

**Intel® Desktop Boards D815EEA2, D815EPEA2,  
D815EFV, and D815EPFV**

*Universal Platforms for 370-pin Processors*

# Quick Reference

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*This guide is written for technically qualified personnel with experience installing and configuring desktop boards.*

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## **Items on the CD-ROM**

- Product warranty
- Intel® Express Installer
- *Intel® Desktop Boards D815EEA2, D815EPEA2, D815EFV, and D815EPFV Product Guide*
- Software utilities and drivers
- Software license agreement
- Readme file

Part number: A52561-002

## Getting Help

View or download product support information from Intel's World Wide Web site:

<http://support.intel.com/support/motherboards/desktop/>

Documents on the Web site include:

- *Intel® Desktop Board D815EEA2/D815EPEA2 Technical Product Specification*
- *Intel® Desktop Board D815EFV/D815EPFV Technical Product Specification*
- *Intel® Desktop Board D815EEA2/D815EPEA2 Specification Update*
- *Intel® Desktop Board D815EFV/D815EPFV Specification Update*

If you can't find the information you need on the Web, contact your point of purchase. The Intel Web site also includes telephone numbers and billing charges, if applicable, for Intel customer support.

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The D815EEA2, D815EPEA2, D815EFV, and D815EPFV desktop boards may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Copies of documents which have an ordering number and are referenced in this document, or other Intel literature, may be obtained from Intel Corporation by going to the World Wide Web site at: <http://www.intel.com> or by calling 1-800-548-4725.

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# Before You Begin

## Warnings and Cautions



### WARNING

*Disconnect the desktop board's power supply from its ac power source before you connect or disconnect cables, or install or remove any desktop board components. Failure to do this can result in personal injury or equipment damage. Some circuitry on the desktop board can continue to operate even though the front panel power switch is off.*



### CAUTION

*Electrostatic Discharge (ESD) can damage desktop board components. Install the desktop board at an ESD-controlled workstation. If such a workstation is not available, wear an antistatic wrist strap.*

## Safety and Regulatory Requirements

See the *Intel® Desktop Boards D815EEA2, D815EPEA2, D815EFV, and D815EPFV Product Guide* for all applicable regulatory compliance statements, product certification markings, and safety and electromagnetic compatibility (EMC) standards and regulations these desktop boards are compliant with.

***Replacement battery warning label provided:*** Place the label inside the chassis in an easy-to-see location near the battery but not on the board itself.

***Intended uses:*** This product was evaluated as information technology equipment (I.T.E.) for home or office use when installed in an appropriate computer chassis. Other end uses or locations may require further evaluation.

# Supported Components

## Processors

The Intel Desktop Boards D815EEA2, D815EPEA2, D815EFV, and D815EPFV support the following processors:

Processor Type	Socket Type	Processor Frequency (GHz)	Processor Frequency (MHz)	System Bus Frequency (MHz)	L2 Cache Size (KB)
Intel® Pentium® III processors	FC-PGA	1.0	933, 866, 800EB, 733, 667, 600EB, and 533EB	133	256
		N/A	850, 800, 750, 700, 650, 600E, 550E, and 500E	100	256
Intel® Celeron™ processors	FC-PGA	N/A	800	100	128
		N/A	766, 733, 700, 667, 633, 600, 566, and 533A	66	128

For the latest information on processors supported by the boards, refer to the Intel Web site at:

<http://support.intel.com/support/motherboards/desktop/>

## Memory Modules

The three memory sockets on the boards support SDRAM DIMMs that meet the following requirements:

- 3.3 V, 168-pin modules with gold-plated contacts
- PC100 or PC133 SDRAM
- 64 Mbit and 128 Mbit SDRAM component density
- Minimum system memory: 32 MB (based on 64 Mbit SDRAM component density)
- Maximum system memory: 512 MB (based on 128 Mbit SDRAM component density)
- Unbuffered single- or double-sided DIMMs
- Non-ECC DIMMs (ECC DIMMs may be used, however, they will operate in non-ECC mode only)
- Suspend to RAM (STR) support
- Memory with Serial Presence Detect (SPD)
- Basic non-SPD support at 100 MHz only

## Processor and Memory Module Combinations

The D815EEA2, D815EPEA2, D815EFV, and D815EPFV boards support the processor and memory module combinations shown below.

Processor Type (System Bus Frequency)	PC100 Memory Modules...	PC133 Memory Modules...
Intel Celeron processor (66 MHz)	...will operate at 100 MHz	...will operate at 100 MHz
Intel Celeron processor (100 MHz)	...will operate at 100 MHz	...will operate at 100 MHz
Intel Pentium III processor (100 MHz)	...will operate at 100 MHz	...will operate at 100 MHz
Intel Pentium III processor (133 MHz)	...will operate at 100 MHz	...will operate at 133 MHz (see note below)

### ⇒ NOTES

*For 133-MHz operation, only four sides of memory can be used; two double-sided DIMMs, or one double-sided DIMM and two single-sided DIMMs. If more than four sides are used, the memory will only run at 100-MHz.*

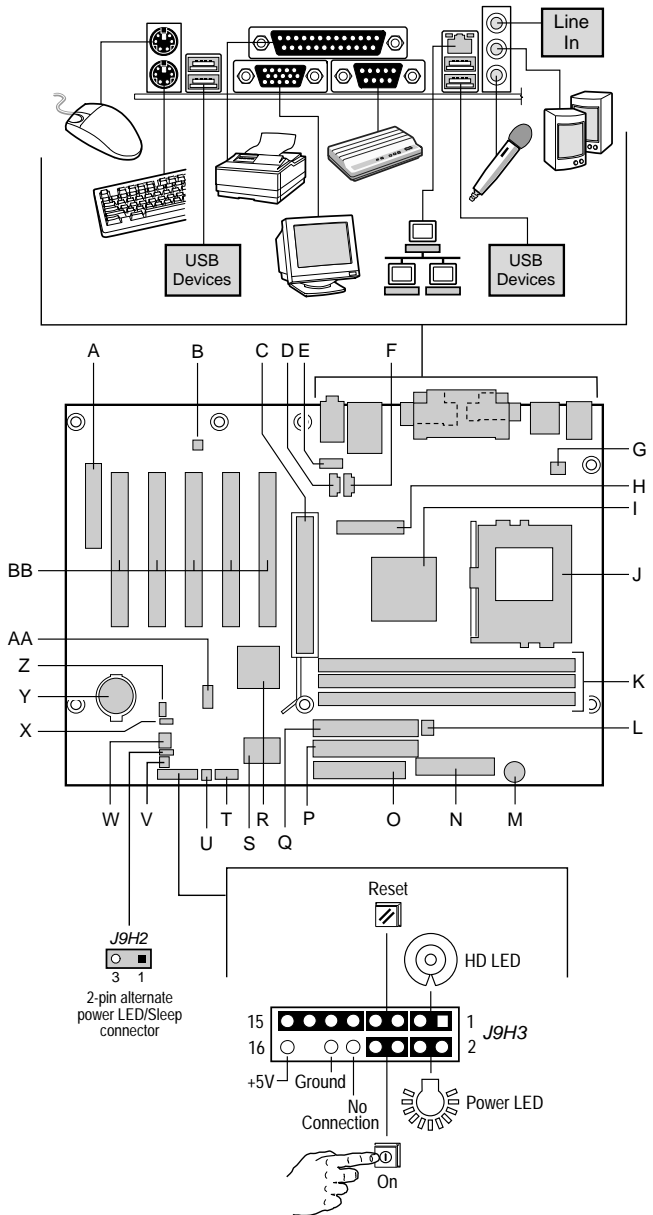
*All memory components and DIMMs used with the desktop boards must comply with the PC SDRAM specifications. These include the PC SDRAM Specification (memory component specific), the PC Unbuffered DIMM Specification, and the PC Registered DIMM Specification. To view or download these specifications, refer to this Intel Web site:*

