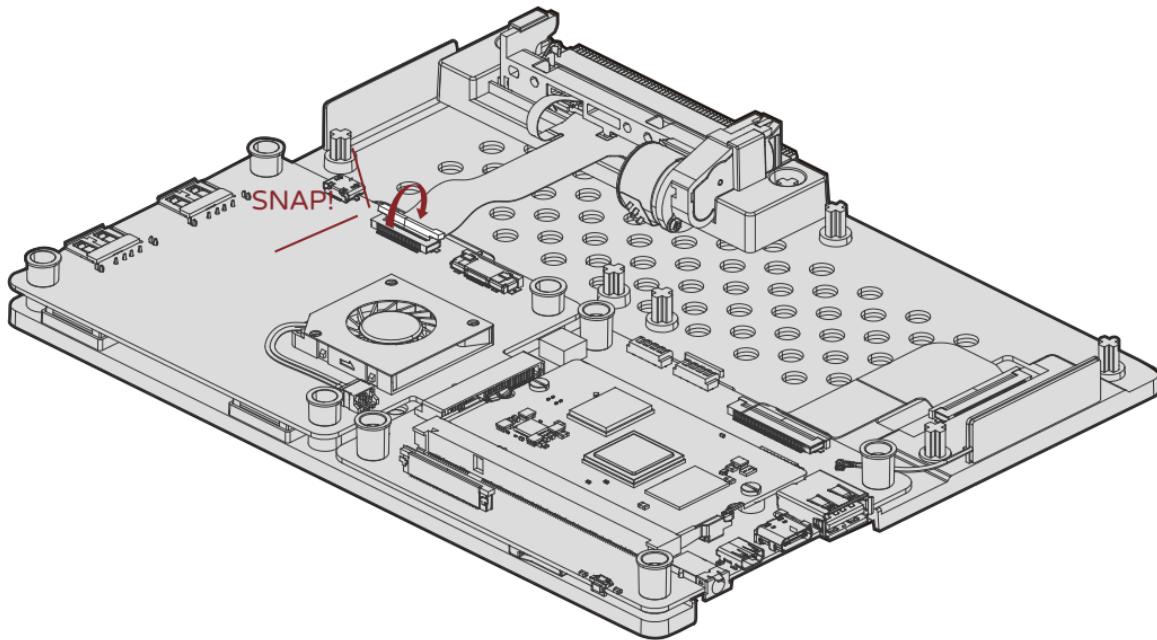
Parts List: **P1** + **P5** **B1** X4

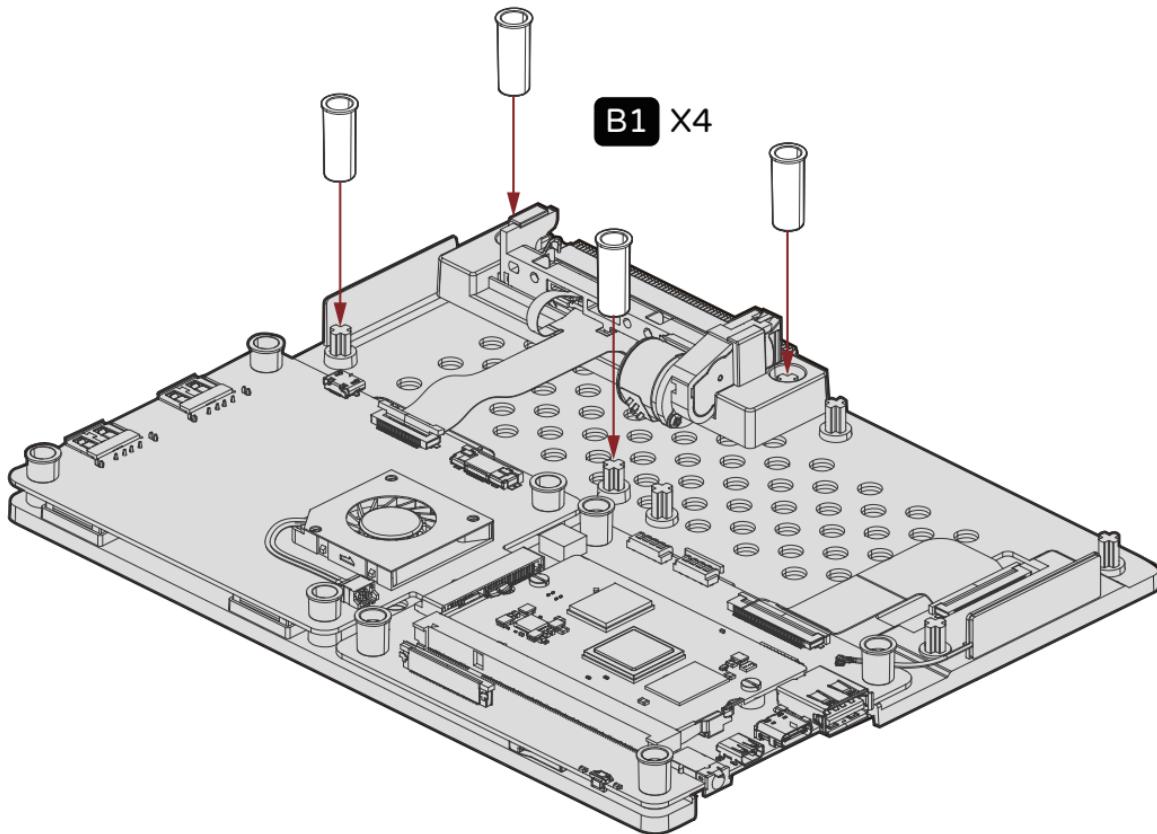
WARNING

- Electrostatic-sensitive Device.

I1







J. Mount the Battery Module

This battery module is compatible with various 18650 battery sizes:

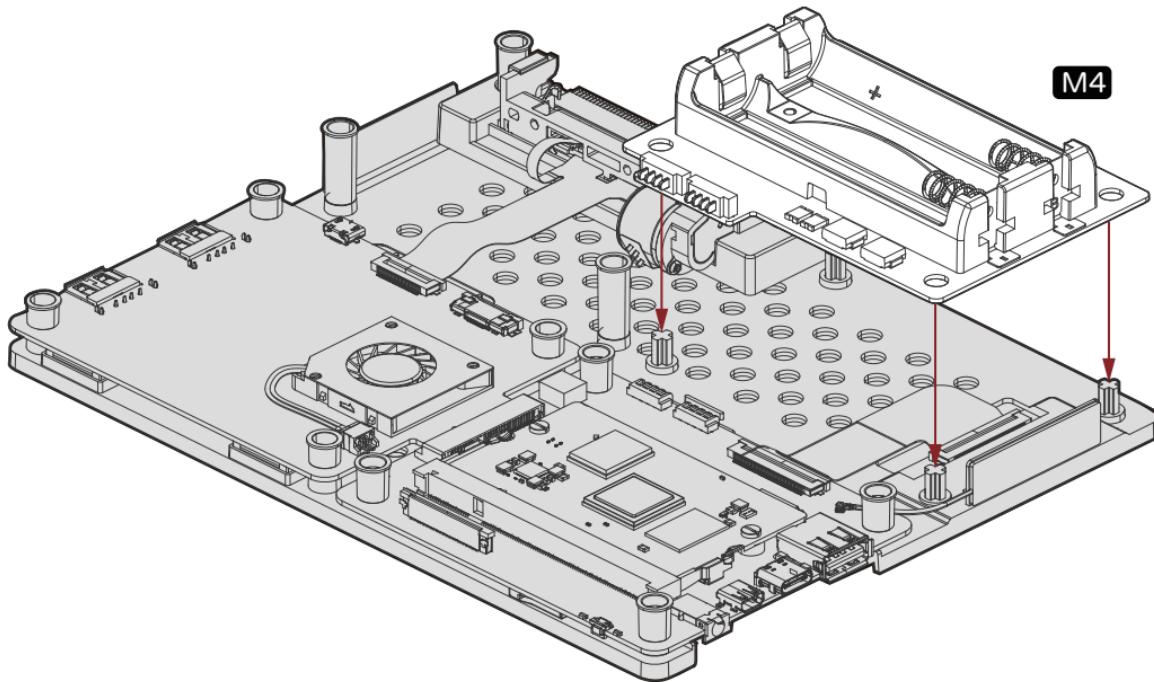
- Diameter: $\Phi 18 \pm 0.5\text{mm}$
- Length: 65-69mm

