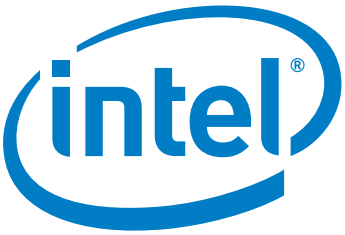

Intel® 600SM PCI Phone Adapter User's Guide

Order Number: D61185-001US

Revision History

Revision	Revision History	Date
-001	First release of the Intel® 600SM PCI Phone Adapter User's Guide	May 2006

If an FCC declaration of conformity marking is present on the board, the following statement applies:

FCC Declaration of Conformity

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.

For questions related to the EMC performance of this product, contact:

Intel Corporation
5200 N.E. Elam Young Parkway
Hillsboro, OR 97124
1-800-628-8686

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 the receiver.
- Connect the equipment to an outlet on a circuit other than the one to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications to the equipment not expressly approved by Intel Corporation could void the user's authority to operate the equipment.

Tested to comply with FCC standards for home or office use.

Canadian Department of Communications Compliance Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numerique német pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Réglement sur le broullage radioélectrique édicté par le ministére des Communications du Canada.

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Preface

This User's Guide provides information about installation, features, troubleshooting, and regulatory requirements for the Intel® 600SM PCI Phone Adapter.

Document Organization

The chapters in this User's Guide are arranged as follows:

1 Installing the Intel® 600SM PCI Phone Adapter Card: instructions on how to install the PCI phone adapter card

2 Setup: Intel 600SM PCI Phone Adapter: instructions on how to install the PCI phone adapter software

3 Making a Call Using the PCI Phone Adapter: instructions on how to make a call using the PCI phone adapter

4 Advanced Features: description of the advanced features of the PCI phone adapter

5 Troubleshooting: troubleshooting information for the PCI phone adapter

A Regulatory Compliance: safety and EMC regulations, and product certification

Conventions

The following conventions are used in this manual:

CAUTION

Cautions warn the user about how to prevent damage to hardware or loss of data.

NOTE

Notes call attention to important information.

Terminology

The table below gives descriptions of some common terms used in this guide.

Term	Description
hook flash	The act of hanging up the telephone for a short period of time (one-half second). This operation is often used as a signal to perform services, such as transferring a call.
softphone	A program that allows you to make Voice over Internet Protocol (VoIP) telephone calls from your computer or computing device. Internet telephony providers typically include a softphone application along with their service.
VoIP	The acronym for Voice over Internet Protocol, which allows voice information to be sent digitally over the Internet.

System Requirements

- One of the following Intel® Desktop Boards: D945GNT/D945GCZ/D945GTP/D945GPM/D945GBO/D945PLNM/D915PDT/D101GGC/ D102GGC2/D865GSA
- One of the following operating systems:
  - Microsoft Windows* XP Professional
  - Microsoft Windows XP Home

Box Contents

- Intel 600SM PCI Phone Adapter Card
- Intel® Express Installer CD-ROM
- Half-height PCI bracket
- Caution label
- Reference Guide

Contents

Tables

1 Installing the Intel® 600SM PCI Phone Adapter Card

CAUTION

Electrostatic discharge (ESD) can damage the PCI Phone Adapter Card components. Install the PCI card at an ESD-controlled workstation. If such a workstation is not available, wear an antistatic wrist strap or touch the surface of the antistatic package before handling the card.

Phone Adapter Handling Precautions

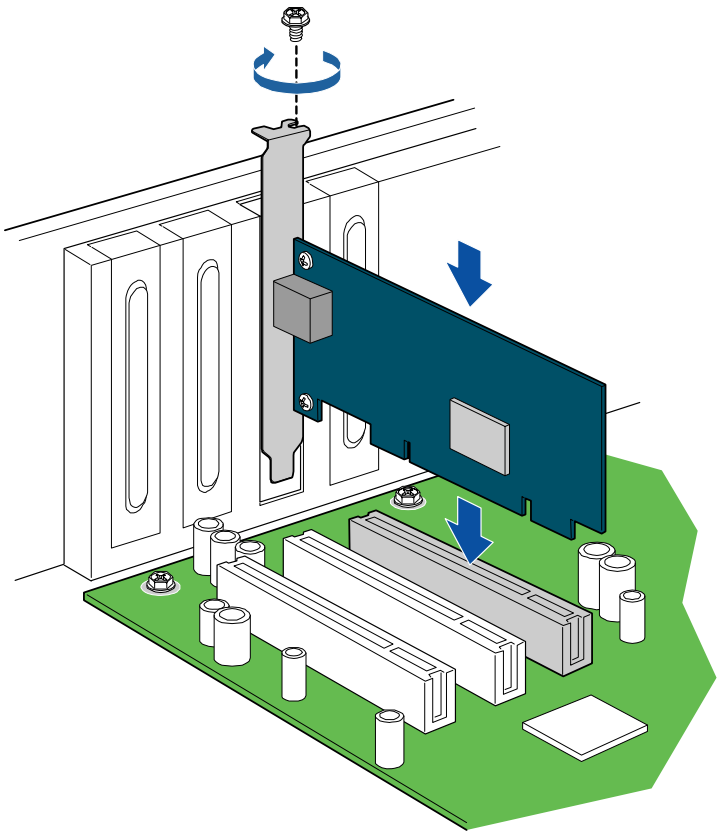
This phone adapter card can be damaged by static electricity. Follow these instructions to minimize the risk of damaging the phone adapter with electrostatic discharge:

1. Place everything you need to install the phone adapter close at hand before starting. Moving around the room to get tools causes static electricity to build up.
2. Stay in physical contact with a metal portion of the computer or the computer's power supply while handling the phone adapter. Touching the computer will discharge any built-up static electricity.
3. Handle the phone adapter card by its top edge and bracket only. Do not touch the edge connectors or the exposed circuitry.
4. Do not place the phone adapter on any metal surface.

