

## FAQ / Application Note

**Subject :** How to setting Dual LVDS for EBM-PNV board.

FAQ Document No: H13006

Date: 2013/4/12

Model Name. EBM-PNV

Rev. A1

Category: ☐ General ☒ H/W ☐ S/W ☐ Others, Display

Purpose: This is used to configure dual LVDS display (clone mode) for EBM-PNV board.

### Test environment:

1. Board: EBM-PNV-B2R
2. BIOS: BPNV-00C.ROM
3. LVDS Panel:
  - a. 15" CPT-CLAA150XP01Q 1024X768 single 24bit
  - b. 10.4" CPT-CLAA104XA01CW 1024x768 single 18bit
4. Inverter:
  - a. HWA YOUN-QF133V.1.95S (for 15")
  - b. HWA YOUN-QF38V6.11S (for 10.4")
5. Firmware file: PNV\_Ver\_009\_20110526\_C (Panel No#09)
6. OS: Windows XP SP3
7. VGA driver: 6.14.10.5106

### Test Procedure:

1. Please programming firmware file to EBM-PNV firstly.

```
47.AU M216H1-L01 1366x768 24bit, 1366x768.BIN
49.SAMSUNG LTN160HT01 1920x1080 24bit, 19201080.BIN
53.MITSUBISHI AA084SA01 800x600 24bit, 800x600.BIN
54.SAMSUNG LTA260AP02 1366x768 24bit, 1366x768.BIN
55.NEC NL8060BC31-41C 800x600 24bit, 800x600.BIN
56.AU T370HM03_V0 1920x1080 24bit, 19201080.BIN
57.AU G185X401_V0 1366x768 24bit, 1366x768.BIN
=====
Up/Down:Select ESC:Exit Enter:Accept ~ by Avalue.BIOS.Chain
Your select:09.AU M150XN07_V.9 1024x768 24bit,02,0,1024x768.BIN
***** Only for Pineview + ICH8M + Realtek scaling *****
SMBUS IO Port : 0x0400
<Panel Type> Read:02... Write:02... Read:02.
Pass:Write Panel Type success.
<Panel BMTS> Read:0... Write:0... Read:0.
Pass:Write Panel BMTS success.
<EDID File Path> 1024x768.BIN
Write EDID : Start ...< Flash Finish >
A:\FW\PEDID ~1>
```

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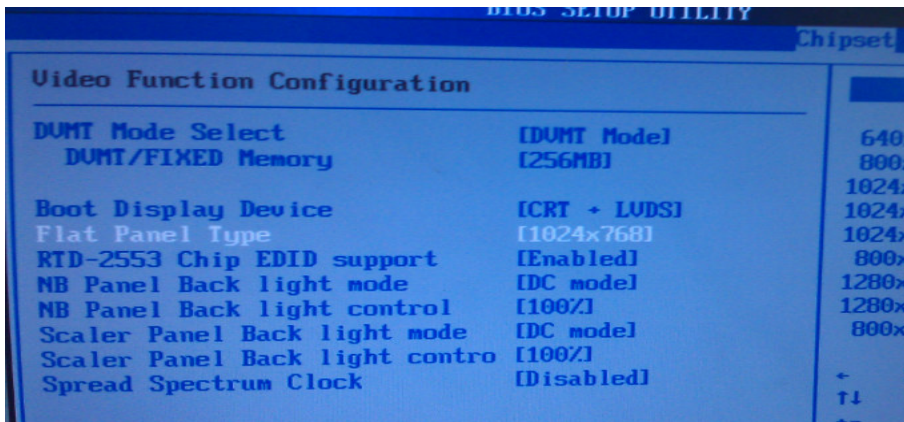
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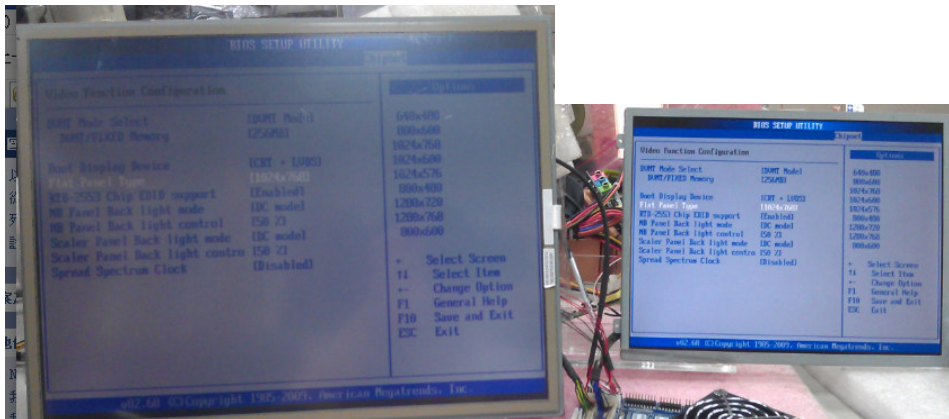
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2. Please insert 10.4" LVDS cable to JLVDS1 connector and QF38V6.11S Inverter cable to JBKL1.  
Please insert 15" LVDS cable to JLVDS2 connector and QF133V.1.95S inverter cable to JBKL2.
3. EBM-PNV Pin JVR1(to setting JLVDS1 backlight mode: DC mode)  
EBM-PNV Pin JVR2(to setting JLVDS2 backlight mode: DC mode)
4. Changed the BIOS setting:  
Chipset/North Bridge configuration/Video function configuration/Flat Panel type: 1024x768  
RTD-2553 Chip EDID support: Enable



