

How to remove the protection of the inverter

Several ways to protect shutdown in popular PWM controllers, LCD inverters.

Attention!

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

If anyone broke the TV does not show, be sure to link - [the TV is not switched on](#)

When repair and diagnosis, it is often necessary to check the individual inverter circuits - power converter lamps illuminate the 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, artists and researches different options for the repair of conferences were blocking inverter protection in order to obtain diagnostic capabilities.

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

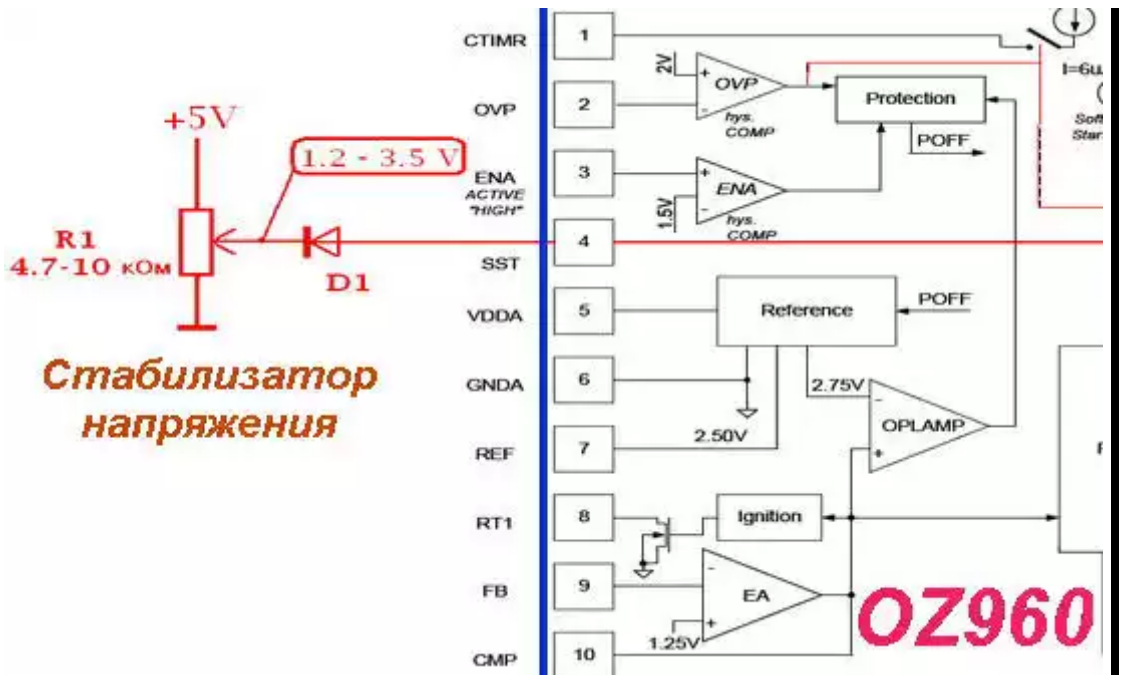
Readers are invited to review previously published examples of how to disable the inverter protection to these PWM controllers:

[AT1741](#) , [BA9741](#) , [BD9211F](#) , [BD9215AFV](#) , [BD9222FV](#) , [BD9240](#) , [BD9261FP](#) , [BD9270F](#) , [BD9275F](#) , [BD9276EFV](#) , [BD9766VF](#) , [BD9777](#) , [BD9882F](#) , [BD9883](#) , [BD9884VF](#) , [BD9896](#) , [BD9897](#) , [BD9897F](#) , [BD9897FS](#) , [BI3101](#) , [BIT3102A](#) , [BIT3102B](#) , [BIT3105](#) , [BIT3193](#) , [BIT3251 - BIT3252](#) , [BIT3713](#) , [DDA009](#) , [DT8211](#) , [ILN816GN](#) , [INL837GL](#) , [FAN7311](#) , [FAN7314](#) , [FAN7316](#) , [FAN7547](#) , [KH0803A](#) , [LX1691A](#) , [MAX8722](#) , [MP1006](#) , [MP1007ES](#) , [MP10072E](#) , [MP1008](#) , [MP1009](#) , [MP1010](#) , [MP1027EF](#) , [MP1038](#) , [MSC1692](#) , [OB3302CP](#) , [OB3309](#) , [OB3316QP](#) , [OB3328UQP](#) , [OB3362RP](#) , [OZ5508G - OZ5508GN](#) , [OZ960](#) , [OZ964](#) , [OZ9643N](#) , [OZ971SN](#) , [OZ972GN](#) , [OZ9910GN](#) , [OZ9919GN](#) , [OZ99361](#) , [OZ9938Q](#) , [OZ9939GN](#) , [OZ9966SN](#) , [OZ9972](#) , [OZ9976](#) , [OZL68GN](#) , [OZT1060GN](#) , [SAQ8818](#) , [SEM2005](#) , [SEM2006](#) , [SEM2105](#) , [SEM2107](#) , [SP5001Q](#) , [SP5005](#) , [SS1091ASN](#) , [TA9687GN](#) , [TL1451](#) , [UBA2070](#) , [UBA2071AT](#) , [UBA2074](#)

