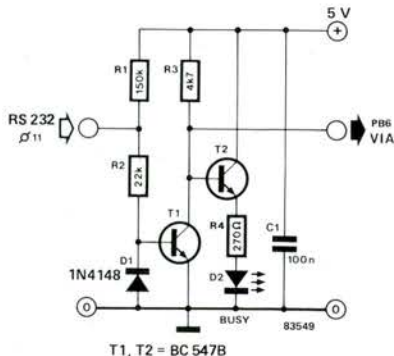


71

W. Schaaij

busy indicator for the Junior Computer

A 'busy' indicator can be useful if a printer is being used with the Junior computer. It simply requires the addition of a small circuit to the



RS 232 printer interface and a few minor changes to the Printer Monitor software.

As can be seen from the diagram, the additional circuit is not very extensive. The input of the circuit is provided by the 'busy' signal from the printer which is available at pin 11 of the RS 232 connector. The first transistor, T1, serves as a level

interface between the RS 232 and TTL.

When the input voltage is positive (logic '0') T1 will conduct and pin PB6 of the VIA will also be at logic '0'. When a busy signal is received from the printer, the input will become '1', T1 will switch off and the PB6 line is taken to +5 V by R3. Transistor T2 will conduct and light LED D2 provides the 'printer busy' indication. Resistor R1 ensures that no busy signal is given to Junior (and the LED cannot light) if the input is open circuited.

The modifications to the Printer Monitor EPROM are:

alter	133A	20	F4	14	JSR BUSY	
				.		
				.		
add	14F4	BUSY	AD	00	18	LDA PBDVIA
	14F7		29	40		ANDIM \$40
	14F9		D0	F9		PB6 VIA = 0?
	14FB		AD	82	1A	LDA PBDPIA
	14FB			60		RTS