

# Tinker Board 2 Series

**User Manual** 



E17169 First Edition March 2021

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# Conventions used in this manual

To highlight key information in this manual, some text are presented as follows:

**IMPORTANT!** This message contains vital information that must be followed to complete a task.

**NOTE:** This message contains additional information and tips that can help complete tasks.

**WARNING!** This message contains important information that must be followed to keep you safe while performing certain tasks and prevent damage to your Single Board Computer's data and components.

# **Typography**

**Bold text** Indicates a menu or an item to select.

Italic This indicates sections that you can refer to in this manual.

# Where to find more information

Refer to the following sources for additional information and for product and software updates.

# **ASUS Websites**

The ASUS website (https://www.asus.com/) provides updated information on ASUS hardware and software products.

# **Optional Documentation**

Your product package may include optional documentation, such as warranty flyers, that may have been added by your dealer. These documents are not part of the standard package.

# 1

# **Product Overview**

# 1.1 Introduction

Tinker Board 2 Series is more than a dream for the DIY-obsessed: it's a gateway to new ideas and new relationships. Experienced makers will love Tinker Board's performance-to-price ratio and strong brand heritage, while novices and younger users will appreciate its accessibility and ease of use. But all will come together to create — Together We Make!

# 1.2 Features

Tinker Board 2 Series features are listed below:

- Ultimate performance for IoT devices
  - Enhanced CPU and GPU performance
  - Rich, future-proof connectivity
- · Versatile and safe
  - Expandability for Embedded Solutions
  - Comprehensive protection
- Enhanced experience
  - Easy setup tool
  - IT management software (AICC, FOTA)
  - Support Android 10

# 1.3 Package contents

Check your package for the following items:

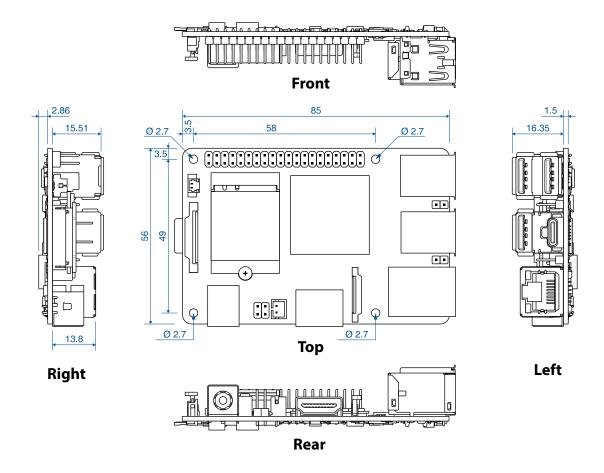
- 1 x Tinker Board 2 or Tinker Board 2S
- 1 x Heatsink\*
- 2 x Wi-Fi/Bluetooth antenna cables
- 1 x Shielding bag
- 1 x Quick start guide

<sup>\*</sup> Beware of high temperatures when only using the bundled heatsink.

