



# Software Product Description

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**PRODUCT NAME:** HASP-RCS, Version 2, HASP Remote Computer System

**SPD 10.30.2**

**DESCRIPTION:**

The HASP version of the Remote Computer System (HASP RCS) is a memory-based software package that causes the PDP-11 to operate as a HASP Multileaving Workstation, simultaneously transmitting to and receiving from an IBM System/370 or System/360 running HASP with the Remote Job Entry feature. A HASP Multileaving Workstation is a programmable device equipped for synchronous communications. It extends the capabilities of the standard Binary Synchronous (BISYNC) Communications protocol. This Multileaving protocol includes such features as data compression, the imbedding of multiple data streams within a single transmission block (e.g., a console message and several print lines), presumptive acknowledgement of transmission blocks, and a load balancing capability which permits either station to request the other to turn individual data streams on and off as its local requirements dictate. HASP-RCS uses this Multileaving protocol to control a printer, card reader, and console operating as a remote job entry station to a HASP system. Besides using transmission facilities far more efficiently than a 2780 type terminal, the HASP-RCS provides workstation console support.

The operator can enter commands and queries to HASP at the console rather than punching them on cards, and can take action on job streams while they are in progress.

**SPECIFICATIONS:**

- 285 card per minute punched card reader
- 132 column line printer using either 64 or 96 character set
- operation at up to 9600 baud using Bell 201 or 208-series modems or equivalent
- only point-to-point operation is provided (HASP does not support any multipoint facilities)

Communicates with the HASP II, Version 3.1 or ASP, Version 2.0 Remote Job Entry feature as a multileaving terminal supporting a single card reader, printer, and console. The System/370 or System/360 configuration must include a 2701 Data Adapter, or a 2703 Transmission Control Unit, or a 3704 or 3705 Transmission Controller with EBCDIC transparency capability.

Full 12-channel carriage tape control is simulated locally by the HASP RCS. Thus special forms, such as checks or invoices can be printed at the remote station.

The throughput of the card reader and the line printer is data dependent, since multiple blanks and repeated characters are compressed.

**MINIMUM HARDWARE REQUIRED:**

PDP-11 processor with:

- at least 8K words of memory
- KW11-L Line Clock
- KG11 Communications Arithmetic Element
- BM792, M9301, or BM873 Bootstrap Loader
- DUP11 or DU11 Synchronous Line Interface
- Console terminal: LA30, LA36, VT05, VT50, VT52
- CR11 Card Reader
- LP11 or LS11 Line Printer (note: 80 column line printer may be used if the HASP or ASP system is generated accordingly)
- One of the following:
  1. TA11 DECcassette or
  2. PC11 high-speed paper tape reader/punch

**OPTIONAL HARDWARE:**

None

**PREREQUISITE SOFTWARE:**

None

**OPTIONAL SOFTWARE:**

None

**TRAINING CREDITS:**

None

**SUPPORT CATEGORY:**

C - Software Support will be provided as listed in the Software Support Categories Addendum to this SPD.

**UPDATE POLICY:**

Software Updates, if any, released by DIGITAL during the one (1) year period following installation, will be provided to the customer for a media charge. After the first year, updates, if any, will be made available according to then prevailing DIGITAL policies.

**ORDERING INFORMATION:**

This software is furnished under a license for use on a single CPU and can be copied and modified (with inclusion of DIGITAL's copyright notice) only for use on such CPU, except as may otherwise be provided in writing by DIGITAL.

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Source and/or listing options are only available after the purchase of at least one binary license and after a source license agreement is in effect.

The following key (B, C, D, N, R, Z) represents the distribution media for the product and must be specified at the end of the "Q" number, i.e., QJD62-CN = binaries on cassette.

B = Paper Tape  
 C = DECtape  
 D = 9-track Magnetic Tape  
 N = Cassette  
 R = Microfiche  
 Z = No hardware dependency

*Standard Options*

QJD62 -C— Single-use license, binaries, documentation, no support services (media: B, N)

QJD62 -D— Single-use license only (media: Z)

*Source/Listing Options*

QJD62 -E— All sources (media: C, D, N)

QJD62 -F— Listings (media: R)

*Update Options*

Users of HASP-RCS, Version 1 whose specified Support Category warranty has expired may order under license the following software update at the then current charge for such update. The update is distributed in source or binary form on the appropriate medium and includes no installation or other services unless specifically stated otherwise.

QJD62 -H— Binaries, documentation (media: B, N)

Users of HASP-RCS, Version 1 whose specified Support Category warranty has not expired may order under license the following software update for the then current media charge. The update is distributed in source or binary form on the appropriate medium and includes no installation or other services unless specifically stated otherwise.

QJD62 -W— Binaries, documentation (media: B, N)

**ADDITIONAL SERVICES:**

None