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## Appendix C. Notices

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## Anyplace Kiosk Class 2 laser notices

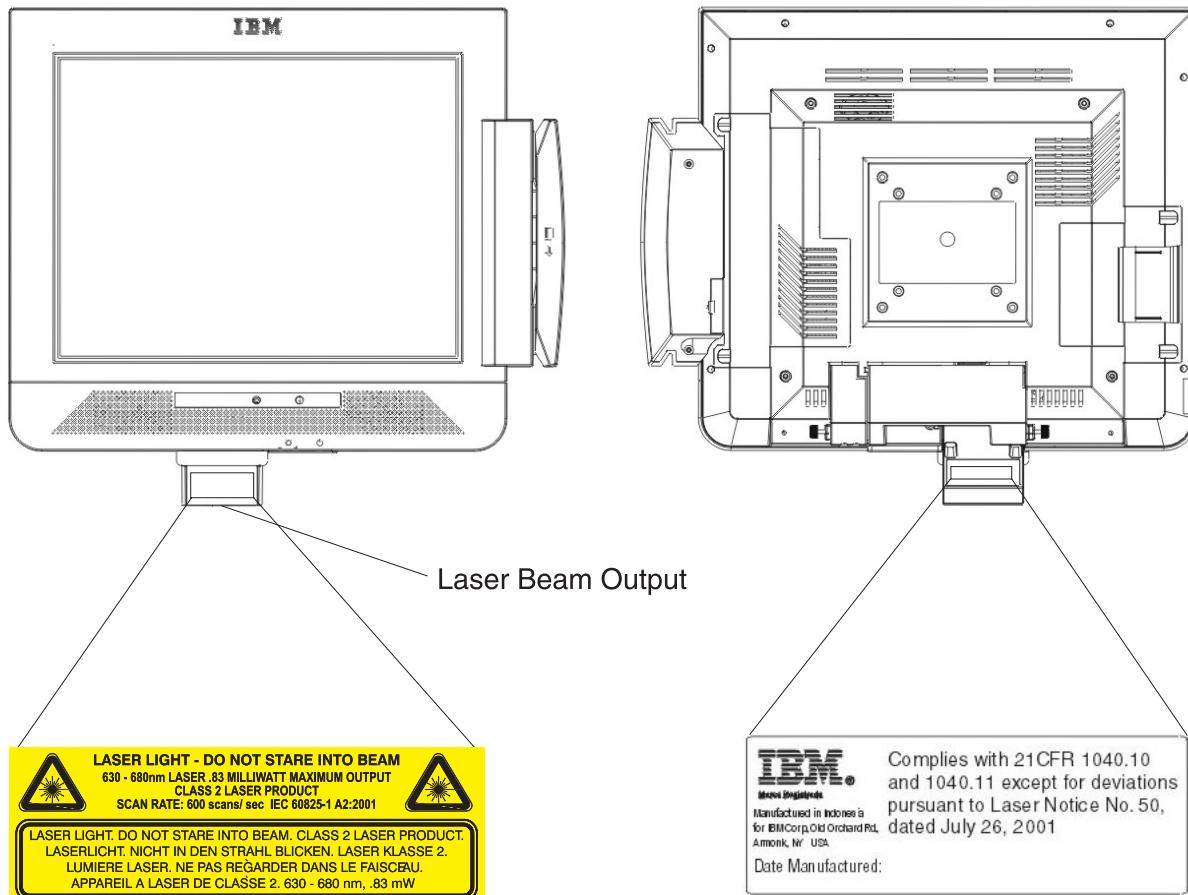


Figure 36. Anyplace Kiosk Class 2 laser notices

### Class 2 laser notices

#### CAUTION:

This product contains a class 2 laser. Do not stare into the beam.

نَذِيرَة:

يَحْتَوِي هَذَا الْمَنْتَجُ عَلَى لَيْزَرٍ 2. Clas. لا تَقْوِمَ بِتَرْكِيزِ النَّظَرِ فِي التَّسْعَاعِ (C029)

#### CUIDADO:

Este produto contém um laser Classe 2. Não olhe em direção ao raio. (C029)

#### 注意:

本產品包含 Class 2 雷射產品。請勿注視光束。 (C029)

#### Pozor:

Ovaj proizvod sadrži laser Klase 2. Ne gledajte u zraku. (C029)

**POZOR:**

Tento produkt obsahuje laser třídy 2. Nedívajte se do paprsku. (C029)

**Pas på:**

Produktet indeholder et klasse 2-laserprodukt. Se ikke ind i laserstrålen. (C029)

**Let op!**

Dit product bevat een laser van Klasse 2. Kijk niet in de laserstraal. (C029)

**Varoitus:**

Tämä tuote sisältää luokan 2 laserlähteen. Varo katsomasta säteeseen. (C029)

**ATTENTION :**

Ce produit contient un laser de classe 2. Evitez de regarder fixement le faisceau. (C029)

**Achtung:**

Dieses Produkt enthält einen Laser der Klasse 2. Niemals direkt in den Laser-strahl blicken. (C029)

**ΠΡΟΣΟΧΗ:**

Το προϊόν αυτό περιέχει υπομονάδα laser Κατηγορίας 2. Μην κοιτάτε στην κατεύθυνση της δέσμης laser. (C029)

**זהירות:**

מוצר זה מכיל לייזר מקטgorיה 2. אין להסתכל ישירות לתוך הקרן. (C029)

**FIGYELMEZTETÉS:**

Ez a termék 2-es osztályú lézert tartalmaz. Ne nézzen bele a lézernyalába. (C029)

**Avvertenza:**

Questo prodotto contiene un laser di Classe 2. Non fissare il fascio laser. (C029)

**注意:**

当製品には、クラス 2 のレーザーが使用されています。光線をのぞき込まないでください。 (C029)

**주의:**

이 제품에는 등급 2 레이저가 포함되어 있습니다. 광선을 응시하지 마십시오. (C029)

**ПРЕДУПРЕДУВАЊЕ:**

Овој производ содржи ласер од Класа 2. Да не се гледа директно во снопот. (C029)

**ADVARSEL:**

Dette produktet inneholder en laser i klasse 2. Ikke stirr inn i laserstrålen. (C029)

**UWAGA:**

Produkt ten zawiera laser klasy 2. Nie należy patrzeć na promień lasera. (C029)

**CUIDADO:**

Este produto contém um laser Classe 2. Não observe directamente o feixe. (C029)

**ОСТОРОЖНО:**

Данное устройство содержит лазер класса 2. Не смотрите прямо на луч. (C029)

**POZOR:**

Tento produkt obsahuje laser triedy 2. Nepozerajte sa do lúča. (C029)

**POZOR:**

Ta izdelek vsebuje laser razreda 2. Ne glejte v žarek. (C029)

**PRECAUCIÓN:**

Este producto contiene un láser de clase 2. No mire directamente al rayo láser. (C029)

**Varning – risk för personskada:**

Maskinvaran innehåller en laserprodukt av klass 2. Titta inte in i ljusstrålen. (C029)

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## Electronic emission notices

### Federal communications commission (FCC) statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or 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.