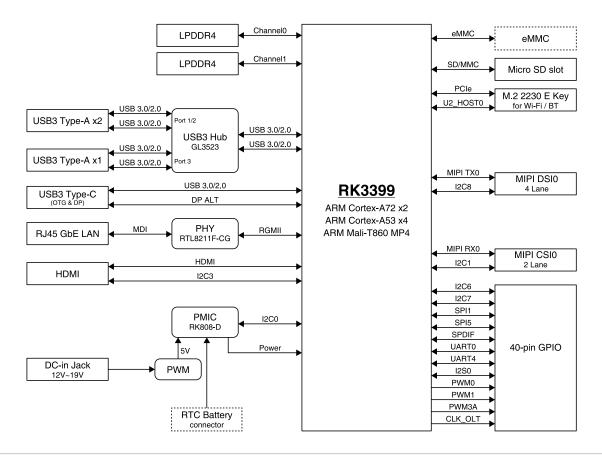
# **1.4 Product specification**

	Tinker Board 2	Tinker Board 2S			
SoC	Rockchip RK3399 (64-bit)				
СРИ	Dual-core Arm <sup>®</sup> Cortex <sup>®</sup> -A72 @ 2.0 Gł Quad-core Arm <sup>®</sup> Cortex <sup>®</sup> -A53 @ 1.5 G				
GPU	Arm® Mali™-T860 MP4 GPU @ 800 MF				
dr 0	1 x HDMI™ with CEC hardware ready	1Z			
Display	1 x USB Type-C <sup>®</sup> (DP 1.2)				
Display	1 x 22-pin MIPI DSI (4 lane) supports	un to FHD			
Memory Size	Dual-CH LPDDR4 2GB or 4GB				
memory Size	-	16GB eMMC			
Storage	Micro SD(TF) card slot (push/pull)	TOOD CIVILVIC			
	RTL8211F-CG GbE LAN				
Connectivity	M.2 - 802.11 a/b/g/n/ac wireless & BT	5 0 (2T2R)			
	1 x HDMI™ audio output	5.0 (21211)			
Audio	1 x S/PDIF TX pin (from GPIO)				
Addio	1 x PCM/I2S pins (from GPIO)				
	3 x USB 3.2 Gen 1 Type-A ports				
USB	1 x USB 3.2 Gen 1 Type-C® OTG port				
Camera Interface	1 x 15-pin MIPI CSI-2 (2 lane)				
Internal Headers	1 x 40-pin header includes: - up to 28 x GPIO pins - up to 2 x SPI bus - up to 2 x I2C bus - up to 2 x UART - up to 3 x PWM - up to 1 x PCM/I2S - up to 1 x S/PDIF TX - 2 x 5V power pins - 2 x 3.3V power pins - 8 x ground pins 1 x 2-pin Recovery header				
	1 x 2-pin Power-on header 1 x 2-pin Reset header 1 x 2-pin Debug UART header 1 x 2-pin DC Fan header 1 x 2-pin RTC Battery header				
Power Connector (up to 45W)	1 x 12~19V DC Power Input Jack (5.5/	(2.5 mm)			
Environment	Operation Temperature: 0°C ~ 60°C Non-operation Temperature: -40°C ~ 85°C Non-operation Humidity: 0%~85% (Non-condensing)				
OS Support	Debian 9 / Android 10				
Dimension	3.37" x 2.125" (85 x 56 mm)				

# 1.5 Dimensions (mm)



# 1.6 Block diagram



# 2

# **Product Introduction**

#### Before you proceed 2.1

Take note of the following precautions before you install your Single Board Computer components or change any single board computer settings.

**NOTE:** The diagrams in this chapter are for reference only. The Single Board Computer layout may vary with models.

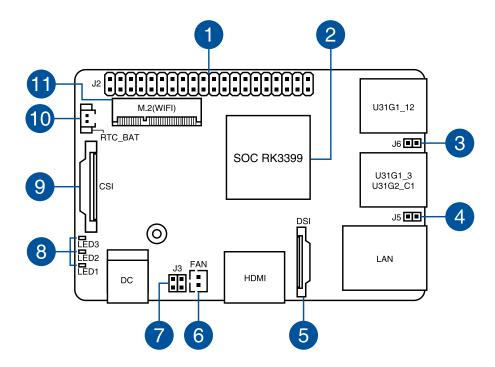
**IMPORTANT!** Components shown in this section may be purchased separately. Refer to **Package contents** section for more information about the contents of your Single Board Computer package.

#### **WARNING!**

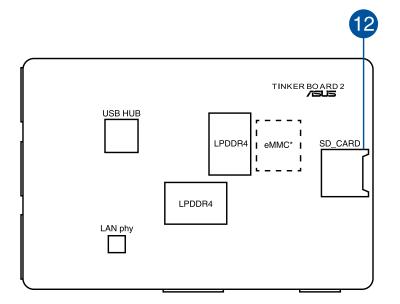
- Unplug the power cord from the wall socket before touching any component.
- Before handling components, use a grounded wrist strap or touch a safely grounded object or a metal object, such as the power supply case, to avoid damaging them due to static electricity.
- Hold components by the edges to avoid touching the ICs on them.
- Whenever you uninstall any component, place it on a grounded antistatic pad or in the bag that came with the component.
- Before you install or remove any component, ensure that the power supply is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the single board computer, peripherals, or components.

# 2.2 Single board Computer layout

# **Top view**



# **Bottom view**

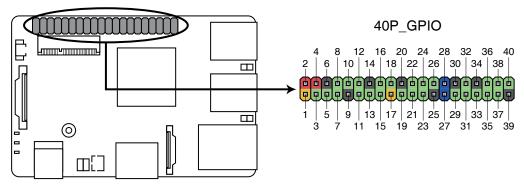


\* eMMC is only available on selected models.

Layout contents				
1.	GPIO header	12		
2.	SOC RK3399	13		
3.	Debug UART header	13		
4.	Reset header	13		
5.	MIPI DSI connector	14		
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9.	MIPI CSI-2 connector	16		
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11.	M.2 Wi-Fi slot	17		
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# **GPIO** header

This 40-pin GPIO (General-Purpose Input/Output) header can be designated (in software) as an input or output pin and is used for a wide range of purposes. Of the 40 pins, 28 are GPIO pins (shared with SPI/ UART/I2C pins).



