Wireless Networking Division

Regulatory and Safety Notices

User Documentation Guidelines for OEMs and Integrators

Calexico I (802.11b)

Note: Due to the evolving state of regulations and standards in the wireless LAN field (IEEE 802.11 and similar), the information provided herein is subject to change. Intel Corporation assumes no responsibility for errors or omissions in this document. Nor does Intel make any commitment to update the information contained herein.

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Revision History

Date	Changes
09/25/02	Created document
10/03/02	Corrected errors in document, added 3 additional Mini PCI models, genericized product references to refer to “LAN Mini PCI Adapters”
10/08/02	Added Annex II under 1999/5/EC for 2.4 GHz products (PS)
12/18/02	Added “Information for the OEM” page 1 and additional text for OEM integrators page 4 (TL)
12/20/02	Added End Product Label: FCC ID “XXXXXXXX’ info.
01/20/03	Renamed document to emphasize “guidelines”; added “purpose of document” text; removed dual-band product models and information; added notified body numbers; updated information for France, Belgium, and the Netherlands; deleted all country/regional coverage for which information has not become available (exceptions are FCC, Canada, Europe); added copyright, disclaimer, and trademark information.
01/24/03	Added additional disclaimer text to emphasize provisional nature of document.

Intel® PRO/Wireless LAN 2100 Mini PCI Adapters
Safety and Regulatory Notices
User Documentation Guidelines for OEMs and Integrators

Purpose of This Document

This document is provided for the information of original equipment manufacturers (OEMs), system integrators, and others who manufacture and distribute systems or products that incorporate a version of the Intel PRO/Wireless LAN 2100 (single-band) Mini PCI adapter. The purpose of the document is to provide safety and regulatory information pertaining to the Intel products of reference and guidance as to what information must be communicated by the OEM/integrator to the end user of the products. As new approval information becomes available over the course of the worldwide approvals process, additional guidelines will be developed as required.

Note: This document should not be distributed directly to end users of the Intel products of reference. The format and content of the regulatory information supplied to the end user is the responsibility of the OEM or integrator, and not of Intel.

The information in this document applies to the following products:

Single-band wireless LAN adapters (802.11b only)

Intel® PRO/Wireless LAN 2100 3B Mini PCI Adapter (model WM3B2100)
Intel® PRO/Wireless LAN 2100 3A Mini PCI Adapter (model WM3A2100)

Information for OEMs and Integrators

The following statement must be included with all versions of this document supplied to an OEM or integrator, but should not be distributed to the end user.

- **This device is intended for OEM integrators only.**
- **This device cannot be co-located with any other transmitter.**
- **Please refer to the full Grant of Equipment document for other restrictions.**

This device is intended for OEM integrators only.
This device cannot be co-located with any other transmitter.

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

1) The antenna must be installed such that 20 cm is maintained between the antenna and users. For laptop installations, the antenna must be installed to ensure that the proper spacing is maintained in the event the users places the device in their lap during use (i.e. positioning of antennas must be placed in the upper portion of the LCD panel only to ensure 20 cm will be maintained if the user places the device in their lap for use) and

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

As long as the 2 conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

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

This transmitter module is authorized only for use in devices where the antenna may be installed such that 20 cm may be maintained between the antenna and users (for example access points, routers, wireless ASDL modems, certain laptop configurations, and similar equipment). The final end product must be labeled in a visible area with the following: "Contains TX FCC ID: XXXXXXXXXXXXXXX," where XXXXXXXXXXXXXXX is replaced by the FCC ID on the module being integrated.

RF Exposure Manual Information That Must be Included

The users 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 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."

Additional Information That Must be Provided to OEM Integrators

The end user should NOT be provided any instructions on how to remove or install the device.

Information to Be Supplied to the End User by the OEM or Integrator

The following regulatory and safety notices must be published in documentation supplied to the end user of the product or system incorporating an Intel® PRO/Wireless 2100 LAN Mini PCI Adapter in compliance with local regulations.

