

File created: 17-Jun-88 17:28:36 {QV}<PEDERSEN>LISP>AREF-TESTER.;4

changes to: (VERIFIED-TESTS AREF1-PUNT AREF1-SIGNED-WORD AREF1-DISPLACED AREF1-BIT AREF1-BYTE AREF1-WORD
AREF1-FIXP AREF1-FLOATP AREF1-STRING-CHAR AREF1-POINTER AREF1-XPOINTER)
(IL:VARS IL:AREF-TESTERCOMS)
(FILE-ENVIRONMENTS "AREF-TESTER")

previous date: 17-Jun-88 12:03:57 {QV}<PEDERSEN>LISP>AREF-TESTER.;1

Read Table: XCL

Package: XCL-USER

Format: XCCS

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```
(IL:RPAQQ IL:AREF-TESTERCOMS ((IL:FILES IL:TESTER)
                               (IL:COMS
```

```
;; AREF1 all types
```

```
(VERIFIED-TESTS AREF1-BIT AREF1-BYTE AREF1-WORD AREF1-SIGNED-WORD
AREF1-FIXP AREF1-FLOATP AREF1-STRING-CHAR AREF1-POINTER
AREF1-XPOINTER AREF1-PUNT))
(FILE-ENVIRONMENTS "AREF-TESTER"))
```

```
(IL:FILESLOAD IL:TESTER)
```

```
;; AREF1 all types
```

```
(DEFINE-VERIFIED-TEST AREF1-BIT "Opcode aref1, type (unsigned-byte 1)"
  (LET* ((ARRAY-1 (MAKE-ARRAY 4 :ELEMENT-TYPE ' (UNSIGNED-BYTE 1)
                              :INITIAL-CONTENTS
                              ' (0 1 0 1)))
         (ARRAY-2 (MAKE-ARRAY 4 :ELEMENT-TYPE ' (UNSIGNED-BYTE 1)
                              :DISPLACED-TO ARRAY-1)))
    (WITH-COLLECTION (DOTIMES (I 4)
                        (COLLECT (AREF ARRAY-1 I))
                        (COLLECT (AREF ARRAY-2 I))))))
```

```
(DEFINE-VERIFIED-TEST AREF1-BYTE "Opcode aref1, type (unsigned-byte 8)"
  (LET* ((ARRAY-1 (MAKE-ARRAY 5 :ELEMENT-TYPE ' (UNSIGNED-BYTE 8)
                              :INITIAL-CONTENTS
                              ' (0 34 56 255 23)))
         (ARRAY-2 (MAKE-ARRAY 5 :ELEMENT-TYPE ' (UNSIGNED-BYTE 8)
                              :DISPLACED-TO ARRAY-1)))
    (WITH-COLLECTION (DOTIMES (I 5)
                        (COLLECT (AREF ARRAY-1 I))
                        (COLLECT (AREF ARRAY-2 I))))))
```

```
(DEFINE-VERIFIED-TEST AREF1-WORD "Opcode aref1, type (unsigned-byte 16)"
  (LET* ((ARRAY-1 (MAKE-ARRAY 5 :ELEMENT-TYPE ' (UNSIGNED-BYTE 16)
                              :INITIAL-CONTENTS
                              ' (0 34 255 65535 23)))
         (ARRAY-2 (MAKE-ARRAY 5 :ELEMENT-TYPE ' (UNSIGNED-BYTE 16)
                              :DISPLACED-TO ARRAY-1)))
    (WITH-COLLECTION (DOTIMES (I 5)
                        (COLLECT (AREF ARRAY-1 I))
                        (COLLECT (AREF ARRAY-2 I))))))
```

```
(DEFINE-VERIFIED-TEST AREF1-SIGNED-WORD "Opcode aref1, type (signed-byte 16)"
  (LET ((ARRAY (MAKE-ARRAY 5 :ELEMENT-TYPE ' (SIGNED-BYTE 16)
                              :INITIAL-CONTENTS
                              ' (0 -34 255 -32768 23))))
    (WITH-COLLECTION (DOTIMES (I 5)
                        (COLLECT (AREF ARRAY I))))))
```