Tinker Board 2 / 2S 40-pins GPIO header

Pin definition		PIO	Pin definition	
VCC3.3_IO	1	2	VCC5V	
GPIO2_B1/I2C6_SDA	3	4	VCC3V	
GPIO2_B2/I2C6_SCL	5	6	GND	
GPIO0_B0/CLKOUT	7	8	GPIO2_C1/UART0_TX	
GND	9	10	GPIO2_C0/UART0_RX	
GPIO2_C3/UART0_RTSN	11	12	GPIO3_D1/I2S0_SCLK	
GPIO2_C5/SPI5_TXD	13	14	GND	
GPIO2_C4/SPI5_RXD	15	16	GPIO2_C6/SPI5_CLK	
VCC3.3_IO	17	18	GPIO2_C7/SPI5_CSN0	
GPIO1_B0/SPI1_TXD/UART4_TX	19	20	GND	
GPIO1_A7/SPI1_RXD/UART4_RX	21	22	GPIO3_D4/I2S0_SDI1SDO3	
GPIO1_B1/SPI1_CLK	23	24	GPIO1_B2/SPI1_CSN0	
GND	25	26	GPIO0_A6/PWM3A_IR	
GPIO2_A7/I2C7_SDA	27	28	GPIO2_B0/I2C7_SCL	
GPIO3_D6/I2S0_SDI1SDO1	29	30	GND	
GPIO3_D5/I2S0_SDI1SDO2	31	32	GPIO4_C2/PWM0	
GPIO4_C6/PWM1	33	34	GND	
GPIO3_D1/I2S0_LRCK	35	36	GPIO2_C2/UART0_CTSN	
GPIO4_C5/SPDIF_TX	_C5/SPDIF_TX <b>37</b>		GPIO3_D3/I2S0_SDI0	
GND	39	40	GPIO3_D7/I2S0_SDO0	

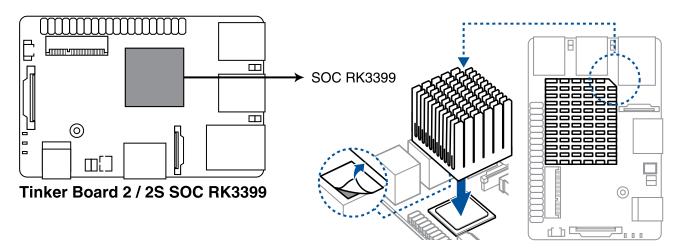
#### **WARNING!**

- Do not use both the system DC power-in jack and the 40-pin GPIO +5V pins (pin 2 and 4, red) for power input at the same time.
- If you wish to use the 40-pin GPIO +5V (pin 2 and 4, red) as a power input source, please make sure the power input rating for each pin complies with the standard of +5V/3A(+/-5%)deviation). A power rating value that exceeds the rating valued mentioned, or an unstable power source may result in damage to your system or hardware. Please refer to the **Top view** illustration for the location of the pins.



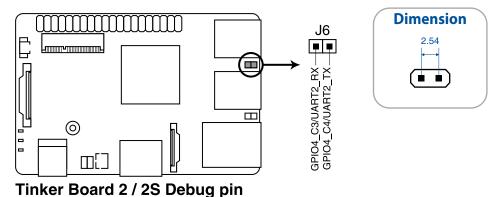
#### 2. **SOC RK3399**

This ARM® system on a chip (SoC) features the new 64-bit Armv8 architecture and Arm® big.LITTLE™ technology's 6-core processor, provides improved performance and comes bundled with Arm® Mali®-T860 MP4 GPU.



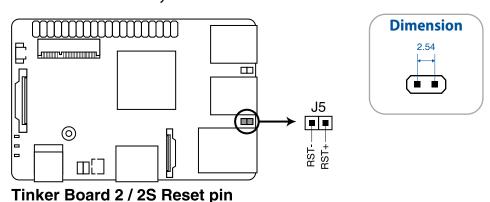
# **Debug UART header**

This Debug UART header provides a separate UART port, allowing developers to use and develop with the serial console without occupying the 40-pin GPIO's UART ports.



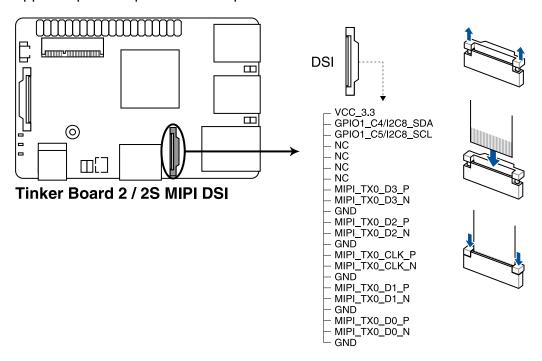
#### **Reset header** 4.

The Reset header allows you to connect an external reset button.



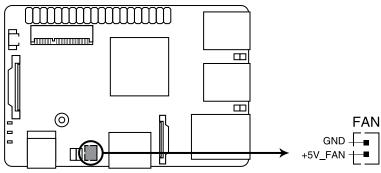
#### 5. **MIPI DSI connector**

The MIPI DSI connector is used to connect a MIPI display module via a 4 lane MIPI-DSI cable. This connector supports up to 6 Gbps connection speed.



#### **DC Fan header** 6.

The DC Fan header allows you to connect a fan to actively cool the system.



Tinker Board 2 / 2S FAN connector

Connector Type	JST PH 2P 2.00mm		
Reference PN:	JST, PHR-2		

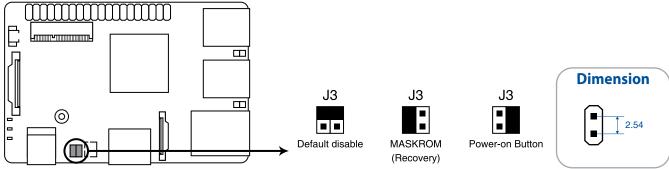
**NOTE:** The fan is purchased separately.

