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## ThinkPad Regulatory Notice

### Read first — regulatory information

Read this document before using your computer. This computer complies with the radio frequency and safety standards of any country or region in which it has been approved for wireless use. Install and use your computer according to the following instructions.

If your computer contains a wireless WAN adapter, be sure to also read *ThinkPad® Regulatory Notice for the Wireless WAN Adapter*, included with your computer.

Veillez lire le présent document avant d'utiliser votre ordinateur. Cet ordinateur est conforme aux normes de fréquence radio et de sécurité de tous les pays ou régions dans lesquels son utilisation sans fil a été homologuée. Installez et utilisez l'ordinateur en respectant les instructions qui suivent.

Si votre ordinateur contient une carte de réseau étendu (WAN) sans fil, veuillez à lire également la consigne réglementaire *ThinkPad Regulatory Notice for the Wireless WAN Adapter*, fournie avec votre ordinateur.

### USA — Federal Communications Commission (FCC)

#### I. User installable wireless LAN/WiMAX adapter

PCI Express Mini Cards:

- FCC ID: PD9512ANXHU (Model: 512ANXHMW)
- FCC ID: PD9512ANHU (Model: 512AN\_HMW)
- FCC ID: PD9533ANHU (Model: 533AN\_HMW)
- FCC ID: PPD-AR5BHB63-L (Model: AR5BHB63-L)
- FCC ID: TX2-RTL8191SE-L (Model: RTL8191SE)

**Note:** The PCI Express Mini Card (Model: 512ANXHMW) incorporates two functions: LAN and WiMAX. These functions operate exclusively, and do not transmit radio frequency simultaneously.

PCI Express Mini Cards for a wireless LAN marketed in the USA and Canada do not support nor function in the extended channels (12ch, 13ch).

For information concerning the wireless adapters announced after the publication of this notice, visit the Web site at <http://www.lenovo.com/support/site.wss/document.do?sitestyle=lenovo&Indocid=tpad-matrix>

**i) FCC RF Exposure compliance:** The radiated output power of the PCI Express Mini Card authorized to use for your computer is far below the FCC radio frequency exposure limits. Nevertheless, it shall be used in such a manner that the potential for human contact during normal operation is minimized as follows:

**CAUTION:**

**To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm (8 inches) must be maintained between the antennas connected to the PCI Express Mini Cards and all persons. If the distance may not be maintained while the computer is closed, you must select sleep (standby) as the power mode when closing the display.**

The transmission antennas for the PCI Express Mini Card are located in the LCD cover. See "Location of the UltraConnect™ wireless antennas" in *Access Help*.

**ii) FCC ID of the wireless adapter:** There is no FCC ID for the PCI Express Mini Card shown on the enclosure of your computer. The FCC ID is affixed on the approved adapter installed in the PCI Express Mini Card slot. For the location of the slot, see "PCI Express Mini Card slot for wireless LAN/WiMAX" in *Access Help*.

**iii) Installation of the approved wireless adapter:** If no integrated PCI Express Mini Card has been preinstalled in your computer, you can install one, provided by Lenovo® as an option. Plug the wireless option adapter into the PCI Express Mini Card slot. For the installation procedure, see "Installing and replacing the PCI Express Mini Card for wireless LAN/WiMAX connection" in *Access Help*.

**Attention:** The computer contains an authentication mechanism. If you install an unauthorized PCI Express Mini Card that is not approved for use in your computer, the computer will not start, but only displays an error message and emits audible beeps.

**iv) Radio Frequency interference requirements:**

- The devices have been tested and found to comply with the limits for a Class B digital device pursuant to FCC Part 15 Subpart B. The wireless LAN adapters (Models: AR5BHB63-L and RTL8191SE) were subject to DoC. Refer to "Electronic emission notices" on page 9. The wireless LAN/WiMAX adapters (Models: 512ANXHMW, 512AN\_HMW, and

533AN\_HMW) underwent the certification process with each respective FCC ID number listed in “I. User installable wireless LAN/WiMAX adapter” on page 1.

