

# DevTerm

## Assembly Guidelines









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## 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](mailto: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 Schneideprozess 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](mailto: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。
- 请选购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](mailto: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。

## 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は、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℃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機に関する注意事項

- ・注意!DevTermに「リチウムイオン充電機は含まれていません」。18650型のリチウムイオン充電機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

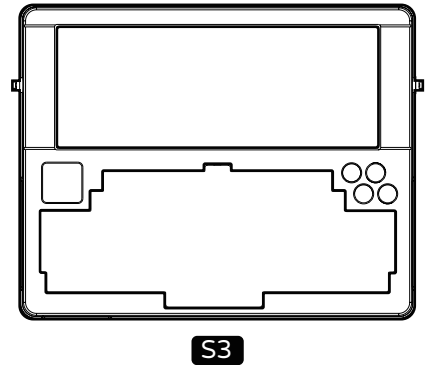
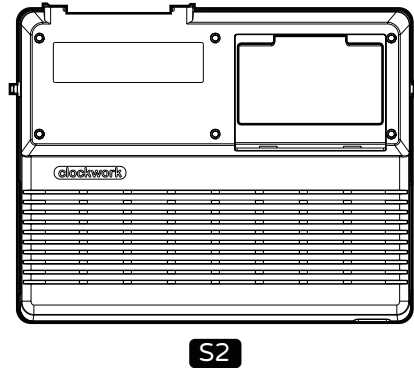
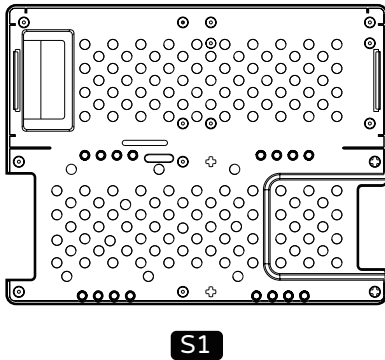
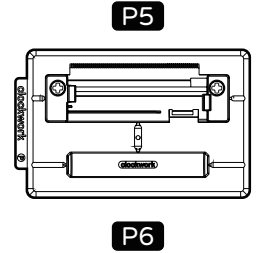
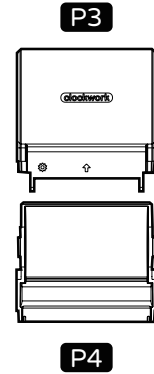
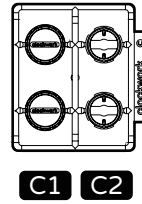
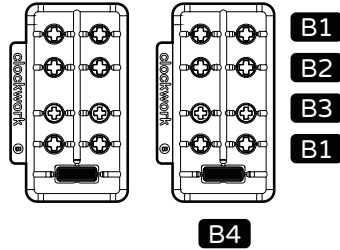
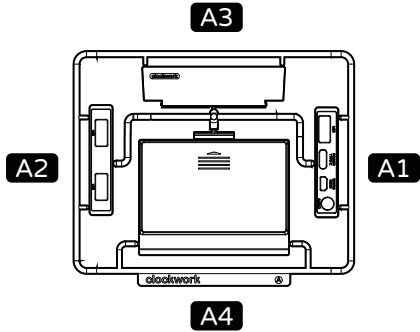
- ・製品、組み立て、使用に関する問題がありましたら、<https://forum.clockworkpi.com> にアクセスいただくか、[help@clockworkpi.com](mailto:help@clockworkpi.com) にメールにてお問い合わせください。迅速に対応させていただきます。

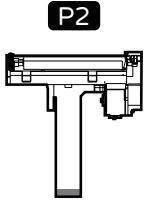
## Clockworkオンラインコミュニティ

- ・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释权を留保します。
- ・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。

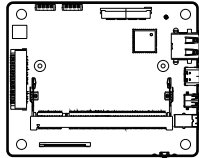


PARTS LIST





P1



M1A



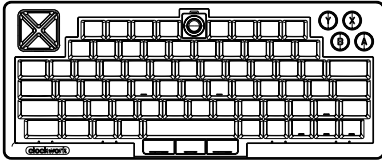
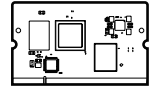
M1B



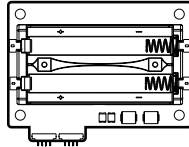
M2



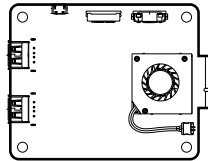
M2C



M3



M4



M5



M5S



MicroSD

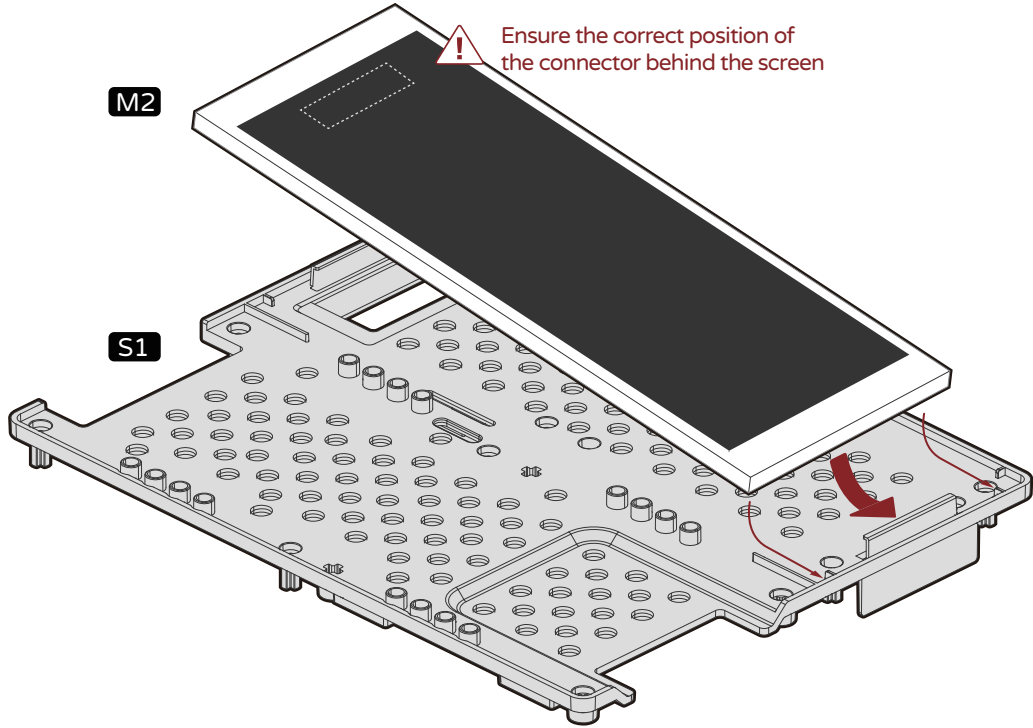
## A. Mount the Screen

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.

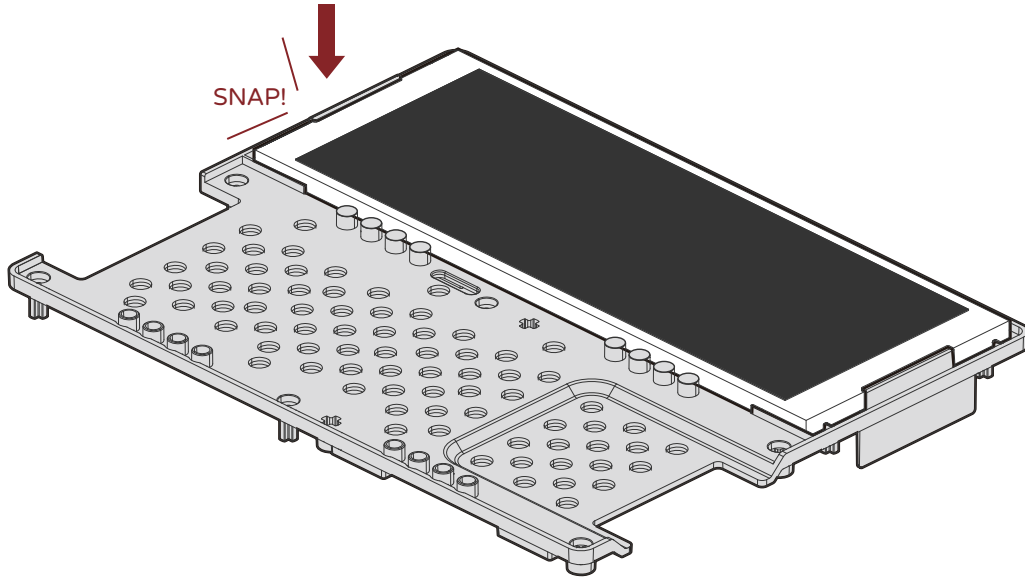
Parts List: **S1** **M2**

### WARNING

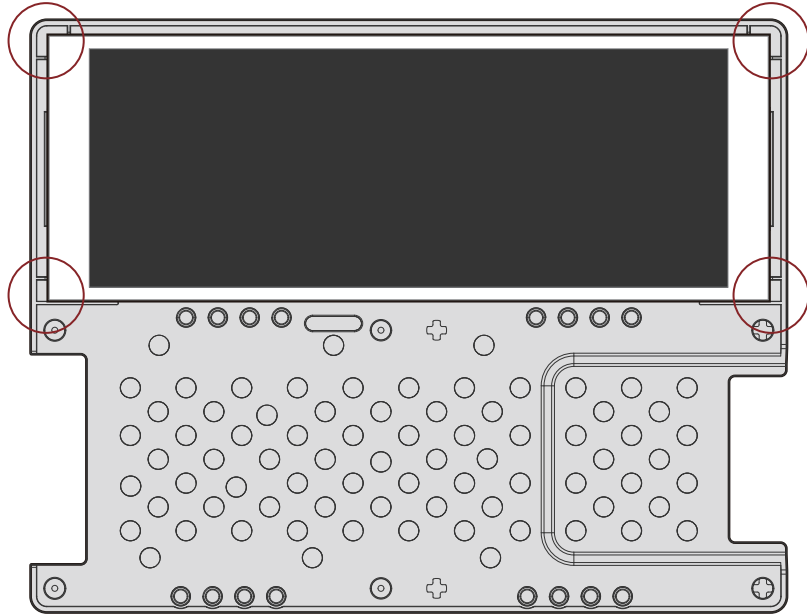
- FRAGILE! Handle Carefully.



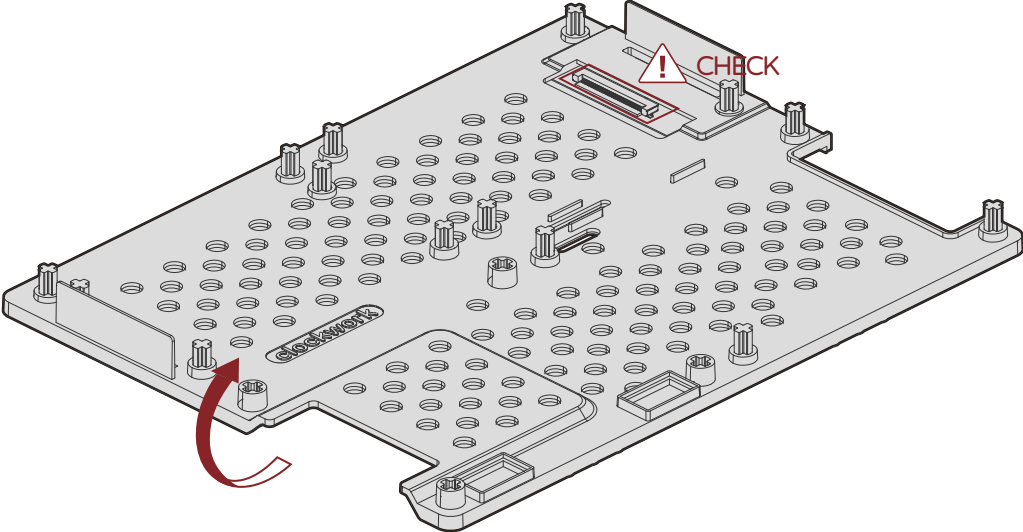
A2



A3



! CHECK



## 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.

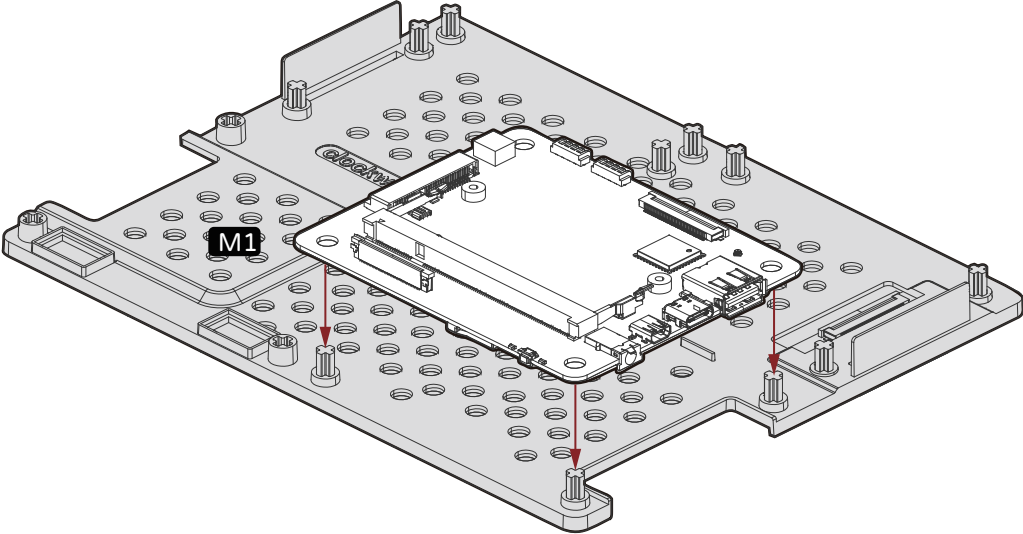
clockworkPi v3.14 is compatible with the Raspberry Pi CM3 series, which means that your work on the Raspberry Pi can be "teleported" to a portable terminal in seconds.