# **WARNING!**

- These are not jumpers! Do not place jumper caps on the fan connectors.
- Ensure the cable is fully inserted into the connector.

#### 7. **Power On header**

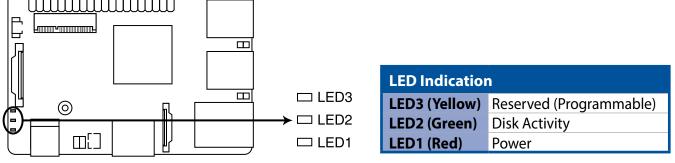
The Power On header allows you to connect an external power button. The Maskrom jumper allows you to mask the eMMC (rom) for recovery. This will allow you to enter developer mode due to the indetected storage and rewrite the eMMC.



Tinker Board 2 / 2S Power on & Maskrom

#### 8. **Status LEDs**

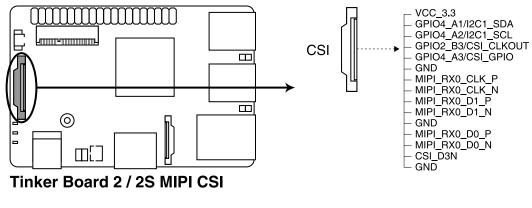
The Status LEDs indicate the current status of the Single Board Computer.

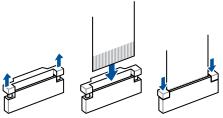


Tinker Board 2 / 2S Programmable LED

#### 9. **MIPI CSI connector**

The MIPI CSI connector is used to connect a MIPI camera module via a 2 lane MIPI-CSI2 cable. This connector supports up to 3 Gbps connection speed.

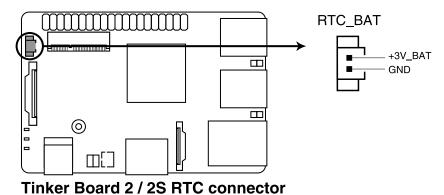




**WARNING!** Ensure the cable for MIPI CSI is connected in the correct orientation with the gold fingers facing towards the rear of the Single Board Computer.

# 10. RTC Battery header

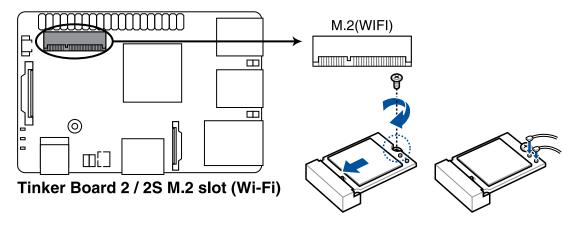
The RTC Battery header allows you to connect the lithium battery.



Connector Type	WtoB 2P 1.25mm
Reference PN	ACES, 50276-002H0H1-001

# 11. M.2 Wi-Fi Slot (E-Key)

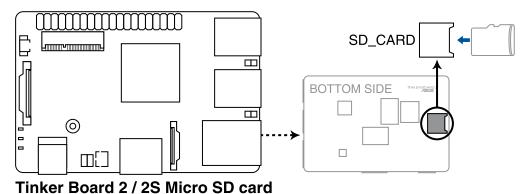
The M.2 Wi-Fi slot allows you to install an M.2 Wi-Fi module (E-key, type 2230).



**NOTE:** The M.2 Wi-Fi module is purchased separately on selected models.

# 12. Micro SD Card slot

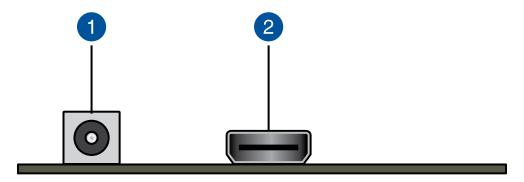
The microSD card slot allows you to install a microSD memory card v2.00 (SDHC) / v3.00 (SDXC) for storage.



WARNING! Disconnect all power (including redundant PSUs) from the existing system before you add or remove a memory card, then reboot the system to access the memory card.

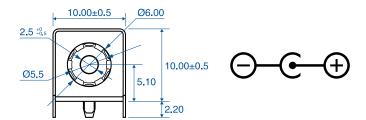
# 2.3 I/O connectors

# 2.3.1 Left panel



# **DC Power Input Jack**

The supplied power adapter converts AC power to DC power for use with this jack (5.5mm/2.5mm). Power supplied through this jack supplies power to the Single Board Computer. To prevent damage to the Single Board Computer, always use the supplied power adapter. Please refer to the table below for the power consumption.

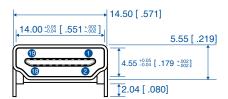


<b>Power Consumption</b>	
Mode	Power (W)
Suspend	0.44
Idle	3.65
Burn-in*	8.18
Max. Load**	29.18

<sup>\*</sup> CPU, GPU, RAM, Storage, LAN, etc. stress test.

