

- ◀▶ Converter introduction
- ◀▶ Converter conversion board introduction
- ◀▶ Conversion diagram of small board connection
- ◀▶ Converter connection tips
- ◀▶ Common motherboard interface diagram

This converter uses aluminum alloy outer shell, easy to carry, while 2K, 4K compatibility is excellent, it is important that the interface protection circuit through hundreds of tests to protect the perfect, tested, is the wrong screen power supply into the LVDS input pin Will not burn the converter, unlike other brand converter also need to be accompanied by another hundred yuan protection plate, do not spend money, but also lead to complex connections, affecting the appearance, carrying more inconvenient, we are integrated protection design, as Your convenience saves you money at the same time!

TV160第7代(显示屏版)

LVDS接口

Vbyone-群创*LG

Shell: aluminum alloy shell, after high temperature sandblasting, wear-resistant, anti-fingerprint;

COLOR: TURQUOISE, HIGH-END ATMOSPHERE, ON THE GRADE;



7英寸高清屏
1024*600

INPUT INTERFACE PROTECTION, EVEN IF THE SCREEN POWER WRONG ACCESS, WILL NOT BURN THE CONVERTER, UNLIKE OTHER BRANDS REQUIRE EXTERNAL PROTECTION BOARD CONVERTER, MORE CONVENIENT AND PRACTICAL, MORE YOU SAVE MONEY.

电源



4K模式



2K模式



RES复位



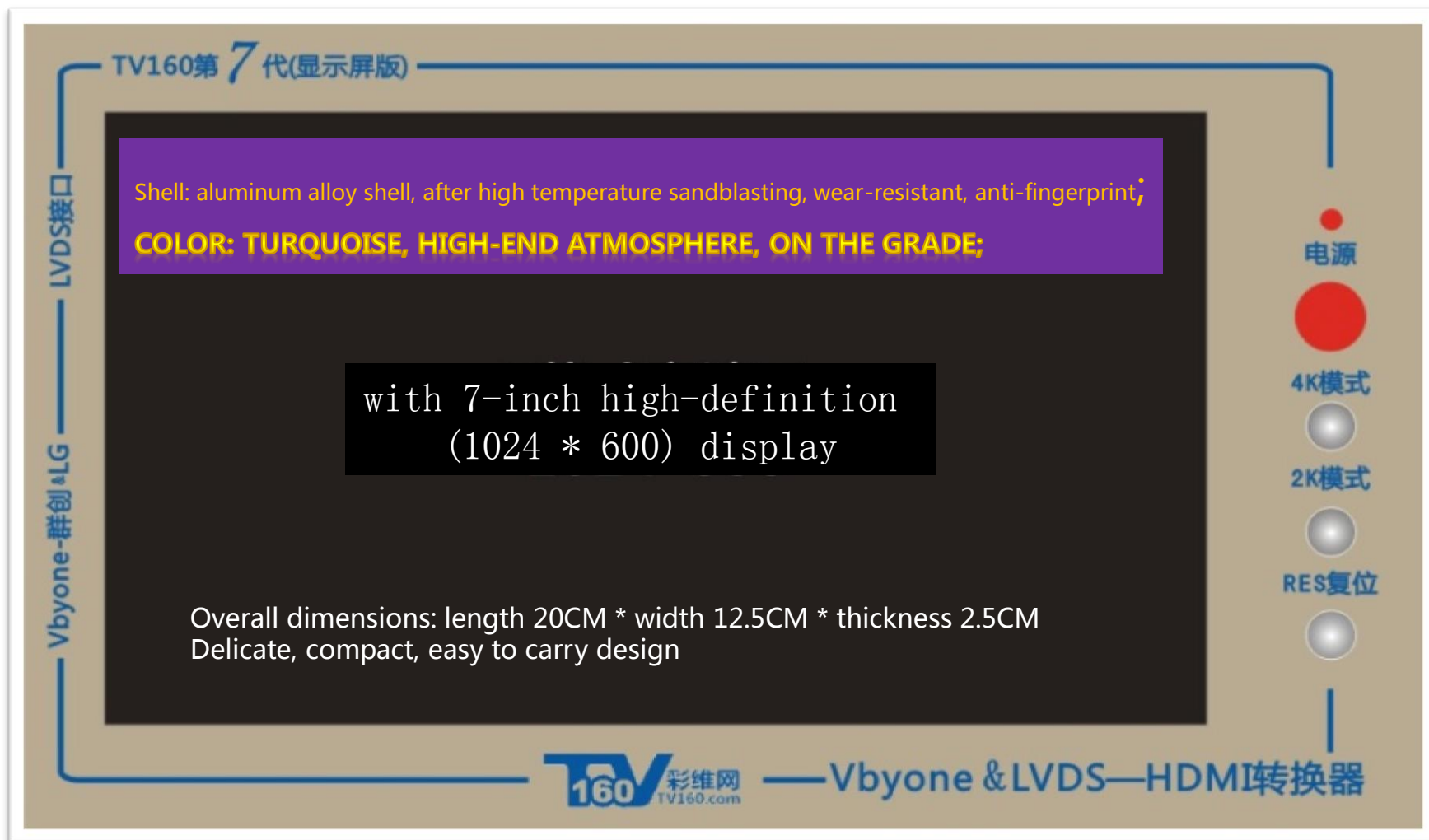
Product description:

Welcome to buy and use "TV60-7 Generation LVDS & Vbyone-HDMI Converter" With the development of LCD TV technology, the movement panel shows the characteristics of TTL (LVDS), V-by-One (TTL) and diversified screen and screen parameters (same hardware and different screen parameters). At present, maintenance user machines are generally used to pull back the whole machine or disassembled maintenance, in which the risk of screen breaking and the cost of tooling screens are high. To this end, TV160-7 generation LVDS & Vbyone-HDMI converter is a practical solution that can support various brands (Skyworth, Hisense, Changhong, TCL, LG, Samsung, Konka, Haier, and other brand-name machines) Motherboard test, As long as it is not a motherboard with T-CON driver board, LVDS signals and 4K Vbyone signals all support, The converter compatibility, small size, beautiful appearance, easy to carry and so on.

According to the statistics, the LVDS and V-by-One signal formats currently occupy a large proportion of TVs, and the LVDS and V-by-One signal formats of the respective movement boards are different. Among them, the LVDS signals include VASA, JEIDA Format, 6bit, 8bit, 10bit wide, 60Hz, 120Hz, 240Hz screen refresh rate, 1366 * 768, 1920 * 1080 resolution, and different 2K screen manufacturers LVDS interface line sequence is different; V-by-One signal has 60Hz, 120Hz screen refresh rate, 4, 8, 16 signals, different 4K screen body V-by-One interface line sequence is also different. Converting all these LVDS and V-by-One to standard HDMI 1.3 signals is of great importance to the factory and maintenance personnel, saving a lot of tooling screens, Because the converter with a 7-inch high-definition display, home test motherboard repair more convenient.

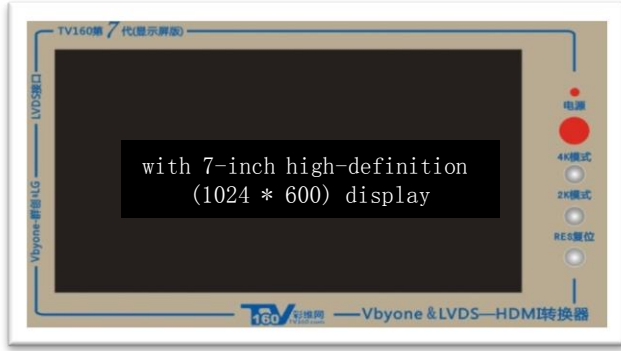
Product description:

The converter mainly includes a set of converter host, a power adapter, LVDS adapter plate 4, V-by-One adapter plate 3, the converter host physical photos are as follows:



TV60-7 generation converter product

- 1, equipped with 7-inch high-definition (1024 * 600) display can be directly displayed on the motherboard images sent at the same time output 1080P / 60Hz HDMI can be directly connected to the external display or TV;
- 2, support for 2K television products, single and double line of 60Hz, 120Hz, 240Hz resolution LVDS signals;
- 3, support 4K TV products V-by-One (including 4, 8, 16) signal conversion into full-screen output, compatible;
- 4, Automatic recognition LVDS, V-by-One signal, through the key to LVDS (2K mode), V-by-One (4K mode) cycle switching;
- 5, wide power input design, support 5V-12V adapter (**recommended 5-6V / 2A or more current power adapter**).
- 6, the converter not only supports 8bit \ 10bit VASA, JEIDA and other formats of LVDS signals, also supports 60Hz, 120Hz, 240Hz single-screen and dual-screen line LVDS signals to support 4, 8, 16 V-by-One (30/60 / 120Hz) signal, compatible with all LVDS, V-by-One signal movement motherboards. The converter also comes with 7-inch screen display, home test board more convenient, well received by the maintenance, maintenance engineers no longer have to worry about the lack of testing, aging screen tooling problems. For the factory production test, it outputs 1080P HDMI format signals, direct external display and TV display, display resolution higher.
- 7, built-in input interface protection circuit, even if the screen into the power, it will not burn the converter, unlike other brand converter to engage in a lot of protection small board so much trouble, the product is more convenient to use.



Converter host



Power Adapter



Three Vbyone interface converter board (4K TV use)

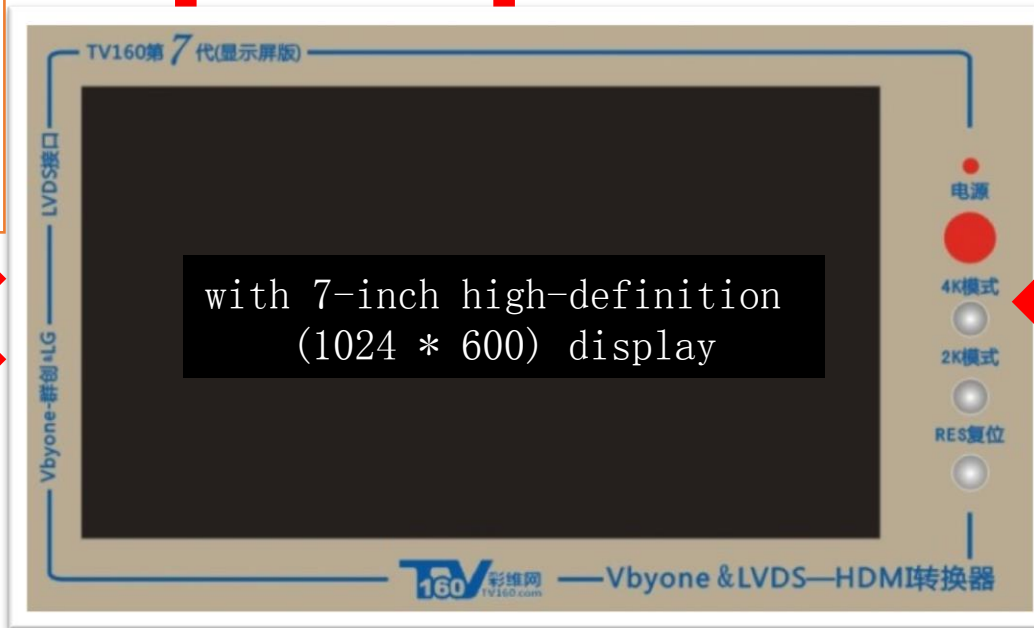
LVDS interface:

Connect the LVDS conversion board, the screen conversion board directly inserted face up.

