

E15973 First Edition November 2019

TINKER EDGE T

Innovatively enjoy a whole new digital experience

享受創新的數位體驗

享受创新的数字体验

Profitez d'une toute nouvelle expérience numérique et innovante

Наслаждайтесь новыми инновационными технологиями

Иновативно, наслаждавайте се на изцяло ново цифрово изживяване. Zcela nový převratný digitální zážitek

Nyd en hel ny digital oplevelse

Geniet innovatief van een volledig nieuwe digitale ervaring

Топығымен жана санлық тәжірибеге инновациялық турле кол жеткізініз

Desfrute de uma nova experiência digital de forma inovadora

Inovatívne si vychutnávaite úplne nový digitálny zážitok

Innovativ niutning av en helt ny digital upplevelse

Tamamen veni varatıcı bir diiital denevim vasavın

เพลิดเพลินกับการสร้างสรรค์ประสบการณ์ดีจิตอลใหม่ทั้งหมด

استمتع بتجربة رقمية جديدة تمامًا وبشكل مبتكر

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Thank you for purchasing ASUS Tinker Edge T!

Tinker Edge T is more than a dream for the DIY-obsessed; it's a gateway to new ideas and new relationships. Experienced makers will love Tinker Edge T'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!

Package contents

Check your Tinker Edge T package for the following items:

DO NOT overclock the board, as this may cause damage to the board.

The board should be placed on a flat, stable, non-conductive surface.

Ensure that the board is placed in a well ventilated environment.

Power supply used with the Tinker Edge T shall comply with relevant regulations and applicable

Avoid handling the board while powered. Handle the board by the edges to minimize risk of Electronic

1 x Tinker Edge T

1 x Metallic backplate with screw set

1 x Shielding bag

Safety Information

Static Damage (ESD).

1 x Quick start guide

いまだかつてない新感覚のデジタル体験を提供します。

Sperimentate un'esperienza di interazione digitale completamente nuoval

Naudi innovatiivselt kogu uut digitaalset kogemust Nauti innovatiivisesta aivan uudesta digitaalisesta kokemuksesta

Genießen Sie ein rundum neues Digitalerlebnis

Καινοτομική απόλαυση μιας εξολοκλήρου νέας εμπειρίας

Vadonatúi digitális élmény

Menikmati pengalaman digital yang benar-benar baru secara inovatif.

완전히 새로운 디지털 세계를 획기적으로 즐겨보세요.

Güstiet pilnīgi jaunu digitālo baudījumu inovatīvā veidā

Mėgaukitės visiškai naujais skaitmeniniais potyriais

Få glede av en helt ny, innovativ digital opplevelse

Korzystaj z zupełnie nowego cyfrowego rozwiązania

Bucurati-vă în cel mai inovator mod de noua experientă digitală

Inovativno uživaite u celom, novom, digitalnom iskustvu

Sea el primero en disfrutar de una nueva experiencia digital total

Tân hưởng trải nghiêm số hoàn toàn mới theo cách cải tiến

ASUS Tinker Edge T specifications summary

Quad-core ARM A53 @ 1.5 GHz*
Adapter stability.
NN Processor Google Edge TPU ML accelerator coprocessor
1 x HDMI with CEC hardware ready 1 x 22-pin MIPI DSI (4lane) supports up to FHD
1 x 22-pin MIPI DSI (4lane) supports up to FHD
1 x 22-pin MIPI DSI (4lane) supports up to FHD Memory Size LPDDR4 1GB 8GB eMMC Micro SD(TF) card slot (push/pull) Connectivity RTL8211F-CG Gb LAN 802.11 b/g/n/ac wireless and BT 4.1 2 x USB 3.2 Gen 1 Type-A
Storage 8GB eMMC Micro SD(TF) card slot (push/pull) Connectivity RTL8211F-CG Gb LAN 802.11 b/g/n/ac wireless and BT 4.1 2 x USB 3.2 Gen 1 Type-A
Micro SD(TF) card slot (push/pull) Connectivity
Micro SD(TF) card slot (push/pull) Connectivity RTL8211F-CG Gb LAN 802.11 b/g/n/ac wireless and BT 4.1 2 x USB 3.2 Gen 1 Type-A
802.11 b/g/n/ac wireless and BT 4.1 2 x USB 3.2 Gen 1 Type-A
802.11 b/g/n/ac wireless and BT 4.1 2 x USB 3.2 Gen 1 Type-A
2 x USB 3.2 Gen 1 Type-A
1 x USB 3.2 Gen 1 Type-C® OTG
Camera Interface 2 x 24-pin MIPI CSI-2 (4lane)
1 x 40-pin headers includes:
- up to 28 x GPIO pins
- up to 1 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
nternal Headers - up to 1 x POWIZS - 2 x 5V power pins
- 2 x 3.3V power pins
- 8 x ground pins
1 x Boot mode switch
1 x 2-pin Reset header
1 x 2-pin DC Fan header
Power Connector 12-19V DC power input (45W)
OS Support Linux Mendel
Dimension 3.37" x 2.125"
Warranty 1 Year

