

Repair guide for V260B1-L04 (P/N : BN07-00364A)

In case of panel failure of LCD-TV using BN07-00364A (V260B1-L04) - LE26R32 , LE26R81 , we usually met below symptoms :

- blanc image (white) at startup , correct image appearing after 5-20 min - sometimes over blanc image appear some H-lines , the number of lines and position on display is different at consecutive startups .
- during operation , the image becomes “still” and after turning to white , disappearing .

In both above cases the display is sensitive when torsion it , close to moment the image appear (first case) or “still” (second case) .

The cause of above symptoms is the failure of one of contacts between the first IC-FPCB in the upper-left corner of display and upper long and narrow PCB of display .

Unlike the rest of FPCBs with drivers for vertical lines , this one have some circuits that just passing through it , to some circuits over panel glass , and through these , to the first of three drivers for H-lines on left side of panel glass .

The access to “long-and-narrow” PCB in the upper part of display , and to FPCBs is only possible after removing of front metal frame of LCD display (fixed in 10 screws) .

The T-Con board must also be removed .

The repair solution described below requires good skills , so please don't do it if you haven't done operations of similar complexity .

Also , if you have additional questions , please contact before (radu.tanase@samsung.com) .

In pictures P01, P04, P05,P06 is described the correspondence between pads on first upper H-driver (please note that pads are accessible below H-driver FPCB when LCD display is on the table) .

Attention ! all of these pads (numbered in P01 from 1 to 15) are covered with a green flexible paint . To detect the interrupted circuit , please scratch gently the paint on the center of each pad (P03.jpg) to can contact them with the tester of multi-meter .

I recommend to use for scratch a new surgical scalpel (curved , not straight) . It is very important that the scalpel to be a new one , not a blunt one .

Attention !!! Be careful when scratch center of pads , don't touch with scalpel the thin circuits near the pads .

For easily access to pads and to avoid the dust and foreign materials to enter between backlight and LCD-panel , carefully and gently lift up the driver FPCB and fix it with adhesive tape in vertical position to don't excessive stress the FPCB , but enough to can access the pads with scalpel , tester and soldering iron . If you consider unsafe lifting of driver FPCB , is better to lift the whole LCD-panel (glass) and put it “up side down “ , but take care of any dust and foreign object to avoid dirty the display . Take care also of driver FPCBs between the long upper PCB and display , don't excessive stress them .

The most frequent circuit found interrupted is that one corresponding to pad numbered 10 (P01.jpg) and indicated in P03D.jpg .

For easily measurement , please measure the continuity of this circuit to the pad numbered 10 in P06.jpg , near the connector to T-Con board .

You can read below the normal resistance values for all circuits (all are so big values because of thin circuits on the glass) .

There are also the normal voltage value that can be measured during function and the voltage drop on each circuit (where is not specified , is below 0.1mV)

Please note that pads numbered with 11, 12 , 14 are not connected , so don't measure them .

1 -> 1st line (-5.5V)

2 -> 13Ω (-5.51V , 7mV)

3 -> 17Ω (+21V , 12mV)

4 -> 13Ω (-5.51V , 8mV)

5 -> 50Ω (3.29V , 4.1mV)

6 -> 61Ω (GND , 3.5mV)

7 -> 91Ω (3.3V)

8 -> 84Ω (917mV)

9 -> 84Ω (1.73V)

10 -> 84Ω

13 -> 20Ω (+5.37V)

15 -> 84Ω (3.3V)

In case you find interrupted circuit corresponding to pad 10 (or resistance $\gg 84 \Omega$) , this must be bypassed with a thin wire CuEm ϕ 0.15 mm (thermoplastic insulation preferably) .

Please cut first the wire at 120mm length and tin it with soldering iron (max 1mm) .

Also , tin with soldering iron (adjusted at 270°C) the pad numbered 10 on FPCB , only where paint is scratched (P07.jpg) . Please use normal soldering alloy (40/60) not Lead-free .