USA and Canada Safety Requirements and Notices

The FCC with its action in ET Docket 96-8 for spread-spectrum and 93-62 is for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC certified equipment. The Intel PRO/Wireless LAN Mini PCI Adapter products meet the Human Exposure limits found in OET Bulletin 65, 2001, and ANSI/IEEE C95.1, 1992. Proper operation of this radio according to the instructions found in this manual will result in exposure substantially below the FCC's recommended limits.
The following safety precautions should be observed:

- Do not touch or move antenna while the unit is transmitting or receiving.
- Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate the radio or attempt to transmit data unless the antenna is connected; if not, the radio may be damaged.
- Use in specific environments:
  - The use of wireless devices in hazardous locations is limited by the constraints posed by the safety directors of such environments.
  - The use of wireless devices on airplanes is governed by the Federal Aviation Administration (FAA).
  - The use of wireless devices in hospitals is restricted to the limits set forth by each hospital.
- Antenna use:
  - In order to comply with FCC RF exposure limits, low gain integrated antennas should be located at a minimum distance of 20 cm (8 inches) or more from the body of all persons.
  - High-gain, wall-mount, or mast-mount antennas are designed to be professionally installed and should be located at a minimum distance of 30 cm (12 inches) or more from the body of all persons. Please contact your professional installer, VAR, or antenna manufacturer for proper installation requirements.

Explosive Device Proximity Warning

Warning: Do not operate a portable transmitter (such as a wireless network device) near unshielded blasting caps or in an explosive environment unless the device has been modified to be qualified for such use.

Antenna Warning

Warning: To comply with the FCC and ANSI C95.1 RF exposure limits, it is recommended for Intel(R) PRO/Wireless LAN Mini PCI Adapters installed in a desktop or portable computer, that the antenna for this device be installed so as to provide a separation distance of al least 20 cm (8 inches) from all persons and that the antenna must not be co-located or operating in conjunction with any other antenna or radio transmitter. It is recommended that the user limit exposure time if the antenna is positioned closer than 20 cm (8 inches).

Use On Aircraft Caution

Caution: Regulations of the FCC and FAA prohibit airborne operation of radio-frequency wireless devices because their signals could interfere with critical aircraft instruments.

Other Wireless Devices

Safety Notices for Other Devices in the Wireless Network: Refer to the documentation supplied with wireless Ethernet adapters or other devices in the wireless network.

USA Radio Frequency Interference Requirements

FCC Regulations Part 15 Declaration of Conformity (DoC)

Intel Corporation declares that the equipment described in this document is within the requirements of the Code of Federal Regulations listed below:

Title 47 Part 15, Subpart B, Class B for a digital device.

This declaration is based upon the compliance of the Intel(R) PRO/Wireless LAN Mini PCI Adapters to the above standards. Intel has determined that the models listed have been shown to comply with the applicable technical standards if no unauthorized change is made in the equipment and if the equipment is properly maintained and operated.

These units are identical to the units tested and found acceptable with the applicable standards. Records maintained by Intel continue to reflect that units being produced under this Declaration of Conformity, within the variation that can be expected due to quantity production and tested on a statistical basis, continue to comply with the applicable technical standards.

FCC Rules and Regulations - Part 15

This device uses, generates and radiates radio frequency energy. The radio frequency energy produced by this device is well below the maximum exposure allowed by the Federal Communications Commission (FCC).

This device complies with the limits for a Class B digital device pursuant to Part 15 subpart C of the FCC Rules and Regulations. 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.

The FCC limits are designed to provide reasonable protection against harmful interference when the equipment is installed and used in accordance with the instruction manual and operated in a commercial environment. However, there is no guarantee that interference will not occur in a particular commercial installation, or if operated in a residential area.

If harmful interference with radio or television reception occurs when the device is turned on, the user must correct the situation at the user's own expense. The user is encouraged to try one or more of the following corrective measures:

- Re-orient 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 on which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by Intel could void the user's authority to operate this device.

Canada

Canada Radio Frequency Interference Requirements

This Class B digital apparatus complies with Canadian ICES-003, Issue 2, and RSS-210, Issue 4 (Dec. 2000).

"To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing."

Cet appareil numérique de la classe B est conforme à la norme NMB-003, No. 2, et CNR-210, No. 4 (Dec. 2000).

« Pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit être utilisé à l'intérieur et devrait être placé loin des fenêtres afin de fournir un écran de blindage maximal. Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence. »

European Union CE Marking and Compliance Notices
Products intended for sale within the European Union are marked with the Conformité Européene (CE) Marking, which indicates compliance with the applicable Directives and European standards and amendments identified below. This equipment also carries the Class 2 identifier.

Declaration of Conformity (Mini PCI Adapter)

[Declaration to be supplied]

Product Descriptions:

Intel® PRO/Wireless LAN 2100 3B Mini PCI Adapter (model WM3B2100) CE0682!

