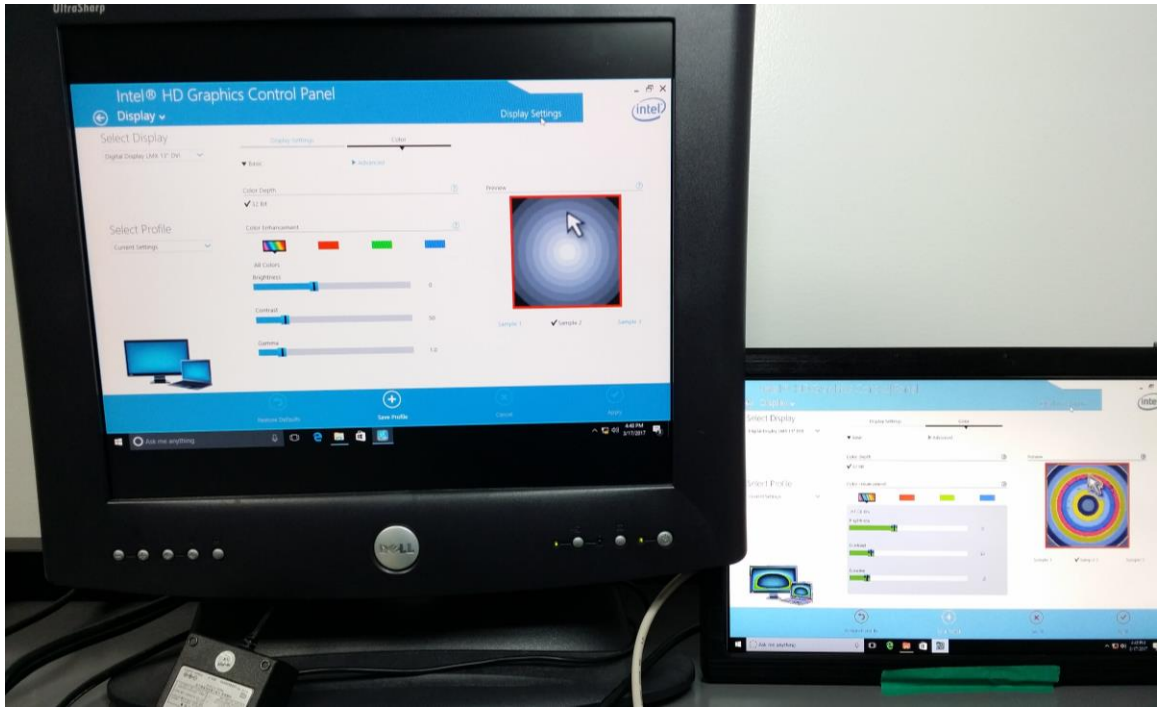
DESIGN

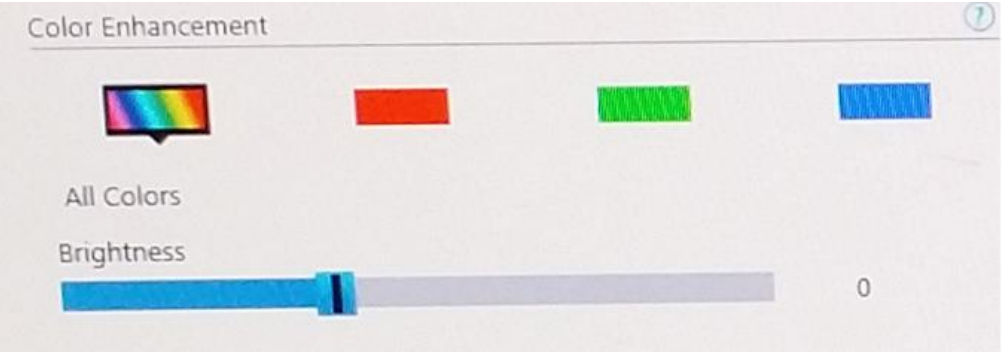
Two-chip solution of TFP401 and SN75LVDS83B used to convert DVI input to LVDS output.

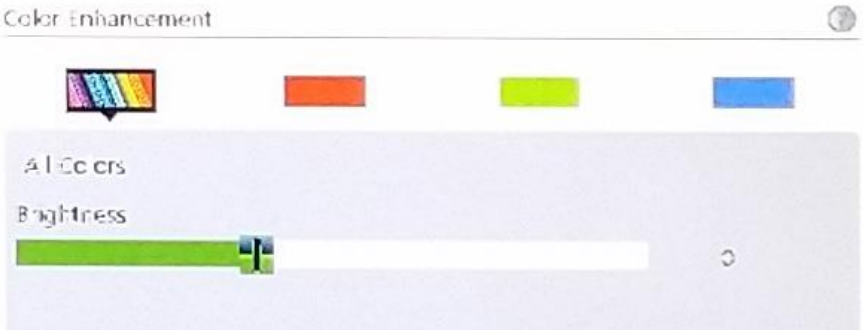
PANEL	PIXEL RATE	ODCK LATCH EDGE	ODCK	DFO	PIXS	OCK_INV
TFT or 16-bit DSTN	1 pix/clock	Falling	Free run	0	0	0