All these operations must be done with the display disconnected (and completely isolated from any metal part of table) , using the antistatic bracelet connected to soldering iron ground contact .

Please solder an end of prepared thin wire to pad 10 (P08.jpg , P09.jpg) .

Release the driver FPCB by carefully and gently unstuck of adhesive tape . Don't excessive stress the FPCB .

Prepare a 5mm strip of adhesive tape and stick the FPCB (P10.jpg) .

Position carefully the wire (P11.jpg) , fixing it from place to place with thin (3mm) strips of adhesive tape .

Find the crossing hole numbered 10 in P04.jpg , P05.jpg and tin it with soldering iron .

If you consider difficult to use this point to solder the wire , you can use the pad near the T-Con connector (P06.jpg) – but you must use a longer wire . You also must take care to isolate it along its route .

Solder the end of wire on prepared cross hole (P13.jpg , P14.jpg , P15.jpg) - or to above specified point , and after , fix the rest of wire (P13.jpg) .

In case you don't find at first measurement an evident interruption of circuit corresponding to pad 10 , before solder the wire to cross hole connect again the ohmmeter between end of wire and pad 10 near connector , and gently touch the side of upper driver FPCB (the side near the display side) and look for a resistance variation . If you don't observe any variation , you must search another interrupted circuit , and bypass it too .

(10 must be bypassed anyway) .

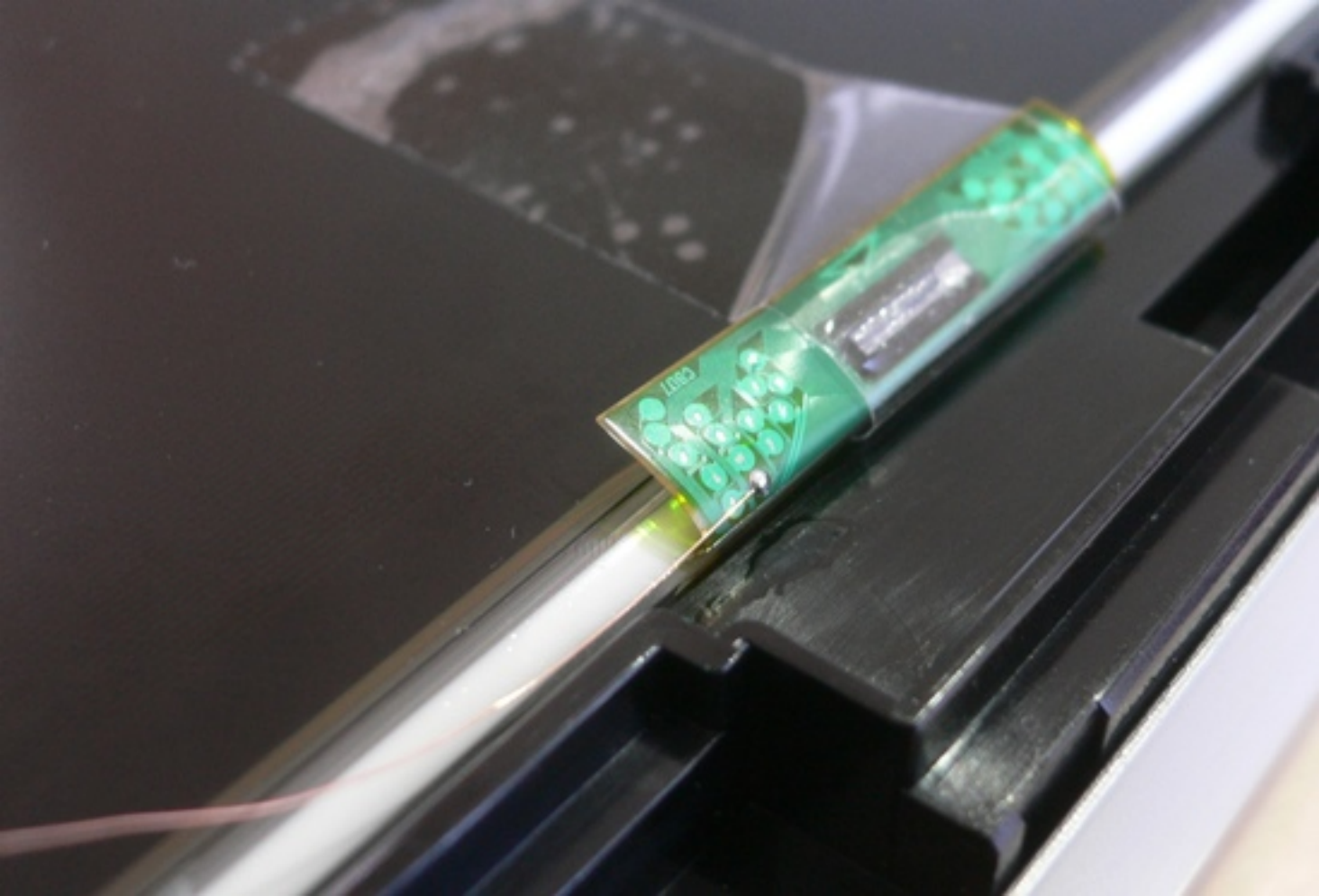
Please don't hesitate to ask me if you have any questions (radu.tanase@samsung.com) .

