ASKEY Bluetooth 2.1 + EDR Module BTU1030 OPERATION MANUAL

1. Features:

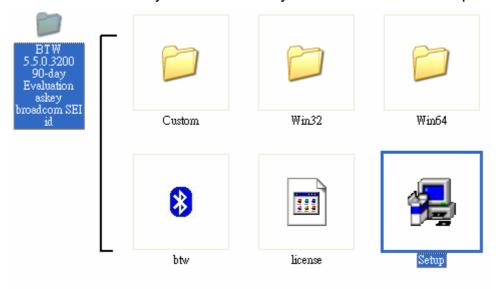
- Fully supports Bluetooth 2.1 additional Feature:
 - Secure Simple Pairing (SSP)
 - Encryption Pause Resume (EPR)
 - Enhance Inquiry response (EIR)
 - Link Supervision Time Out (LSTO)
 - Sniff SubRating (SSR)
 - Erroneous Data (ED)
 - Packet Boundary Flag (PBF)
 - Support Bluetooth 2.0 and EDR packet type
- Programmable output power control meets Class 2
- Low power consumption
- Channel quality driven data rate and packet type selection
- Full support for power saving modes:
 - Bluetooth standard Park, Hold, and Sniff
 - Deep sleep mode and regulator shutdown

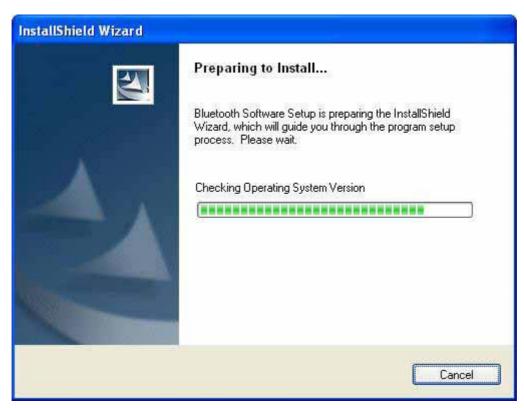
2. Product Spec.

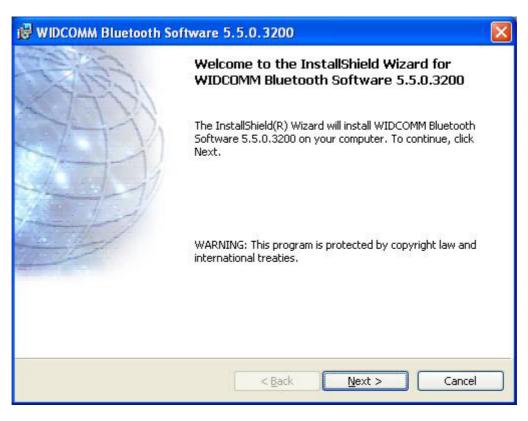
Interfaces	USB2.0 with JST SM10B-SSR-H-TB CONNECT
Chipset	BROADCOM BCM2046BKFBG
Operating Voltage	3.3V +/- 0.3
Radio Transceiver	2.4G Unlicensed ISM Band
Digital Modulator	GFSK, $\pi/4$ DQPSK, 8-DPSK
Supported Data Rate	3Mbps
Operating Frequencies	2.402GHz ~ 2.480GHz
Operating Channels	79 Channels
RF Output Power	5.67 dBm
Power Class	Class 2
Power Consumption	45 mA
Data Rate	Basic Data rate :
	Asynchronous: 723.2kbps/57.6kbps
	Synchronous: 433.9kbps/433.9kbps
	Enhance Data Rate :
	2Mbps (π /4 DQPSK)
	3Mbps (8DPSK)
Receiver sensitivity	-75dBm, BER < 0.1%
Operating temperature	0 ~ +70 degrees/Celsius
Operating humidity	RH 80%
Storage temperature	-10 to +80 degrees/Celsius
Antenna type	Printed Antenna
Dimensions	Length: 31mm, width: 15mm, Height:3mm

3. Normal Link

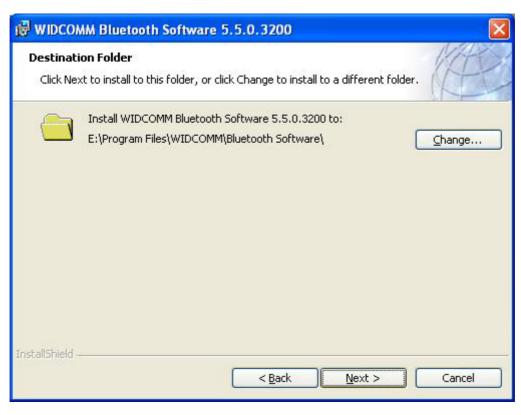
A. BTW 5.5.0.3200 90-day Evaluation askey broadcom SEI id – Setup