### Industry Canada Class A emission compliance statement

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

## Avis de conformité aux normes d'Industrie Canada

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

## European Community (CE) mark of conformity statement

This product is in conformity with the protection requirements of EC Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to CISPR 22 / European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

**Warning:** This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

## Germany

**Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) vom 30. August 1995 (bzw. der EMC EG Richtlinie 89/336).**

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen.

Verantwortlich für die Konformitätserklärung nach Paragraph 5 des EMVG ist die IBM Deutschland Informationssysteme GmbH, 70548 Stuttgart.

Informationen in Hinsicht EMVG Paragraph 3 Abs. (2) 2:

Das Gerät erfüllt die Schutzanforderungen nach EN 50082-1 und EN 55022 Klasse A.

EN 55022 Klasse A Geräte müssen mit folgendem Warnhinweis versehen werden:

"Warnung: dies ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funkstörungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen durchzuführen und dafür aufzukommen."

EN 50082-1 Hinweis:

"Wird dieses Gerät in einer industriellen Umgebung betrieben (wie in EN 50082-2 festgelegt), dann kann es dabei eventuell gestört werden. In solch einem Fall ist der Abstand bzw. die Abschirmung zu der industriellen Störquelle zu vergrößern."

Anmerkung:

Um die Einhaltung des EMVG sicherzustellen, sind die Geräte, wie in den IBM Handbüchern angegeben, zu installieren und zu betreiben.

## Australia / New Zealand

**Attention:** This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

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## Japanese power line harmonics compliance statement

高調波ガイドライン適合品

高調波ガイドライン適合品

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## Japanese Voluntary Control Council for Interference (VCCI) statement

This product is a Class A Information Technology Equipment and conforms to the standards set by the Voluntary Control Council for Interference by Technology Equipment (VCCI). In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

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## Korean Communications Statement

As this equipment has undergone EMC registration for business purpose, the seller and/or buyer is asked to be aware of this point and in case an incorrect sale or purchase has been made, it is asked that a change to household use be made.

이 기기는 업무용으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이 점을 주의하시기 바라며, 만약 잘못 판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

## Chinese Class A warning statement

**Attention:** This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

中华人民共和国“A类”警告声明

声 明

此为 A 级产品，在生活环境巾，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

## Taiwanese Class A warning statement

警告使用者：  
這是甲類的資訊產品，在  
居住的環境中使用時，可  
能會造成射頻干擾，在這  
種情況下，使用者會被要  
求採取某些適當的對策。

## Taiwanese battery recycling statement



# 廢電池請回收

Waste batteries, please recycle.

## Electrostatic discharge (ESD)

**Attention:** ESD damage can occur when there is a difference in charge between the part, the product, and the service person. No damage will occur if the service person and the part being installed are at the same charge level.

### ESD Damage Prevention

Anytime a service action involves physical contact with logic cards, modules, back-panel pins, or other ESD sensitive (ESDS) parts, the service person must be connected to an ESD common ground point on the product through the ESD wrist strap and cord.

The ESD ground clip can be attached to any frame ground, ground braid, green wire ground, or the round ground prong on the AC power plug. Coax or connector outside shells can also be used.

### Handling Removed Cards

Logic cards removed from a product should be placed in ESD protective containers. No other object should be allowed inside the ESD container with the logic card. Attach tags or reports that must accompany the card to the outside of the container.

## | Regulatory notice for T60H786 or GN-WIAG02 IBM 802.11 b/g wireless LAN mini PCI adapter

The IBM Wireless LAN Mini PCI Adapter must be installed and used in strict accordance with the following instructions. This product complies with the following radio frequency standards.

## USA – Federal Communications Commission (FCC)

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.

### Exposure to radio frequency energy

The radiated output power of the Wireless LAN Mini-PCI Card authorized for use in the IBM 4836/4838 Anyplace Kiosk is far below the FCC radio frequency exposure limits. Nevertheless, the IBM 4836/4838 Anyplace Kiosk shall be used in such a manner that the potential for human contact during normal operations is minimized.

#### CAUTION:

- **To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm (8 inches) must be maintained between the antenna for the integrated Wireless LAN Mini-PCI Card built in to the display section and all persons.**
- **The antenna(s) must not be co-located (within 20cm) or operating in conjunction with any other antenna or transmitter during customer usage.**

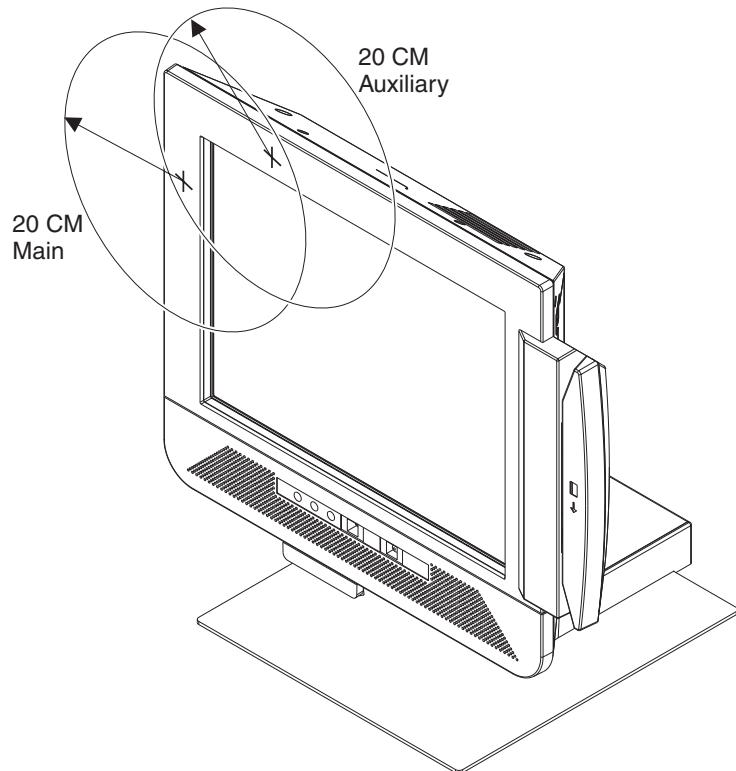


Figure 37. Antenna operating range

### Wireless card access

To access the wireless card adapter, refer to “Removing the wireless card” on page 33.

### Interference statement

An improper installation or unauthorized use may cause harmful interference to radio communications. Also, any tampering with the internal antenna will void the FCC certification and your warranty. Refer to the Appendix: Electronic Emission notices in the User Manual for more detail.

## Canada – Industry Canada (IC) Low Power License-Exempt Radio Communication 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.

