



Tech Info Library

LaserWriter Iisc: Controller Description

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Security: Everyone

LaserWriter Iisc: Controller Description

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LaserWriter Iisc is a personal laser printer that communicates through the SCSI port. The LaserWriter Iisc controller consists of:

- a Motorola MC68000 microprocessor (7.46MHz)
- 16K bytes of ROM
- 1 megabyte of RAM
- two 50-pin SCSI connectors
- a switch for setting the SCSI device number
- Apple Desktop Bus connector.

The printer ROM does NOT contain a page description language such as the PostScript language interpreter. All imaging is done in the Macintosh using QuickDraw and a set of specially designed four times (4x) fonts (such as 48, 56, 72, 96 point) which are stored in the Macintosh System File. QuickDraw commands are intercepted and translated by the LaserWriter Iisc driver, which draws each object into an offscreen bit-map in the Macintosh RAM.

The LaserWriter Iisc is configured with 1 megabyte of dynamic RAM, which is primarily used as a page-frame buffer for constructing the bit-mapped page image. They are 64-pin printer SIMMs, 120 nS access time, and interchangeable with the LaserWriter IIntx SIMMs.

Even though the hardware supports up to 4 megabytes of RAM, the software utilizes only 1 megabyte -- which is all that is required to represent a full page bitmap.

The host sends bit-mapped data and control commands to the LaserWriter Iisc controller over the SCSI bus; there is no support for the AppleTalk Personal

Network or serial communications.

	Printer with Controller	Controller Only
Marketing Number:	M6200	M6003

Controller Panel

ADB Port

The ADB port in the LaserWriter IIscc ROM supports printer enhancements -- i.e.: cut sheet feeders, bin feeders, output collators. The LaserWriter IIscc does NOT provide any power to the ADB bus. Refer to the ADB specifications for information about the ADB hardware and protocol currently available from Developer Support or Software Licensing.

SCSI Address Switch

This is the only switch on the controller panel. It is a pushwheel-type switch with a numeric display that indicates the address to the user. It will be preset to SCSI address "4".

CAUTION: The SCSI Address Switch should always be assigned a value in the range of 2 to 6; an internal SCSI hard disk is always ID "0" (zero) and the Macintosh is always ID "7". The SCSI ID number for the printer must be different from any SCSI hard disk in the SCSI chain. There is a remote possibility that data on a hard disk which is inadvertently assigned the same ID as the printer would be destroyed when attempting to print to the printer.

SCSI Port

There are two 50-pin SCSI connectors on the controller panel. Only ONE Macintosh may be connected to the printer at one time. The LaserWriter IIscc does supply terminator power to the connectors, but does not have an internal terminator.

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