## **Specifications**

# IBM System/34 Subset 1968 ANS Compiler and Library PRPO Program Number 5799-AWR

The IBM System/34 COBOL PRPQ compiler translates programs written in IBM System/34 COBOL PRPQ language into object modules. These modules are executed and controlled by the System/34 System Support Program Product. The COBOL PRPQ is composed of a compiler and a library that cannot be ordered separately.

The System/34 COBOL PRPQ language is based on the following:

- Language elements implementing six modules of American National Standard COBOL X3.23-1968, as shown in Table 1.
- Selected extensions to these six modules which include:
  - Extensions beyond level 1 of the nucleus, sequential access, and random access modules.
  - Extensions that conform to CODASYL COBOL specifications.
  - IBM extensions to the American National Standard COBOL.

Input/output device support consists of support for fixed disk, printers, and work stations. Work stations support is via CALL. The capability to read/write data using formatted screens, and the capability to acquire and release work stations is provided. The local data area (WSDA) and UPSI byte of a work station may also be read or written.

The COBOL PRPQ compiler can accept a minimum of five source statements: the four division headers and the PROGRAM-ID statement. The maximum number of source statements that can be processed depends on the complexity of the statements and the amount of disk space available. With normal use of the language features, the COBOL compiler can accept and compile an average 1000-source-statement program, and in some cases will compile programs of several thousand statements or more. Main storage requirements for execution depend on the size and content of the source program.

### **Specified Operating Environment**

#### Machine Requirements

The System/34 COBOL PRPQ compiler runs on all models of the System/34. The compiler will take advantage of additional main storage if it is available.

#### **Programming Requirements**

The System/34 COBOL PRPQ compiler and library and the object modules produced are designed to operate under control of the System/34 System Support Program Product, 5726-SS1, or its equivalent.

#### Warranty

The System/34 COBOL PRPQ compiler and library is warranted to conform to its Licensed Program Specifications when shipped to the customer if properly used in the Specified Operating Environment.

Licensed Program Specifications may be updated from time to time, and such updates may constitute a change in specifications.

Following the discontinuance of all program service, this program will be distributed on an As Is basis without warranty of any kind either express or implied.

Table 1

Module <sup>1</sup>	Description
Nucleus (1NUC 1,2)	This consists of the character set and the basic language elements.
Sequential Access (1SEQ 1,2)	The records on a file are read or written serially, reference being implicitly determined by the position of the record on the file.
Random Access (1RAC 0,2)	The records on a file are read or written as specified by the programmer. Keys defined by the programmer control successive references to the file.
Library (1LIB 0,2)	The programmer can insert prewritten source program text from a library into his source program at compile time. The effect is as if the text were actually written as part of the source program.
Table Handling (2TBL 1,3)	The programmer can define fixed-length tables of contiguous data items in up to three dimensions. Each item can be identified and accessed through the use of subscripts or an index name. Series options and the ability to vary the contents of index names by an increment or a decrement provide additional flexibility and convenience.
Segmentation (1SEG 0,2)	The programmer can use elements of the COBOL language to specify overlay requirements by defining permanent and independent segments. Sections with the same priority number must be contiguous in the source program. All permanent sections must also be contiguous.

<sup>&</sup>lt;sup>1</sup>The name of each module is followed by its designation under the American National Standard. The first number of this designation represents the level of the module chosen for the IBM System/34 COBOL PRPQ. The last two numbers represent the lowest and highest levels available under the Standard. A zero indicates that the Standard permits a subset language that does not implement the module.

Any other documentation with respect to this licensed program, including any documentation referenced is provided for information purposes only and does not extend or modify these specifications.

International Business Machines Corporation

General Systems Division 4111 Northside Parkway N.W. P.O. Box 2150 Atlanta, Georgia 30301 (U.S.A. only)

General Business Group/International 44 South Broadway White Plains, New York 10601 U.S.A. (International)