Installing the Phone Adapter Hardware

To install the PCI Phone Adapter card:

1. Turn off the computer and unplug the AC power cord. Remove the cover.
2. Locate an unused PCI slot.
3. If necessary, remove the coverplate from the open slot. Save the screw.
4. Insert the phone adapter card into the PCI slot. You may have to push firmly to insert the card.
5. Replace the coverplate screw.

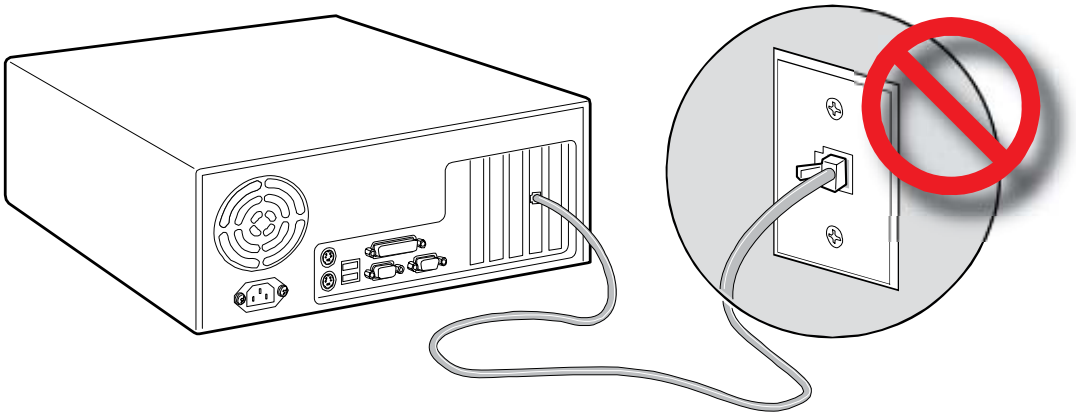


OM1943

Connecting the Phone Adapter to the Telephone

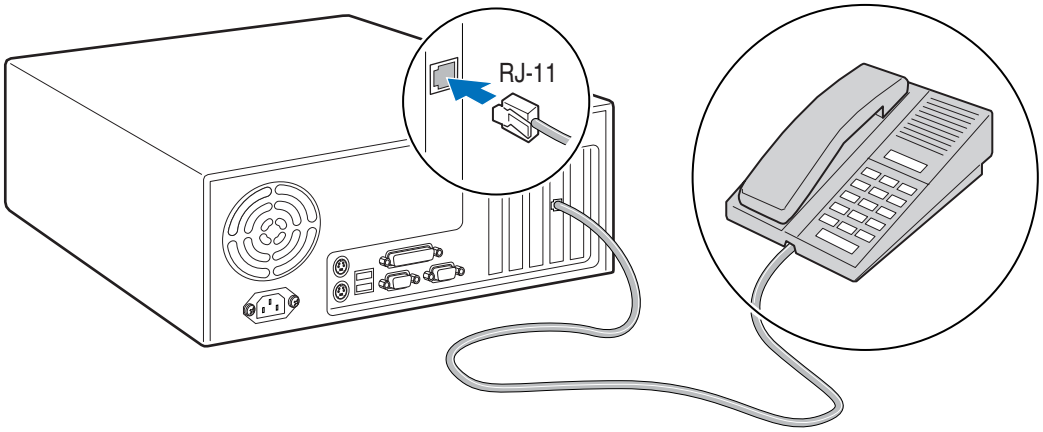
CAUTION

Do not directly connect the Intel 600SM Phone Adapter card to a telephone wall jack. The phone adapter will not function properly until it is disconnected from the telephone wall jack and the computer is rebooted. The phone adapter will only function properly when connected to an analog phone.



OM19433

1. Connect a standard telephone to the RJ-11 jack on the back panel of the phone adapter card, as shown below.



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2. Reconnect the computer's AC power cord.

2 Setup: Intel 600SM PCI Phone Adapter

Installing the Phone Adapter Drivers in Microsoft Windows XP

To install your phone adapter drivers:

1. Turn on the computer.
2. When the New Hardware Wizard appears, click **Cancel**.

3. Place the Intel Express Installer CD into your computer's CD-ROM drive.
4. When the Intel Express Installer window appears, accept the default settings and click **Install Now**.
5. Follow the installation messages that appear.
6. The computer will automatically reboot after installing the phone adapter drivers.
7. After successful installation of the software, the main menu shows the final status.