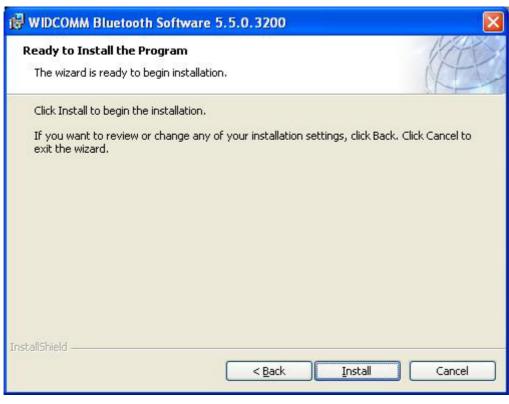


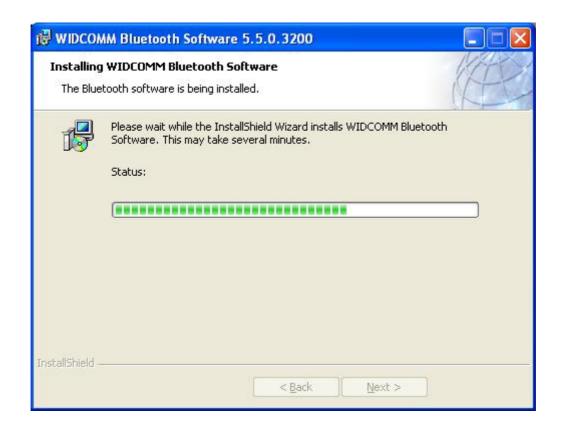
















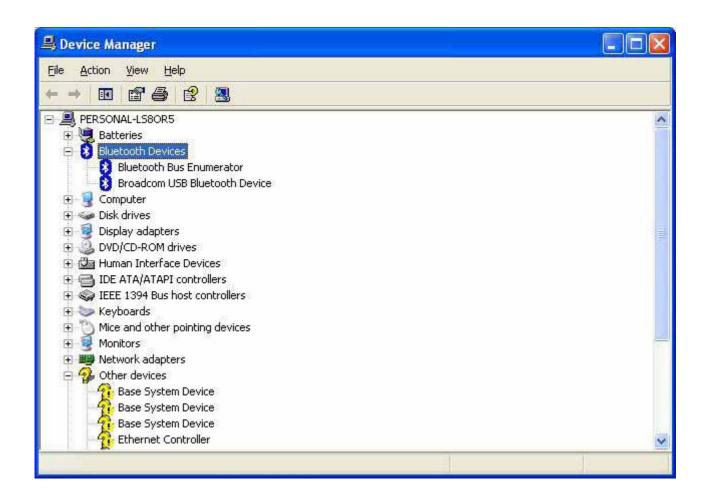
B. Insert BTU1030-D4 sample and install normal link driver





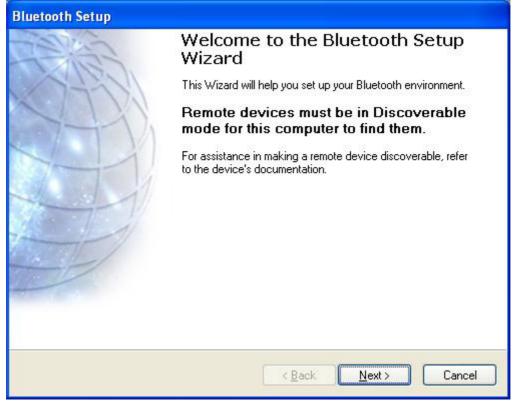






C. Connect new Bluetooth device

















USA - Federal Communications Commission (FCC)

FCC Radiation Exposure Statement



CAUTION:

- The radiated output power of Bluetooth 2.1 + EDR Module devices is far below the FCC radio frequency exposure limits. Nevertheless, Bluetooth 2.1 + EDR Module devices should be used in such a manner that the potential for human contact during normal operation is minimized. To avoid the possibility of exceeding the FCC radio frequency exposure limits, you should keep a distance of at least 20 cm between you (or any other person in the vicinity) and the antenna that is built into the notebook.
- . These devices have also been evaluated for and shown compliant with the FCC RF exposure limits under portable exposure conditions (antennas are within 20 cm of a person's body) when installed in certain specific OEM configurations. Details of the authorized configurations can be found at http://www.fcc.gov/oet/ea by entering the FCC ID number on the device.

Interference Statement

These devices comply with Part 15 of the FCC Rules. Operation of the devices is subject to the following two conditions: (1) The devices may not cause harmful interference, and (2) The devices must accept any interference that might cause undesired operation.

