

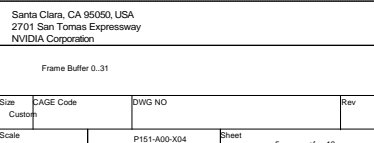
Revision History			Sub Assemblies		Description
Schematics taken from P151-A00-X24			COMMON		Components are stuffed for all SKUs
MS-8889 00A			NO_STUFF		Components are not stuffed
00A-0621			PRI_DVI_I		Components stuffed for Primary VGA
1)Page 10,13,18 of the original design (P151) has been delete.			PRI_PROT		Components stuffed for Primary Protection
2)Page 10,12 U816,U817,U818,U811(single gate) share one ACT08/S08.			SEC_DVI_I		Components stuffed for Secondary DVI
3)Page 13 a.P300 change reference to P600.			SEC_PROT		Components stuffed for Secondary Protection
b.Add P300 (long D-sub)for SEC D-sub.			AGP3VFBDDQ		Components stuffed for AGP 3.3V to FBVDD
4)Page 14 a.Remove P602.			FBVDD-FBDQ		Components stuffed for FBVDDQ 2.5V to FBVDD
b.Add S_OUT1,S_IN1,AV_OUT1,AV_IN1,J1,J2 connector.			PLL-SEQ		Components stuffed for PLL Sequence
5)Page 16,17 Modify power supply solution.			PWR-SEQ		Components stuffed for Power Sequence
a.PWM from SC1102A,SC1541-3.3V,SC1565 share one ISL6529.			PWR-SEQ-BP		Components stuffed for Power Sequence By-PASS
b.FBVDDQ is transferred from Q800,U4 by 5V.			NVVDD-2602		Components stuffed for NVVDD Power
c.SC2610 change to HIP6012.			FB_2610_SWT		Components stuffed for FBVDD Power
00A-0624			SC1541		Components stuffed for 3.3VL Fixed
1)Page 16 a.Remove C1250,C1251,R1076,R1071,Q10,U4,Q800.			SC1565		Components stuffed for SC1565 - 3.3VL Adj.
b.FBVDDQ Remove Q800 and U4 ,Add U812/NIKO-1085S/TO-263.			FB64LO		Components stuffed for FBA_DATA and FBD_DATA
c.Q905 and Q201 from 45N02LD change to 55N02LD for low Rdson.			FB64UP		Components stuffed for FBC_DATA and FBD_DATA
2)page 17 Remove Q9,R2086,Q8,R2087.			SER-PROM		Components stuffed for Serial PROM
3)page 11 Add R2217/33ohm and C2495 for "DVOCLK_IN".			PAR-PROM		Components stuffed for Parallel PROM
4)page 15 change Text Note "PCI_DEVID =253" to "PCI_DEVID =283".			FAN_HS-LFT		Components stuffed for Fan / Blower left of the GPU
5)page 17 a.R2085 change value to 4.7K.					
b.U3 change reference to U813.					
00A-0625			FAN_SNK		Fan Sink Component
1)Page 16 ADD C1250,C1251,R1076,C1071.			HEAT_SNK		Heat Sink Component
2)page 9 a.ADD RP16/47ohm for "DVOBD12" and "DVOBD13".					
b.Add solder side heat sink "K201"					
3)page 11 Add SAA7104/5.					
00A-0626			VIVO		Components stuffed for Video IN/OUT
1)Page 9 - Change the 47ohm RPack to 33ohm RPack.			VIDO-7104		SAA7104 Video Out
2)Page 2 - a.ADD C106/4.7U for "12V to gnd".			CX-ENC-TVOUT		Components stuffed for CX25871 - TV-OUT
b.R80,R81,R82, and R83 from 5Ω change to 1Ω.			SOCKET		Components stuffed for Socket
3)Page 16 - U812 from L1085/3A change to L1084/5A for FBVDDQ.			64MB-4MX16		Components stuffed for Mem-CFG: 64MB (4Mx16) memory
4)Page 14 - S_OUT1 & S_IN1 chage to P500 & P501.			BRACKET		IO Bracket / VGA-DIN-DVI-I
00A-0701			BRACKET-VGA		IO Bracket / VGA- -DVI-I
1)Page 2 - a.ADD thermal sensor RT1 (in GPU solder side).			FB_2610_LDO		Components stuffed for FBVDDQ Power
b.ADD C113/220PF "AGPREFECG" pull down.			FBVDD_ADJ		Components to adjust FBVVD out voltage.
2)Page 14 - Remove J1.			FBVDQ_ADJ		Components to adjust FBVVDQ out voltage.
4)Page 16 - a.Remove C1406.					
b.ADD CE1,CE2,CE3,CE4 for EMI (FBVDD bypass).					
c.ADD R617/1K,R618/6.8K,C1406/470PF for U814.					
5)Page 17 - ADD C2307,C2308 for "FBVDDQ".					
