

Connect MCU via TOOL0 RL78D1A.hpx



RL78.pdf
Version 2.5



Починаючи з версії V1.4 діод не потрібен!



Since from version V1.4, the diode is not required!

Current Version RL78D1A.hpx V1.4

Renesas RL78/D1A

Read / Verify / Write Data-Flash (EEProm)

Read
Compare
Write
Verify

| | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F | 0123456789ABCDEF |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------------------|
| 00000 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00010 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00020 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00030 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00040 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00050 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00060 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00070 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00080 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00090 | FF | яяяяяяяяяяяяяяяяяяяя |
| 000A0 | FF | яяяяяяяяяяяяяяяяяяяя |
| 000B0 | FF | яяяяяяяяяяяяяяяяяяяя |
| 000C0 | FF | яяяяяяяяяяяяяяяяяяяя |
| 000D0 | FF | яяяяяяяяяяяяяяяяяяяя |
| 000E0 | FF | яяяяяяяяяяяяяяяяяяяя |
| 000F0 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00100 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00110 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00120 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00130 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00140 | FF | яяяяяяяяяяяяяяяяяяяя |
| 00150 | FF | яяяяяяяяяяяяяяяяяяяя |

Orange

Operation is not safety!
Please don't disconnect Mcu while READING!
Otherwise Data-Flash will be loss forever!
Continue?

OK Отмена

Type: Renesas RL78 V1.4 R5F10CM (8 Kx 8) Renesas RL78/D1A V1.4

vcc 5.00V

Read... 0F1000 NUM

<http://ipavelpervomaysk.com>

Remove before Read / Verify / Write

General Options



Force Write

Block Mode Enable

 Verify During write

Confirmation

 Verify After write

Buttons Ba Vertical

Play sounds

Power Bar

OK

Cancel

Read Data-Flash

- Read
- Compare
- Write
- Verify

| | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F | 0123456789ABCDEF |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------------------|
| 00000 | FF | яяяяяяяяяяяяяяяяяя |
| 00010 | FF | яяяяяяяяяяяяяяяяяя |
| 00020 | FF | яяяяяяяяяяяяяяяяяя |
| 00030 | FF | яяяяяяяяяяяяяяяяяя |
| 00040 | FF | яяяяяяяяяяяяяяяяяя |
| 00050 | FF | яяяяяяяяяяяяяяяяяя |
| 00060 | FF | яяяяяяяяяяяяяяяяяя |
| 00070 | FF | яяяяяяяяяяяяяяяяяя |
| 00080 | FF | яяяяяяяяяяяяяяяяяя |
| 00090 | FF | яяяяяяяяяяяяяяяяяя |
| 000A0 | FF | яяяяяяяяяяяяяяяяяя |
| 000B0 | FF | яяяяяяяяяяяяяяяяяя |
| 000C0 | FF | яяяяяяяяяяяяяяяяяя |
| 000D0 | FF | яяяяяяяяяяяяяяяяяя |
| 000E0 | FF | яяяяяяяяяяяяяяяяяя |
| 000F0 | FF | яяяяяяяяяяяяяяяяяя |
| 00100 | FF | яяяяяяяяяяяяяяяяяя |
| 00110 | FF | яяяяяяяяяяяяяяяяяя |
| 00120 | FF | яяяяяяяяяяяяяяяяяя |
| 00130 | FF | яяяяяяяяяяяяяяяяяя |
| 00140 | FF | яяяяяяяяяяяяяяяяяя |
| 00150 | FF | яяяяяяяяяяяяяяяяяя |
| 00160 | FF | яяяяяяяяяяяяяяяяяя |
| 00170 | FF | яяяяяяяяяяяяяяяяяя |
| 00180 | FF | яяяяяяяяяяяяяяяяяя |
| 00190 | FF | яяяяяяяяяяяяяяяяяя |
| 001A0 | FF | яяяяяяяяяяяяяяяяяя |
| 001B0 | FF | яяяяяяяяяяяяяяяяяя |
| 001C0 | FF | яяяяяяяяяяяяяяяяяя |
| 001D0 | FF | яяяяяяяяяяяяяяяяяя |
| 001E0 | FF | яяяяяяяяяяяяяяяяяя |
| 001F0 | FF | яяяяяяяяяяяяяяяяяя |
| 00200 | FF | яяяяяяяяяяяяяяяяяя |
| 00210 | FF | яяяяяяяяяяяяяяяяяя |
| 00220 | FF | яяяяяяяяяяяяяяяяяя |
| 00230 | FF | яяяяяяяяяяяяяяяяяя |
| 00240 | FF | яяяяяяяяяяяяяяяяяя |

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Read Data Flash R5F10DLDJ

Don't Cancel or Disconnect Mcu! ←

BF 00 FF 2F 0F 03 00 03 91 03

Code Flash size: 48 KB

Data Flash size: 8 KB

Flash options: 02 08 06 FE 07 00 00 2F 00 FF FF C6 03

Reading.

Reading Data-Flash

Cancel

Log

Read Data Flash R5F10DLDJ

Renesas RL78 group V1.1

Freq. 4000 kHz

Baud. 250000 pbs

Connected: R5F10DLD

Silicon Signature: 02 16 10 00 06 52 35 46 31 30 44 4C

Code Flash size: 48 KB

Data Flash size: 8 KB

Flash options: 02 08 06 FE 07 00 00 2F 00 FF FF C6 03

Reading.

WARNING!!!

Не отключать во время чтения!

Иначе Data-Flash будет утеряна безвозвратно!



- Read
- Compare
- Write
- Verify

| | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F | 0123456789ABCDEF |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------------------|
| 00000 | 55 | 55 | 55 | 55 | FF | UUUUяяяяяяяяяяяя |
| 00010 | 51 | 00 | 00 | AE | FF | Q. .@яяяяяяяяяяяя |
| 00020 | FF | яяяяяяяяяяяяяяяя |
| 00030 | FF | яяяяяяяяяяяяяяяя |
| 00040 | FF | яяяяяяяяяяяяяяяя |
| 00050 | FF | яяяяяяяяяяяяяяяя |
| 00060 | FF | яяяяяяяяяяяяяяяя |
| 00070 | FF | яяяяяяяяяяяяяяяя |
| 00080 | FF | яяяяяяяяяяяяяяяя |
| 00090 | FF | яяяяяяяяяяяяяяяя |
| 000A0 | FF | яяяяяяяяяяяяяяяя |
| 000B0 | FF | яяяяяяяяяяяяяяяя |
| 000C0 | FF | яяяяяяяяяяяяяяяя |
| 000D0 | FF | яяяяяяяяяяяяяяяя |
| 000E0 | FF | яяяяяяяяяяяяяяяя |
| 000F0 | FF | яяяяяяяяяяяяяяяя |
| 00100 | FF | яяяяяяяяяяяяяяяя |
| 00110 | FF | яяяяяяяяяяяяяяяя |
| 00120 | FF | яяяяяяяяяяяяяяяя |
| 00130 | FF | яяяяяяяяяяяяяяяя |
| 00140 | FF | яяяяяяяяяяяяяяяя |
| 00150 | FF | яяяяяяяяяяяяяяяя |
| 00160 | FF | яяяяяяяяяяяяяяяя |
| 00170 | FF | яяяяяяяяяяяяяяяя |
| 00180 | FF | яяяяяяяяяяяяяяяя |
| 00190 | FF | яяяяяяяяяяяяяяяя |
| 001A0 | FF | яяяяяяяяяяяяяяяя |
| 001B0 | FF | яяяяяяяяяяяяяяяя |
| 001C0 | FF | яяяяяяяяяяяяяяяя |
| 001D0 | FF | яяяяяяяяяяяяяяяя |
| 001E0 | FF | яяяяяяяяяяяяяяяя |
| 001F0 | FF | яяяяяяяяяяяяяяяя |
| 00200 | FF | яяяяяяяяяяяяяяяя |
| 00210 | FF | яяяяяяяяяяяяяяяя |
| 00220 | FF | яяяяяяяяяяяяяяяя |
| 00230 | FF | яяяяяяяяяяяяяяяя |
| 00240 | FF | яяяяяяяяяяяяяяяя |

http://pavelpervov.com/5maysk.com



Log

```

Read Data Flash R5F10DLDJ
Renesas RL78 group V1.1
Freq. 4000 kHz
Baud. 250000 pbs
Connected: R5F10DLD
Silicon Signature: 02 16 10 00 06 52 35 46 31 30 44 4C
Code Flash size: 48 KB
Data Flash size: 8 KB
Flash options: 02 08 06 FE 07 00 00 2F 00 FF FF C6 03
Reading.
Parsing... 32 Blocks.
Parse: F100H
Parse: F110H
Parse: F120H
Parse: F130H
Parse: F140H
Parse: F150H
Parse: F160H
Parse: F170H
Parse: F180H
Parse: F190H
Parse: F1A0H
Parse: F1B0H
Parse: F1C0H
Parse: F1D0H
Parse: F1E0H
Parse: F1F0H
Parse: F200H
Parse: F210H
Parse: F220H
Parse: F230H
Parse: F240H
Parse: F250H
Parse: F260H
Parse: F270H
Parse: F280H
Parse: F290H
Parse: F2A0H
Parse: F2B0H
Parse: F2C0H
Parse: F2D0H
Parse: F2E0H
Parse: F2F0H
Done
  
```

Read ok!

