

## **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](mailto: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** -> 1<sup>st</sup> 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  $\phi$  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 ) .

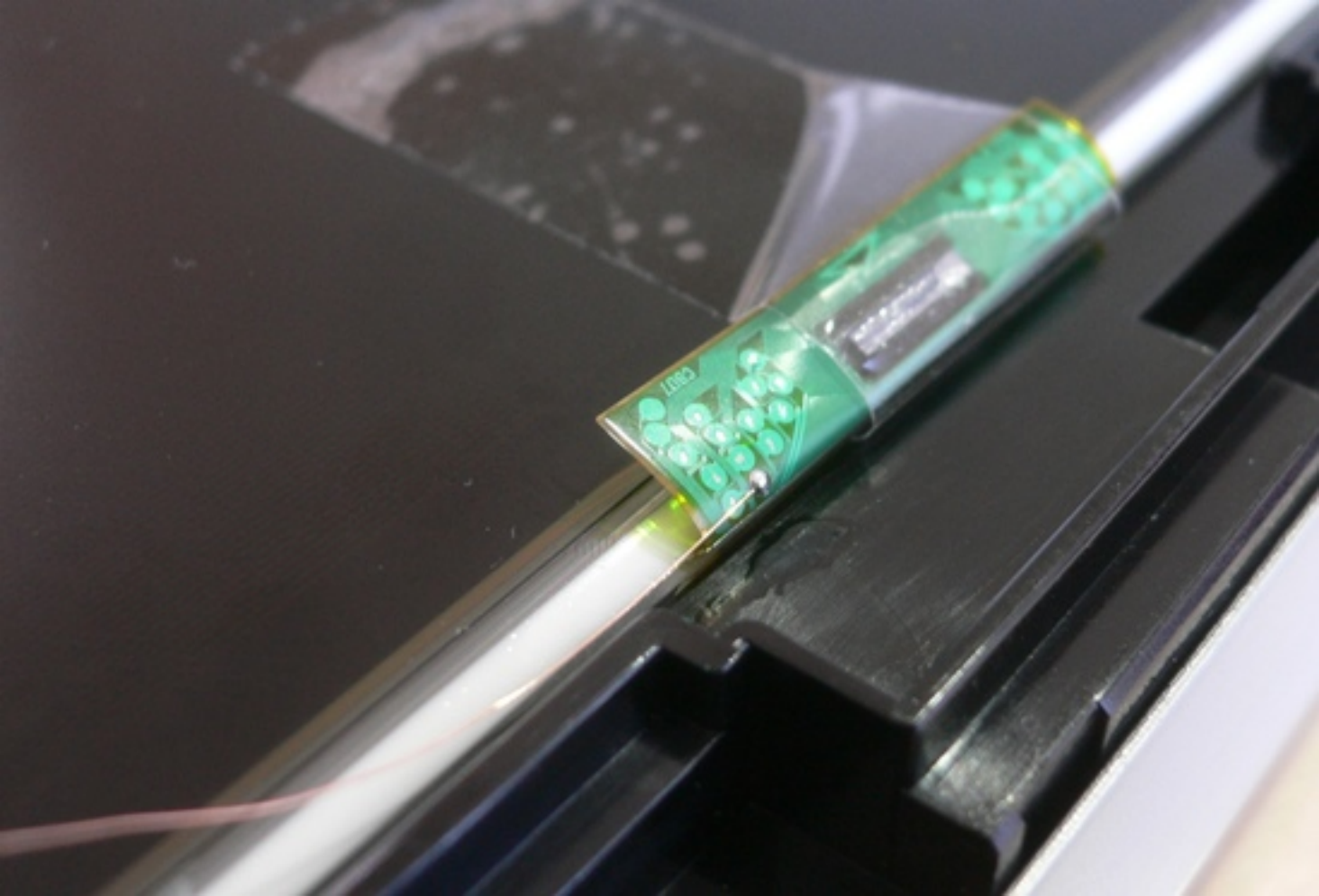
Please don't hesitate to ask me if you have any questions ( [radu.tanase@samsung.com](mailto:radu.tanase@samsung.com) ) .