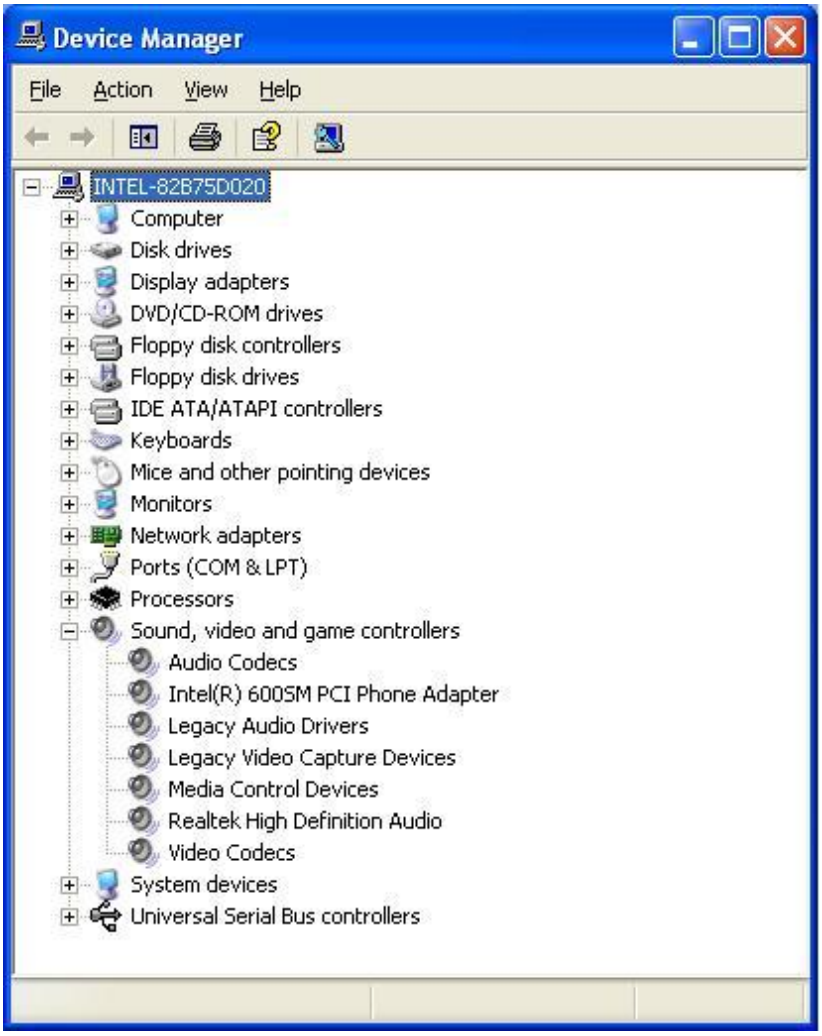
NOTE

The installation procedure will automatically install icons on your computer for your regional Voice over Internet Protocol (VOIP) service providers.

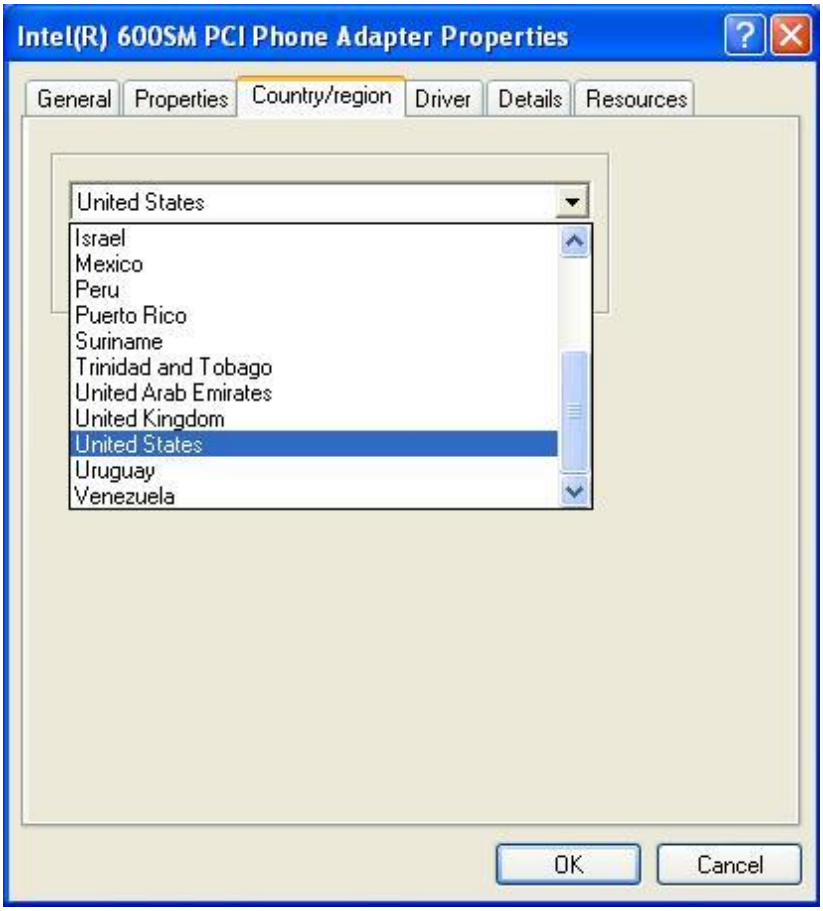
Phone Adapter Country/Region Settings

To change the country/region settings for your phone adapter, do the following:

1. Open Windows Device Manager, double-click **Sound, video and game controllers**, and then right-click **Intel(R) 600SM PCI Phone Adapter** to access the Properties dialog box.