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. If the equipment is not installed and used in accordance with the instructions, the equipment might cause harmful interference to radio communications. There is no guarantee, however, that such 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 taking one or more of the following measures:

- · Relocate this device.
- Increase the separation between the device and the receiver.
- Connect the device into an outlet on a circuit different from that of other electronics.
- · Consult the dealer or an experienced radio technician for help.



- Bluetooth 2.1 + EDR Module devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. Any other installation or use will violate FCC Part 15 regulations. Modifications not expressly approved by ASKEY could void your authority to operate the equipment.
- The devices must not be co-located or operating in conjunction with any other antenna or transmitter.

Brazil

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Canada. Industry Canada (IC)

This device complies with RSS210 of Industry Canada.

CAUTION: Exposure to Radio Frequency Radiation. The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population. Consult Safety Code 6, obtainable from health Canada's website www.hc-sc.ca/rpb.

- 1. This Transmitter must not be co-located or operating in conjunction with any other antenna or ransmitter.
- 2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.
- 3. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

This device is intended only form OEM integrators under the following conditions:

1) The transmitter module may not be co-located with any other transmitter or antenna.

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

The final end product must be labeled in visible area with the following:

Contains TX FCC ID: H8N-BTU1030; IC:1353A-BTU1030

End Product Manual Information

The user manual for end users must include the following information in a prominent location "IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna must not be co-located or operating in conjunction with any other antenna or transmitter.•

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.

Europe. EU Declaration of Conformity

This equipment complies with the essential requirements of the European Union directive 1999/5/EC.

Български

С настоящето ASKEY COMPUTER CORP. потвърждава, че това Безжично устройство е в съответствие със задължителните изисквания и другите приложими разпоредби на Директива 1999/5/ЕС.

Čeština

ASKEY COMPUTER CORP. tímto prohlašuje, že tento Wireless Device je ve shodž se základními požadavky a dalšími príslušnými ustanoveními smernice 1999/5/ES.

Dansk

Undertegnede ASKEY COMPUTER CORP. erklærer herved, at følgende udstyr Wireless Device overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

Deutsch

Hiermit erklärt ASKEY COMPUTER CORP., dass sich das Gerät Wireless Device in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.

English

Hereby, ASKEY COMPUTER CORP. declares that this Wireless Device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Eesti

Käesolevaga kinnitab ASKEY COMPUTER CORP. seadme Wireless Device vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

Español

Por medio de la presente ASKEY COMPUTER CORP. declara que el Wireless Device cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

Ελληυικά

ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ ASKEY COMPUTER CORP. ΔΗΛΩΝΕΙ ΟΤΙ Wireless Device ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.

Français

Par la présente ASKEY COMPUTER CORP. déclare que l'appareil Wireless Device est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

Italiano

Con la presente ASKEY COMPUTER CORP. dichiara che questo Wireless Device è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Íslensk

Hér með lýsir ASKEY COMPUTER CORP. yfir Því að Wireless Device er í samræmi viðgrunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.

Latviešu

Ar šo ASKEY COMPUTER CORP. deklarē, ka Wireless Device atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

Lietuvių k.

Šiuo ASKEY COMPUTER CORP. deklaruoja, kad šis Wireless Device atitinka esminius reikalavimus ir kitas

1999/5/EB Direktyvos nuostatas.

Magyar

Alulírott, ASKEY COMPUTER CORP. nyilatkozom, hogy a Wireless Device megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.

Maltese

Hawnhekk, ASKEY COMPUTER CORP., jiddikjara li dan Wireless Device jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.

Nederlands

Hierbij verklaart ASKEY COMPUTER CORP. dat het toestel Wireless Device in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

Norsk

ASKEY COMPUTER CORP. erklærer herved at utstyret Wireless Device er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

Polski

Niniejszym ASKEY COMPUTER CORP. oświadcza, że Wireless Device jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.

Português

ASKEY COMPUTER CORP. declara que este Wireless Device está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

Română

Prin aceasta, ASKEY COMPUTER CORP. declară că acest Dispozitiv Wireless este în conformitate cu cerințele esențiale și alte dispoziții relevante ale Directivei 1999/5/CE.

Slovenčina

ASKEY COMPUTER CORP. týmto vyhlasuje, že Wireless Device spĺňa základné pošiadavky a všetky prĺslušné ustanovenia Smernice 1999/5/ES.

Slovenščina

ASKEY COMPUTER CORP. izjavlja, da je ta Wireless Device v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.

Suomi

ASKEY COMPUTER CORP. vakuuttaa täten että Wireless Device tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Svenska

Härmed intygar ASKEY COMPUTER CORP. att denna Wireless Device står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

France

In all Metropolitan départements, wireless frequencies can be used under the following conditions, either for public or private use:

- Indoor use: maximum power (EIRP) of 100 mW for the entire 2400–2483.5 MHz frequency band.
- Outdoor use: maximum power (EIRP) of 100 mW for the 2400–2454 MHz band and with maximum power (EIRP) of 10 mW for the 2454–2483.5 MHz band.