## Permis d'émission à faible puissance – Cas des appareils de communications radio (CNR-210)

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes:

1. il ne doit pas produire de brouillage et
2. l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

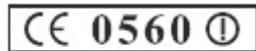
### **Exposure of humans to RF fields (RSS-102)**

IBM Anyplace Kiosk 4836/4838 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 <http://www.hc-sc.gc.ca/>.

### **Exposition des êtres humains aux champs radioélectriques (RF) (CNR-102)**

Le IBM Anyplace Kiosk 4836/4838 computers utilise des antennes intégrales à faible gain qui némettent 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 <http://www.hc-sc.gc.ca/>.

## **Europe – EU declaration of conformity for IBM 11 b/g wireless LAN mini PCI adapter**



Products intended for sale within the European Union are marked with the Conformité Européenne (CE) Marking, which indicates compliance with the applicable Directives and European Norms, and amendments, identified below.

- Hereby, AMBIT MICROSYSTEMS CORPORATION, declares that this IBM 11b/g Wireless LAN Mini PCI Adapter is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. This device is intended for indoor use.
- AMBIT MICROSYSTEMS CORPORATION vakuuttaa täten että IBM 11b/g Wireless LAN Mini PCI Adapter tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen. Tämä laite on tarkoitettu käytettäväksi vain sisätiloissa.
- Hierbij verklaart AMBIT MICROSYSTEMS CORPORATION dat het toestel IBM 11b/g Wireless LAN Mini PCI Adapter in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG. Dit apparaat is bedoeld voor gebruik binnenshuis.
- Bij deze verklaart AMBIT MICROSYSTEMS CORPORATION dat deze IBM 11b/g Wireless LAN Mini PCI Adapter voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC. Dit apparaat is bedoeld voor gebruik binnenshuis.
- Par la présente AMBIT MICROSYSTEMS CORPORATION déclare que l'appareil IBM 11b/g Wireless LAN Mini PCI Adapter est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE. Ce périphérique est destiné à être utilisé à l'intérieur.
- Par la présente, AMBIT MICROSYSTEMS CORPORATION déclare que ce IBM 11b/g Wireless LAN Mini PCI Adapter est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables. Ce périphérique est destiné à être utilisé à l'intérieur.
- Härmed intygar AMBIT MICROSYSTEMS CORPORATION att denna IBM 11b/g Wireless LAN Mini PCI Adapter står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG. Enheten är avsedd för inomhusbruk.

- Undertegnede AMBIT MICROSYSTEMS CORPORATION erklærer herved, at følgende udstyr IBM 11b/g Wireless LAN Mini PCI Adapter overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF. Dette udstyr er beregnet til indendørs brug.
- Hiermit erklärt AMBIT MICROSYSTEMS CORPORATION, dass sich dieser/diese/dieses IBM 11b/g Wireless LAN Mini PCI Adapter in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet. Diese Einheit ist für den Betrieb in Innenräumen vorgesehen. (BMW)
- Hiermit erklärt AMBIT MICROSYSTEMS CORPORATION die Übereinstimmung des Gerätes IBM 11b/g Wireless LAN Mini PCI Adapter mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. Diese Einheit ist für den Betrieb in Innenräumen vorgesehen. (Wien)
- *ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ ΑΜΒΙΤ MICROSYSTEMS CORPORATION ΔΗΛΩΝΕΙ ΟΤΙ ΙΒΜ 11b/g Wireless LAN Mini PCI Adapter ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ*  
Η συσκευή αυτή προορίζεται για εσωτερική χρήση.
- Con la presente AMBIT MICROSYSTEMS CORPORATION dichiara che questo IBM 11b/g Wireless LAN Mini PCI Adapter è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE. Questo dispositivo è stato progettato per l'utilizzo in uno spazio interno.
- Por medio de la presente AMBIT MICROSYSTEMS CORPORATION declara que el IBM 11b/g Wireless LAN Mini PCI Adapter cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE. Este dispositivo no está pensado para ser utilizado en el exterior.
- AMBIT MICROSYSTEMS CORPORATION declara que este IBM 11b/g Wireless LAN Mini PCI Adapter está conforme com os requisitos essenciais e outras provisões da Directiva 1999/5/CE. Este dispositivo destina-se a ser utilizado apenas em espaços fechados.
- AMBIT MICROSYSTEMS CORPORATION declara ca aparatul IBM 11b/g Wireless LAN Mini PCI Adapter este in conformitate cu cerintele esentiale si cu alte prevederi relevante ale Hotararii Guvernului nr. 88/2003 (Directiva 1999/5/CE)
- Ambit Microsystems Corporation tímto prohlašuje, že IBM 11b/g Wireless LAN Mini PCI Adapter je ve shodě se základními požadavky a s dalšími příslušnými ustanoveními Nařízení 1999/5/ES.

**Zařízení je určeno pro použití uvnitř budov.**

- Käesolevaga kinnitab Ambit Microsystems Corporation seadme IBM 11b/g Wireless LAN Mini PCI Adapter vastavust direktiivi 1999/5/EU põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.  
Seade on mõeldud siseruumides kasutamiseks.
- Ambit Microsystems Corporation ezzennel kijelenti, hogy ez a IBM 11b/g Wireless LAN Mini PCI Adapter termék megfelel az alapveto követelményeknek és az 1999/5/EC irányelv más vonatkozó nöndelkezéseinak.  
Az eszköz beltéri használatra készült.
- Ambit Microsystems Corporation lýsir her med yfir að thessi bunadur, IBM 11b/g Wireless LAN Mini PCI Adapter uppfyllir allar grunnkrofur, sem gerðar eru í R&TTE tilskipun ESB nr 1999/5/EC  
Tæki þetta er ætlað til notkunar innanhúss.
- Ar šo Ambit Microsystems Corporation deklarē, ka IBM 11b/g Wireless LAN Mini PCI Adapter atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.  
Šī ierīce ir paredzēta lietošanai telpās.
- Ambit Microsystems Corporation deklaruoja, kad irenginys IBM 11b/g Wireless LAN Mini PCI Adapter tenkina 1999/5/EB Direktyvos esminius reikalavimus ir kitas sios direktīvos nuostatas  
Šis prietais skirtas naudojimui patalpoje.
- Ambit Microsystems Corporation, deklarujemy z pełną odpowiedzialnością, że wyrób IBM 11b/g Wireless LAN Mini PCI Adapter spełnia podstawowe wymagania i odpowiada warunkom zawartym w dyrektywie 1999/5/EC.  
Urządzenie jest przeznaczone do używania wewnętrz budynków.
- Ambit Microsystems Corporation týmto vyhlasuje, že tento IBM 11b/g Wireless LAN Mini PCI Adapter vyhovuje technickým požiadavkám a ďalším ustanoveniam smernice 1999/5/ES, ktoré sa na tento výrobok vzťahujú.  
Toto zariadenie je určené pre používanie vo vnútornom prostredí.
- S tem dokumentom Ambit Microsystems Corporation, izjavlja, da je ta IBM 11b/g Wireless LAN Mini PCI Adapter v skladu z bistvenimi zahtevami in z drugimi ustreznimi določili Direktive 1999/5/EC  
Ta naprava je namenjena uporabi v zaprtih prostorih.