00A-0702					
1)Page 2 - a.Make R80 = 49.9 ohms 1%, Make R81 = NO_STUFF, Make R82 = 56.2 ohms 1%, and Make R83 = NO_STUFF.					
b.C110 from 0.1uF change to 0.01uF					
C113 from 220PF change to 0.22uF					
2)Page 16/17 - R617, R618, R624, R616, R1080, R1082, R1210, R1104, R2085, R2083, R2082 all be 1%.					
00A-0703					
1)Page 2 - Add R111,R112 0ohm for thermal sensor.					
2)Page 11 - Remove U1 7104H/QFP64.					
00A-0704					
1)Page 11 - Remove R2218.					
2)Add 8.a H/W MONITOR for channel only, Medion NO_STUFF.					
3)Page 17 - Add C2235 for 12V to GND.					
00A-0708					
1)Page 2 - RT1 footprint from SMD change to DIP.					
00A-0709					
1)Page 16 - Remove C1276,C1264,C1366,C1267,C1301,C1379,C1304.					
2)Page 5,6,7,8 - Add C550-C565 / 10PF / 0402 from "FB(A/B/C/D)CLK(0/0-1/1-) total 16pcs for EMI engineer.					
00A-0712					
1)Need to change Power net on R2088 sheet 17 to "12V".					
Need to change Power Net on D658 sheet 17 to "12V".					
00A-0716					
1)Page 2 - a.R80 and R81 needs to be tied to "GND". right now it is tied to VDDQ.					
b.R82 and R83 needs to be tied to "VDDQ".					
Pin 'R82.2' moved to net 'VDDQ'.					
Pin 'R83.2' moved to net 'VDDQ'.					
Pin 'R81.1' moved to net 'GND'.					
2)Page 2 - Pin 'Q901.3' moved to net 'AGP_MDT2'. This is the collector.					
Pin 'Q901.1' moved to net 'AGP_MDT4'. This is the BASE.					
Pin 'Q901.2' moved to net '3.3V'. This is the Emitter.					
3)Page 2 - Component value changes:					
a.R98 please change from 5.76K to 6.49K 1%.					
b.R110 and R105 change from 1.5K to 2.32K 1%.					
c.Q613 - Changed from ZN7002 to IRLML2502 (N-ch 20V 3A 0.08 on resistance).					
d.Q901A - change to MMST4403LT1.					
00B-0728					
1)Page 2 - C108 pin 1 & Q901A pin "E" and R94 pin 1 from 3.3V change to 3.3VL.					
2)Page 16 - C1303 from SMD change to DIP for low ESR.					
3)Page 17 - a.ADD CE4-CE8 for EMI 3.3V to FBVDDQ.					
b.D658 pin2 connector to "CP_CAP",D658 pin 3 connector to C2273 pin 1.					
00B-0730					
1)Page 2 - Add U200/FDC6301N,R93/0R,R101/121K,R108/121K,R96/1K for AGPvrefcg.					
2)Page 16 - R1076 change to 6.49 ohm / 1%.					
C1250 change to 68nF.					
R1210 change to 13K / 1%.					
C1448 change to 47nF.					
C1252 change to 2.2nF.					
3)Page 17 - R1067 change to 10 ohm / 1%.					
C2230 change to 100nF.					
R2081 change to 10K / 1%.					
C2234 change to 2.7nF.					
R2075 change to 1.58K / 1%.					
R2084 change to 49.9K / 1%.					
00B-0731					
1)We need to change the Device ID from 0x283 to 0x281.					
So that means R959 is a NO_STUFF and R258 is 10K.					
2)Page 17 - R1121 change to 3.16K / 1%.					
00B-0801					
1)Page 17 - C2234 change to 2.7nF.					
2)Page 15 - Add JP2 connector to "DVOD21 and GND.					
3)Page 13 - P300 pin 17,18 floating.					
00B-0802					
1)Page 16 - Add Cap C1264,C2309,C2310(dual layout) for layout.					
2)Page 18 - Add R58,R59,R60 and U2 for FAN power.					
100-0819					
1)Page 16,17 - Remove C1263,C2267,C2301,C2303,C2309,C2310 for layout.					
2)Page 16,17 - L801,L802 change Footprint to CHK_3052_08.					
3)Page 3 - change R1107 to 113R and change R927 to 110R.					
4)Page 10,12 - C325,C320,C1120,C1121 from 22PF change to 47PF.					
Legend:					
-----					
TPNC = Test Point - Not Connected					
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140-10085-0000-A03					