Getting Started

- 1 x USB Type-C[®] cable with data transfer function (to connect your PC to the board's data port)
- 1 x 12~19V power supply*
- 1 x Monitor with HDMI cable
- 1 x Keyboard and Mouse set
- * The power supply is purchased separately.



Boot mode

Requirement:

The factory settings only includes a U-Boot bootloader and does not include a system

Before you begin the flashing procedure, please ensure of the following:

- . The board is completely powered off, and the power cord and cables connecting the board to your computer are all disconnected.
- . The boot mode switches are set to eMMC mode, please refer to the table and illustration below for the eMMC mode setting.

Switch 1	Switch 2	Switch 3	Switch 4	ON
ON	OFF	OFF	OFF	ON 1 2



Top view

DC in (12V~19V) HDMI

2 x USB 3.2 Gen1 ports

Flashing the Tinker Edge T

Initiating Fastboot mode:

- 1. Connect the USB Type-C[®] cable to the USB Type-C[®] ports on the Tinker Edge T and your host
- 2. Power on the board, you should automatically be booted into Fastboot mode.



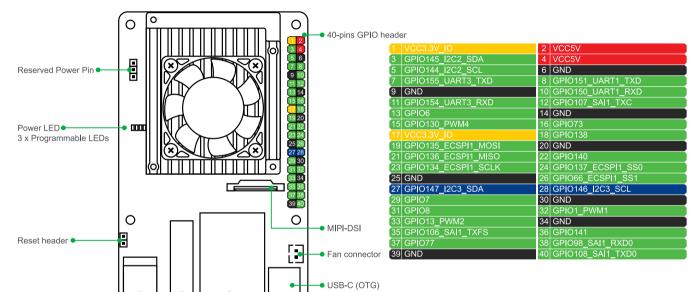
- Please note that you will only be booted into Fastboot mode when booting up the Tinker Edge T for the first time.
- Please refer to the readme file in the unzipped folder for details on other items such as re-flash or recovery.

Executing the flash script:

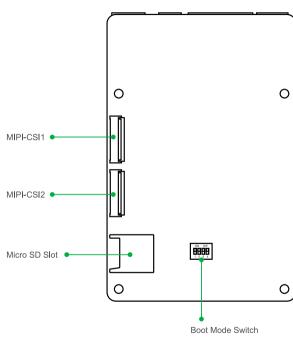
- 1. Download the OS image from the Tinker Edge T website, then unzip the image file.
- 2. Run the flash script or command file to start the flash process. The flash process should take a few minutes. Once the flash is completed, the Tinker Edge T will reboot and you should be booted to the terminal prompt.



Please refer to the readme file in the unzipped folder for troubleshooting steps.







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 guarantee 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

- 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
- Consult the dealer or an experienced radio/TV technician for help.



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

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.

This equipment must be installed and operated in accordance with provided instructions and

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: A4R-1701AA1

KC: Korea Warning Statement

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

NCC: Taiwan Wireless Statement

Contains module (CCA.I19I P6FD0T9)

經型式認語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。低功率射頻雷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 類電機須忍受合法補信或工業、科學及緊癢用電波輻射性電機設備之干擾。

應避免影響附折雷達系統之操作。

受信障害を引き起こすことがあります。

VCCI: Japan Compliance Statement Contains module 204-430024

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、

取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

Japan RF Equipment Statement

屋外での使用について

本製品は、5GHz帯域での通信に対応しています。電波法の定めにより5.2GHz、5.3GHz帯域の電波は屋外で使 用が禁じられています。

法律および規制遵守

本製品は雷波法及びこれに基づく命令の定めるところに従い使用してください。日本国外では、その国の法律ま たは規制により、本製品の使用ができないことがあります。このような国では、本製品を運用した結果、罰せられ ることがありますが、当社は一切責任を負いかねますのでご了承ください。

限用物質及其化學符號:

	PLX/T3 19/3	权用物具及共14子的30.					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr ⁺⁶)	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)	
	-	0	0	\circ	0	0	
其配件	-	0	0	0	0	0	
"O" 係指該項限用物質 "—" 係指該項限用物質			分比含量基	基準值。			