**AMBIT Microsystems Corporation**

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**Declaration of Conformity**

We,

AMBIT MICROSYSTEMS CORPORATION,  
5F-1, 5 Hsin-An Road, Hsinchu Science-Based  
Industrial Park, Taiwan, R.O.C  
Contact Person: Ms Rio Chen  
Tel: 886-3-5784975 Fax: 886-3-5799178, 5775100  
E-mail: [rio.chen@ambit.com.tw](mailto:rio.chen@ambit.com.tw)

Herewith declare that the product:

Equipment: Wireless LAN 802.11b/g Mini-PCI card  
Model: T60H786

Is in conformity with the provisions of the following EC directive(s)  
meets the requirements of the council of the European communities relating to and.

(NB name: telefication and address: Edisonstraat 12A, 6902 PK Zevenaar,  
The Netherlands) identified by the mark (ID number: 0560)

**Reference NO. Title**

1999/5/EC Radio & Telecommunications Terminal Equipment Directive (R&TTE)  
Standard : EN 300-328-2 Version 1.2.1  
73/23/EEC Low Voltage Directive (LVD)  
Standard: EN60950 Third edition 2000  
89/336/EEC Electromagnetic Compatibility (EMC-Directive)  
Standard: EN 301 489-17 version 1.1.1

and that standards and/or technical specifications referenced above have been applied.

Rio Chen  
Deputy Manager, Compliance  
Ambit Microsystems Corporation  
Date: Dec., 2, 2003

## Notice for users in Korea

### 당해 무선설비는 운용중 전파혼신 가능성이 있음.

The wireless device may cause radio wave interference during operation.

## Notice for users in Singapore

### Operating conditions under which the radio communication equipment are exempted from licensing

To maximize frequency sharing while minimizing radio interference, the following operating conditions are imposed to confine the propagation of radio signals within a building or at a localized site:

- The radio communication equipment shall be used for in-building or localized on-site operations
- The radio communication equipment shall operate at frequencies or frequency bands designated by IDA on non-exclusive basis
- The radio communication equipment shall not operate beyond the maximum permissible output power designated by IDA to confine the propagation of radio signals to a small localized area
- For an on-site localized operation with little obstruction by the nearby buildings or terrain, height of any external antenna, if installation approved by IDA, shall not be more than 10 metres above ground level to limit the radio wave propagation
- No repeater station shall be used to extend the radio coverage.

## End of life disposal

This unit must be recycled or discarded according to applicable local and national regulations. IBM encourages owners of information technology (IT) equipment to responsibly recycle their equipment when it is no longer needed. IBM offers a variety of product return programs and services in several countries to assist equipment owners in recycling their IT products. Information on IBM product recycling offerings can be found on IBM's Internet site at <http://www.ibm.com/ibm/environment/products/prp.shtml>.



**Notice:** This mark applies only to countries within the European Union (EU) and Norway.

Appliances are labeled in accordance with European Directive 2002/96/EC concerning waste electrical and electronic equipment (WEEE). The Directive determines the framework for the return and recycling of used appliances as applicable throughout the European Union. This label is applied to various products to indicate that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.

In accordance with the European WEEE Directive, electrical and electronic equipment (EEE) is to be collected separately and to be reused, recycled, or recovered at end of life. Users of EEE with the WEEE marking per Annex IV of the

WEEE Directive, as shown above, must not dispose of end of life EEE as unsorted municipal waste, but use the collection framework available to customers for the return, recycling, and recovery of WEEE. Customer participation is important to minimize any potential effects of EEE on the environment and human health due to the potential presence of hazardous substances in EEE. For proper collection and treatment, contact your local IBM representative.

Disposal of IT products should be in accordance with local ordinances and regulations.

## **Mercury-added statement**

The fluorescent lamp in the liquid crystal display contains mercury. Dispose of it as required by local ordinances and regulations.

## **Macrovision copy protection technology**

This product incorporates copy protection technology that is protected by U.S. and foreign patents, including patent numbers 5,315,448 and 6,836,549, and other intellectual property rights. The use of Macrovision's copy protection technology in the product must be authorized by Macrovision. Reverse engineering or disassembly is prohibited.

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## Appendix D. Safety information

### Danger



Before you begin to install this product, read the safety information in *IBM Safety Information – Read This First*, GA27-4004. This booklet describes safe procedures for cabling and plugging in electrical equipment.

### Gevaar



Voordat u begint met de installatie van dit produkt, moet u eerst de veiligheidsinstructies lezen in de brochure *Veiligheidsinstructies – Lees dit eerst*, GA27-4004. Hierin wordt beschreven hoe u elektrische apparatuur op een veilige manier moet bekabelen en aansluiten.

### Perigo



Antes de começar a instalar este produto, leia as informações de segurança contidas em *Informações Sobre Segurança – Leia Isto Primeiro*, GA27-4004. Esse folheto descreve procedimentos de segurança para a instalação de cabos e conexões em equipamentos elétricos.

### Fare!



Før du installerer dette produkt, skal du læse sikkerhedsforskrifterne i *Sikkerhedsforskrifter – Læs dette først*, GA27-4004. Vejledningen beskriver den fremgangsmåde, du skal bruge ved tilslutning af kabler og udstyr.

### Gevaar



Voordat u begint met het installeren van dit produkt, dient u eerst de veiligheidsrichtlijnen te lezen die zijn vermeld in de publikatie *IBM Safety Information – Read This First*, GA27-4004. In dit boekje vindt u veilige procedures voor het aansluiten van elektrische apparatuur.

**VAARA**



Ennen kuin aloitat tämän tuotteen asennuksen, lue julkaisussa *Turvaohjeet – Luetämä ensin*, GA27-4004, olevat turvaohjeet. Tässä kirjasessa on ohjeet siitä, miten sähkölaitteet kaapeloidaan ja kytketään turvallisesti.

**Danger**



Avant d'installer le présent produit, consultez le livret *Informations pour la sécurité – Lisez-moi d'abord*, GA27-4004, qui décrit les procédures à respecter pour effectuer les opérations de câblage et brancher les équipements électriques en toute sécurité.

**Vorsicht**



Bevor mit der Installation des Produktes begonnen wird, die Sicherheitshinweise in *Sicherheitsinformationen – Bitte zuerst lesen*, GA27-4004. Diese Veröffentlichung beschreibt die Sicherheitsvorkehrungen für das Verkabeln und Anschließen elektrischer Geräte.

**Vigyázat**



Mielőtt megkezdi a berendezés üzembe helyezését, olvassa el a *IBM Safety Information – Read This First*, GA27-4004, könyvecskeben leírt biztonsági információkat. Ez a könyv leírja, milyen biztonsági intézkedéseket kell megtenni az elektromos berendezés huzalozásakor illetve csatlakoztatásakor.