Write Data-Flash

File Buffer Device Tools Options Type Recent



Read

Compare

Write

Verify

| | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F | 0123456789ABCDEF |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------------------|
| 01800 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | FF | UUUUUUUUяяяяяяяя |
| 01810 | 52 | 00 | 00 | AD | 6A | 05 | 00 | 6F | FF | R..-j..ояяяяяяяя |
| 01820 | FF | 06 | F8 | 01 | 2F | DB | FE | 01 | FC | 06 | F8 | 02 | FC | 06 | AD | A9 | я.ш./Ыю.ь.ш.ь.-@ |
| 01830 | FA | 06 | FF | 03 | FA | 06 | AA | A8 | F9 | 06 | FB | 04 | C5 | 2C | 47 | E0 | ь.я.ь.ЁЁщ.м.Е,Га |
| 01840 | EF | 06 | EC | 05 | EC | 69 | D3 | AB | DC | 06 | DC | 06 | 7E | 7F | 71 | F8 | п.м.миУ«ь.ь.~Шqш |
| 01850 | D8 | 06 | D9 | 07 | BE | 06 | 27 | F8 | D6 | 06 | D8 | 08 | C4 | 85 | 41 | D0 | Ш.щ.с.'шц.ш.д...AP |
| 01860 | D0 | 06 | DF | 09 | D0 | 06 | DF | 09 | CE | 06 | C9 | 01 | 1E | DB | CF | 01 | Р.Я.Р.Я.О.Й..ЫП. |
| 01870 | CB | 06 | CC | 01 | 1B | DB | CA | 01 | C8 | 06 | CF | 01 | 18 | DB | C9 | 01 | Л.М..ЫК.И.П..ЫЙ. |
| 01880 | C5 | 06 | C2 | 01 | 15 | DB | C4 | 01 | C2 | 06 | C5 | 01 | 12 | DB | C3 | 01 | Е.В..ЫД.В.Е..ЫГ. |
| 01890 | BF | 06 | B8 | 01 | 6F | DB | BE | 01 | BC | 06 | BB | 01 | 6C | DB | BD | 01 | ÿ.ё.омs.j.»..лWS. |
| 018A0 | B9 | 06 | BE | 01 | 69 | DB | B8 | 01 | B6 | 06 | B1 | 01 | 66 | DB | B7 | 01 | М.s.iWë.¶.±.fM. |
| 018B0 | B3 | 06 | B4 | 01 | 63 | DB | B2 | 01 | B0 | 06 | B7 | 01 | 60 | DB | B1 | 01 | i.r.cMI.°..`M±. |
| 018C0 | AD | 06 | AA | 01 | 7D | DB | AC | 01 | AA | 06 | AD | 01 | 7A | DB | AB | 01 | -.E.}M-.E.-.zW«. |
| 018D0 | A7 | 06 | A0 | 01 | 77 | DB | A6 | 01 | A4 | 06 | A3 | 01 | 74 | DB | A5 | 01 | §. .wM .«.J.tMГ. |
| 018E0 | A1 | 06 | A6 | 01 | 71 | DB | A0 | 01 | 9E | 06 | 99 | 01 | 4E | DB | 9F | 01 | 9.}.qM .ñ."..NMу. |
| 018F0 | 9B | 06 | 9C | 01 | 4B | DB | 9A | 01 | 98 | 06 | 9F | 01 | 48 | DB | 99 | 01 | >.ь.KMь. .у.НМ™. |
| 01900 | 95 | 06 | 92 | 01 | 45 | DB | 94 | 01 | 92 | 06 | 95 | 01 | 42 | DB | 93 | 01 | +.'.EM".'.'.BM". |
| 01910 | 8F | 06 | 88 | 01 | 5F | DB | 8E | 01 | 8C | 06 | 8B | 01 | 5C | DB | 8D | 01 | У.М..ЫТ.Ь.<.\MK. |
| 01920 | 89 | 06 | 8E | 01 | 59 | DB | 88 | 01 | 86 | 06 | 81 | 01 | 56 | DB | 87 | 01 | ¿.Т.УММ.†.Г.UM±. |
| 01930 | 83 | 06 | 84 | 01 | 53 | DB | 82 | 01 | 80 | 06 | 87 | 01 | 50 | DB | 81 | 01 | ѓ.„.SM,.T.‡.PMГ. |
| 01940 | 7D | 06 | 7A | 01 | AD | DB | 7C | 01 | 7A | 06 | 7D | 01 | AA | DB | 7B | 01 | }..z.-M .z.}.EM{. |
| 01950 | 77 | 06 | 70 | 01 | A7 | DB | 76 | 01 | 74 | 06 | 73 | 01 | A4 | DB | 75 | 01 | w.p.§Mv.t.s.*Mu. |
| 01960 | 71 | 06 | 76 | 01 | A1 | DB | 70 | 01 | 6E | 06 | 69 | 01 | BE | DB | 6F | 01 | q.v.9Mр.n.i.sMo. |
| 01970 | 6B | 06 | 6C | 01 | BB | DB | 6A | 01 | 68 | 06 | 6F | 01 | B8 | DB | 69 | 01 | k.l.»Mj.h.o.ёMi. |
| 01980 | FF | яяяяяяяяяяяяяяяя |
| 01990 | FF | D0 | DD | 06 | 00 | D0 | DD | 06 | 00 | яяяяяяяяP3..P3.. |
| 019A0 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |
| 019B0 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |
| 019C0 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |
| 019D0 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |
| 019E0 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |
| 019F0 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |
| 01A00 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |
| 01A10 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |
| 01A20 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |
| 01A30 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |
| 01A40 | D0 | DD | 06 | 00 | P3..P3..P3..P3.. |

Log

```

Verify: F1600H Ok.
Verify: F1700H Ok.
Verify: F1800H Ok.
Verify: F1900H Ok.
Verify: F1A00H Ok.
Verify: F1B00H Ok.
Verify: F1C00H Ok.
Verify: F1D00H Ok.
Verify: F1E00H Ok.
Verify: F1F00H Ok.
Verify: F2000H Ok.
Verify: F2100H Ok.
Verify: F2200H Ok.
Verify: F2300H Ok.
Verify: F2400H Ok.
Verify: F2500H Ok.
Verify: F2600H Ok.
Verify: F2700H Ok.
Verify: F2800H Ok.
Verify: F2900H Ok.
Verify: F2A00H Ok.
Verify: F2B00H Ok.
Verify: F2C00H Ok.
Verify: F2D00H Ok.
Verify: F2E00H Ok.
Verify: F2F00H Ok.

```

```

Write Data Flash R5F10LDJ
Renesas RL78 group V1.1
Freq. 4000 kHz
Baud. 250000 pbs
Connected: R5F10LDL
Silicon Signature: 02 16 10 00 06 52 35 46 31 30 44 4C
Code Flash size: 48 KB
Data Flash size: 8 KB
Flash options: 02 08 06 FE 07 00 00 2F 00 FF FF C6 03
Erase Data-Flash Area.
Erase: [F1000H] - Ok
Erase: [F1400H] - Ok
Erase: [F1800H] - Ok
Erase: [F1C00H] - Ok
Erase: [F2000H] - Ok
Erase: [F2400H] - Ok
Erase: [F2800H] - Ok
Erase: [F2C00H] - Ok
Ok