Korea

The operation of this radio equipment is prohibited for purposes involving or related to public safety.

Taiwan NCC

Article 12: Unless granted permission by Taiwan NCC, the user is not allowed to change the frequency or transmitting power or enhance or alter the original design characteristics or operating functions of an approved low-power radio frequency device.

Article 14: Low-power radio-frequency devices shall not influence aircraft security or interfere with legal communications; if such influence or interference occurs, the user shall immediately cease operating the device. Legal communications is defined as radio communications operations that conform to the Telecommunications Act. Low-power radio-frequency devices must accept any interference received from legal communications and industrial, scientific, and medical (ISM) radio wave devices.

Radio Approvals

It is important to ensure that you use your radio device only in countries where the device is approved for use.

In countries other than the United States and Japan and Canada verify that the location setting on the **Location** tab in **Regional and Language Options** (from **Control Panel**) has been set to the country in which you are using your Bluetooth 2.1 + EDR Module device. This ensures compliance with local regulatory restrictions on transmit power and optimizes operational performance. Any deviation from the permissible power and frequency settings for the country of use is an infringement of national law and might be punished as such.

Troubleshooting

Unable to connect to a paired device that is listed in Entire Bluetooth Neighborhood.

- Ensure that the device is turned on, in range, and in Discoverable mode (refer to the manual that came with the device for instructions for making the device discoverable). Devices that you have paired with are listed in Entire Bluetooth Neighborhood regardless of whether they are turned on, in range, or in Discoverable mode.
- Ensure that the device Bluetooth radio is turned on (refer to the manual that came with the device for instructions). If the other device is a Bluetooth computer, check the appearance of the **Bluetooth** icon in the notification area (see <u>Using Bluetooth Tools</u>).
- If you have connected a Bluetooth device with another Bluetooth device besides this computer (for example, connecting a headset with a cellular phone), you must delete the existing connection to this computer, and then re-create the connection.

NOTE: Because of corporate security policies, certain Bluetooth functions might be unavailable. If a function has been disabled by the IT administrator, a message is displayed whenever you attempt to use that function. Contact your IT administrator for more information or if you have any questions.

The device you want to connect to is not listed in Entire Bluetooth Neighborhood.

• Check to see if the device is turned on, in range, and in Discoverable mode. See <u>Find Other Bluetooth Devices</u>.

Unable to print to the Bluetooth printer from this computer.

- If you have printed to the printer before, verify that the printer is in range, is turned on, is not malfunctioning, and is still paired with this computer.
- If you have not printed to the printer before, ensure that you have installed the printer. If have not, install the printer according to the instructions provided in <u>Print to a Bluetooth Printer From This Computer</u>. If you did install the printer, verify that the procedure you followed matches the instructions.

NOTE: Because of corporate security policies, certain Bluetooth functions might be unavailable. If a function has been disabled by the IT administrator, a message is displayed whenever you attempt to use that function. Contact your IT administrator for more information or if you have any questions.

Unable to print from another Bluetooth computer to a standard printer that is physically connected to this computer.

- If you have printed to the printer before, verify that you are in range of and paired with this computer, that both the printer and this computer are powered on, that the printer is not malfunctioning, and that the printer is the default printer for this computer.
- If you have not printed to the printer before, did you install the printer on your computer as specified in Print From Another Bluetooth Device to a Standard Printer That is Physically Connected to This Computer? If not, follow these instructions and try again.

NOTE: Because of corporate security policies, certain Bluetooth functions might be unavailable. If a function has been disabled by the IT administrator, a message is displayed whenever you attempt to use that function. Contact your IT administrator for more information or if you have any questions.

Unable to send a fax using the fax capabilities of a Bluetooth telephone, modem, or other device that offers fax service.

• The device offering the fax service might be set to use another device instead of the fax modem.

NOTE: Because of corporate security policies, certain Bluetooth functions might be unavailable. If a function has been disabled by the IT administrator, a message is displayed whenever you attempt to use that function. Contact your IT administrator for more information or if you have any questions.

Unable to adjust the headphone volume.

- Ensure that the volume on the headphones is set to minimum.
- Adjust the volume using the volume control on your media player rather than the master volume control on the computer.

Unable to communicate with a mobile phone or reconnect to a mobile phone.

• Verify that the mobile phone is in Discoverable mode, is in range, and that the Bluetooth radio is turned on. See <u>Find Other Bluetooth Devices</u>.

NOTE: Because of corporate security policies, certain Bluetooth functions might be unavailable. If a function has been disabled by the IT administrator, a message is displayed whenever you attempt to use that function. Contact your IT administrator for more information or if you have any questions.