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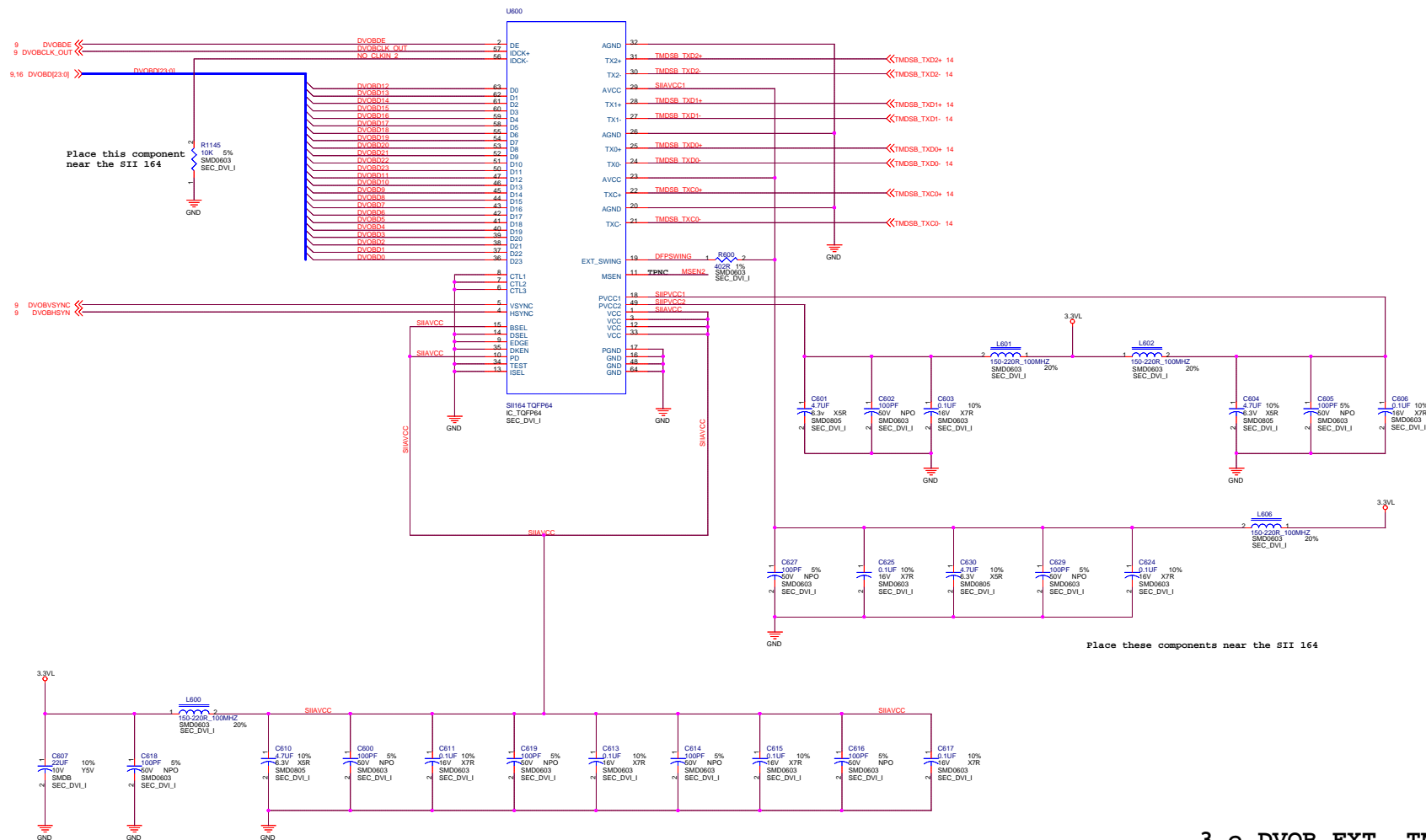