After completing a repair , please send a photo of display label (like P16.jpg) to above e-mail address .

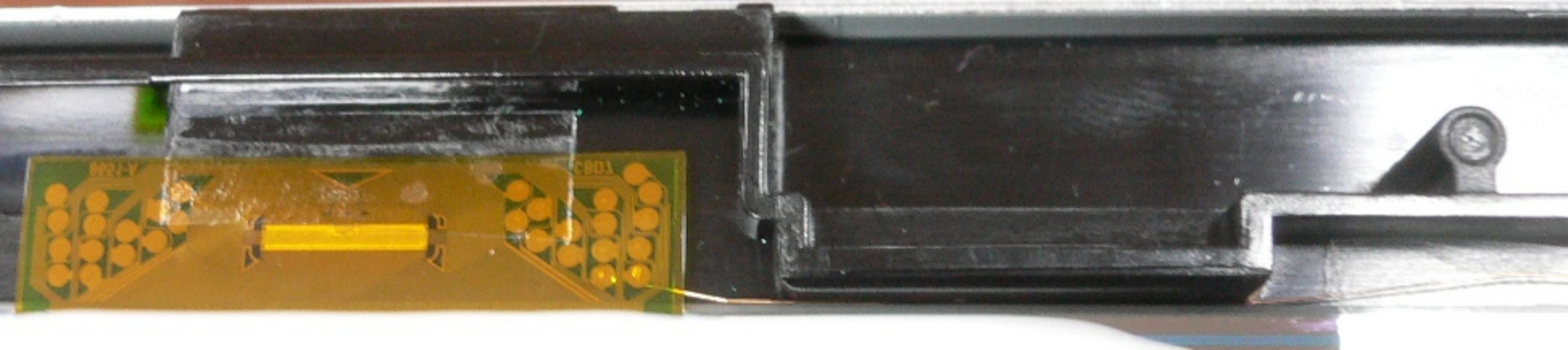
Thank you .