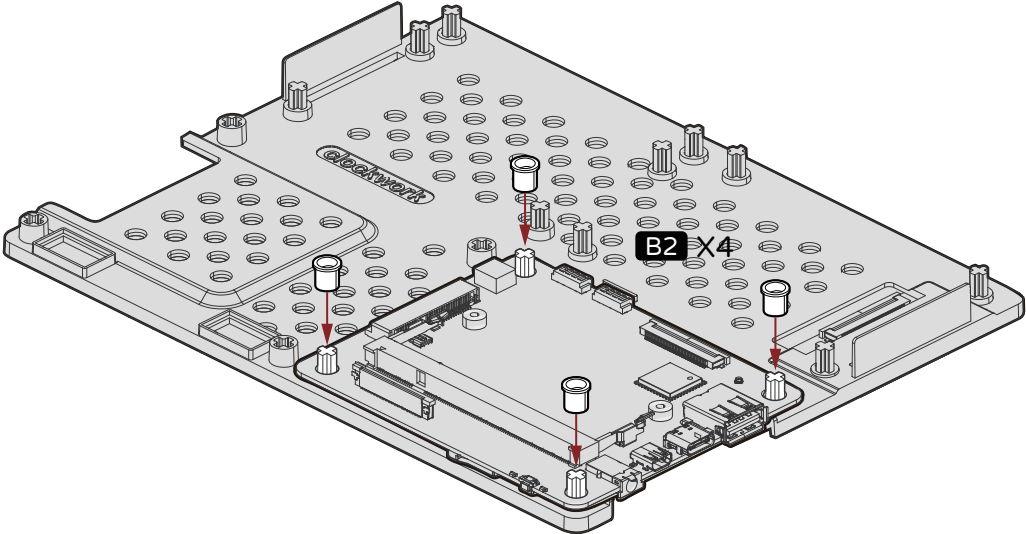
Parts List: **M1** **B2** X4

### WARNING

- Electrostatic-sensitive device!







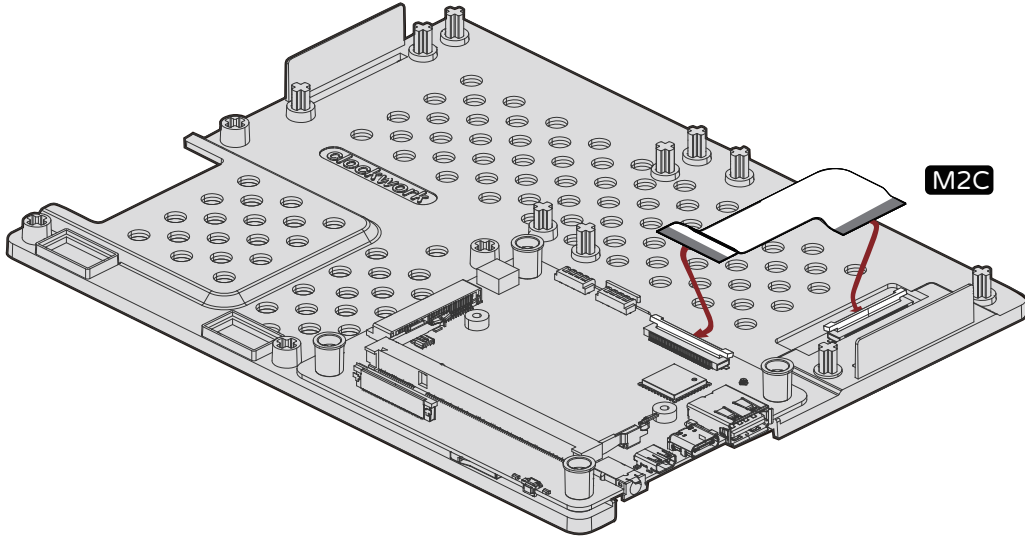
## C. Connect the Screen & the Mainboard

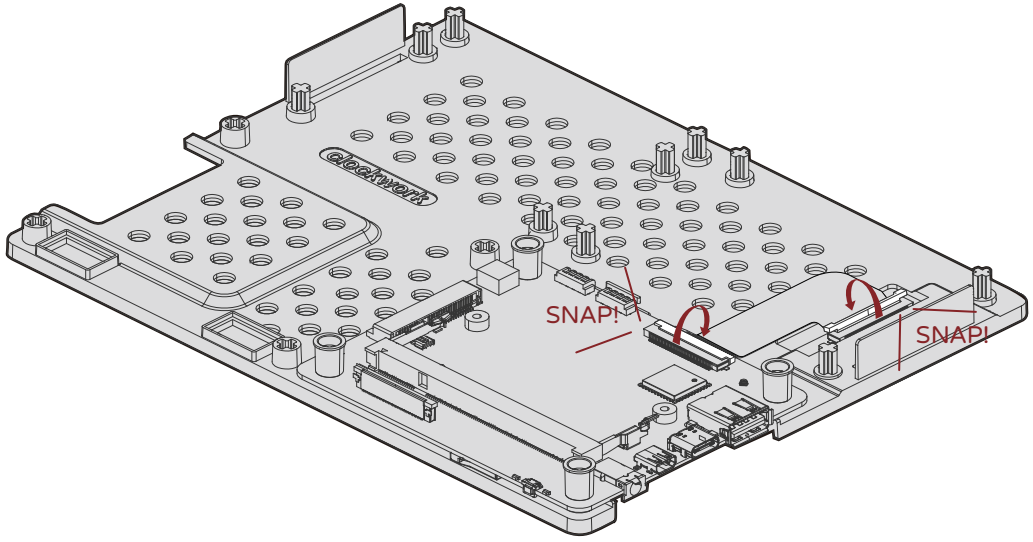
Parts List: **M2C**

### WARNING

- FRAGILE! Handle Carefully.

C1





## 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

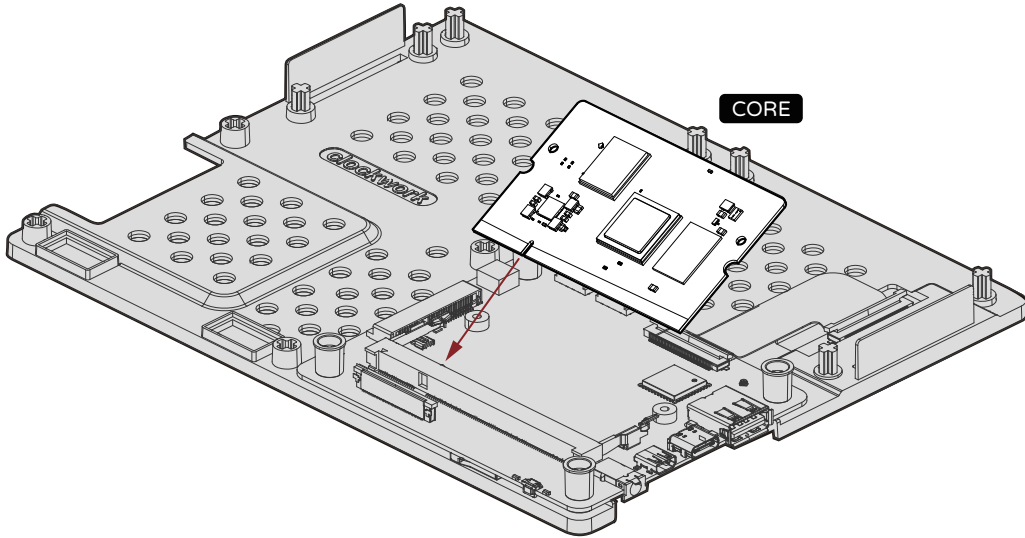
### WARNING

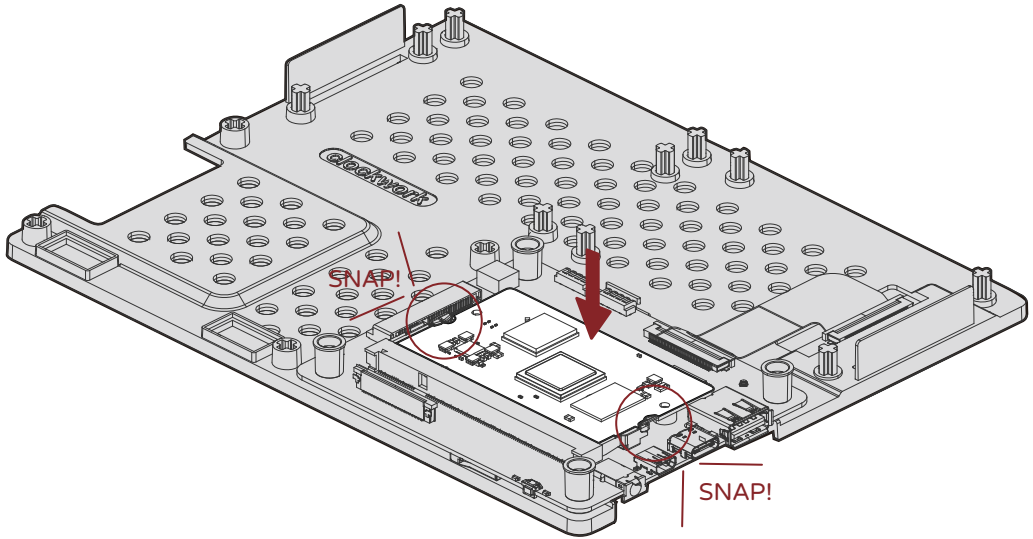
- Electrostatic-sensitive Device.
- FRAGILE! Handle Carefully.