5-12V power supply

HDMI output interface
1920 * 1080P

Connect the TV or monitor HDMI port



with 7-inch high-definition
(1024 * 600) display

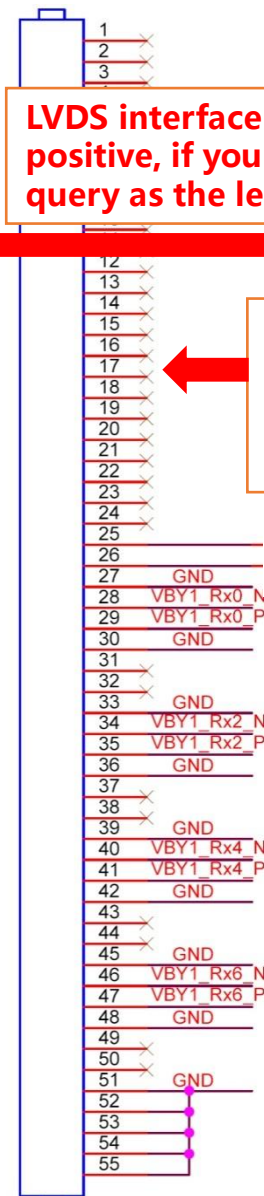
Power button: switch;
4K mode: Switch 4K motherboard Vbyone signal splicing mode, up to 4K signal normal display, the LVDS signal, this key does not work;
2K mode: Switch 2K LVDS motherboard signal format, Huaping switch this key, 4K Vbyone signal, this key does not work;
RES reset: Reset button, when the image is bad, press this button to reset the converter, reset 2K or 4K mode.

Vbyone interface :

4K motherboard screen line directly into this port, this port only supports group * LG screen line interface, other brands need to transfer plate screen line conversion.

Note: When testing 4K-Vbyone signals, unplug the LVDS boardlets
 In the meantime, there may be interference if inserted, which may result in inability to plot.

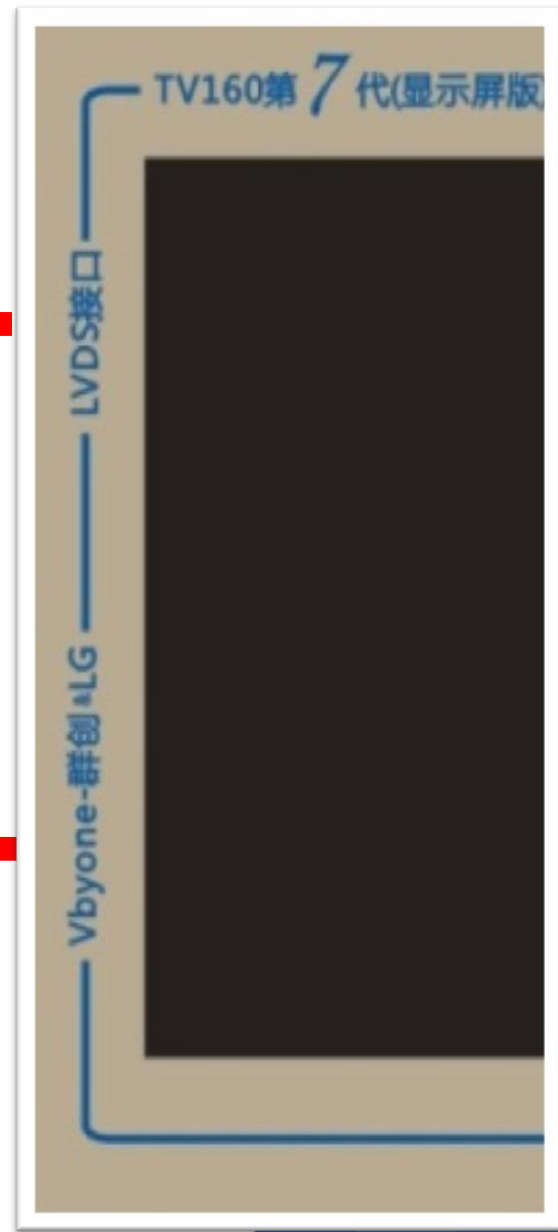
E	E
E	E
E	E
E	E
E	E
E	E
G	G
E	E
E	E
G	G
A0+	A0-
A1+	A1-
A2+	A2-
AC+	AC-
A3+	A3-
A4+	A4-
G	G
G	G
E	E
E	E



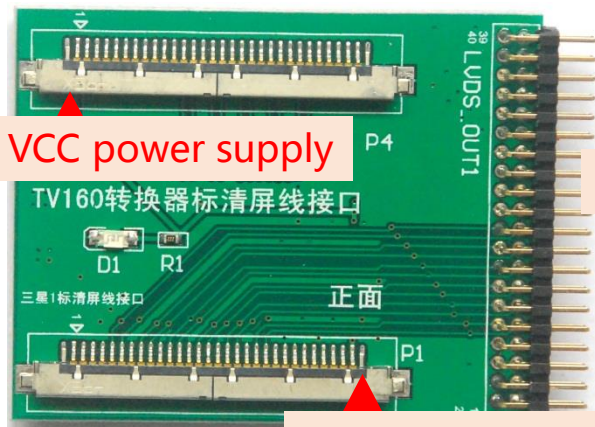
LVDS interface line order, the signal is negative, positive, if you do the line, the definition of the query as the left table:

All above are empty feet.

Vbyone interface is a custom definition of the interface with LG Group, you can refer to LG4K screen input interface. As shown on the left.



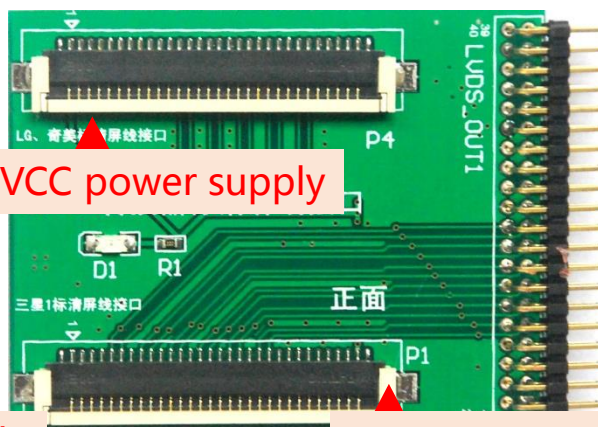
Converter with seven conversion board: (four LVDS screen adapter conversion board)



VCC power supply

VCC power supply

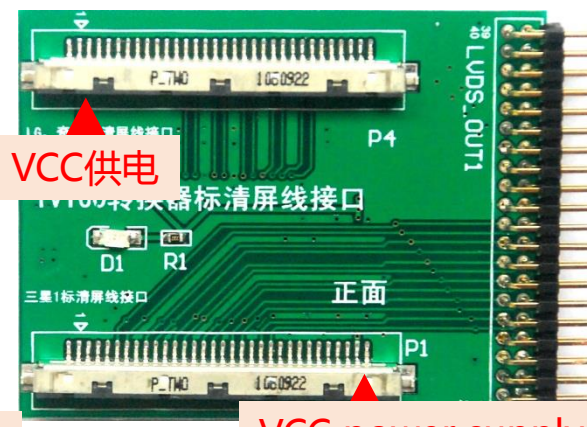
SD interface
(commonly used)



VCC power supply

VCC power supply

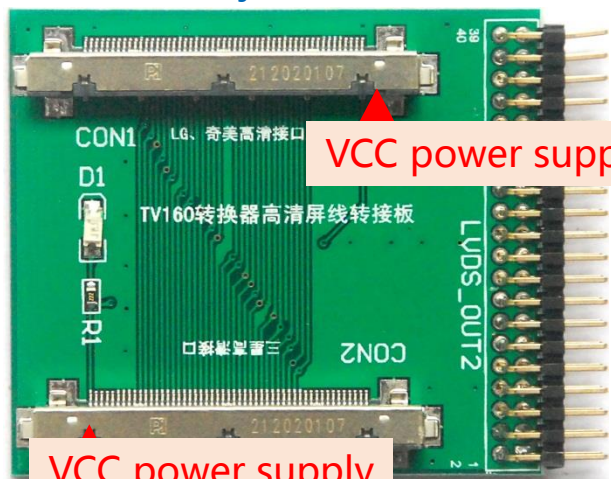
SD soft cable four
interfaces



VCC供电

VCC power supply

SD interface (Samsung
screen)



VCC power supply

VCC power supply

HD interface board (commonly used)

This four small board is only for 2K LVDS signal conversion board, See below for usage, see 4K on the Vbyone converter board see The next page icon:

Converter with seven conversion board: (three Vbyone interface converter board)



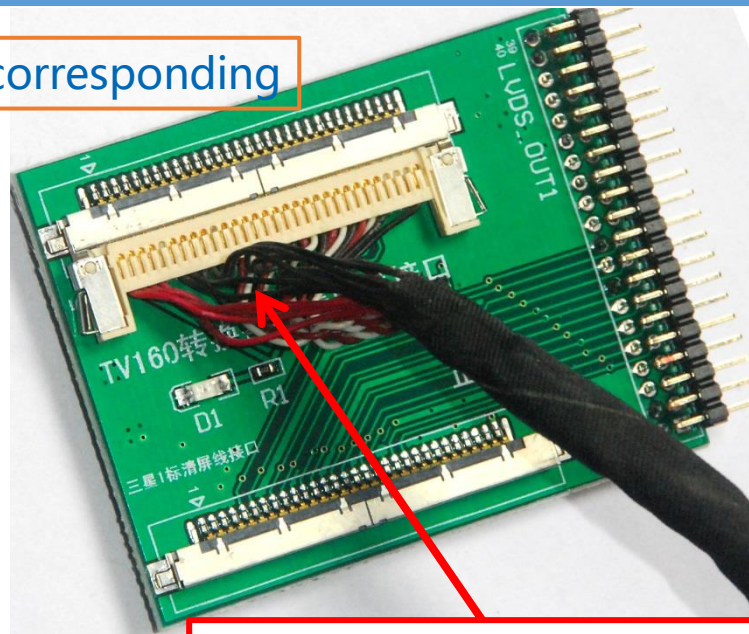
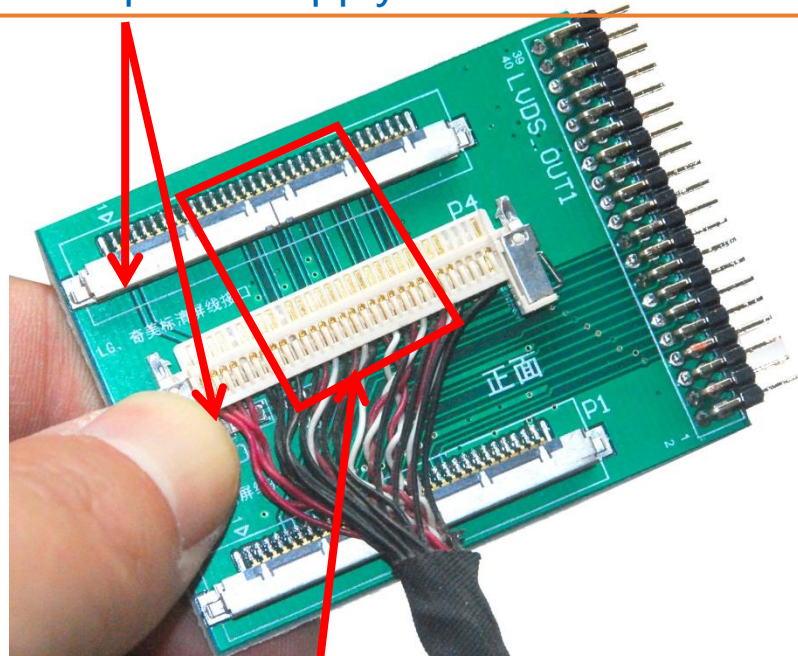
Huaxing photoelectric screen conversion board 2 groups, 4 groups of Vbyone signal converter board



The three small board is only for 4K Vbyone signal conversion board, Use the method described later. Note: Group, LG, (late Samsung), BOE and other 4K screen interface motherboard, without conversion board, the motherboard 4K screen line output directly into the seven generations of converter Vbyone interface can be.