Radu Tanase



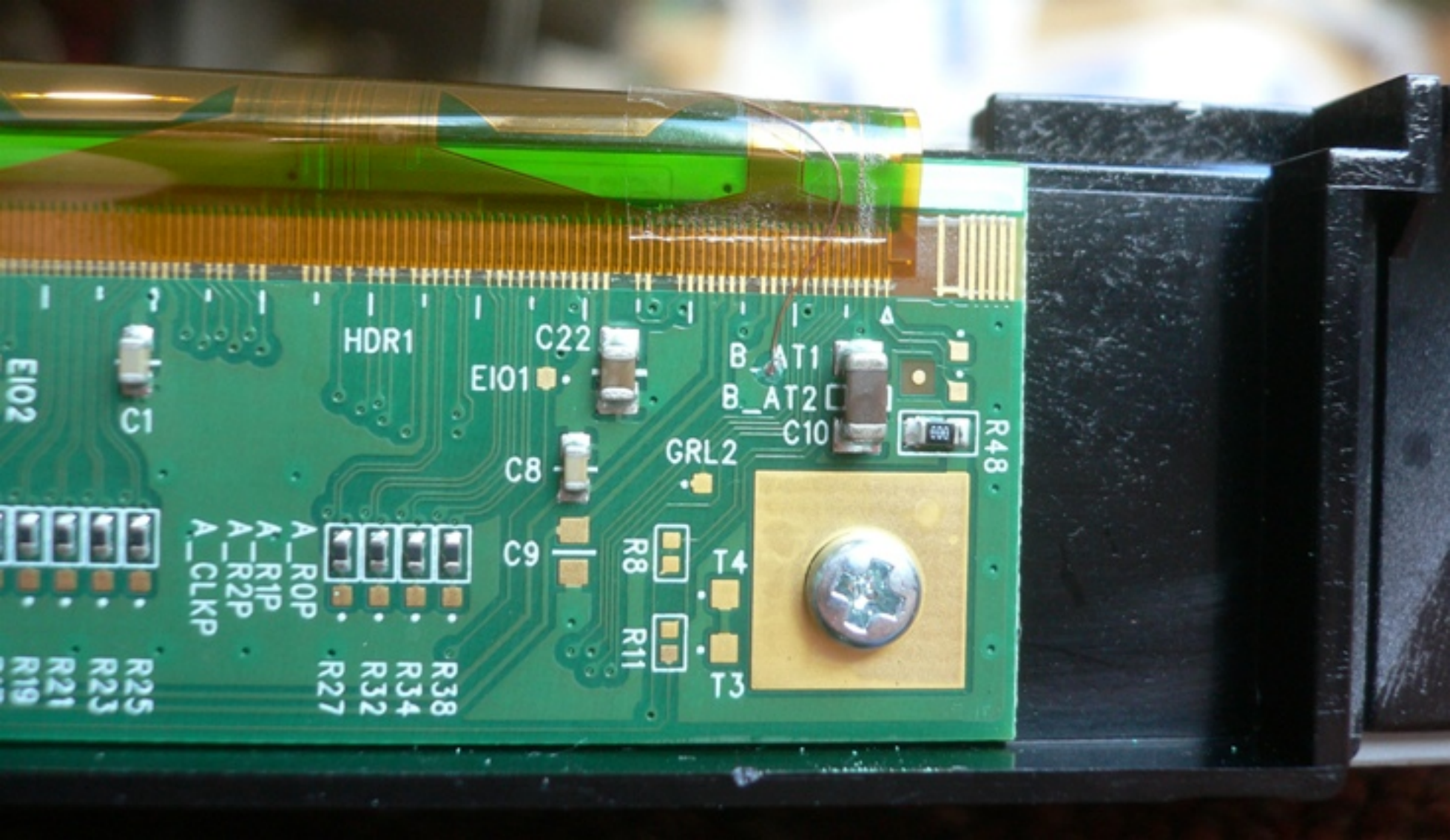












BAT1

BAT2

C10

BAT1

BAT2



CHI MEI
OPTOELECTRONICS

V260B1 -L04

Rev. C2



C6C2C4281Q21157



CM26B14266TN3NPC81O1183



E207943

MADE IN CHINA

LEOO

RoHS



M\$46-D012331-L\$W5151100181N2749



11

12

13

14

15

CB07

7

8

9

10

1

3

2

5

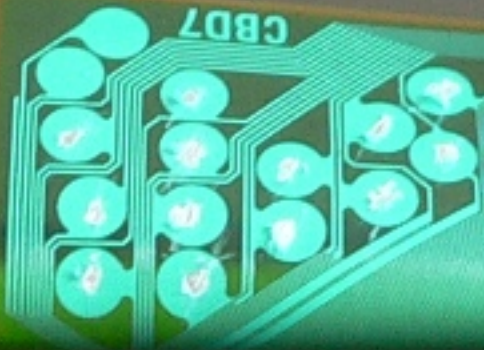
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4