OZ960

To disable protection for SoftStart input (pin 4 OZ960 chip) should be forced to file for this input (the pin 4) voltage 1,5V - 3,5V, which will manage the PWM pulse duration and regulate the output current in the lamps.

Information courtesy of the party to repair Rottor forum monitor.net.ru



**Стабилизатор
напряжения**

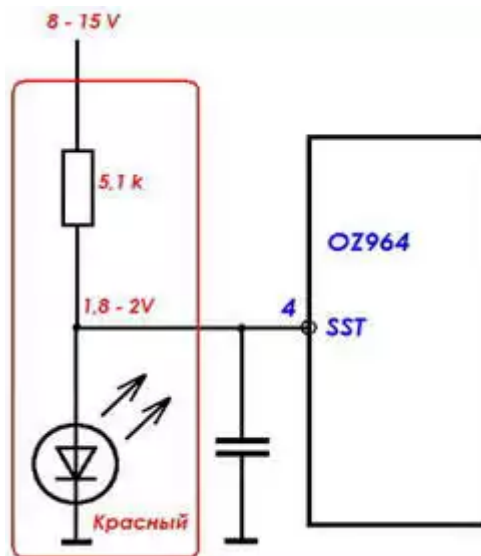
Another original solution OZ960 protection tripping pin-10 from AMIT party.
Quote:

OZ960
very simple way to remove the protection. supply LED with 10 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, LED 10 output.

From party forum monitor.net.ru CAIIIA
Quote:

The LCD LG 32LK330-ZB Inverter VIT71884.00 REV: failed to win 2.LOGAH (OZ964 + LM339), that works, there is, but only managed to disable the

protection for both 4 and 10 feet. Separately protection is not blocked.