120HZ – two sets of Vbyone screen conversion board

Screen power supply line and small board corresponding

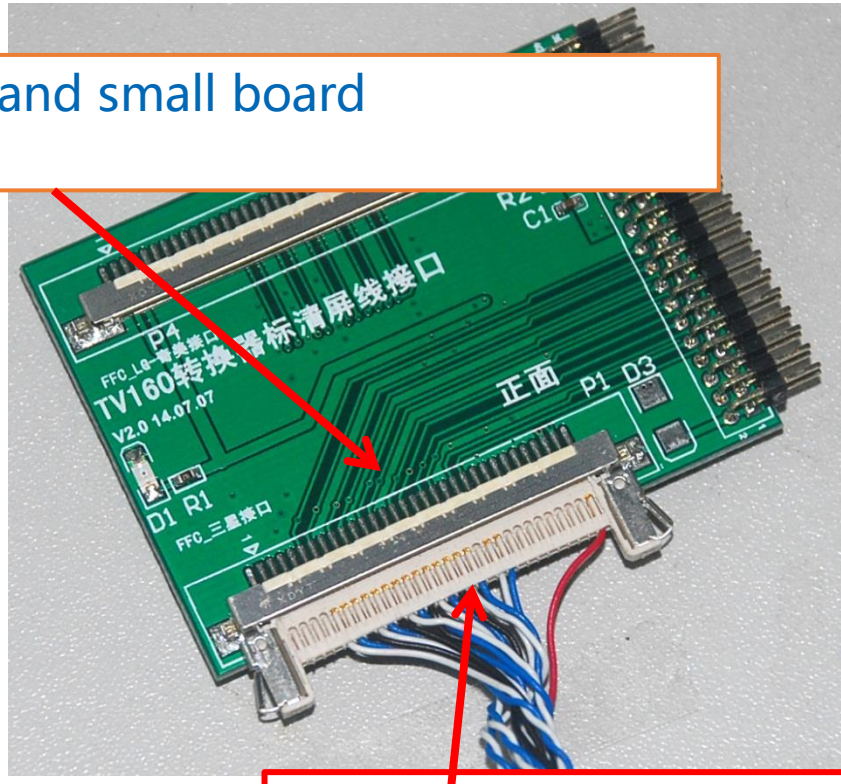
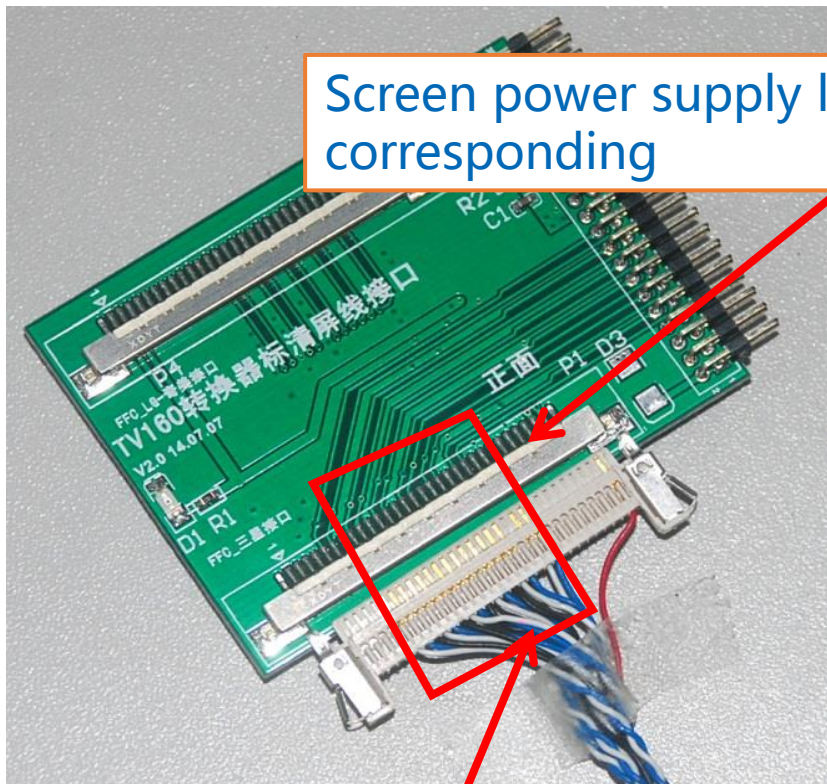


LVDS signal line is the differential line, it is sure that the twisted pair and the signal line on the screen board (two together) can be good, other screen line interface refer to this method. The figure is mainly LG, a group, China Star Optoelectronics, BOE BOE, AU and other 32-37-inch SD interface using this port can be inserted.

Plug the screen into this interface, turn on the power of the TV main board, and the LED on the small board will turn on due to the screen power supply (If not bright, please check the interface is wrong) , Then the small board face up, insert the converter LVDS interface, you can test the motherboard.

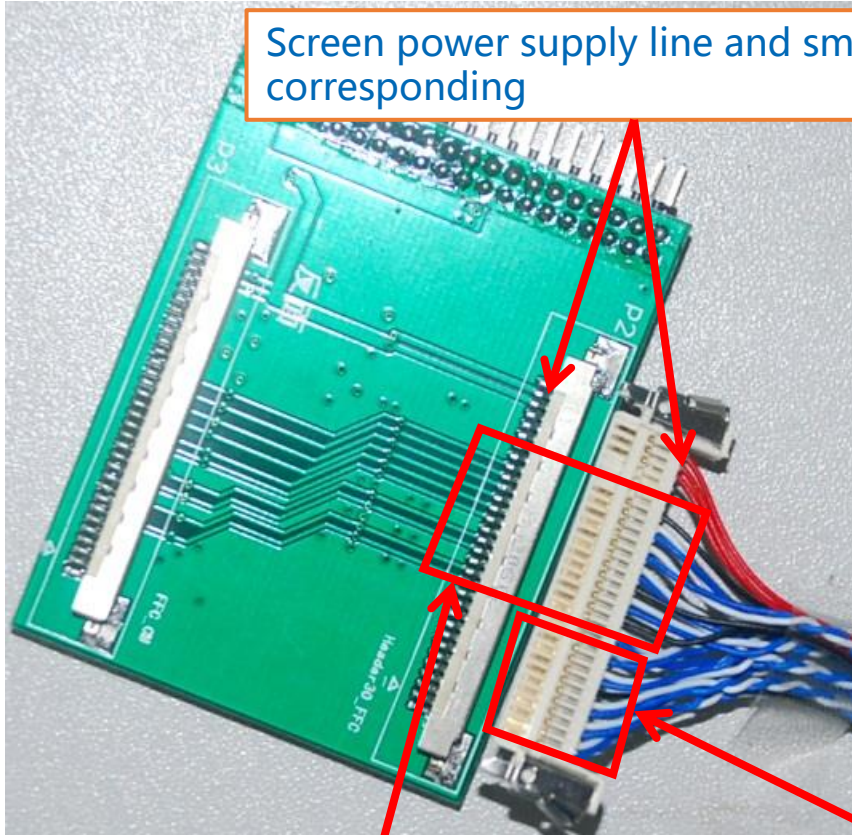


Screen power supply line and small board corresponding

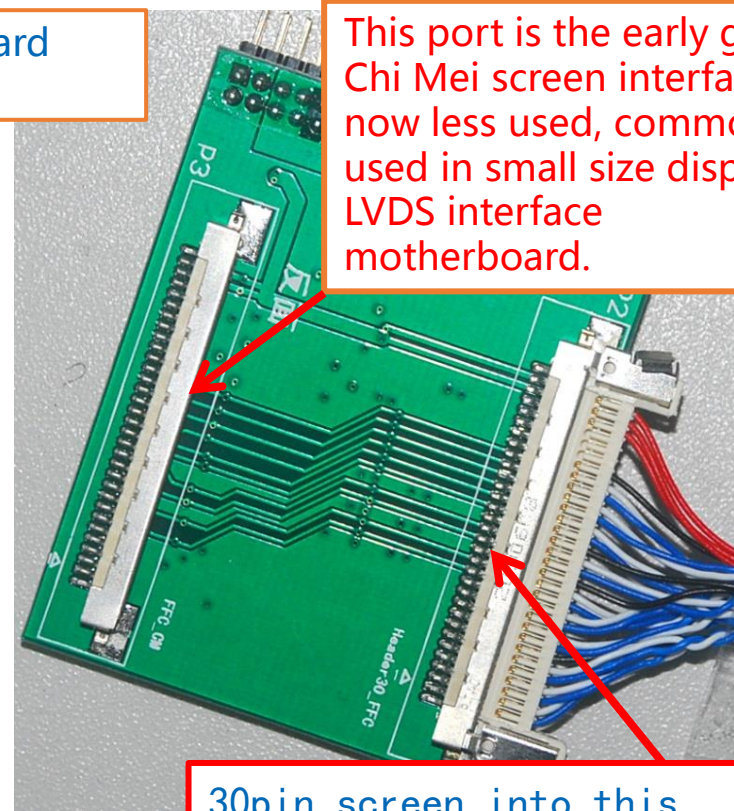


LVDS differential twisted pair and the signal line on the small screen board (two together) can be good, this port is the right power supply and the above port power supply on the contrary. This port is mainly Samsung 32-37 inch SD interface using this port can be inserted.

Plug the screen into this interface, turn on the power of the TV main board, and the LED on the small board will turn on due to the screen power supply (If not bright, please check the interface is wrong) , Then the small board face up, insert the converter LVDS interface, you can test the motherboard.



