

# How to remove the protection of the inverter

**Several ways to disable the protection in popular PWM controllers inverters LCD.**

**Attention!**

**Not all methods tested by the author and can not be recommended repairers who do not have sufficient experience and theoretical knowledge.**

**If anyone broke the TV does not show, we recommend the link: - [the TV does not turn on](#)**

When repair and diagnostics, it is often necessary verification of certain circuits of the inverter - inverter power backlight LCD panel.

Carry out the necessary measurements is sometimes not possible, the generation of breaks for various reasons, for example because of the imbalance in the loads.

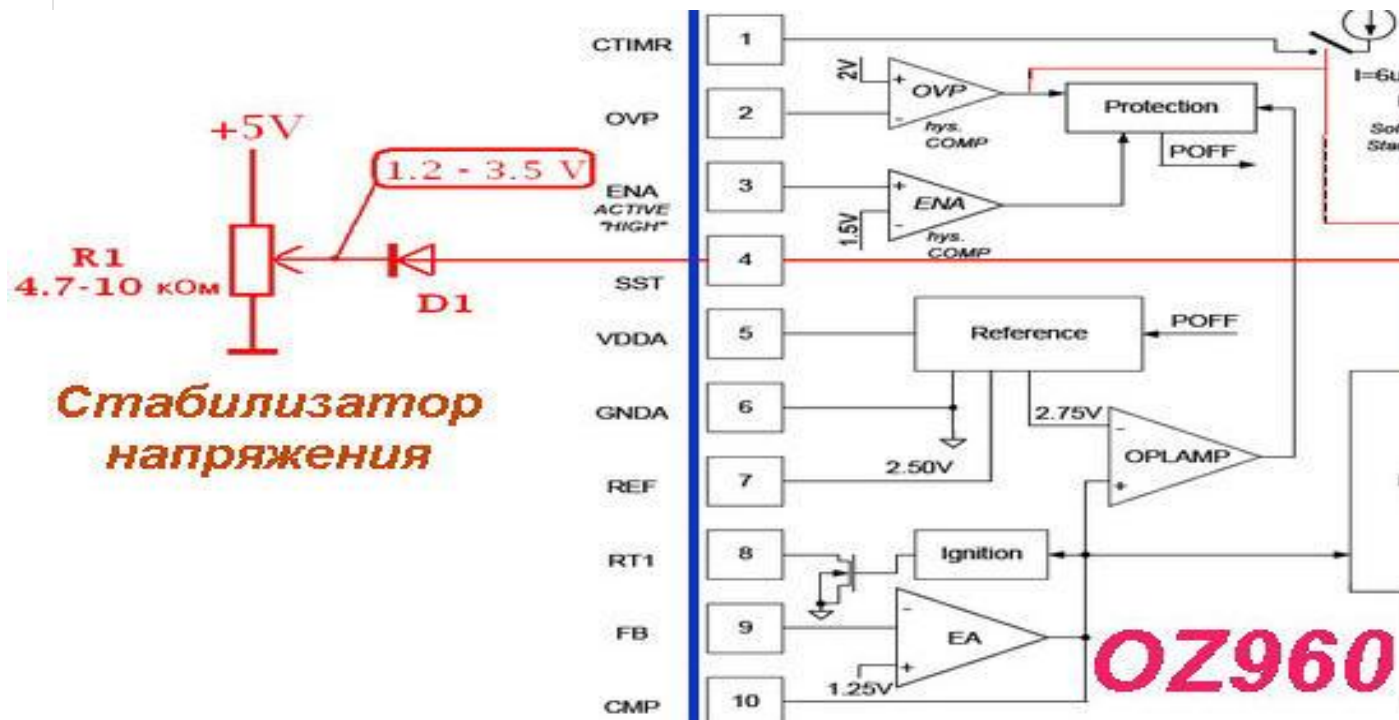
Together, masters and researches various repair Conferences options were blocking protection inverters to obtain diagnostic capabilities.

Preserved discussion at one of the forums <http://monitor.net.ru/forum/lcd-info-239071.html>.