2. From the Properties dialog box, click the **Country/region** tab. This tab provides access to a menu of selectable country names, which will indicate to the driver to use a country-specific signaling profile. Select the appropriate country/region and click **OK**.



For help with using Windows Device Manager, refer to your Windows help system.

Uninstalling the Phone Adapter in Windows* XP

To uninstall the modem in Windows XP:

1. Open Windows Device Manager, double-click **Sound, video and game controllers**, right-click **Intel(R) 600SM PCI Phone Adapter**, and then select **Uninstall**.
2. Follow the uninstall instructions that appear.

For help with using Windows Device Manager, refer to your Windows help system.

NOTE

The phone adapter will not function without the phone adapter driver installed.

Uninstalling the SoftPhone Agent

To uninstall the SoftPhone Agent:

1. From the Windows Control Panel, open the **Add or Remove Programs** utility, select **SoftPhone Agent**, and then click **Change/Remove**.
2. Follow the uninstall instructions that appear.

For help with using Add or Remove Programs, refer to your Windows help system.

3 Making a Call Using the PCI Phone Adapter

To make a call using the PCI phone adapter:

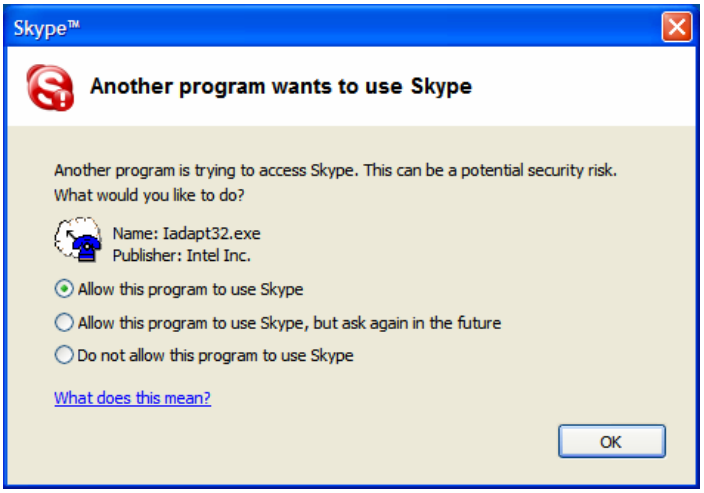
- Refer to the instructions provided by your softphone service. Instructions for making calls using the phone adapter may vary depending on your softphone service.
- Make sure that your softphone application is running.

NOTE

The phone adapter does not support dialup modem connectivity or fax transmission.

For Skype* Users

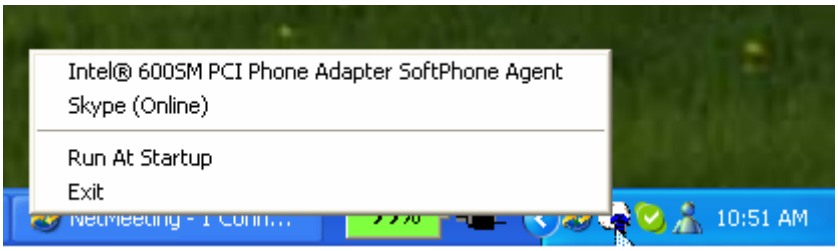
When you first run Skype, a dialog box will appear asking permission to allow the phone adapter to use Skype. **IMPORTANT! You MUST select "Allow this program to use Skype" and then click OK in order to make Skype calls using the phone adapter**.



The SoftPhone Agent Pop-up Menu

Once you have installed the phone adapter software, the system tray will display the following icon for the SoftPhone Agent.

Right-click the softphone agent icon to view a popup menu which displays the status of Skype, allows you to request whether the SoftPhone Agent will run at startup, and allows you to exit the SoftPhone Agent.



NOTE

The SoftPhone Agent must be running in the system tray in order make Skype phone calls using the PCI phone adapter.

Dialing Instructions

- To make a local or long-distance phone call in the U.S.A., dial 1 + area code + seven-digit phone number + #.
- To make a local or long-distance phone call outside the U.S.A., dial country code + area code + phone number + #.
- To make international phone calls, you must dial the number as follows: 011 or 00 + country code + area code + phone number + #.

To make Skype-to-Skype calls, simply assign a two-digit speed-dial number to a Skype contact, and then dial that number on an analog phone connected to the PCI phone adapter.

NOTE

For the most current instructions, refer to the Skype website.

4 Advanced Features

The Intel® 600M PCI Phone Adapter supports a number of advanced features including Caller ID (Type I and Type II), Call Waiting, and Conference Calling.

Caller ID Features

Type I Caller ID allows you to view the phone number of an incoming call on the Caller ID screen. Type II Caller ID allows you to view the phone number of an incoming call while you are on an existing call. If you have created a contact list using your softphone application and you receive a call from a contact, then you will be able to view the name of that contact on the Caller ID screen.