Screen power supply line and small board corresponding



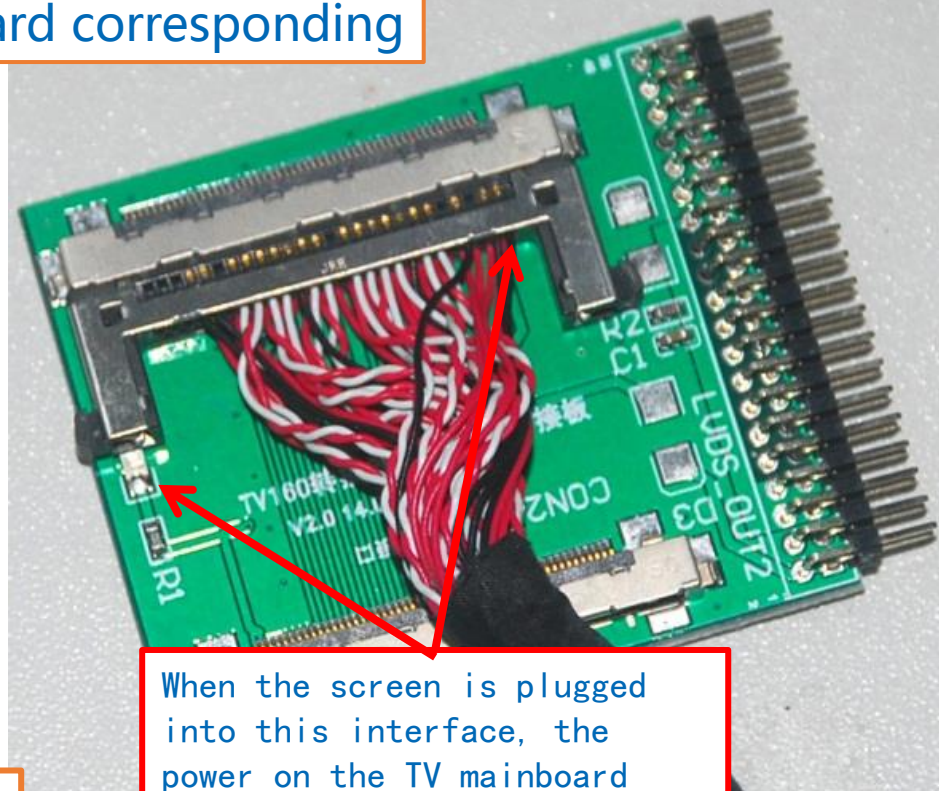
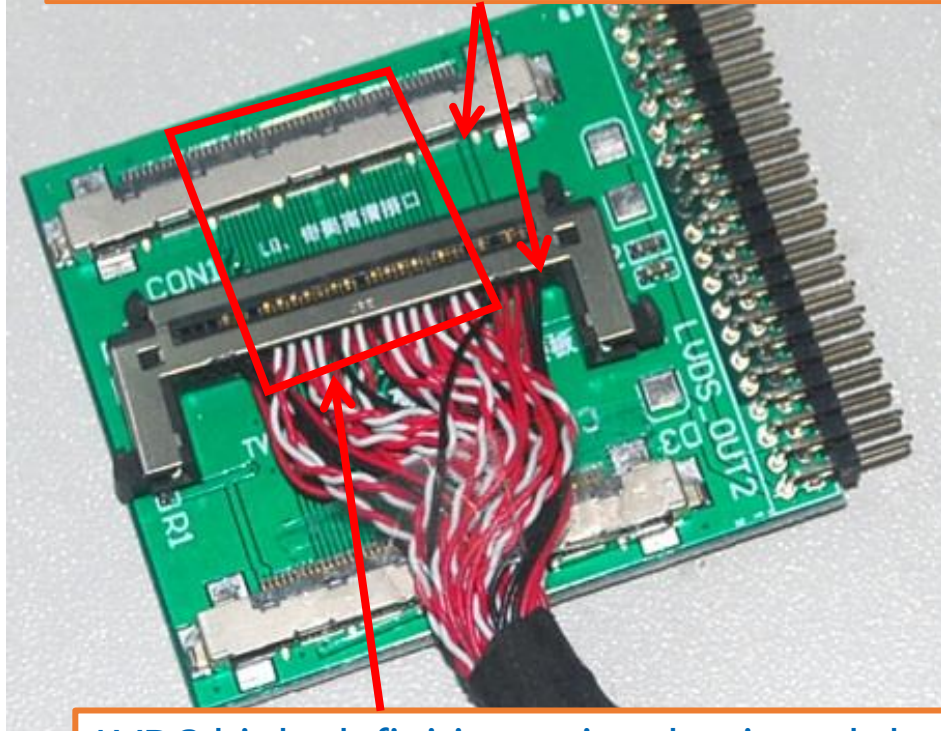
This port is the early group Chi Mei screen interface, now less used, commonly used in small size display LVDS interface motherboard.

Commonly used SD small board opposite P2 mouth, you can take orders 8 and 8 dual Samsung screen line port, such as such screen line can be inserted into this port, commonly used 22-26 inch high-definition screen using this interface.

Only a single set of LVDS signal converter can be a map, 30pin double 8-screen line can only be connected to a group.

30pin screen into this interface, the TV motherboard power on, the small board of the light on the screen will be lit (if not bright, check the interface is wrong), then the small board face up, insert the converter LVDS Interface, you can test the motherboard.

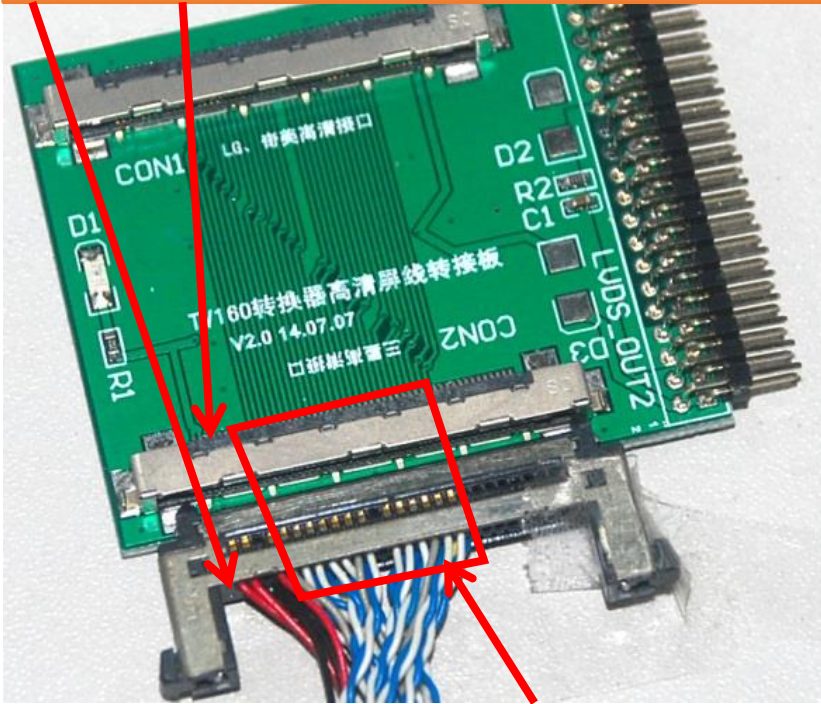
Screen power supply line and small board corresponding



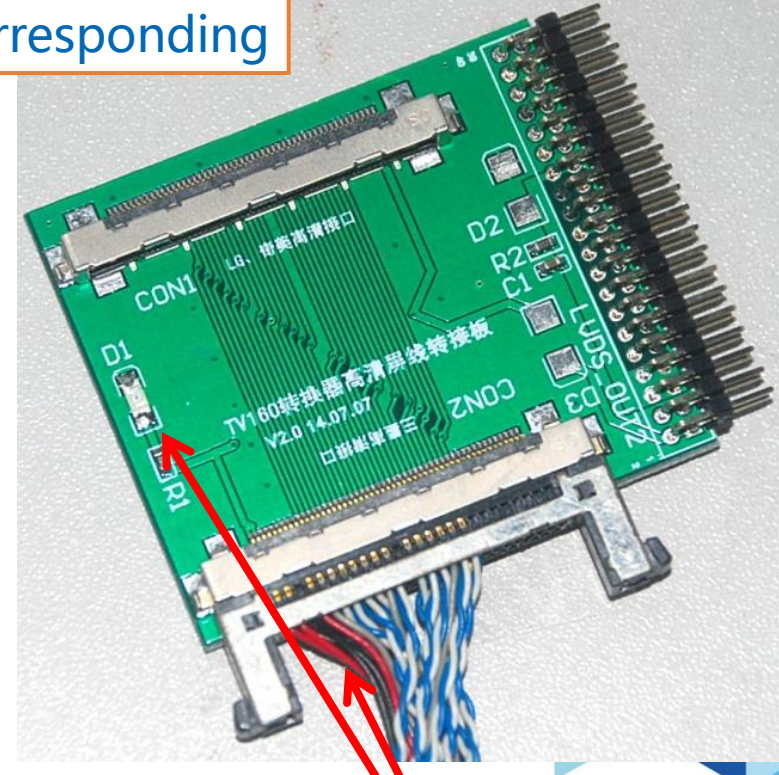
LVDS high-definition twisted pair and the signal line on the small line board (two together) corresponds to good, other screen line interface with reference to this method. The figure is mainly LG, a group, China Star Optoelectronics, BOE BOE BOE 42-84 inch LVDS high-definition screen double 8 or double 10 line interface using this port can be inserted.

When the screen is plugged into this interface, the power on the TV mainboard will turn on, and the indicator light on the small panel will light up due to the screen (if not, please check whether the interface is wrong), insert the small board face up and insert the converter LVDS interface, You can test the motherboard.

Screen power supply line and small board corresponding

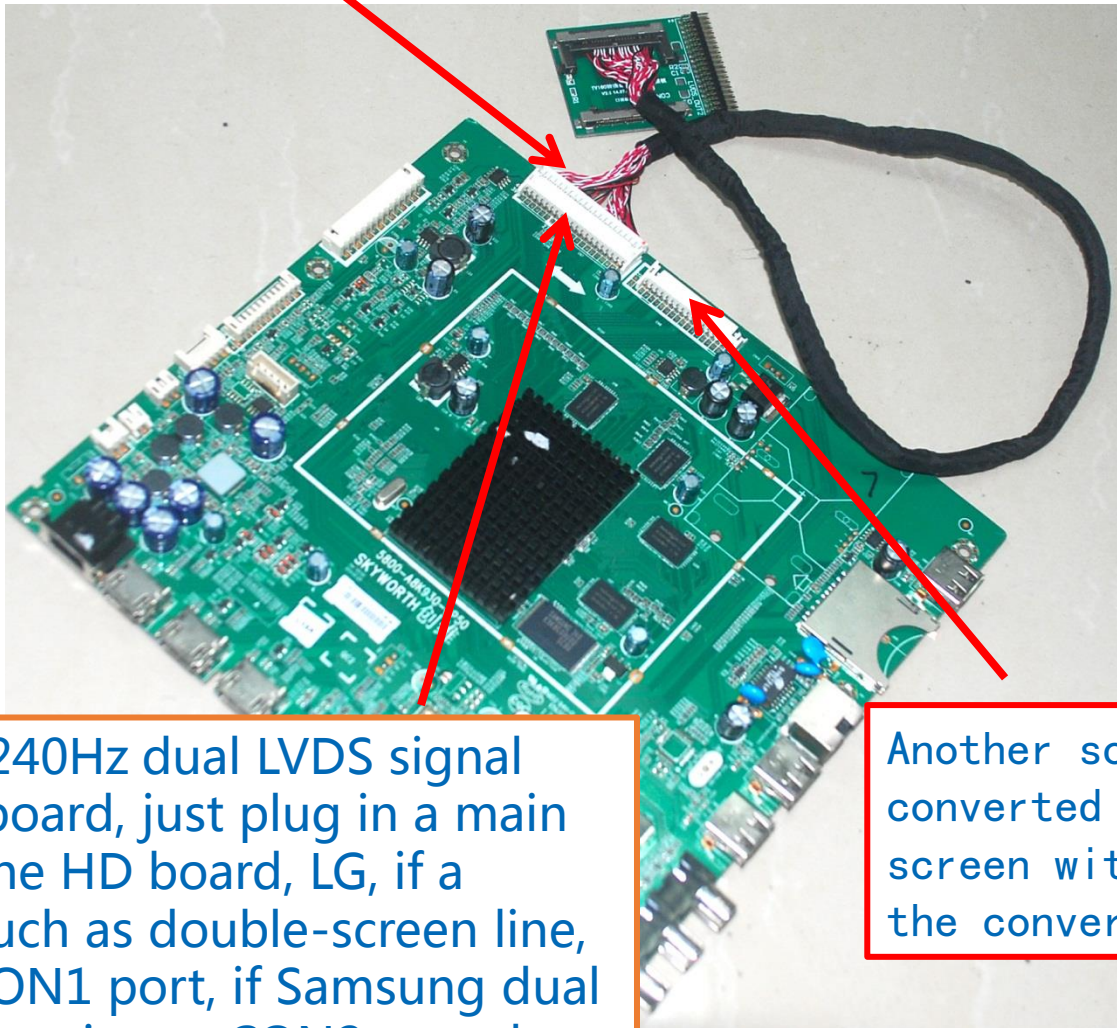


LVDS high-definition twisted pair and the signal line on the small line board (two together) corresponds to good, other screen line interface with reference to this method. The figure is mainly Samsung, AU-screen and other 42-84 inch LVDS high-definition screen double 8 or double 10 line interface using this port can be inserted.