<http://www.intel.com/technology/memory/pcsdram/>

*For information about vendors that support these memory requirements, refer to the D815EEA2, D815EPEA2, D815EFV, or D815EPFV link on this Intel Web site:*

<http://support.intel.com/support/motherboards/desktop/>

# Desktop Board Components for D815EEA2 and D815EPEA2



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## D815EEA2 and D815EPEA2 Desktop Board Components

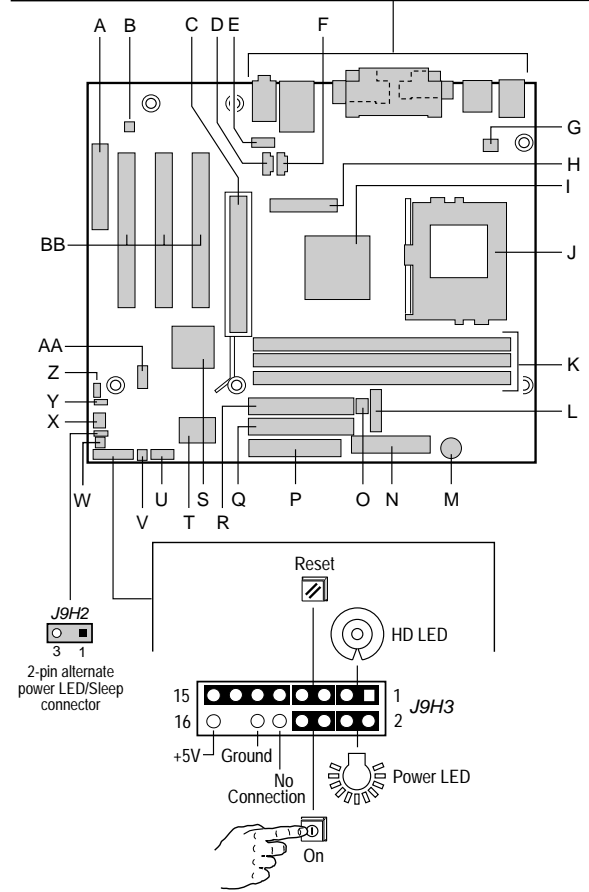
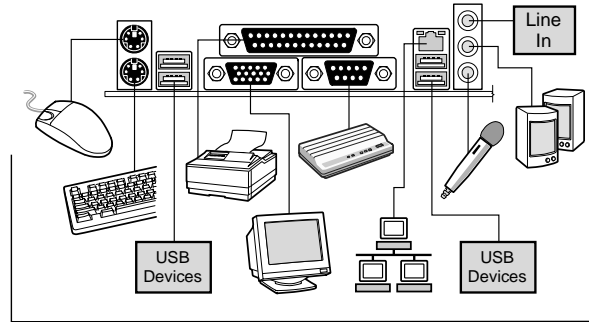
- A. Communication and Networking Riser (CNR) connector (optional)
- B. ADI AD1885 audio codec
- C. AGP universal connector
- D. ATAPI-style auxiliary line in connector
- E. Front panel audio connector (optional)
- F. ATAPI-style CD-ROM connector
- G. Processor fan connector (fan 1)
- H. Digital video output (DVO) connector (D815EEA2 only)
- I. Controller hub:
  - Intel® 82815E GMCH (D815EEA2 only)
  - Intel 82815EP MCH (D815EPEA2 only)
- J. Processor socket
- K. DIMM sockets
- L. Chassis fan connector (fan 3)
- M. Speaker
- N. Power connector
- O. Diskette drive connector
- P. Primary IDE connector
- Q. Secondary IDE connector
- R. Intel® 82801BA (ICH2)
- S. SMSC LPC47M132 super I/O controller  
(optional SMSC LPC47M142 super I/O controller)
- T. Serial port B connector
- U. SCSI hard drive activity LED connector
- V. Chassis intrusion connector
- W. Chassis fan connector (fan 2)
- X. BIOS configuration jumper block
- Y. Battery
- Z. Wake on LAN† technology connector (optional)
- AA. Front panel USB connector (optional)
- BB. PCI expansion slots



### CAUTION

*Many of the internal desktop board connectors provide operating voltage (+5 V DC and +12 V DC, for example) to devices inside the computer chassis, such as fans and internal peripherals. These connectors are not overcurrent protected. Do not use these connectors for powering devices external to the computer chassis. A fault in the load presented by the external devices could cause damage to the computer, the interconnecting cables, and the external devices themselves.*

# Desktop Board Components for D815EFV and D815EPFV



OM11623



## D815EFV and D815EPFV Desktop Board Components

- A. Communication and Networking Riser (CNR) connector (optional)
- B. ADI AD1885 audio codec
- C. AGP universal connector
- D. ATAPI-style auxiliary line in connector
- E. Front panel audio connector (optional)
- F. ATAPI-style CD-ROM connector
- G. Processor fan connector (fan 1)
- H. Digital video output (DVO) connector (D815EFV only)
- I. Controller hub:
  - Intel 82815E GMCH (D815EFV only)
  - Intel 82815EP MCH (D815EPFV only)
- J. Processor socket
- K. DIMM sockets
- L. Battery
- M. Speaker
- N. Power connector
- O. Chassis fan connector (fan 3)
- P. Diskette drive connector
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- T. SMSC LPC47M132 super I/O controller  
(optional SMSC LPC47M142 super I/O controller)
- U. Serial port B connector
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- Z. Wake on LAN technology connector (optional)
- AA. Front panel USB connector (optional)
- BB. PCI expansion slots



### CAUTION

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# Installation Steps

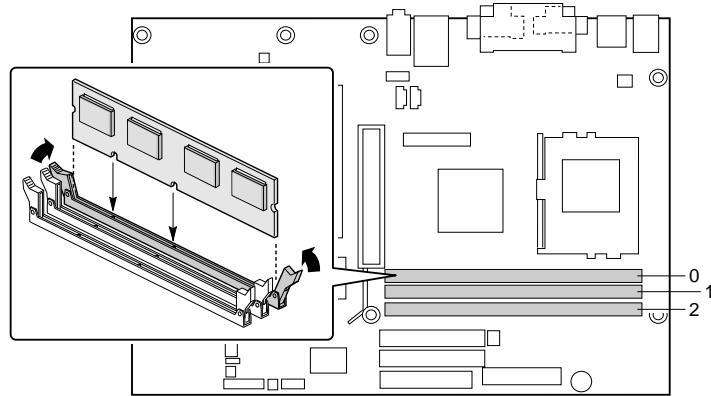
## 1 Installing Memory Modules



### CAUTION

*Install memory in the DIMM sockets prior to installing the AGP video card to avoid interference with the memory retention mechanism.*

The D815EEA2, D815EPEA2, D815EFV, and D815EPFV boards require that DIMMs be installed as shown in the figure below. The three DIMM sockets are arranged as Banks 0, 1, and 2 as shown below. If installing a single DIMM, install it in Bank 0. If installing two DIMMs, install them in Banks 0 and 1.



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### The D815EEA2 Board is Shown

To install DIMMs, follow these steps:

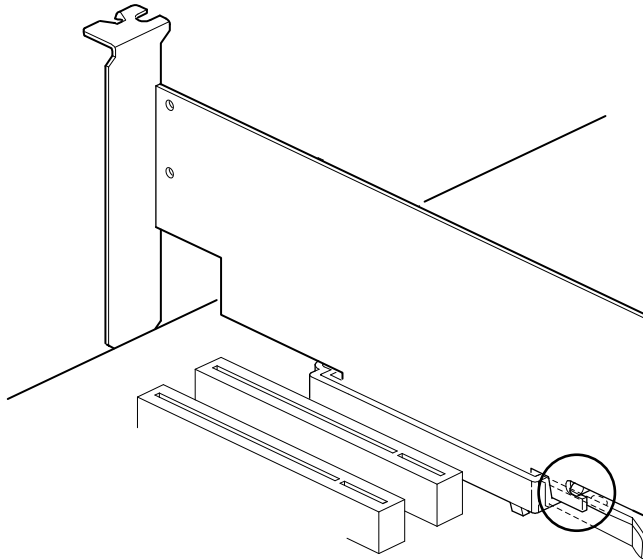
1. Observe the precautions in “Before You Begin” (see page 3).
2. Turn off all peripheral devices connected to the computer. Turn off and unplug the computer.
3. Remove the computer cover and locate the DIMM sockets.
4. Holding the DIMM by the edges, remove it from its antistatic package.
5. Make sure the clips at either end of the socket are pushed away from the socket as shown above.
6. Position the DIMM above the socket. Align the two small notches in the bottom edge of the DIMM with the keys in the socket.
7. Insert the bottom edge of the DIMM into the socket.
8. When the DIMM is inserted, push down on the top edge of the DIMM until the retaining clips snap into place. Make sure the clips are firmly in place.
9. Replace the computer cover.