Parts List: **M4** **B1** X4

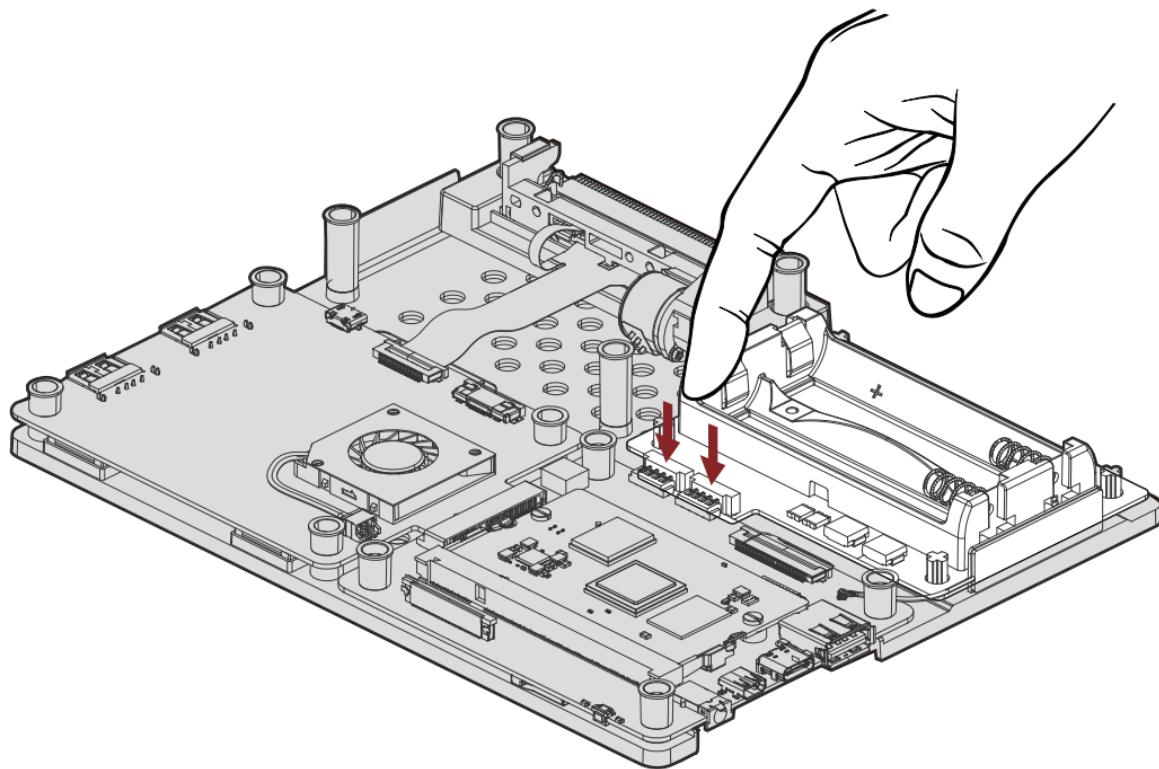
NOTE:

- The 18650 batteries are not included in the package.

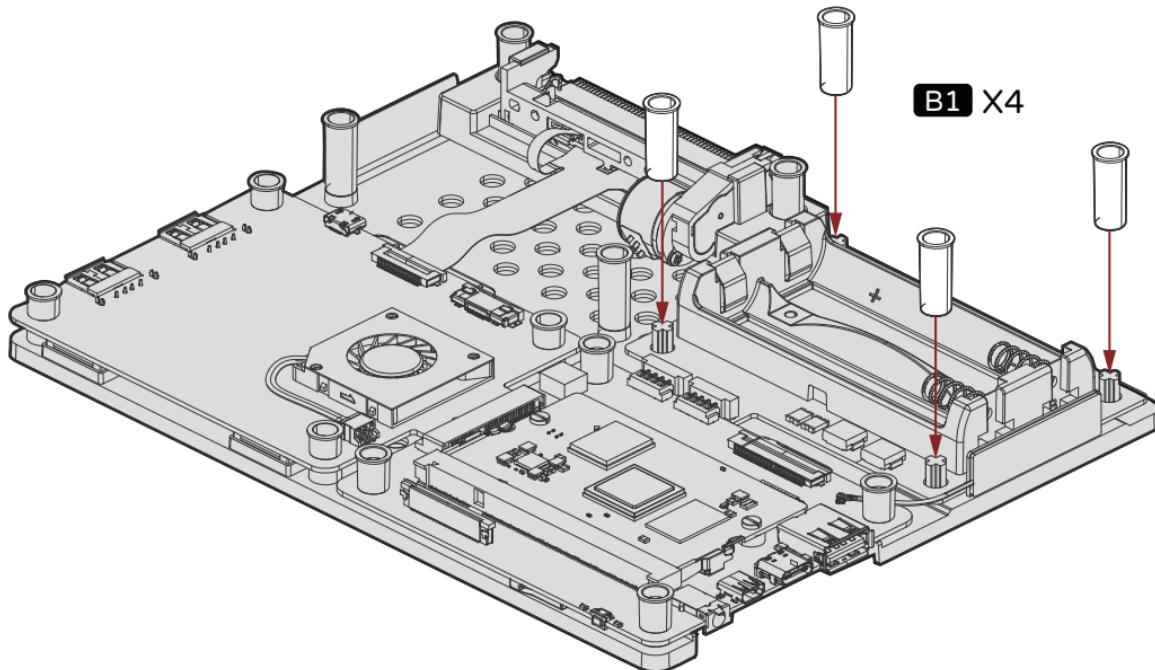
J1



J2



J3



K. Mount the Back Shell

Parts List: **S2** **B4** **A1** **A2**

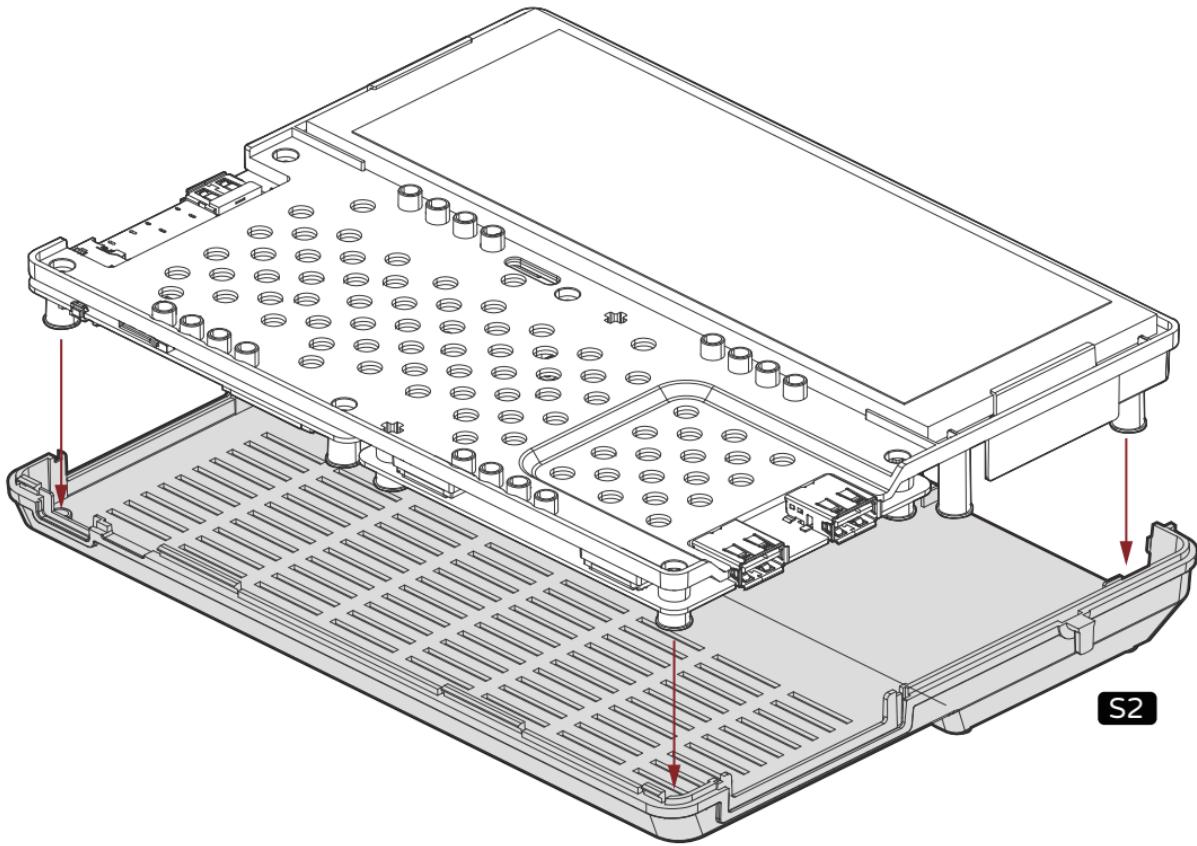
WARNING

- Before turning over, make sure that all modules are securely fixed.