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

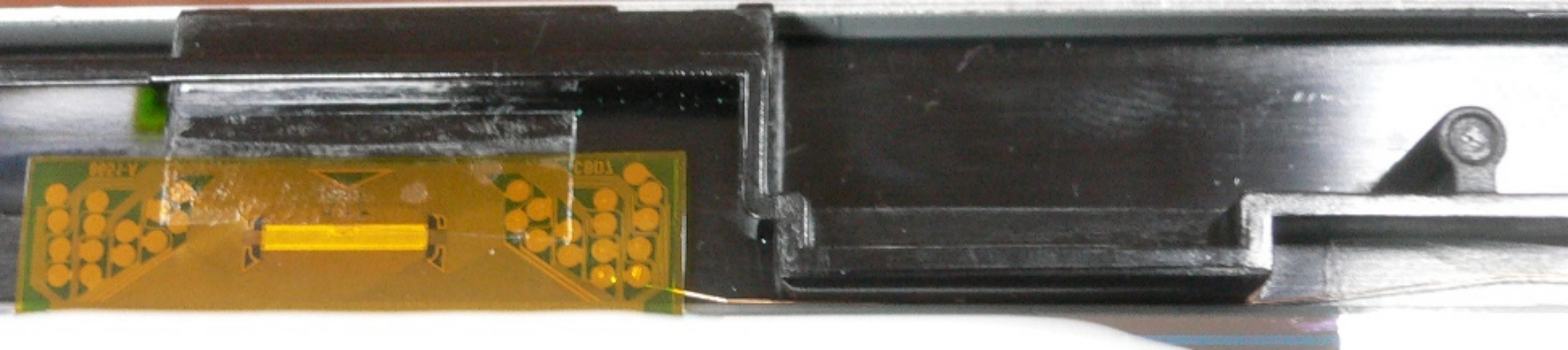
Thank you .