- Each device is restricted to indoor use due to its operation in the 5150 to 5250 MHz frequency range. FCC requires these products to be used indoors for the frequency range 5150 to 5250 MHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.
- High power radar are allocated as primary users of the 5250 to 5350 MHz and 5650 to 5850 MHz bands. These radar stations can cause interference with and/or damage this device.

## **II. Preinstalled integrated *Bluetooth* device**

- FCC ID: QDS-BRCM1033 (Model: BCM92046MD\_GEN)
- FCC ID: QDS-BRCM1046 (Model: BCM92070MD\_LEN0)

**i) FCC ID and installation of the device:** If you find the FCC ID QDS-BRCM1033 or FCC ID QDS-BRCM1046 on the label at the bottom side of your computer, your computer use a *Bluetooth* transmitter device (Model: BCM92046MD\_GEN or BCM92070MD\_LEN0). The *Bluetooth* device is preinstalled by Lenovo, and is not removable by you. If the device requires replacement during warranty it must be serviced by a Lenovo authorized servicer.

**ii) FCC RF safety requirement:** The radiated output power of the *Bluetooth* device is far below the FCC radio frequency exposure limits. Therefore, a 20 cm of separation between the *Bluetooth* antenna and human body is not required.

The *Bluetooth* device (Model: BCM92046MD\_GEN or BCM92070MD\_LEN0) is located under the palm rest. See “About your computer” in *Access Help*.

**iii) Radio Frequency interference requirements:** The devices have been tested and found to comply with the limits for both a Class B digital device regarding FCC Part 15 Subpart B and an intentional radiator regarding FCC Part 15 Subpart C; then they underwent the certification processes for both rules. Thus the FCC ID QDS-BRCM1033 and FCC ID QDS-BRCM1046 include both certifications of Part 15 Subpart B and C.

## **III. Preinstalled integrated Wireless USB adapter**

- FCC ID: TX2RTU7305BG13HMC (Model: RTU7305-BG13-HCM-V2C)

**i) FCC ID and installation of the adapter:** If you find the FCC ID TX2RTU7305BG13HMC on the label at the bottom side of your computer, your computer use a Wireless USB adapter (Model: RTU7305-BG13-HCM-V2C). The Wireless USB adapter is preinstalled by Lenovo, and any other adapter is not approved for use in your computer. If the adapter requires replacement via the proper steps shown in “Getting help and service” of the

*Service and Troubleshooting Guide*, shipped with your computer, Lenovo will send you a Customer Replaceable Unit (CRU).

**ii) FCC RF safety requirement:** The transmission antenna for the Wireless USB adapter is located in the LCD cover. See “Location of the UltraConnect wireless antennas” in *Access Help*. Any Wireless USB adapter is not subject to the RF Safety requirement regarding 47 CFR Part 2 section 1091 nor 1093. There is no restriction on operation of the Wireless USB adapter.

**iii) Radio Frequency interference requirements:** The device has been tested and certified as an intentional radiator regarding FCC Part 15 Subpart F under the FCC ID TX2RTU7305BG13HMC.

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

#### **IV. Simultaneous use of RF transmitters**

Your computer is approved for simultaneous use of the transmitters listed below:

- Wireless LAN/WiMAX adapter (FCC ID: PD9512ANXHU, PD9512ANHU, PD9533ANHU, PPD-AR5BHB63-L, or TX2-RTL8191SE-L)
- *Bluetooth* device (FCC ID: QDS-BRCM1033 or QDS-BRCM1046)
- Wireless USB adapter (FCC ID: TX2RTU7305BG13HMC)

Make sure of the following conditions when you use any other external wireless option device:

1. When you use any other RF option device, all other wireless features including the above integrated devices in your computer are required to be turned off.
2. You must follow the RF Safety instructions on wireless option devices that are included in the user manual of the RF option device.

## Canada — Industry Canada (IC)

### IC Certification number

#### I) User installable wireless LAN adapter:

- IC: 1000M-512ANHU (Model: 512AN\_HMW)
- IC: 1000M-533ANHU (Model: 533AN\_HMW)
- IC: 6317A-RTL8191SE (Model: RTL8191SE)
- IC: 4104A-ARBHB63L (Model: AR5BHB63-L)

PCI Express Mini Cards for a wireless LAN marketed in the USA and Canada do not support nor function in the extended channels (12ch, 13ch).