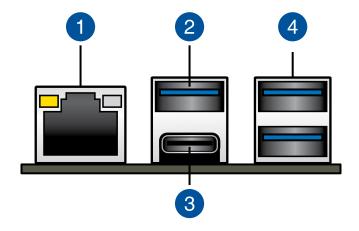
#### 2. HDMI<sup>™</sup> port

This port is for the HDMI™ (High-Definition Multimedia Interface) connector.



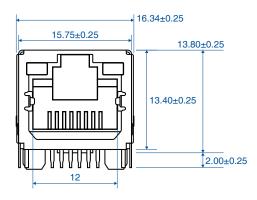
<sup>\*\*</sup> e.g. 3 x USB Type-A 5V/0.9A, 1 x USB Type-C\* 5V/1.5A, total up to 21W.

# 2.3.2 Rear panel

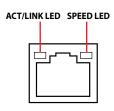


# 1. LAN (RJ-45) port

The 8-pin RJ-45 LAN port supports a standard Ethernet cable for connection to a local network. Please refer to the table below for the LED indications.



Activit	y Link LED		Speed LED		
Status Description		Status	Description		
Off	No link	Off	10 Mbps connection		
Orange	Linked	Orange	100 Mbps connection		
Orange (Blinking) Data activity		Green	1 Gbps connection		

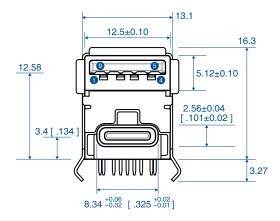


#### 2. USB 3.2 Gen 1 Type-A port

The USB 3.2 Gen 1 (Universal Serial Bus) port provides a transfer rate up to 5 Gbit/s.

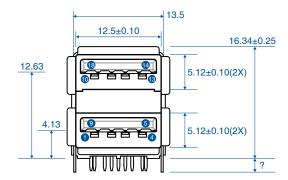
# USB 3.2 Gen 1 Type-C® OTG port

This USB Type-C™ (Universal Serial Bus) port provides a transfer rate of up to 5 Gbit/s



#### 4. USB 3.2 Gen 1 Type-A port

The USB 3.2 Gen 1 (Universal Serial Bus) port provides a transfer rate up to 5 Gbit/s.



# 3

# Software Installation

# 3.1 Booting from external Micro SD card

# **Requirement:**

- 1 x Micro SD card with at least 8GB capacity
- 1 x 12~19V, DC 5.5/2.5 power supply\*
- 1 x Monitor with HDMI™ cable or USB Type-C® (DP) cable
- 1 x Keyboard and Mouse set
- \* The Power Supply is purchased separately.

# **Setting Up:**

- 1. Insert the micro SD card into a Windows® PC.
- 2. Download the TinkerOS image from the Tinker Board website (<a href="https://tinker-board.asus.com/download.">httml</a>) and burn it into the micro SD card using a third-party ISO software, such as *Etcher*.
- 3. Insert the bootable micro SD card into your Tinker Board 2 / Tinker Board 2S, then connect the power supply, keyboard, mouse, and monitor to boot up.

# 3.2 Booting from onboard eMMC (on selected models)

**NOTE:** Booting from the onboard eMMC is only available for Tinker Board 2S models with eMMC.

# **Requirement:**

- 1 x USB Type-C<sup>®</sup> cable with data transfer function
- 1 x 12~19V, DC 5.5/2.5 power supply\*
- 1 x Monitor with HDMI™ cable or USB Type-C® (DP) cable
- 1 x Keyboard and Mouse set
- \* The Power Supply is purchased separately.

# **Setting Up:**

- 1. Connect the Tinker Board 2S to a PC using a USB Type-C<sup>®</sup> cable.
- 2. Connect the power adapter to the Tinker Board 2S.
- 3. Download the TinkerOS image from the Tinker Board website (<a href="https://tinker-board.asus.com/download.">https://tinker-board.asus.com/download.</a> <a href="https://tinker-board.asus.com/download.">httml</a>) and burn it into the Tinker Board 2S using a third-party ISO software, such as *Etcher*.
- 4. After the TinkerOS image is successfully burned, disconnect all cables from the Tinker Board 2S.
- 5. Connect the power supply, keyboard, mouse, and monitor to your Tinker Board 2S to boot up.

# Appendix

# **Notices**

# **Federal Communications Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no quarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**WARNING!** Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

# RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

# **End Product Labeling**

This transmitter module is authorized only for use in device where the antenna may be installed such that 20cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following:

Contains FCC ID: TX2-RTL8822CE and Contains IC: 6317A-RTL8822CE

# **Mexico Notice**

Contains module RCPRERT18-2159

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

# **Regional notice for Singapore**

Complies with IMDA Standards DB103778

This ASUS product complies with IMDA Standards.