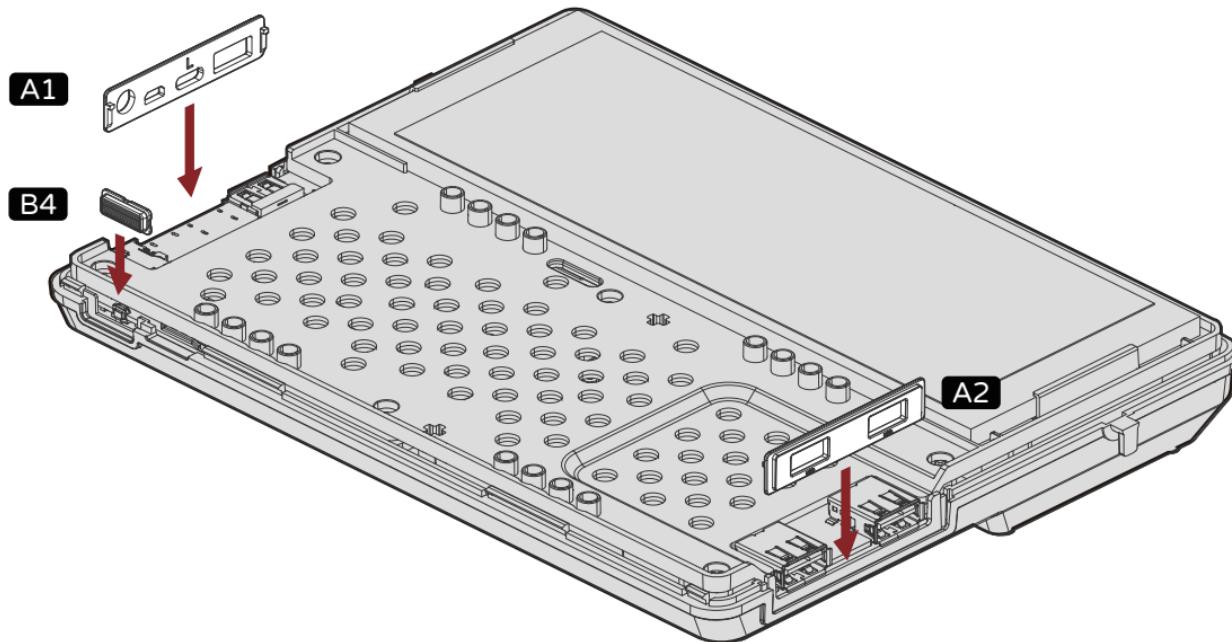
Recommended tools

- Side Cutters

K1



K2



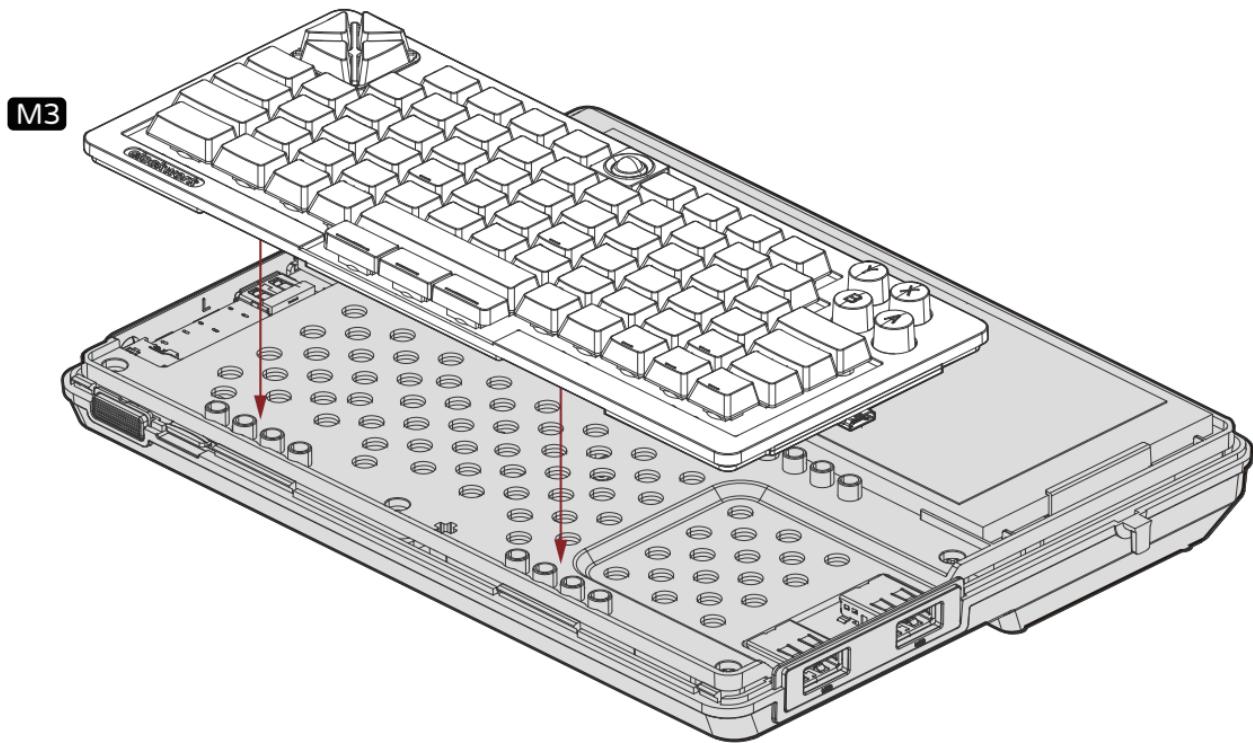
L. Mount the Keyboard

Parts List: M3

WARNING

- Electrostatic-sensitive device

L1



M. Mount the Front Shell

Parts List: **S3** **C1** X2 **C2** X2

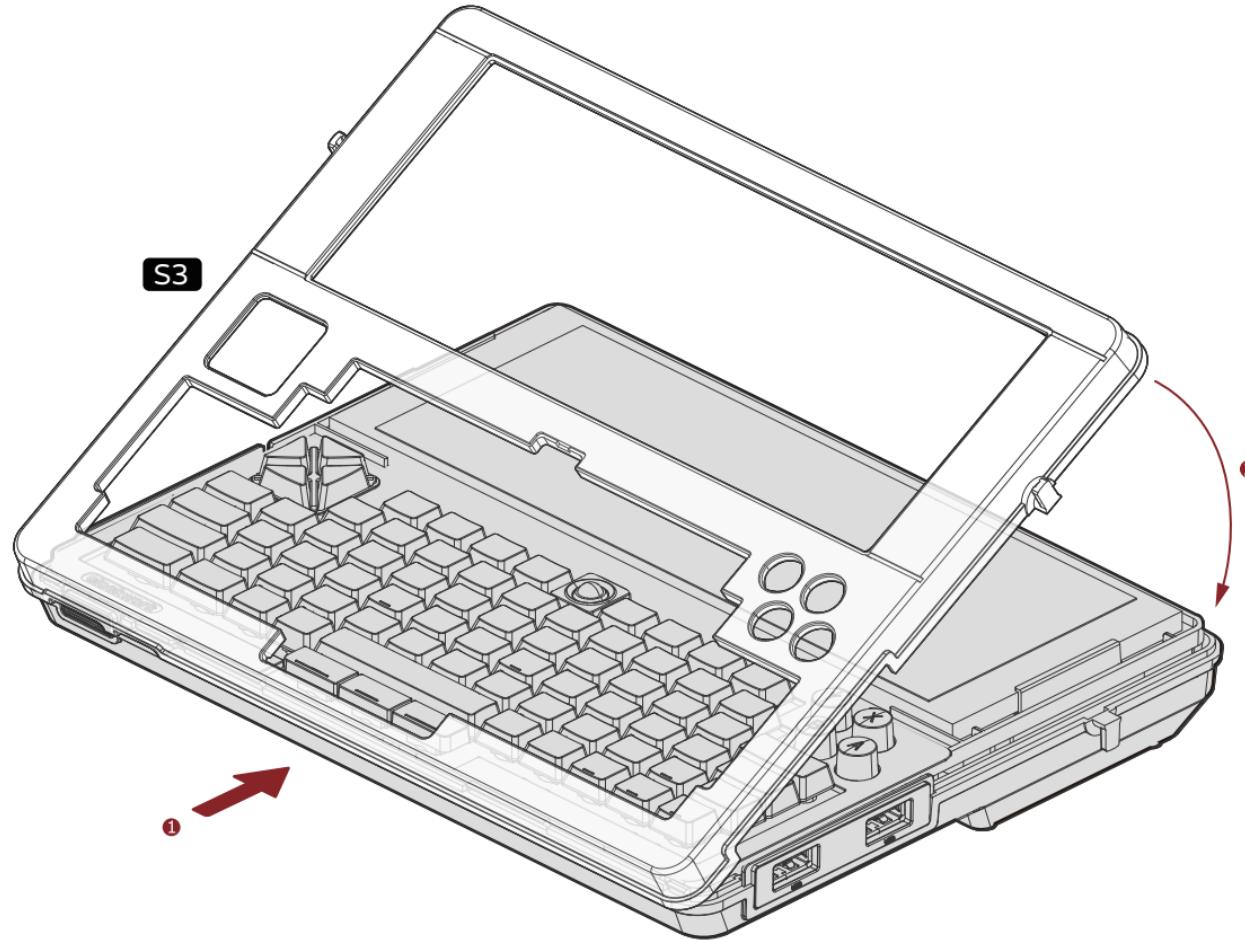
WARNING

- Follow the diagram carefully.

