

KEYBOARD VARIETIES

The first Apple keyboard was built by Datanetics, assembly number 01-0425. The built-in keyboard was built around a MM5740 monolithic keyboard decoder ROM. The inputs to this Rom, on pins 4 through 12 and 22 through 31, are connected to the matrix of keyswitches on the keyboard. The outputs of this Rom are buffered by a 7404 and are connected to the Apple's Keyboard Connector.

The keyboard decoder rapidly scans through the array of keys on the keyboard, looking for one which is pressed. This scanning action is controlled by the free-running oscillator made up of three sections of a 7400 at keyboard location U4. The speed of this oscillation is controlled by C6, R6, and R7 on the keyboard's printed -circuit board. This keyboard is non-serivable.

The second Apple keyboard was also built by Datanetics, assembly number 01-0551-0. The keyboard comes with a redesigned keyboard made up of two parts, mechanical assembly (power light and 52 key switch matrix), and encoder board (contains all electronic components). This style uses the same key switch that was used on the old style keyboard (Assembly #01-0425). The replacement procedure for this key switch is found in Appendix D.

The third Apple keyboard was built by the keyboard Company which is located in Garden Grove, California. This style uses a new key switch whose replacement procedure is described in Appendix D. This style does not require the aluminum bracket stand-offs. This keyboard is referred to as an ALPS switchable with low profile or sculptured key caps. It also contains an encoder board separate from the mechanical assembly.

The fourth Apple keyboard was also built by the Keyboard Company. This keyboard is described as a bucket keyboard. It also is a two piece keyboard with a detachable encoder board and a non-repairable mechanical assembly. This keyboard offers two types of keycaps low profile and sculptured.

All the keyboards described above use the same encoder board except the first keyboard built by Datanetics. Each keyboard is built around a AY-5-3600 keyboard encoder Rom. The inputs to this ROM, on pins 17 through 26 and 36 through 40 are connected to the matrix of keyswitches on the keyboard. The outputs of this ROM are buffered by a 74LS04 and are connected to the Apple keyboard connector.

The keyboard decoder rapidly scans through the array of keys on the keyboard, looking for one which has been pressed. This scanning action is controlled by the free running oscillator made up of three sections of a 74LS00 at location B3 on the separate encoder board. The speed of this oscillation is controlled by C7, R7, and R8 on the encoder board.

PRE-RELEASE
VERSION