Wiring

Keyboard connections are assumed from the labels, which are not consistent from the input board to the keyboard board. The scope driver ports are assigned arbitrarily as there is no clue or code regarding how they are connected.

Input Ports

Port 4 : Keyboard data (P2 1-8)

Output Ports

Port 8: Z1/Z8 (Low Byte)

Port 9: Z10/Z18 (High Byte)

Port 10 : Keyboard reset strobe (P1.9)

Scope functionality is dealt with separately.

Keyboard

OPS P1-9 (strobe clear) sets Z9 flip flop, sending !Q low, sending Z6 pin 8 high, sending D7 low

Z7/Z4 is effectively an OR gate for any key press. When a key is pressed Z9 is clocked and set. On release, Z8-6 goes high, driving Z9 pin 1 low, resetting the clock, setting D7. At the same time Z9 pin 5 is pulled low, clocking the strobe Z9, which latches Z2/5 for reading.

In practice ; when a key is available P2-8 is logic ‘1’. Data is latched and the pin is high until OPS1-9 is pulsed via an OUT ; this clears the strobe and puts the keyboard in the position to accept another key.

KD7 is data not a strobe (I think)