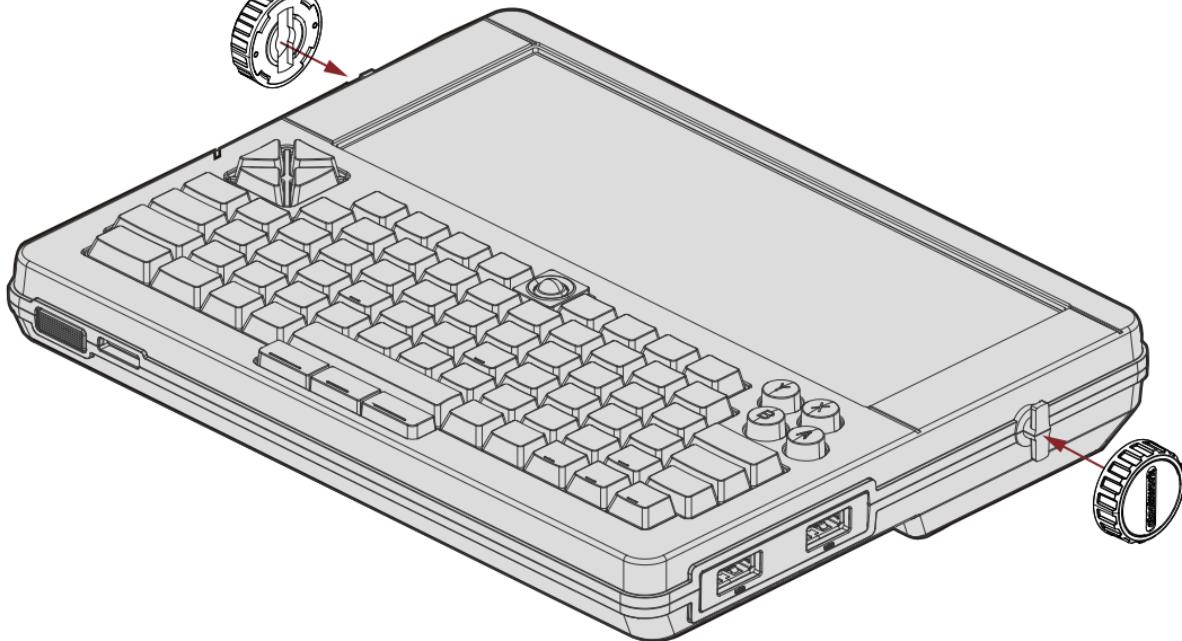
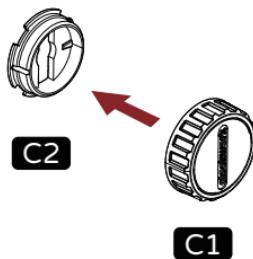
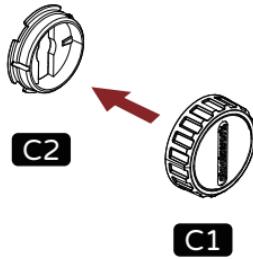
Recommended tool

- Side Cutters

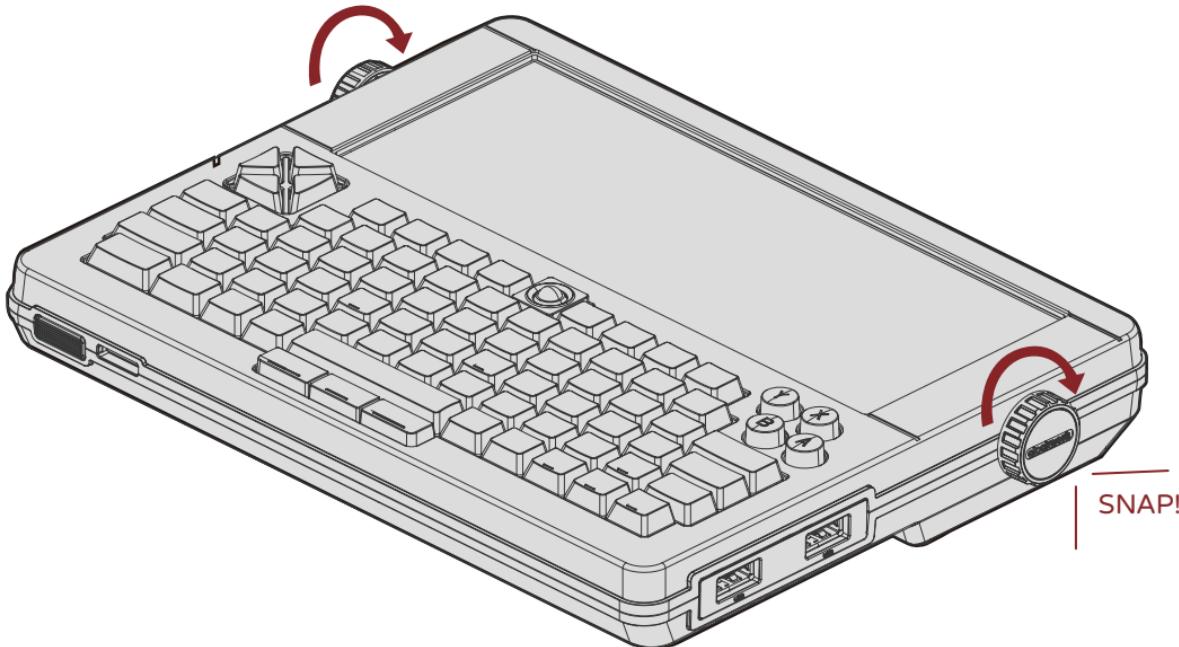
M1



M2



M3



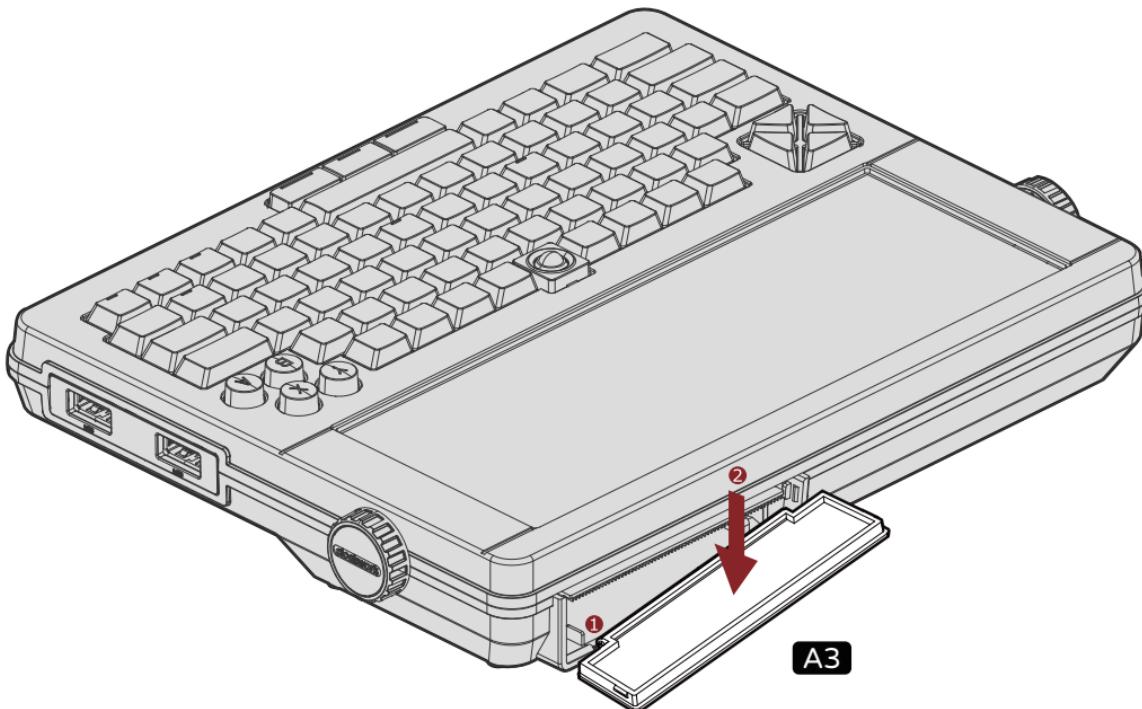
N. Mount the Exp. Port Cover

Parts List: **A3**

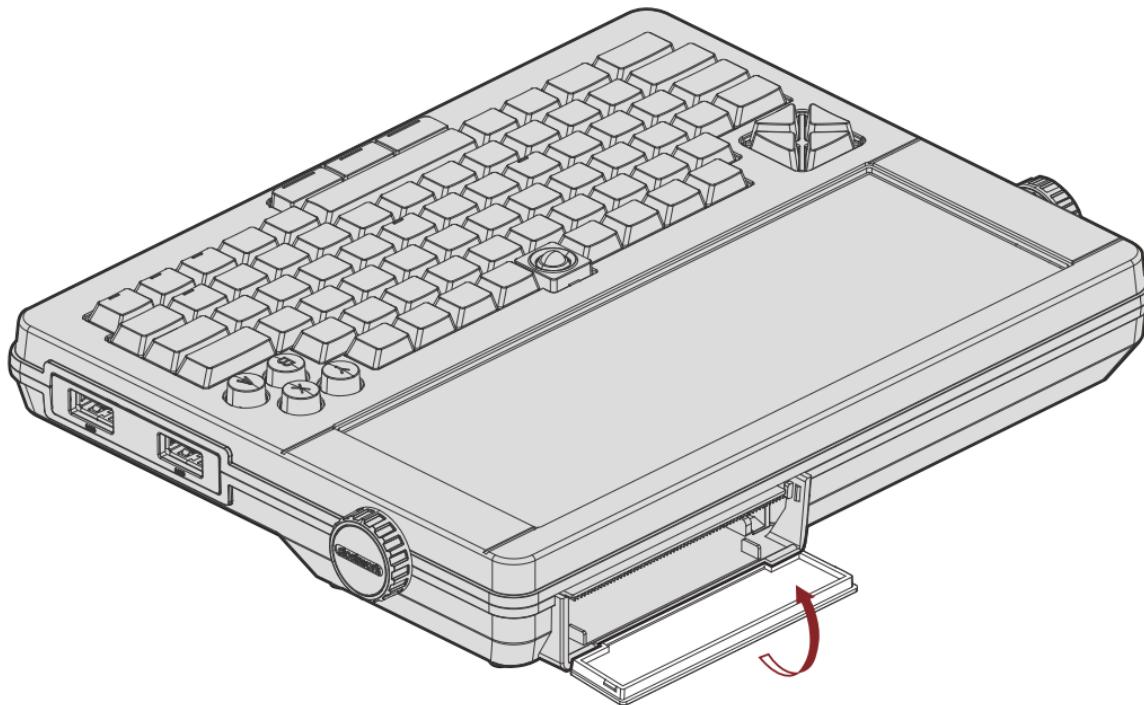
WARNING

- Follow the diagram carefully.