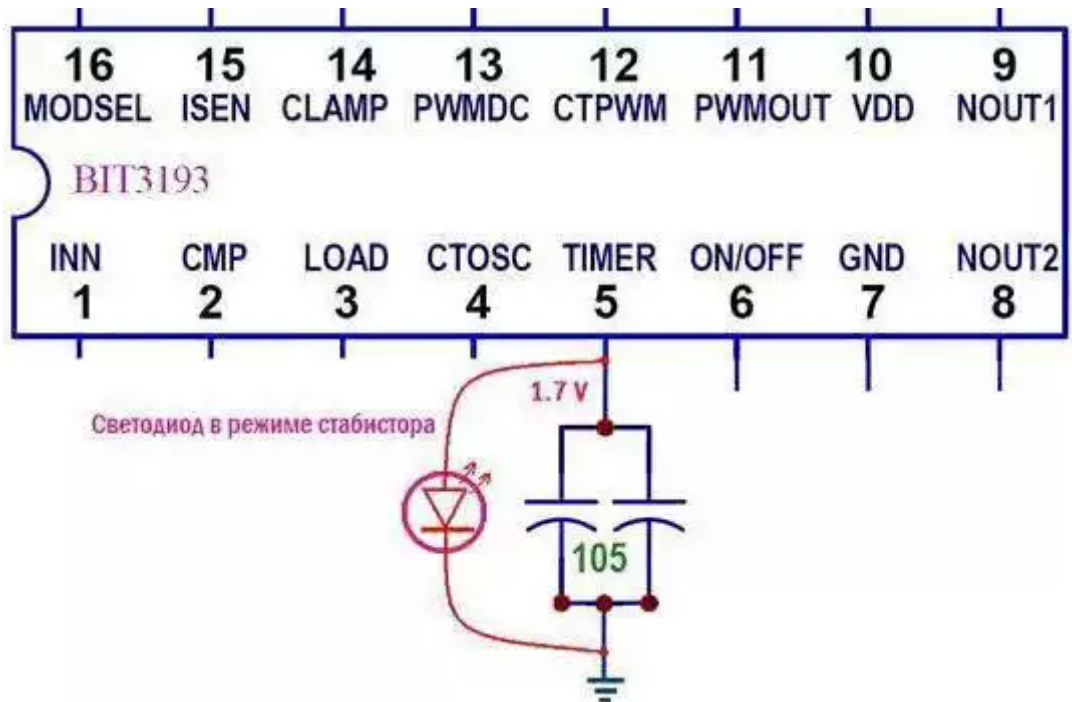
BIT3193

Information provided by the member KRAB:

Quote:

Removing protection for BIT3193:

When the protection is activated the voltage at terminal 5 of about 3, 5 V.
When the voltage at terminal 5, from 0.4 to 2.4V supply and command "start" PWM operates autonomously, the lamp is not switched off.



TL1451

More information on the KRAB:

Quote:

Remove the TL1451 protection:

- Protection Lock-chip TL1451 (analogue VA9741) is reduced to the simple action of the output circuit 15 to the "ground".

But if you do it after tripping (eg forceps), nothing happens because the trigger protection is already locked by the feedback sensor.

- For disaster recovery protection you want to clear off the trigger and restarting the inverter or a change in level on pin 9 of the chip.

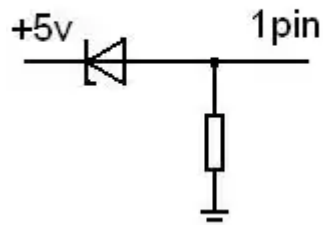
In operating mode, the monitor resets automatically updated protection trigger.

FAN7314

From party forum monitor.net.ru Valentin

Quote:

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



FAN7311 - FAN7314

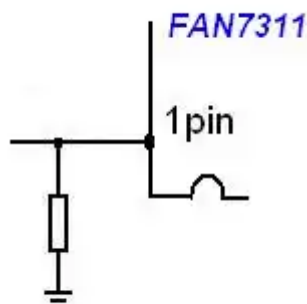
From party monitor.net.ru Parazetam0l

Quote:

Supervisors FAN7311 - FAN7314

By Valentin procedure (on this page) - 560 ohm resistor, with the output 1 on the body.

Zener diode is not needed, then turned on it still does not work.

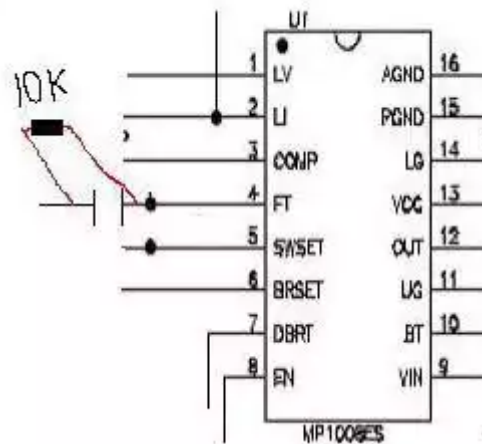


MP1008

Information provided by the member ancl:

Quote:

Removing protection from MP1008: 10k 4 MP1008 pin on the body.



OZ9938Q

Information provided by the member JUDI71:

Quote:

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

BD9897FS

The theory of electronics

Theory. foundation

From the practice of repair

Reference data

online Calculators

Information provided by the member comporator:

Quote:

The machine LCD Sharp LC-32A47I, inverter 6 at the tube BD9897FS. It was necessary to bypass the protection BD9897FS, in a trance korotnula one vtorichek - winding deleted. For a long time trying to do something for the feedback, nothing happened. As a result, set-Live LED on the 17 pin BD9897 and the housing, which immediately disable the protection. The unit earned run and successfully issued.

TA9687GN

Information provided by the member gchel:

Quote:

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

Information provided by the member fetyunin Sarge:

Quote:

TA9687GN instead of the resistor put svetodid and regulation of brightness remains.

BD9883

Information provided by the member AMIT:

Quote:

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

Information provided by the member Captain:

Quote:

just sit on the ground 12 foot.
recommendation from Sharpe.