```

Type: Renesas RL78 R5F10LDJ (8 Kx 8) Renesas RL78/D1A V1.1

vcc 5.00V

Write Ok

0F10EF NUM

Segway Snarler AT6L 2021 R5F10D



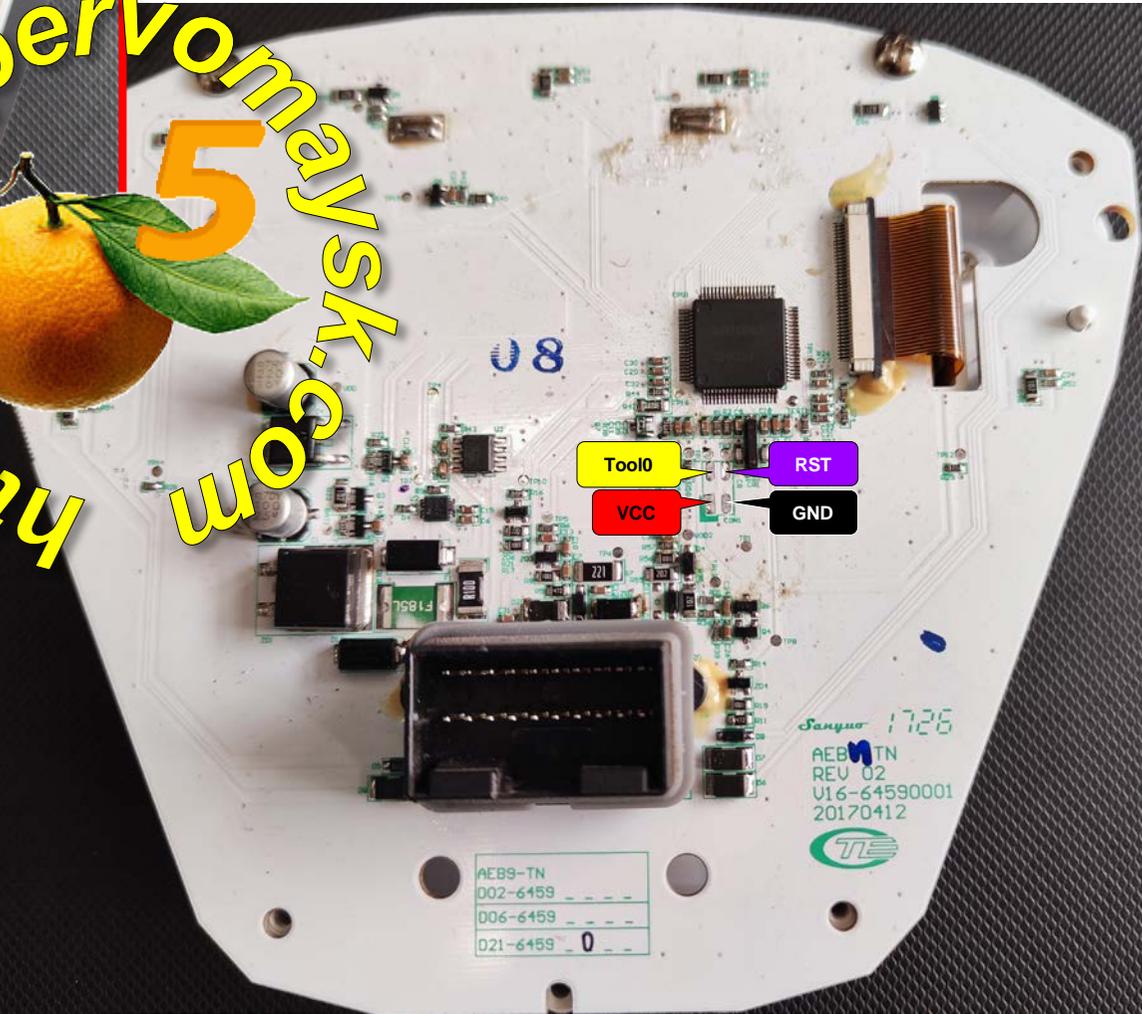
KYMCO PEOPLE 150 R5F10W



<http://pavelpervomajsk.com>



5

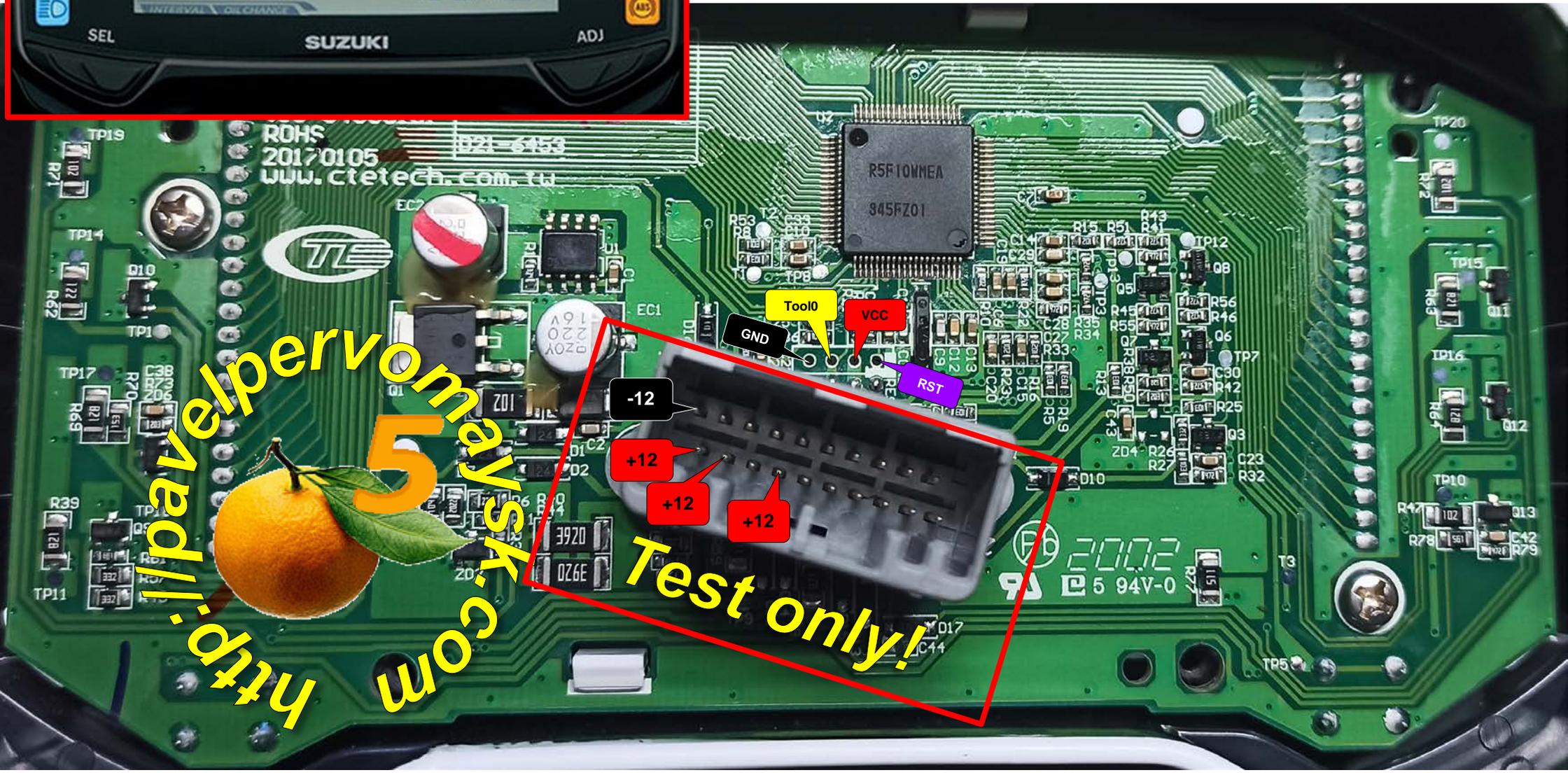


AEBS-TN
002-6459
006-6459
021-6459 0

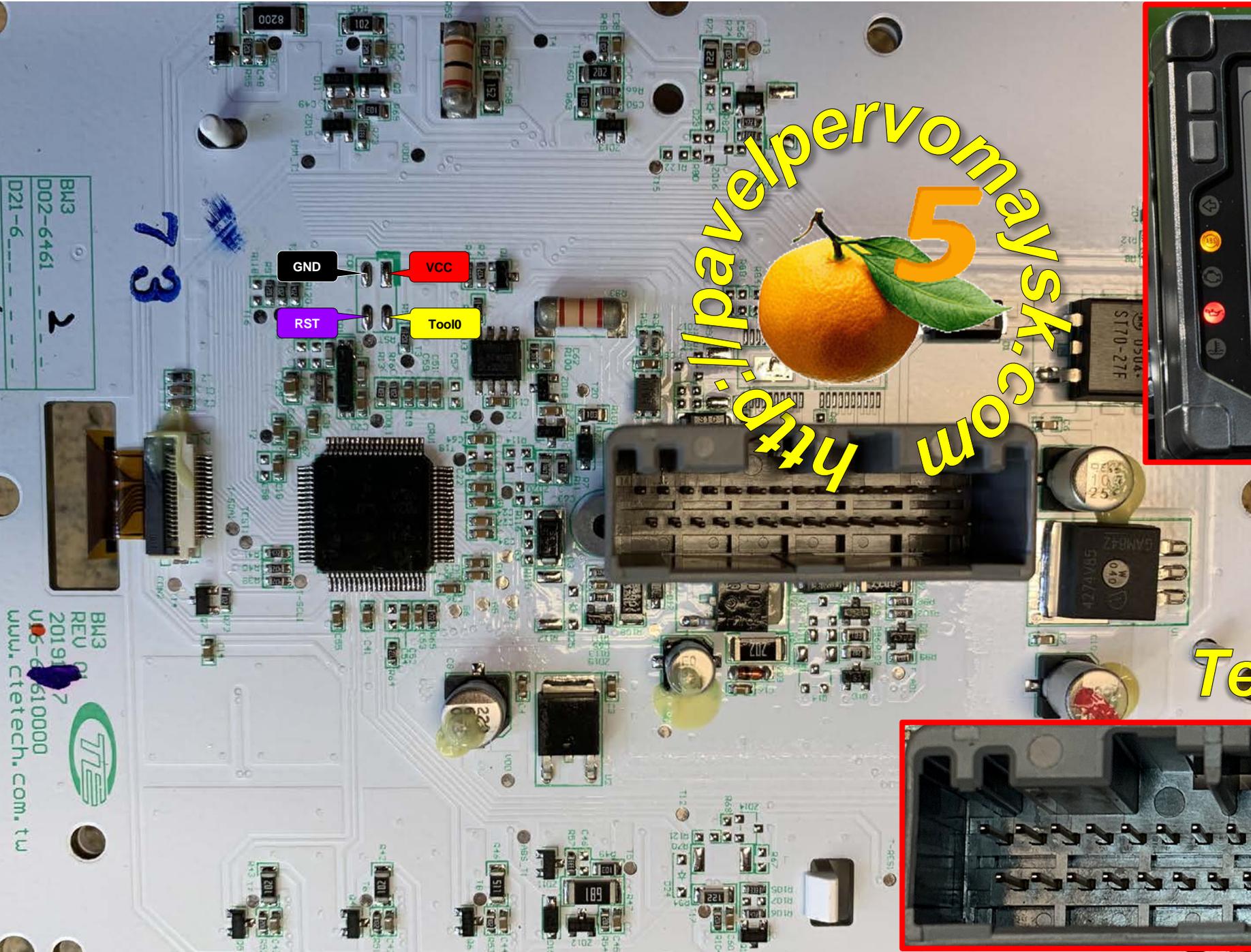
Sanyo 1726
AEBM TN
REV 02
U16-64590001
20170412