Readers are invited to review previously published examples of how to disable the protection of the inverter to the following ШИМ-контроллеров: [AT1741](#) , [BA9741](#) , [BD9240](#) , [BD9766VF](#) , [BD9882F](#) , [BD9883](#) , [BD9884VF](#) , [BD9897FS](#) , [BI3101](#) , [BIT3102A](#) , [BIT3193](#) , [BIT3713](#) , [INL837GL](#) , [FAN7311](#) , [FAN7314](#) , [FAN7316](#) , [KH0803A](#) , [LX1691A](#) , [MAX8722](#) , [MP10072E](#) , [MP1008](#) , [MP1009](#) , [MP1027EF](#) , [MP1038](#) , [MSC1692](#) , [OB3309](#) , [OB3316QP](#) , [OB3328UQP](#) , [OZ960](#) , [OZ964](#) , [OZ9910GN](#) , [OZ99361](#) , [OZ9938Q](#) , [OZ9966SN](#) , [OZT1060GN](#) , [SEM2006](#) , [SEM2105](#) , [SP5001Q](#) , [SP5005](#) , [TA9687GN](#) , [TL1451](#)

# OZ960

To disable the protection on the input SoftStart (pin 4 IC OZ960), you need to force the voltage to this input (pin 4) 1,5V - 3,5V, which will control the duration of the PWM and regulate the output current in the lamps.  
Information courtesy of the party Rottor to repair forum monitor.net.ru



Another original solution to disable protection for OZ960 pin-10 from the participant AMIT: Quote:

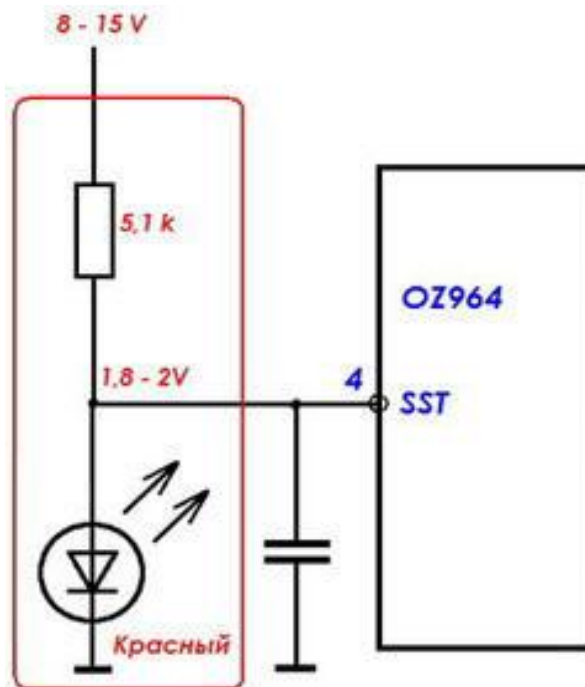
OZ960  
very easy way to remove the protection.  
LED 10 to put his feet on the ground. (6 foot chip)

# OZ964

From party forum monitor.net.ru KRAB Quote:

Removing protection for OZ964:

On pin 4 (SST - Soft-Start Time) at the moment when you need to keep the 1,8 - 2V.



From party forum monitor.net.ru X1-42 Quote:

OZ964 protection is removed as well as OZ960, 10 LED output.