Call Waiting and Conference Call Features by Locale

NOTE

The term "hook flash" means to hang up the phone briefly (one-half second) by pressing the "Flash" button or the hook of the phone.

For all countries except the United Kingdom, France, and Germany

Basic Call Waiting

To answer an incoming call while keeping an existing call on hold:

1. Perform a hook flash. The first call will be placed on hold and you will be connected to the second incoming call.
2. To reconnect to the first call, perform another hook flash.

Basic Call Conference

To create a conference call between three or more phones:

1. Make a call to the first phone of the conference.
2. Once you are connected to the first phone, perform a hook flash. You will now hear a dial tone.
3. Dial the second phone of the conference. Once connected, perform another hook flash. At this point, all three phones will be in the call.
4. To add another phone to the call, perform the above steps again.

Call Waiting while in a Conference Call

Call waiting while in a conference call works the same way that it does in a regular phone call. When a call comes in while you are in a conference call, perform a hook flash to put the conference call on hold and connect the incoming call. Once the incoming call is complete, perform another hook flash to be reconnected to the conference call.

The United Kingdom, France, and Germany

In the United Kingdom, France, and Germany, there are three main actions used for advanced calling features. They are as follows:

Feature	Action
Drop Active Call	Hook flash, then press 1
Switch to another call	Hook flash, then press 2
Connect calls to a conference	Hook flash, then press 3

When using these features, you must wait for a dial tone after performing a hook flash. Once you hear a dial tone, you may press the appropriate call control number on your phone keypad. Failure to press a call control number will cancel the process. In some cases, performing a hook flash will be enough to answer a call waiting event or to initiate a new call. If a conference call has been established, the "Drop Active Call" and "Switch to another call" features can only be used on additional incoming or outgoing calls.

Basic Call Waiting

To answer an incoming call, while keeping an existing call on hold:

1. Perform a hook flash. The first call will be placed on hold and you will be connected to the second incoming call.
2. To reconnect to the original phone call, first perform a hook flash. Then, once you hear a dial tone, press 2 and you will be reconnected to the original phone call. The same procedure can be used to switch back to the second caller.
3. To establish a conference call involving all three parties, perform a hook flash, wait for a dial tone, and then press 3.
4. To drop the current call and switch to the call on-hold, perform a hook flash, wait for a dial tone, and then press 1.

Basic Call Conference

To create a conference call between three or more phones:

1. Make a call to the first phone of the conference.
2. Once you're connected to the first phone, perform a hook flash. You will now hear a dial tone.
3. Dial the second phone of the conference. Once connected, perform another hook flash. You will now hear a dial tone. Press 3 to add the second phone to the conference. At this point, all three phones will be in the call.
4. To add another phone to the call, perform the above steps again.

Call Waiting while in a Conference Call

Call waiting while in a conference works the same way that it does in a standard single phone call. When a call comes in while you are in a conference call, perform a hook flash to put the conference call on hold and connect the incoming call. Once connected to the incoming call, perform another hook flash, and listen for the dial tone. Press 2 to be reconnected to the conference call, with the incoming call put on hold. If you'd like to add the incoming call to the current conference, perform a hook flash and wait for a dial tone. Then press 3 and the incoming call will be added to the conference. If you'd like to drop the incoming call, perform a hook flash and wait for a dial tone. Press 1 and the incoming call will be dropped and you will be reconnected to the conference call.

5 Troubleshooting

The phone adapter was plugged into a telephone wall jack by mistake

If you connected the phone adapter to a telephone wall jack, do the following:

1. Turn off the computer.
2. Disconnect the phone adapter from the telephone wall jack and connect it to a standard telephone (for detailed instructions, see page 11).
3. Turn on the computer.

SoftPhone Agent will not function in a suspend state

If you attempt to place your computer into a suspend state, such as standby or hibernate, or if the computer attempts it via an inactivity timeout while the SoftPhone Agent is running, a message will appear indicating that suspending will disable your softphone service, and then ask if you want to continue. You will not be able to receive calls or dial out using your phone adapter while your computer is in a suspend state.

No dial tone heard when placing a call

If the SoftPhone Agent is not running, or if your softphone application does not have an active connection to your VoIP service provider, then your phone adapter will not generate a dial tone. If you do not hear a dial tone after picking up the phone, try the following troubleshooting steps, and recheck the dial tone after each step:

1. Ensure that the SoftPhone Agent and your softphone application are running.
2. Ensure that your softphone application has an active connection to your VoIP service provider.
3. Ensure that the phone adapter card is connected to the telephone.
4. Disconnect and reconnect the telephone line to the telephone and to the phone adapter.
5. Install a new telephone line (RJ-11 cable) between the phone adapter and the telephone.
6. Check to make sure the PCI phone adapter card is seated correctly in your computer. If not, reseat the PCI phone adapter card (for detailed instructions, see page 9).