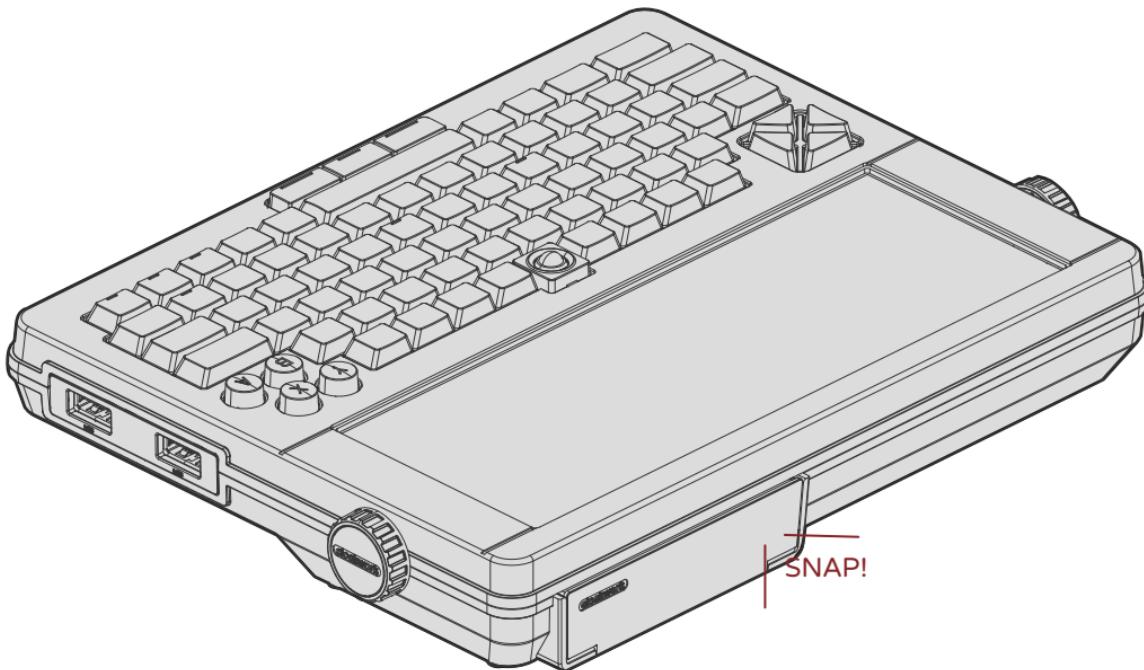
N1



N2



N3



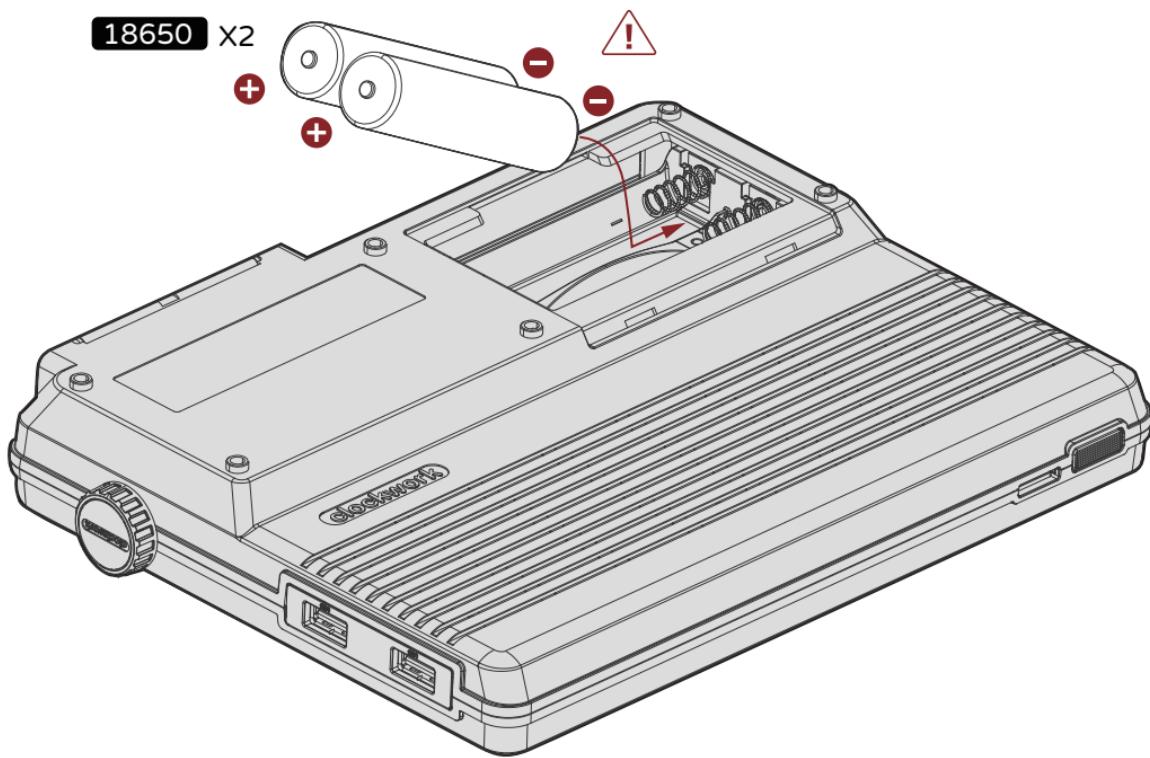
O. Mount the 18650 Batteries

Parts List: A4 18650 X2

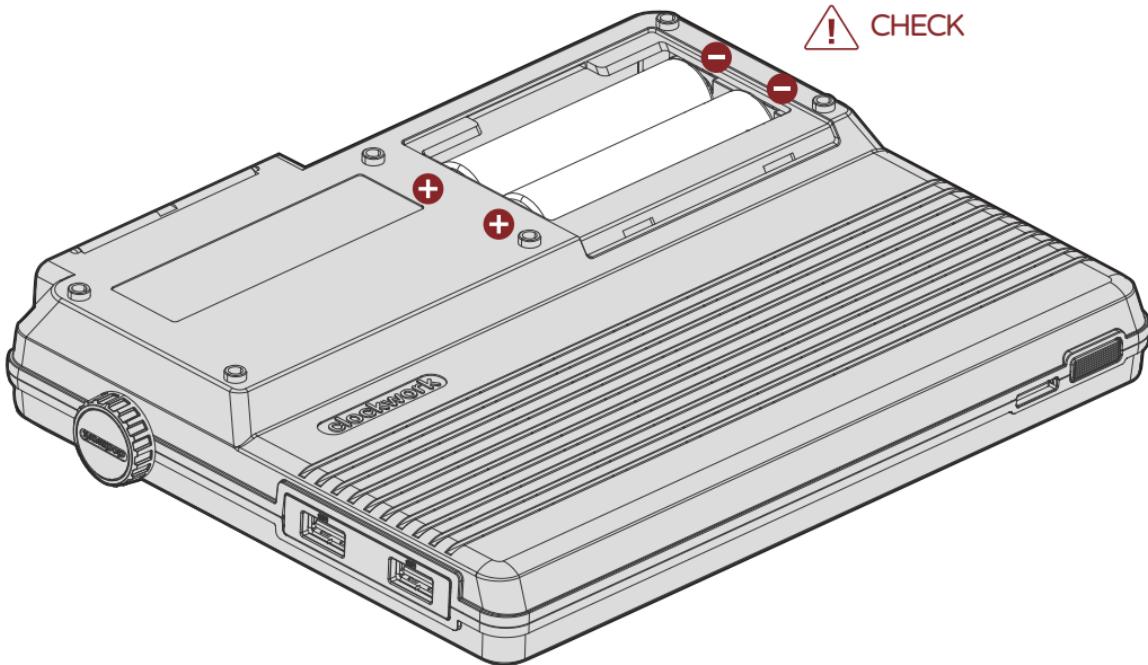
WARNING

- Please consult the battery supplier for detailed 18650 safe usage rules, and strictly follow them.
- Fire Risk! Short circuit (ensuring that positive (+) and negative (-) poles never come into contact) can damage electronic equipment, cause batteries to explode, and even start a fire.