Radu Tanase





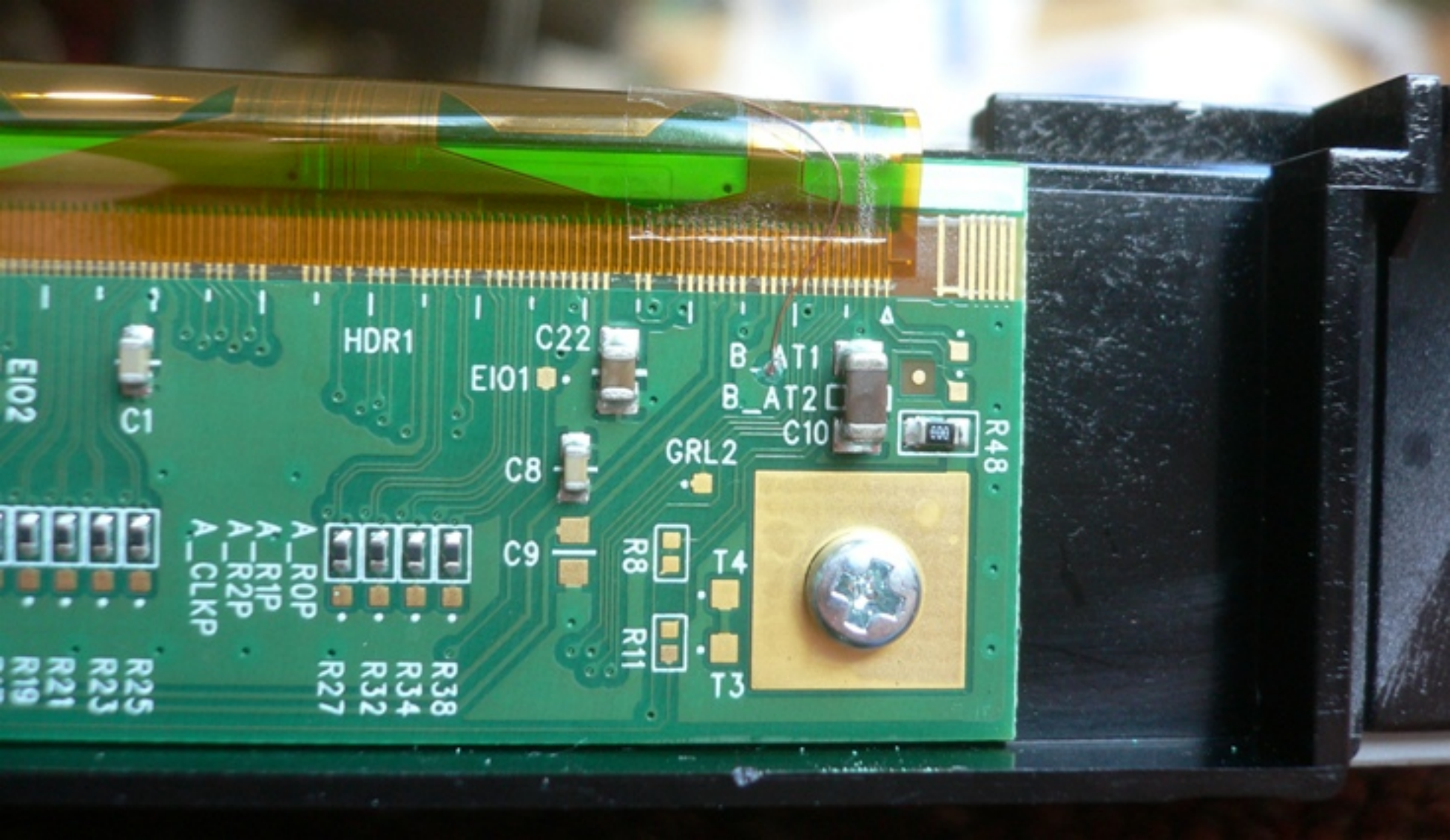












E102

C1

HDR1

E101

C22

B\_AT1

B\_AT2

C10

R48

GRL2

C8

C9

R8

R11

T4

T3

A\_R0P  
A\_R1P  
A\_R2P  
A\_CLKP

R27  
R32  
R34  
R38

R19  
R21  
R22  
R25

BAT1

BAT2

C10

B AT1

B AT2



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