8651-A



CBD7



8651-A



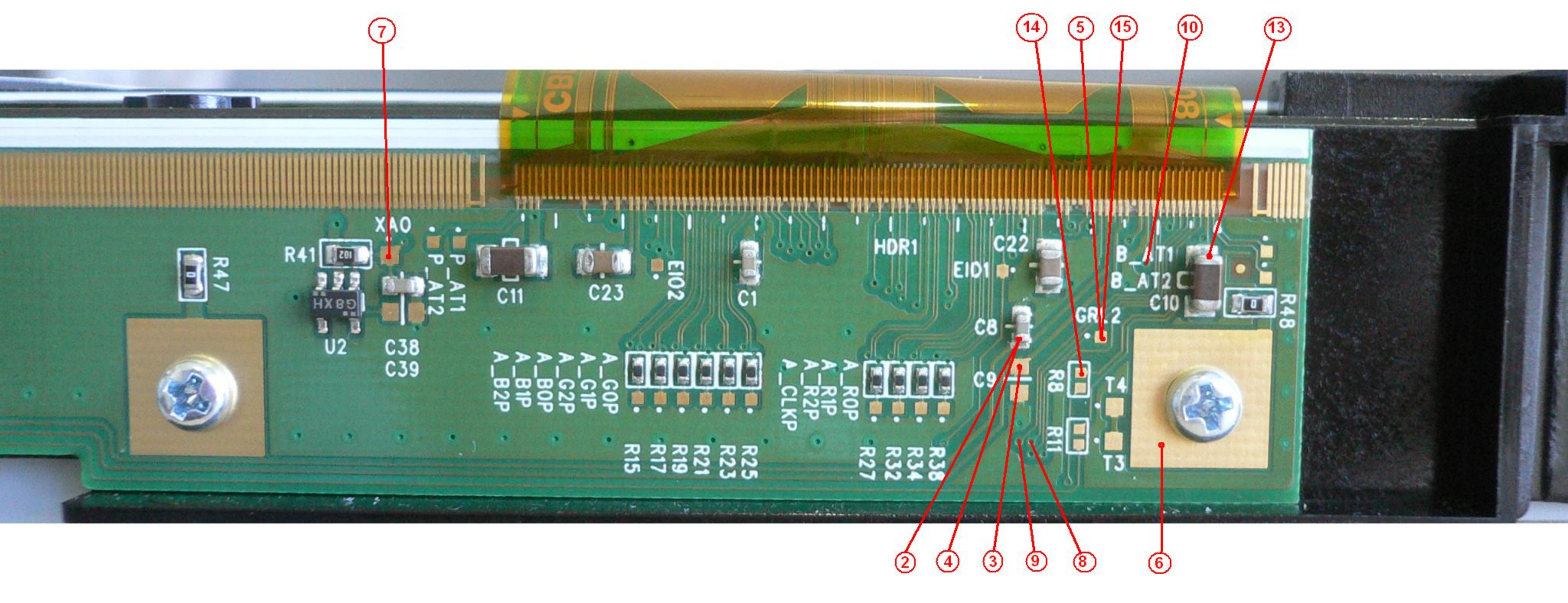
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CBD7