OZ99361

Information provided by the member Nlfjk:

Quote:

Disabling security in the chip OZ99361.
... Regulator to set the 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 LC260WX2 panel, inverter master-slave, master assembled on 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 (protection tripping in this case, is not dangerous for the inverter because

of chopped podsevshih lamps) but this refinement it.! works, all is well, but every mode of "standard" and AV1 inverter starts to squeal like a dog incised while working my remake is a little different - hang in the air one leg micro and connect it through rezik 100k to 5 volts below is clay, going 6 foot Micra well, between 1 foot and micro land - kondërchik 0.15 microfarads, and all - works great silence in all modes

OZ9910GN

Information provided by the member evg4682:

Quote:

The controller turns off QZ9910 GN protection: LED 3 feet stabistorov. It works with a single lamp, regulated only by contrast. Monitor Aser al1716.

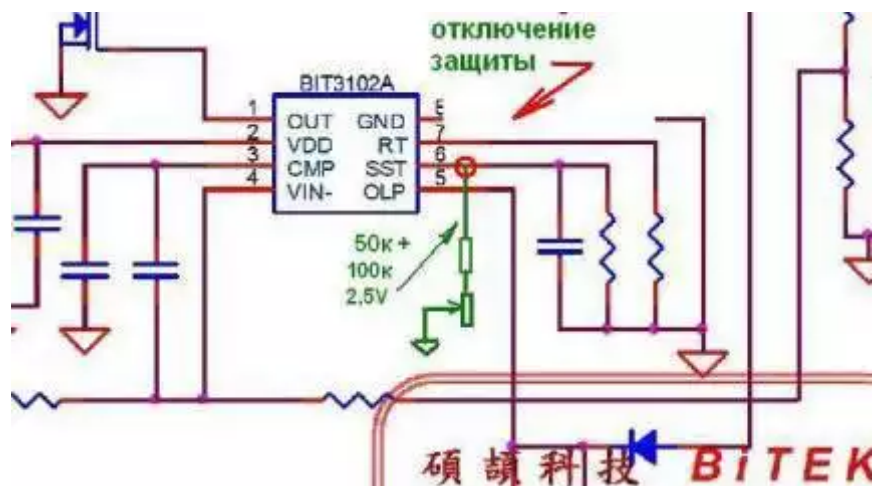
More variants from other forums:

BIT3102A

From monitor.espec.ws zuev-tv party

Quote:

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



From party monitor.net.ru maksatiha

Quote:

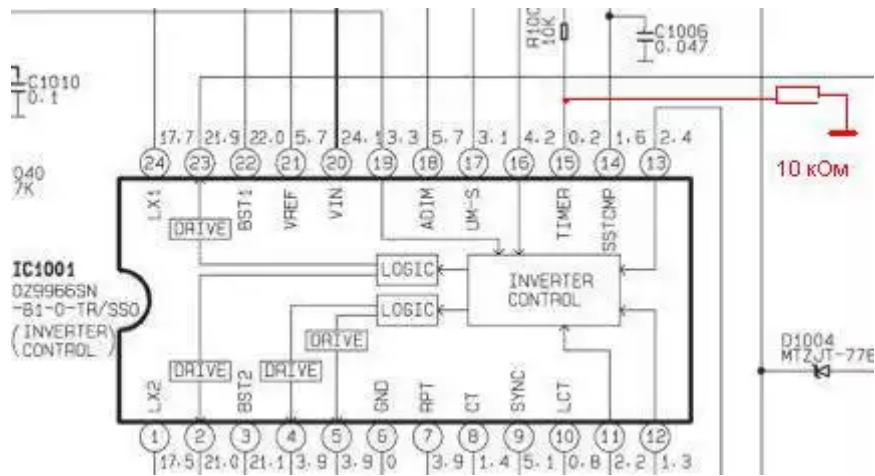
Disable protection on ms BIT3102A. Protection otklyuchaetya if 6 foot planted on the ground through R = 40kOm. Verified personally. I had it done when installed in the Samsung N920 instead MT2-17 REV0.2 block BN44-00082C

OZ9966SN

From monitor.espec.ws zuev-tv party

Quote:

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



LX1691A

From party monitor.net.ru gosha_gor
Quote:

I want to share with 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:

Disabling security 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:

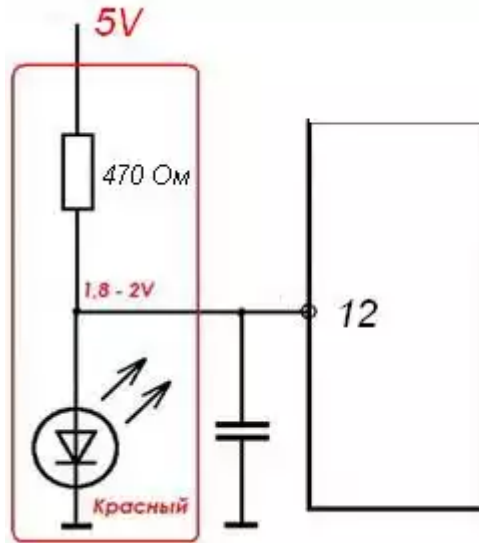
Removing protection IC type MP10072E: 3 pin - LED on the enclosure.