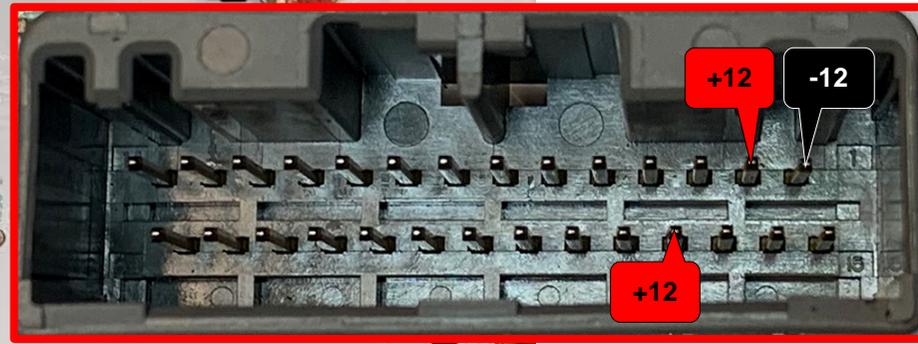
Suzuki GSXS 125 R5F10W



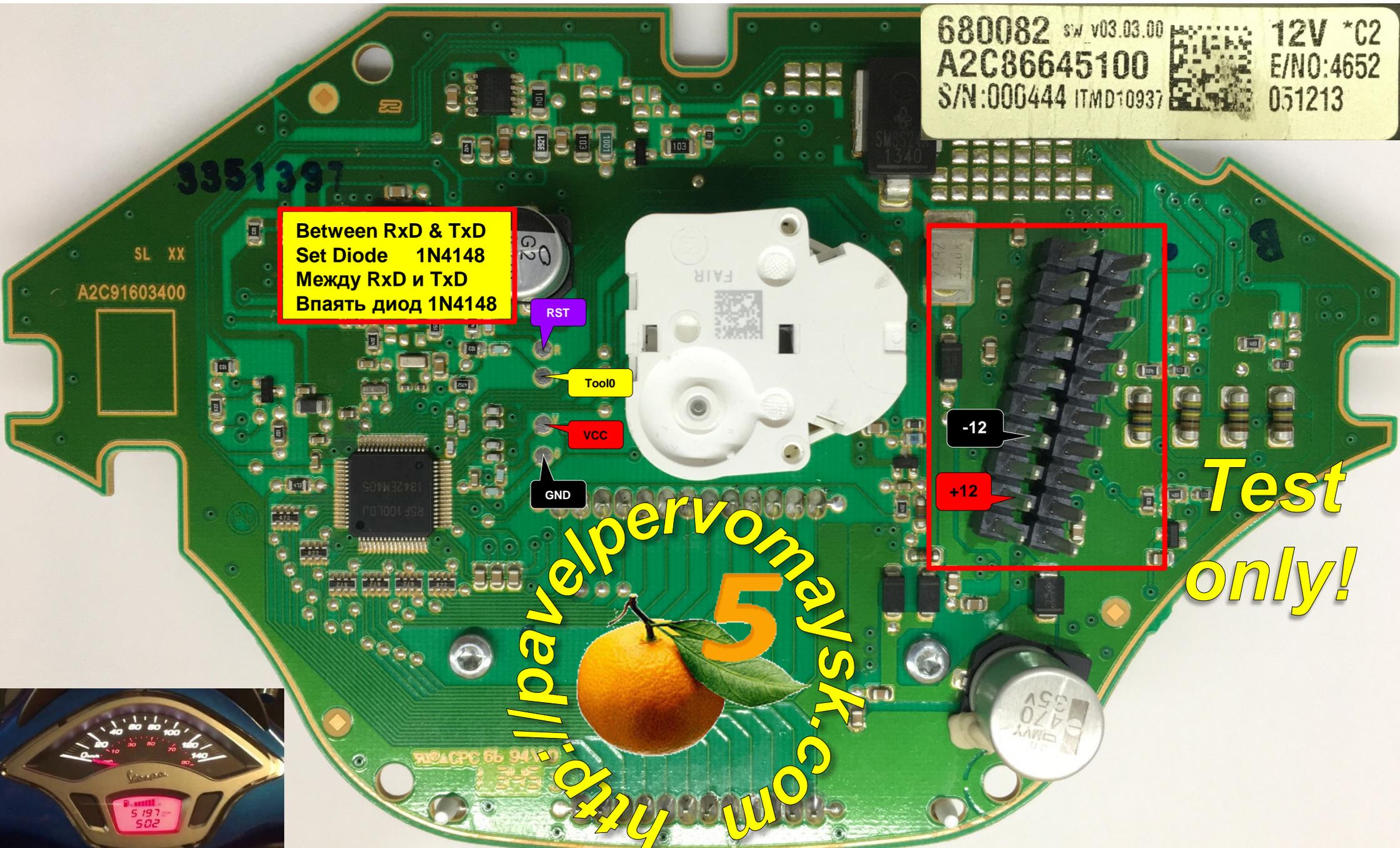
Yamaha XTZ690 R5F10D



Test only!



Yamaha Vespa R5F10DLDJ



680082 SW V03.03.00
A2C86645100
S/N:000444 ITMD10937
12V *C2
E/NO:4652
051213

3351397

SL XX
A2C91603400

Between RxD & TxD
Set Diode 1N4148
Между RxD и TxD
Впаять диод 1N4148

RST

Tool0

VCC

GND

-12

+12

Test
only!

<http://pavelpervomaysk.com>



Yamaha MT125 & YZF-R125

R5F10DLDJ

Continental A2C86259100 04.02.2014 10:12
5D7-H3500-30 03 04.50 3178 0018



<http://pavelpervomask.com>



Between RxD & TxD
Set Diode 1N4148
Между RxD и TxD
Впаять диод 1N4148

Tool0

RST

VCC

GND

+12

+12

-12

Test
only!



220 VHA. 603

471

14h

471

Yamaha XSR700

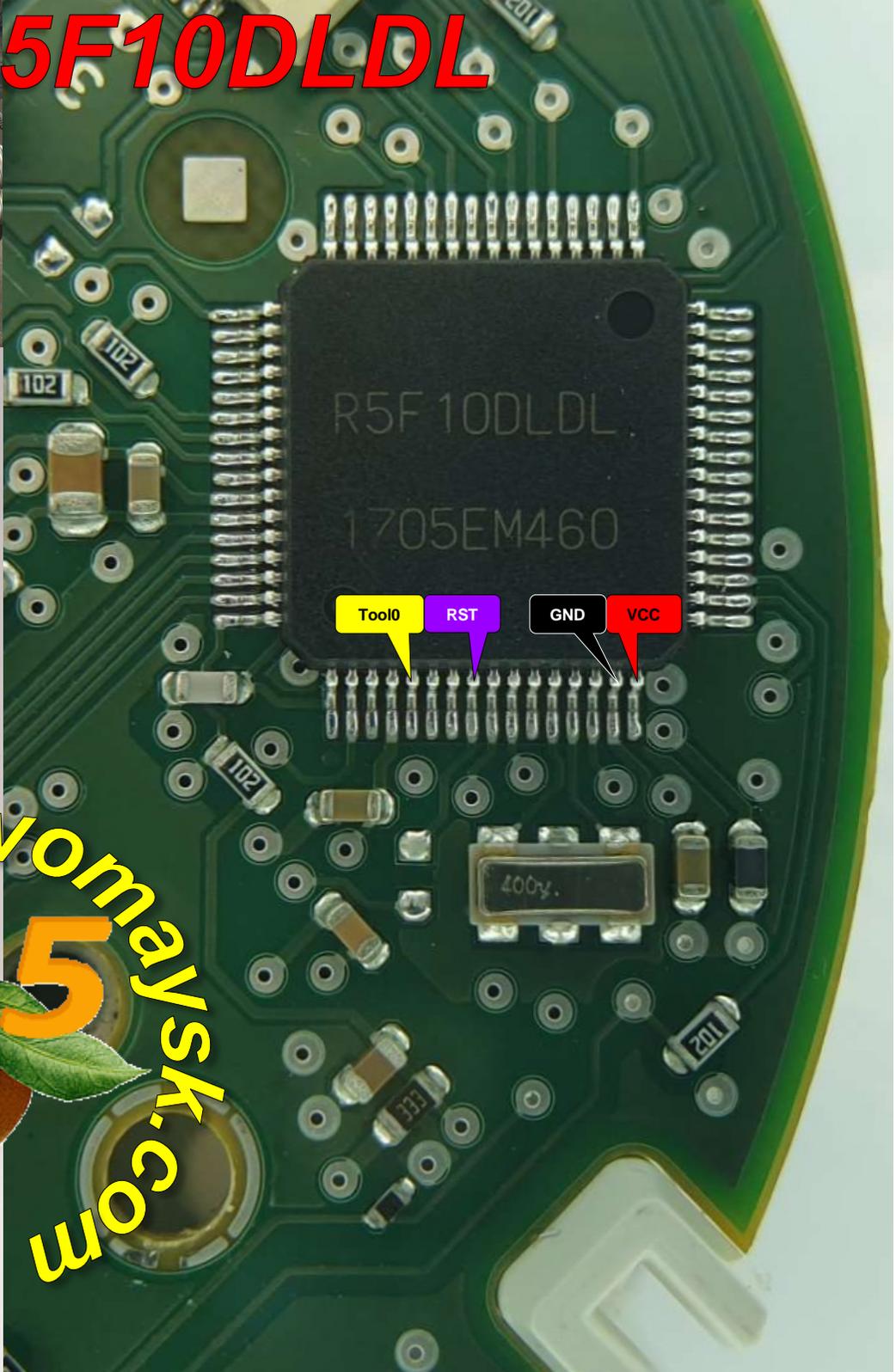
R5F10DM

VCC
GND
Tool0
RST

<http://pavelpervomajsk.com>



BMW Bike R5F10DLDL



<http://pavelpervomajsk.com>



5

Peugeot Expert 2018 R5F10DM

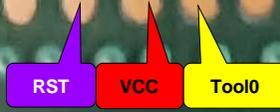
N1-KMH 24.09.2018 SN1- 0636157
CEM : YZK CMB N1 CEM00 K0
YZK HW - 05.15.00 SW - 10.11.34.00