**Pericolo**



Prima di iniziare l'installazione di questo prodotto, leggere le informazioni relative alla sicurezza riportate nell'opuscolo *Informazioni di sicurezza – Prime informazioni da leggere*, GA27-4004, in cui sono descritte le procedure per il cablaggio ed il collegamento di apparecchiature elettriche.

**Fare**



Før du begynner å installere dette produktet, må du lese sikkerhetsinformasjonen i *Sikkerhetsinformasjon – Les dette først*, GA27-4004, som beskriver sikkerhetsrutinene for kabling og tilkobling av elektrisk utstyr.

**Perigo**



Antes de iniciar a instalação deste produto, leia as informações de segurança *Informações de Segurança – Leia Primeiro*, GA27-4004. Este documento descreve como efectuar, de um modo seguro, as ligações eléctricas dos equipamentos.

**Peligro**



Antes de empezar a instalar este producto, lea la información de seguridad en *Información de Seguridad – Lea Esto Primero*, GA27-4004. Este documento describe los procedimientos de seguridad para cablear y enchufar equipos eléctricos.

**Varning – livsfara**



Innan du börjar installera den här produkten bör du läsa säkerhetsinformationen i dokumentet *Säkerhetsföreskrifter – Läs detta först*, GA27-4004. Där beskrivs hur du på ett säkert sätt ansluter elektrisk utrustning.

危險：安裝本產品之前，請先閱讀  
"IBM Safety Information-Read  
This First" GA27-4004 手冊中所提  
供的安全注意事項。這本手冊將會說明  
使用電器設備的纜線及電源的安全程序。

Opasnost: Prije nego sto pōcnete sa instalacijom produkta,  
pročitajte naputak o pravilima o sigurnom rukovanju u  
Upozorenje: Pravila o sigurnom rukovanju - Prvo pročitaj ovo,  
GA27-4004. Ovaj privitak opisuje sigurnosne postupke za  
priključivanje kabela i priključivanje na električno napajanje.

**Upozornění:** než zahájíte instalaci tohoto produktu, přečtěte si  
nejprve bezpečnostní informace v pokynech „Bezpečnostní  
informace“ č. GA27-4004. Tato brožurka popisuje bezpečnostní  
opatření pro kabeláž a zapojení elektrického zařízení.

**Κίνδυνος:** Πριν ξεκινήσετε την εγκατάσταση αυτού του προϊόντος,  
διαβάστε τις πληροφορίες ασφάλειας στο φυλλάδιο *IBM Safety  
Information-Read this first*, GA27-4004. Στο φυλλάδιο αυτό  
περιγράφονται οι ασφαλείς διαδικασίες για την καλωδίωση των  
ηλεκτρικών συσκευών και τη σύνδεσή τους στην πρίζα.

危険：導入作業を開始する前に、安全に関する  
小冊子 GA27-4004 の「最初にお読みください」  
(Read This First) の項をお読みください。  
この小冊子は、電気機器の安全な配線と接続の  
手順について説明しています。

위험: 이 제품을 설치하기 전에 반드시  
"주의: 안전 정보-시작하기 전에"  
(GA27-4004)에 있는 안전 정보를  
읽으십시오.

סכנה: לפני שמתחילה בהתקנת מוצר זה, יש לקרוא את הוראות הבטיחות בחוברת  
Caution: Safety Information - Read This First, GA27-4004  
חוברת זו מותארת את הוראות הבטיחות לחיבור הcabלים ולהנפקה של ציוד חשמלי.

خطر: قبل عملية بدء تركيب هذا المنتج، قم بقراءة معلومات  
الحماية الموجودة في التحذير: معلومات الحماية -  
Read This First - GA27-4004 . يقوم هذا الكتيب بوصف إجراءات الأمان  
لتوصيل الأدوات الكهربائية بال CABLÉS و المقابس الكهربائي.

## ОПАСНОСТ

Пред да почнете да го инсталirate овој продукт, прочитајте ја информацијата за безбедност:

"Предупредување: Информација за безбедност: Прочитајте го прво ова", GA27-4004.

Оваа брошура опишува безбедносни процедури за каблирање и вклучување на електрична опрема.

Uwaga:

Przed rozpoczęciem instalacji produktu należy zapoznać się z instrukcją:

"IBM Safety Information - Read This First", GA27-4004.

Zawiera ona warunki bezpieczeństwa przy podłączaniu do sieci elektrycznej i eksploatacji.

**ОСТОРОЖНО:** Прежде чем инсталлировать этот продукт, прочтите Инструкцию по технике безопасности в документе "Внимание: Инструкция по технике безопасности -- Прочесть в первую очередь", GA27-4004. В этой брошюре описаны безопасные способы кабелирования и подключения электрического оборудования.

Nebezpečenstvo: Pred inštaláciou výrobku si prečítajte bezpečnostné predpisy v

Výstraha: Bezpečnostné predpisy - Prečítaj ako prvé, GA27-4004. V tejto brožúrke sú opísané bezpečnostné postupy pre pripojenie elektrických zariadení.

Pozor: Preden zaènete z instalacijo tega produkta preberite poglavje: "Opozorilo: Informacije o varnem rokovjanju-preberi pred uporabo," GA27-4004. To poglavje opisuje pravilne postopke za kabliranje,

危險：

開始安裝此產品之前，請先閱讀安全資訊。

注意：

請先閱讀 - 安全資訊 GA27-4004

此冊子說明插接電器設備之電纜線的安全程序。

危险：

在开始安装本产品之前, 请阅读

**IBM Safety Information - Read This First,**

**GA27-4004** 中的安全信息。

此手册描述了如何安全地连接和插拔电气设备。



## Glossary

This glossary includes terms and definitions from:

- *American National Standard Dictionary for Information Systems*, ANSI X3.172-1990, copyright 1990 by the American National Standards Institute (ANSI). Copies may be purchased from the American National Standards Institute, 11 West 42nd Street, New York, New York 10036. Definitions are identified by the symbol (A) after the definition.
- The *Information Technology Vocabulary*, developed by Subcommittee 1, Joint Technical Committee 1, of the International Organization for Standardization and the International Electrotechnical Commission (ISO/IEC JTC1/SC1). Definitions of published parts of this vocabulary are identified by the symbol (I) after the definition; definitions taken from draft international standards, committee drafts, and working papers being developed by ISO/IEC JTC1/SC1 are identified by the symbol (T) after the definition, indicating that final agreement has not yet been reached among the participating National Bodies of SC1.

## A

**active.** (1) Able to communicate on the network. A token-ring network adapter is active if it is able to transmit and receive on the network (2) Operational. (3) Pertaining to a node or device that is connected or is available for connection to another node or device. (4) Currently transmitting or receiving.

**adapter.** (1) In the point-of-sale terminal, a circuit card that, with its associated software, enables the terminal to use a function or feature. (2) In a LAN, within a communicating device, a circuit card that, with its associated software and/or microcode, enables the device to communicate over the network.

