

588VN1, N588VN1

interrupt controller

Purpose

The 588VN1 microcircuit is an interrupt controller based on planar CMOS technology. The microcircuit is designed to work as part of a microprocessor kit.

Designation of specifications

- bKO.347.367-17 TU

Temperature range

- operating temperature range from - 60 to + 125 °C

Case version

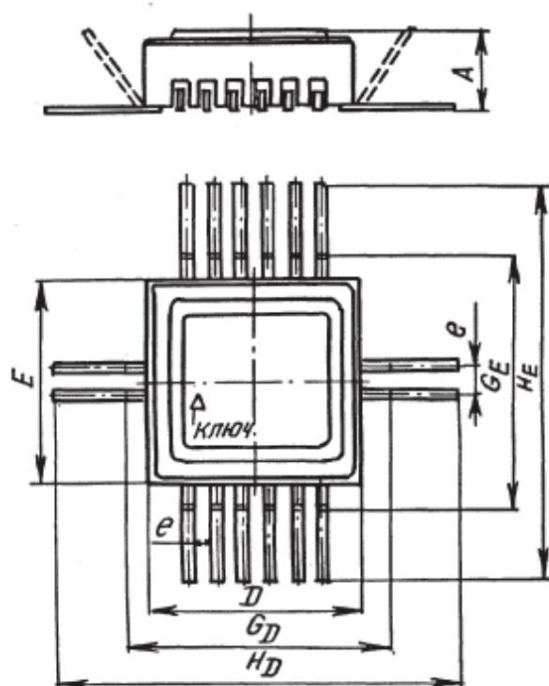
- housing H14.42-1V for H588VN1
- housing 4119.28-3.01 for 588VN1

Table 1. Main electrical parameters 588VN1 and N588VN1 at Tamb. environment = + 25 °C

Parameter name, unit of measurement, measurement mode	Letter designation	Norm	
		no less	no more
High-level output voltage, V, at $U_{CC} = 5\text{ V} \pm 10\%$, $I_{OH} = \bar{y} - 0.4\bar{y}\text{ mA}$, $U_{IH} = (U_{CC} - 0.8)\text{ V}$, $U_{IL} = 0.8\text{ V}$	U_{OH}	$U_{SS} - 0.4$	-
Low level output voltage, V, at $U_{CC} = 5\text{ V} \pm 10\%$, $U_{IL} = 0.8\text{ V}$, $U_{IH} = (U_{CC} - 0.8)\text{ V}$, $I_{OL} = 0.8\text{ mA}$	U_{OL}	-	0.4
High-level output current, mA, at $U_{CC} = 5\text{ V} \pm 10\%$, $U_{IL} = 0.8\text{ V}$, $U_{IH} = (U_{CC} - 0.8)\text{ V}$, $U_{OH} = (U_{CC} - 0.4)\text{ V}$	I_{OH}	$\bar{y} - 0.4\bar{y}$	-
Low level output current, mA, at $U_{CC} = 5\text{ V} \pm 10\%$, $U_{IL} = 0.8\text{ V}$, $U_{IH} = (U_{CC} - 0.8)\text{ V}$, $U_{OL} = 0.4\text{ V}$	I_{OL}	0.8	-
High level input current, μA , at $U_{CC} = 5\text{ V} \pm 10\%$, $U_{IH} = (U_{CC} - 0.8)\text{ V}$	I_{IH}	-	1.0
Low-level input current, μA , at $U_{CC} = 5\text{ V} \pm 10\%$, $U_{IL} = 0.8\text{ V}$, $U_{IH} = (U_{CC} - 0.4)\text{ V}$, High-level	I_{IL}	-	$\bar{y} - 1.0\bar{y}$
output current in the "Off" state, μA , at $U_{SC} = 5\text{ V} \pm 10\%$, $U_{IH} = (U_{CC} - 0.8)\text{ V}$ Low-level output current in the "Off" state, μA , at $U_{SC} = 5\text{ V} \pm 10\%$, $U_{IH} = (U_{CC} - 0.4)\text{ V}$, $U_{IL} = 0.8\text{ V}$	I_{OZH}	-	2.0
	I_{OZL}	-	$\bar{y} - 2.0\bar{y}$
Current consumption, μA , at $U_{CC} = 5\text{ V} \pm 10\%$, $U_{IH} = (U_{CC} - 0.4)\text{ V}$	I_{SS}	-	200
Signal propagation delay time, ns, at $U_{SS} = 5\text{ V} \pm 10\%$, $U_{IL} = 0.4\text{ V}$, $U_{IH} = (U_{SS} - 0.4)\text{ V}$, $\bar{y}L \bar{y} 50\text{ pF}$	$t_{\bar{y}}(WR - AN)$	-	140
	$t_{\bar{y}}(RD - AN)$	-	140
	$t_{\bar{y}}(RQINRA, RQINRB - RQINR)$	-	200