### Recommended tools

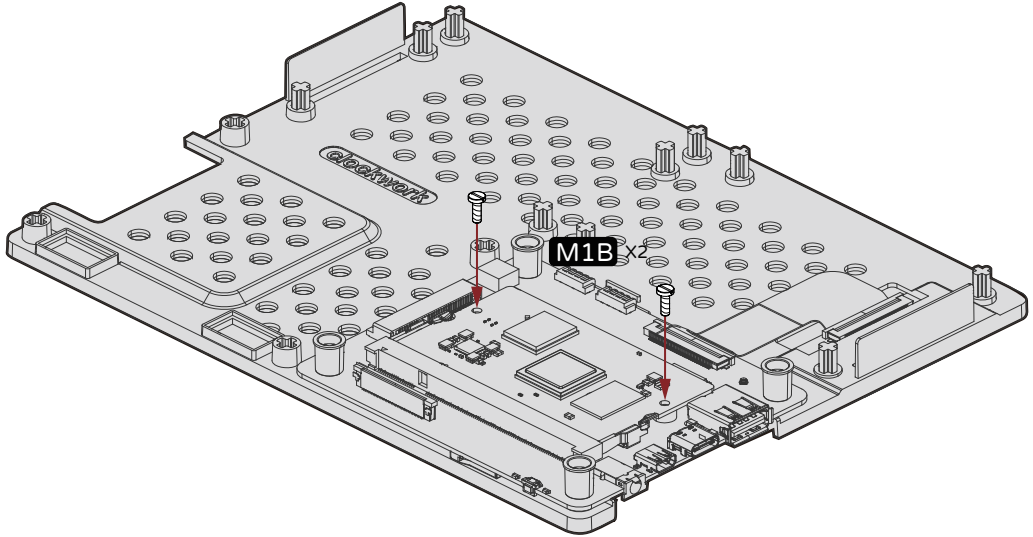
- Screwdriver

D1







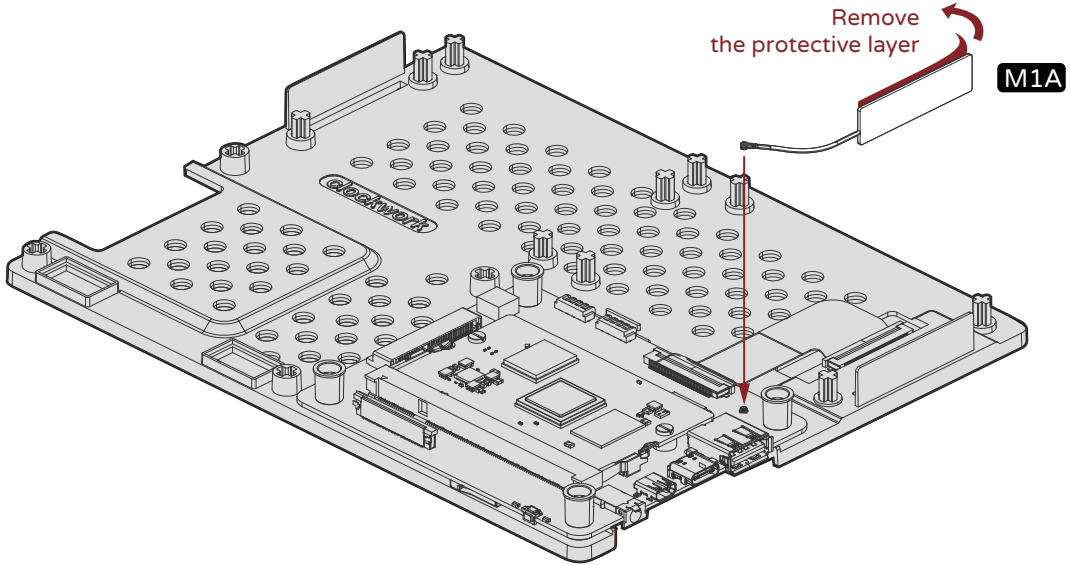


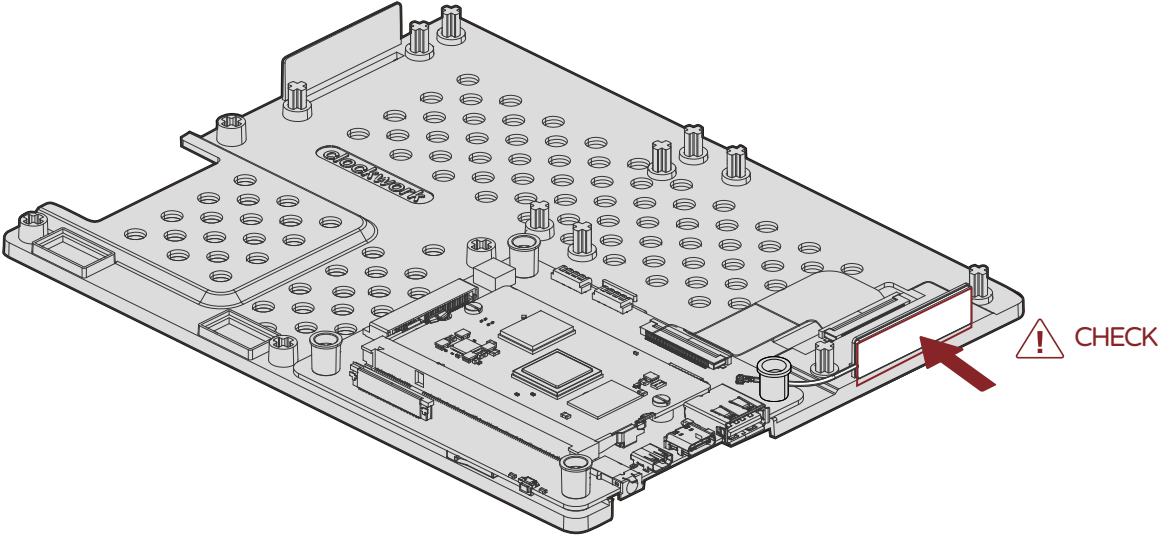
## E. Install the Antenna

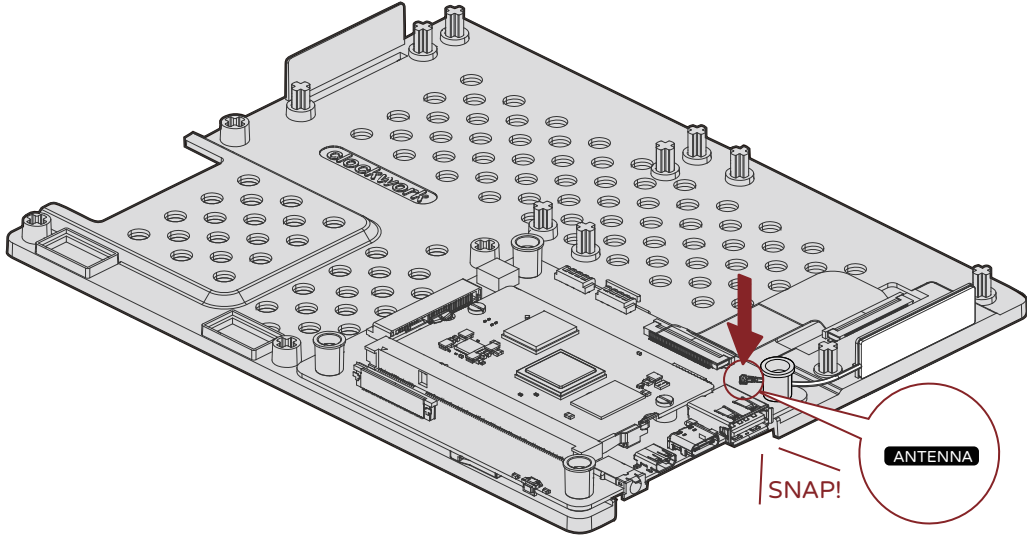
Parts List: **M1A**

### WARNING

- FRAGILE! Handle Carefully.





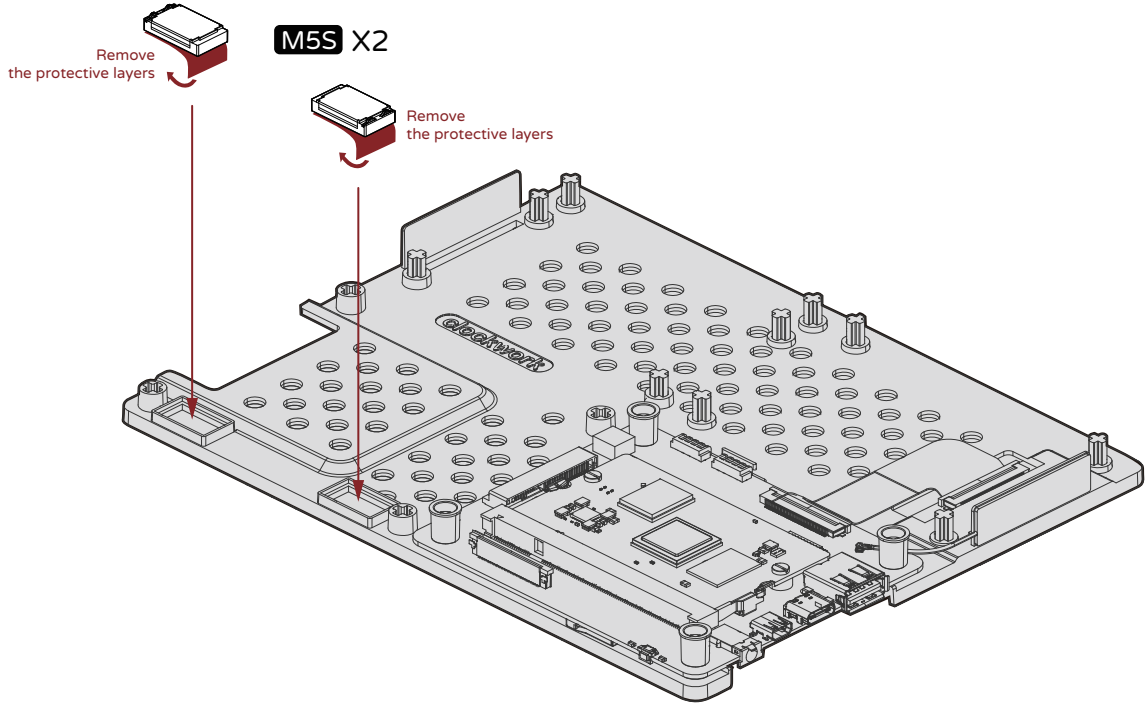


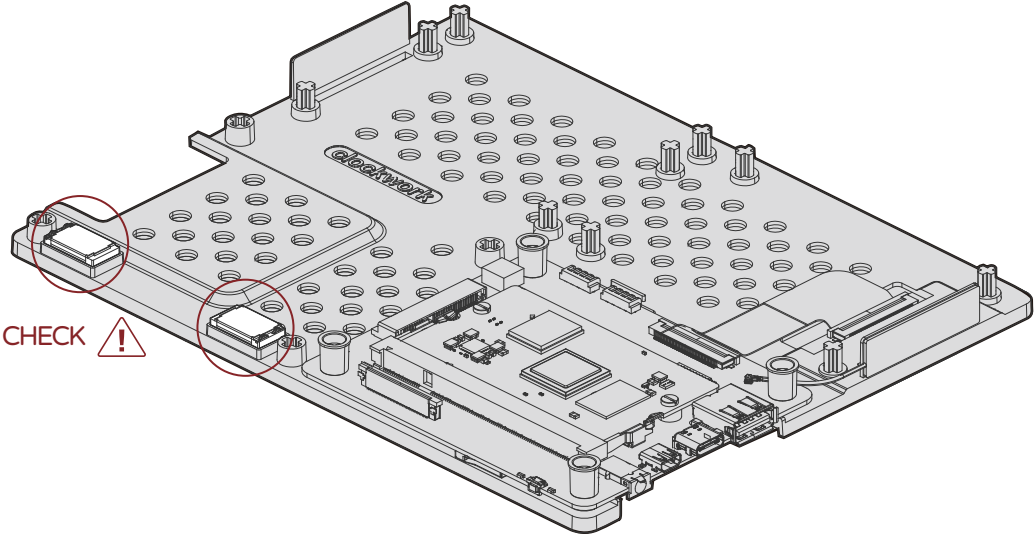
## F. Paste the Speakers

Parts List: **M5S** X2

### WARNING

- Remove The Protective Layer Before Installation.







## G. Mount the Ext. Module

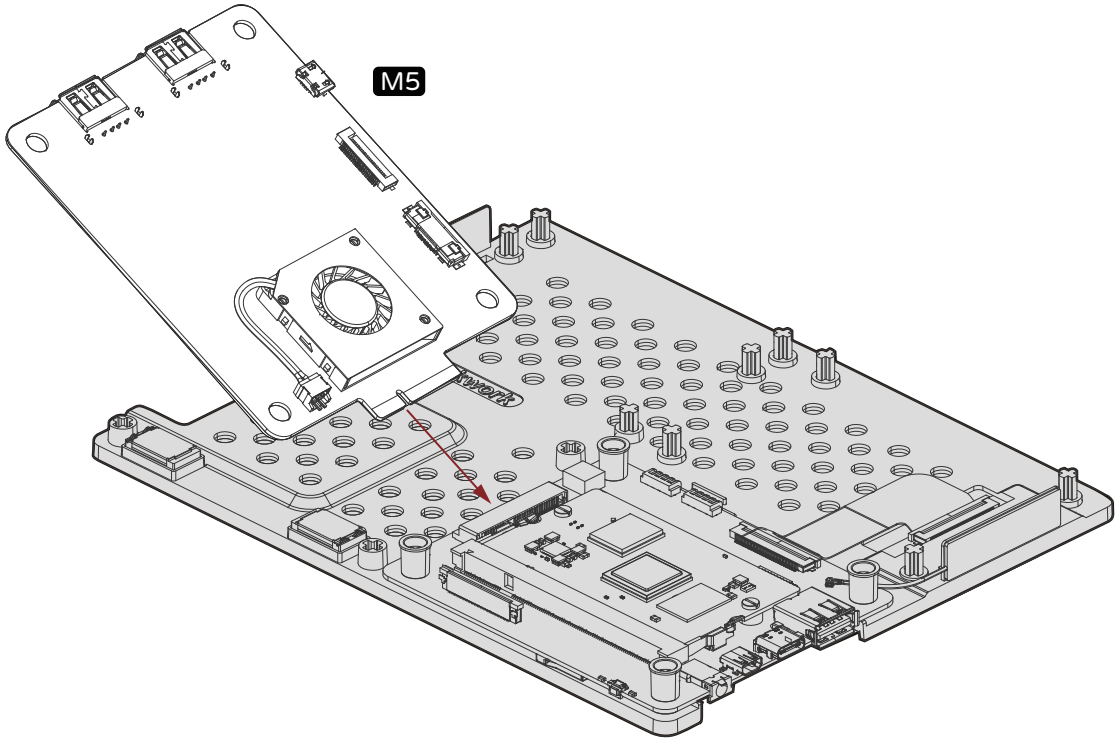
Parts List: **M5** **B3** X4

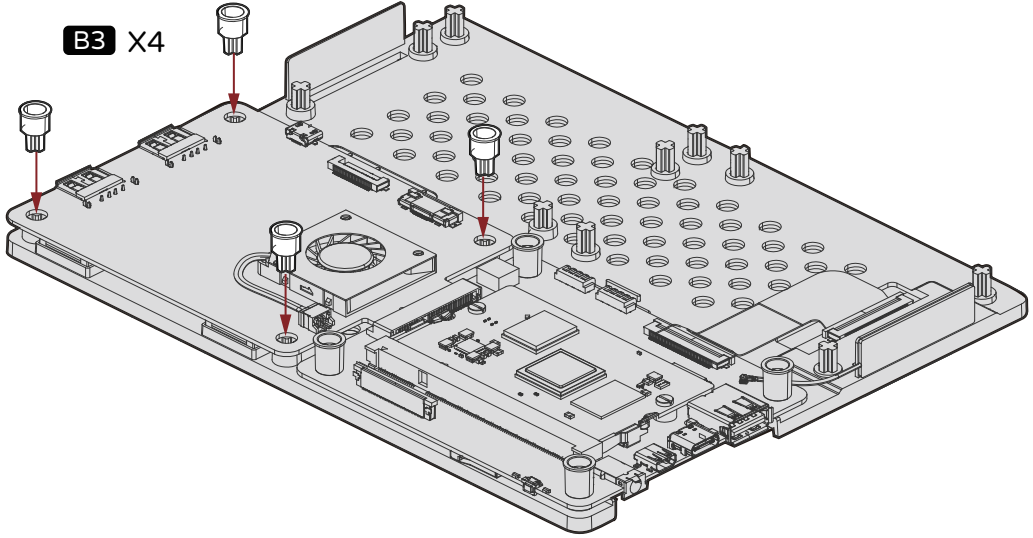
### WARNING

- Electrostatic-sensitive Device.