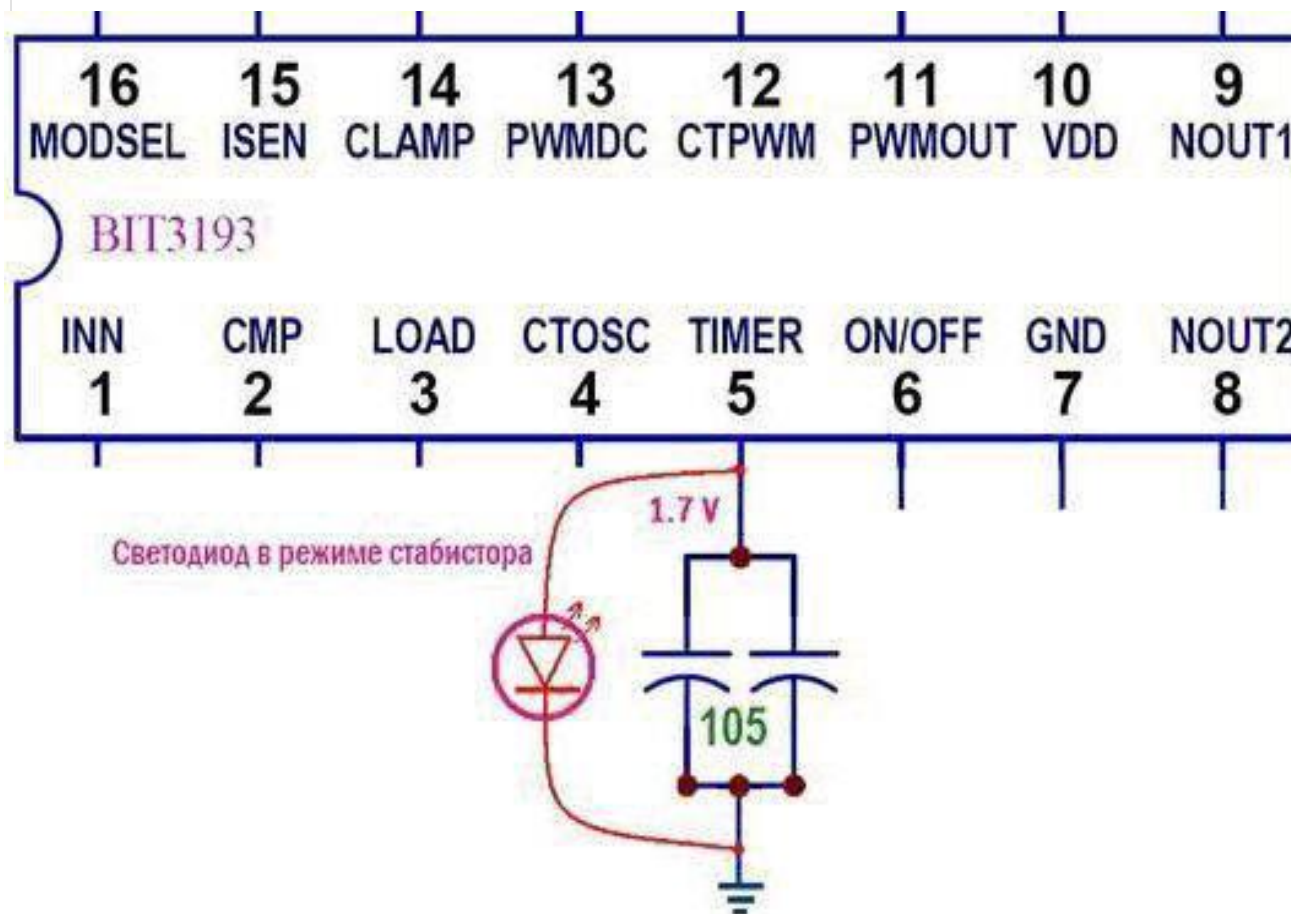
# BIT3193

Information provided by the member KRAB: Quote:

Removing protection BIT3193:

When the protection is activated the voltage at terminal 5 about 3, 5 V.

When the voltage on pin 5, from 0.4 to 2.4V, and the command "start" PWM operates autonomously, the lamp does not turn off.



## TL1451

More information on the KRAB: Quote:

Unprotect TL1451:

- Blocking protection chip TL1451 (analogue VA9741) is reduced to the simple action of the output circuit 15 to the "land."

But if you do it after a trip (such as forceps), then nothing happens because the trigger protection is already locked by feedback sensors links.

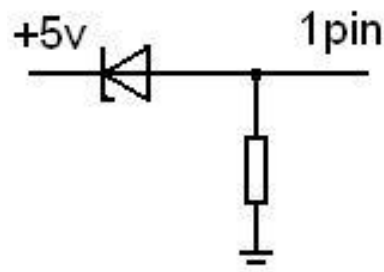
- To restore functionality you need to reset the trigger protection switching off and on the inverter or a change in the level of pin 9 of the chip.

In the operation mode monitor reset trigger protection is automatically updated.

## FAN7314

From party forum monitor.net.ru Valentin Quote:

BN44-00182C with live transformers with the inverter, has decided to throw in the well-known trance ... 123rd unit, a primary trans paralleled, but in 1yu FAN7314 set foot on the 4.3v zener with + 5V and 620 ohm resistor on the body.



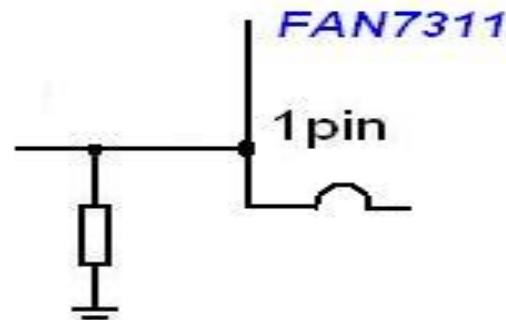
## FAN7311 - FAN7314

From party monitor.net.ru Parazetam0l Quote:

Controllers FAN7311 - FAN7314

by the method of Valentin, (on this page) - 560 ohm resistor from pin 1 to the housing.