98 239 602 80 00

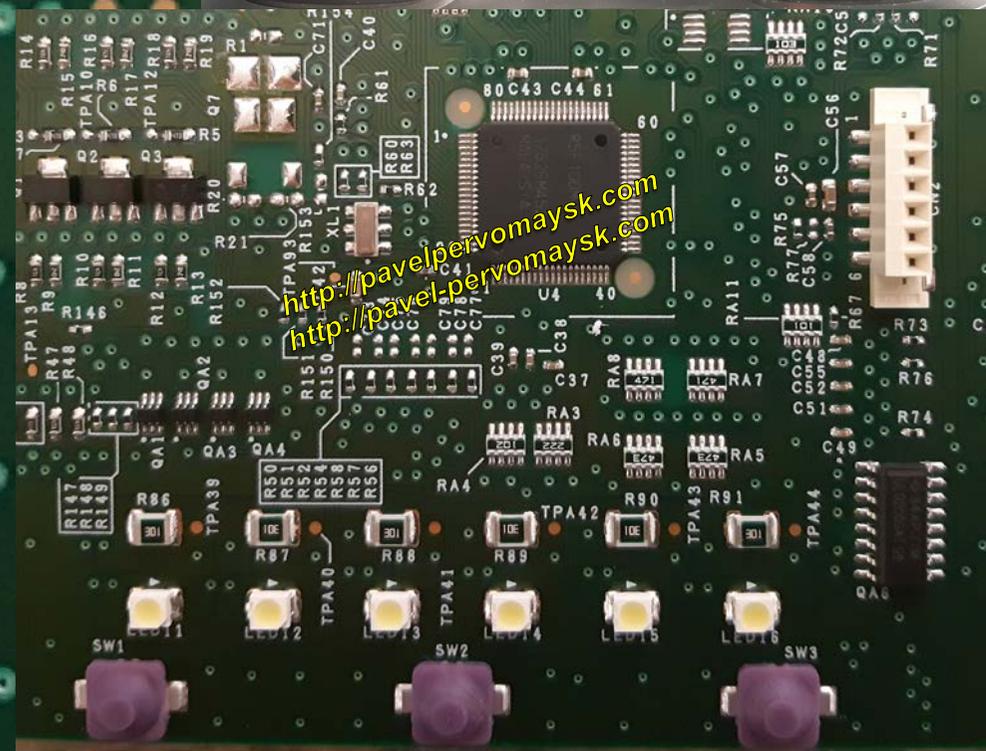
GND

<http://pavelpervomaysk.com>
<http://pavel-pervomaysk.com>



<http://pavelpervomaysk.com>
<http://pavel-pervomaysk.com>

<http://pavelpervomaysk.com>

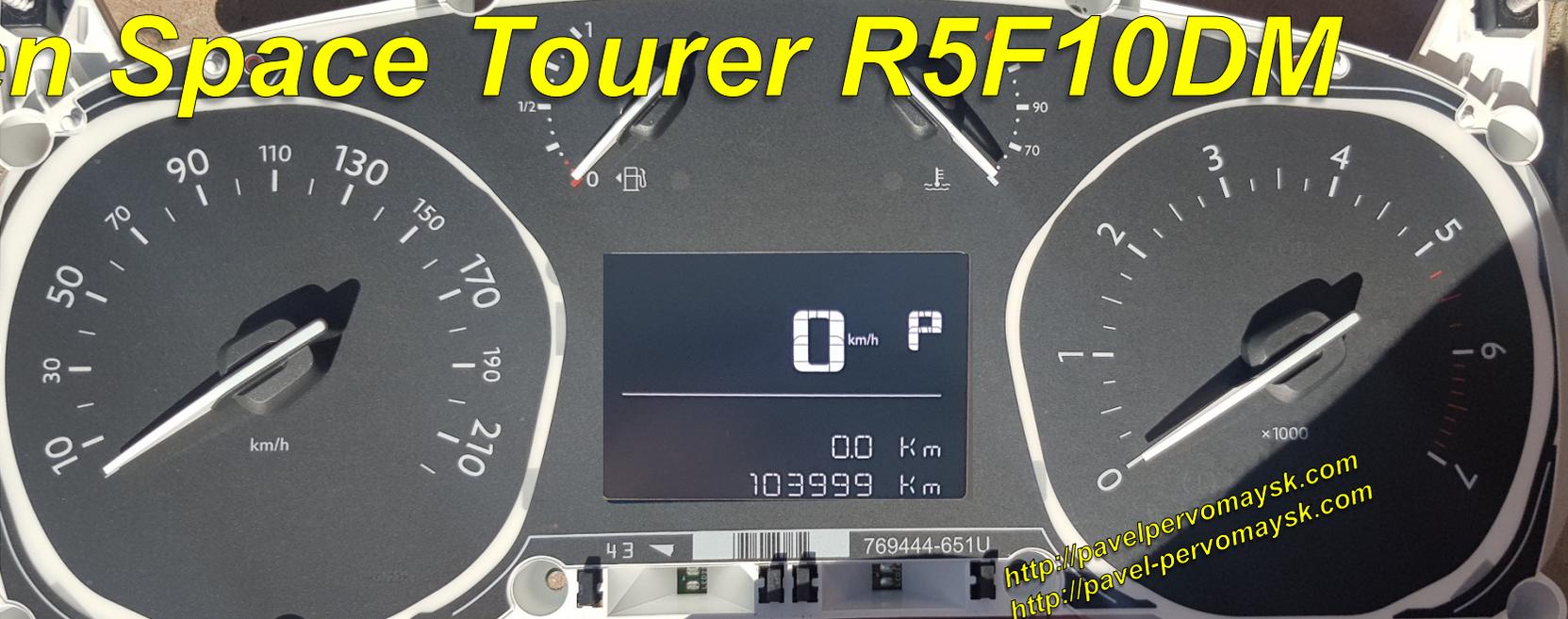


<http://pavelpervomaysk.com>
<http://pavel-pervomaysk.com>

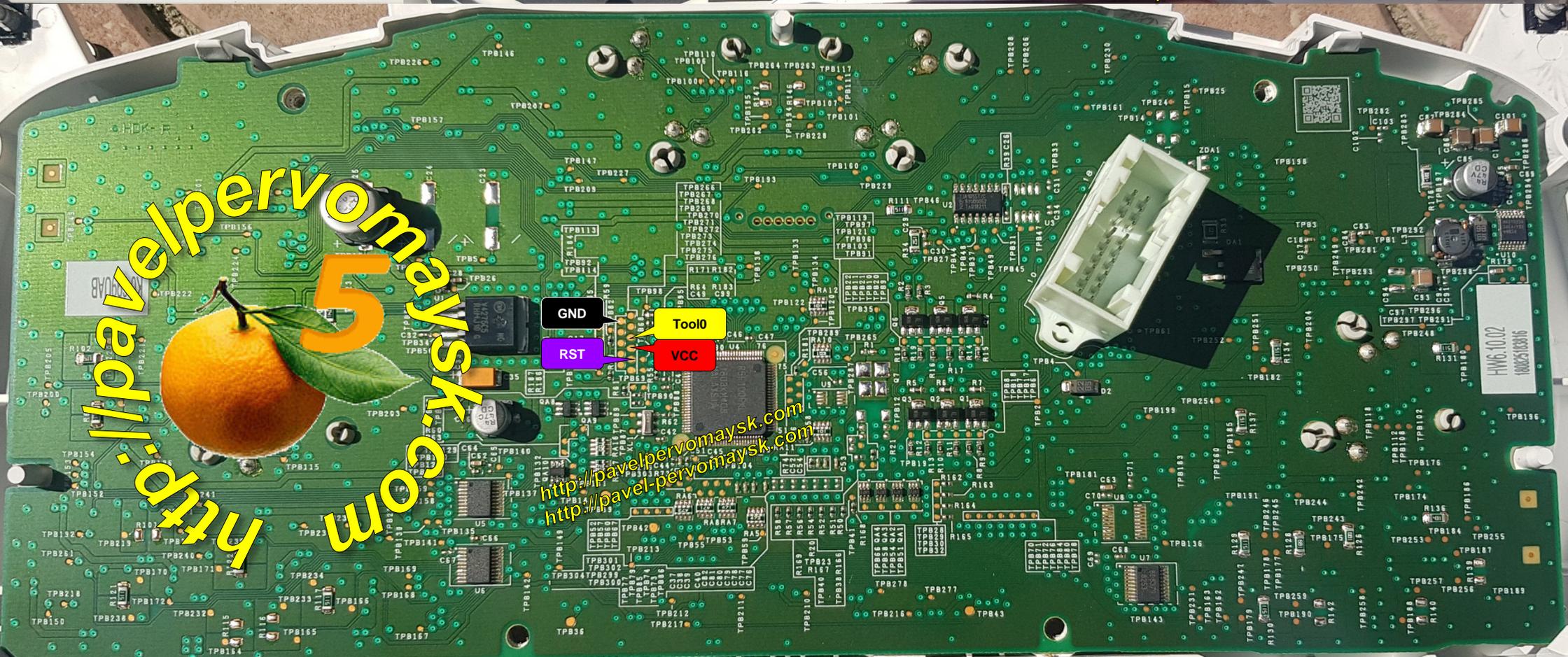
Citroen Space Tourer R5F10DM

N2-KMH 30.08.2018 SN2- 0454394
CEM : YZK CMB N2 CEM01
YZK HW - 06.10.02 SW - 10.11.34.00