```
(DEFINE-VERIFIED-TEST AREF1-FIXP "Opcode aref1, type (signed-byte 32)"
  (LET ((ARRAY (MAKE-ARRAY 5 :ELEMENT-TYPE ' (SIGNED-BYTE 32)
                              :INITIAL-CONTENTS
                              ' (0 -34 258 -65538 2147483647))))
    (WITH-COLLECTION (DOTIMES (I 5)
                        (COLLECT (AREF ARRAY I))))))
```

```
(DEFINE-VERIFIED-TEST AREF1-FLOATP "Opcode aref1, type single-float"
  (LET ((ARRAY (MAKE-ARRAY 5 :ELEMENT-TYPE ' SINGLE-FLOAT :INITIAL-CONTENTS ' (0.0 -34.0 3.456756E+35 -5.768E-34
                                                                                   5.4524))))
    (WITH-COLLECTION (DOTIMES (I 5)
                        (COLLECT (AREF ARRAY I))))))
```

```
(DEFINE-VERIFIED-TEST AREF1-STRING-CHAR "Opcode aref1, type string-char"
  (LET ((ARRAY-1 (MAKE-ARRAY 3 :ELEMENT-TYPE ' STRING-CHAR :INITIAL-CONTENTS ' (#\Space #\a #\b)))
        (ARRAY-2 (MAKE-ARRAY 3 :ELEMENT-TYPE ' STRING-CHAR :FATP T :INITIAL-CONTENTS ' (#\Space #\Greek-0
                                                                                           #\Greek-32))))
    (WITH-COLLECTION (DOTIMES (I 3)
                        (COLLECT (AREF ARRAY-1 I))
                        (COLLECT (AREF ARRAY-2 I))))))
```

```

(DEFINE-VERIFIED-TEST AREF1-POINTER "Opcode aref1, type t"
  (LET* ((LST (LIST 0 (CONS 'A 'B)
                    3.4
                    'C
                    (CONS 'D 'E)))
         (ARRAY (MAKE-ARRAY 5 :ELEMENT-TYPE T :INITIAL-CONTENTS LST)))
    (WITH-COLLECTION (DOTIMES (I 5)
                      (COLLECT (CONS (AREF ARRAY I)
                                     (IL:\REFCNT (AREF ARRAY I)))))))

(DEFINE-VERIFIED-TEST AREF1-XPOINTER "Opcode aref1, type il:xpointer"
  (LET* ((LST (LIST 0 (CONS 'A 'B)
                    3.4
                    'C
                    (CONS 'D 'E)))
         (ARRAY (MAKE-ARRAY 5 :ELEMENT-TYPE 'IL:XPOINTER :INITIAL-CONTENTS LST)))
    (WITH-COLLECTION (DOTIMES (I 5)
                      (COLLECT (CONS (AREF ARRAY I)
                                     (IL:\REFCNT (AREF ARRAY I)))))))

(DEFINE-VERIFIED-TEST AREF1-PUNT "Opcode aref1, punt cases"
  (LET* ((ARRAY-1 (MAKE-ARRAY 4 :ELEMENT-TYPE 'STRING-CHAR :DISPLACED-TO (MAKE-ARRAY 4 :ELEMENT-TYPE
                                                                                   'STRING-CHAR :INITIAL-CONTENTS
                                                                                   '#(\a #\b #\c #\d))))
         (ARRAY-2 (MAKE-ARRAY 4 :ELEMENT-TYPE T :ADJUSTABLE T :INITIAL-CONTENTS '(0 A B (A . B))))
         (ARRAY-3 (MAKE-ARRAY 4 :ELEMENT-TYPE '(UNSIGNED-BYTE 8)
                                             :READ-ONLY-P T :INITIAL-CONTENTS '(0 1 2 3))))
    ;; aref1 should punt on all these cases
    (WITH-COLLECTION (DOTIMES (I 4)
                          (COLLECT (AREF ARRAY-1 I))
                          (COLLECT (AREF ARRAY-2 I))
                          (COLLECT (AREF ARRAY-3 I))))))

(DEFINE-FILE-ENVIRONMENT "AREF-TESTER" :PACKAGE "XCL-USER"
  :READTABLE "XCL"
  :COMPILER :COMPILE-FILE)

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```

FILE-ENVIRONMENT INDEX

"AREF-TESTER"2