## 2 Installing the AGP Card Retention Mechanism



### CAUTION

*Install the AGP card retention mechanism (RM) only when using an AGP card with a retention notch as shown in the figure below. Use of the RM with an unnotched card may impair video operation. See the Intel Desktop Boards D815EEA2, D815EPEA2, D815EFV, and D815EPFV Product Guide on the Intel Express Installer CD-ROM for RM removal instructions.*

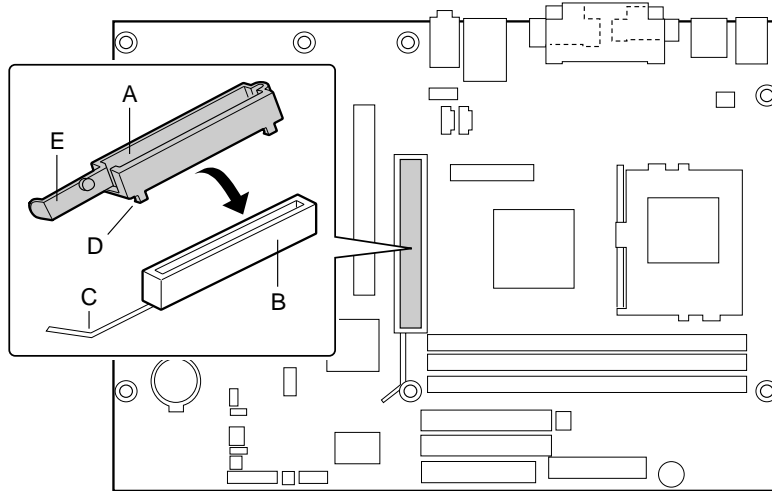


OM10218

The RM encloses the desktop board's AGP connector and provides additional stability to the AGP card primarily for shipping.

After placing the desktop board on a flat, supportive surface, follow these steps to attach the RM (A) to the AGP connector (B):

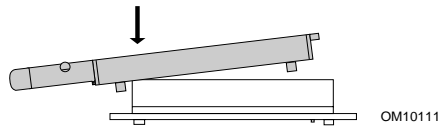
1. Locate the AGP connector (J8C1) on the desktop board as shown below. Note that the desktop board's silkscreen (C) indicates the correct final position of the lever on the RM (E).



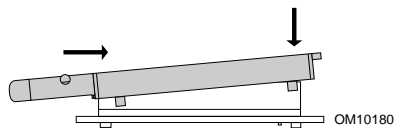
OM11624

**The D815EEA2 Board is Shown**

2. Position the RM over the AGP connector as shown below.



3. Push the lever end of the RM in the direction of the arrow until the two rear tabs (D) spread over the end of the AGP connector.



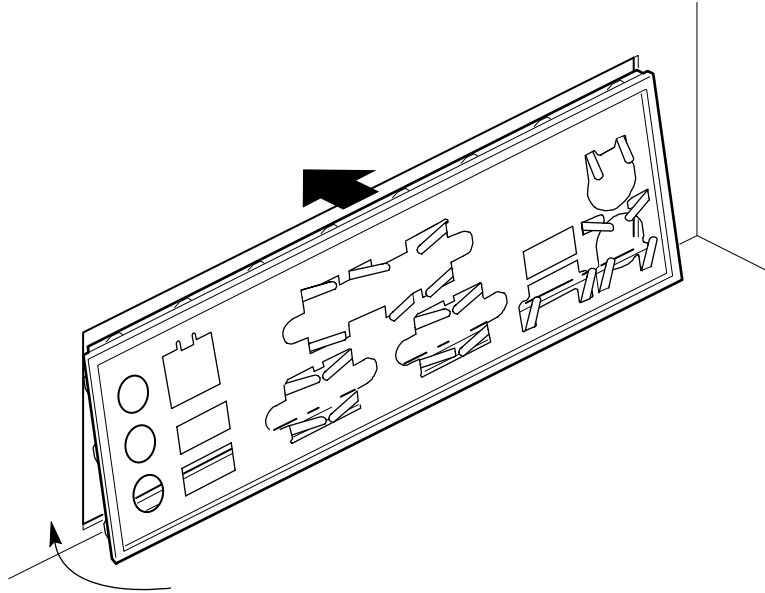
4. Push the free end of the RM over the other end of the AGP connector and press down until all four tabs snap underneath the AGP connector.



### 3 Installing the I/O Shield

The desktop board comes with an I/O shield. When installed in the chassis, the shield blocks radio frequency transmissions, protects internal components from dust and foreign objects, and promotes correct airflow within the chassis.

Install the I/O shield before installing the desktop board in the chassis. Place the shield inside the chassis as shown in the following figure. Press the shield into place so that it fits tightly and securely. If the shield doesn't fit, obtain a properly-sized shield from the chassis supplier.

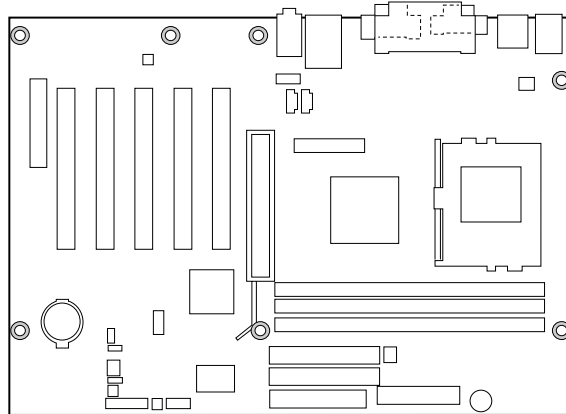


OM11310

## 4 Installing the Desktop Board

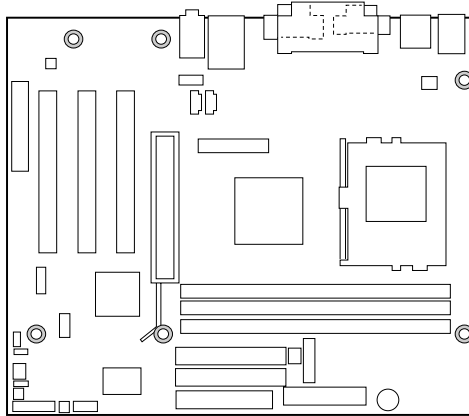
Refer to your chassis manual for specific instructions on installing and removing the desktop board.

Secure the desktop board to the chassis standoffs using seven screws for the D815EEA2 and D815EPEA2 boards, and six screws for the D815EFV and D815EPFV boards. Insert the screws in the mounting holes shown in the figures below.