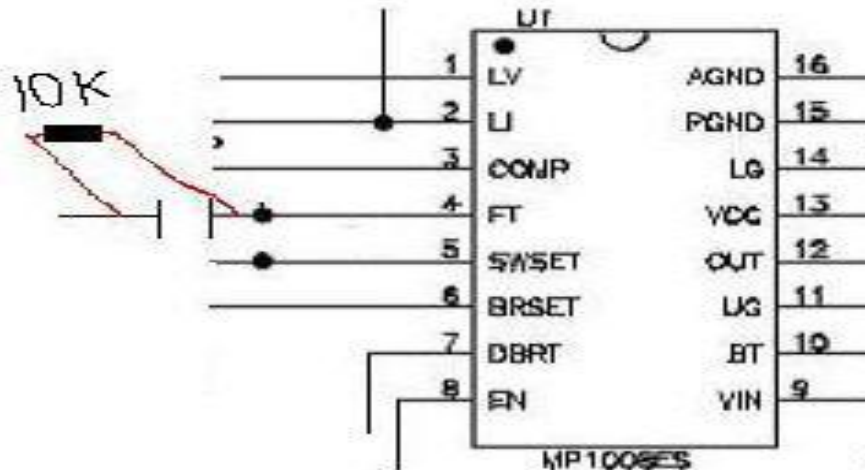
The zener diode is not needed, such inclusion, he still is not working.



## MP1008

Information provided by the member ancl: Quote:

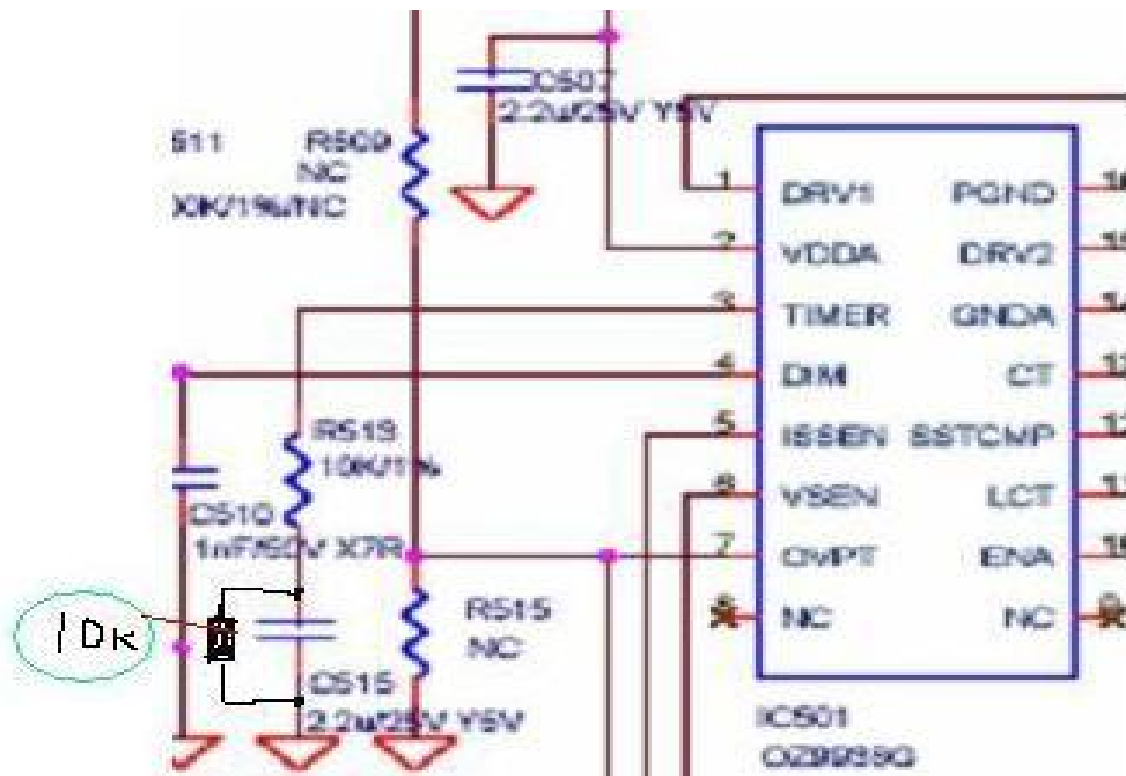
Deprotection MP1008: 10K 4 Pin MP1008 on the body.