When the screen is plugged into this interface, the power on the TV mainboard will turn on, and the indicator light on the small panel will light up due to the screen (if not, please check whether the interface is wrong), insert the small board face up and insert the converter LVDS interface, You can test the motherboard.

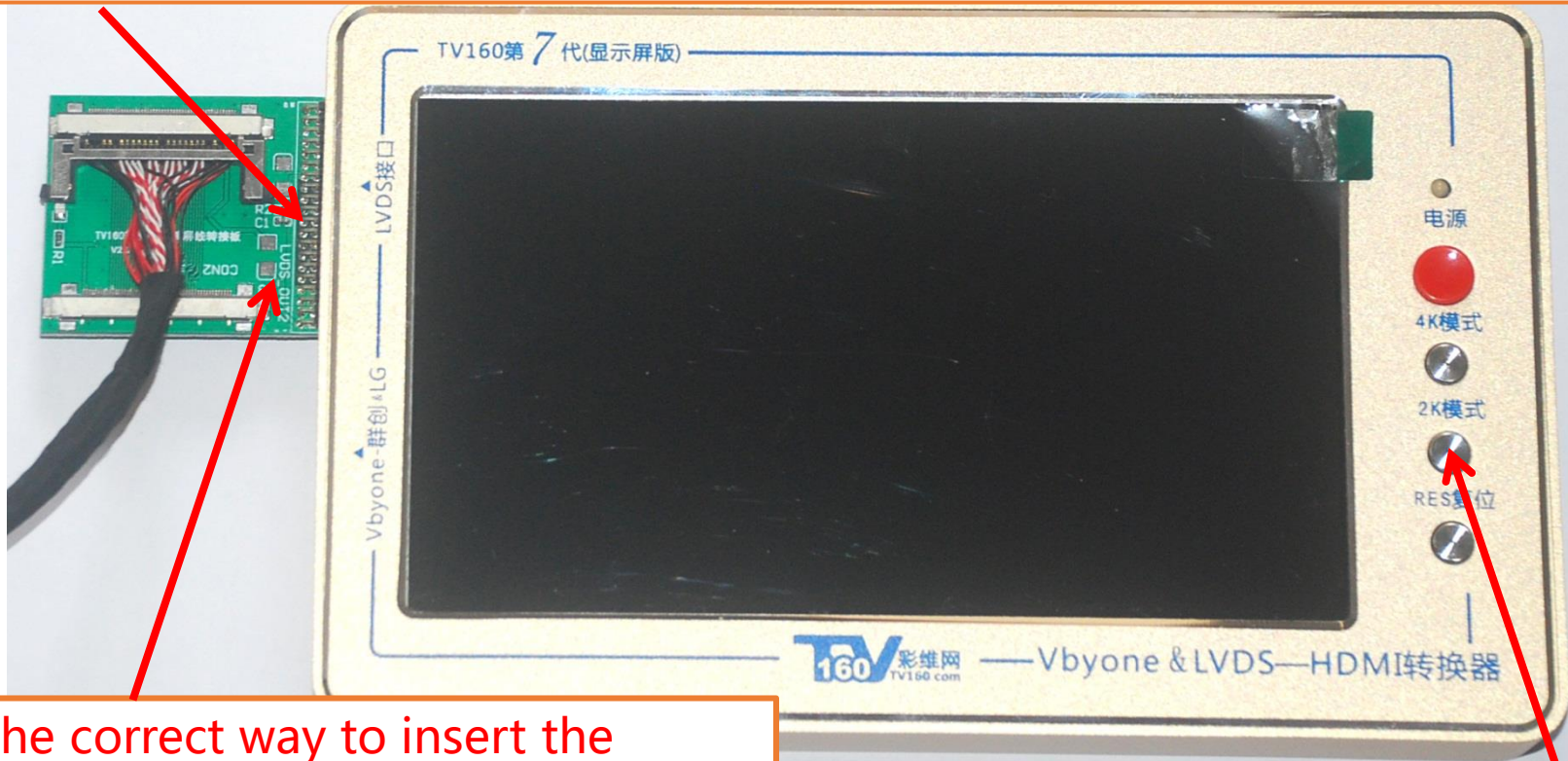
120HZ-240Hz dual LVDS signal motherboard, just plug in a main line to the HD board, as shown below:



120HZ-240Hz dual LVDS signal motherboard, just plug in a main line to the HD board, LG, if a group such as double-screen line, insert CON1 port, if Samsung dual screen line, insert CON2 port that can.

Another screen can be converted into the screen without access to the converter.

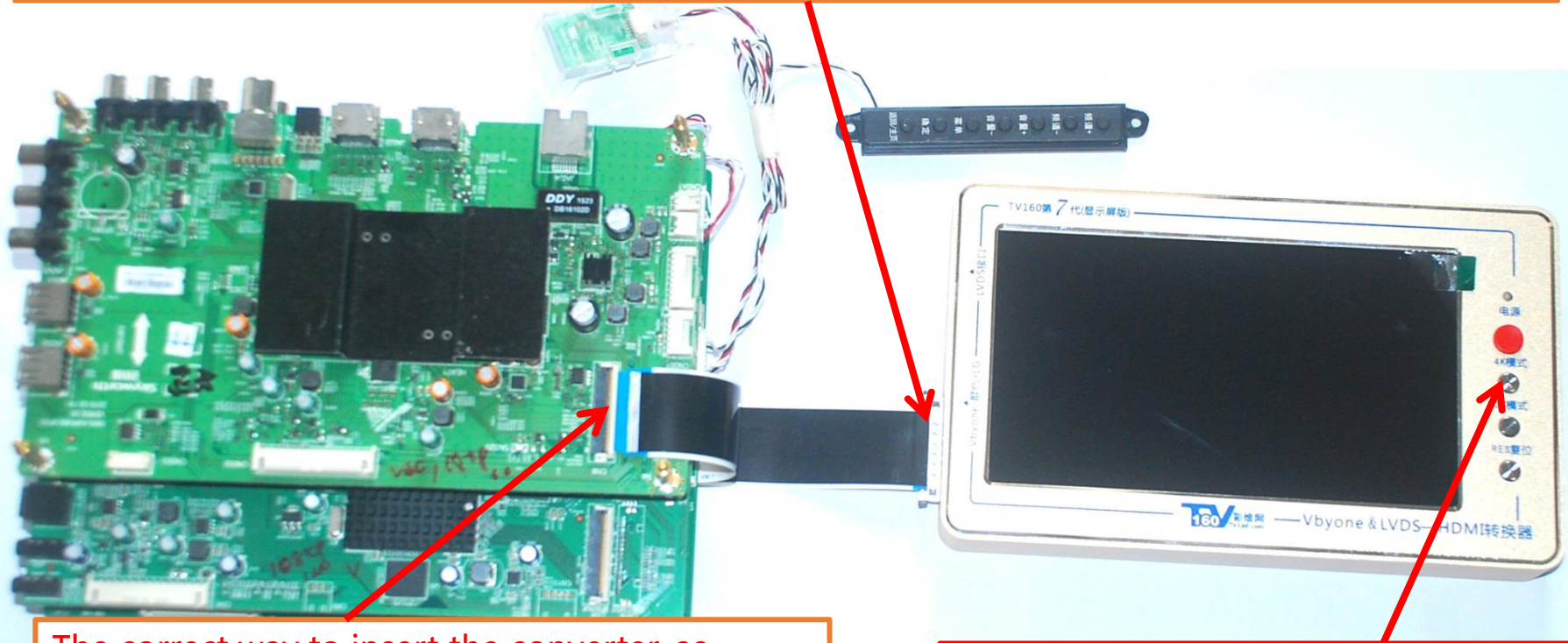
After inserting the panel into the panel, no matter what screen panel is inserted into the front converter, as shown:



The correct way to insert the converter, as shown above; Operation steps, the TV motherboard boot, see the small board light that the board and the motherboard screen power supply connection is correct, this time you can insert the converter boot.

After access, such as Huaping, press the reset button, such as still Huaping, you can press 2K mode button to switch. If the image is not displayed, check if the motherboard is powered on or the screen connection is properly connected. The 4K mode key will not function in LVDS status.

The 4K-Vbyone interface, you can directly connect LG, a group, BOE, etc. (later Samsung) 4K motherboard access



The correct way to insert the converter, as shown in the figure above; The operation method steps, first confirm whether the TV motherboard is 4K motherboard, the output is Vbone signal, if it is LVDS signal, (can drive the board) prohibit the insertion of this port. This interface can be inserted directly LG, a group, BOE, etc. (late Samsung) and other 4K motherboard access. If it is Huaxing Optoelectronics, you need to convert small board conversion and then access.

4K access, press the reset button, the converter automatically recognizes the image mode, complete the full image display, such as found on the screen shows the same two images, you can press the 4K mode button to switch. If the image is not displayed, check if the motherboard is powered on or the screen connection is properly connected. 4K-Vbyone state, 2K mode key will not work.

