

INFRARED DECODER; MICROCOMPUTER COMPATIBLE

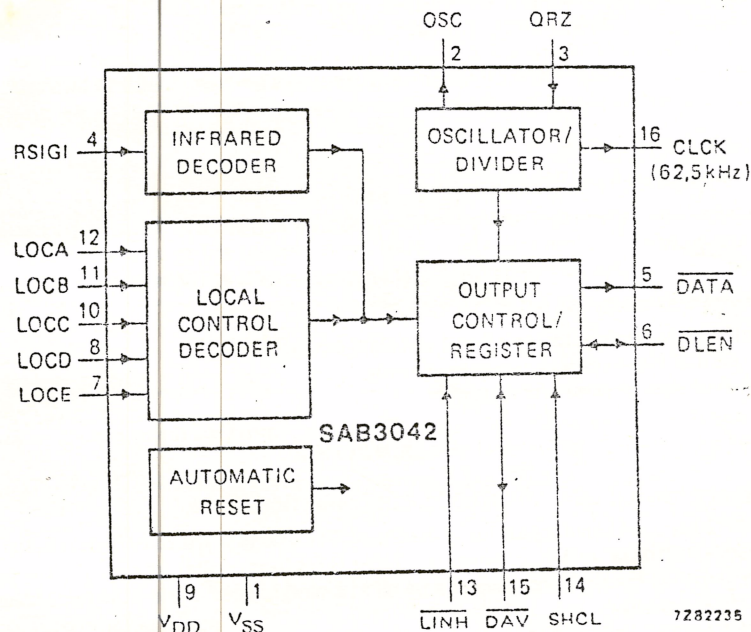


Fig. 1 Block diagram.

Features

- Remote control receiver for 128 commands to be used in combination with the remote transmitter SAB3011 in microcomputer controlled tuning concepts.
- High security against interferences by word format checking and double word testing, also in case of a simultaneous infrared sound transmission.
- Asynchronous serial command output to the microcomputer with processing of acknowledgement signals produced by the microcomputer.
- Relieving the microcomputer of real time processing, e.g. incoming signals are permanently checked with the command format validity and freedom from interferences.
- Separate inputs for local operation (up to 31 commands); mask-programmable.
- Only three terminals of the microcomputer are necessary for the control part of the television receiver.
- Internal clock oscillator.

QUICK REFERENCE DATA

Supply voltage	V_{DD} typ.	5 V
Operating ambient temperature range	T_{amb}	0 to +70 °C
Oscillator frequency	f_{QRZ} typ.	4 MHz
Supply current; $V_{DD} = 5\text{ V}$; $T_{amb} = 25\text{ °C}$	I_{DD} typ.	20 mA

PACKAGE OUTLINE

16-lead DIL; plastic (SOT-38Z).

CHARACTERISTICS (continued)

	V _{DD} V	symbol	min.	typ.	max.	conditions
Oscillator frequency QRZ, OSC	5	f	3	4	4,1	MHz
Duty factor	5	δ	0,4	0,5	0,6	
Switching times see Fig. 5	5	t _R	1	—	4	ms
	5	t _{d1} ; t _{d2}	—	—	20	μ s
	5	t _{d3}	—	—	5	μ s
	5	t _A	0	—	—	μ s
	5	t _{SL} ; t _w ; t _H ; t _L	5	—	—	μ s
Input rise/fall times	5	t _r ; t _f	—	—	50	ns
Input QRZ	5	t _r ; t _f	—	—	1	μ s

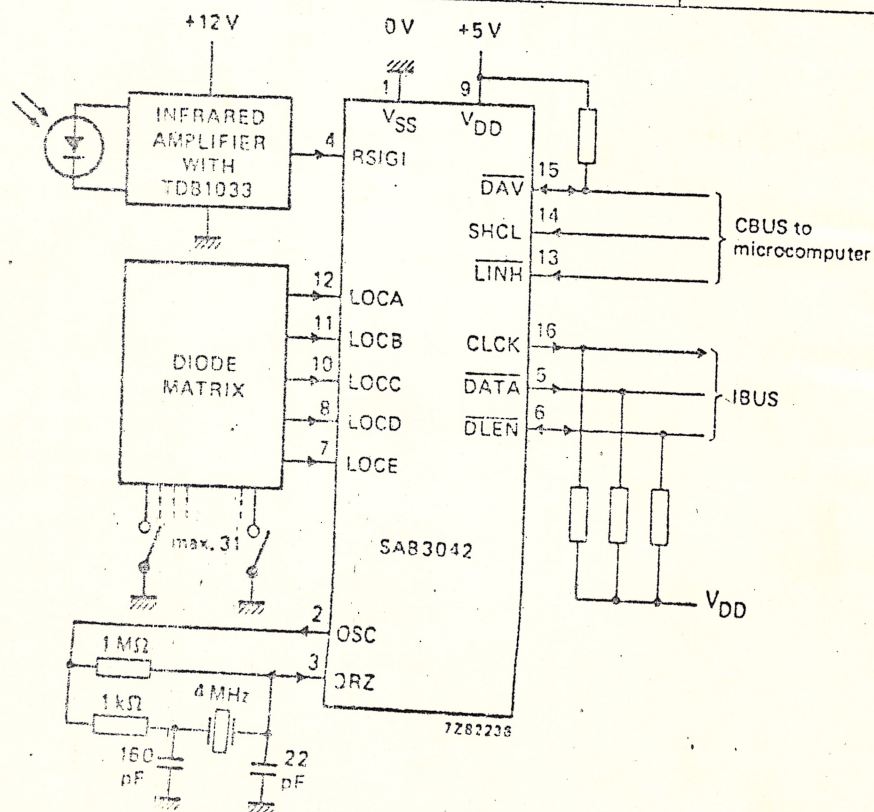


Fig. 7 Typical receiver circuit using SAB3042.