# **HDMI Compliance Statement**

The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

# **Compliance Statement of Innovation, Science and Economic Development Canada** (ISED)

This device complies with Innovation, Science and Economic Development Canada licence exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CAN ICES-3(B)/NMB-3(B)

# Déclaration de conformité de Innovation, Sciences et Développement économique Canada (ISED)

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3(B)/NMB-3(B)

# Précautions d'emploi de l'appareil :

- a. Soyez particulièrement vigilant quant à votre sécurité lors de l'utilisation de cet appareil dans certains lieux (les avions, les aéroports, les hôpitaux, les stations-service et les garages professionnels).
- b. Évitez d'utiliser cet appareil à proximité de dispositifs médicaux implantés. Si vous portez un implant électronique (stimulateurs cardiaques, pompes à insuline, neurostimulateurs...), veuillez impérativement respecter une distance minimale de 15 centimètres entre cet appareil et l'implant pour réduire les risques d'interférence.
- c. Utilisez cet appareil dans de bonnes conditions de réception pour minimiser le niveau de rayonnement. Ce n'est pas toujours le cas dans certaines zones ou situations, notamment dans les parkings souterrains, dans les ascenseurs, en train ou en voiture ou tout simplement dans un secteur mal couvert par le réseau.
- d. Tenez cet appareil à distance du ventre des femmes enceintes et du bas-ventre des adolescents.

# **KC: Korea Warning Statement**

B급 기기 (가정용 방송통신기자재) 이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

# Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has also been evaluated and shown compliant with the IC RF Exposure limits under mobile exposure conditions. (antennas are greater than 20cm from a person's body).

# Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil de sans fil est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l'appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'IC dans des conditions d'exposition à des appareils mobiles (antennes sont supérieures à 20 cm à partir du corps d'une personne).

# **NCC: Taiwan Wireless Statement**

# Contains module @ NCCAI18LP2010T7

經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或 變更原設計之特性及功能。低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象 時,應立即停用,並改善至無干擾時方得繼續使用。前項合法通信,指依電信法規定作業之無線電通信。 低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

# **VCCI: Japan Compliance Statement**

Contains module 201-180775

# **Class B ITE**

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目 的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、 受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

# Contains module 00158-19-04076



# 限用物質及其化學符號:

ᄪᆖ	限用物質及其化學符號						
單元	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr+6)	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)	
印刷電路板及電子組件	_	$\bigcirc$	$\bigcirc$	$\circ$	$\circ$	0	
其他及其配件	_	0	0	0	0	0	
備考1. "O"條指該項限用物質之百分比含量未超出百分比含量基準值。 備考2. "—"條指該項限用物質為排除項目。							

# **Maximum Radio-Frequency Output Table**

Function	Frequency	Maximum Output Power (EIRP)		
	2412 - 2472 MHz	19 dBm		
W:E:	5150 - 5350 MHz	22 dBm		
WiFi	5470 - 5725 MHz	22 dBm		
	5725 - 5850 MHz	22 dBm		
Bluetooth	2402 - 2480 MHz	8 dBm		



# **Simplified EU Declaration of Conformity**

ASUSTek Computer Inc. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. Full text of EU declaration of conformity is available at https://www.asus.com/support/

#### Déclaration simplifiée de conformité de l'UE

ASUSTek Computer Inc. déclare par la présente que cet appareil est conforme aux critères essentiels et autres clauses pertinentes de la directive 2014/53/EU. La déclaration de conformité de l'UE peut être téléchargée à partir du site internet suivant : https://www.asus.com/support/

#### Vereinfachte EU-Konformitätserklärung

ASUSTek COMPUTER INC erklärt hiermit, dass dieses Gerät mit den grundlegenden Anforderungen und anderen relevanten Bestimmungen der Richtlinie 2014/53/EU übereinstimmt. Der gesamte Text der EU-Konformitätserklärung ist verfügbar unter: https://www.asus.com/support/

# Dichiarazione di conformità UE semplificata

ASUSTek Computer Inc. con la presente dichiara che questo dispositivo è conforme ai requisiti essenziali e alle altre disposizioni pertinenti con la direttiva 2014/53/EU. Il testo completo della dichiarazione di conformità UE è disponibile all'indirizzo: https://www.asus.com/support/

#### Упрощенное заявление о соответствии европейской директиве

ASUSTek Computer Inc. заявляет, что устройство соответствует основным требованиям и другим соответствующим условиям директивы 2014/53/EU. Полный текст декларации соответствия EC доступен на https://www.asus.com/support/

إعلان التوافق المبسط الصادر عن الاتحاد الأوروبي تقر شركة ASUSTek Computer أن هذا الجهاز يتوافق مع المتطلبات الأساسية والأحكام الأخرى ذات الصلة الخاصة بتوجيه 2014/53/EU. يتوفر النص الكامل لإعلان التوافق الصادر عن الاتحاد الأوروبي على: https://www.asus.com/support/

# Опростена декларация за съответствие на ЕС

C настоящото ASUSTek Computer Inc. декларира, че това устройство е в съответствие със съществените изисквания и другите приложими постановления на свързаната Директива 2014/53/ЕС. Пълният текст на ЕС декларация за съвместимост е достъпен на адрес https://www.asus.com/support/