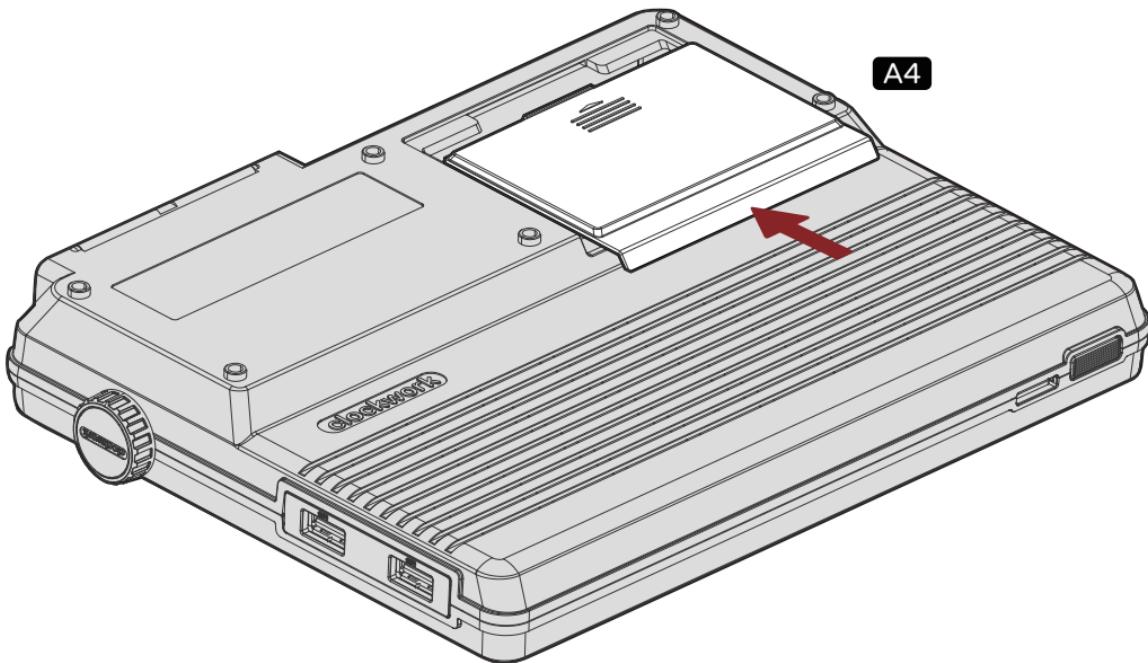
O1



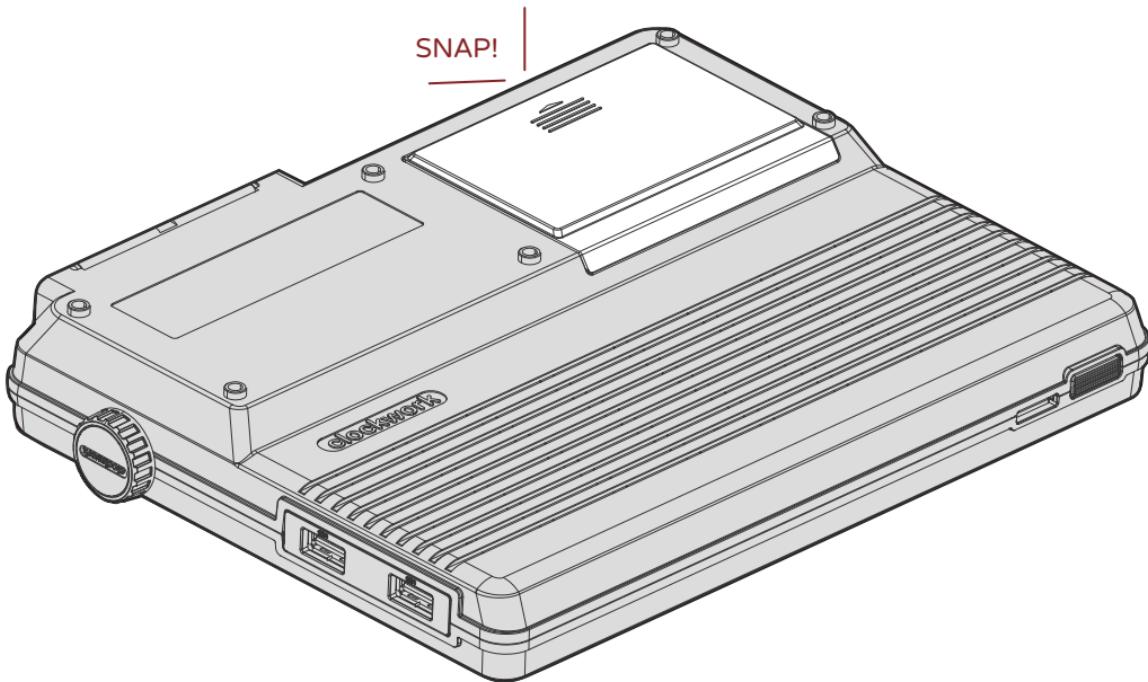
O2



O3



O4



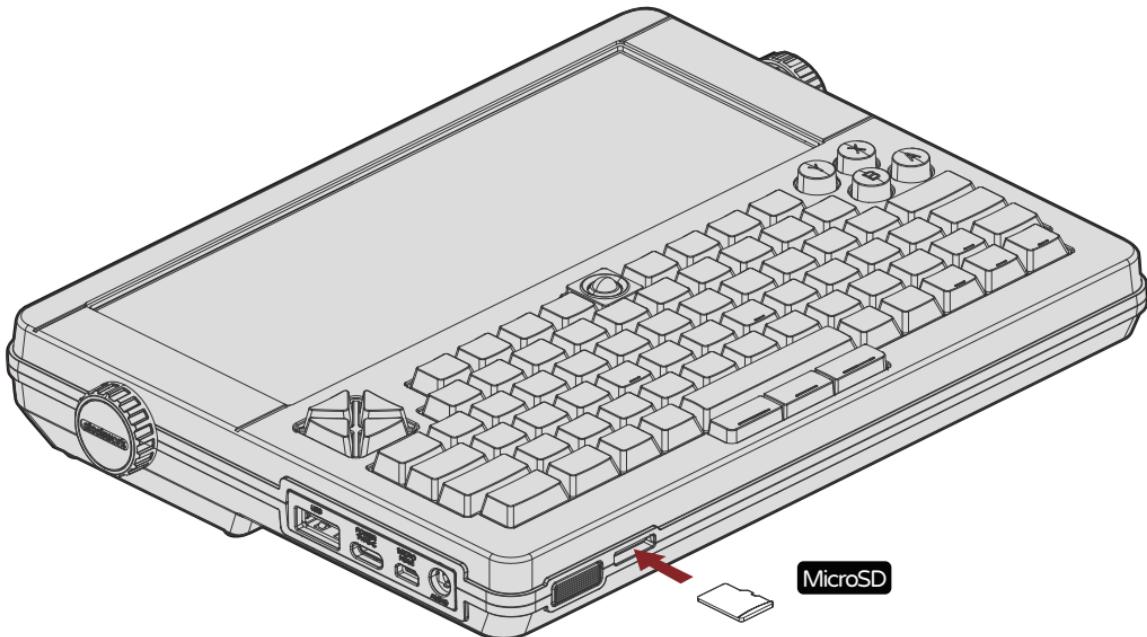
P. Insert the MicroSD & Power On

Parts List: [MicroSD](#)

WARNING

- The microSD must be inserted before power on.

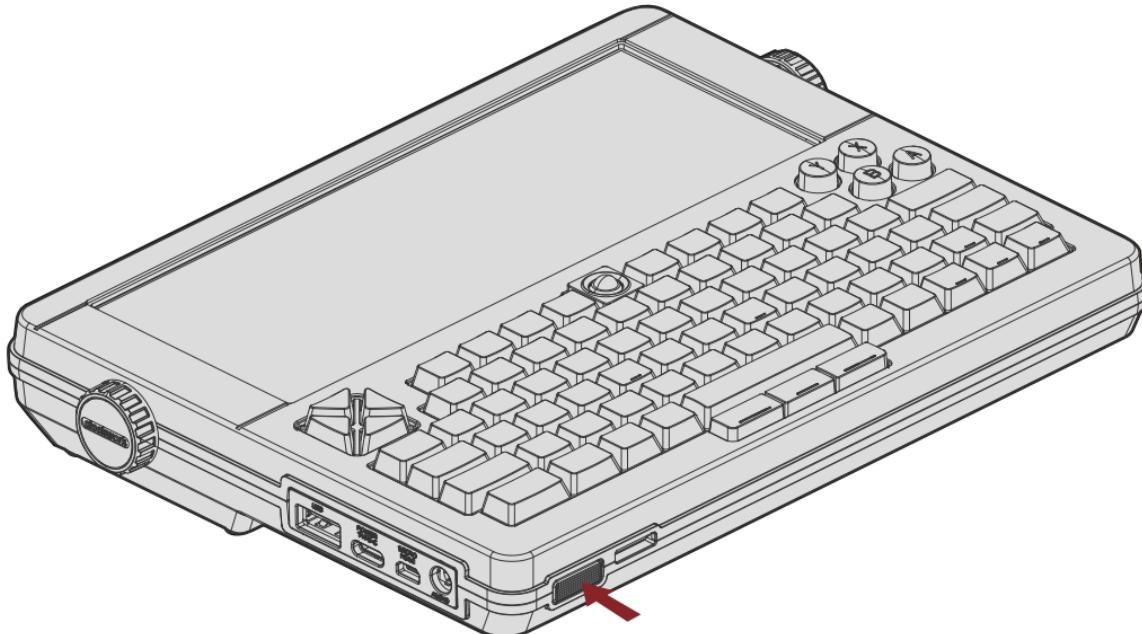
P1





Finish

P2



Power ON - Pressing and holding the "ON/OFF" button for 2 seconds.
It may take about 60 seconds to boot up for the first time.