### Recommended tools

- Side Cutters



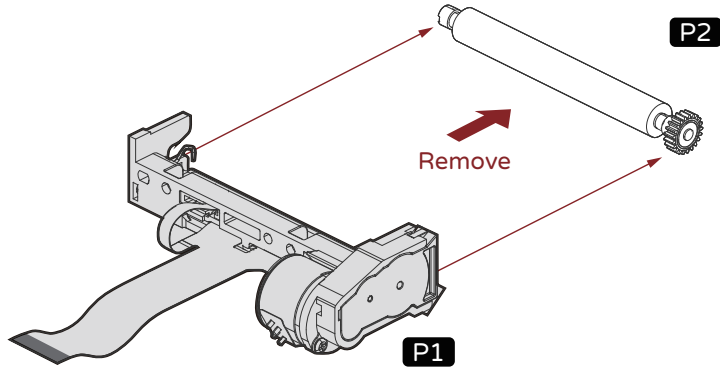


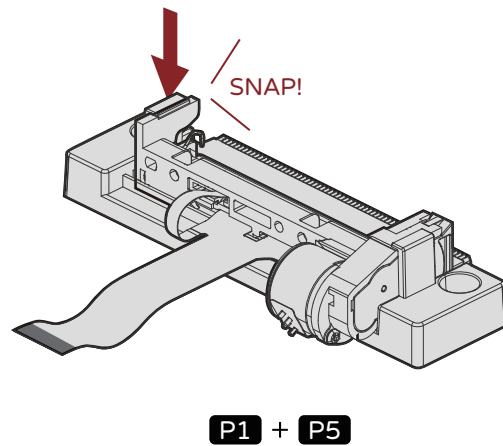
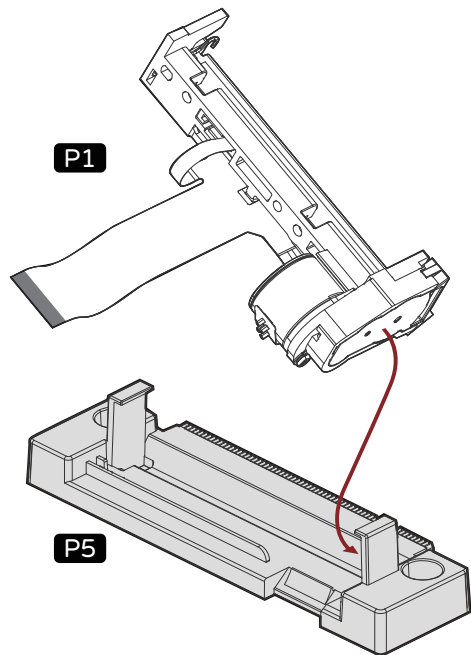
## H. Assemble the Thermal Printer Module

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

### WARNING

- Electrostatic-sensitive Device.





H2

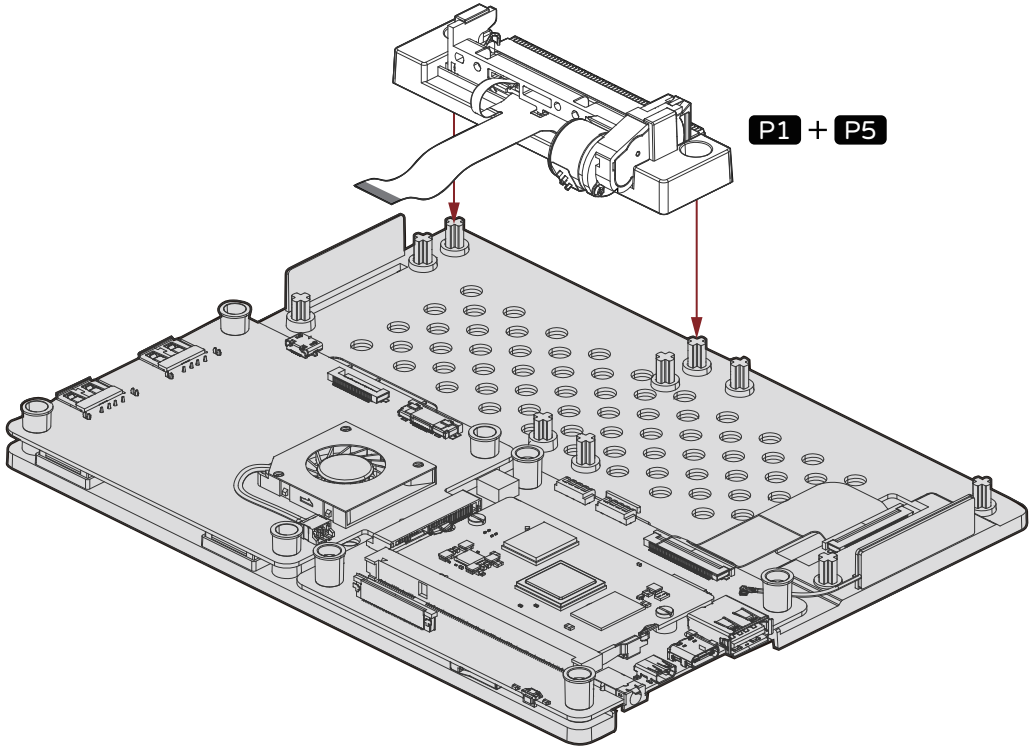
# I. Mount the Thermal Printer Module

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

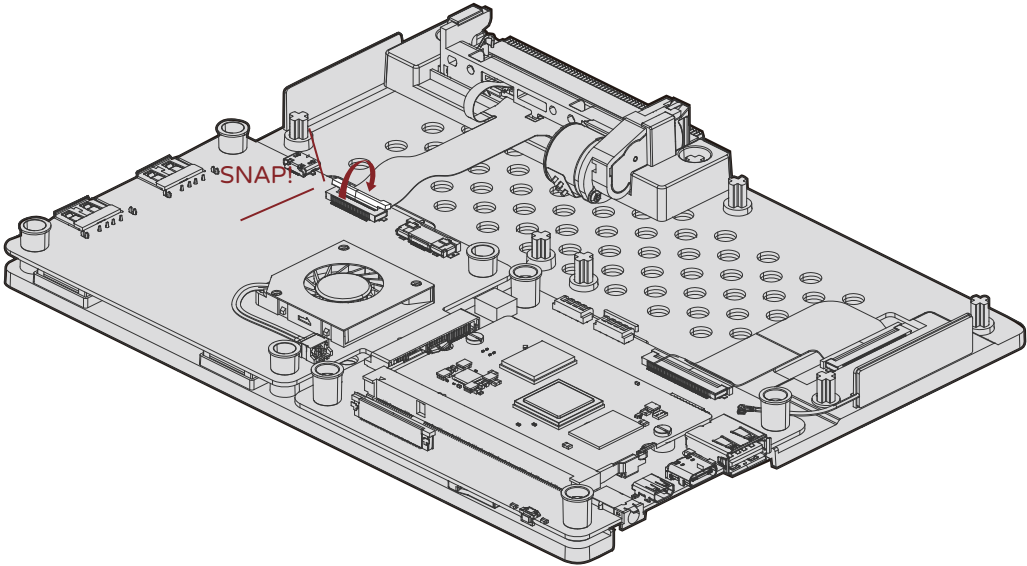
Parts List: **P1** + **P5** **B1** X4

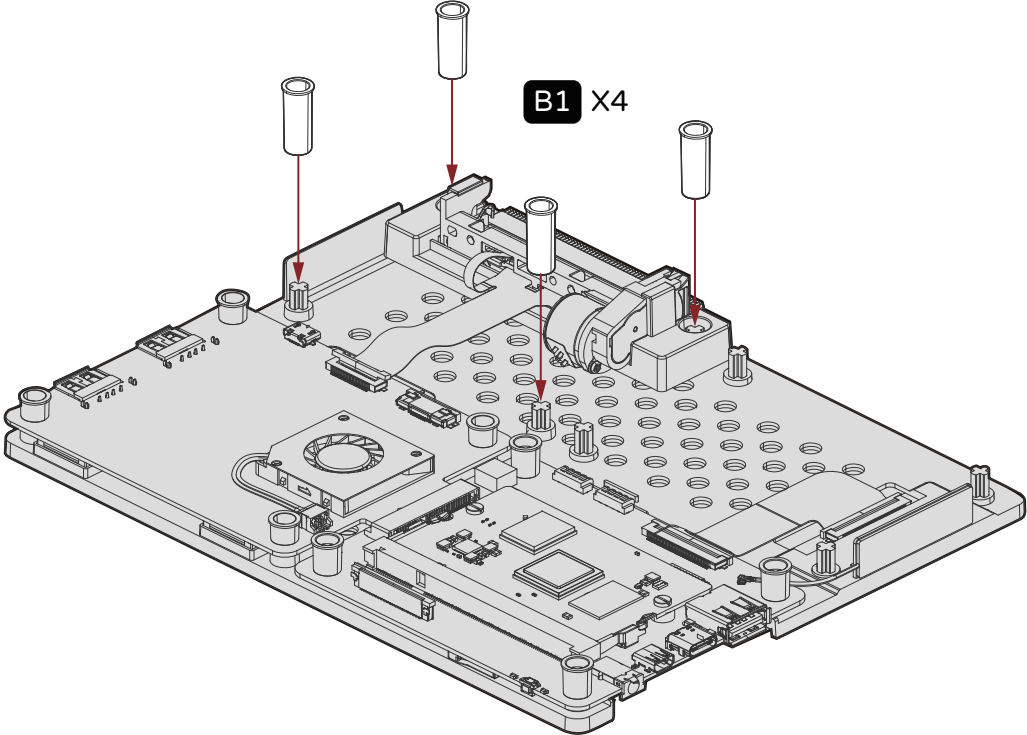
## WARNING

- Electrostatic-sensitive Device.