## OZ9938Q

Information provided by the member JUDI71: Quote:

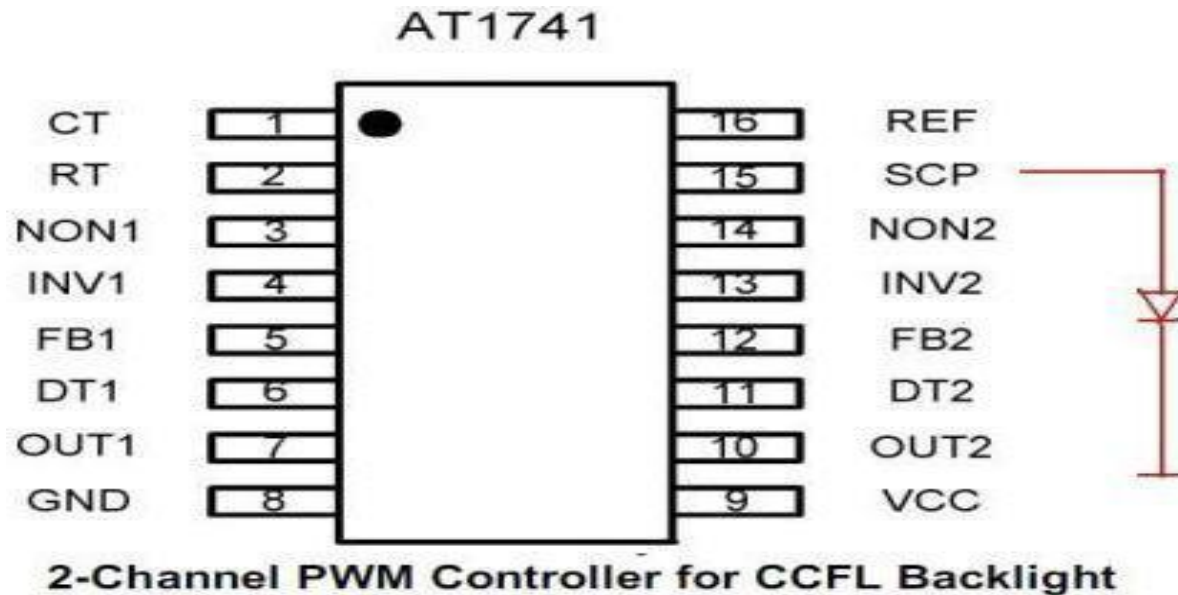
... Removed sewn, 10k parallel Conder 3 pin OZ9938.



## AT1741

Information provided by the member asanik: Quote:

AT1741S - LED display with 15 on the ground. I believe it is possible and resistor.  
LED off.



## BD9897FS

Information provided by the member comporator: Quote:

The machine LCD Sharp LC-32A47I, inverter 6 tube to BD9897FS. It was necessary to circumvent the protection BD9897FS, trance korotnula one vtorichek - coil removed. For a long time trying to do something on the feedback it failed. As a result, I put forward the LEDs 17 pin BD9897 and the housing, which immediately disable the protection. The unit earned, was successfully run and issued.



## TA9687GN

Information provided by the member gchel: Quote:

TA9687GN ---- connect the output 12 TIMER through 47kom with Copus (parallel S818). Checked.

## BD9883

Information provided by the member AMIT: Quote:

you can use any LED 13 foot-SS, chips BD9883, --- ,, anode body ---- 7, the cathode , or just sit on the ground 12 foot.

Information provided by the member Captain: Quote:

just put the foot on the ground 12.  
recommendation from Sharp.

## OZ99361

Information provided by the member Nlfjk: Quote:

To disable the on-chip OZ99361.  
... expose the control voltage at terminal 1 of the chip within the sustainable launch 1,85 - 1,98V

From party monitor.net.ru kebastos Quote:

Complementing and I for LG 26LC2RA ..... panel LC260WX2, inverter master slave, assembled on the master OZ99361 ..... can be changed on 9936, but that's not it .... after the inverter is chopped by three seconds ..... off to protect it invented and there in the internet: see. photo below ..... (disabling protection in this case, it is not dangerous for the inverter chopped because podsevshih bulbs) .... but! with such finalize it working, everything is good, but every mode of "standard" and AV1 inverter starts to squeal like a dog cut, while working ..... my remake is a little different - hang in the air one leg micro and connect it through rezik 100k to 5 volts .... the figure is clay, going 6 foot Micra .... well, between 1 foot and micro land - kondërchik 0.15 microfarads, and everything - works great silence in all modes

## OZ9910GN

Information provided by the member evg4682: Quote:

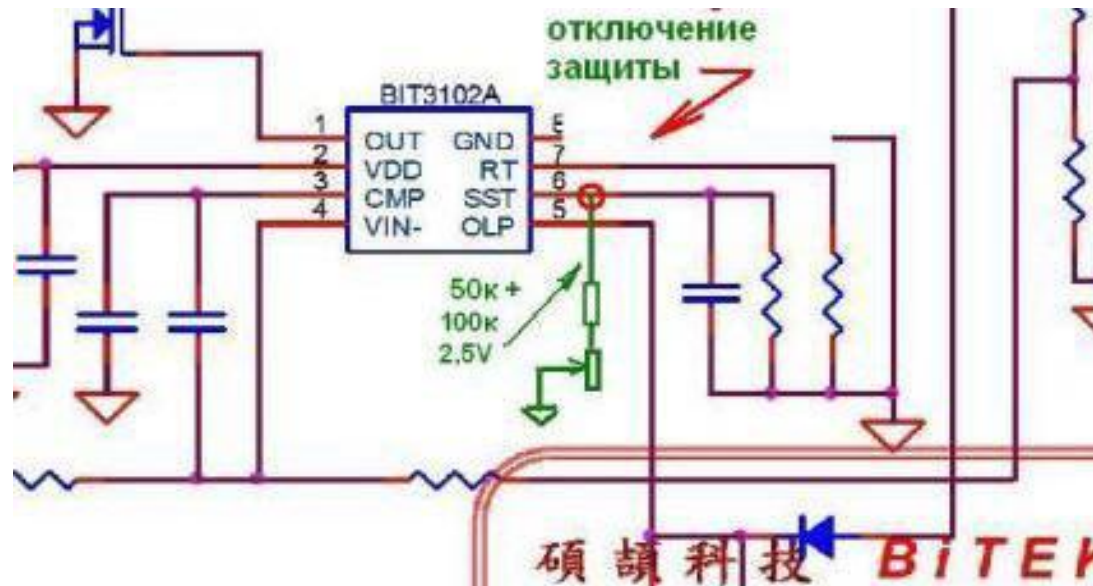
Controller QZ9910 GN protection is disabled: LED with 3 legs stabistorov. It works with one lamp, regulated only by contrast. Monitor Aser al1716.

More versions of other fora:

## BIT3102A

From party monitor.espec.ws zuev-tv Quote:

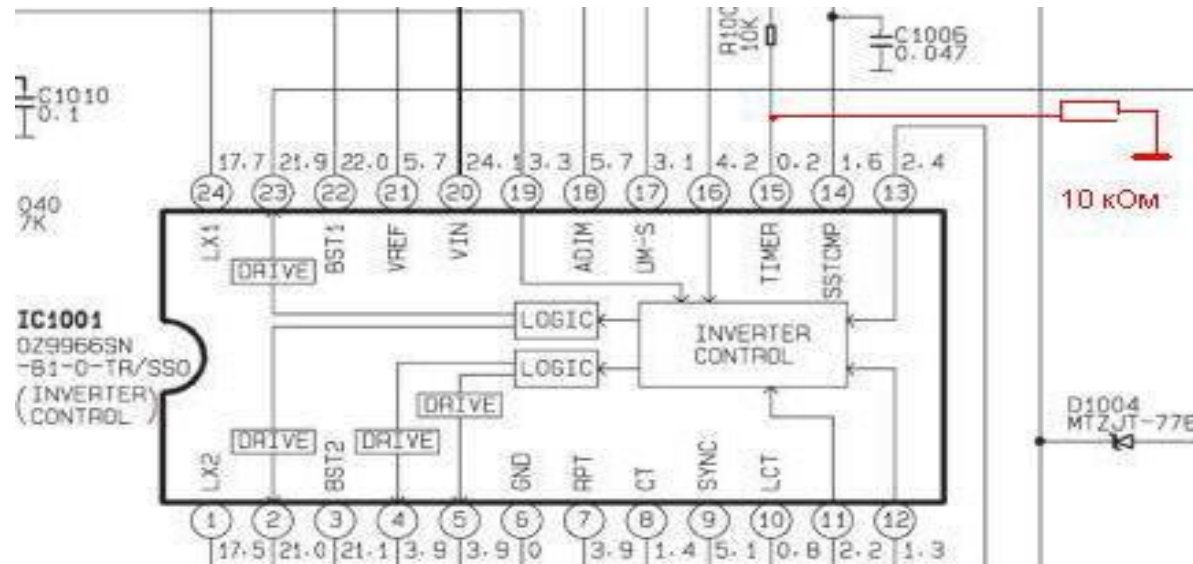
For inverters BIT3102A shutdown protection = set on pin 6 voltage 2.5V.



## OZ9966SN

From party monitor.espec.ws zuev-tv Quote:

Inverter LCD TV on OZ9966SN - how to disable the protection.