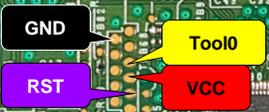
98 239 605 80 00



<http://pavel-pervomaysk.com>
<http://pavel-pervomaysk.com>

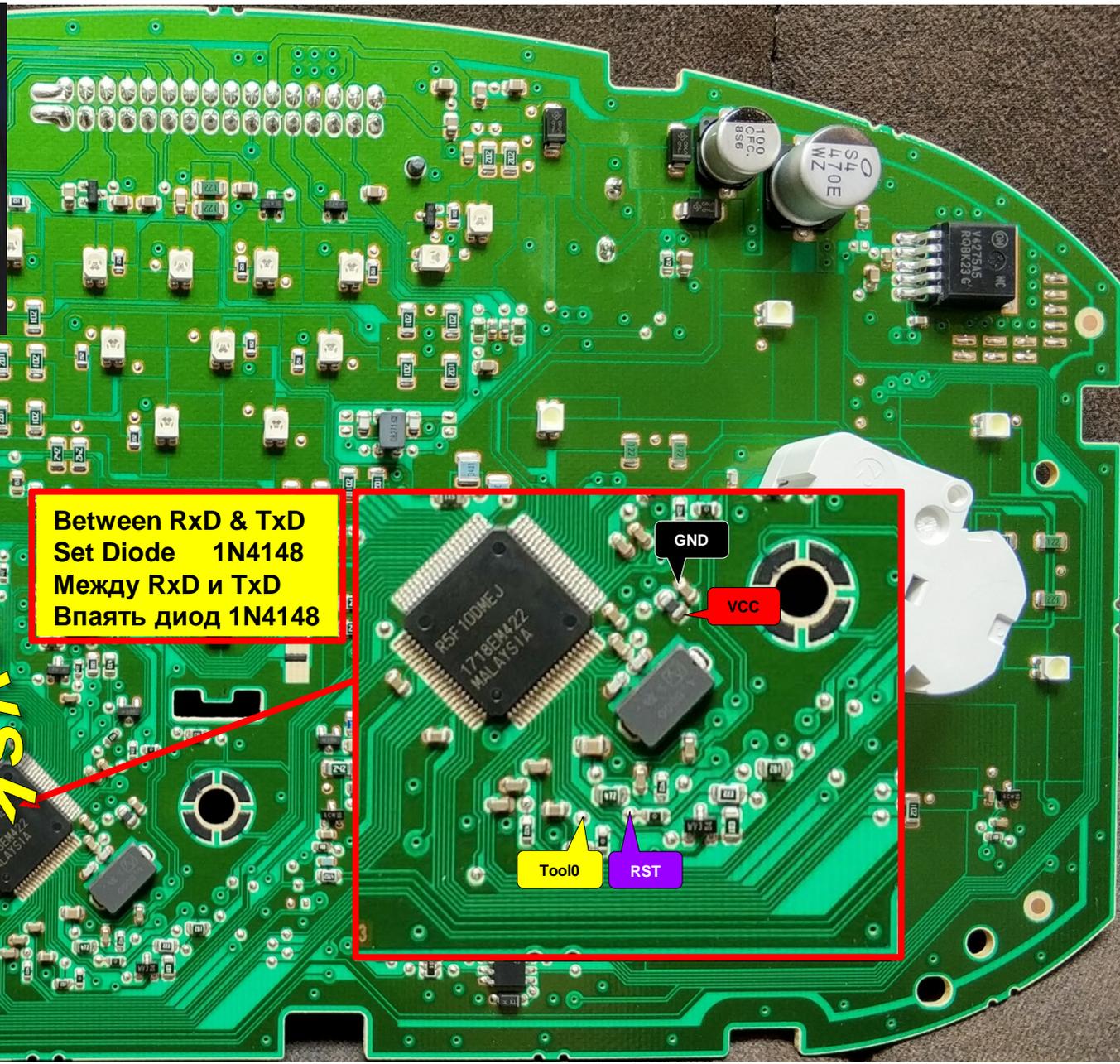


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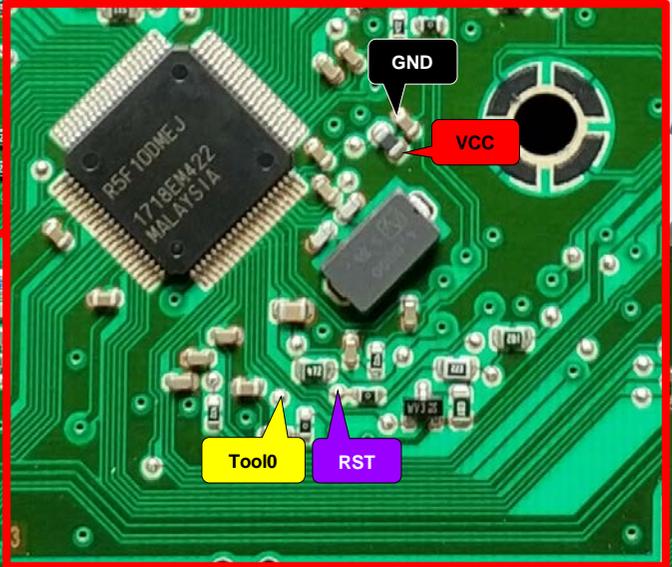


<http://pavel-pervomaysk.com>
<http://pavel-pervomaysk.com>

Proton Saga R5F10DMEJ



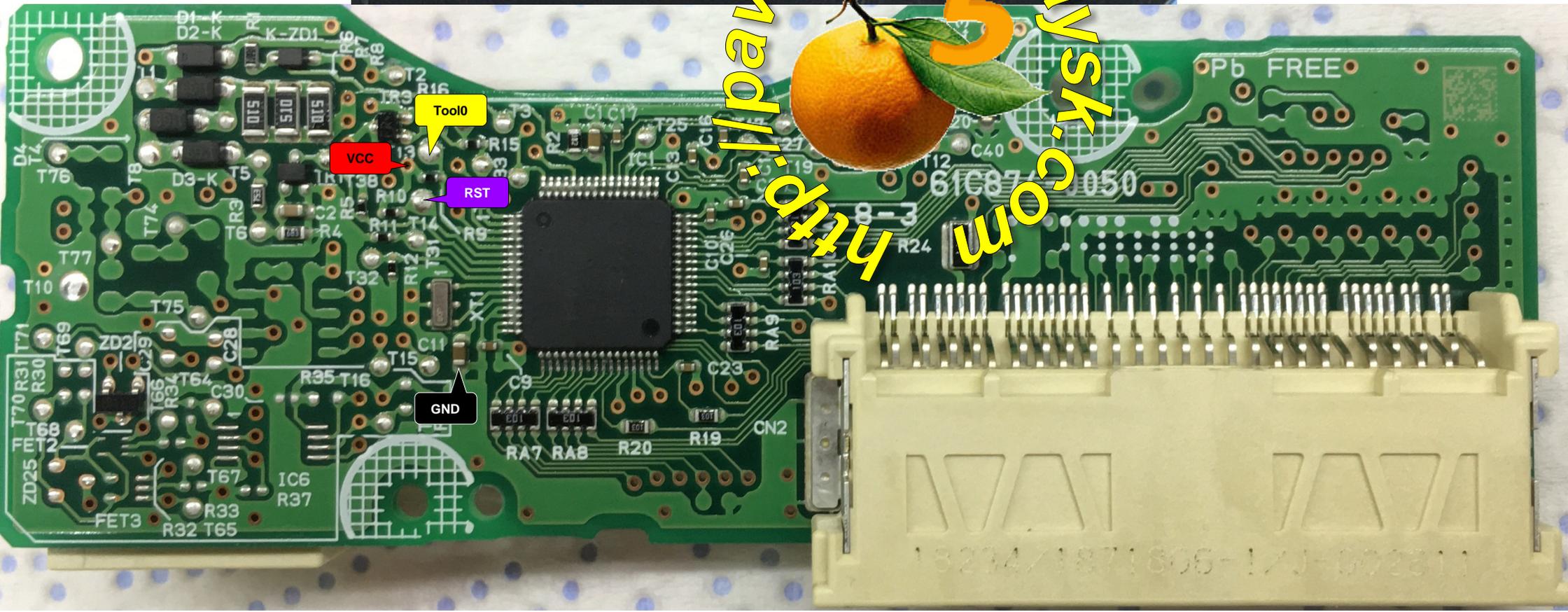
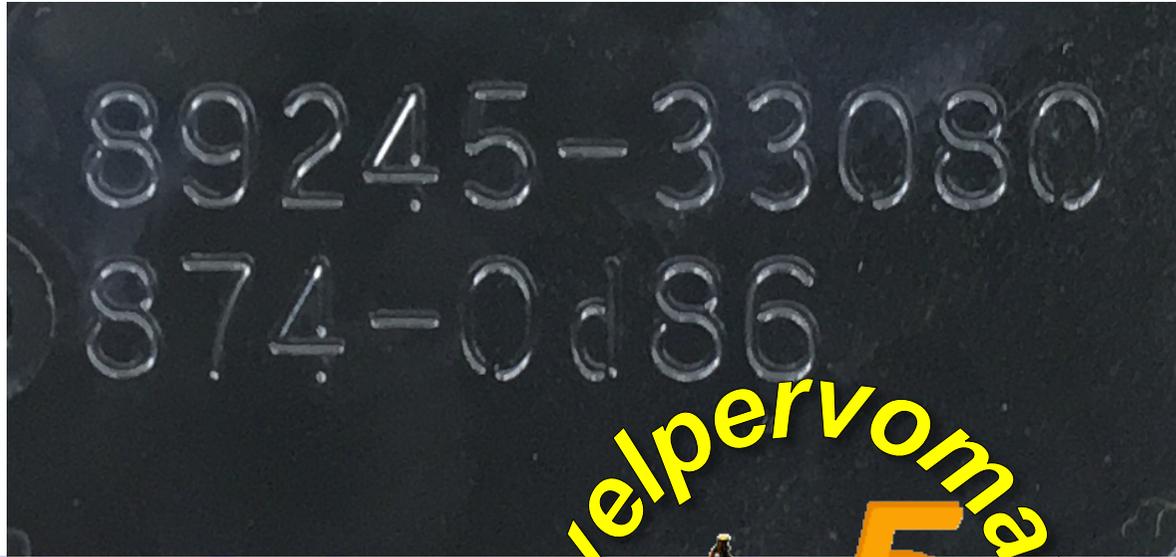
Between RxD & TxD
Set Diode 1N4148
Между RxD и TxD
Впаять диод 1N4148