OM11625

**Location of the Mounting Screw Holes for the D815EEA2 and D815EPEA2 Boards**



OM11626

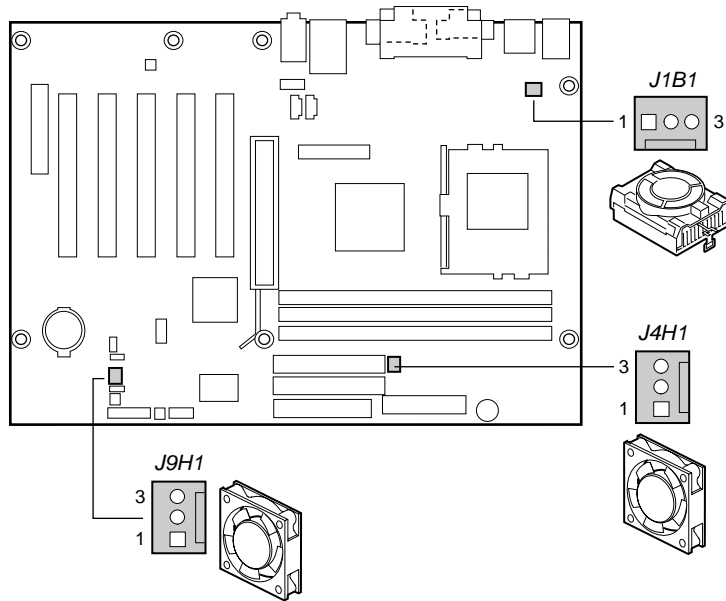
**Location of the Mounting Screw Holes for the D815EFV and D815EPFV Boards**

## 5 Installing the Processor

Follow the instructions included with the boxed processor.

## 6 Connecting the Fans

The following figure shows the location of the fan connectors. If you are installing a processor with an active fan heatsink, connect the processor's fan cable to the desktop board connector labeled J1B1 (fan 1). Connect the chassis fan cables to the desktop board connectors labeled J9H1 (fan 2) and J4H1 (fan 3).



OM11627

The D815EEA2 Board is Shown

## 7 Installing AGP and GPA Cards



### CAUTION

*Remove the AGP video card before installing or upgrading memory to avoid interference with the memory retention mechanism.*

Follow these instructions to install Accelerated Graphics Port (AGP) and Graphics Performance Accelerator (GPA) cards if they have a retention notch. Remove the retention mechanism before installing an AGP or GPA card if the card does not have a retention notch (see the *Intel Desktop Boards D815EEA2, D815EPEA2, D815EFV, and D815EPFV Product Guide* on the Intel Express Installer CD-ROM for RM removal instructions.)

1. Place the AGP or GPA card in the AGP universal connector.
2. Press down on the card until it is completely seated in the AGP universal connector and the card retention notch snaps into place below the RM pin.
3. Secure the card's metal bracket to the chassis back panel with a screw (for AGP cards only).

## 8 Connecting the IDE Drives



### NOTE

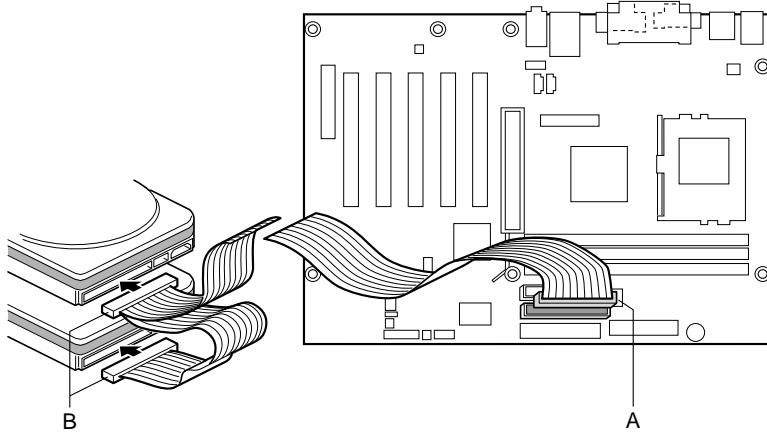
*If the cable select option is enabled on your IDE drive, the primary drive must be connected to the black connector on the IDE cable.*

The Intel® boxed desktop board package includes two IDE cables. Either cable can connect two drives to the desktop board. The cables support the Ultra DMA-33 (40-contact) or ATA-66/100 (40-contact, 80-conductor) transfer protocols and are backward compatible with drives using slower IDE transfer protocols.



For the cable to function correctly:

1. Attach the cable end with the single connector (A), which is blue and labeled P1, to the desktop board.
2. Attach the cable end with the two closely spaced connectors (B), which are gray (for secondary drive) and black (for primary drive) and are labeled P2 and P3, to the drives.

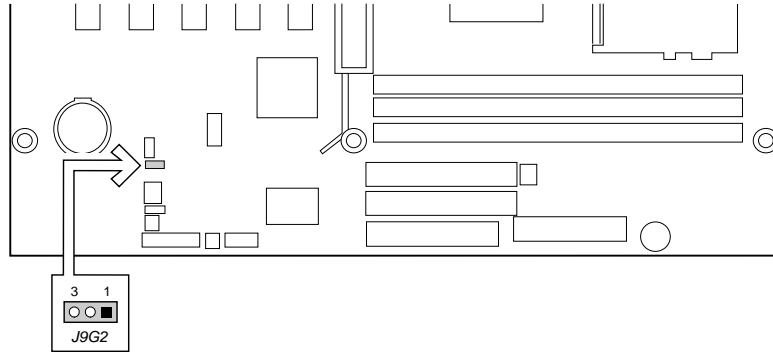


OM11633

**The D815EEA2 Board is Shown**

## Using the BIOS Configuration Jumper

The BIOS configuration jumper determines the operating mode of the BIOS Setup Program and enables BIOS recovery in the event of a failed BIOS upgrade. The following figure shows the location of the configuration jumper (J9G2).



OM11628

### The D815EEA2 Board is Shown

The following table describes the BIOS mode for each jumper position.

Jumper Position	Mode	Description
Pins 1-2	Normal (default)	The BIOS uses the current configuration and passwords for booting.
Pins 2-3	Configure	After the Power-On Self-Test (POST) runs, the BIOS displays the Maintenance Menu. Use this menu to clear passwords.
No jumper	Recovery	The BIOS recovers data from a recovery CD-ROM or diskette in the event of a failed BIOS upgrade. To upgrade or recover the BIOS, see the instructions in the <i>Intel Desktop Boards D815EEA2, D815EPEA2, D815EFV, and D815EPFV Product Guide</i> on the Intel Express Installer CD-ROM.

## BIOS Setup Program Defaults

For a complete list of the BIOS Setup settings, refer to the Intel World Wide Web site:

<http://support.intel.com/support/motherboards/desktop>

and select one of the following TPSs:

- Intel Desktop Board D815EEA2/D815EPEA2 Technical Product Specification
- Intel Desktop Board D815EFV/D815EPFV Technical Product Specification

### ⇒ NOTES

*To disable the audio interface, select the Peripheral Configuration Submenu under the Advanced Menu, then set Audio Device to "Disabled."*

*To disable the LAN interface, select the Peripheral Configuration Submenu under the Advanced Menu, then set LAN Device to "Disabled."*



# Intel® 桌面主板 D815EEA2、D815EPEA2、 D815EFV 和 D815EPFV

370 引脚处理器通用平台

## 快速参考指南

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本指南供有安装和配置桌面主板经验的合格技术人员使用。

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D815EEA2 和 D815EPEA2 桌面主板元件 .....

D815EFV 和 D815EPFV 桌面主板元件 .....

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使用 BIOS 配置跳线 .....

BIOS 设置程序默认设置 .....