PROBLEM

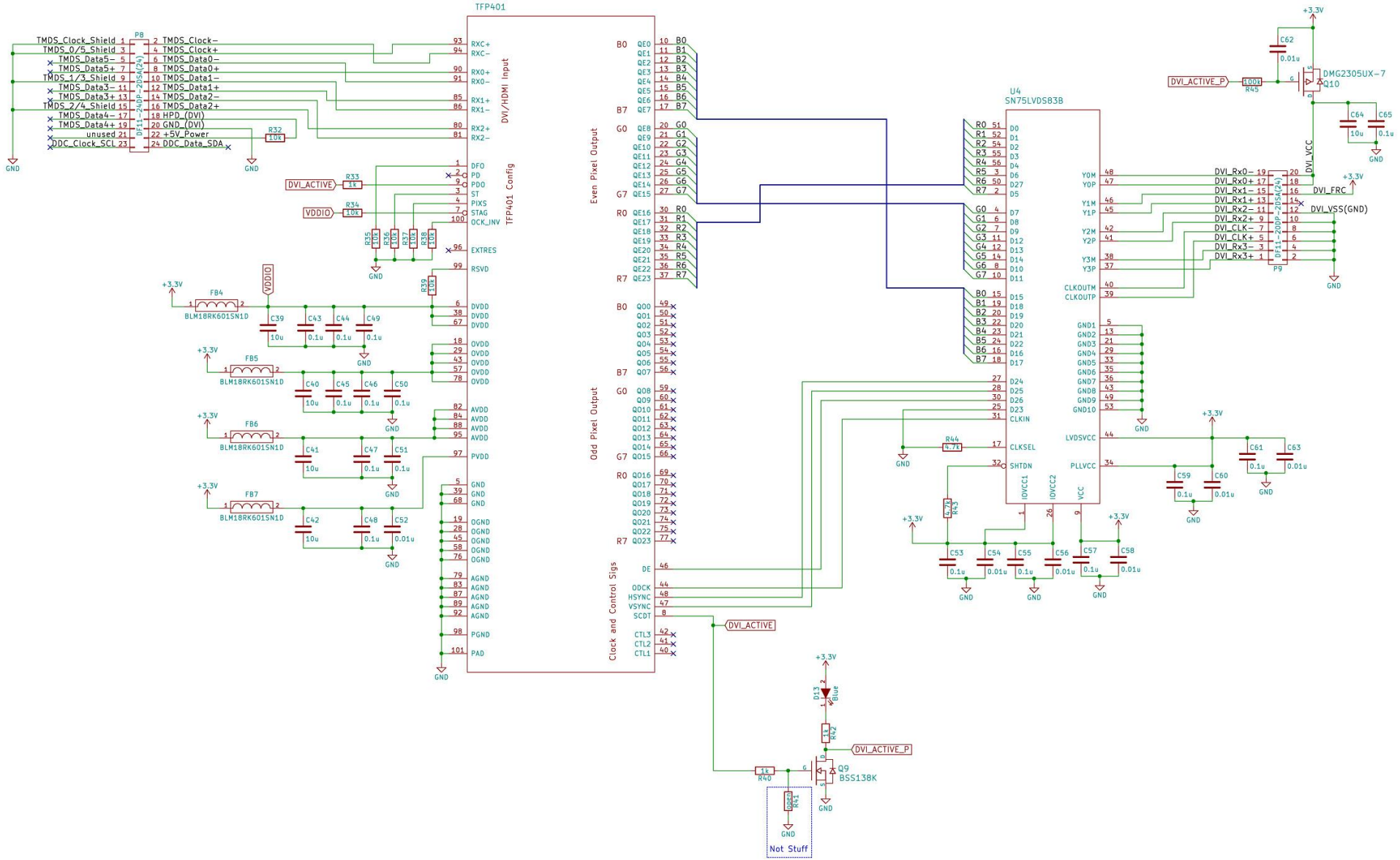
Resulting video image is messed up. “True” Red, Green, Blue, Black and White all seem to be relatively okay, but all other colors are very incorrect, with ridged lines rather than smooth color gradients. Also, the text is not crisp. See images below (working image on left side, bad image on right side).


