



FAQ / Application Note

Subject : How to adjust VIA VT8606 VGA BIOS for LCD Modules?	
FAQ Document No: H08004	Date: 2003/10/30
Model No. For VIA VT8606 chipset series	Rev. A1
Category: <input type="checkbox"/>General <input checked="" type="checkbox"/>H/W <input type="checkbox"/>S/W <input type="checkbox"/>Others, <u>Display</u>	
Purpose : That will help adjust VGA BIOS for different LCD panel on VIA VT8606 chipset series product.	

VIA provides us some utilities to customize VT8606 VGA BIOS LCD panel table/value w/o accessing to source code.

S3xray.exe → tool for adjust VGA BIOS on the fly under Win9X

Biosedit.exe → tool for edit VGA BIOS

You can install Win98 and connect LCD on your VT8606 platform first, and run s3xray.exe under Win98.

Following are the flat panel registers we will modify in the most of the cases :

SR60 to SR6F → LCD display range and position registers

SR64 → adjust H position

SR6A → adjust V position

SR70 to SR7F → LCD display panel type characters register

SR70(0)=0 → DSTN LCD, SR70(0)=1 → TFT or STN LCD

SR72 → LCD signal(H-sync, V-sync, Dclk, DE) polarity register

SR76 → LCD dither control register

SR79 → LCD frame rate control register

SR7C(7-6) → Flat panel active to FPVDD high timing adjustment

SR81 → FPVDD, LP timing adjust

SR7D → LCD configuration register

SR7D(0)=1, SR76=00, SR1D=00 → 24bit TFT TTL output

SR2C → build-in LVDS transmitter adjustment

SR2C(1-0) → 00(LVDS 36bit mode)

SR2C(1-0) → 10(LVDS 18bit mode)

SR2C(1-0) → 11(TTL output mode)

PanelDclk → Panel Shift clock adjustment

For more detail information, please refer to TwisterSpec_Reg.pdf Section 4(Plat Panel Registers)