There is no certification number of Industry Canada for the PCI Express Mini Card shown on the enclosure of your computer. The IC certification number is affixed on the approved adapter installed in the PCI Express Mini Card slot. For the location of the slot, see “PCI Express Mini Card slot for wireless LAN/WiMAX” in *Access Help*.

**Attention:** The computer contains an authentication mechanism. You can install or remove each wireless adapter by yourself. If you install an unauthorized wireless adapter that is not approved for use in the computer, the computer will not start, but only displays an error message and emits audible beeps.

#### II) Preinstalled integrated *Bluetooth* device:

- IC: 4324A-BRCM1033 (Model: BCM92046MD\_GEN)
- IC: 4324A-BRCM1046 (Model: BCM92070MD\_LEN0)

If you find an indication “Contains Transmitter Module: IC: 4324A-BRCM1033” or “Contains Transmitter Module: IC: 4324A-BRCM1046” on the label at the bottom side of your computer, your computer use a *Bluetooth* transmitter device. The *Bluetooth* device is preinstalled by Lenovo, and is not removable by you. If the device requires replacement during warranty it must be serviced by a Lenovo authorized servicer.

**III) WiMAX features and Wireless USB features:** The use of the WiMAX features and the Wireless USB features is not permitted in Canada. Do not use these features. To do so would be a violation of Industry Canada regulations.

#### IV) Low power license-exempt radiocommunication devices (RSS-210):

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.

The transmitter devices have been designed to operate with the antennas integrated in the computer, and having a maximum gain of within 3 dBi.

The maximum antenna gain permitted for devices in the 5250-5350 MHz, 5470-5725 MHz, and 5725-5825 MHz bands complies with the e.i.r.p. limit in section A9.2 of RSS-210.

When you use the wireless LAN adapter (Model: 512AN\_HMW or 533AN\_HMW):

- The devices for the band 5150–5250 MHz are only for indoor usage to reduce potential for harmful interference to co-channel Mobile Satellite systems.
- High power radars are allocated as primary users (meaning they have priority) of 5250–5350 MHz and 5650–5850 MHz and these radars could cause interference and/or damage to LELAN (Licence-Exempt Local Area Network) devices.

**V) Exposure of humans to RF fields (RSS-102):** The computers employ low gain integral antennas that do not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site at [www.hc-sc.gc.ca/](http://www.hc-sc.gc.ca/)

The radiated energy from the antennas connected to the wireless adapters conforms to the IC limit of the RF exposure requirement regarding IC RSS-102, Issue 2 clause 4.2.

## **Numéro d'homologation IC**

### **I) Module sans fil installable par l'utilisateur:**

- IC: 1000M-512ANHU (Model: 512AN\_HMW)
- IC: 1000M-533ANHU (Model: 533AN\_HMW)
- IC: 6317A-RTL8191SE (Model: RTL8191SE)
- IC: 4104A-ARBHB63L (Model: AR5BHB63-L)

Les cartes de réseau local sans fil Express mini-PCI commercialisées aux États-Unis et au Canada ne prennent pas en charge les canaux étendus (12ch, 13ch) et ne fonctionnent donc pas sur de tels canaux.

Le boîtier de votre ordinateur ne comporte pas de numéro d'homologation IC (Industry Canada) pour la carte mini-PCI Express. Le numéro d'homologation IC est apposé sur le module installé dans le logement pour carte mini-PCI Express. Pour savoir où se trouve cet emplacement, consultez la section "Logement pour cartes mini-PCI Express pour réseau local/WiMAX" dans Access Help.

**Attention:** L'ordinateur contient un mécanisme d'authentification. Vous pouvez installer ou désinstaller tout dispositif sans fil. Si vous installez une carte sans fil qui n'est pas homologuée dans votre ordinateur, l'ordinateur ne démarrera pas mais affichera un message d'erreur et générera des bips sonores.

