

# decsystem10

Software Option Bulletin

## QSORT

### Features

- More than twice the sorting speed of COBOL SORT
- Minimal hardware required
- Completely compatible with COBOL SORT

QSORT is a sort package which can replace the standard SORT module in the COBOL run-time system (LIBOL) or function as a free-standing sort routine capable of accepting user commands from a terminal.

Because of its efficient sorting algorithm and its direct Input-Output commands (as opposed to calling LIBOL I/O routines) it generally sorts twice as fast as the standard sort.

QSORT, designed to handle disk files, requires a minimum hardware configuration of one RP02 disk drive (5.12 million words). COBOL applications containing the SORT verb require no reprogramming.

QSORT is a product of the DECsystem-10 Advanced Systems Group.

For additional information on prices and software support arrangements, contact the nearest **DIGITAL** sales office.



COBOL PROGRAM TO SORT 20,000 CARD IMAGES EACH  
CONTAINING RANDOM DIGITS IN COLUMNS 1-80.

IDENTIFICATION DIVISION.  
PROGRAM-ID. SBENCH.

ENVIRONMENT DIVISION.

INPUT-OUTPUT SECTION.  
FILE-CONTROL.

SELECT SORTIN, ASSIGN TO INP.  
SELECT SORTOUT, ASSIGN TO OUT.  
SELECT SORTSC, ASSIGN TO DSK, DSK, DSK.

DATA DIVISION.

FILE SECTION.

FD SORTIN, VALUE OF IDENTIFICATION IS "SORT IN".  
01 SORTIND, DISPLAY-7, PICTURE X(80).

FD SORTOUT, VALUE OF IDENTIFICATION IS "SORT OUT".  
01 SORTOUTD, DISPLAY-7, PICTURE X(80).

FD SORTSC.  
01 SORTSCD, DISPLAY-7, PICTURE X(80).

PROCEDURE DIVISION.  
STD. SORT SORTSC ASCENDING KEY SORTSCD,  
USING SORTIN, GIVING SORTOUT.  
STOP RUN.

PROGRAM STATISTICS:

	STANDARD COBOL SORT	NEW QSORT
CPU TIME (SECONDS)	512	248
KILO-CORE-SEC	8599	3988
CLOCK TIME (MINUTES)	18:12	8:44
DISK ACCESSES	51744	13875
SCRATCH SPACE (BLOCKS)	12320	5210

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