CD-ROM 上提供的项目

- 产品担保书
- Intel® 快速安装程序
- 《Intel® 桌面主板 D815EEA2、D815EPEA2、D815EFV 和 D815EPFV 产品指南》
- 软件实用程序和驱动程序
- 软件许可协议
- 自述文件

## 获得帮助

从 Intel 的万维网站点查看或下载产品的支持信息:

<http://support.intel.com/support/motherboards/desktop/>

万维网站点上的文档包括:

- 《Intel® 桌面主板 D815EEA2/D815EPEA2 产品技术规格》
- 《Intel® 桌面主板 D815EFV/D815EPFV 产品技术规格》
- 《Intel® 桌面主板 D815EEA2/D815EPEA2 规格更新》
- 《Intel® 桌面主板 D815EFV/D815EPFV 规格更新》

如果在万维网上找不到需要的信息, 请与您的经销商联系。Intel 万维网站点上还列出了 Intel 客户支持的电话号码和所要收取的费用 (如果适用)。

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D815EEA2、D815EPEA2、D815EFV 和 D815EPFV 桌面主板可能包含已知设计缺陷或错误的勘误表, 可能导致您的产品与出版的规格略有不同。如客户提出索取, 可提供最新的勘误表。

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# 开始之前

## 警告与注意



### 警告

在连接或断开电缆、安装或拆下任何桌面主板元件之前，请先将桌面母板的交流电源切断。否则会引起人身伤害或损坏设备。即使在前面板电源开关关闭后，桌面主板上的某些电路仍可能继续工作。



### 注意

静电释放 (ESD) 会损坏桌面母板的元件。请在有静电释放保护的工作站安装桌面主板。如果没有这样的工作站，请戴上防静电腕带。

## 安全和规章要求

有关这些桌面主板现行的符合规章声明、产品认证标志、安全与电磁兼容性 (EMC) 标准和规章，请参阅《Intel® 桌面主板 D815EEA2、D815EPEA2、D815EFV 和 D815EPFV 产品指南》。

提供的更换电池警告标签：将标贴签贴在机箱内靠近电池且容易看见的地方，注意不要贴在母板上。

指定用法：本产品已作为信息技术设备 (I.T.E.) 通过鉴定，在适当的计算机机箱上安装后用于家庭或办公室。用于其它目的或场所有待进一步鉴定。

## 支持的元件

### 处理器

Intel 桌面主板 D815EEA2、D815EPEA2、D815EFV 和 D815EPFV 支持下列处理器：

处理器类型	插座类型	处理器频率 (GHz)	处理器频率 (MHz)	系统总线频率 (MHz)	L2 高速缓存大小 (KB)
Intel® Pentium® III 处理器	FC-PGA	1.0	933、866、800EB、733、667、600EB 和 533EB	133	256
		不适用	850、800、750、700、650、600E、550E 和 500E	100	256
Intel® Celeron™ 处理器	FC-PGA	不适用	800	100	128
		不适用	766、733、700、667、633、600、566 和 533A	66	128

有关主板支持的处理器之最新信息，请访问 Intel 万维网站：  
<http://support.intel.com/support/motherboards/desktop/>

### 内存模块

主板上的三个内存插座支持符合下列要求的 SDRAM DIMM：

- 3.3 V、带有镀金触点的 168 引脚模块
- PC100 或 PC133 SDRAM
- 64 兆位和 128 兆位 SDRAM 元件密度
- 最小系统内存：32 MB（基于 64 兆位 SDRAM 元件密度）
- 最大系统内存：512 MB（基于 128 兆位 SDRAM 元件密度）
- 非缓冲型单面或双面 DIMM
- 非 ECC DIMM（可以使用 ECC DIMM，但它们仅在非 ECC 模式下工作）
- 支持“挂于内存省电模式” (STR)
- 具有串行设备检测 (SPD) 的内存
- 基本非 SPD 的支持（仅在 100 MHz 的运行下）



## 处理器和内存模块组合

D815EEA2、D815EPEA2、D815EFV 和 D815EPFV 主板支持如下所示的处理器和内存模块组合。

处理器类型（系统总线频率）	PC100 内存模块...	PC133 内存模块...
Intel Celeron 处理器 (66 MHz)	...运行速度为 100 MHz	...运行速度为 100 MHz
Intel Celeron 处理器 (100 MHz)	...运行速度为 100 MHz	...运行速度为 100 MHz
Intel Pentium III 处理器 (100 MHz)	...运行速度为 100 MHz	...运行速度为 100 MHz
Intel Pentium III 处理器 (133 MHz)	...运行速度为 100 MHz	...运行速度为 133 MHz (请参阅如下注释)

### ⇒ 注释

当运行速度为 133 MHz 时，内存仅有四个面可用：两个双面 DIMM，或者一个双面 DIMM 和两个单面 DIMM。如果使用四个面以上，内存的运行速度仅为 100 MHz。

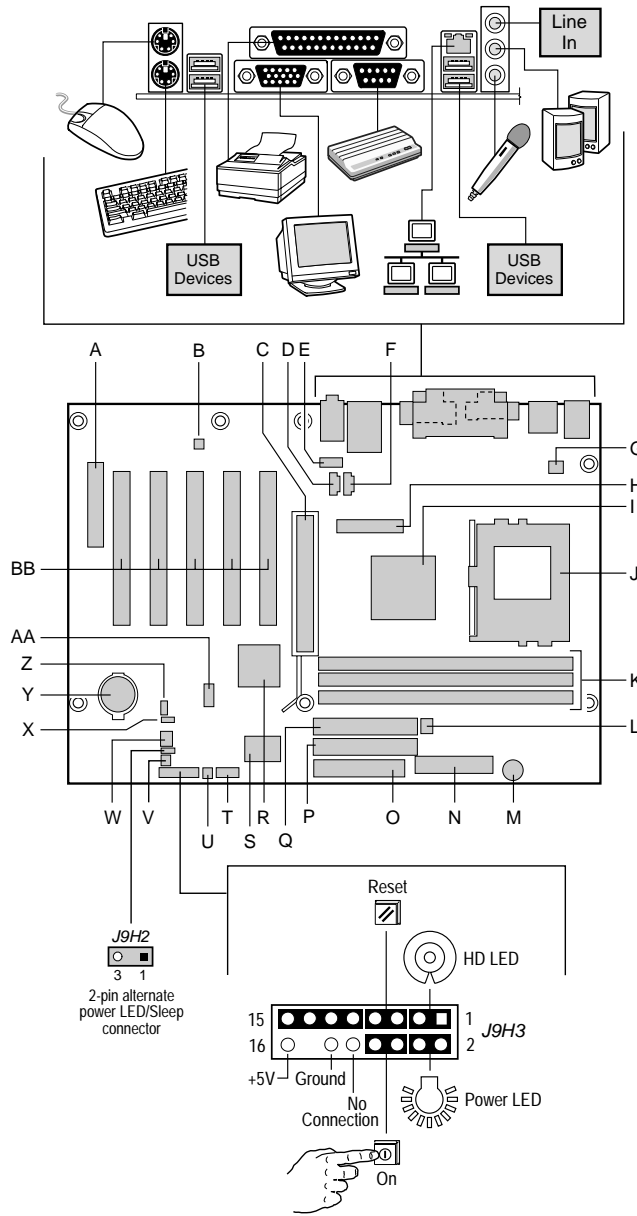
本桌面主板使用的所有内存元件和 DIMM 都必须符合 PC SDRAM 规格。包括 PC SDRAM 规格（内存元件规格）、非缓冲型 PC DIMM 规格以及 PC 寄存式 DIMM 规格。欲查看或下载这些规范，请参考 Intel 的万维网站：

<http://www.intel.com/technology/memory/pcsdram/>

有关支持这些内存要求的厂商信息，请参阅 Intel 万维网站上的 D815EEA2、D815EPEA2、D815EFV 或 D815EPFV 链接：

<http://support.intel.com/support/motherboards/desktop/>

## D815EEA2 和 D815EPEA2 桌面主板元件



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## D815EEA2 和 D815EPEA2 桌面主板元件