## LX1691A

From party monitor.net.ru gosha\_gor Quote:

I want to share deprotection inverter IC type LX1691A: Dana 14 foot chip called as OP-SNS is grounded on the case. Works OK.

## **MP1009**

From party monitor.net.ru Benzopiren Quote:

To disable the MP1009 - Jumper pin 5 on the body.

## **OZT1060GN**

From party monitor.net.ru bdvrt Quote:

OZT1060GN - sv.diod pin1

## **QZ9938GN**

From party monitor.net.ru bdvrt Quote:

QZ9938GN - sv.diod pin3 ... for bit3193

## **MP10072E**

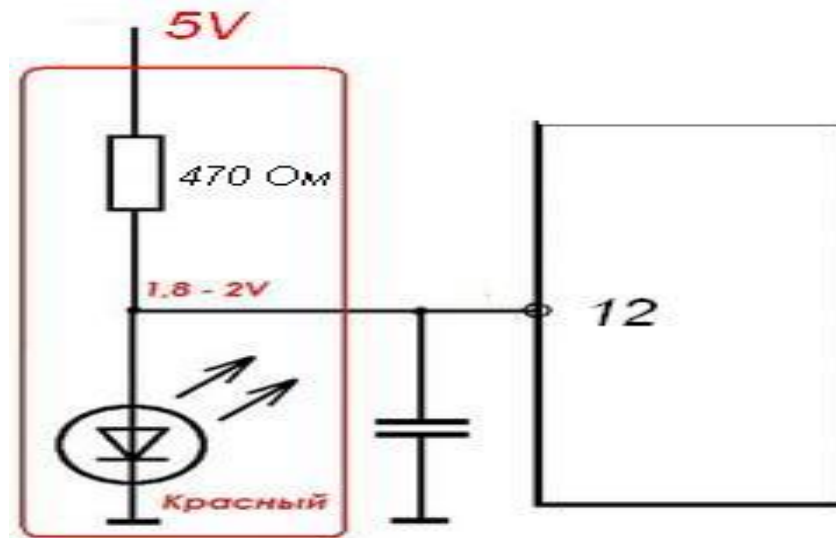
From party monitor.net.ru gosha\_gor Quote:

Removing protection IC type MP10072E: 3 pin - LED on the enclosure.

## INL837GL

From party monitor.net.ru Benzopiren Quote:

INL837GL stabilized power supply at terminal 12 - 1.7 - 2 V. Connect stabistorov (LED) display with 12 on the ground, to the same supply power from the source of 5 V through resistor 470 - 510 ohms.



## OZ99361

From party monitor.net.ru kebastos Quote:

Complementing and I for LG 26LC2RA ..... panel LC260WX2, inverter master slave, assembled on the master OZ99361 ..... can be changed on 9936, but that's not it .... after the inverter is chopped by three seconds ..... off to protect it invented and there in the internet: see. photo below ..... (disabling protection in this case, it is not dangerous for the inverter chopped because podsevshih bulbs) .... but! with such finalize it working, everything is good, but every mode of "standard" and AV1 inverter starts to squeal like a dog cut, while working ..... my remake is a little different - hang in the air one leg micro and connect it through rezik 100k to 5 volts .... the figure is clay, going 6 foot Micra .... well, between 1 foot and micro land - kondërchik 0.15 microfarads, and everything - works great silence in all modes

## MP1038

Quote:

... Deprotection MP1038 - 6-foot driver (FT) through 10k to the body. (By analogy with the MP1008, only there FT - 4th leg)