Skype-related Issues

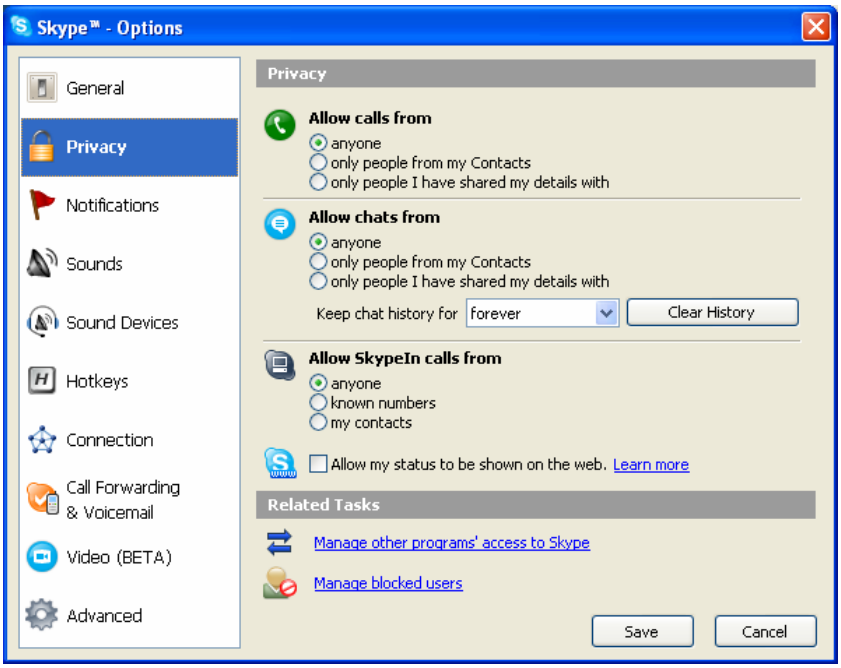
Skype does not allow the SoftPhone Agent to use Skype

If you see the following popup message, "Request to access Skype was denied. Please check Skype Options and restart the SoftPhone Agent" then the SoftPhone Agent has been blocked by Skype. Perform the following steps to remove the SoftPhone Agent from the list of blocked programs:

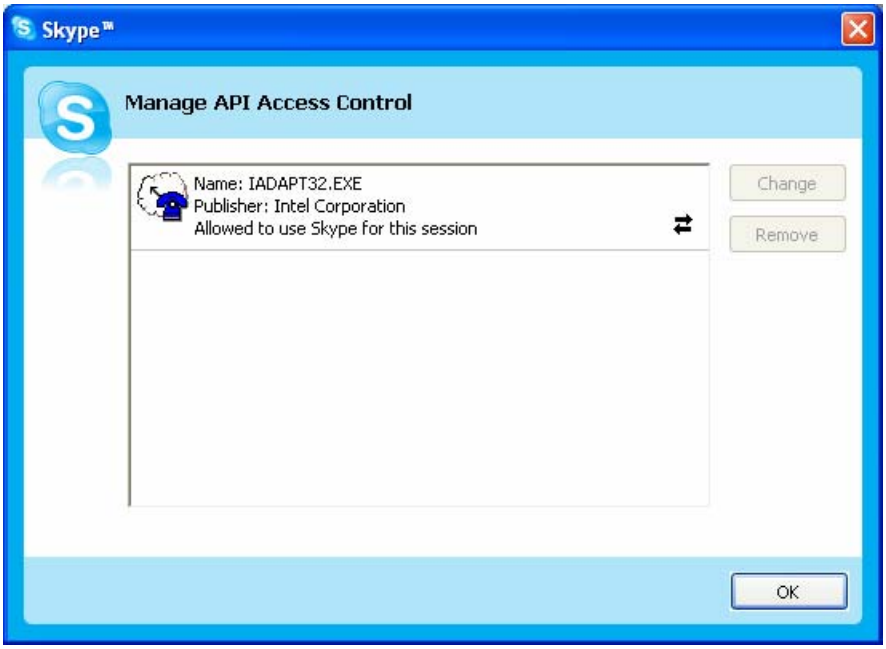
NOTE

The following windows may differ depending the version of Skype you are using.

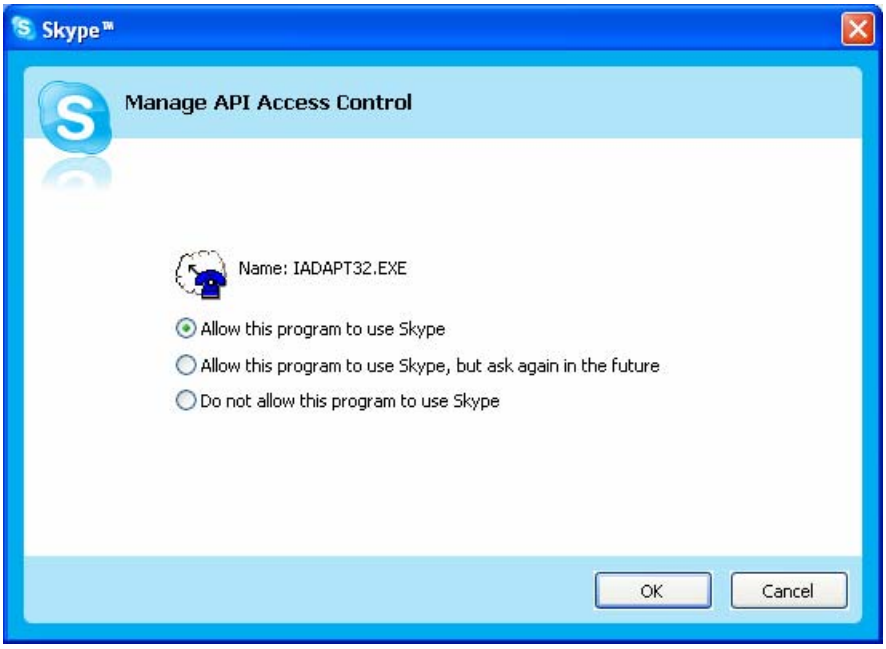
1. From the Skype main menu, click **Tools**, and then select **Options** from the pull-down menu.
2. From the **Options** window, click **Manage other programs' access to Skype**.