RF Output table

	Function		Frequency	Maximum Output Power (EIRP)
WiFi 2.4GHz:	IEEE802.11b/g/n	HT20	2412 - 2472 MHz	18 dBm
WiFi 5 GHz:	IEEE802.11a	HT20	5150 - 5350 MHz	19 dBm
	IEEE802.11n	HT20/HT40	5470 - 5725 MHz	20 dBm
	IEEE802.11ac	HT20/40/80	5725 - 5850 MHz	17 dBm
Bluetooth: BR/ (Bluetooth Spe	/EDR/BLE ecification V5.0)		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/FU. Full text of FU 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 С настоящото ASUSTek Computer Inc. декларира, че Gerät mit den grundlegenden Anforderungen und това устройство е в съответствие със съществените anderen relevanten Bestimmungen der Richtlinie изисквания и другите приложими постановления на 2014/53/EU übereinstimmt. Der gesamte Text der EUсвързаната Директива 2014/53/ЕС. Пълният текст на ЕС Konformitätserklärung ist verfügbar unter: декларация за съвместимост е достъпен на адрес https://www.asus.com/support/ https://www.asus.com/support/

Dichiarazione di conformità UE semplificata

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

Упрошенное заявление о соответствии европейской

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

إعلان التوافق المبسط الصادر عن الاتحاد

تقر شركة ASUSTek Computer أن هذا الجهاز يتوافق مع المتطلبات الأساسية و الأحكام الأخرى ذات الصلة الخاصة بتوجيه 2014/53/EU. يتوفر النص الكامل لإعلان التوافق الصادر عن الاتحاد

Declaração de Conformidade UE Simplificada

https://www.asus.com/support/ Опростена декларация за съответствие на ЕС

muiden asiaankuuluvien lisäysten mukainen. Koko EY:n vaatimustenmukaisuusvakuutuksen teksti on luettavissa osoitteessa https://www.asus.com/support/ /https://www.asus.com/support تبعيت از نسخه ساده شده بياتيه اتحاديه ارويا

ASUSTek Computer Inc

Uproszczona deklaracja zgodności UE

ASUSTek Computer Inc. ilmoittaa täten, että tämä laite

on direktiivin 2014/53/EU olennaisten vaatimusten ia

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 iziavljuje da je ovaj uređaj sukladan s bitnim zahtievima i ostalim odgovarajućim odredbama direktive 2014/53/FU. Cijeli tekst FU izjave o תקוה 2014/53/EU, ניתו לקרוא את הנוסח המלא של הצהרת sukladnosti dostupan je na https://www.asus.com/support/ Ziednodušené prohlášení o shodě EU

Společnost ASUSTek Computer Inc. tímto prohlašuje, že

ASUSTeK Computer Inc. erklærer hermed at denne enhed

er i overensstemmelse med hovedkravene og øvrige

overensstemmelseserklæringen kan findes på

Vereenvoudigd EU-conformiteitsverklaring

relevante bestemmelser i direktivet 2014/53/FU. Hele EU-

ASUSTeK Computer Inc. verklaart hierbij dat dit apparaat

shodě EU je k dispozici na adrese

https://www.asus.com/support/

https://www.asus.com/support/

https://www.asus.com/support/

Egyszerűsített EU megfelelőségi nyilatkozat

toto zařízení splňuje základní požadavky a další příslušná Az ASLISTek Computer Inc. ezennel kijelenti, hogy ez ustanovení směrnice 2014/53/ EU. Plné znění prohlášení o az eszköz megfelel az 2014/53/FIJ sz. irányely alanyető követelményeinek és egyéb vonatkozó rendelkezéseinek. Az EU megfelelőségi nyilatkozat telies szövegét a következő Forenklet EU-overensstemmelseserklæring weboldalon tekintheti meg: https://www.asus.com/support/

Pernyataan Kesesuaian UF yang Disederhanakan

ASUSTek Computer Inc.