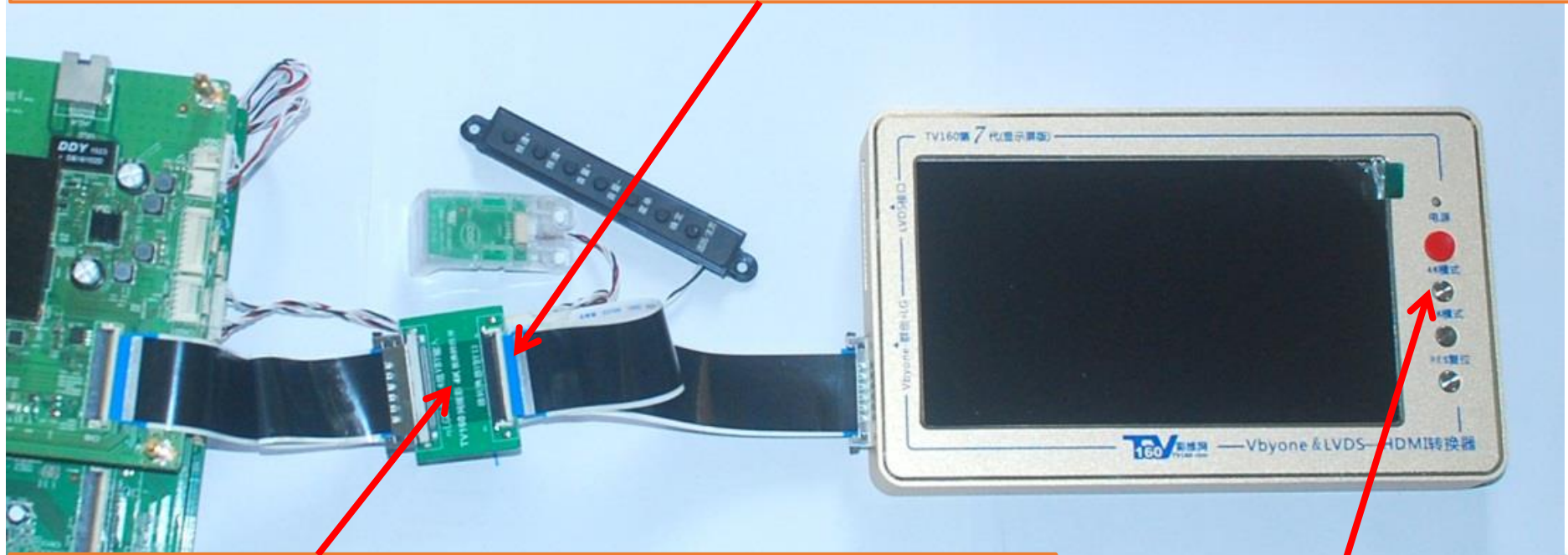
If it is Huaxing 4K electronic screen, you need to go through the Huaxing 4K converter conversion board and then access the converter, as shown below



To confirm whether it is Huaxing Photoelectric 4K motherboard, because the 4K Star motherboard and LG Group create 4K screen line sequence is different, you need to change and then access, or not a picture. If you can not confirm, check the motherboard line sequence can correspond to the small board can also access the converter to try.

Just like the operation of 4K motherboard, press the reset button, see the image is normal, if not normal, then press the 4K mode button.

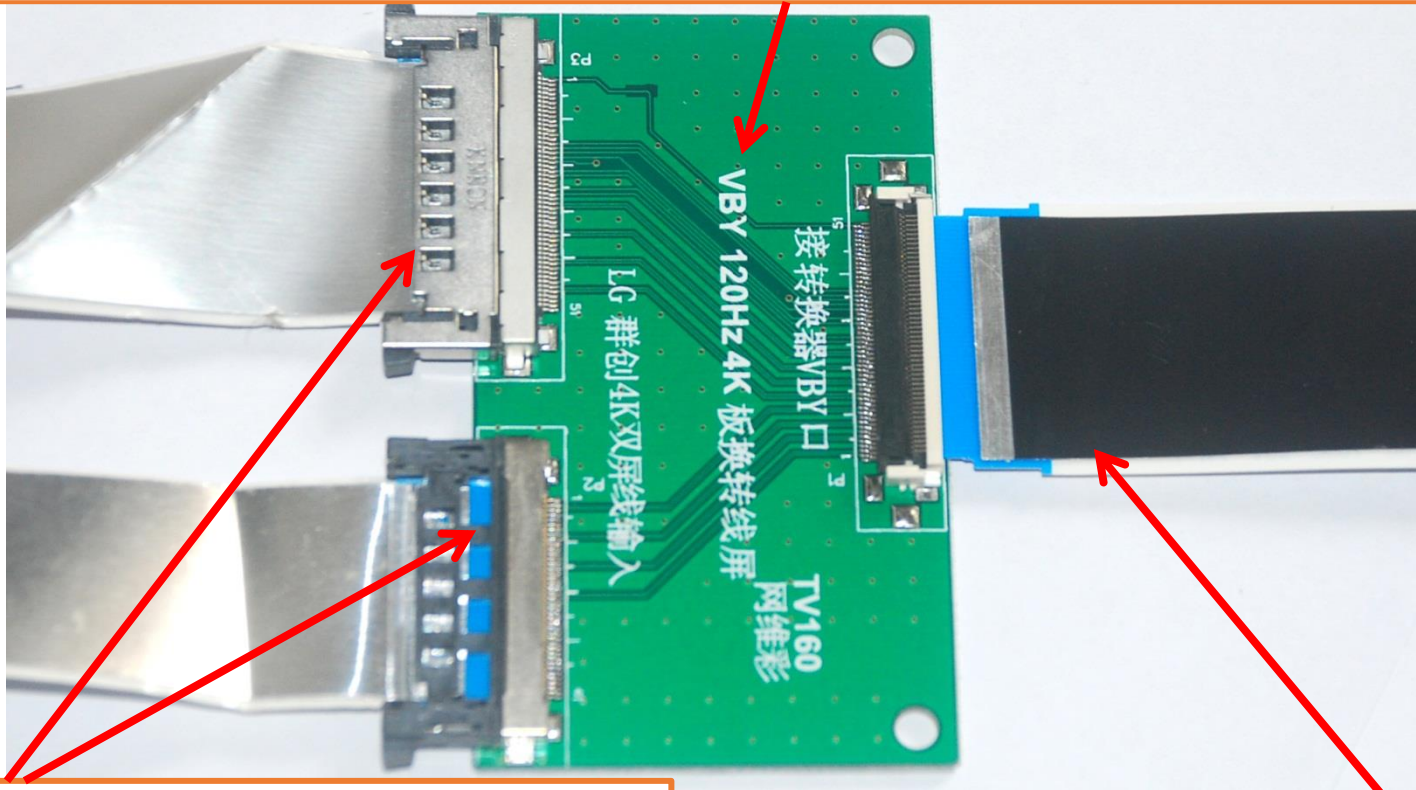
Such as the two groups \ four groups of 4K-Vbyone signal access, through 2_4 group conversion board conversion and then insert the converter



For example, some LG, Qun screen 4K motherboard, it only outputs 4 sets of Vbyone signal, such as directly into the converter may not be able to display images, through the "LG Group create 2_4 group conversion board" conversion, and then insert the converter only image. If you can not confirm the motherboard output several groups, count the number of capacitors on the Vbyone signal line on the motherboard, if only four pairs, you need this conversion board. Individual 8 pairs of direct insertion, such as no map, you also need to convert through this board and then insert the converter. If you do not understand, we can access the conversion plate test can be, as long as the Vbyone signal, will not burn the motherboard and the converter.

Just like the operation of 4K motherboard, press the reset button, see the image is normal, if not normal, then press the 4K mode button.

120HZ-240Hz dual 4K-Vbyone motherboard, through the conversion of small board, and then access the converter, as shown below:



Confirmed the dual-line 4K-4K-Vbyone signal motherboard, the current main board is mainly used in high-end machines, such as OLED products, the original output of the two screen lines, insert the conversion board, conversion and then insert Converter can be. The following page:

Through this small board conversion, and then insert the 7 generation converter 4K-Vbyone input port can be.

实拍图片：创维双屏线4K主板测效果！

The 4K motherboard two Vbuone screen into the 120HZ-4K screen converter board, the output converter Vbyone input port, as shown on the left, you can boot the test. **Note: Must be a 4K motherboard Vbyone interface, if it is 2K motherboard LVDS dual-line plugged in, will lead to burning converter board or TV motherboard screen power supply short circuit.**

创维OLED主板
S9-1系列-240Hz
4K-Vbyone信号

7代转接

彩维网店官方淘宝商城
淘宝ID：skyisa





HDMI-1920*1080 输出

S9300 系列
产品主板

7代转换器主机

240Hz- 双屏线
Vbyone 接口主板

实拍图片：创维双屏线4K主板测效果！

创维OLED主板
S9-1系列-240Hz
4K-Vbyone信号

7代转换器主板



实拍图片：创维4K电视主板



The 4K main board Vbuone screen line, as long as the LG and group a screen, you can use the screen directly into the converter 4K-Vbyone port, can be directly converted full-screen clear picture.



实拍图片：标清主板，LVDS接口

LVDS interface, plug the line directly into the conversion board, and then insert the converter, you can directly convert full screen clear picture.

2K主板-标清
LVDS信号

7代转换器主机



TV160第7代(显示屏版)

实拍图片：工厂模式下的字符

手机拍照，工厂模式字符清晰
再用不用担心进工厂不能调屏参了！

工厂菜单

ALC

白平衡

非标

非线性

垂直率

SSC

其它设置

版本信息

PEQ

Dream Panel Parameter

SFS Fun

屏编号:

PNL_LG_55_QWUXGA_03_A000

CPU:

8S09-E790U-Ver1.0.0-2014/01/17 09:33:13 -SVN:6202

Panel:

PS_55_LED

6M40:

Day:20/Mon:3

PWM Setting

Screen can be adjusted directly in the small screen, the figure shows the factory's information.

实拍图片：酷开 4K 电视主板



Huaxing 4K electronic screen, through the 4K conversion board, the perfect display of full-screen images.

This interface is 4K-Vbyone interface, directly into the converter with a screen line LG \ Group Vbyone interface, no small board conversion.

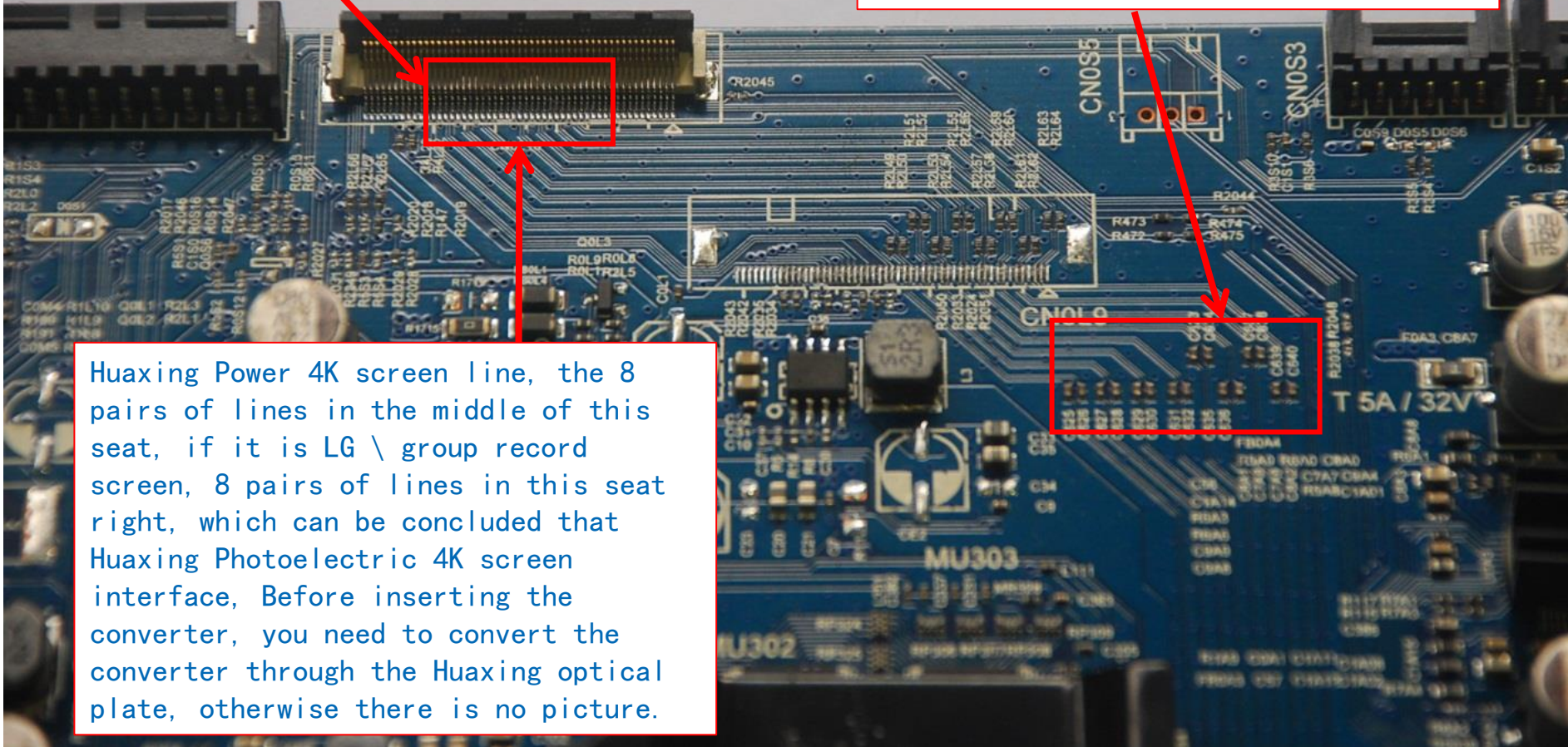
Vbyone signal line will have a string of capacitors, LVDS line will not have capacitance, and only 8 pairs of lines, which can be concluded as Vbyone signal.