# J. Mount the Battery Module

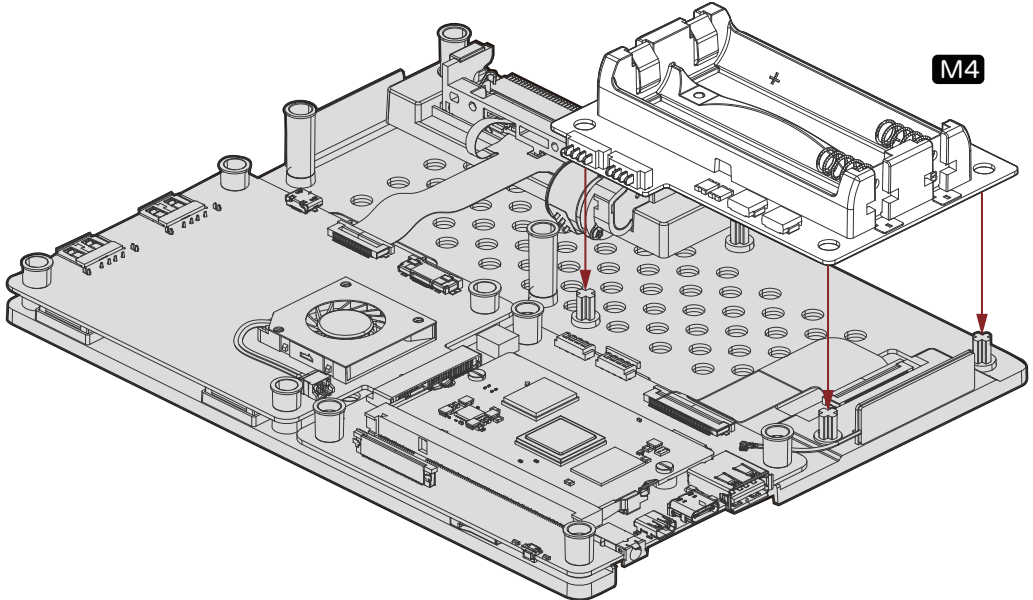
This battery module is compatible with various 18650 battery sizes:

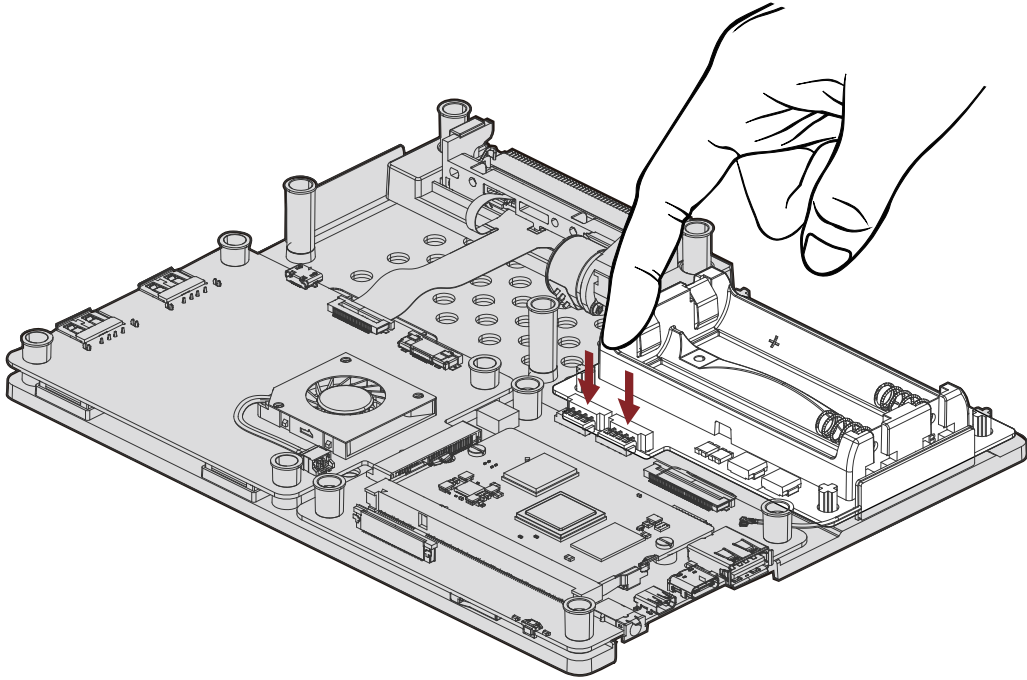
- Diameter:  $\Phi 18 \pm 0.5 \text{mm}$
- Length: 65-69mm

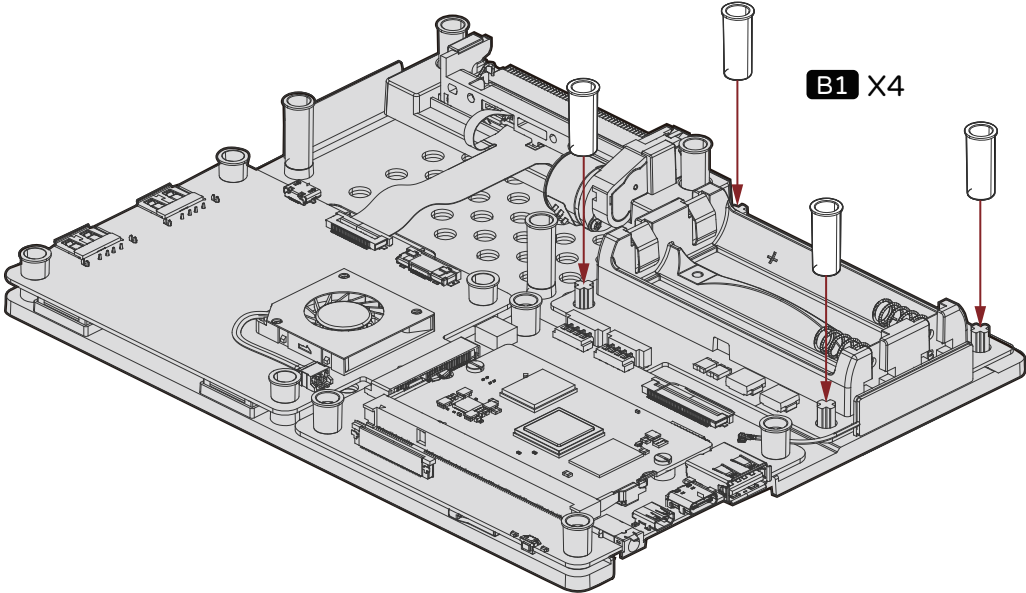
Parts List: **M4** **B1** X4

NOTE:

- The 18650 batteries are not included in the package.