**address.** (1) In data communication, the IEEE-assigned unique code or the unique locally administered code assigned to each device or workstation connected to a network. (2) A character or group of characters that identifies a register, a particular part of storage, or some other data source or destination. (A) (3) To refer to a device or an item of data by its address. (I) (A) (4) The location in the storage of a computer where data is stored.

**addressing.** (1) The assignment of addresses to the instructions of a program. (2) In data communication, the way in which a station selects the station to which it is to send data.

**alphanumeric.** Pertaining to data consisting of letters, digits, and usually other characters, such as punctuation marks. (T) (A)

**analog.** (1) Pertaining to data consisting of continuously variable physical quantities. (A) (2) Contrast with *digital*.

**application.** (1) A collection of one or more programs that work together to accomplish goals for a business. (2) A set of executable files and data files required to perform a desired function, which can consist of multiple programs running on different workstations.

**architecture.** A logical structure that encompasses operating principles including services, functions, and protocols. See *network architecture*.

**attach.** (1) To connect a device physically. (2) To make a device a part of a network logically. Compare with *connect*.

**attaching device.** Any device that is physically connected to a network and can communicate over the network.

## B

**bit.** Either of the digits 0 or 1 when used in the binary numeration system. Synonymous with binary digit. (T)

**bus.** (1) In a processor, a physical facility on which data is transferred to all destinations, but from which only addressed destinations may read in accordance with appropriate conventions. (2) A network configuration in which nodes are interconnected through a bidirectional transmission medium. (3) One or more conductors used for transmitting signals or power. (A)

## C

**cash drawer.** An optional I/O device attached to a point-of-sale terminal. The cash drawer contains a till. The cash drawer will open upon receiving a command. See *till*.

**circuit.** (1) A logic device. (2) One or more conductors through which an electric current can flow.

**cluster.** (1) A station that consists of a control unit (a cluster controller) and the terminals attached to it. (2) A group of APPN nodes that have the same network ID and the same topology database. A cluster is a subset of a NETID subnetwork. (3) In high-availability cluster multiprocessing (HACMP™), a set of independent systems (called nodes) that are organized into a network for the purpose of sharing resources and communicating with each other.

**collision.** (1) An unwanted condition that results from concurrent transmissions on a channel. (T) (2) When a frame from a transmitting adapter encounters any other signal in its path (frame, noise, or another type of signal), the adapter stops transmitting and a collision is registered.

**command.** (1) A request for performance of an operation or execution of a program. (2) A character string from a source external to a system that represents a request for system action.

**component.** (1) Any part of a network other than an attaching device, such as an IBM 8228 Multistation Access Unit. (2) Hardware or software that is part of a functional unit.

**configuration.** (1) The devices and programs that make up a system, subsystem, or network. (A) See also *system configuration*. (2) In the IBM StorePlace Distributed Data Services for OS/2®, program options that are initially set at installation, and that can be changed later. Changing these options requires an IPL. These changes must be performed by a programmer or store operations personnel. These options are used to tune the product's use of the operating system and machine resources.

**connect.** In a LAN, to physically join a cable from a station to an access unit or network connection point. Contrast with *attach*.

**controller.** A unit that controls input/output operations for one or more devices.

**cursor.** A movable point of light (or a short line) that indicates where the next character is to be entered on the display screen.

## D

**data.** (1) A representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by human or automatic means. (I) (2) Any representations such as characters or analog quantities to which meaning is or might be assigned. (A)

**data file.** A collection of related data records organized in a specific manner; for example, a payroll file (one record for each employee, showing such information as rate of pay and deductions) or an inventory file (one record for each inventory item, showing such information as cost, selling price, and number in stock.) See also *data set, file*.

**data processing system.** A system, including computer systems and associated personnel, that performs input, processing, storage, output, and control functions to accomplish a sequence of operations on data. (A) (I)

**data set.** Logically related records treated as a single unit. See also *file*.

**DBCS.** See *double-byte character set*.

**device.** (1) A mechanical, electrical, or electronic contrivance with a specific purpose. (2) An input/output unit such as a terminal, display, or printer. See also *attaching device*.

**diagnostic diskette.** A diskette containing diagnostic modules or tests used by computer users and service personnel to diagnose hardware problems.

**diagnostics.** Modules or tests used by computer users and service personnel to diagnose hardware problems.

**digital.** (1) Pertaining to data in the form of digits. (A) Contrast with *analog*. (2) Pertaining to data consisting of numerical values or discrete units.

**DIP switch.** A two-position switch on a circuit board that is preset to control certain functions. The user can change the position of a DIP switch to satisfy special requirements.

**disk.** A round, flat, data medium that is rotated in order to read or write data. (T) See also *diskette, hard-disk drive*.

**disk operating system (DOS).** A computer operating system that can perform only one task at a time.

**diskette.** A thin, flexible magnetic disk permanently enclosed in a protective jacket. A diskette is used to store information for processing.

**diskette drive.** The mechanism used to seek, read, and write data on diskettes.

**display.** (1) A visual presentation of data. (2) A device that presents visual information to the point-of-sale terminal operator and to the customer.

**distributed.** Physically separate but connected by cables.

**DOS.** See *disk operating system*.

**double-byte character set (DBCS).** A set of characters in which each character is represented by 2 bytes. Languages such as Japanese, Chinese, and Korean, which contain more symbols than can be represented by 256 code points, require double-byte character sets. Because each character requires 2 bytes, the typing, display, and printing of DBCS characters requires hardware and programs that support DBCS. Contrast with *single-byte character set*.

**DRAM.** Dynamic RAM. See *RAM*.

**driver.** A software component that controls a device.

**dump.** (1) To record, at a particular instant, the contents of all or part of one storage device in another storage device. Dumping is usually for the purpose of debugging. (T) (2) Data that has been dumped. (T)

**DVD-ROM.** Digital-video-disk read-only memory.

## E

**error message.** A message that is issued because an error has been detected.

## F

**FCC.** See *Federal Communications Commission*.

**feature.** A part of an IBM product that may be ordered separately by the customer.

**Federal Communications Commission (FCC).** A board of commissioners appointed by the President under the Communications Act of 1934, having the power to regulate all interstate and foreign communications by wire and radio originating in the United States.

**field.** On a data medium or a storage medium, a specified area used for a particular category of data; for example, a group of character positions used to enter or display wage rates on a panel. (T)

**file.** A named set of records stored or processed as a unit. (T) For example, an invoice may form a record and the complete set of such records may form a file. See also *data set*.

**flash memory.** A data-storage device that is programmable, erasable, and does not require continuous power. The chief benefit of flash memory over other programmable and erasable data storage devices is that it can be reprogrammed without being removed from the circuit board.

**formatted diskette.** A diskette on which track and sector control information has been written and that can be used by the computer to store data. **Note:** A diskette must be formatted before it can receive data.