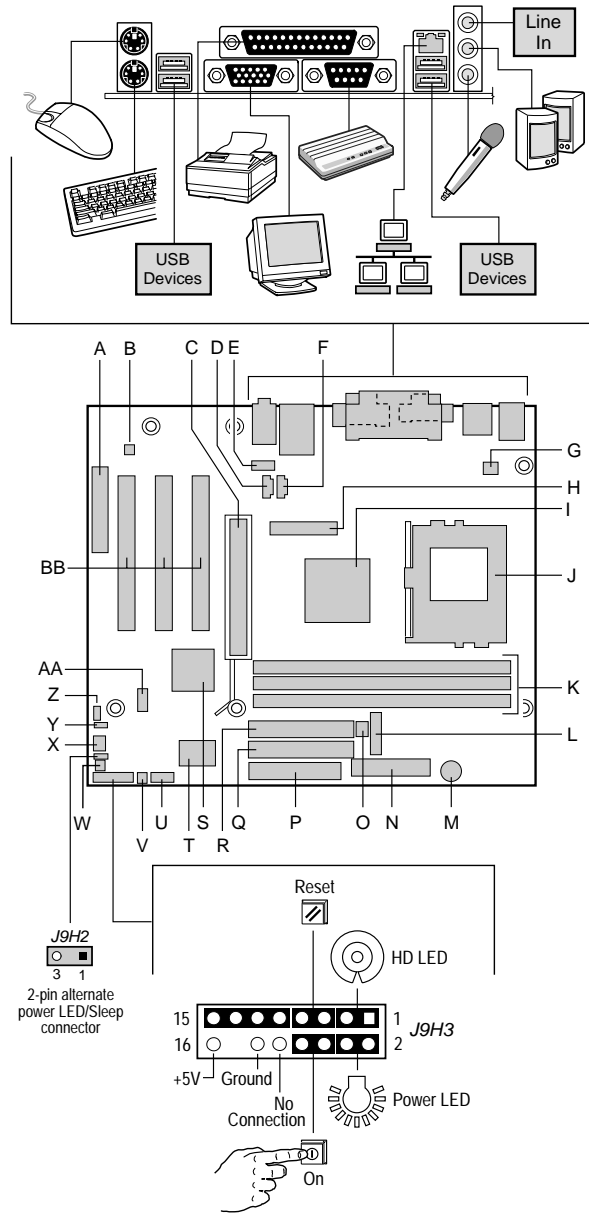
- A. 通信和网络竖卡 (CNR) 连接头 (可选)
- B. ADI AD1885 音频编解码器
- C. AGP 通用连接头
- D. ATAPI 式辅助线路输入连接头
- E. 前面板音频连接头 (可选)
- F. ATAPI 式 CD-ROM 连接头
- G. 处理器风扇连接头 (风扇 1)
- H. 数字视频输出 (DVO) 连接头 (仅适用于 D815EEA2)
- I. 控制器集线器:
  - Intel® 82815E GMCH (仅适用于 D815EEA2)
  - Intel 82815EP MCH (仅适用于 D815EPEA2)
- J. 处理器插座
- K. DIMM 插座
- L. 机箱风扇连接头 (风扇 3)
- M. 扬声器
- N. 电源连接头
- O. 软盘驱动器连接头
- P. 主 IDE 接头
- Q. 次 IDE 接头
- R. Intel® 82801BA (ICH2)
- S. SMSC LPC47M132 超级 I/O 控制器  
(SMSC LPC47M142 超级 I/O 控制器, 可选)
- T. 串行端口 B 连接头
- U. SCSI 硬盘驱动器活动指示灯连接头
- V. 开启机箱连接头
- W. 机箱风扇连接头 (风扇 2)
- X. BIOS 配置跳线块
- Y. 电池
- Z. Wake on LAN<sup>†</sup> 技术连接头 (可选)
- AA. 前面板 USB 连接头 (可选)
- BB. PCI 扩展槽



### 注意

许多内部桌面主板连接头为计算机机箱内的设备 (如风扇和内部的外围设备) 提供工作电压 (例如, 直流 +5 V 和直流 +12 V)。这些连接头没有过载保护。不要使用这些连接头为计算机机箱外的设备提供电源。由外部设备产生的电源加载故障可能会损坏计算机、互连的电缆和外部设备本身。

# D815EFV 和 D815EPFV 桌面主板元件



OM11623

## D815EFV 和 D815EPFV 桌面主板元件

- A. 通信和网络竖卡 (CNR) 连接头 (可选)
- B. ADI AD1885 音频编解码器
- C. AGP 通用连接头
- D. ATAPI 式辅助线路输入连接头
- E. 前面板音频连接头 (可选)
- F. ATAPI 式 CD-ROM 连接头
- G. 处理器风扇连接头 (风扇 1)
- H. 数字视频输出 (DVO) 连接头 (仅适用于 D815EFV)
- I. 控制器集线器:
  - Intel 82815E GMC H (仅适用于 D815EFV)
  - Intel 82815EP MCH (仅适用于 D815EPFV)
- J. 处理器插座
- K. DIMM 插座
- L. 电池
- M. 扬声器
- N. 电源连接头
- O. 机箱风扇连接头 (风扇 3)
- P. 软盘驱动器连接头
- Q. 主 IDE 接头
- R. 次 IDE 接头
- S. Intel 82801BA (ICH2)
- T. SMC LPC47M132 超级 I/O 控制器  
(SMC LPC47M142 超级 I/O 控制器, 可选)
- U. 串行端口 B 连接头
- V. SCSI 指示灯连接头
- W. 开启机箱连接头
- X. 机箱风扇连接头 (风扇 2)
- Y. BIOS 配置跳线块
- Z. Wake on LAN 技术连接头 (可选)
- AA. 前面板 USB 连接头 (可选)
- BB. PCI 扩展槽



### 注意

许多内部桌面主板连接头为计算机机箱内的设备 (如风扇和内部的外围设备) 提供工作电压 (例如, 直流 +5 V 和直流 +12 V)。这些连接头没有过载保护。不要使用这些连接头为计算机机箱外的设备提供电源。由外部设备产生的电源加载故障可能会损坏计算机、互连的电缆和外部设备本身。

## 安装步骤

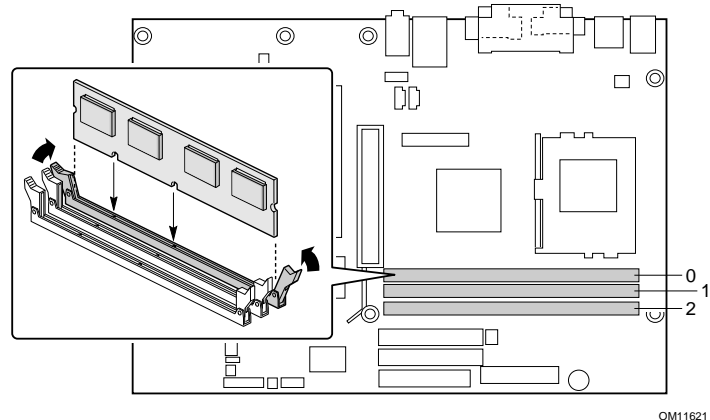
### 1 安装内存模块



#### 注意

在安装 AGP 视频卡之前，先将内存装到 DIMM 插座上，以避免与内存固定装置发生冲突。

D815EEA2、D815EPEA2、D815EFV 和 D815EPFV 主板要求按下图所示安装 DIMM。三个 DIMM 插座依次排列为组 0、1 和 2，如下图所示。如果安装单条 DIMM，将它安装在组 0 中。如果安装两条 DIMM，则安装在组 0 和 1 中。