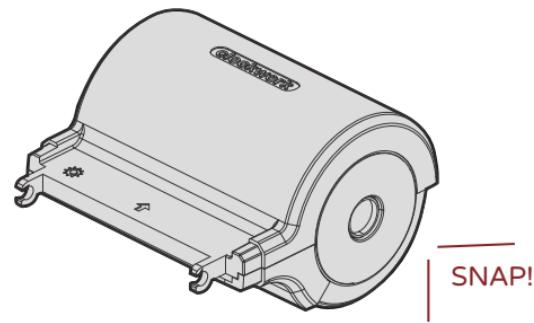
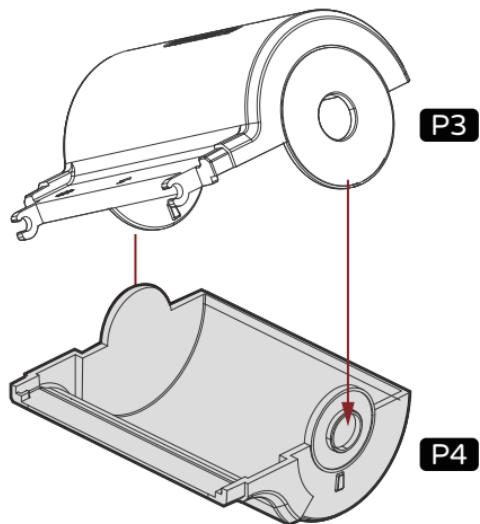
Q. Assemble the Input Tray

Parts List: **P2** **P3** **P4** **P6**

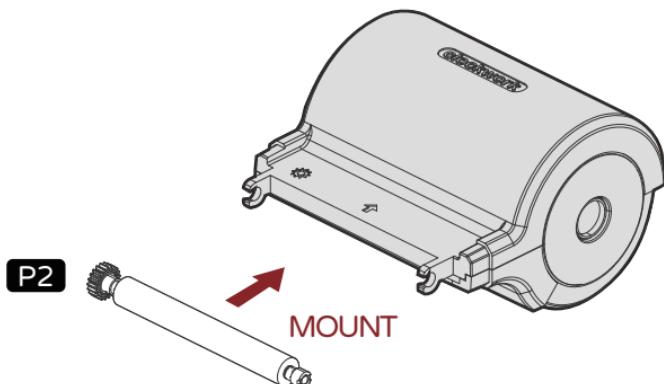
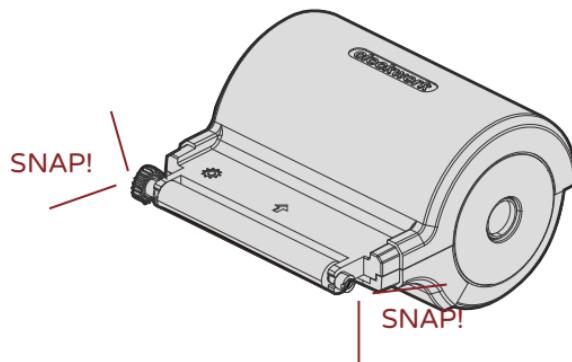
NOTE

- The 58mm thermal paper is not included. “BPA-FREE” thermal paper is recommended.

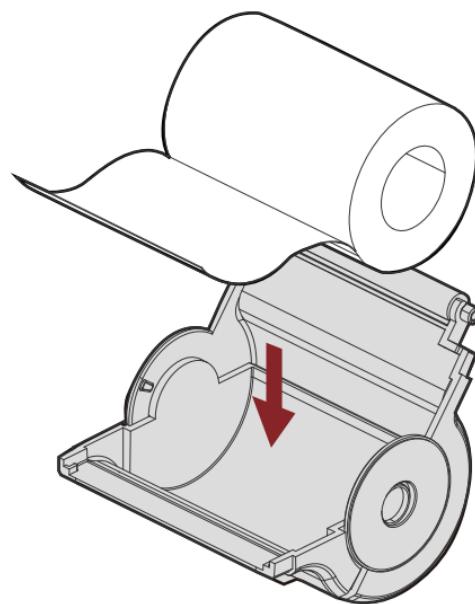
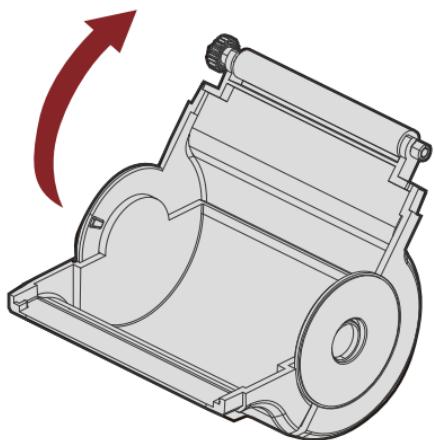
Q1



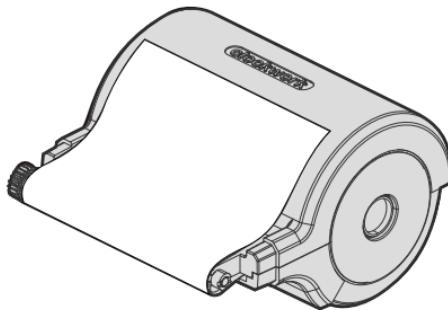
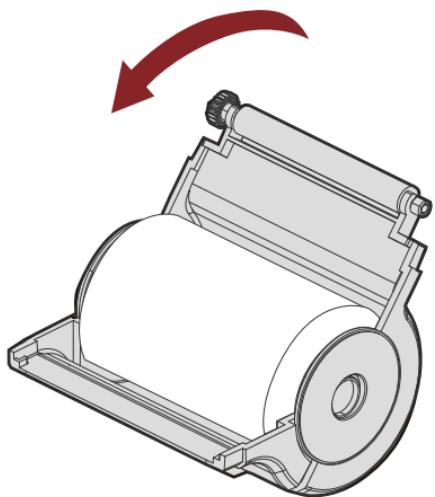
Q2