# K. Mount the Back Shell

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

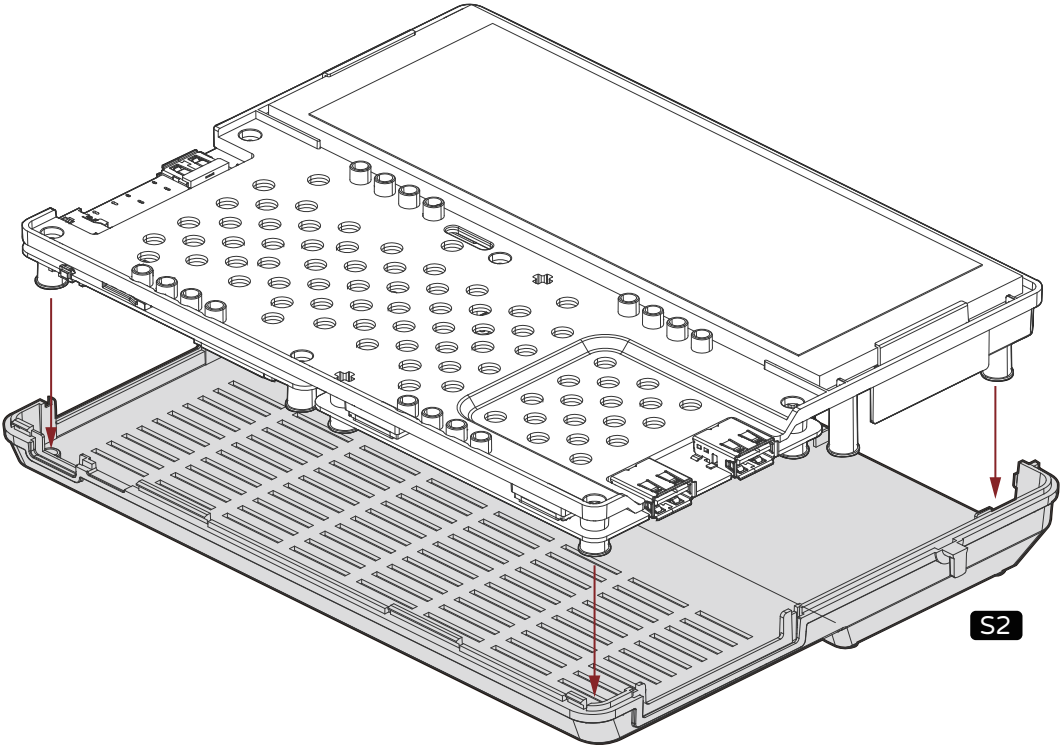
## WARNING

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

## Recommended tools

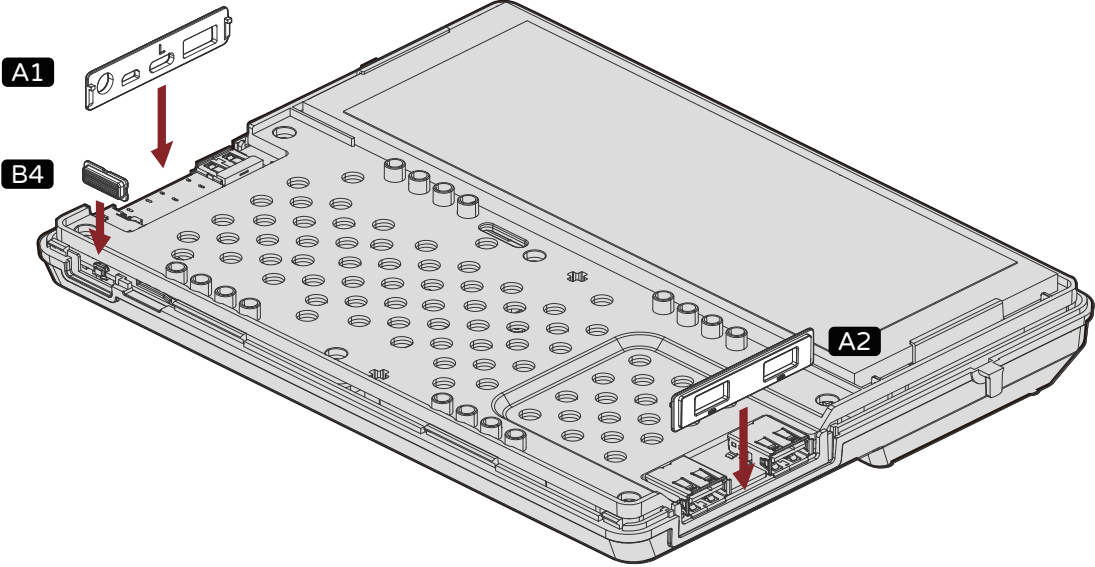
- Side Cutters

K1



S2



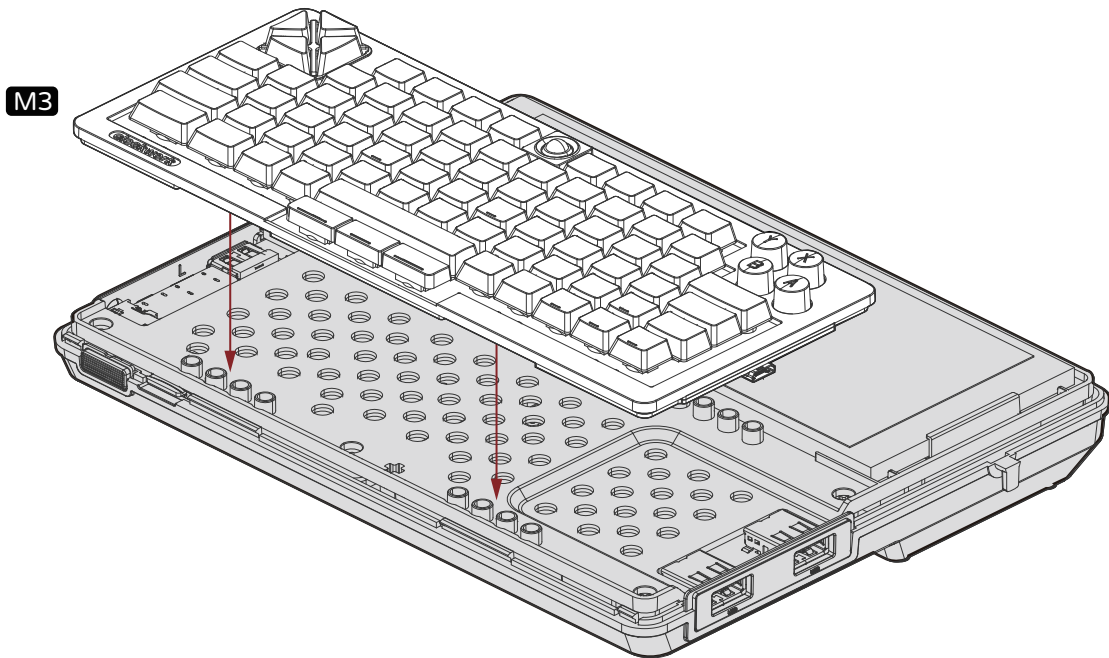


# L. Mount the Keyboard

Parts List: **M3**

## WARNING

- Electrostatic-sensitive device



# M. Mount the Front Shell

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

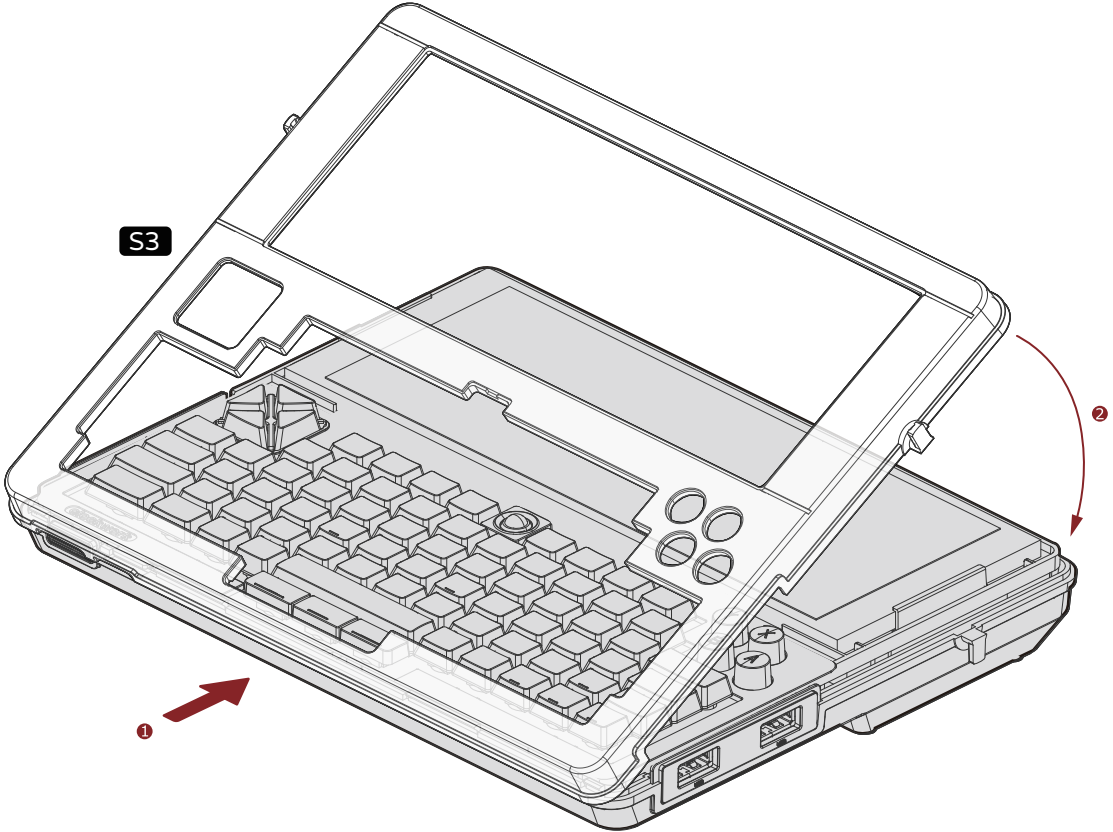
## WARNING

- Follow the diagram carefully.

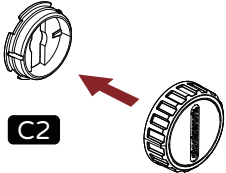
## Recommended tool

- Side Cutters

M1



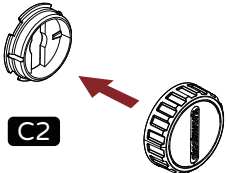
M2



C2



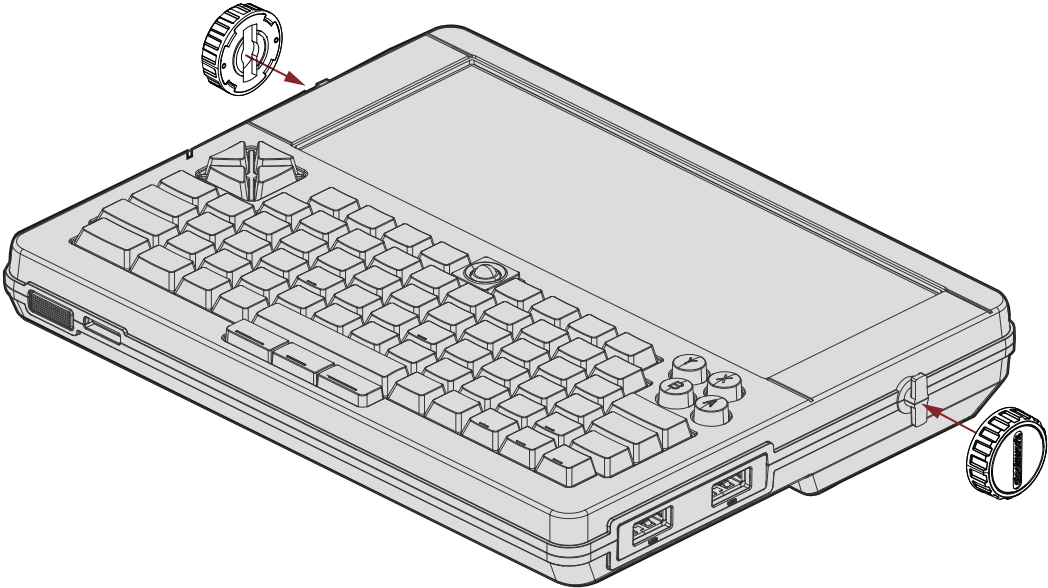
C1



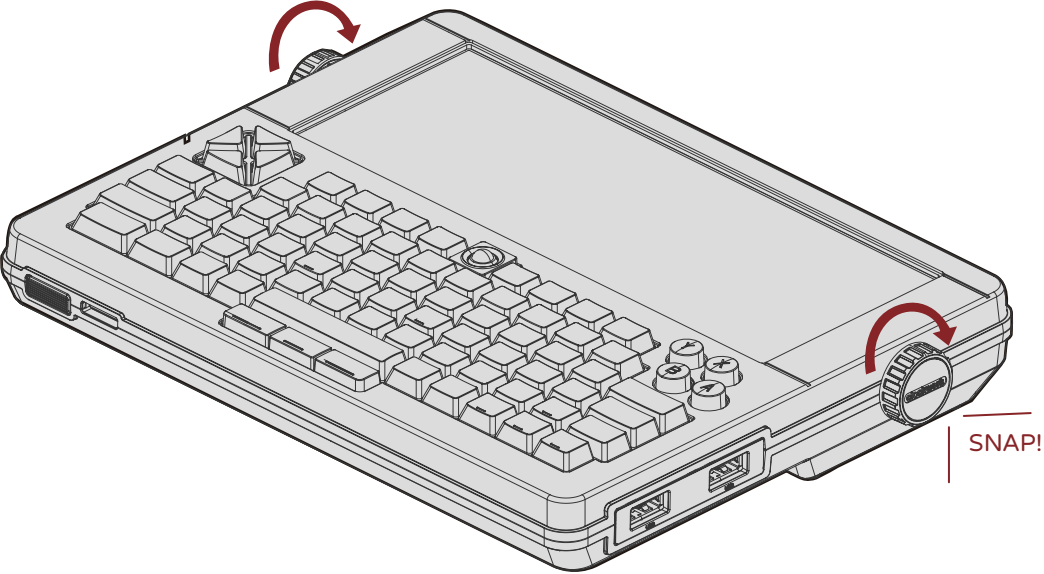
C2



C1



M3



## N. Mount the Exp. Port Cover

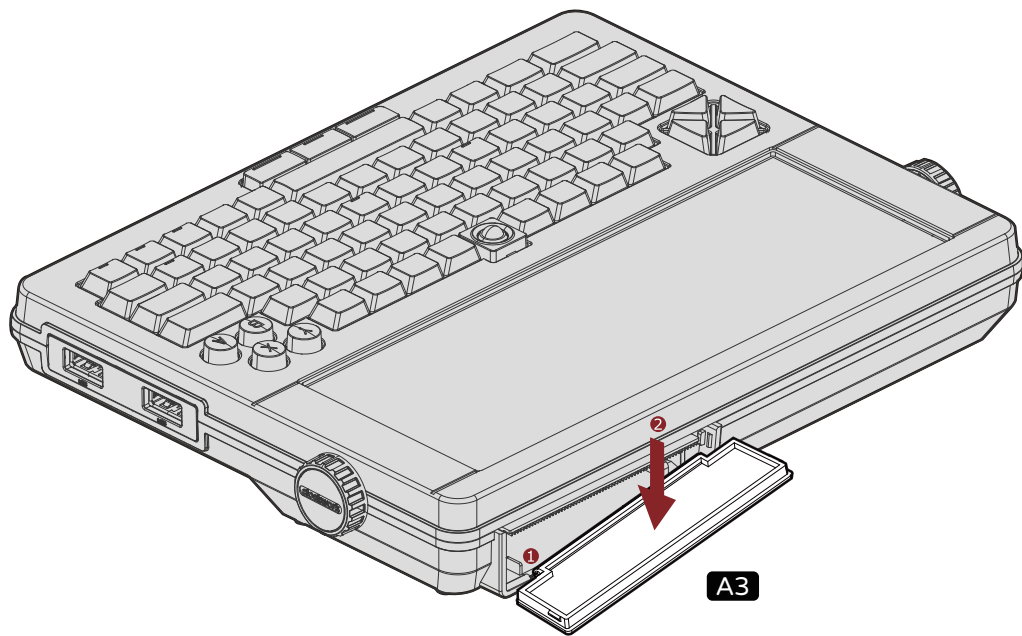
Parts List: **A3**

### WARNING

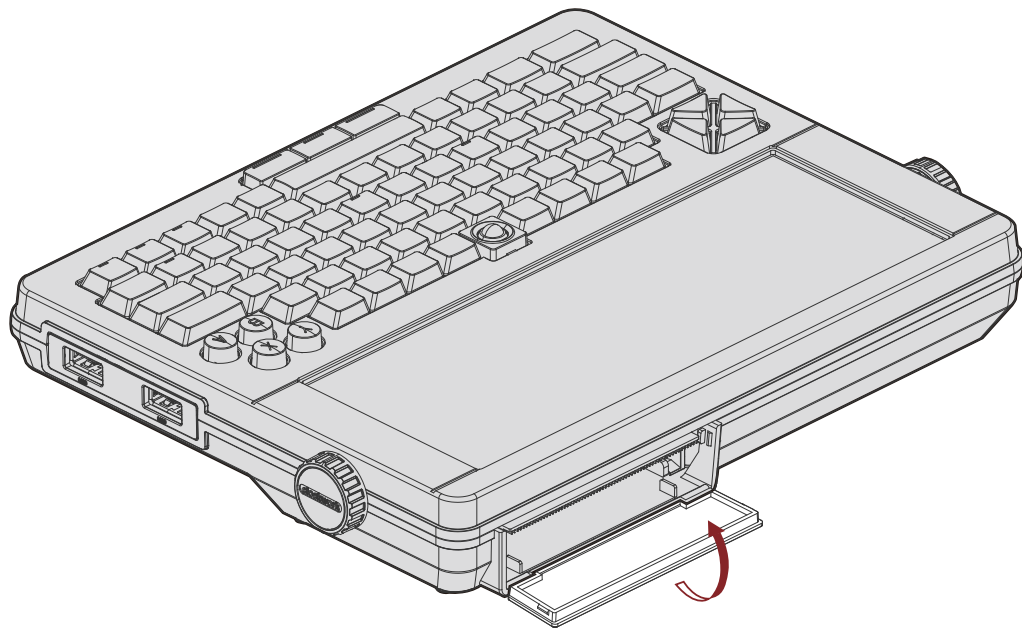
- Follow the diagram carefully.