Pin assignment

Output	Purpose	Output	Purpose
No. 1	Interrupt vector address input A0	#15	Interrupt grant input INR1
No. 2	Interrupt vector address input A1	#16	Interrupt grant output INR0
No. 3	Interrupt vector address input A2	No.17	Output "Request Interrupt" \overline{RQINR}
No. 4	Interrupt vector address input A3	#18	Output "Ready interrupt from external device B" \overline{RAINRB}
No. 5	Interrupt vector address input A4	No.19	AN data response output
No. 6	Interrupt vector address input A5	#20	Input "Initialization" \overline{SR}
#7	Status register input RGSA	#21	Input/output data address AD0
No. 8	Input "Internal register A" RGA	No.22	AD1 data address input/output
#9	Input "Internal register B" RGB	No.23	AD2 data address input/output
No. 10	Input "Data recording" \overline{WR}	#24	AD3 data address input/output
No. 11	Input "Reading data" \overline{RD}	#25	AD4 data address input/output
#12	Input "Interrupt request from external devices A" \overline{RQINRA}	No.26	AD5 data address input/output
#13	Input "Interrupt request from external devices B" \overline{RQINRB}	No.27	AD6 data address input/output
No. 14	Common output 0V	No. 28	Power output from a voltage source U



Корпус	мм			
	D_{max}	E_{max}	H_D_{max}	H_E_{max}
H02.14-1B	6,8	6,8	15,20	15,20
H02.14-2B	6,78	6,78	14,58	14,58
H04.16-1B	8,2	7,8	16,60	15,58
H04.16-2B	8,08	7,63	15,58	15,58
H06.24-1B	9,48	7,88	17,38	15,8
H09.18-1B	9,68	9,68	17,58	17,58
H09.28-1B	9,66	9,68	17,68	17,68
H09.28-2B				
H14.42-1B	12,315	12,315	20,215	20,215
H16.48-1B	14,50	14,50	22,7	22,7
H16.48-2B				

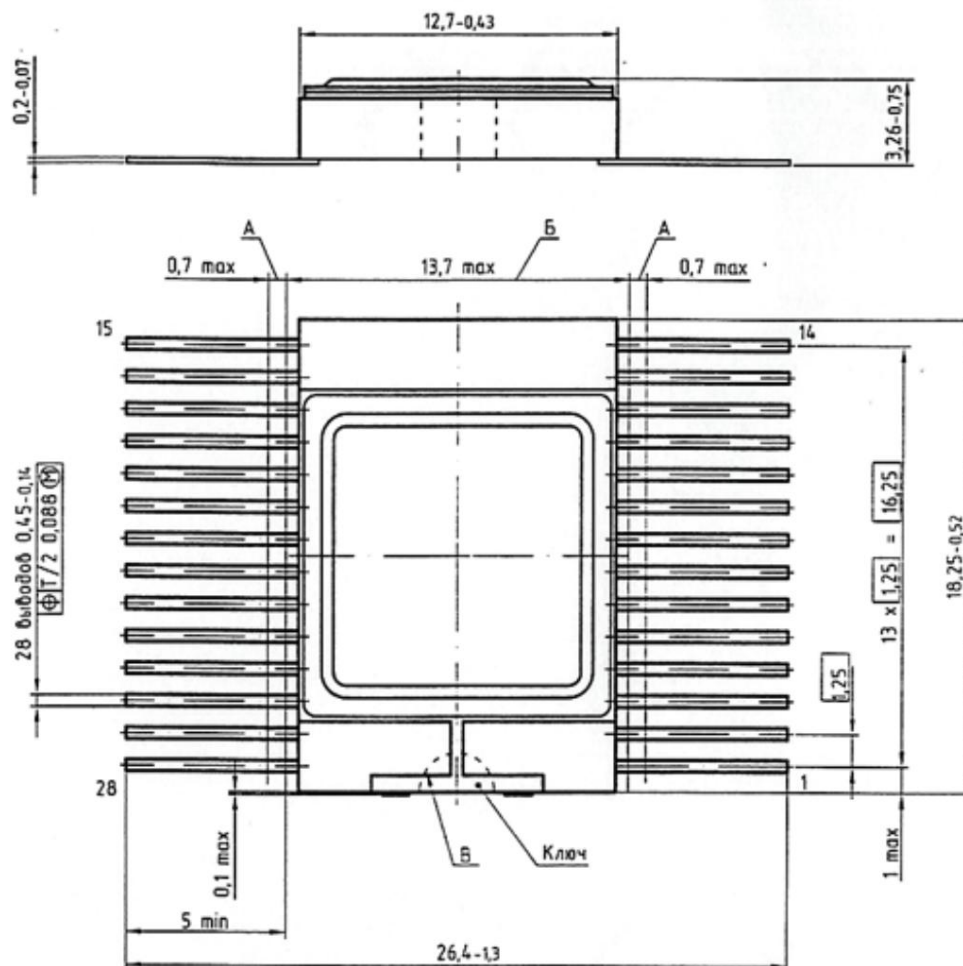
A — 3,0 мм

e — 1,0 мм

G_E — $E_{max} + 1,0$ мм

G_D — $D_{max} + 1,0$ мм

Figure 1. Dimensional drawing of the H14.42-1B case



1. А - длина вывода, в пределах которой установлено смещение плоскостей симметрии выводов от номинального расположения.
2. Б - ширина зоны, которая включает действительную ширину микросхемы и часть выводов, непригодную для монтажа.
3. Нумерация выводов показана условно.
4. Допускается удаление керамического слоя платы в зоне Б.

Figure 2. Dimensional drawing of the housing 4119.28-3.01



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