3. Select **IADAPT32.EXE** (as shown below), click **Change**, and then click **OK**.



4. When the following window appears, select **Allow this program to use Skype**, and then click **OK**.



You will now be able to use Skype with your phone adapter.

A Regulatory Compliance

This appendix contains the following regulatory compliance information for Intel 600SM PCI Phone Adapter:

- European Union Declaration of Conformity statement
- Product Ecology statement
- Electromagnetic Compatibility (EMC) regulations
- Product certifications

European Union Declaration of Conformity Statement

We, Intel Corporation, declare under our sole responsibility that the product Intel 600SM PCI Phone Adapter is in conformity with all applicable essential requirements necessary for CE marking, following the provisions of the European Council Directive 89/336/EEC (EMC Directive) and Council Directive 73/23/EEC (Safety/Low Voltage Directive).

The product is properly CE marked demonstrating this conformity and is for distribution within all member states of the EU with no restrictions.

CE

This product follows the provisions of the European Directives 89/336/EEC and 73/23/EEC.

Čeština Tento výrobek odpovídá požadavkům evropských směrnic 89/336/EEC a 73/23/EEC.

Dansk Dette produkt er i overensstemmelse med det europæiske direktiv 89/336/EEC & 73/23/EEC.

Dutch Dit product is in navolging van de bepalingen van Europees Directief 89/336/EEC & 73/23/EEC.

Eesti Antud toode vastab Euroopa direktiivides 89/336/EEC ja 73/23/EEC kehtestatud nõuetele.

Suomi Tämä tuote noudattaa EU-direktiivin 89/336/EEC & 73/23/EEC määräyksiä.

Français Ce produit est conforme aux exigences de la Directive Européenne 89/336/EEC & 73/23/EEC.

Deutsch Dieses Produkt entspricht den Bestimmungen der Europäischen Richtlinie 89/336/EEC & 73/23/EEC.

Ελληνικά Το παρόν προϊόν ακολουθεί τις διατάξεις των Ευρωπαϊκών Οδηγιών 89/336/ΕΟΚ και 73/23/ΕΟΚ.

Magyar E termék megfelel a 89/336/EEC és 73/23/EEC Európai Irányelv előírásainak.

Icelandic Þessi vara stenst reglugerð Evrópska Efnahags Bandalagsins númer 89/336/ EEC & 73/23/EEC.

Italiano Questo prodotto è conforme alla Direttiva Europea 89/336/EEC & 73/23/EEC.

Latviešu Šis produkts atbilst Eiropas Direktīvu 89/336/EEC un 73/23/EEC noteikumiem.

Lietuvių Šis produktas atitinka Europos direktyvų 89/336/EEC ir 73/23/EEC nuostatas.

Malti Dan il-prodott hu konformi mal-provvedimenti tad-Direttivi Ewropej 89/336/EEC u 73/23/EEC.

Norsk Dette produktet er i henhold til bestemmelsene i det europeiske direktivet 89/336/ EEC & 73/23/EEC.

Polski Niniejszy produkt jest zgodny z postanowieniami Dyrektyw Unii Europejskiej 89/336/EWG i 73/23/EWG.

Portuguese Este produto cumpre com as normas da Diretiva Européia 89/336/EEC & 73/23/EEC.

Español Este producto cumple con las normas del Directivo Europeo 89/336/EEC & 73/23/EEC.

Slovensky Tento produkt je v súlade s ustanoveniami európskych direktív 89/336/EEC a 73/23/EEC.

Slovenščina Izdelek je skladen z določbami evropskih direktiv 89/336/EGS in 73/23/EGS.

Svenska Denna produkt har tillverkats i enlighet med EG-direktiv 89/336/EEC & 73/23/EEC.

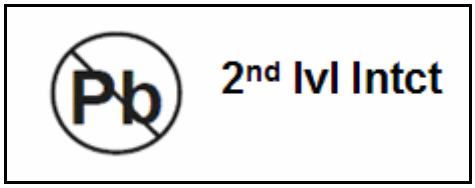
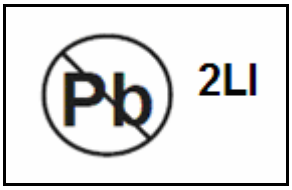
Türkçe Bu ürün, Avrupa Birliği'nin 89/336/EEC ve 73/23/EEC yönergelerine uyar.