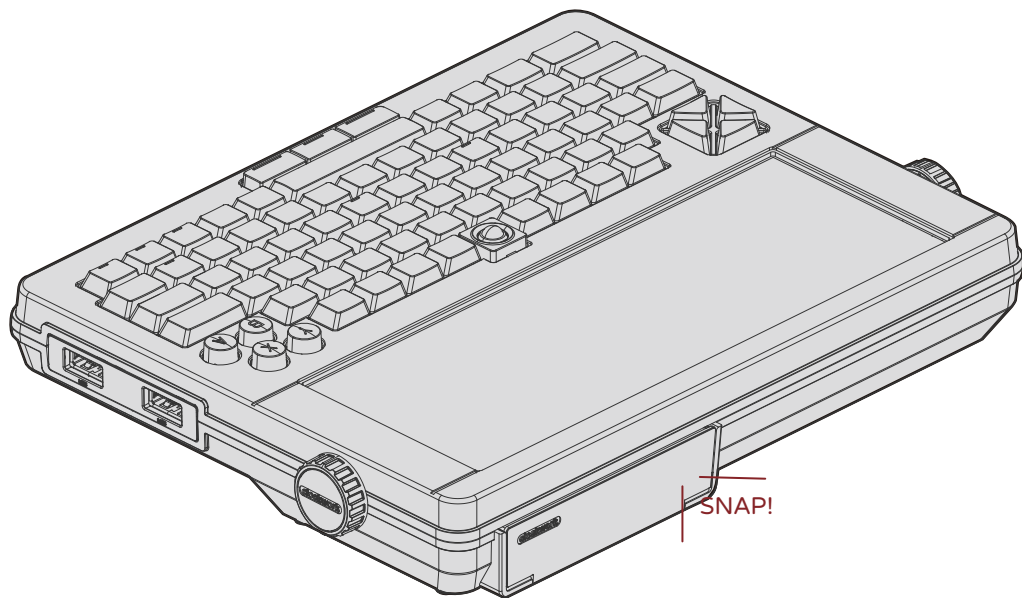
N1



N2



N3

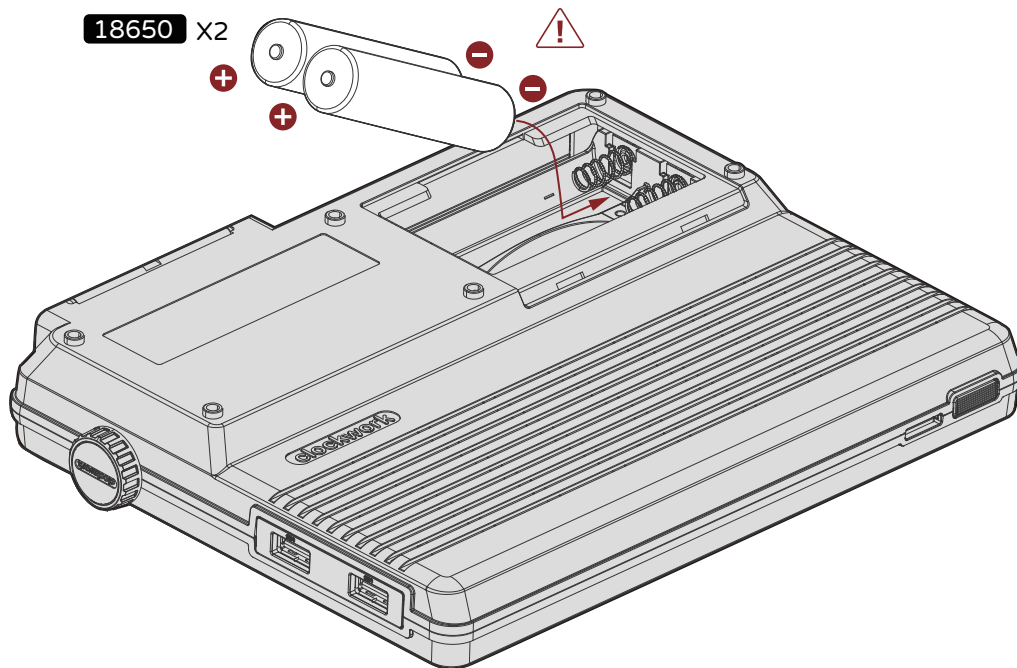


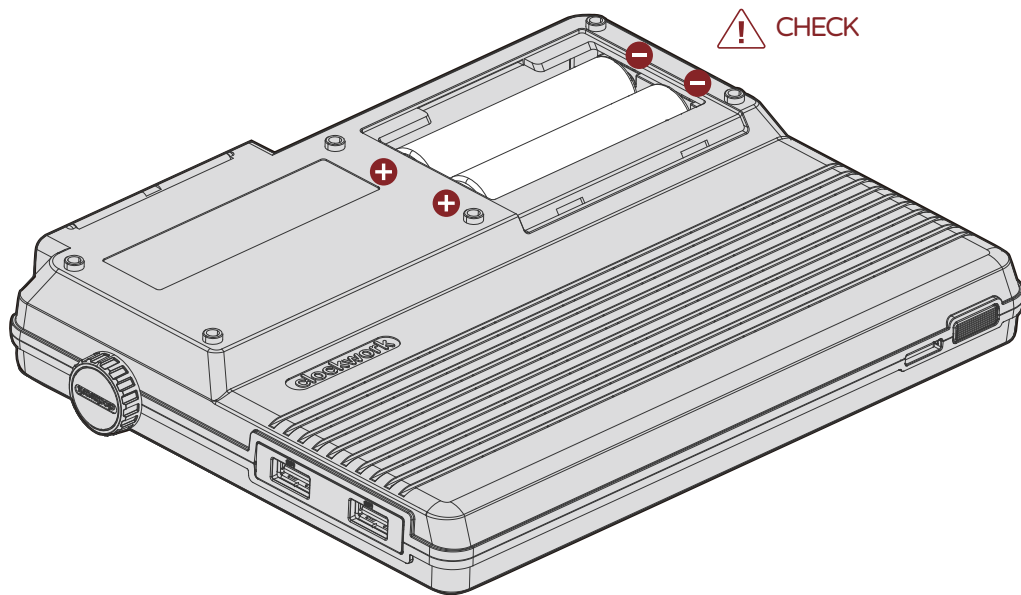
## O. Mount the 18650 Batteries

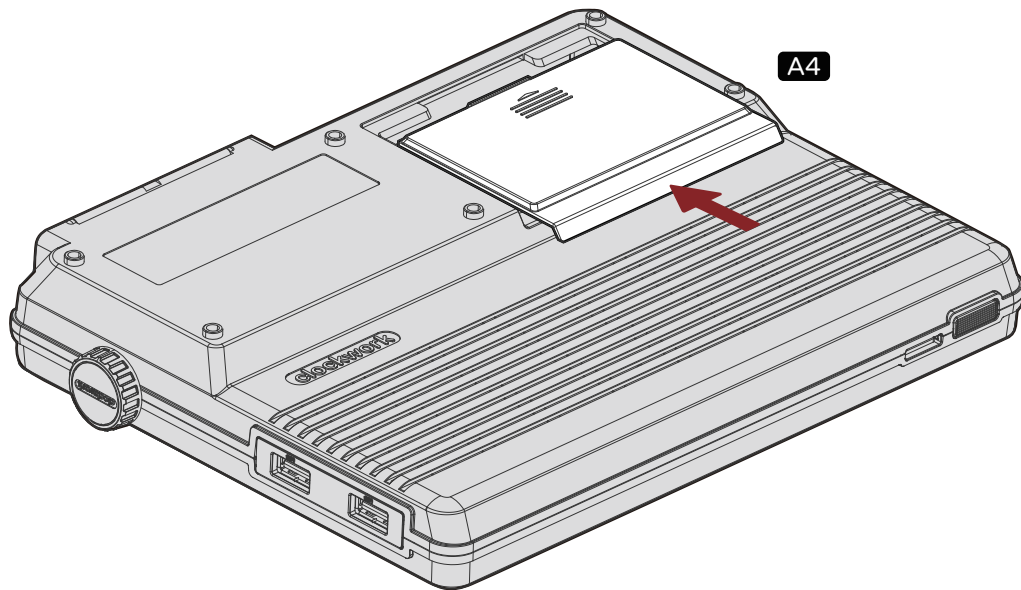
Parts List: **A4** **18650** X2

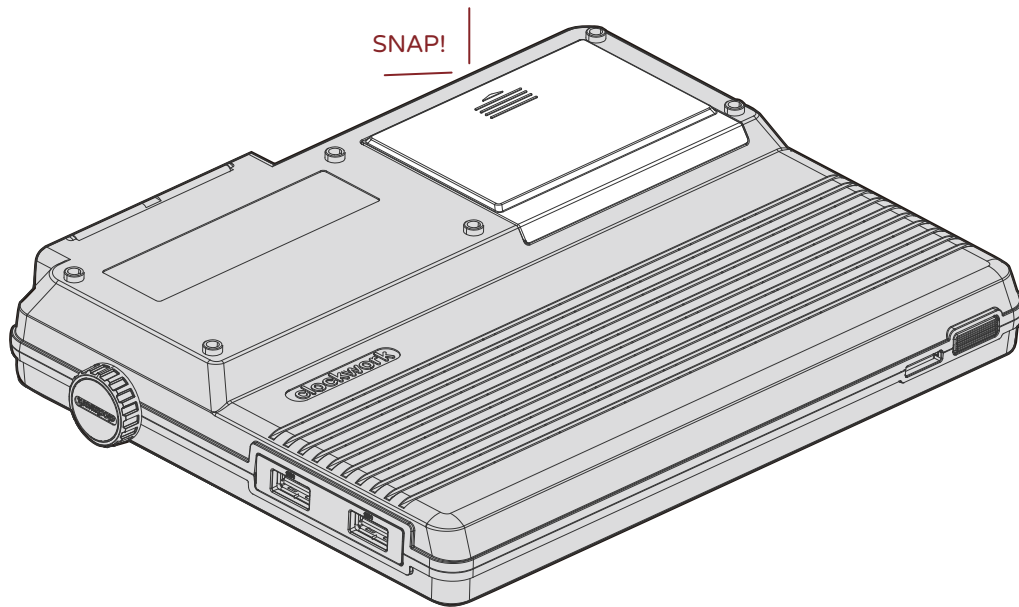
### WARNING

- 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.









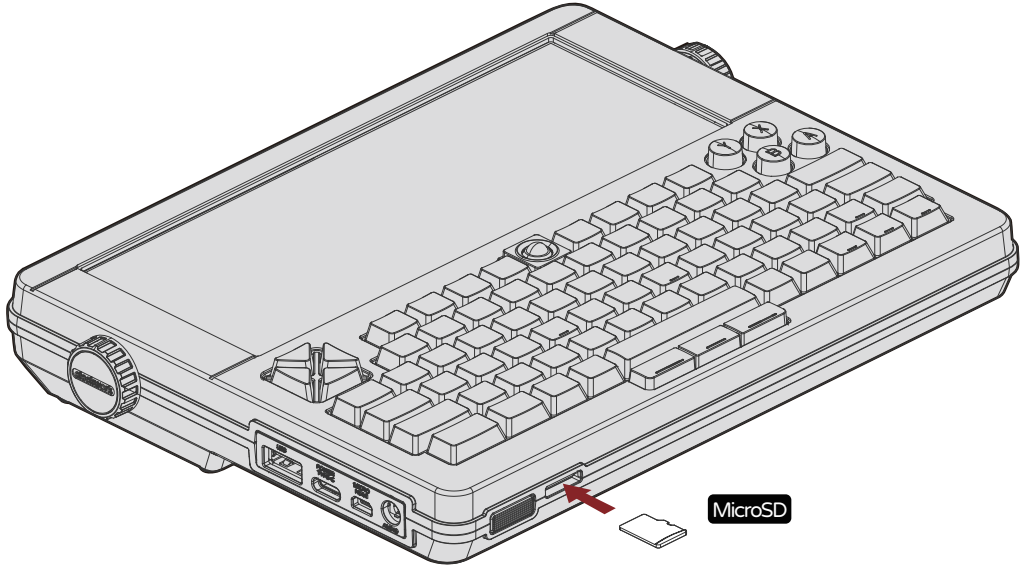


## P. Insert the MicroSD & Power On

Parts List: **MicroSD**

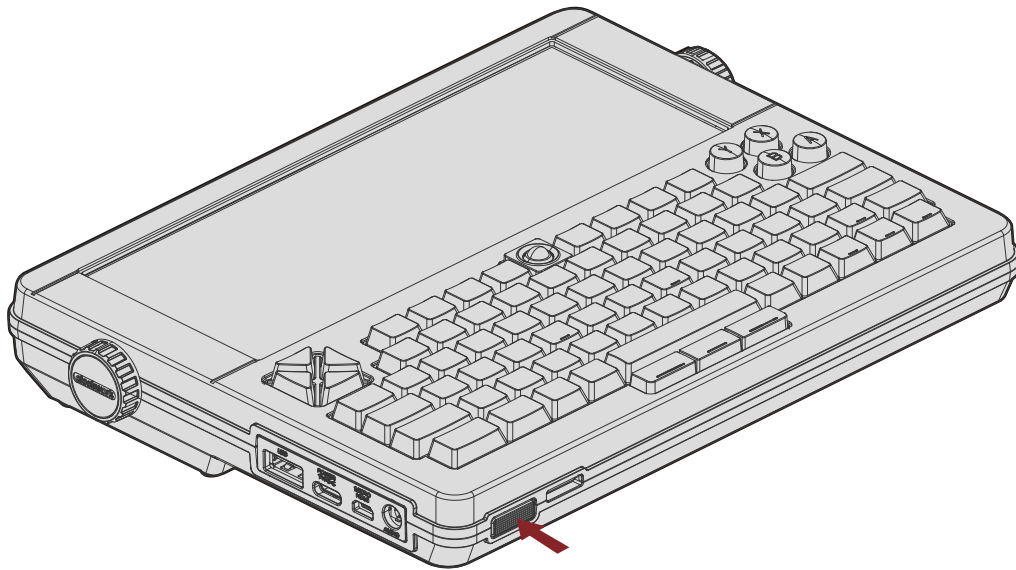
### WARNING

- The microSD must be inserted before power on.





P2



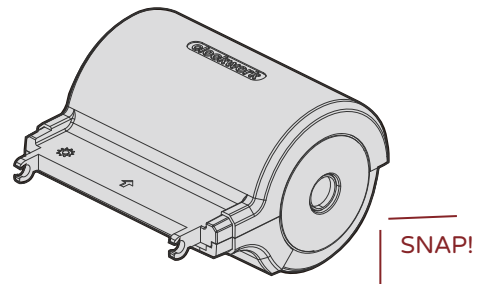
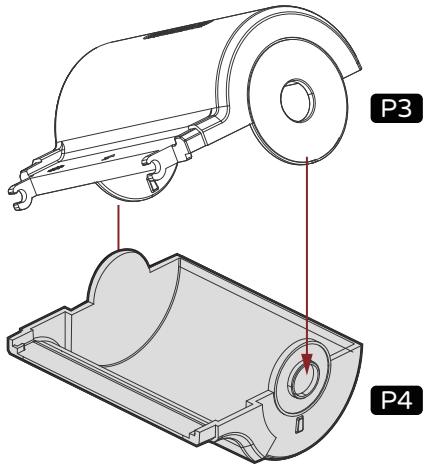
Power ON - Pressing and holding the "ON/OFF" button for 2 seconds. It may take about 60 seconds to boot up for the first time.