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 a resistor 470 - 510 ohms.



OZ99361

From party monitor.net.ru kebastos

Quote:

Complementing and I for LG 26LC2RA LC260WX2 panel, inverter master-slave, master assembled on 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 (protection tripping in this case, is not dangerous for the inverter because of chopped podsevshih lamps) but this refinement it.! works, all is well, but every mode of "standard" and AV1 inverter starts to squeal like a dog incised while working my remake is a little different - hang in the air one leg micro and connect it through rezik 100k to 5 volts below is clay, going 6 foot Micra well, between 1 foot and micro land - kondërchik 0.15 microfarads, and all - works great silence in all modes

MP1038

Quote Sergei Ganz:

... Deprotection MP1038 - 6-foot driver (FT) over 10k on the case. (By analogy with the MP1008, only there FT - 4th leg).

MP1038EY

From party monitor.net.ru rammer

Quote:

MP1038EY - LED on the 6th pin Fault Timing.

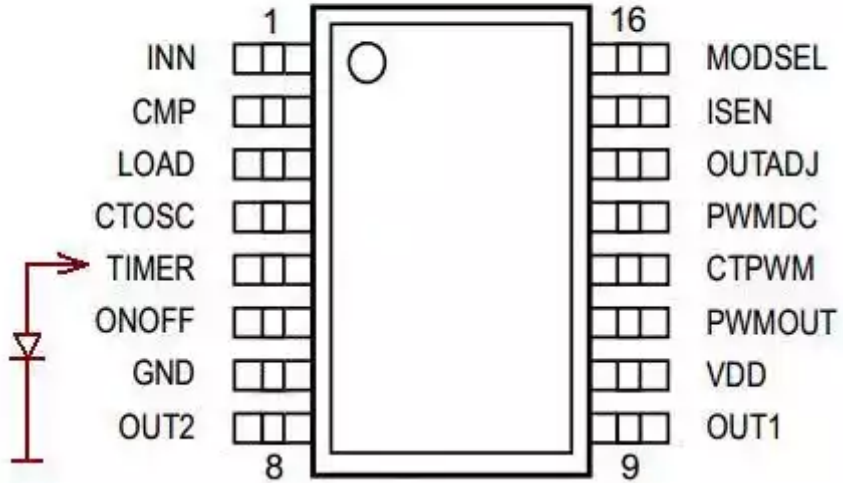
BIT3713

From party monitor.net.ru asanik

Quote:

BIT3713 - LED display with 5 TIMER on the ground. The LED does not light up.

BIT3713



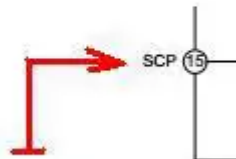
BA9741

From party monitor.net.ru asanik

Quote:

BA9741 F 15 pin - SCP connected to "ground". Thus, the protection is carried out lock on both driver channels. (LCD CAMERON 1501SP)

BA9741



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 - to block the plant 4 pin to ground.

SEM2006

From party monitor.net.ru yuri 72

Quote:

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

MSC1692

From party monitor.net.ru yuri 72

Quote:

MSC1692 - a 4 pin resistor 220kOm on the case.

KH0803A

From party monitor.net.ru yuri 72

Quote:

KH0803A - LED or R 390 - 820 kOm with 5 pins in the housing. (Parallel to the N125).

SP5005

From party monitor.net.ru Altai

Quote:

SP5005 - (sop16 4ccfl) LED 5 (the timer) pin on korpus.OZ9910 in my case disable protection LED with 10 pins (instead of 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 MP1027EF PWM controller. Rare controller installed in the main industrial firms monoblocks ADVANTECH. PWM controller with a 20-pin, you have 16 pins are connected to GND through a red light.