8651-A





7

14

5

15

10

13

R47

R41

U2
HX89

XAO

P_AT1
P_AT2

C11

C23

EIO2

C1

HDR1

EIO1

C22

B_AT1
B_AT2

C10

R48

C38

C39

A_GOP
A_G1P
A_B0P
A_B1P
A_B2P

R15
R17
R19
R21
R23
R25

A_CLKP
A_R0P
A_R1P
A_R2P

R27
R32
R34
R38

CB

C9

R8

R11

GR2

T4

T3

2

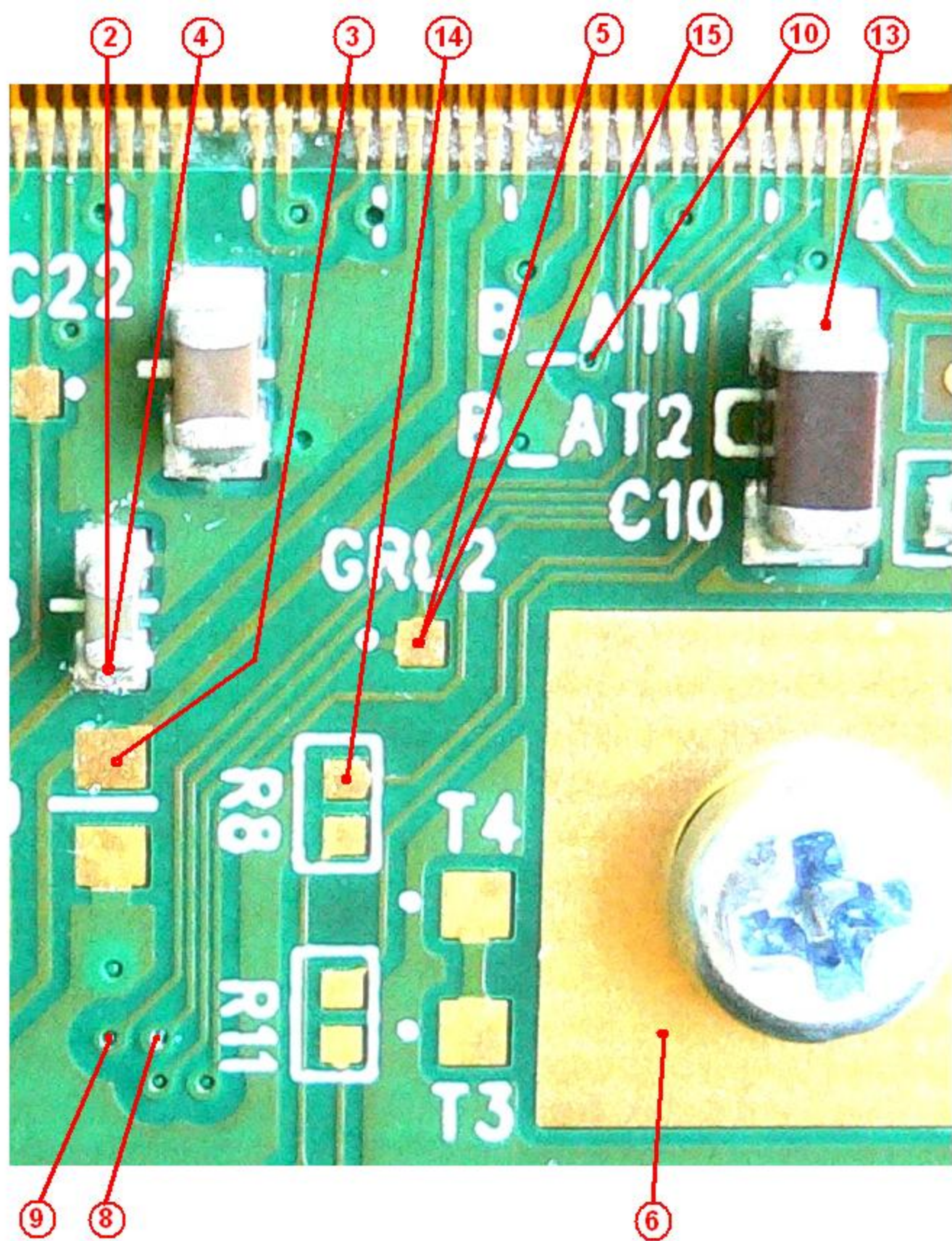
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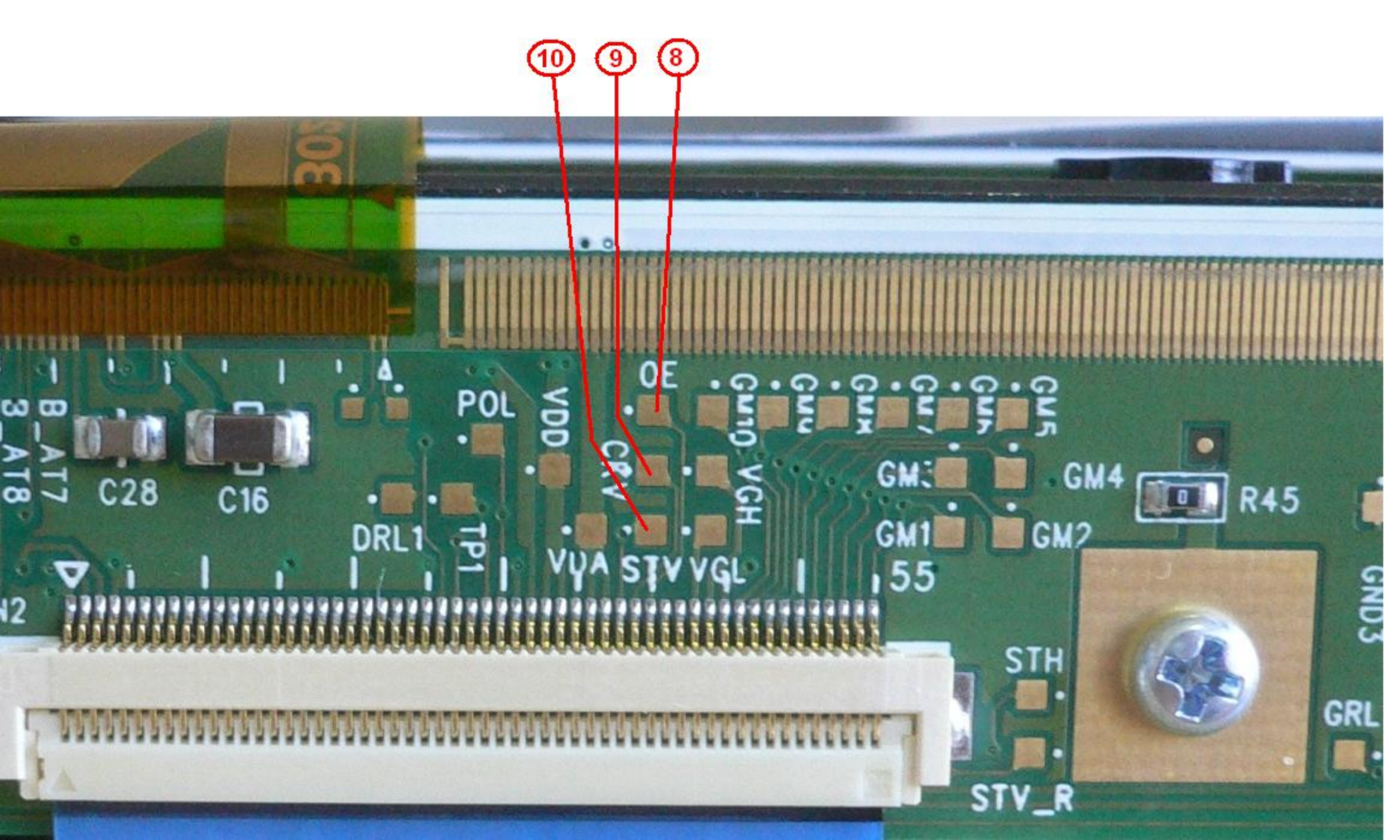
3

9

8

6





10

9

8

OE

VGA

STV

POL

VDD

GM10

GM9

GM8

GM7

GM6

GM5

GM3

GM4

GM1

GM2

55

C28

C16

DRL1

TP1

R45

STH

STV_R

GRL

GND3

B_A17

A18

A18

A2