**II) Émetteur Bluetooth intégré préinstallé:**

- IC: 4324A-BRCM1033 (Model: BCM92046MD\_GEN)
- IC: 4324A-BRCM1046 (Model: BCM92070MD\_LEN0)

Si la mention "Contains Transmitter Module: IC: 4324A-BRCM1033" ou "Contains Transmitter Module: IC: 4324A-BRCM1046" figure sur un étiquette située sous l'ordinateur, cela signifie que l'ordinateur utilise un émetteur Bluetooth. L'émetteur Bluetooth est préinstallé par Lenovo et ne peut pas être retiré par l'utilisateur. S'il doit être remplacé pendant la période de garantie, l'opération doit être effectuée par un prestataire de services agréé par Lenovo.

**III) Fonctions WiMAX et fonctions USB sans fil:** L'utilisation de fonctions WiMAX et de fonctions USB sans fil n'est pas autorisée au Canada. Veuillez ne pas utiliser ces fonctions car ce serait une infraction aux lois d'Industrie Canada.

**IV) Remarque relative aux appareils de communication radio de faible puissance sans licence (CNR-210):** Le fonctionnement de ce type d'appareil est soumis aux deux conditions suivantes:

1. Cet appareil ne doit pas perturber les communications radio, et
2. cet appareil doit supporter toute perturbation, y compris les perturbations qui pourraient provoquer son dysfonctionnement.

Les périphériques d'émission sont conçus pour fonctionner avec des antennes intégrées à l'ordinateur et ayant un gain maximal de moins de 3 dBi.

Le gain d'antenne maximal pour les périphériques dans les bandes de fréquence 5250-5350 MHz, 5470-5725 MHz, et 5725-5825 MHz est conforme à la limite p.i.r.e énoncée dans la section A9.2 de la CNR-210.

Lorsque vous utilisez le modèle, 512AN\_HMW ou 533AN\_HMW:

- Tout appareil destiné à la bande 5150-5250 MHz devra être exclusivement utilisé en intérieur afin de réduire les risques de perturbations électromagnétiques gênantes sur les systèmes de satellite mobile dans un même canal.
- Les radars à forte puissance sont désignés comme les utilisateurs principaux (c'est-à-dire qu'ils sont prioritaires) des bandes 5250-5350 MHz et 5650-5850 MHz. Ils peuvent provoquer des perturbations électromagnétiques sur les appareils de type LELAN (réseau de communication local sans licence) ou les endommager.

**V) Exposition des êtres humains aux champs radioélectriques (RF)**

**(CNR-102):** L'ordinateur utilise des antennes intégrales à faible gain qui n'émettent pas un champ électromagnétique supérieur aux normes imposées par le Ministère de la santé canadien pour la population. Consultez le Safety Code 6 sur le site Web du Ministère de la santé canadien à l'adresse [www.hc-sc.gc.ca/](http://www.hc-sc.gc.ca/)

L'énergie émise par les antennes reliées aux adaptateurs sans fil respecte la limite d'exposition aux radiofréquences telle que définie par Industrie Canada dans la clause 4.2 du document CNR-102.

## Electronic emission notices

### *Federal Communications Commission (FCC) Statement*

- Model: AR5BHB63-L
- Model: RTL8191SE

**Note:** The wireless LAN/WiMAX adapters (Models: 512ANXHMW, 512AN\_HMW, and 533AN\_HMW) and the *Bluetooth* devices (Models: BCM92046MD\_GEN and BCM92070MD\_LEN0) underwent certification process for the FCC Part 15 Subpart B compliance under each respective FCC ID number.

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 measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an authorized dealer or service representative for help.

Lenovo is not responsible for any radio or television interference caused by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

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.

Responsible Party:

Lenovo (United States) Incorporated  
1009 Think Place-Building One  
Morrisville, NC 27560  
Telephone: 1-919-294-5900



Tested To Comply  
With FCC Standards

FOR HOME OR OFFICE USE

*Industry Canada Class B Emission Compliance Statement*

This Class B digital apparatus complies with Canadian ICES-003.

*Avis de conformité à la réglementation d'Industrie Canada*

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

## **Trademarks**

The following terms are trademarks of Lenovo in the United States, other countries, or both:

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