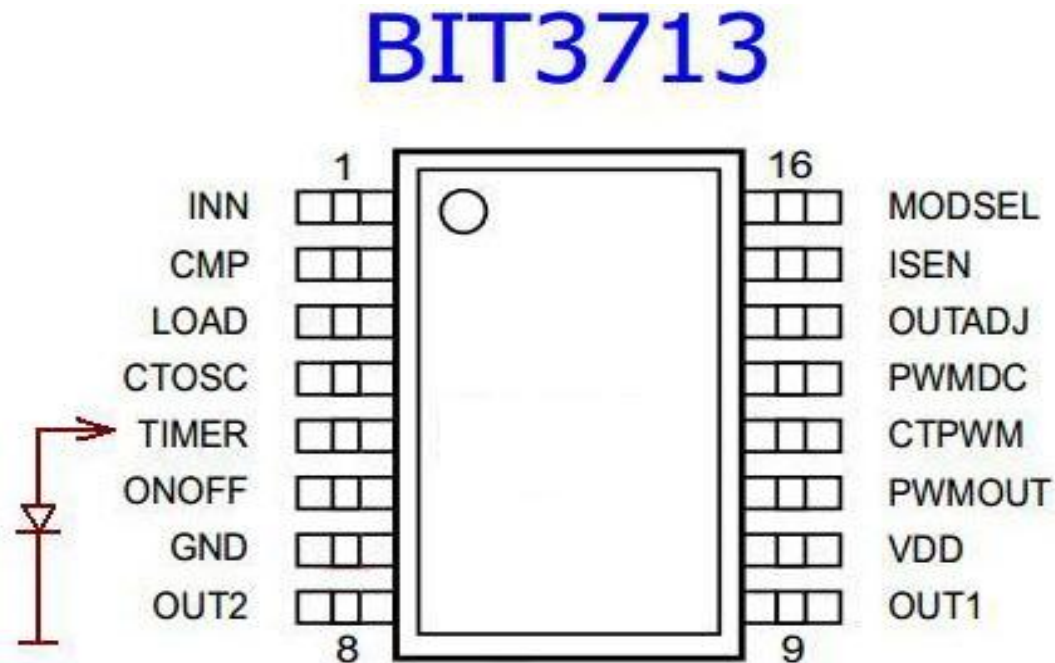
-  
Sergei Ganz

## BIT3713

From party monitor.net.ru asanik

Quote:

BIT3713 - 5 LED display TIMER on the ground. LED off.



## BA9741

From party monitor.net.ru asanik

Quote:

BA9741 F 15 pin - SCP connected to the "earth." Thus the protection is blocked on both channels driver. (LCD CAMERON 1501SP)



## SEM2105

From party monitor.net.ru ra4llb

Quote:

SEM2105 - to lock put on the LED pin of IC 1.

## MAX8722

From party monitor.net.ru ANOD07

Quote:

max8722 - put 4 to lock the pin to the ground.

## **SEM2006**

From member Yuri monitor.net.ru 72

Quote:

SEM2006 - protection is removed from the LED pins on the housing 2.

## **MSC1692**

From member Yuri monitor.net.ru 72

Quote:

MSC1692 - 4 pin resistor 220kOm on the body.

## **KH0803A**

From member Yuri monitor.net.ru 72

Quote:

KH0803A - LED or R 390 - 820 kOm 5 pins on the body. (Parallel to the N125).

## **SP5005**

From party monitor.net.ru Altai

Quote:

SP5005 - (sop16 4ccfl) LED 5 (timer) on the pin in my case korpus.OZ9910 disable protection LED with 10 pins (not from the 9th)



## **SP5001Q**

From member Anatoly Boldorev  
Quote:

TV SANSUI LT2202SS.  
Chip SP 5001Q. LED with 19nogi to common cathode.

## **MP1027EF**

From party monitor.net.ru Rishat-80  
Quote:

Another way to disable protection PWM controller MP1027EF. Rare controller, mainly installed in industrial firms monoblocks ADVANTECH. PWM controller with a 20-pin, you have 16 pins are connected to GND through a red LED.

## **BD9240**

From party monitor.net.ru jurez  
Quote:

BD9240 Unprotect possible by planting 15 foot (CP) 10 ohms to work korpus.Perestaët backlight adjustment panel.

## **OB3316QP**

From party monitor.net.ru LGbaht tel  
Quote:

OB3316QP remove protection, you can Put LED with 5pin IC to ground.

## **BD9884VF**

From party monitor.net.ru Radiogad  
Quote:

bd9884VF  
Unprotecting tested on Erisson 26LH01 --- 17 pin chip is connected to a voltage divider - cut off the track after a divider, which goes to the DU - the error amplifier.

## **OB3328UQP**

From party monitor.net.ru Radiogad  
Quote:

OB3328UQP  
To remove protection is sufficient to establish a 3pin LED IC to ground.

## **BI3101**

From party monitor.net.ru olegno11  
Quote:

To disable the on-chip BI3101  
output circuit 16 close to common resistor 220 - 470 ohms

## **BD9882F**

From party monitor.net.ru Kohl  
Quote:

BD9882F  
LED from the 14th output to ground.

## BD9766VF

From party monitor.net.ru LGbaht tel  
Quote:

BD9766VF.  
The LED from the 20th output to ground.



## OB3309

From party remont-aud.net AleksandKn  
Quote:

According to the datasheet OV3309 15pin STIME be + 2V. I put on the body LED 15pin voltage 1.7V. Highlighting works nothing hot. The trim resistors shima all normal, the image parameters are adjustable.

## FAN7316

Oleg Nemtsov oleg-nemcv@rambler.ru  
Quote:

17 LED output.