5. Save changes and exit BIOS setup. Power ON again, you will see dual LVDS in DOS mode.



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6. Please setting Intel Graphic driver utility when into Windows XP SP3 OS.  
Operating Mode: Intel® Dual Display Clone.



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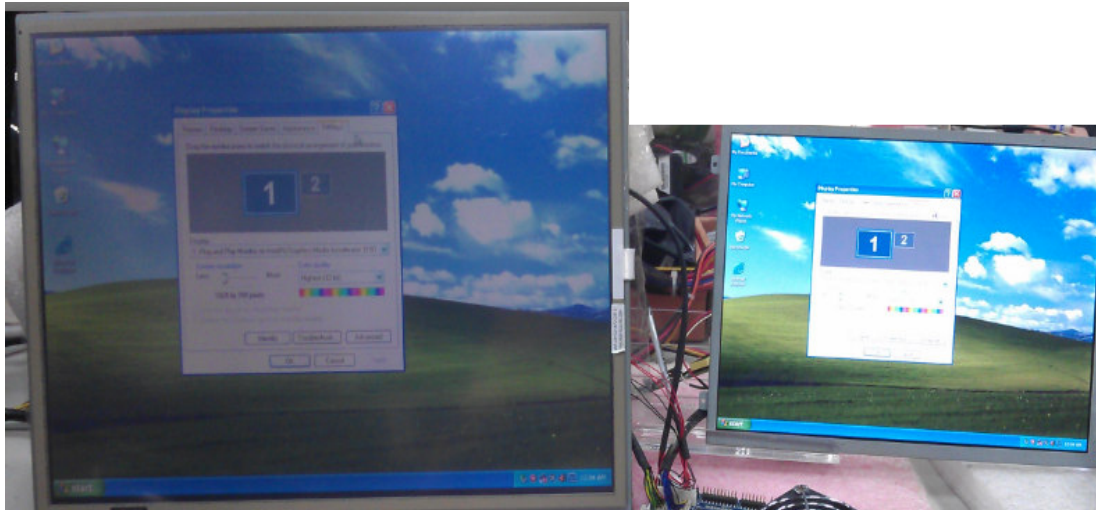
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## The dual LVDS in Windows XP SP3 OS.



**Remark: Because of Hardware designed that can achieve dual LVDS display function**

**1. JLVDS1 connector is Primary display from Atom internal LVDS support.**

**It support 18bit single channel panel only**

**2. JLVDS2 connector is designed VGA to LVDS controller for secondary LVDS support.**

**It can support 18bit/24bit single/dual channel panel, but need programming firmware according.**

**-End**

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