5  
6

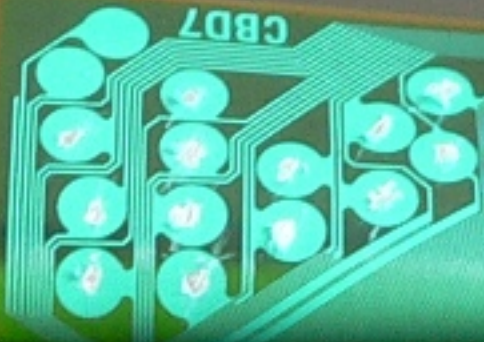
3  
4

1  
2

8651-A



CBD7



8651-A



8651-A



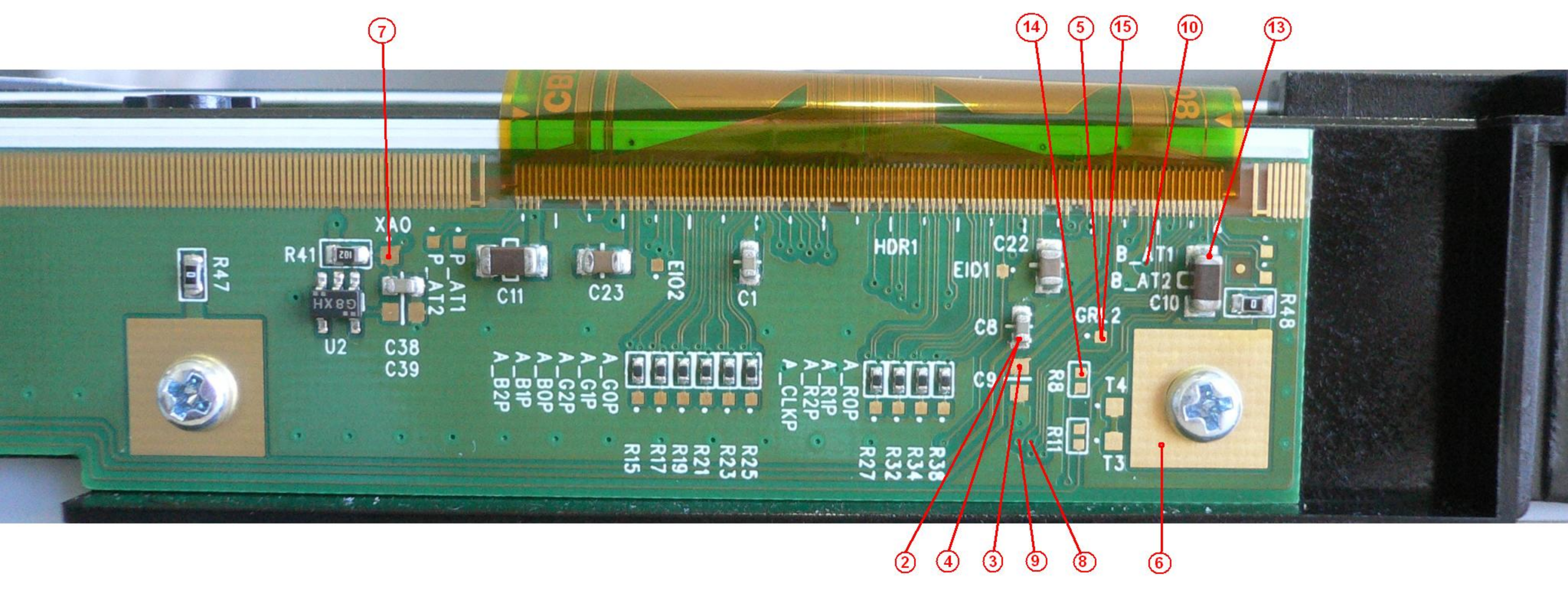


CBD7

8651-A







7

14

5

15

10

13

R47

R41

U2  
HX8G

XAO

P\_AT1  
P\_AT2

C11

C23

E102

C1

HDR1

EID1