UltraSharp
Intel® HD Graphics Control Panel
Display
Display Settings
Select Display
Select Profile
DELL


Color Enhancement
All Colors
Brightness
0

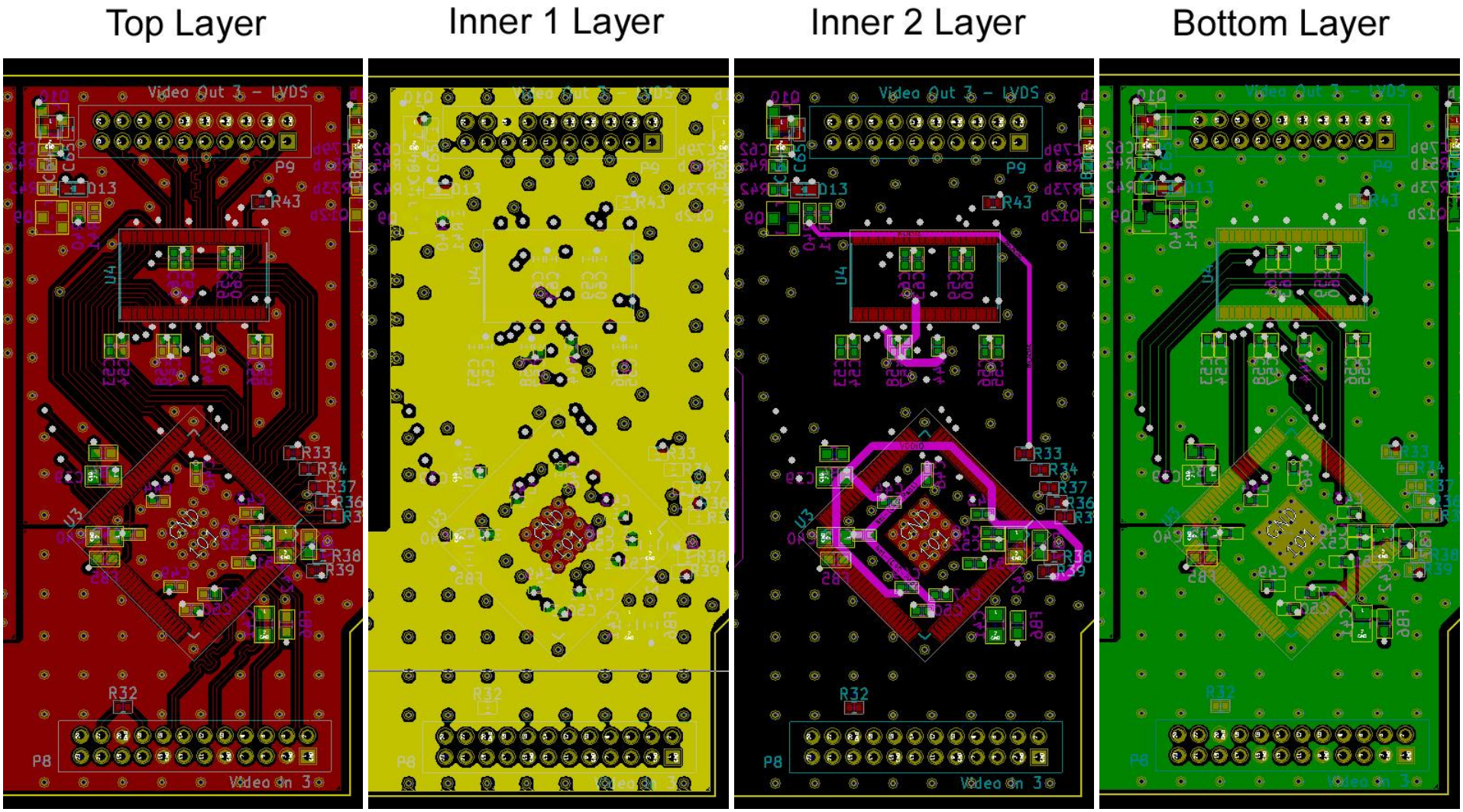

Color Enhancement

SCHEMATIC



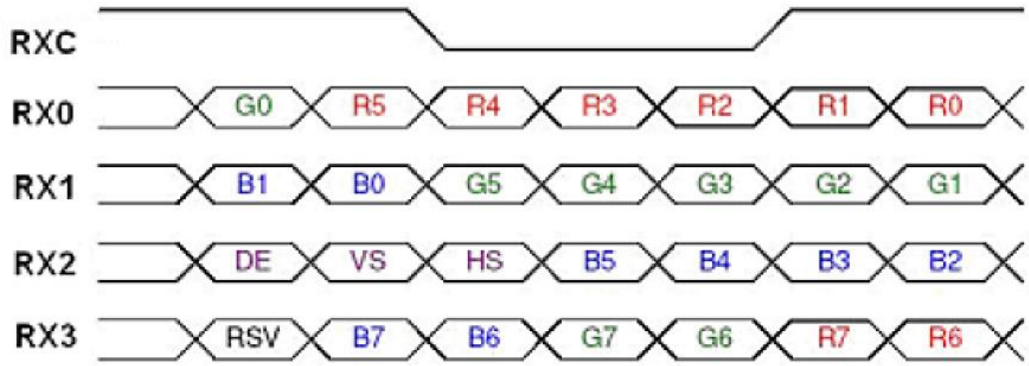
NOTE: DDC Clock (SCL) and DDC Data (SDA) are routed to external EEPROM containing EDID.

PCB LAYOUT



NOTE: Top and Bottom layer footprints visible on all layers.

PANEL SPECS

- TFT LCD Monitor
- WXGA (1280 x 800 pixels) resolution
- 16.2M colors

FRC = "High" for 8 bits LVDS Input