**frame.** (1) The unit of transmission in some LANs, including the IBM Token-Ring Network and the IBM PC Network. It includes delimiters, control characters, information, and checking characters. On a token-ring network, a frame is created from a token when the token has data appended to it. On a token-bus network (IBM PC Network), all frames including the token frame contain a preamble, start delimiter, control address, optional data and checking characters, end delimiter, and are followed by a minimum silence period. (2) A housing for machine elements. (3) In synchronous data link control (SDLC), the vehicle for every command,

every response, and all information that is transmitted using SDLC procedures. Each frame begins and ends with a flag.

**function.** (1) A specific purpose of an entity, or its characteristic action. (A) (2) In data communications, a machine action such as a carriage return or line feed. (A)

## H

**hard-disk drive.** In a personal computer system unit, a disk storage device that reads and writes on rigid magnetic disks. It is faster and has a larger storage capacity than a diskette and is permanently installed. Synonymous with *fixed disk*.

**HID.** See *human interface devices*.

**hot pluggable.** Refers to a hardware component that can be installed or removed without disturbing the operation of any other resource that is not connected to, or dependent on, this component.

**human interface devices (HID).** Devices which allow humans to interact and communicate with a computer. Examples are a keyboard or a mouse.

**hot plugging.** Process of installing connections to the serial bus while the system is running and without powering down.

**hot unplugging.** Process of removing connections from the serial bus while the system is running and without powering down.

**hypertext.** (1) A method of presenting text in discrete units, or nodes, that are connected by links for navigation. (2) Text designed to be read or accessed in a nonlinear manner using nodes that are connected by links for navigation.

## I

**I/O.** See *input/output*.

**I/O device.** A device in a data processing system by means of which data can be entered into the system, received from the system, or both. (I) (A)

**IBM Disk Operating System (DOS).** A disk operating system based on MS-DOS that operates with all IBM-compatible personal computers.

**IEEE.** Institute of Electrical and Electronics Engineers.

**input/output (I/O).** (1) Pertaining to a device whose parts can perform an input process and an output process at the same time. (I) (2) Pertaining to a functional unit or channel involved in an input process, output process, or both, concurrently or not, and to the data involved in such a process.

**integrated.** Arranged together as one unit.

**interference.** (1) The prevention of clear reception of broadcast signals. (2) The distorted portion of a received signal.

**interrupt.** (1) A suspension of a process, such as execution of a computer program, caused by an external event and performed in such a way that the process can be resumed. (A) (2) To stop a process in such a way that it can be resumed. (3) A means of passing processing control from one software or microcode module or routine to another, or of requesting a particular software, microcode, or hardware function.

## J

**jabber.** Transmission by a data station beyond the time interval allowed by the protocol. (T)

## K

**K.** When referring to storage capacity, a symbol that represents two to the tenth power, or 1024.

**keyboard.** A group of numeric keys, alphabetic keys, special character keys, or function keys used for entering information into the terminal and into the system.

## L

**LAN.** See *local area network*.

**LAN adapter.** The circuit card within a communicating device (such as a personal computer) that, together with its associated software, enables the device to be attached to a LAN.

**LCD.** Liquid crystal display

**LED.** Light-emitting diode.

**light-emitting diode (LED).** A semiconductor chip that gives off visible or infrared light when activated.

**line.** On a terminal, one or more characters entered before a return to the first printing or display position.

**link.** (1) The logical connection between nodes including the end-to-end link control procedures. (2) The combination of physical media, protocols, and programming that connects devices on a network. (3) In computer programming, the part of a program, in some cases a single instruction or an address, that passes control and parameters between separate portions of the computer program. (4) To interconnect items of data or portions of one or more computer programs. (5) In SNA, the combination of the link connection and link stations joining network nodes. See also *link connection*. **Note:** A link connection is the physical

medium of transmission; for example, a telephone wire or a microwave beam. A link includes the physical medium of transmission, the protocol, and associated devices and programming; it is both logical and physical.

**link connection.** (1) All physical components and protocol machines that lie between the communicating link stations of a link. The link connection may include a switched or leased physical data circuit, a LAN, or an X.25 virtual circuit. (2) In SNA, the physical equipment providing two-way communication and error correction and detection between one link station and one or more other link stations. (3) In the IBM Store System, the logical link providing two-way communication of data from one network node to one or more other network nodes.

**load.** In computer programming, to enter data into memory or working registers.

**local area network (LAN).** A computer network located on a user's premises within a limited geographical area. **Note:** Communication within a LAN is not subject to external regulations; however, communication across the LAN boundary may be subject to some form of regulation.

**logon.** The procedure for starting up a point-of-sale terminal or store controller for normal sales operations by sequentially entering the correct security number and transaction number. Synonymous with *sign-on*.

## M

**magnetic ink character reader (MICR).** An input unit that reads characters by magnetic ink character recognition. (A)

**magnetic ink character recognition.** (1) MICR. Character recognition of magnetic ink characters. (T) (2) The identification of characters through the use of magnetic ink.

**MB.** See *megabyte*.

**Mbps.** One million bits per second.

**megabyte (MB).** A unit of measure for data. 1 megabyte = 1 048 576 bytes.

**memory.** Program-addressable storage from which instructions and other data can be loaded directly into registers for subsequent execution or processing.

**message.** (1) An arbitrary amount of information whose beginning and end are defined or implied. (2) A group of characters and control bit sequences transferred as an entity. (3) In telecommunication, a combination of characters and symbols transmitted from one point to another. (4) A logical partition of the user

device's data stream to and from the adapter. See also *error message*, *operator message*.

**MICR.** See magnetic ink character reader and magnetic ink character recognition.

**module.** A program unit that is discrete and identifiable with respect to compiling, combining with other units, and load; for example, the input to, or output from, an assembler, compiler, linkage editor, or executive routine.

## N

**network.** (1) A configuration of data processing devices and software connected for information interchange. (2) An arrangement of nodes and connecting branches. Connections are made between data stations.

**network architecture.** The logical structure and operating principles of a computer network. **Note:** The operating principles of a network include those of services, functions, and protocols.

**nit.** A nit is a unit of luminance equal to one candela per square meter. It is often used to quote the brightness of computer displays.

**noise.** (1) A disturbance that affects a signal and that can distort the information carried by the signal. (2) Random variations of one or more characteristics of any entity, such as voltage, current, or data. (3) Loosely, any disturbance tending to interfere with normal operation of a device or system.

**nonvolatile random access memory (NVRAM) .** Random access memory that retains its contents after electrical power is shut off. Contrast with *volatile memory*.

**NVRAM.** See nonvolatile random access memory.

## O

**operating system.** Software that controls the execution of programs and that may provide services such as resource allocation, scheduling, input/output control, and data management. Although operating systems are predominantly software, partial hardware implementations are possible. (T)

**Operating System/2® (OS/2).** A set of programs that control the operation of high-speed large-memory IBM Personal Computers providing multitasking. Contrast with *Disk Operating System (DOS)*.

