<u>KEYBOARD</u>

The Coupe has a full-travel 72 key keyboard. It is addressed as a 9 x 8
matrix, using two ports, KEYBOARD (254 dec) and STATUS (249 dec).

The 8 input lines are made up by the KEYBOARD port inputting the lower 5
bits represented by K1, K2, K3, K4 and K5, while the STATUS port inputs
the upper 3 bits represented by K6, K7 and K8.

The 9 output scan lines are made up by the CPU address lines AD8, AD9,
AD10, AD11, AD12, AD13, AD14, AD15 and the ASIC line RDMSEL.

An example of a typical keyboard scan:

```
        LD    HL,SCAN                ;set HL with buffer start
        LD    B,11111110bin         ;set upper address lines

LOOP    LD    C,HIKEY                ;port address K6 - K8
        IN    A,(C)
        AND   11100000bin           ;strip unwanted bits
        LD    (HL),A                 ;hold it

        LD    C, LOKEY               ;port address K1 - K5
        IN    A, (C)
        AND   00011111bin           ;strip unwanted bits
        OR    (HL)                   ;make K1 - K8
        LD    (HL),A                 ;save it

        INC   HL                     ;next location in buffer
        SCF                          ;set carry flag for
        RLC   B                      ;rotate next address line
        JR    C,LOOP                 ;jump if not done

        IN    A,(C)                  ;input RDMSEL line
        AND   00011111bin           ;strip unwanted bits
        LD    (HL),A                 ;save it
        RET                          ;return to analyse scan
```

Keyboard port address map

ADDRESS	STATUS (&F9)			BORDER (&FE)				
SELECTOR	7	6	5	4	3	2	1	0
11111110 FE	F 3	F 2	F 1	V	C	X	Z	SHIFT
11111101 FD	F 6	F 5	F 4	G	F	D	S	A
11111011 FB	F 9	F 8	F 7	T	R	E	W	Q
11110111 F7	CAPS	TAB	ESC	5	4	3	2	1
11101111 EF	DELETE	+	-	6	7	8	9	0
11011111 DF	F 0	"	=	Y	U	I	O	P
10111111 BF	EDIT	:	;	H	J	K	L	RETURN
01111111 7F	INV	.	,	B	N	M	SYMBOL	SPACE
11111111 FF				RIGHT	LEFT	UP	DOWN	CNTRL