Determining The QuickDraw Version

Remember that the three varieties of **QuickDraw** are upwardly compatible: programs you write for the original **QuickDraw** run on all varieties of **QuickDraw**, and indexed-pixel **Color QuickDraw** programs run under direct-pixel systems (although colors may look different-they'll be closer to what you request). The reverse is not true;
Color QuickDraw uses hard- ware features of the 68020 microprocessor and above, which means it cannot execute on 68000-based machines; in addition, the original **Color QuickDraw** does not have the ability to handle direct pixel values.

By checking at run time to see which version of **QuickDraw** is available, you can adapt your program to make best use of the hardware, or at least inform the user that your program has graphics needs that aren't being met. (Remember also that this information doesn't matter to many programs; they use no color, use the original
QuickDraw color system, or, if they use **Color QuickDraw**, specify only RGB colors.)

In system software versions 6.0.5 and later you can use the **Gestalt** environment selector gestaltQuickDrawVersion to determine which of the **QuickDraw** versions is available. **Gestalt** returns a 4-byte value in the response parameter; the low-order word contains **QuickDraw** version data. In that low-order word, the high-order byte represents the major revision number and the low-order byte represents the minor revision. The major revisions currently defined are the original **QuickDraw**, the original **Color QuickDraw**, and **Color QuickDraw** with direct pixel capability (which Gestalt calls QD32). See the Compatibility Guidelines for information on the use of Gestalt.

What Else to Read

The two introductory subjects on Macintosh graphics are the **QuickDraw** chapter in Volume I and this overview. Proceed from here according to your inclination. If your application never uses color or gray scales, you may have all the information you need. If you use color at all, read the **Color QuickDraw** chapter in Volume V and the **Color QuickDraw** and **Palette Manager** chapters in this volume. If your application creates offscreen bitmaps or pixel maps, you should read the **Graphics Devices Manager** chapter in this volume.

If your application needs to offer the user a means of selecting a color, read about the Color Picker Package

If your application manipulates pixel maps or pictures and needs a means of determining their contents-for example, what fonts a picture contains, or how many colors are in a pixel map, read the text about the
Picture Utilities Package.

The **Color Manager** describes the **Color Manager** and other low-level information that most applications seldom need to use. Read that text if you need to modify the color-matching system used with indexed devices.

If you write graphics drivers or firmware for cards, read the **Slot Manager** description and the book *Designing Cards and Drivers for the*

Macintosh Family, second edition.