

WRTK Stores key assignments of system functions onto medium. Uses ALPHA register.

WRTP Stores a program and its key assignments onto medium. Uses ALPHA register.

WRTPV Stores a program and its key assignments onto medium and make file private. Uses ALPHA register.

WRTR Copies all storage registers. Uses ALPHA register.

WRTRX Copies some storage registers into data file as specified by X (bbb.eee). Starts at current register in data file.

WRTS Stores calculator status onto medium. Uses ALPHA register.

ZERO Fills a data file with zero values. Uses ALPHA register.

Mass Storage Flag

Flag 11 Automatic program execution

Used with **WRTP**, **WRTPV** or **WRTA** sets a program for automatic execution when copied back into the calculator from the keyboard. (For the **WRTA**, execution set to start at current position in program memory.)

Interface Control Operations

AUTOIO Sets the interface to Auto mode

FINDID Finds the address of a specified device type and places the address in X. If the device is not found, zero is returned. Uses ALPHA register.

INA Inputs an ALPHA string up to 24 characters from primary device.

IND Inputs decimal number from primary device.

INSTAT Input status information from primary device, sets or clears flags 00 through 07 accordingly, and places decimal status number in X.

LISTEN Sets device as a listener, or remove all listeners for X = 31. Uses X-register.

LOCAL Sets primary device to its local operating mode.

MANIO Sets the interface to Manual mode.

OUTA Output an ALPHA string to primary device. Uses ALPHA register.

PWRDN Sets all devices to their low power state.

PWRUP Sets all devices to their operating power state.

REMOTE Sets primary device to its remote operating mode.

SELECT Selects a device as the primary device. Uses X-register.

STOPIO Stops I/O communication in loop.

TRIGGER Triggers all devices set to respond (listeners).

Interface Control Flags

Flags 00 through 07: Device Status

When set by **INSTAT**, indicate that corresponding status bits of a device are 1's

Flag 17: Suppress End-of-Line

End-of-line indicator is not used. **OUTA** does not send CR and LF. **INA** ignores CR and LF.

Flag 32: Manual Mode

Indicates interface is in Manual mode.



HP 82160A HP-IL Module Quick Reference Card

While the HP 82160A HP-IL Module is plugged into the calculator, the following functions are available for your use. All functions are programmable except as noted below. Appropriate peripherals must be connected to the Hewlett-Packard Interface Loop for the functions to be executed normally.

Calculator flags indicated below determine how the interface module performs certain operations. When a flag is set, operations are performed as described.

Printer Operations

Functions marked with * are for the HP 82162A Thermal Printer only.

ACA Accumulates the ALPHA register into print buffer.

ACCHR Accumulates a character into print buffer. Uses X-register.

ACCOL * Accumulates a specified column of dots into print buffer. Uses X-register.

ACSPEC * Accumulates special character into print buffer. The character is defined by using **BLDSPEC**. Uses X-register.

ACX Accumulates X-register content into print buffer.

ADV Advances the printer paper and prints the print buffer right-justified

BLDSPEC Executed up to seven times, builds a special character using specified columns of dots. Accumulate using **ACSPEC** or store in a register. Uses X- and Y-registers.

FMT * Accumulates a format specifier into print buffer. the print buffer. Leading or trailing specifier centers output, internal specifier prints left- and right-justified