BD9240

From party monitor.net.ru jurez

Quote:

BD9240 Remove the protection can be by planting 15 foot (CP) through a 10k run on korpus.Perestaët backlight adjustment panel.

OB3316QP

From monitor.net.ru LGbaht-party bodies
Quote:

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

BD9884VF

From party monitor.net.ru Radiogad
Quote:

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

OB3328UQP

From party monitor.net.ru Radiogad
Quote:

OB3328UQP
To remove the protection is enough to set the LED to 3pin IC to ground.

From party monitor.net.ru key-s
Quote:

Resistor 10k, with pin 3 to ground. Native Conder this Pina desoldering, in his place -rezistor. Favorite inverter TV3203-ZC02-02 (A)

BI3101

From party monitor.net.ru olegno11
Quote:

Disabling security in the chip BI3101
output 16 circuits shorted to common wire resistor of 220 - 470 Ohm

BD9882F

From party monitor.net.ru Kohl
Quote:

BD9882F
LED from the 14th output to ground.

BD9766VF

From monitor.net.ru LGbaht-party bodies

Quote:

BD9766VF.
LED 20 th output to ground.



OB3309

From party remont-aud.net AleksandKn

Quote:

According to the datasheet OV3309 15pin STIME should be + 2V. I put the 15pin LED on the enclosure voltage 1.7V. Highlight works nothing is heated. The piping shima all resistors are normal, the image parameters are adjusted.

FAN7316

Oleg Nemtsov oleg-nemcv@rambler.ru

Quote:

LED 17 output.

BD9211F

From party monitor.net.ru HMAO

Quote:

Disables lights, set resistor 4.7kOm on 14vyvod and housing.

BD9261FP

From party monitor.net.ru LEX1

Quote:

Lock protection is carried out by setting binding. between the diode 27 (6) output m / s and the housing.

SAQ8818

From party monitor.net.ru idnavi

Quote:

To lock protection enough solder 1M resistor with 12 V (inverter supply) 7 conclusion SA08818. SAQ8818 put TL494 with 180 degrees.

The theory of electronics

Theory. foundation

From the practice of repair

Reference data

online Calculators

MP1006

From party monitor.net.ru Vladislav_
Quote:

MP1006 remove protection installation resistance 10k 6 O "FT" on the body.

SEM2107

From monitor.net.ru rostik-71 Member
Quote:

SEM2107 TV KTC, inverter SSL_400_14A01 rev 0.1.
On the output of IC 21 (SDT) to solder the LED.

FAN7547

From party monitor.net.ru emer6
Quote:

Monitor Viewsonic-VA712B. Bypass inverter protection at FAN7547 - earthed 7th leg of the chip.

OB3302CP

From party monitor.net.ru RadioElektronik
Quote:

OB3302CP protection starred installation on pin 2 LED 3 volts.

BD9777

From monitor.net.ru status DNA party
Quote:

BD9777 14 pin (SS) - chip through a resistor 10K to ground.

OZL68GN

From party monitor.net.ru CAIIIA
Quote:

OZL68GN starred protection white LED on the conclusion SST 4pin.

BIT3105

From party monitor.net.ru CAIIIA
Quote:

BIT3105 deprotection to withdraw SST (19) trehvoltovym white LED on the mass. Brightness is good, at a terminal of this LED is held 2,3V.

BD9222FV

From party monitor.net.ru ANOD07
Quote:

BD9222FV - LED display with 13 on the ground. LED off

DT8211

From party monitor.net.ru gchel
Quote:

DT8211 9 foot on the housing through a resistor kiloomny example 47kom.

OZ9972

From party monitor.net.ru rz6anh
Quote:

OZ9972. Version with 24 pins. Conclusion 20 (prot) through 1k on korpus.Vyvod the scheme is not cut off.

UBA2070

From party monitor.net.ru zharinov
Quote:

UBA2070 - 1st leg on the ground.

BD9896

From party monitor.net.ru fantom555
Quote:

BD9896 hang with the third pin on the LED mass-Live and the inverter does not work in spite of everything.

BD9215AFV

From monitor.net.ru LGbaht-party bodies
Quote:

BD9215AFV put a 10k resistor with a 15-pin IC to ground.

ILN816GN

From party monitor.net.ru slfl

Quote:

ILN816GN - Disable protection on BENQ E2420HD. Protection setting resistor 10K took the eighth Pina, parallel to the capacitor C3.