תואם לדרישות החיוניות ולשאר הסעיפים הרלוונטיים של

התאימות הרגולטורית ערור האיחוד האירופי בכתובת:

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

הצהרת תאימות רגולטורית מקוצרת

https://www.asus.com/support/

עבור האיחוד אירופי

Vienkāršota ES atbilstības pazinojums

voldoet aan de essentiële vereisten en andere relevante ASUSTeK Computer Inc. ar šo pazino, ka šī ierīce atbilst benalingen van Richtlijn 2014/53/EU. De volledige tekst van Direktīvas 2014/53/ES būtiskaiām prasībām un citiem citiem de EU-conformiteitsverklaring is beschikbaar op saistošaijem nosacijumiem. Pilns ES atbilstības paziņojuma teksts pieeiams šeit; https://www.asus.com/support/

Lihtsustatud EÜ vastavusdeklaratsioon

Käesolevaga kinnitab ASUSTek Computer Inc. et seade iame dokumente bendrovė "ASUSTek Computer vastab direktiivi 2014/53/FÜ olulistele nõuetele ja teistele nc." pareišķia, kad šis prietaisas atitinka pagrindinius asiakohastele sätetele. EL vastavusdeklaratsiooni täistekst on reikalavimus ir kitas susijusias Direktyvos 2014/53/ES saadaval veebisaidil https://www.asus.com/support/ Eurooppa - EY:n vaatimustenmukaisuusvakuutus

ASUSTek Computer Inc. erklærer herved at denne enheten. er i samsvar med hovedsaklige krav og andre relevante forskrifter i direktivet 2014/53/FU. Fullstendig tekst for FUsamsvarserklæringen finnes på:

adresem https://www.asus.com/support/

با نیاز های اساسی و سایر مقر رات مربوط به بیانیه 2014/53/EU. Firma ASUSTek Computer Inc. niniejszym oświadcza, że urządzenie to jest zgodne z zasadniczymi wymogami i .https://www.asus.com/support/ innymi właściwymi postanowieniami dyrektywy 2014/53/

Απλοποιημένη Δήλωση Συμμόρφωσης ΕΕ

Λιά 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 está em conformidade com os requisitos essenciais e της ΕΕ είναι διαθέσιμο στη διεύθυνση https://www.asus.com/support/

Declarație 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 declaratiei de conformitate UE este disponibil la adresa https://www.asus.com/support/ Pojednostavljena Deklaracija o usaglašenosti EU

ASUSTek Computer Inc. ovim iziavljuje 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/

Ziednodušené vyhlásenie o zhode platné pre EÚ

Spoločnosť ASUSTek Computer Inc. týmto vyhlasuje, že toto zariadenie je v súlade so základnými požiadavkami a ďalšími príslušnými ustanoveniami smernice č. 2014/53/FÚ. 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. tukai iziavlia, da ie ta naprava skladna s temelinimi zahtevami in drugimi relevantnimii določili Direktive 2014/53/EU. Polno besedilo iziave EU o skladnosti je na voljo na https://www.asus.com/support/

declaración de conformidad para la UF.

Förenklad EU-försäkran om överensstämmelse

Declaración de conformidad simplificada para la UE

Por la presente, ASUSTek Computer Inc. declara que este

pertinentes de la directiva 2014/53/EU. En https://www.

dispositivo cumple los requisitos básicos y otras disposicione

asus.com/support/ está disponible el texto completo de la

Supaprastinta ES atitikties deklaracija

nuostatas. Visas ES atitikties deklaracijos tekstas pateikiamas čia: https://www.asus.com/support/

Forenklet EU-samsvarserklæring

EU. Pełny tekst deklaracji zgodności UE jest dostępny pod

outras disposições relevantes da Diretiva 2014/53/UE. O

disponível em https://www.asus.com/support/

texto integral da declaração de conformidade da UE está

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/

ประกาศเกียวกับความสอดคล้องของสหภาพยโรปแบบย่อ

ASUSTek Computer Inc. ขอประกาศในที่นีว่าอปกรณ์นี้มีความ สอดคล้องกับความ ต้องการที่จำเป็นและเงือนไขทีเกี่ยวข้องอื่น ๆ ของบทบักเก้เ ข้อกำหนด 2014/53/FU เนื้อหาที่สมบรณ์ของประกาศความ สอดคล้องกับ EU มีอยู่ที https://www.asus.com/support

Declaração de Conformidade Simplificada da UE Basitlestirilmis AB Uvumluluk Bildirimi A ASUSTek Computer Inc. declara que este dispositivo

ASUSTek Computer Inc., bu avaitin 2014/53/EU Yönergesinin temel gereksinimlerine ve diğer ilgili hükümlerine uygun olduğunu bildirir. AB uygunluk bildiriminin tam metni su adreste bulunabilir: https://www.asus.com/support/

Спрошена декларація про відповідність нормам

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

The WIFI operating in the band 5150-5350MHz shall be restricted to indoor use for countries listed in the table

AT	BE	BG	CZ	DK	EE	FR
DE	IS	IE	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



Responsible Party: Asus Computer International 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 EDGE T

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.