## **PPC Toolbox Parameter Blocks**

**PPC Toolbox** functions require a pointer to a <u>PPC parameter block</u>. You must fill out any fields of the parameter block that the specific **PPC Toolbox** function requires.

The qLink, csCode, <u>intUse</u>, <u>intUsePtr</u>, and <u>reserved</u> fields of the PPCParamBlockRec are used internally by the <u>PPC Toolbox</u>. Your application should not rely on the <u>PPC Toolbox</u> to preserve these fields across calls.

Your application transfers ownership of the <a href="PPC Toolbox">PPC Toolbox</a> parameter block (and any buffers or records pointed to by the <a href="PPC Toolbox">PPC Toolbox</a> until a PPC function is complete. Once the function completes, ownership of the parameter block (and any buffers or records it points to) is transferred back to your application. If a <a href="PPC Toolbox">PPC Toolbox</a> function is executed asynchronously, your program cannot alter memory that might be used by the <a href="PPC Toolbox">PPC Toolbox</a> until that function completes.

A **PPC Toolbox** function that is executed asynchronously must specify <u>NIL</u> or the address of a completion routine in the ioCompletion field of the <u>PPC parameter block</u>. The ioResult field should be used to determine the actual result code when an asynchronously executed <u>PPC Toolbox</u> function completes.

If you specify a completion routine in the ioCompletion field, it is called at interrupt time when the **PPC Toolbox** function completes execution.

**Warning:** Completion routines execute at the interrupt level and must preserve all registers other than A0, A1, and D0-D2. (Note that most commercial high-level languages do this automatically.) Your completion routine must not make any calls to the **Memory Manager**, directly or indirectly, and it can't depend on the validity of handles to unlocked blocks. The **PPC Toolbox** preserves the application global register A5.

You can write completion routines in C, Pascal, or assembly language. A completion routine declared in Think C is:

pascal void MyCompletionRoutine (PPCParamBlockPtr Pb);

The pb parameter points to the <u>PPC parameter block</u> passed to the <u>PPC Toolbox</u> function.