# Declaração de Conformidade UE Simplificada

ASUSTek Computer Inc. declara que este dispositivo está em conformidade com os requisitos essenciais e outras disposições relevantes relacionadas às diretivas 2014/53/UE. O texto completo da declaração de conformidade CE está disponível em https://www.asus.com/support/

# Pojednostavljena EU Izjava o sukladnosti

ASUSTeK Computer Inc. ovim izjavljuje da je ovaj uređaj sukladan s bitnim zahtjevima i ostalim odgovarajućim odredbama direktive 2014/53/ EU. Cijeli tekst EU izjave o sukladnosti dostupan je na https://www.asus.com/support/

#### Zjednodušené prohlášení o shodě EU

Společnost ASUSTek Computer Inc. tímto prohlašuje, že toto zařízení splňuje základní požadavky a další příslušná ustanovení směrnice 2014/53/ EU. Plné znění prohlášení o shodě EU je k dispozici na adrese https://www.asus.com/support/

# Forenklet EU-overensstemmelseserklæring

ASUSTeK Computer Inc. erklærer hermed at denne enhed er i overensstemmelse med hovedkravene og øvrige relevante bestemmelser i direktivet 2014/53/EU. Hele EU-overensstemmelseserklæringen kan findes på https://www.asus.com/support/

#### Vereenvoudigd EU-conformiteitsverklaring

ASUSTeK Computer Inc. verklaart hierbij dat dit apparaat voldoet aan de essentiële vereisten en andere relevante bepalingen van Richtlijn 2014/53/EU. De volledige tekst van de EU-conformiteitsverklaring is beschikbaar op https://www.asus.com/support/

#### Lihtsustatud EÜ vastavusdeklaratsioon

Käesolevaga kinnitab ASUSTek Computer Inc, et seade vastab direktiivi 2014/53/EÜ olulistele nõuetele ja teistele asjakohastele sätetele. EL vastavusdeklaratsiooni täistekst on saadaval veebisaidil <a href="https://www.asus.com/support/">https://www.asus.com/support/</a>

# Eurooppa - EY:n vaatimustenmukaisuusvakuutus

ASUSTek Computer Inc. ilmoittaa täten, että tämä laite on direktiivin 2014/53/EU olennaisten vaatimusten ja muiden asiaankuuluvien lisäysten mukainen. Koko EY:n vaatimustenmukaisuusvakuutuksen teksti on luettavissa osoitteessa https://www.asus.com/support/

ASUSTek Computer Inc در اینجا اعلام می کند که این دستگاه با نیاز های اساسی و سایر مقررات مربوط به بیانیه 2014/53/EU. مطابقت دارد. متن کامل پیروی از این بیانیه اتحادیه ارویا در این آدرس موجود است: .https://www.asus.com/support/

#### Απλοποιημένη Δήλωση Συμμόρφωσης ΕΕ

Διά του παρόντος η ASUSTek Computer Inc. δηλώνει ότι αυτή η συσκευή είναι σύμμορφη με τις βασικές προϋποθέσεις και άλλες σχετικές διατάξεις της Οδηγίας 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης της ΕΕ είναι διαθέσιμο στη διεύθυνση https://www.asus.com/support/

#### הצהרת תאימות רגולטורית מקוצרת עבור האיחוד אירופי

מצהירה בזאת כי מכשיר זה תואם לדרישות החיוניות ולשאר הסעיפים הרלוונטיים של תקנה ASUSTek Computer Inc. לקרוא את הנוסח המלא של הצהרת התאימות הרגולטורית עבור האיחוד האירופי בכתובת: https://www.asus.com/support/

#### Egyszerűsített EU megfelelőségi nyilatkozat

Az ASUSTek Computer Inc. ezennel kijelenti, hogy ez az eszköz megfelel az 2014/53/EU sz. irányelv alapvető követelményeinek és egyéb vonatkozó rendelkezéseinek. Az EU megfelelőségi nyilatkozat teljes szövegét a következő weboldalon tekintheti meg: https://www.asus.com/support/

#### Pernyataan Kesesuaian UE yang Disederhanakan

ASUSTEK Computer Inc. dengan ini menyatakan bahwa perangkat ini memenuhi persyaratan utama dan ketentuan relevan lainnya yang terdapat pada Petunjuk 2014/53/EU. Teks lengkap pernyataan kesesuaian EU tersedia di: https://www.asus.com/support/

#### Vienkāršota ES atbilstības paziņojums

ASUSTeK Computer Inc. ar šo paziņo, ka šī ierīce atbilst Direktīvas 2014/53/ES būtiskajām prasībām un citiem citiem saistošajiem nosacījumiem. Pilns ES atbilstības paziņojuma teksts pieejams šeit: https://www.asus.com/support/

# Supaprastinta ES atitikties deklaracija

Šiame dokumente bendrovė "ASUSTek Computer Inc." pareiškia, kad šis prietaisas atitinka pagrindinius reikalavimus ir kitas susijusias Direktyvos 2014/53/ES nuostatas. Visas ES atitikties deklaracijos tekstas pateikiamas čia: https://www.asus.com/support/