UBA2074

From party monitor.net.ru Iskander

Quote:

UBA2074 to unprotect - 20kOm on housing with O 6. (6pin - CT - fault timing capacitor).

OZ9919GN

From party monitor.net.ru artur58

Quote:

OZ9919GN 8pin through 10k to ground.

SEM2005

From party monitor.net.ru nem

Quote:

SEM2005 - Protection removed from the LED pins on the housing 1.

MP1007ES

From monitor.net.ru LGbaht-party bodies

Quote:

MP1007ES 4pin to ground.

BD9276EFV

From party monitor.net.ru Vlad-1966

Quote:

... I withdrew protection LED on the 35 pin (softstart).

BIT3251 - BIT3252

From party monitor.net.ru RadioElektronik

Quote:

... Protection starred closure pin 5 on the ground.

OZ9643N

From party monitor.net.ru Xen

Quote:

OZ9643n - 1st pin 20 ohms to ground.

DDA009

From party monitor.net.ru vovan_j

Quote:

DDA009. On the pin 18 (VCOMP) file 3v.

OZ5508G - OZ5508GN

From party monitor.net.ru expressel

Quote:

OZ5508G / N - 3 pin cr. LED on the housing. Adjusting the backlight works.

BD9275F

From party monitor.net.ru Lupik2

Quote:

BD9275F - 11 pin (CP External capacitor from CP to GND for Timer Latch) 1 ohms to the housing (parallel Conder). First, very closed to the body - the protection disconnected. I tried with resistor - Security disabled. Adjusting the backlight works. Checked.

OZ972GN

From party monitor.net.ru ABDU

Quote:

OZ972GN c 8 LED output to ground. I switch off the inverter V370H-L01.

OZ9976

From party monitor.net.ru kebastos

Quote:

OZ9976 (analogously OZ9966) - 10k to the housing with O TIMER, in this case the pin 11 of the chip.

BD9270F

From party monitor.net.ru VUSA

Quote:

BD9270F - 13 (cp) PIN - 10K resistor on the case.

The theory of electronics

Theory. foundation

From the practice of repair

Reference data

online Calculators



SS1091ASN

From party monitor.net.ru sergei1600

Quote:

To remove the protection on SS1091asn 19 conclusion soldered LED.

MP1010

From party monitor.net.ru Dimon C

Quote:

MP1010 (MP1010B, MP1010BEF, MP1010BEM) - 17 foot close to the body. If the switching circuit 19 + 17, then 19 separate 17 and 17 is still firmly on the body!

OZ971SN

From party bogomol65

Quote:

OZ971SN remove protection can be pulled up through the 20 foot 100k from 3.3 volts from the team at the switch. ... 28 feet of the chip is in the inverter CL200WX PHILIPS LCD ... was torn off the lamp power winding ... vypayat ragged trance and the second, which is paired with him, he threw a couple of lamps. Jumper connected sensors error with workers trance. Time did not have to look for the best option, saved 3.3 volt supply 20 foot by 100 ohms.

BIT3102B

From party monitor.net.ru scn3

Quote:

Disabling security bit3102b sot-May 14-pin to ground through a resistor 47kOm.

OZ9939GN

From party monitor.net.ru yura_brt

Quote:

To remove the protection on OZ9939GN 3pin to ground through a resistor 100-110kOm.

UBA2071AT

The participants monitor.net.ru laurevena, X1-42, Condorviys

Quotes:

POLAR 38LTV4105, inverter chip UBA2071AT + two field STP60N06. Urged to obey the ground terminal 5 chips.

[Home](#)

The theory of electronics

Theory. foundation

From the practice of
repair

Reference data

online Calculators

PHILIPS chassis TPM4.1e, on-chip inverter UBA2071AT + two field 8N60 5
Conclusion on the weight did not help. But with 6 LED display on the
weight of great help and took the wrong lamp telly.

With Supra STV-LC2615VD the Well-hire.

OB3362RP

From member Andrew Kostyunin

Quotes:

Unlock OB3362RP. 16 pin - resistor to ground 20-24kom. of the nominal
value depends on the brightness of the backlight. .

Information for casual visitors and owners of TV sets:

Administration of this site strongly recommends that attempts to repair
without special skills and knowledge.

If any malfunctions of the TV should be handled by professionals.

In cases of irrelevance repair some of the recommendations that may
come in handy when buying a new TV link [How to Choose a TV](#) .

Comments and suggestions are accepted at horeff@mail.ru