## Q. Assemble the Input Tray

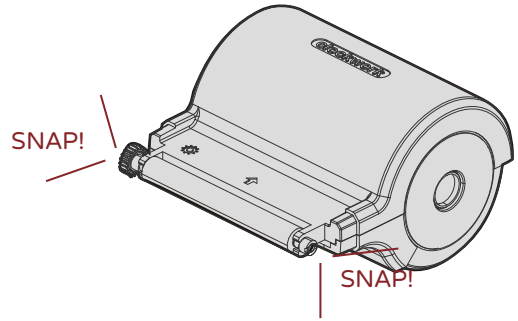
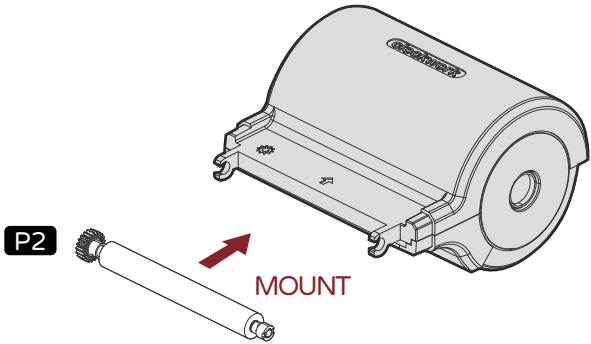
Parts List: **P2** **P3** **P4** **P6**

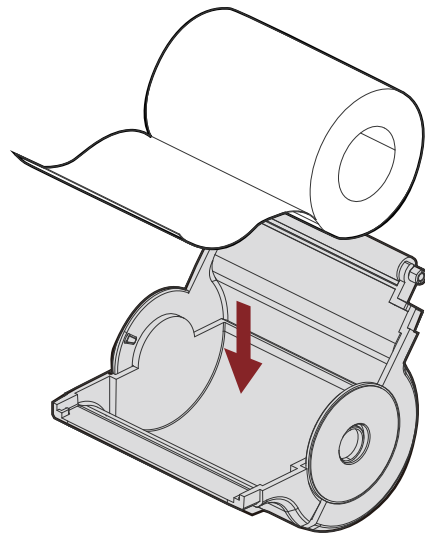
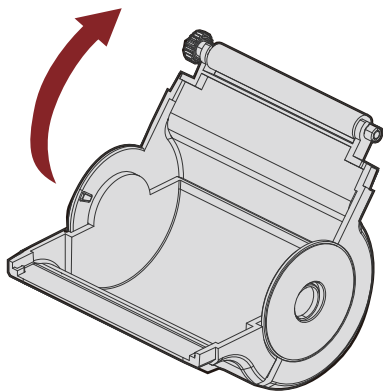
### NOTE

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

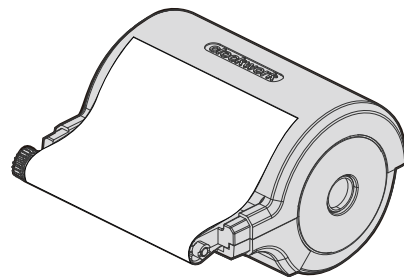
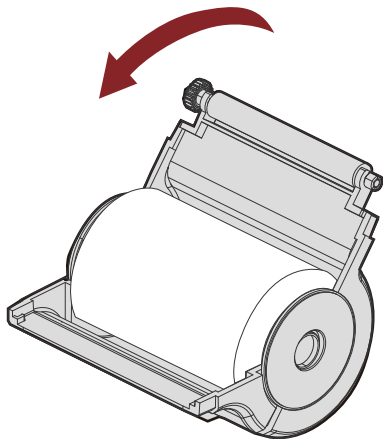


Q1





Q3



Q4



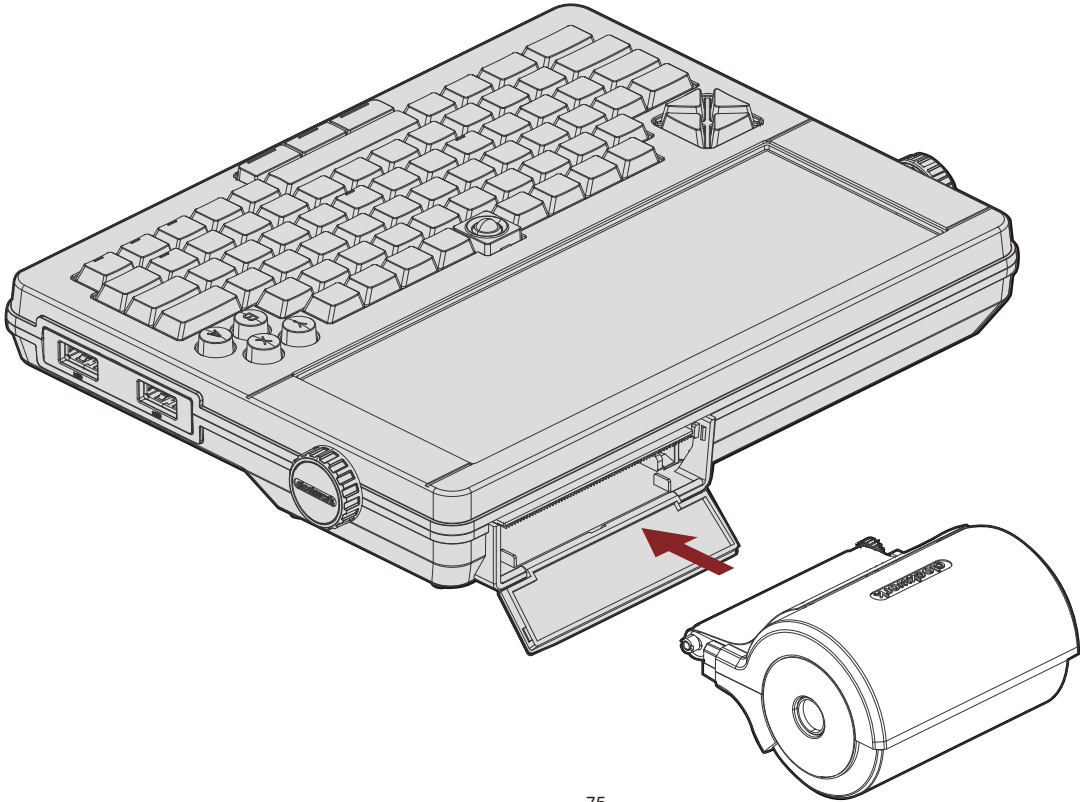
## R. Mount/Unmount the Input Tray

Parts List: Pre-assembled Input Tray

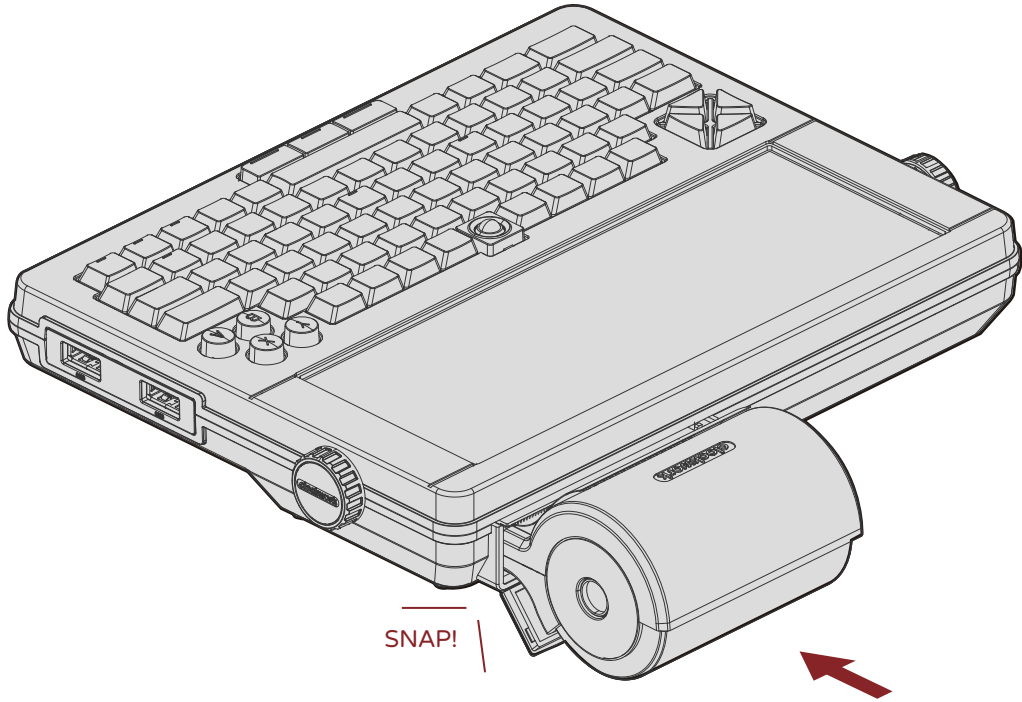
### WARNING

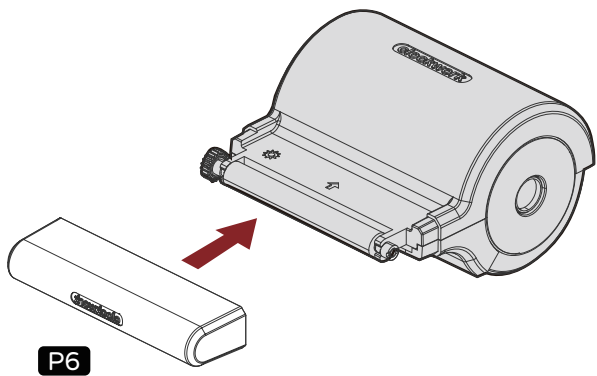
- Follow the diagram carefully.

R1

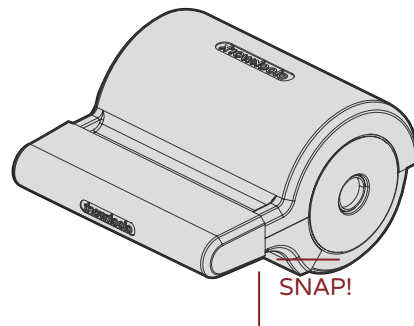


R2



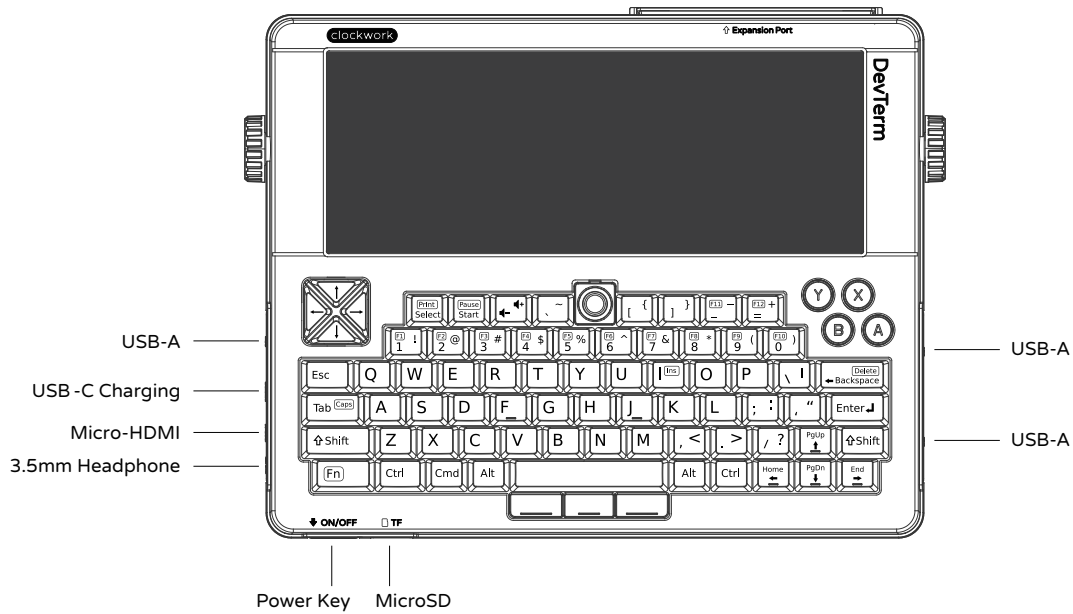


R3



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

# The Interfaces



# FAQ

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## 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](mailto: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