Q3



Q4



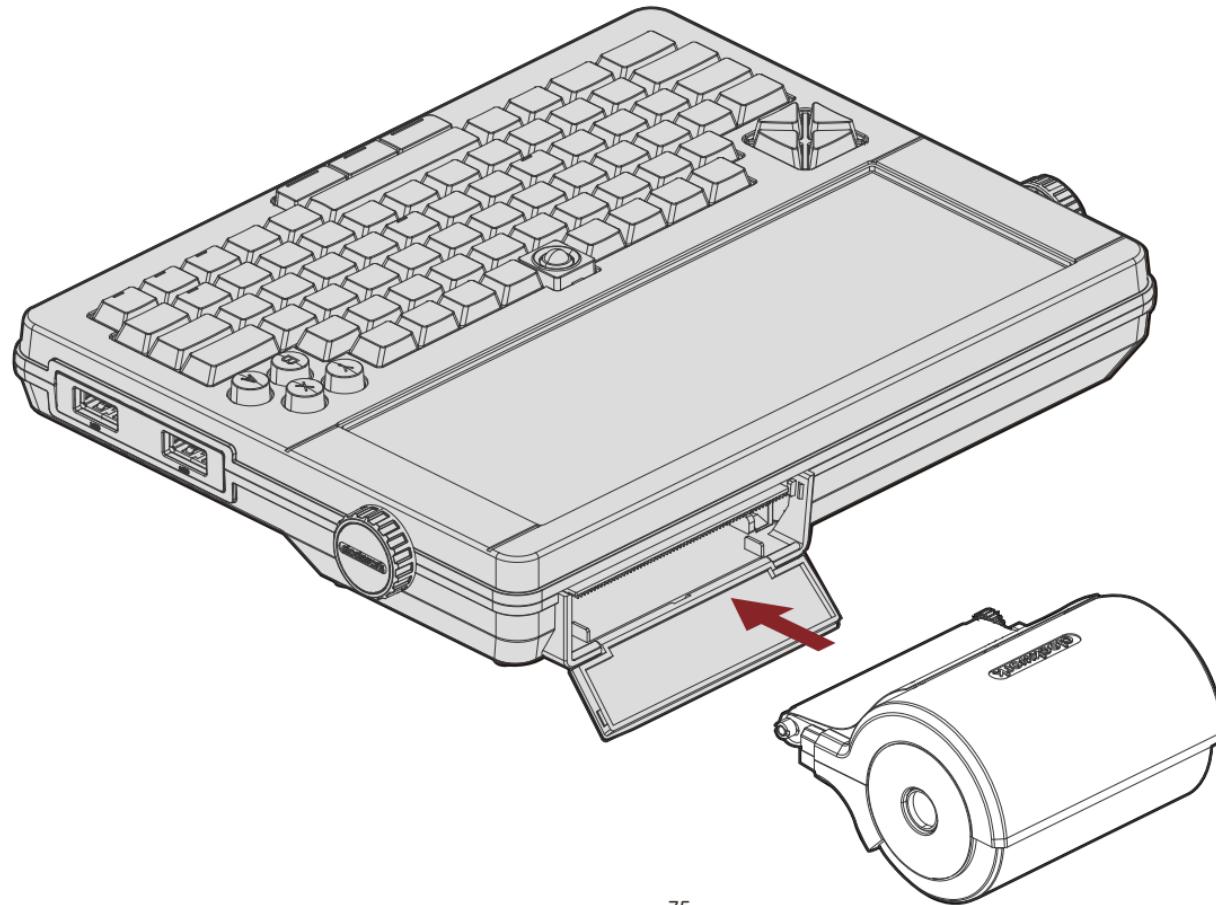
R. Mount/Unmount the Input Tray

Parts List: Pre-assembled Input Tray

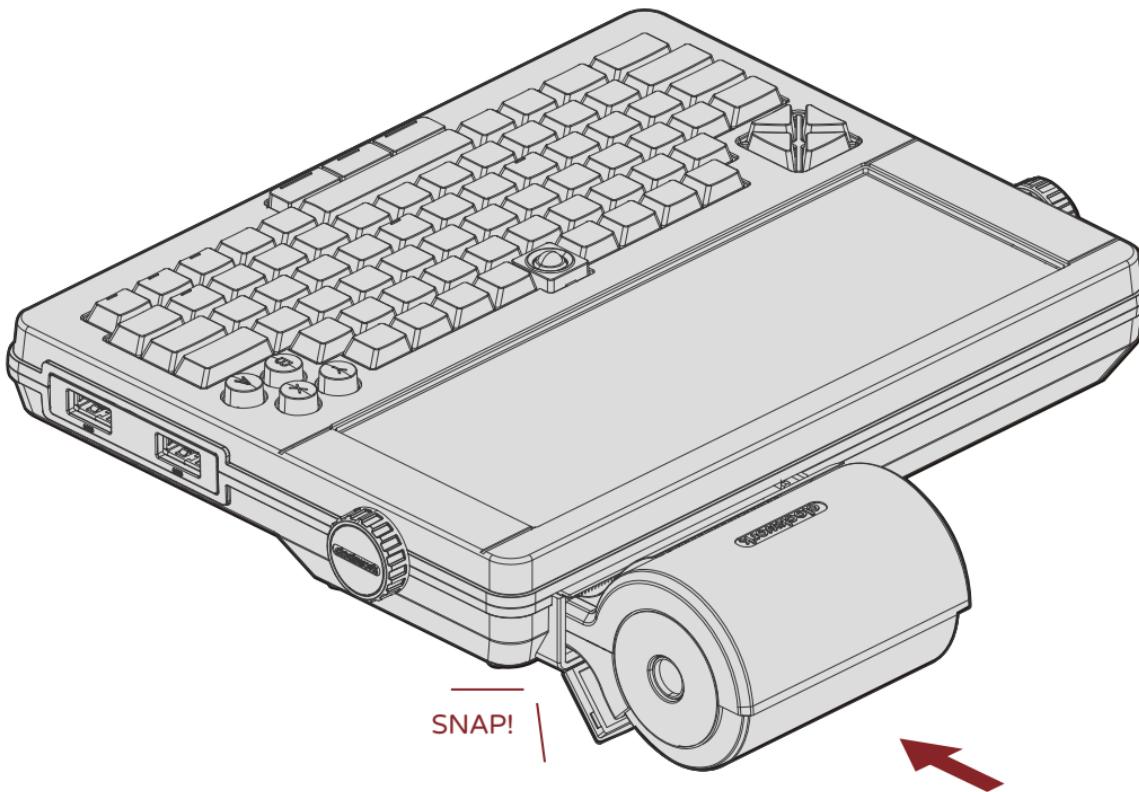
WARNING

- Follow the diagram carefully.

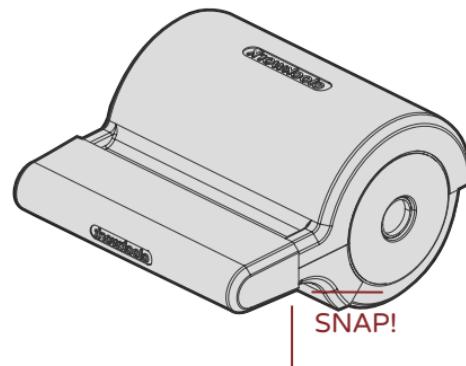
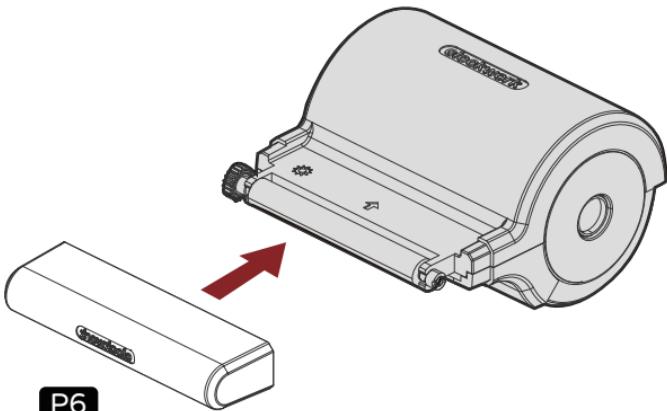
R1



R2

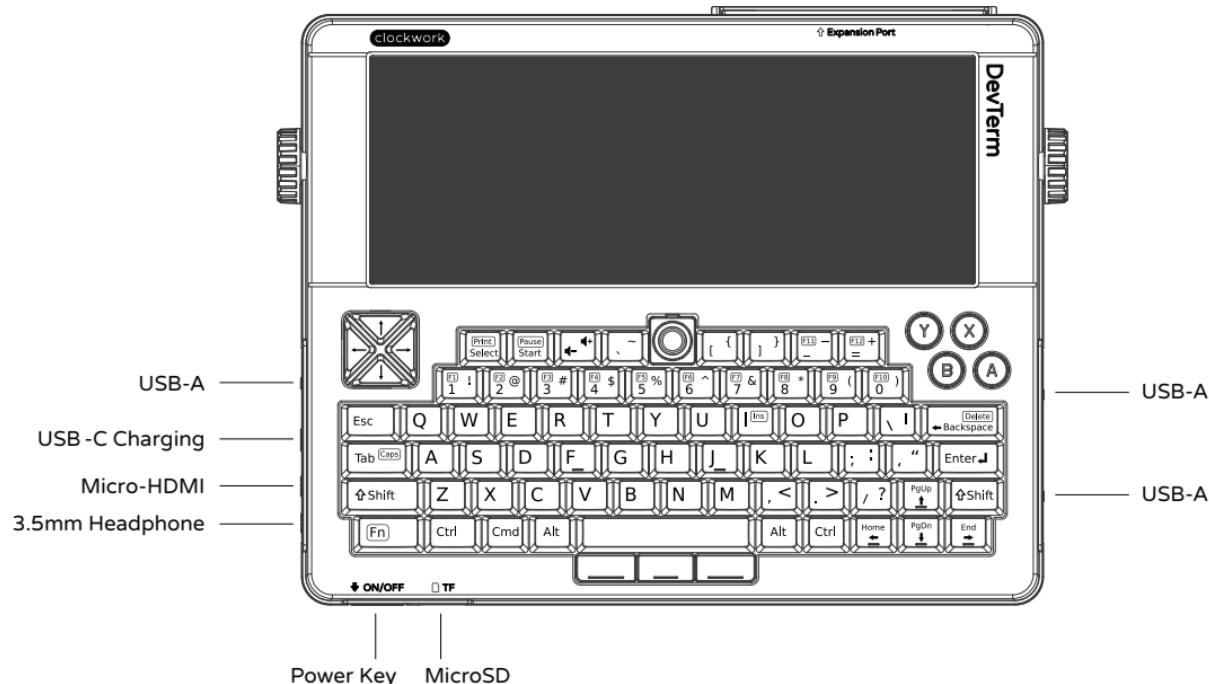


R3



The sturdy “input tray” provides a storage function, allowing you to carry it freely.

The Interfaces



FAQ

Power On

- Make sure that the batteries are fully charged and installed correctly.
- The DevTerm can be powered by 5V-2A USB-C power supply.
- MicroSD must be inserted before power on.
- Pressing and holding the "ON/OFF" button for 2 seconds.
- For the first time of booting up, it will take about 60 sec.

How to Charge

- Use ONLY 5V-2A USB-C charger.
- Please use a high-quality USB-C cable.

18650 Battery

- The 18650 batteries are not included in this package due to global logistics complexity for lithium batteries.
- Please remove the batteries if you do not use the device for a long time.
- Please consult the batteries supplier for detailed 18650 safe usage rules, and strictly follow them.

Clockwork OS

- Clockwork OS download URL: <https://www.clockworkpi.com>
- Unzip the image file and use the flash tool to make the image into MicroSD.

Warranty

- The DevTerm Kit has a 6-month warranty starting since delivery is made.
- Please keep the receipt or screenshot with delivery date.
- For after-sales requests, please send an email with your order number, the issue and some pictures, videos to help@clockworkpi.com

How to Purchase Parts

- Please go to <https://clockworkpi.com/shop> to purchase the parts.
- You can also download 3D-printing files (STL) in our online shop to print the parts.

Open Source & Open Design

- DevTerm follows the "Hacker-friendly" concept and modular design. The open-source development kit (including structure, software, hardware, and documentation) combines high performance, portability, and scalability features.
- Please visit our GitHub: <https://github.com/clockworkpi>

Join ClockworkPi Community

- Please join our community on <https://forum.clockworkpi.com>
- Meet our friends from all over the world and share your unique ideas!

clockwork



WARNING
STATIC
SENSITIVE
DEVICES



MADE IN CHINA