#### Forenklet EU-samsvarserklæring

ASUSTek Computer Inc. erklærer herved at denne enheten er i samsvar med hovedsaklige krav og andre relevante forskrifter i direktivet 2014/53/EU. Fullstendig tekst for EU-samsvarserklæringen finnes på: https://www.asus.com/support/

#### Uproszczona deklaracja zgodności UE

Firma ASUSTek Computer Inc. niniejszym oświadcza, że urządzenie to jest zgodne z zasadniczymi wymogami i innymi właściwymi postanowieniami dyrektywy 2014/53/EU. Pełny tekst deklaracji zgodności UE jest dostępny pod adresem https://www.asus.com/support/

#### Declaração de Conformidade Simplificada da UE

A ASUSTek Computer Inc. declara que este dispositivo está em conformidade com os requisitos essenciais e outras disposições relevantes da Diretiva 2014/53/UE. O texto integral da declaração de conformidade da UE está disponível em https://www.asus.com/support/

### Declaratie de conformitate UE, versiune simplificată

Prin prezenta, ASUSTek Computer Inc. declară că acest dispozitiv este în conformitate cu reglementările esențiale și cu celelalte prevederi relevante ale Directivei 2014/53/UE. Textul complet al declarației de conformitate UE este disponibil la adresa https://www.asus.com/support/

# Pojednostavljena Deklaracija o usaglašenosti EU

ASUSTek Computer Inc. ovim izjavljuje da je ovaj uređaj usaglašen sa osnovnim zahtevima i drugim relevantnim odredbama Direktive 2014/53/EU. Ceo tekst Deklaracije o usaglašenosti EU dostupan je na lokaciji https://www.asus.com/support/

#### Zjednodušené vyhlásenie o zhode platné pre EÚ

Spoločnosť ASUSTek Computer Inc. týmto vyhlasuje, že toto zarjadenie je v súlade so základnými požiadavkami a ďalšími príslušnými ustanoveniami smernice č. 2014/53/EÚ. Plné znenie vyhlásenia o zhode pre EÚ je k dispozícii na lokalite https://www.asus.com/support/

#### Poenostavljena izjava EU o skladnosti

ASUSTek Computer Inc. tukaj izjavlja, da je ta naprava skladna s temeljnimi zahtevami in drugimi relevantnimii določili Direktive 2014/53/EU. Polno besedilo izjave EU o skladnosti je na voljo na https://www.asus.com/support/

# Declaración de conformidad simplificada para la UE

Por la presente, ASUSTek Computer Inc. declara que este dispositivo cumple los requisitos básicos y otras disposiciones pertinentes de la directiva 2014/53/EU. En https://www.asus.com/support/ está disponible el texto completo de la declaración de conformidad para la UE.

#### Förenklad EU-försäkran om överensstämmelse

ASUSTek Computer Inc. deklarerar härmed att denna enhet överensstämmer med de grundläggande kraven och andra relevanta bestämmelser i direktiv 2014/53/EU. Fullständig text av EU-försäkran om överensstämmelse finns på https://www.asus.com/support/

# ประกาศเกี่ยวกับความสอดคล้องของสหภาพยุโรปแบบย่อ

ASUSTek Computer Inc. ขอประกาศในที่นี้ว่าอุปกรณ์นี้มีความสอดคล้องกับความ ต้องการที่จำเป็นและเงื่อนไขที่เกี่ยวข้องอื่น ๆ ของบทบัญญัติข้อกำหนด 2014/53/EU เนื้อหาที่สมบูรณ์ของประกาศความสอดคล้องกับ EU มีอยู่ที่ https://www.asus.com/support/

# Basitleştirilmiş AB Uyumluluk Bildirimi

ASUSTek Computer Inc., bu aygıtın 2014/53/EU Yönergesinin temel gereksinimlerine ve diğer ilgili hükümlerine uygun olduğunu bildirir. AB uygunluk bildiriminin tam metni şu adreste bulunabilir: <a href="https://www.asus.com/support/">https://www.asus.com/support/</a>

# Спрощена декларація про відповідність нормам ЄС

ASUSTek Computer Inc. заявляє, що цей пристрій відповідає основним вимогам та іншим відповідним вимогам Директиви 2014 / 53 / EU. Повний текст декларації відповідності нормам ЄС доступний на https://www.asus.com/support/

AT	BE	BG	CZ	DK	EE	FR
DE	IS	ΙE	IT	GR	ES	CY
LV	LI	LT	LU	HU	MT	NL
NO	PL	PT	RO	SI	SK	TR
FI	SE	CH	UK	HR		

# FCC COMPLIANCE INFORMATION

Per FCC Part 2 Section 2.1077



**Asus Computer International Responsible Party:** 

> **Address:** 48720 Kato Rd, Fremont, CA 94538

Phone/Fax No: (510)739-3777/(510)608-4555

hereby declares that the product

**Product Name: MOTHERBOARD** 

**Model Number:** TINKER BOARD 2, TINKER BOARD 2S

# compliance statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Ver. 180125