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

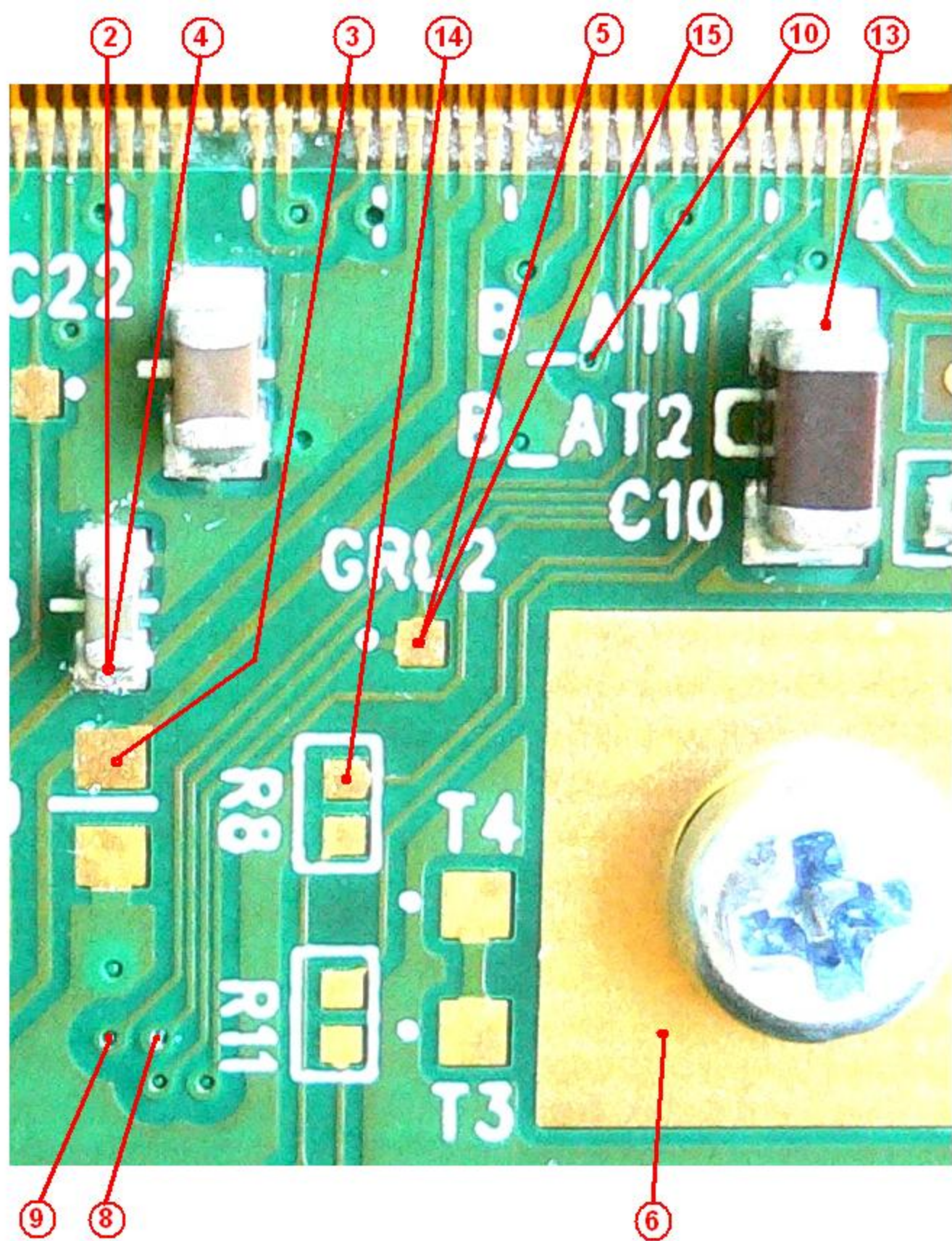
4

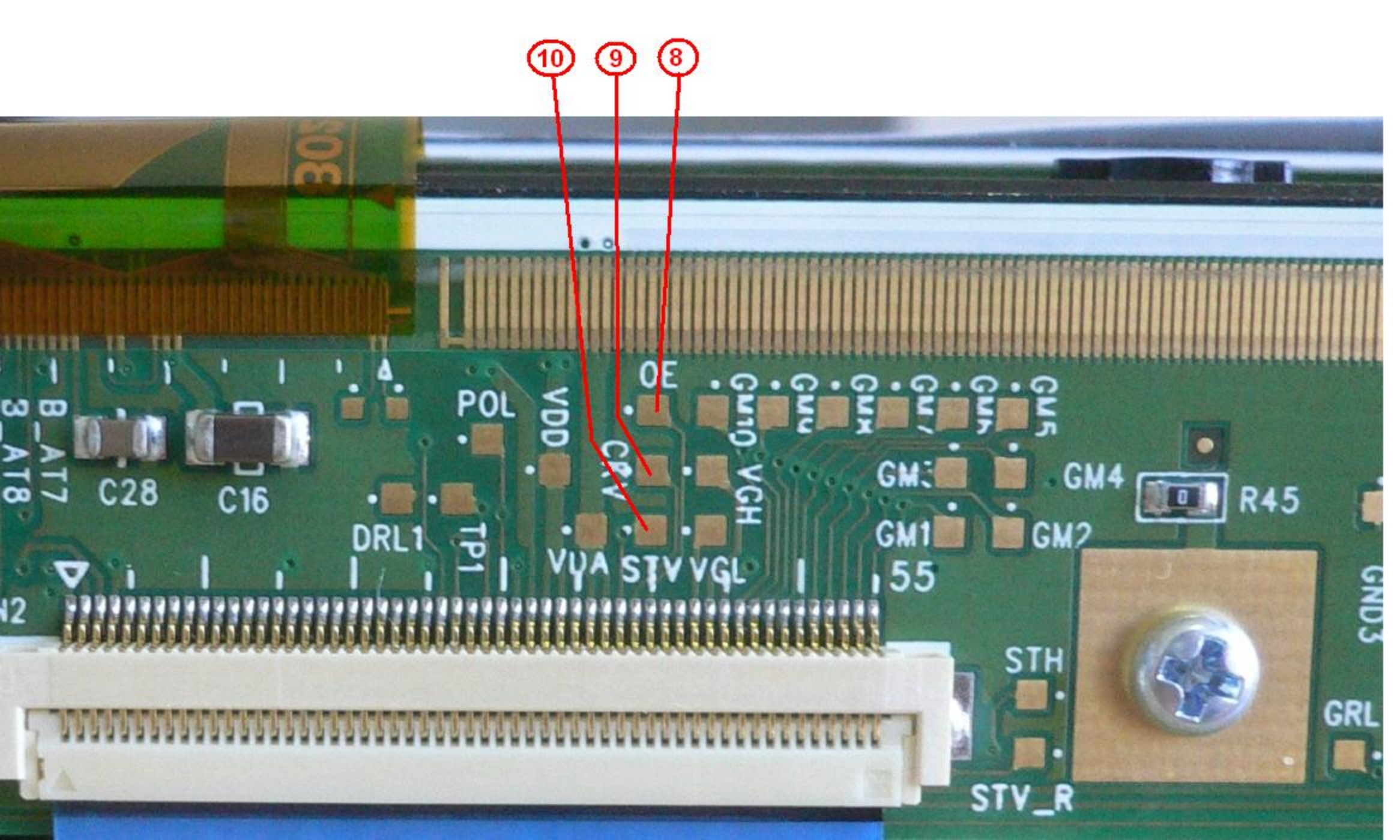
3

9

8

6





10

9

8

POL

VDD

OE

OE

GM10

GM9

GM8

GM7

GM6

GM5

GM3

GM4

GM1

GM2

VVA

STV

VGL

55

C28

C16

DRL1

TP1

R45

STH

STV\_R

GRL

GND3

B\_A17  
A18

A2