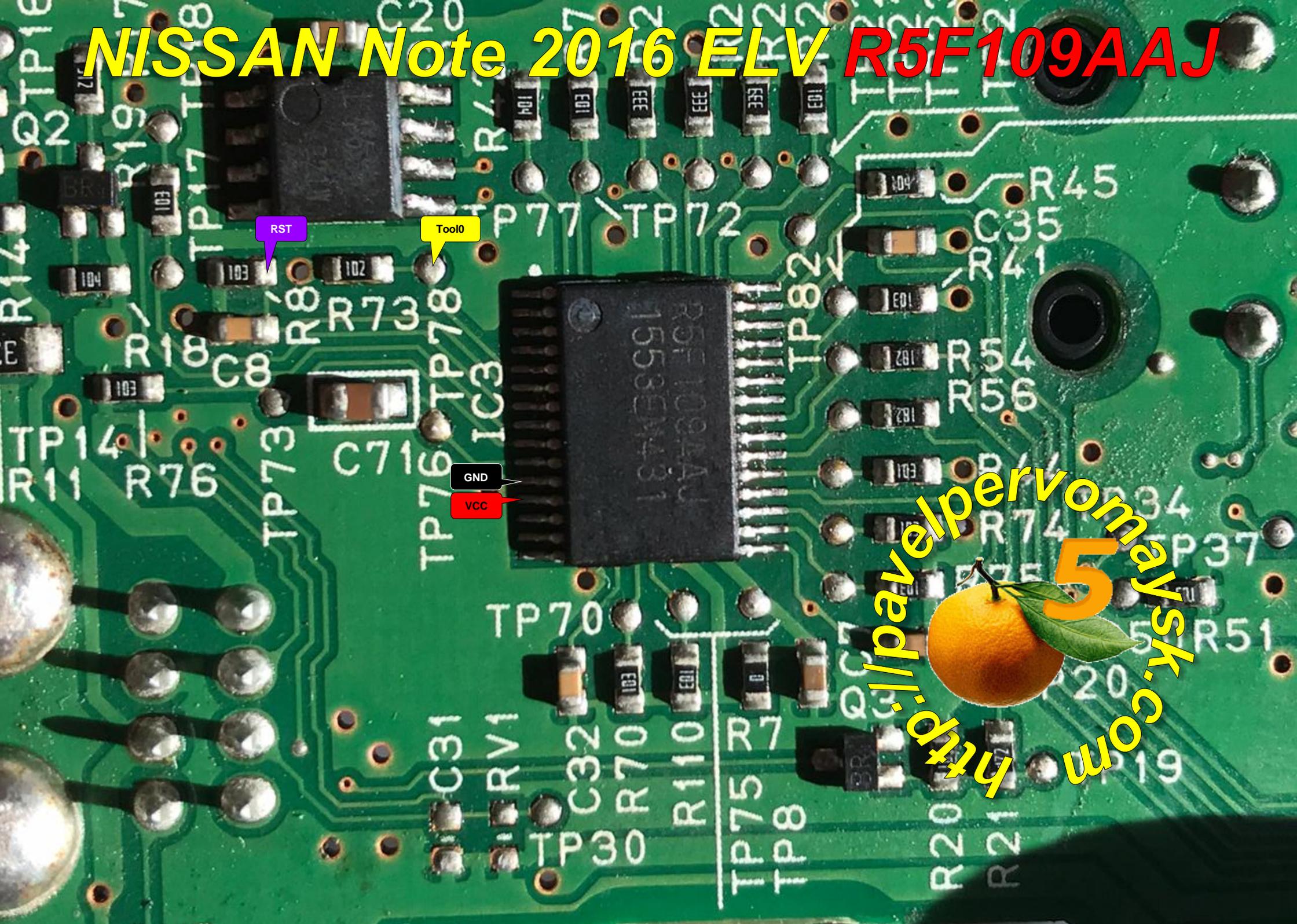
<http://pravelpervomaysk.com>



Toyota Camry V70 R5F10PLJL



NISSAN Note 2016 ELV R5F109AAJ



RST

Tool0

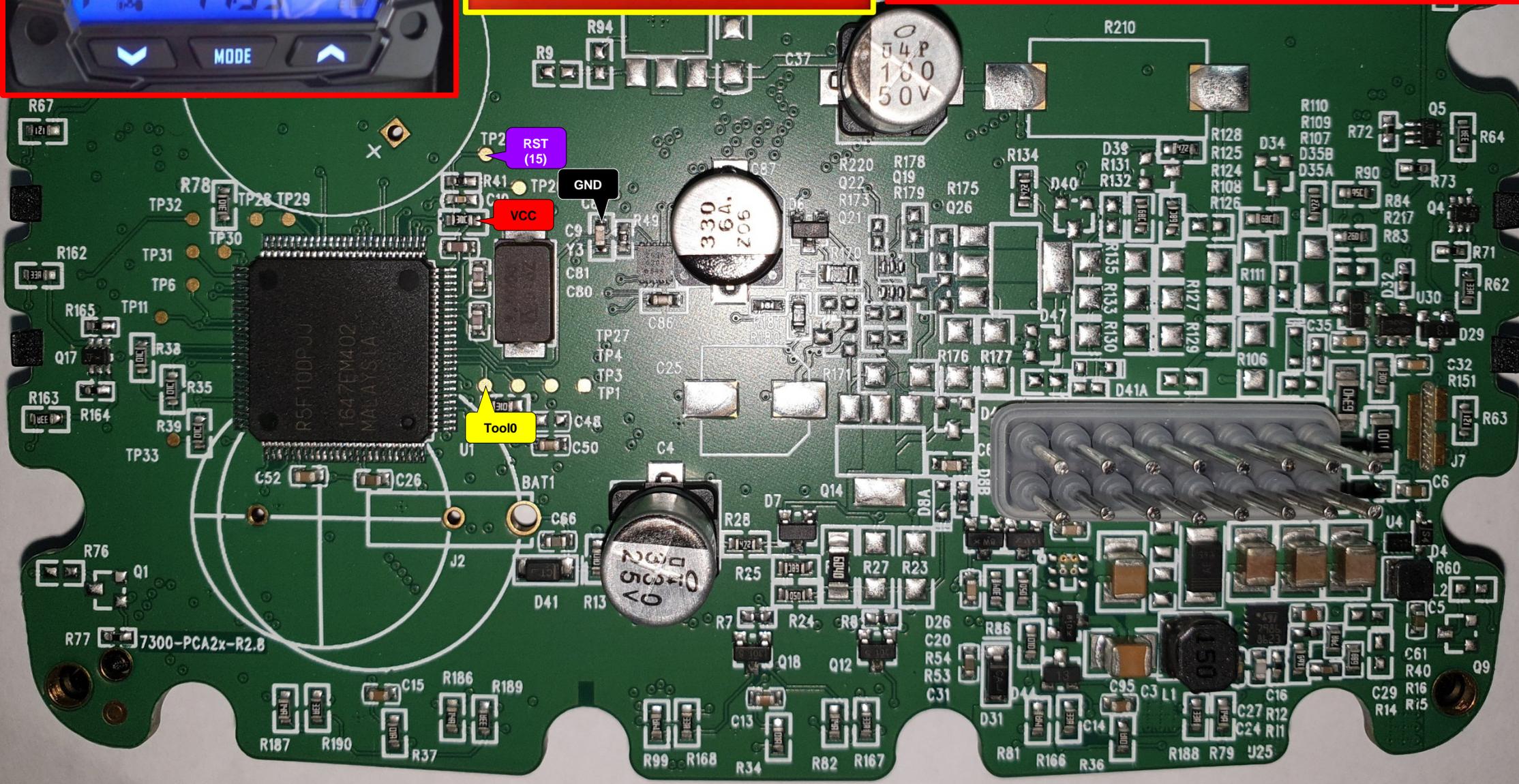
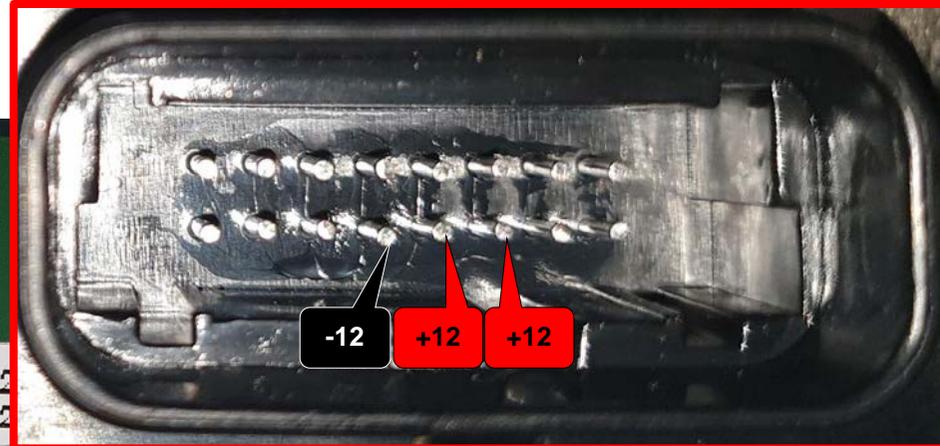
GND

VCC

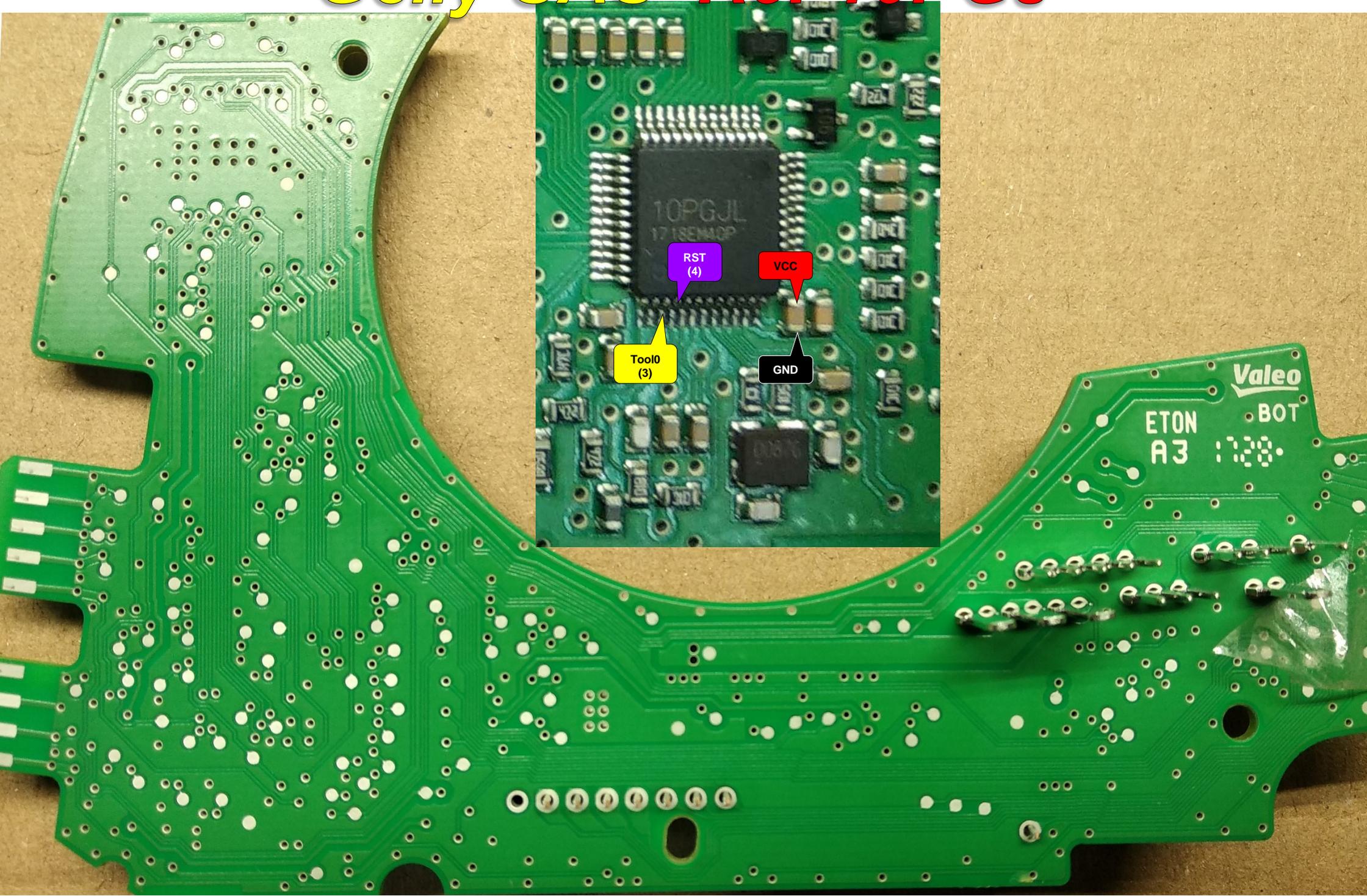
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Polaris R5F10DPJJ