LG \ Group created a 4K screen line of 8 pairs of lines in the right side of this seat, if it is Huaxing photoelectric, 8 pairs of lines in this seat in the middle, it can be concluded that the LG \ Group record 4K interface can be directly Insert converter, without conversion platelets

This interface is Huaxing 4K-Vbyone optical interface, you need to use Huaxing Photoelectric 4K small board conversion, and then insert the converter.

Vbyone signal line will have a string of capacitors, LVDS line will not string capacitor, and only eight pairs of lines, which can be concluded as Vbyone signal.

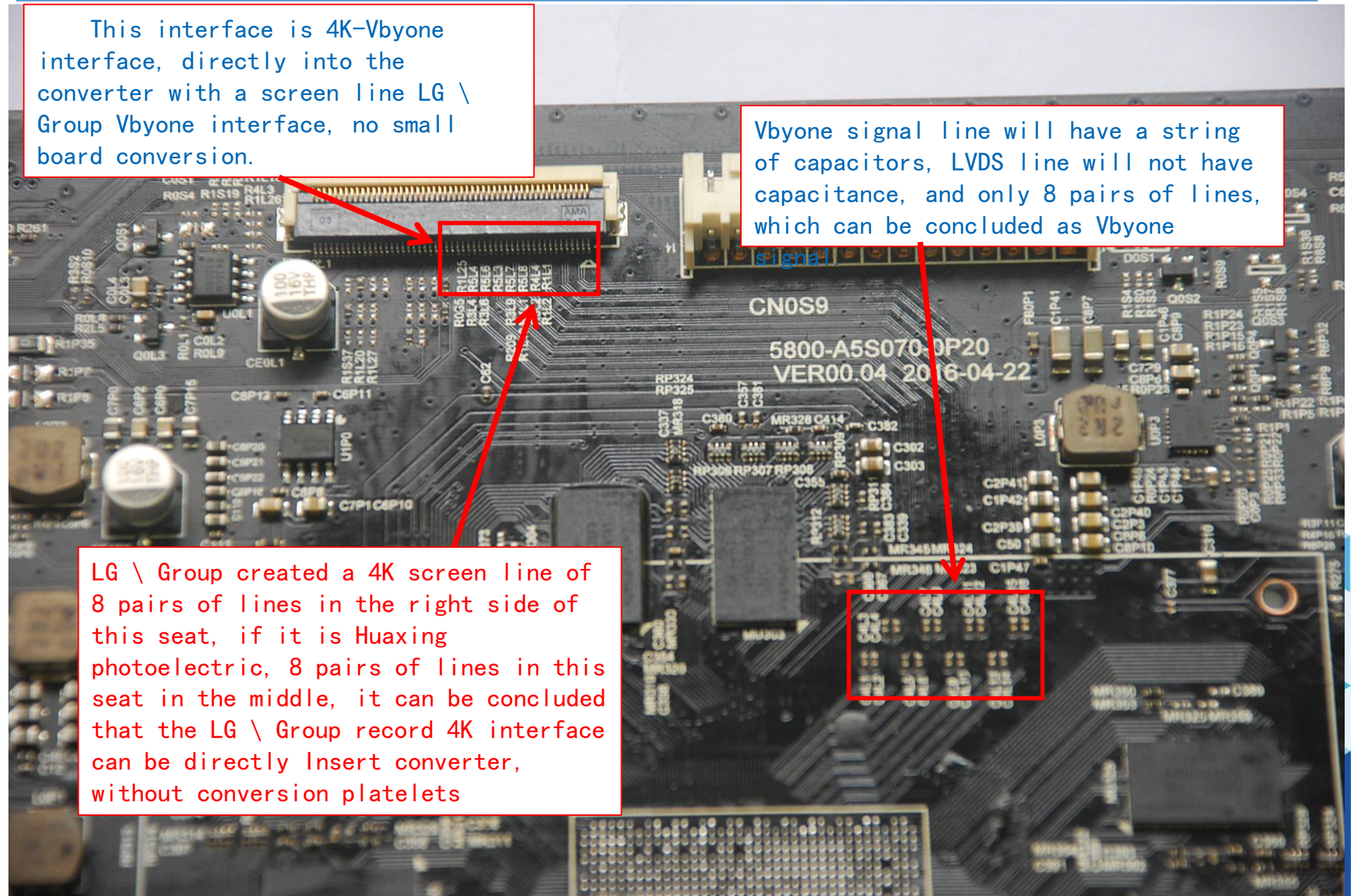
Huaxing Power 4K screen line, the 8 pairs of lines in the middle of this seat, if it is LG \ group record screen, 8 pairs of lines in this seat right, which can be concluded that Huaxing Photoelectric 4K screen interface, Before inserting the converter, you need to convert the converter through the Huaxing optical plate, otherwise there is no picture.



This interface is 4K-Vbyone interface, directly into the converter with a screen line LG \ Group Vbyone interface, no small board conversion.

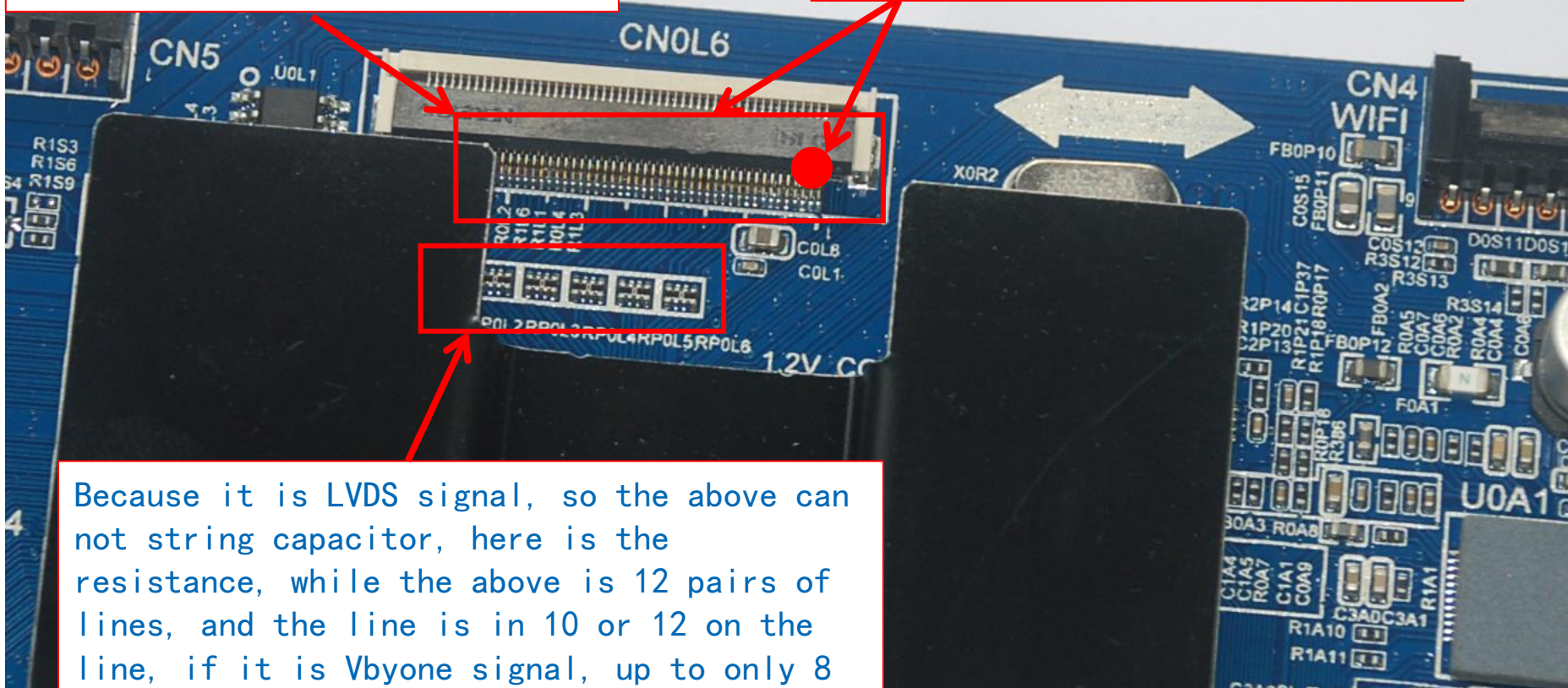
Vbyone signal line will have a string of capacitors, LVDS line will not have capacitance, and only 8 pairs of lines, which can be concluded as Vbyone signal.

LG \ Group created a 4K screen line of 8 pairs of lines in the right side of this seat, if it is Huaxing photoelectric, 8 pairs of lines in this seat in the middle, it can be concluded that the LG \ Group record 4K interface can be directly Insert converter, without conversion platelets



This interface 51Pin LVDS interface, with the original screen into the line converter LVDS HD converter board LG \ group CON2 port, and then insert the converter LVDS interface.

