

Date: 23 Jan 89 16:12  
From: Will Snow: AISNorth: Xerox  
Subject: Places that use hiloc/loloc and what for  
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I spent some time finding out who uses hiloc/loloc and what they use them for. the following is a summary:

#### 10MBDECLS:

**DOETHERIOCB**  
**DLEETHERIOCB**

All iocb's are in the lowest addresses, so 10MBdecls takes advantage and only puts in the piece of the pointer necessary (loloc)

#### 10MBDRIVER:

**\RELEASE.IOCB** change the "next iocb" field of the given iocb to a null value.  
**\INIT.ETHER.BUFFER.POOL** change the "next iocb" fields to null.  
**\QUEUE.INPUT.IOCB** next iocb ptr of last iocb = this iocb, or make this the first one.  
**\QUEUE.OUTPUT.IOCB** rearranging the queue of iocb's

#### ABASIC:

**EQUAL** uses loloc as an optimization on fixp vs smallp comparisons.

#### ACODE:

**CHANGECCODE** uses hiloc, loloc during refcount operations  
**CODEBLOCKP** uses hiloc to determine what segment of storage the piece being looked at is in.

#### ADDARITH:

MACRO **.XUNBOX.**

#### APRINT:

**\PRINTADDR** tries to print a lisp address nicely. Uses both HILOC and LOLOC.

#### ASTACK:

**SETSTKNAME** ? (HILOC)

#### CMLARRAY-SUPPORT:

MACRO **%SMALLFIXP-SMALLPOSP** converts smallfixp to a number. (LOLOC)

#### CMLCHARACTER:

ACCESSFNS **CHARACTER** how to create and access a common lisp character. (loloc)

**CL:CHAR-CODE** change a character into a #(Loloc)

DEFOPTIMIZER **CL:CHAR-CODE** fast changing of char into code. (loloc)

**CL:CODE-CHAR** fast checking for smallposp (hiloc)

DEFOPTIMIZER **CL:CODE-CHAR** fast checking for smallposp (hiloc)

#### CMLEVAL:

DEFSTRUCT **CLOSURE** :print-function to print the ptr (hiloc,loloc)

DEFSTRUCT **ENVIRONMENT** :print-function to print the ptr (hiloc,loloc)

**set-symbol** checks if environment is the stackhi

CMLSTRING

**%%STRING-BASE-COMPARE-EQUAL** get the character code from a string of CL:CHARS (loloc)

CMLUNDO

**undoably-set-symbol** determine if at top of stack. (hiloc)

D-ASSEM

**FIXUP-PTR, FIXUP-PTR-NO-REF** - ? (loloc,hiloc)

**INTERN-DCODE** ? (loloc)

DEBUGGER

**PRINT-ENTRY-MESSAGE** print the condition number...

**DLAP** - LOLOC/HILOC optimizers to u-code.

DOVEDECLS:

**DEFMACRO \DoveIO.IORegionOffset** get the right IO region on a dove.(loloc)

DOVEETHER

**\DoveEther.Enqueue** fill in the "next packet" field.(loloc)

DOVEINPUTOUTPUT

**\DoveIO.MakeOpieAddress** make the correct opie address out of a lisp addr.(hi,lo)

DTDECLARE:

**COMPILEDREPLACEFIELD** figure out what to do with an X pointer.

**Note:: Both DLION and DOVE disk code also uses LOLOC and HILOC...**

*—End of message—*