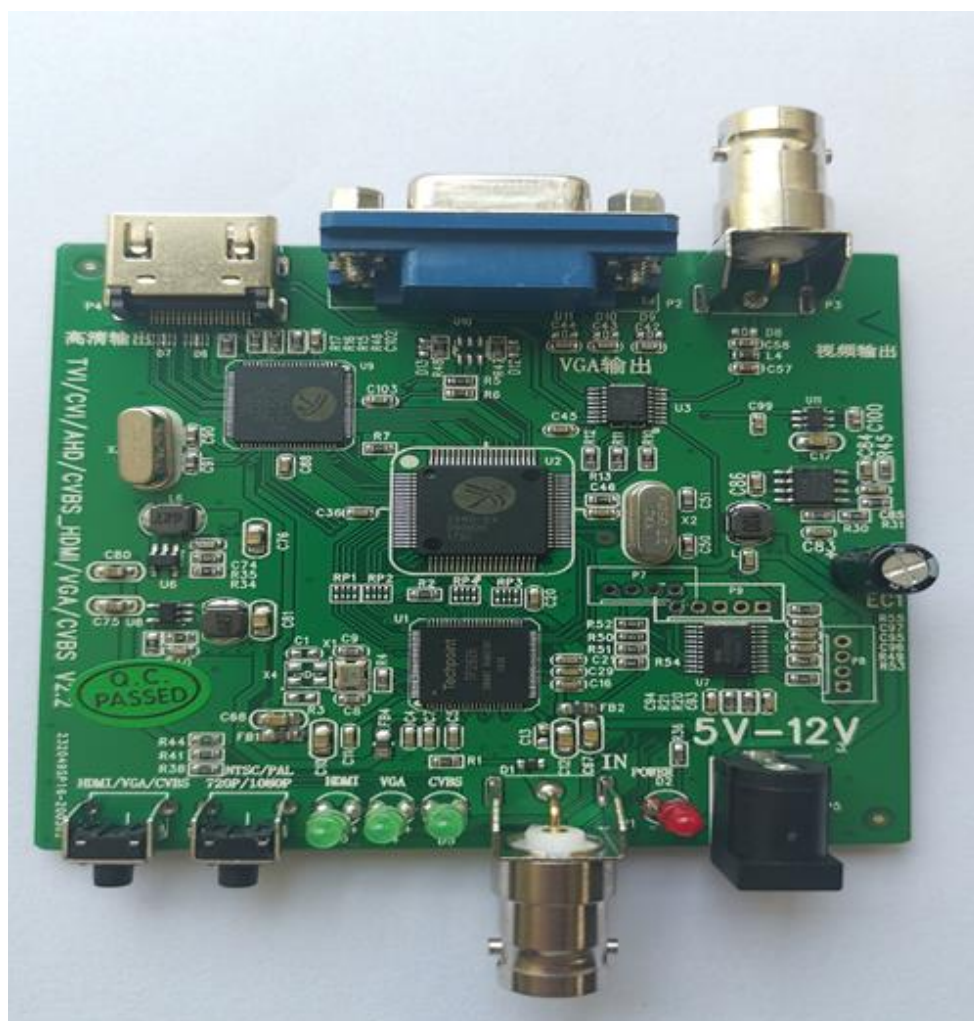


## AHD / TVI / CVI / CVBS to HDMI / VGA / CVBS conversion solution description document



**The basic specifications of this scheme are as follows :**

**Input signal support: :**

AHD : 100W(25/30) 200W(25/30) 400W(15/25/30) 500W(12/20)

TVI : 100W(25/30) 200W(25/30) 300W(18) 400W(25/30) 500W(12/20)

CVI : 100W(25/30) 200W(25/30) 400W(25/30)

CVBS : (PAL:720x576i 25Hz or NTSC:720x480i 30Hz)

**Output signal support: :**

CVBS signal output (PAL:720x576i 25Hz or NTSC:720x480i 30Hz)

VGA signal output (1280x720P 60Hz or 1920x1080P60Hz)

HDMI signal output (1280x720P 60Hz or 1920x1080P60Hz)

**Connector function definition: (subject to the latest PCB file of Chipav)**

P4 : HDMI output

P2 : VGA output

P3 : CVBS output

S1 : Switching output channels

S2 : Switch output resolution

D3 : HDMI output LED

D4 : VGA output LED

D5 : CVBS output LED

P1 : (AHD/TVI/CVI/CVBS) input

D2 : Power LED

P5 : Power input 5 / 12V

**Operating instructions :**

Before the PCB board is powered on, connect the analog HD lens to the P1 interface through the coaxial cable, and then connect the P4 / P3 / P2 interface according to your own output requirements (you can connect at the same time,

but you can not output at the same time, you can only select the channel to output through the S1 key each time, and the HDMI output is recognized by default.) Finally, the board is connected to the dc5 / 12V power supply to light up.

### **Chips provided by chipav are:**

The solution consists of four main chips, and the process is as follows:

TP2826：Decode AHD / TVI / CVI / CVBS signal, and output internal synchronous bt656 digital signal.

CV2880：The digital signal decoded by tp2826 is converted into CVBS / VGA signal.

HC32F005：Controller of overall solution.

CV8788：The digital signal output from cv2880 is coded as HDMI signal.