图为 D815EEA2 主板

如要安装 DIMM 内存，请按以下步骤操作：

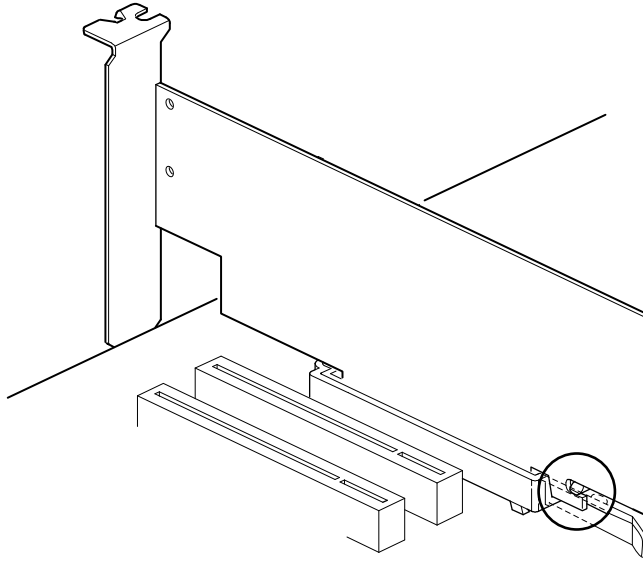
1. 请遵守“开始之前”中的注意事项（参见第 3 页）。
2. 关闭所有与计算机相连的外围设备。关闭计算机并拔下电源插头。
3. 打开计算机机箱盖，找到 DIMM 插座。
4. 握住 DIMM 的边缘，将其从防静电包中取出。
5. 确保插座两端的夹片已打开（如上图所示）。
6. 将 DIMM 放置在插座上方。将 DIMM 底部边缘的两个小凹口与插座中的销子对齐。
7. 将 DIMM 的底部边缘插入插座。
8. 插入 DIMM 之后，按住 DIMM 的顶部边缘向下推，直到固定夹片卡入到位。确保夹片已牢牢夹紧。
9. 盖好计算机机箱盖。

## 2 安装 AGP 卡固定装置



### 注意

只有在使用带固定槽的 AGP 卡（如下图所示）时，才需要安装 AGP 卡固定装置 (RM)。无槽口的卡若使用固定装置 (RM) 可能会影响视频的正常运行。有关拆卸 RM 的说明，请参阅 Intel 快速安装程序 CD-ROM 上的《Intel 桌面主板 D815EEA2、D815EPEA2、D815EFV 和 D815EPFV 产品指南》。

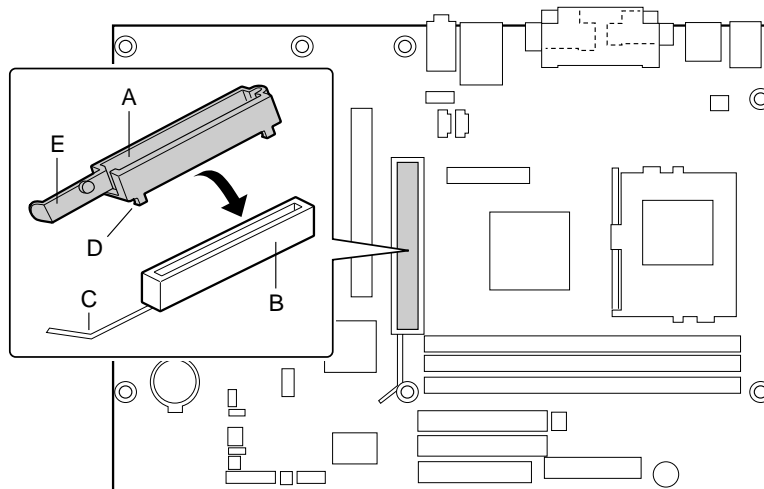


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RM 盖过桌面母板的 AGP 连接头，主要用于在运输时增加对 AGP 卡的保护。

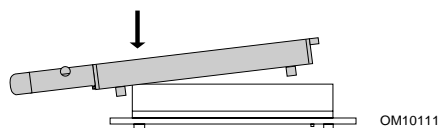
将桌面主板放置在平整的支持面上，按以下步骤将 RM (A) 连接到 AGP 接头 (B) 上：

1. 如下图所示，找到桌面主板上的 AGP 接头 (J8C1)。注意桌面主板的丝网印刷线 (C) 指示 RM 控制杆 (E) 的最终正确位置。

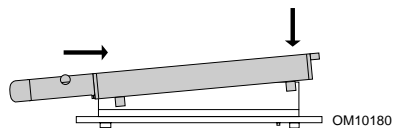


图为 D815EEA2 主板

2. 如下图所示，将 RM 置于 AGP 接头上。



3. 按箭头所示方向推压 RM 的控制杆末端，直到其后部的两个小突出部位 (D) 卡入 AGP 接头的末端。



4. 将 RM 的活动端对准 AGP 接头的另一端并向下按，直到四个小突出部位全部卡入 AGP 接头之下。

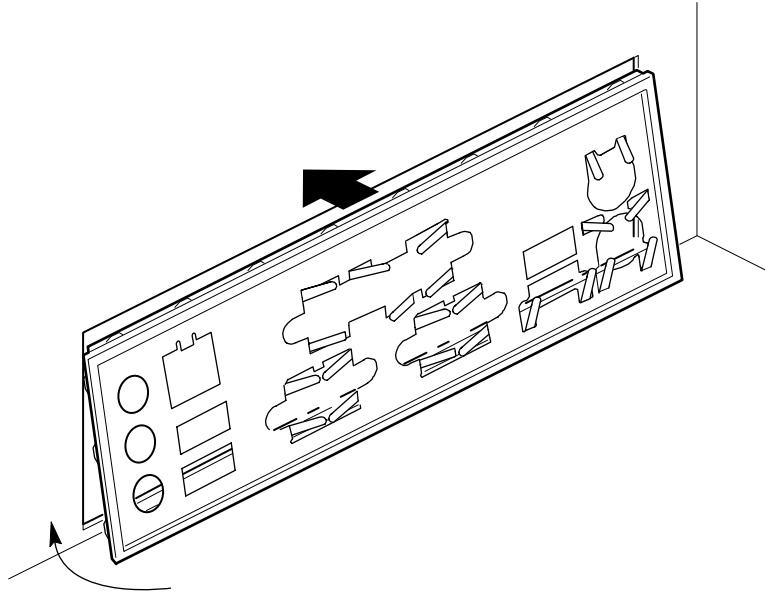




### 3 安装 I/O 防护板

桌面主板带有 I/O 防护板。机箱中安装了防护板后，可阻挡无线电射线的传播，保护内部元件不受灰尘和异物的侵害，在机箱内加强空气的正确流通。

在机箱中安装桌面主板之前先安装 I/O 防护板。如下图所示，将防护板置于机箱内部。将防护板按到位，使它安全紧固。如果防护板不适合机箱的大小，请从机箱供应商处取得大小合适的防护板。

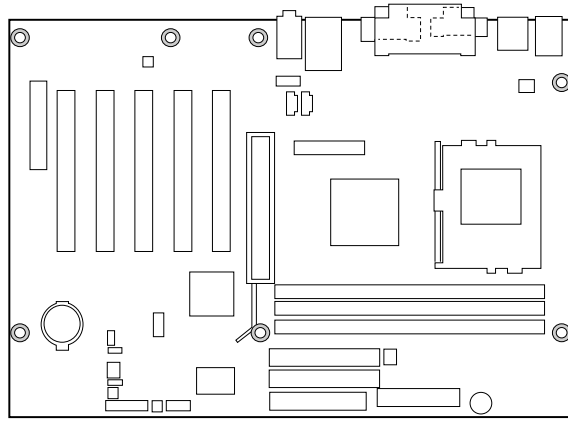


OM11310

## 4 安装桌面主板

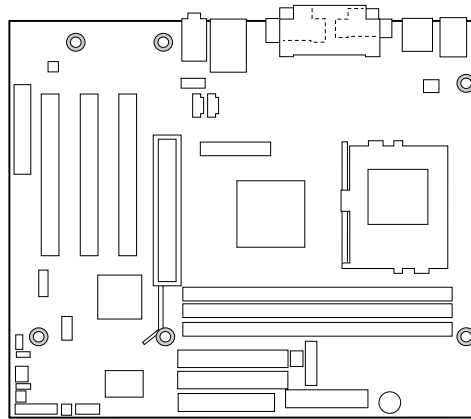
有关安装和拆卸桌面主板的说明，请参阅机箱手册。

用螺丝将桌面主板固定到机箱立柱上，D815EEA2 和 D815EPEA2 主板要用七颗螺丝；D815EFV 和 D815EPFV 主板要用六颗螺丝。如下图所示，将螺丝插入安装孔。