**operator.** A person who operates a machine.

**operator message.** A message from the operating system or a program telling the operator to perform a specific function or informing the operator of a specific condition within the system, such as an error condition.

**option.** (1) A specification in a statement, a selection from a menu, or a setting of a switch, that can be used to influence the execution of a program. (2) A hardware or software function that can be selected or enabled as part of a configuration process. (3) A piece of hardware (such as a network adapter) that can be installed in a device to modify or enhance device function.

**OS.** Operating system.

**OS/2.** Operating System/2.

## P

**page.** The information displayed at the same time on the screen of a display device.

**panel.** (1) A thin flat sheet, usually (a) of pressed metal and carrying controls and indicators, (b) of glass, or (c) of plastic. (2) A formatted display of information that appears on a display screen.

**parallel port.** A port that transmits the bits of a byte in parallel along the lines of the bus, one byte at a time, to an I/O device. On a personal computer, it is used to connect a device that uses a parallel interface, such as a dot matrix printer, to the computer. Contrast with *serial port*.

**PC.** See *personal computer*.

**personal computer (PC).** A desktop, free-standing, or portable microcomputer that usually consists of a system unit, a display, a keyboard, one or more diskette drives, internal fixed-disk storage, and an optional printer. PCs are designed primarily to give independent computing power to a single user and are inexpensively priced for purchase by individuals or small businesses. Examples include the various models of the IBM Personal Computers.

**plug.** (1) A connector for attaching wires from a device to a cable, such as a store loop. A plug is inserted into a receptacle or plug. (2) To insert a connector into a receptacle or socket.

**Plug and Play (PnP).** Pertaining to the capability of a hardware or software component to be installed on a system with minimal effort and to be available for use immediately thereafter.

**PnP.** See *Plug and Play*.

**point-of-sale (POS).** A method of providing information to support sales and of collecting the resulting sales information from retail devices located in stores.

**port.** (1) An access point for data entry or exit. (2) A connector on a device to which cables for other devices such as display stations and printers are attached. Synonymous with *socket*.

**POS.** See *point-of-sale*.

**POST.** Power-on self-test.

**power-on self-test (POST).** A series of diagnostic tests that are run automatically each time the computer's power is switched on.

**problem determination.** The process of determining the source of a problem; for example, a program component, machine failure, telecommunication facilities, user or contractor-installed programs or equipment, environmental failure such as a power loss, or user error.

**procedure.** (1) A set of related control statements that cause one or more programs to be performed. (2) A set of instructions that gives a service representative a step-by-step procedure for tracing a symptom to the cause of failure.

**processor.** In a computer, a functional unit that interprets and executes instructions. (A) (I)

**protocol.** (1) A set of semantic and syntactic rules that determine the behavior of functional units in achieving communication. (I) (2) A specification for the format and relative timing of information exchanged between communicating parties.

## R

**RAM.** See *random access memory*.

**random access memory (RAM).** A computer's or adapter's volatile memory, which can be accessed nonsequentially.

**read.** To acquire or to interpret data from a storage device, from a data medium, or from another source. (I) (A)

**real-time.** (1) Pertaining to the actual time during which a physical process occurs. (2) Pertaining to data collected concurrently with physical events, so that the results of the collection operation may be used to influence the sequence of events.

**receive.** To obtain and store information transmitted from a device.

**record.** A collection of related items of data, treated as a unit; for example, in stock control, each invoice could constitute one record. A complete set of such records may form a file.

**repeater.** A device that amplifies or regenerates data signals in order to extend the range of transmission between devices in a network.

## S

**SBCS.** See *single-byte character set*.

**scanner.** A device that examines the bar code on merchandise tickets, credit cards, and employee badges and generates analog or digital signals corresponding to the bar code.

**serial port.** On personal computers, a port used to attach devices such as display devices, letter-quality printers, modems, plotters, and pointing devices such as light pens and mice; it transmits data one bit at a time. Contrast with *parallel port*.

**signal.** A variation of a physical attribute, used to convey data. (A)

**single-byte character set (SBCS).** Single-byte character set. A character set in which each character is represented by a one-byte code. Contrast with *double-byte character set*.

**socket.** (1) An opening that holds something. (2) Synonym for *port*.

**source.** The origin of any data involved in a data transfer.

**subsystem.** A secondary or subordinate system, usually capable of operating independently of, or asynchronously with, a controlling system. (T)

**switch.** (1) A device for making and breaking electrical connections, for making a selection, or for requesting a function or operation. (2) On an adapter, a mechanism used to select a value for, enable, or disable a configurable option or feature.

**system.** (1) In data processing, a collection of people, machines, and methods organized to accomplish a set of specific functions. (I) (A) See also *data processing system*, *operating system*, and *system unit*. (2) In the IBM StorePlace Distributed Data Services for OS/2, a group of nodes for which files are managed.

**system board.** In a system unit, the main circuit board that supports a variety of basic system devices, such as a keyboard or a mouse, and provides other basic system functions.

**system configuration.** A process that specifies the devices and programs that form a particular data processing system.

**system unit.** (1) A part of a computer that contains the processing unit and may contain devices such as disk and diskette drives. (2) In an IBM Personal Computer, the unit that contains the processor circuitry, read-only memory (ROM), random access memory (RAM), and the I/O channel. It may have one or more disk or diskette drives. (3) In an IBM Store System terminal, the

part of the terminal that contains the processing unit, ROM, RAM, disk and diskette drives, and the I/O channel.

## T

**terminal.** In data communication, a device, usually equipped with a keyboard and a display, that is capable of sending and receiving information.

**till.** A tray in the cash drawer of the point-of-sale terminal, used to keep the different denominations of bills and coins separated and easily accessible.

**transmit.** To send information from one place for reception elsewhere. (A)

**twisted pair.** A transmission medium that consists of two insulated electrical conductors twisted together. (A)

**typematic.** The ability of a key on a keyboard to repeatedly type a character as long as it is held down.

## U

**Universal Serial Bus (USB).** A serial interface standard for telephony and multimedia connections to personal computers.

**Universal Serial Bus (USB), powered.** A powered-USB connector provides additional power from the host system. A powered-USB receptacle consists of two connectors stacked vertically inside the common housing. The upper connector contains four contacts that are used for powering the attached device.

**unshielded twisted pair (UTP).** One or more twisted pairs of copper wire in the unshielded voice-grade cable commonly used to connect a telephone to its wall jack.

**user.** (1) A category of identification defined for file access protection. (2) A person using a program or system.

**USB.** See *Universal Serial Bus*.

## V

**version .** A separately licensed program that usually has significant new code or new function.

**vital product data (VPD).** Information about the computer, such as machine type and model or serial number, stored in the BIOS.

**volatile memory.** Memory that loses its contents when power is turned off.

**VPD.** See *vital product data*.



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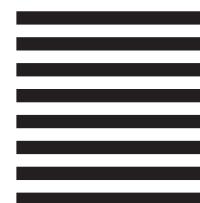
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