Intel® PRO/Wireless LAN 2100 3A Mini PCI Adapter (model WM3A2100) CE0336!

Warning: See 802.11b restrictions for specific countries or regions within countries under the heading "European Economic Area Restrictions" below.

Translated Statements of Compliance

[English]
This product follows the provisions of the European Directive 1999/5/EC.
[Danish]
Dette produkt er i overensstemmelse med det europæiske direktiv 1999/5/EC
[Dutch]
Dit product is in navolging van de bepalingen van Europees Directief 1999/5/EC.
[Finnish]
Tämä tuote noudattaa EU-direktiivin 1999/5/EC määräyksiä.
[French]
Ce produit est conforme aux exigences de la Directive Européenne 1999/5/EC.
[German]
Dieses Produkt entspricht den Bestimmungen der Europäischen Richtlinie 1999/5/EC
[Greek]
Το προϊόν αυτό πληροί τις προβλέψεις της Ευρωπαϊκής Οδηγίας 1999/5/EC.
[Icelandic]
Þessi vara stenst reglugerð Evrópska Efnahags Bandalagsins númer 1999/5/EC
[Italian]
Questo prodotto è conforme alla Direttiva Europea 1999/5/EC.
[Norwegian]
Dette produktet er i henhold til bestemmelsene i det europeiske direktivet 1999/5/EC.
[Portuguese]
Este produto cumpre com as normas da Diretiva Européia 1999/5/EC.
[Spanish]
Este producto cumple con las normas del Directivo Europeo 1999/5/EC.
[Swedish]
Denna produkt har tillverkats i enlighet med EG-direktiv 1999/5/EC.

European Economic Area Restrictions

Local Restriction of 802.11b Radio Usage

[**Note to integrator:** The following statements on local restrictions must be published in all end-user documentation provided with the system or product incorporating the Intel PRO/Wireless 2100 Wireless LAN (802.11b) product.]

Caution: Due to the fact that the frequencies used by 802.11b wireless LAN devices may not yet be harmonized in all countries, 802.11b products are designed for use only in specific countries or regions, and are not allowed to be operated in countries or regions other than those of designated use. As a user of these products, you are responsible for ensuring that the products are used only in the countries or regions for which they were intended and for verifying that they are configured with the correct selection of frequency and channel for the country or region of use. Any deviation from permissible settings and

restrictions in the country or region of use could be an infringement of local law and may be punished as such.

The European variant is intended for use throughout the European Economic Area. However, authorization for use is further restricted in particular countries or regions within countries, as follows:

Local Restrictions on 802.11b Radio Usage

General

European standards dictate maximum radiated transmit power of 100mW effective isotropic radiated power (EIRP) and the frequency range 2400 – 2483.5 MHz.

Belgium and the Netherlands
In Belgium and the Netherlands, the product may not be used outdoors. See the instructions below under the heading “How to Turn Off the Wireless LAN Radio.”

France

Note: At the time of publication of this document, operation of Intel® PRO/Wireless 2100 LAN Mini PCI Adapters in France was restricted to indoor use only and was allowable in only 38 specific regional “départements” due to local restrictions on transmission power and frequencies. The 38 departments in which the Intel adapter can currently be used are listed below. Since it is likely that additional permitted departments will be added to the list at regular intervals, visit the website of the French Authority for Regulation of Telecommunications (ART) for updated information, in French at **http://www.art-telecom.fr/** or in English at **http//www.art-telecom.fr/eng/**

Departments in Which the Intel Wireless LAN Mini PCI Adapter Can Be Used (Indoors Only)

The Intel® PRO/Wireless 2100 LAN Mini PCI Adapter can currently be used indoors only in the following 38 departments of mainland France.

01	Ain Orientales	36	Indre	66	Pyrénées
02	Aisne	37	Indre et Loire	67	Bas Rhin
03	Allier	41	Loir et Cher	68	Haut Rhin
05	Hautes Alpes	42	Loire	70	Haute Saône
08	Ardennes	45	Loiret	71	Saône et Loire
09	Ariège	50	Manche	75	Paris
11	Aude	55	Meuse	82	Tarn et Garonne
12	Aveyron	58	Nièvre	84	Vaucluse
16	Charente	59	Nord	88	Vosges
24	Dordogne	60	Oise	89	Yonne
25	Doubs	61	Orne	90	Territoire de Belfort
26	Drôme	63	Puy du Dôme	94	Val de Marne
32	Gers	64	Pyrénées Atlantique		

Departments in Which the Intel Wireless LAN Mini PCI Adapter Cannot Be Used

The Intel® PRO/Wireless 2100 LAN Mini PCI Adapter cannot currently be used in any departments of mainland France other than the 38 listed above. See the heading “How to Turn Off the Wireless LAN Radio” for the procedures to be followed when operating your computer device or system in departments not listed above.