OM11625

D815EEA2 和 D815EPEA2 母板的  
安装螺丝孔位置



OM11626

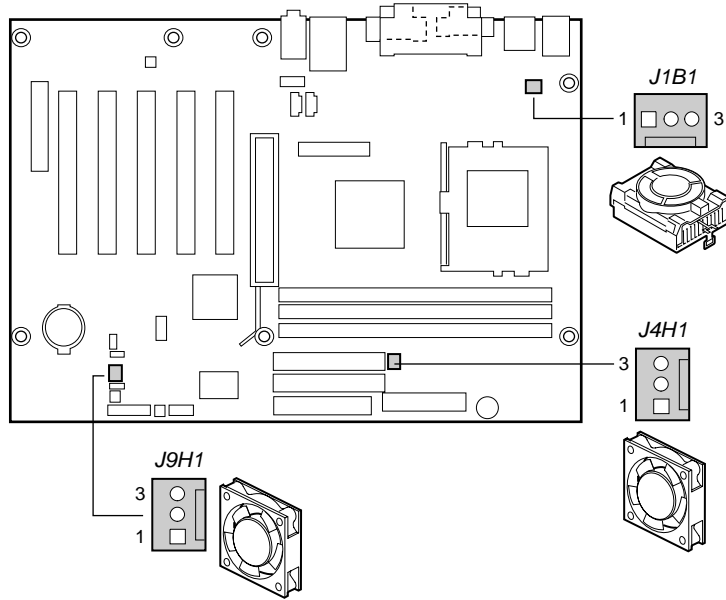
D815EFV 和 D815EPFV 母板的  
固定螺丝孔位置

## 5 安装处理器

按照盒装处理器附带的说明进行操作。

## 6 连接风扇

下图显示了风扇接头的位置。如果您正在安装一个配有有源风扇散热器的处理器，应将处理器的风扇电缆连接到标为 **J1B1**（风扇 1）的桌面主板连接头上。将机箱风扇电缆连接到桌面主板连接头上，其标为 **J9H1**（风扇 2）和 **J4H1**（风扇 3）



OM11627

图为 D815EEA2 主板

## 7 安装 AGP 卡和 GPA 卡



### 注意

在安装或升级内存之前，先拆除 AGP 视频卡，以避免与内存固定装置冲突。

如果图形加速端口 (AGP) 卡和图形性能加速器 (GPA) 卡带有固定槽，请按以下说明进行安装。如果 AGP 或 GPA 卡上不带固定槽，在安装卡之前，先拆除固定装置。（有关拆卸 RM 的说明，请参阅 Intel 快速安装程序 CD-ROM 上的《Intel 桌面主板 D815EEA2、D815EPEA2、D815EFV 和 D815EPFV 产品指南》。）

1. 将 AGP 卡或 GPA 卡放入 AGP 通用连接头。
2. 向下按卡，使它完全卡入 AGP 通用连接头中，卡的固定槽口恰好与 RM 销啮合。
3. 用一颗螺丝将卡的金属支架固定到机箱的后面板上（仅适用于 AGP 卡）。

## 8 连接 IDE 驱动器



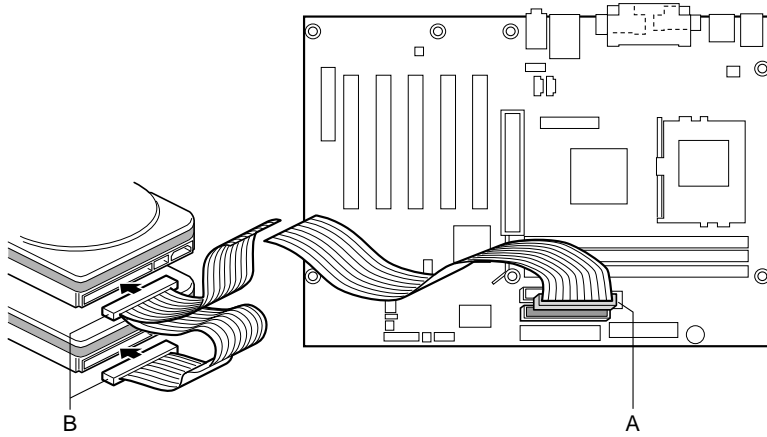
### 注释

如果在您的 IDE 驱动器上的电缆选择选项设为启用，必须把主驱动器连接到 IDE 电缆的黑色连接头上。

Intel® 原装桌面主板包装盒内有两根 IDE 电缆。用任何一根电缆均可把两个驱动器连接到桌面母板上。该电缆支持 Ultra DMA-33（40 触点）或 ATA-66/100（40 触点、80 线）传输协议，并向后兼容使用较慢 IDE 传输协议的驱动器。

为使电缆正常工作：

1. 将带单接头 (A) (蓝色, 标为 P1) 的电缆端连接到桌面母板上。
2. 将电缆另一端的双接头 (B) [ 分别为灰色 (用于次驱动器) 和黑色 (用于主驱动器), 标为 P2 和 P3 ] 连接到驱动器上。

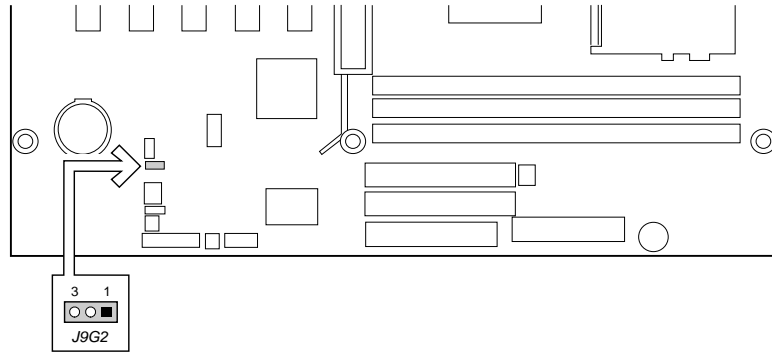


OM11633

图为 D815EEA2 主板

## 使用 BIOS 配置跳线

BIOS 配置跳线确定“BIOS 设置程序”的运行模式，并在 BIOS 升级失败时允许 BIOS 恢复。下图显示了配置跳线 (J9G2) 的位置。



OM11628

图为 D815EEA2 主板

下表描述了每个跳线位置对应的 BIOS 模式。

跳线位置	模式	说明
引脚 1-2	正常 (默认)	BIOS 使用当前配置和口令来启动系统。
引脚 2-3	配置	开机自检 (POST) 运行后，BIOS 显示 Maintenance (维护) 菜单。此菜单用于清除口令。
无跳线	恢复	如果 BIOS 升级失败，BIOS 将从一张恢复 CD-ROM 或软盘中恢复数据。要升级或恢复 BIOS，请参阅 Intel 快速安装程序 CD-ROM 上的《Intel 桌面主板 D815EEA2、D815EPEA2、D815EFV 和 D815EPFV 产品指南》中的说明。

## BIOS 设置程序默认设置

要获得 BIOS 设置程序设置的完整列表，请访问 Intel 万维网站点：

<http://support.intel.com/support/motherboards/desktop>

并选择以下的 TPS 之一：

- 《Intel 桌面主板 D815EEA2/D815EPEA2 产品技术规格》
- 《Intel 桌面主板 D815EFV/D815EPFV 产品技术规格》

### ⇒ 注释

要禁用音频接口，选择 **Advanced Menu**（高级菜单）下的 **Peripheral Configuration Submenu**（外围设备配置子菜单），然后将 **Audio Device**（音频设备）设置为“**Disabled**”（禁用）。

要禁用 LAN 接口，选择 **Advanced Menu**（高级菜单）下的 **Peripheral Configuration Submenu**（外围设备配置子菜单），然后将 **LAN Device**（LAN 设备）设置为“**Disabled**”（禁用）。