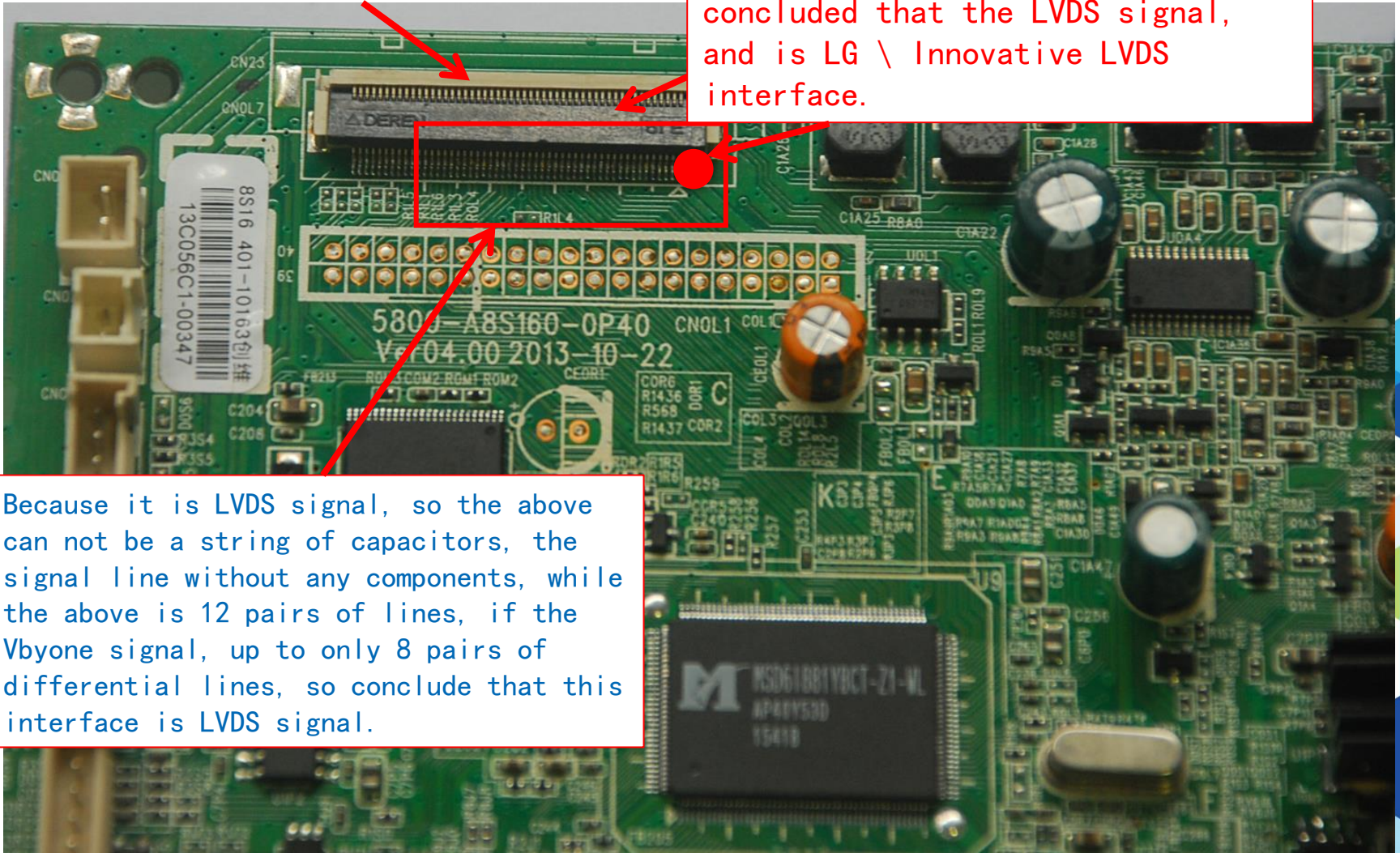
In addition, the power supply on the right side of this interface, if the Vbyone signal, power supply on the other side, which can be concluded that the LVDS signal, and is LG \ Innovative LVDS interface.



Because it is LVDS signal, so the above can not string capacitor, here is the resistance, while the above is 12 pairs of lines, and the line is in 10 or 12 on the line, if it is Vbyone signal, up to only 8 pairs of differential lines, so concluded that this interface is the LVDS signal.

This interface 51Pin LVDS interface, with the original screen into the line converter LVDS HD converter board LG \ Group CON2 port, and then insert the converter LVDS interface.

In addition, the power supply on the right side of this interface, if the Vbyone signal, power supply on the other side, which can be concluded that the LVDS signal, and is LG \ Innovative LVDS interface.



Because it is LVDS signal, so the above can not be a string of capacitors, the signal line without any components, while the above is 12 pairs of lines, if the Vbyone signal, up to only 8 pairs of differential lines, so conclude that this interface is LVDS signal.

This interface is not an LVDS interface or a vbone interface. This port is a 4k EPI interface and is a patented LG with 16 sets of voltages. Such interfaces are not supported by the converter and are not allowed to access the converter.

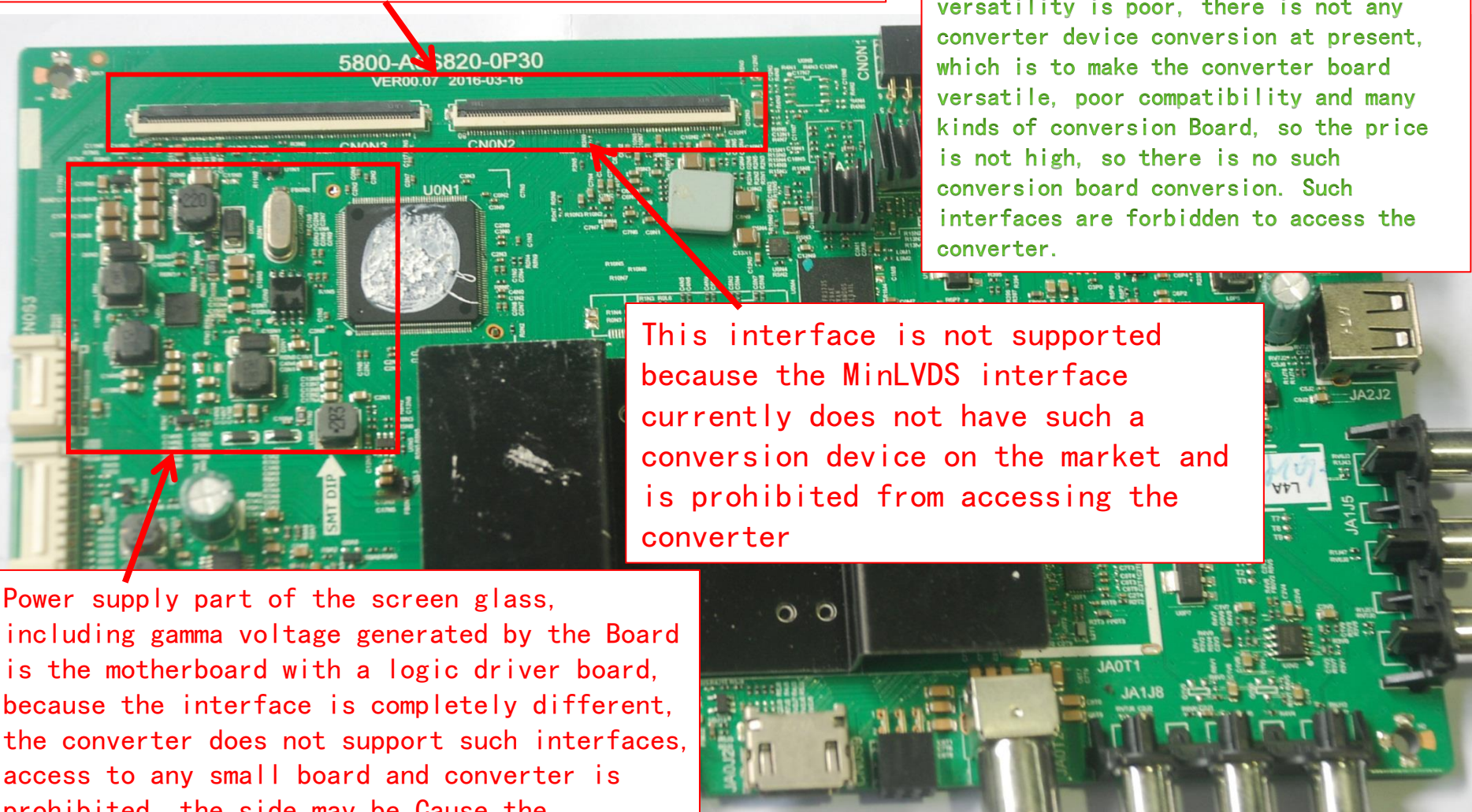


This type of interface is not supported because it is the only 4K-EPI signal interface. Access to the converter is forbidden

Power supply part of the screen glass, including gamma voltage generated by the Board is the motherboard with a logic driver board, because the interface is completely different, the converter does not support such interfaces, access to any small board and converter is prohibited, the side may be Cause the motherboard damage.

This interface is not an LVDS interface nor a vbone interface. This interface is a MinLVDS interface with 16 sets of voltages. Such interfaces are not supported by the converter and are not allowed to access the converter.

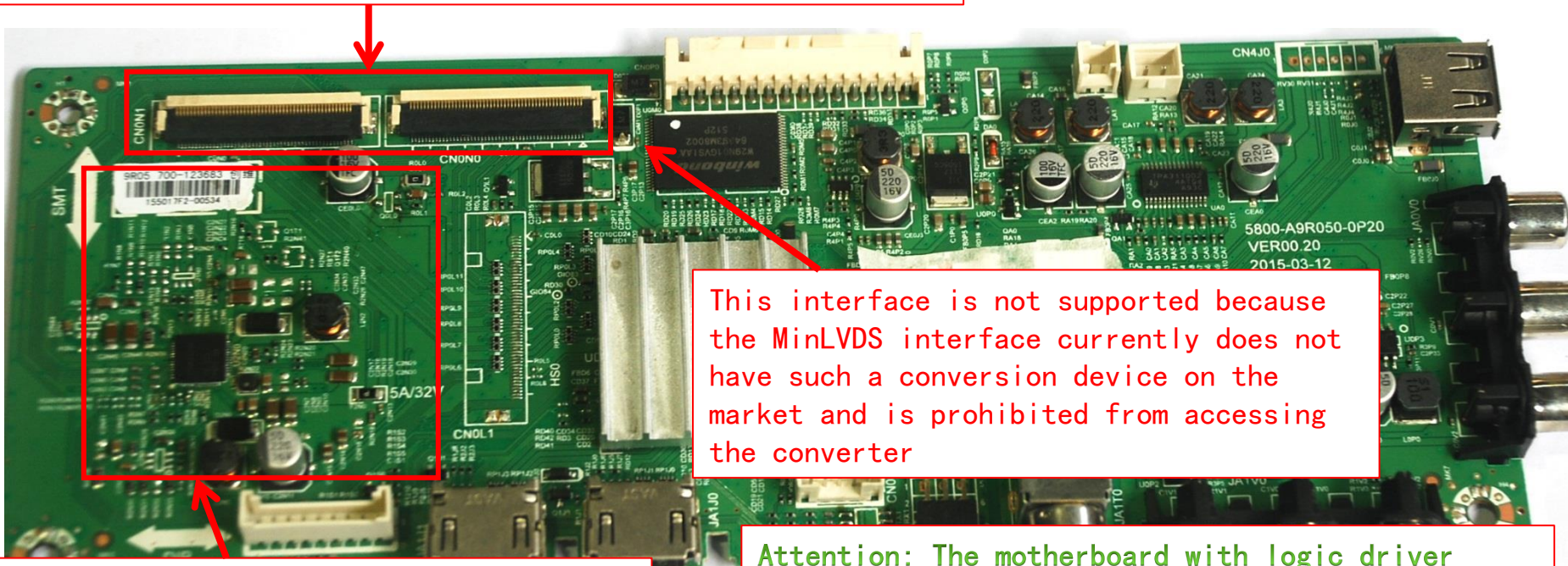
Attention: The motherboard with logic driver board is strictly matched with the screen glass. Because the standard of the output signal is not uniform and the versatility is poor, there is not any converter device conversion at present, which is to make the converter board versatile, poor compatibility and many kinds of conversion Board, so the price is not high, so there is no such conversion board conversion. Such interfaces are forbidden to access the converter.



This interface is not supported because the MinLVDS interface currently does not have such a conversion device on the market and is prohibited from accessing the converter

Power supply part of the screen glass, including gamma voltage generated by the Board is the motherboard with a logic driver board, because the interface is completely different, the converter does not support such interfaces, access to any small board and converter is prohibited, the side may be Cause the motherboard damage.

This interface is not an LVDS interface or a vbone interface. This interface is a MinLVDS interface with 14 sets of voltages. Such interfaces are not supported by the converter and are not allowed to access the converter.



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