Maximum EIRP for use of 802.11b wireless LAN cards in the mainland departments of France not shown in the table above (see the ART website at www.art-telecom.fr for information on the French overseas territories)

Frequency Ranges (MHz)	Indoors	Outdoors
2400 – 2446.5	10 mW	Not permitted
2446.5 – 2483.5	100 mW	100 mW on private property with Ministry of Defense approval

[**Note to integrator:** In the documentation provided to the end user, the OEM or integrator must specify the maximum EIRP of the system (including antenna) so that the user can compare the EIRP of the system to the limits stated in the table above.]

How to turn off the wireless LAN radio

Note: Turning the wireless LAN radio off is not the same as disabling the wireless LAN card. It is not necessary to disable the card to meet the regulatory requirements.

While operating the computer or system incorporating the Intel® PRO/Wireless 2100 LAN Mini PCI in those French departments that do not allow use of the wireless LAN equipment, the user of the equipment must turn off the wireless LAN radio in order to comply with local regulations. Instructions on how to do this are provided in this document under the heading “How to Turn Off the Wireless LAN Radio.”

[**Note to integrator:** The following instructions must be published in all end-user documentation provided with the system or product incorporating the Intel PRO/Wireless 2100 Wireless LAN (802.11b) products. The instructions be matched to the features of the computer or system to which they below.]

How to turn off the WLAN radio using software

If Intel® PROSet is installed

[**Note to integrator:** If Intel PROSet utility software is installed on the system or computer incorporating the Intel® PRO/Wireless 2100 LAN Mini PCI Adapter, the OEM or integrator must supply the end user with OS-appropriate instructions on how use Intel PROSet to turn off the Intel wireless LAN card in restricted countries or regions, either as part of the documentation containing wireless LAN regulatory guidelines or by referral to system documentation containing the required instructions. The procedure for turning off the wireless LAN radio in restricted regions must be described clearly step by step so that the end user can easily comply with the regulatory requirements. See an outline of the procedure below.]

To turn off the wireless LAN radio using Intel PROSet:

1. Right-click the Intel(R) PRO/Wireless card icon in the system tray
2. Select the active Intel adapter and click Switch Radio Off.

You can also turn off the radio on the General tab of the Intel PROSet screen, by selecting Off next to Switch radio.

If Intel PROSet is not installed

[**Note to integrator:** If Intel PROSet configuration software is not installed on the system or computer incorporating the Intel® PRO/Wireless 2100 LAN Mini PCI Adapter, the OEM or integrator must supply the end user with OS-appropriate instructions on how to use the Control Panel to turn off the Intel wireless LAN radio in restricted countries or regions, either as part of the documentation containing wireless LAN regulatory guidelines or by referral to system documentation containing the required instructions. The procedure for turning off the wireless LAN radio in restricted regions must be described clearly step by step so that the end user can easily comply with the regulatory requirements. See an outline of the procedure below.]

To turn off the wireless LAN radio using the Control Panel:

1. Access the Control Panel and double-click the System icon.

2. Go to Device Manager under Hardware and expand the list of Network Adapters.
3. Double-click the Intel PRO/Wireless Mini PCI LAN Adapter and select the Advanced tab.
4. On the Advanced tab, check the Wireless device off (radio off) check box, and click OK.

How to turn off the WLAN radio using a hardware switch (if supplied)

[**Note to integrator:** If the system or computer incorporating the Intel® PRO/Wireless 2100 LAN Mini PCI Adapter has an external hardware switch that can be used to manually turn the wireless LAN card off and on, the OEM or integrator must supply the end user with instructions on how to use this switch, either as part of the documentation containing wireless LAN regulatory guidelines or by referral to system documentation containing the required instructions. The procedure for manually turning off the wireless LAN radio in restricted regions must be described clearly step by step so that the end user can easily comply with local regulatory requirements.]