Gelly SAS R5F10PGJ



Tool0
(3)

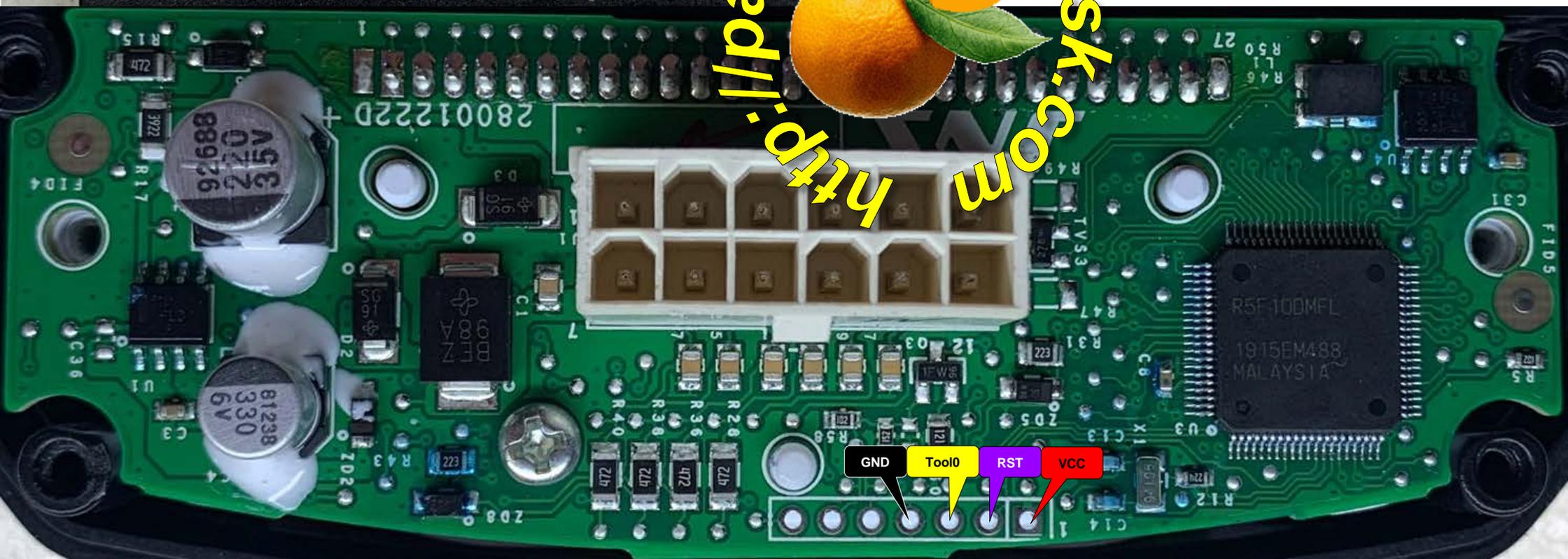
RST
(4)

VCC

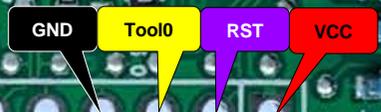
GND

Valeo
ETON BOT
A3 128

Bajaj dominar 400. R5F10DM

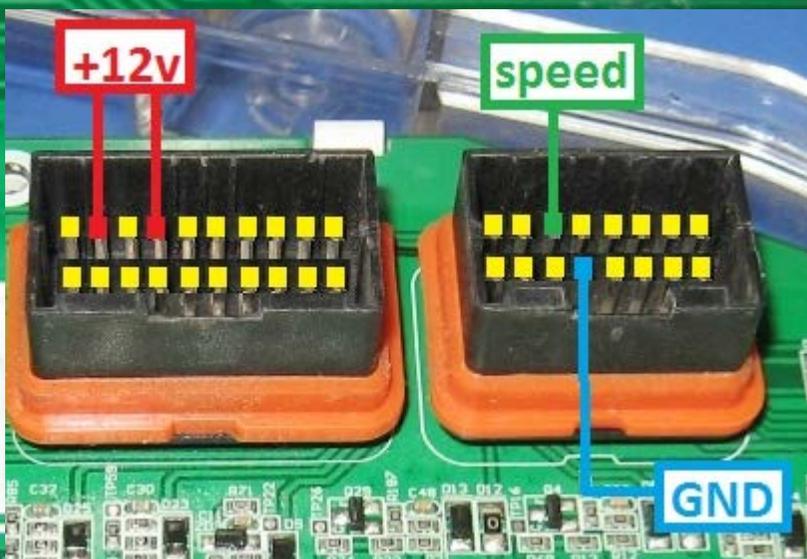
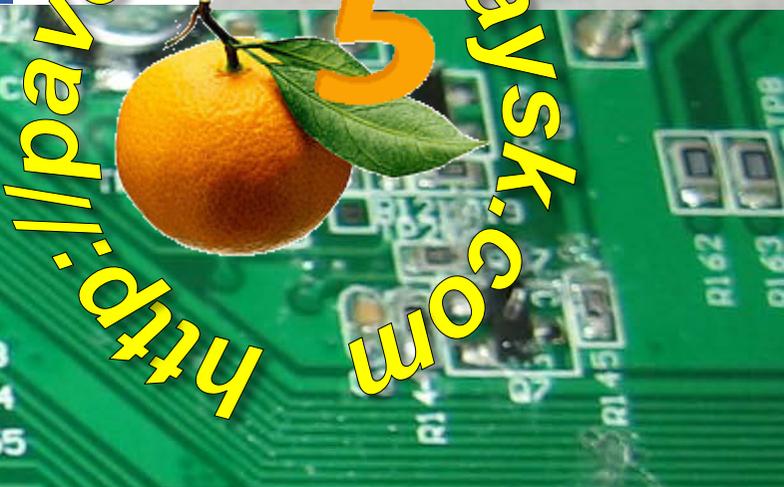
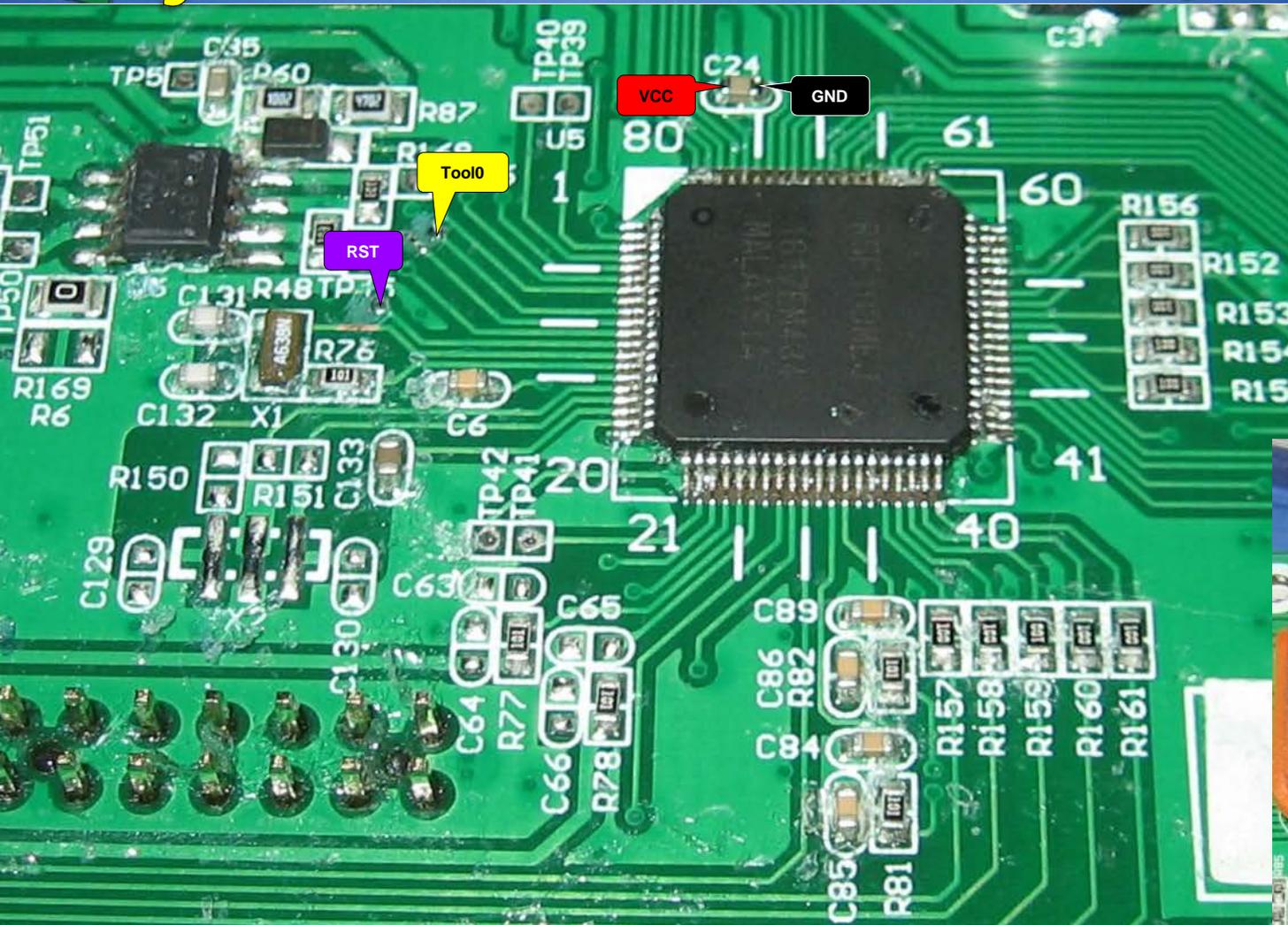


<http://pavelpervomajsk.com>





Kymco AK550 R5F10DM



BMW G07 belt tensioner

R5F10PGJ