Product Ecology Statement

Lead-Free PCI Card

This PCI card is lead-free although certain discrete components used on the board contain a small amount of lead which is necessary for component performance and/or reliability. This PCI card is referred to as "Lead-free second level interconnect." The PCI card substrate and the solder connections from the PCI card to the components (second-level connections) are all lead-free. Table 1 shows the various forms of the "Lead-Free 2nd Level Interconnect" mark as it appears on the board and accompanying collateral.

Table 1. Lead-Free Board Markings

Description	Mark
Lead-Free 2nd Level Interconnect: This symbol is used to identify electrical and electronic assemblies and components in which the lead (Pb) concentration level in the PCI card substrate and the solder connections from the PCI card to the components (second-level interconnect) is not greater than 0.1% by weight (1000 ppm).	 **or**  **or** 

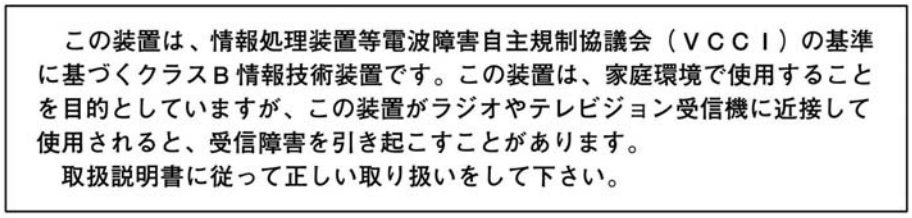
Electromagnetic Compatibility (EMC) Regulations

Intel 600SM PCI Phone Adapter complies with the EMC regulations stated in Table 2 when correctly installed in a compatible host system.

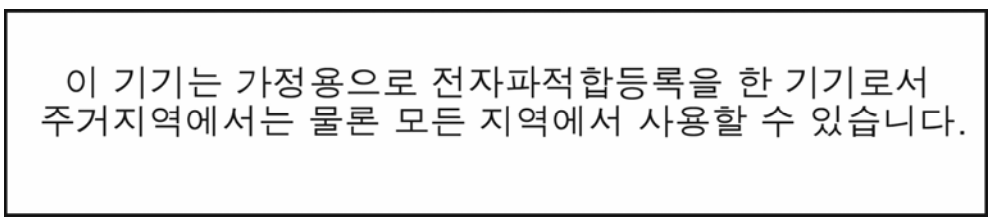
Table 2. EMC Regulations

Regulation	Title
FCC Class B	Title 47 of the Code of Federal Regulations, Parts 2 and 15, Subpart B, Radio Frequency Devices. (USA)
ICES-003 (Class B)	Interference-Causing Equipment Standard, Digital Apparatus. (Canada)
EN55022: 1998 (Class B)	Limits and methods of measurement of Radio Interference Characteristics of Information Technology Equipment. (European Union)
EN55024: 1998	Information Technology Equipment – Immunity Characteristics Limits and methods of measurement. (European Union)
AS/NZS CISPR22 (Class B)	Australian Communications Authority, Standard for Electromagnetic Compatibility. (Australia and New Zealand)
CISPR 22, 3rd Edition, (Class B)	Limits and methods of measurement of Radio Disturbance Characteristics of Information Technology Equipment. (International)
CISPR 24: 1997	Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement. (International)
VCCI (Class B)	Voluntary Control for Interference by Information Technology Equipment (Japan)

Japanese Kanji statement translation: This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI). If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.



Korean Class B statement translation: This is household equipment that is certified to comply with EMC requirements. You may use this equipment in residential environments and other non-residential environments.



Product Certifications

Board-Level Certification Markings

Intel 600SM PCI Phone Adapter has the following product certification markings:

Table 3. Product Certification Markings

Description	Mark
UL joint US/Canada Recognized Component mark. Includes adjacent UL file number for Intel desktop boards: E210882.	
FCC Declaration of Conformity logo mark for Class B equipment. Includes Intel name and 600SM model designation.	Trade Name Model Number
CE mark. Declaring compliance to European Union (EU) EMC directive (89/336/EEC) and Low Voltage directive (73/23/EEC).	
Australian Communications Authority (ACA) C-tick mark. Includes adjacent Intel supplier code number, N-232.	
Japan VCCI (Voluntary Control Council for Interference) mark.	
S. Korea MIC (Ministry of Information and Communication) mark. Includes adjacent MIC certification number: CPU-600SM. For information about MIC certification, go to http://support.intel.com/support/motherboards/desktop/600SM	
Taiwan BSMI (Bureau of Standards, Metrology and Inspections) mark. Includes adjacent Intel company number, D33025.	
Printed wiring board manufacturer's recognition mark. Consists of a unique UL recognized manufacturer's logo, along with a flammability rating (solder side).	V-0

Service Provider Certification

Intel 600SM PCI Phone Adapter has the following service provider certification:

Table 4. Service Provider Certification

Description	Mark
Skype certification mark. Intel 600SM Phone Adapter is Skype Certified* *Disclaimer: This certification applies only to the Intel 600SM PCI Phone Adapter card, and cannot be used to certify a system or other components. For more details, please see http://www.skype.com/partners/hardware/certified_guidelines.html	