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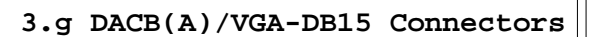


### 3.e DVOB EXT. TMDSB SEC

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	DVOB Ext. TMDSB PH		
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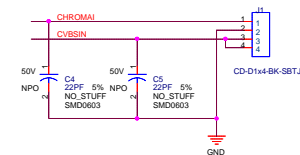
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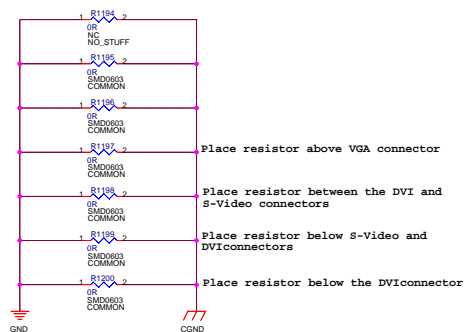


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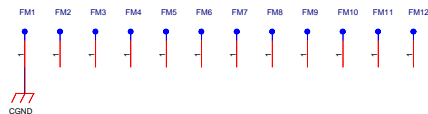




## X-Components



All of these components have been designated with the following Assembly: VIVO




### 3.h Connector - S-Video-Vidcap.

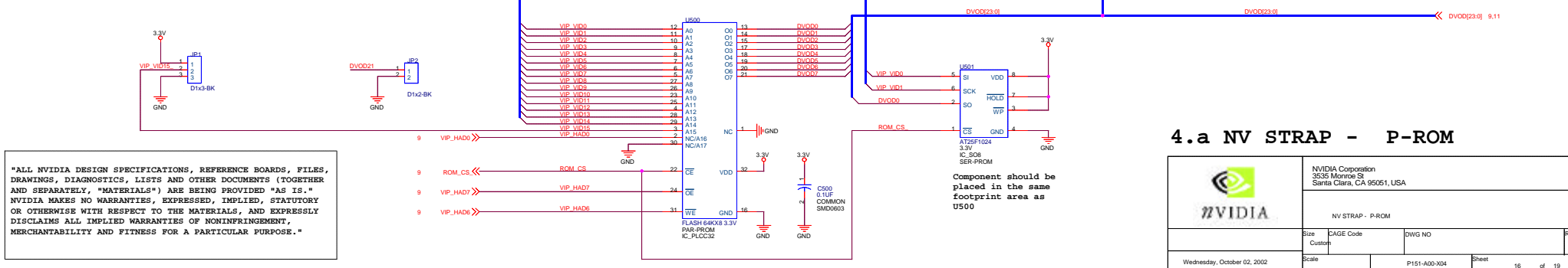
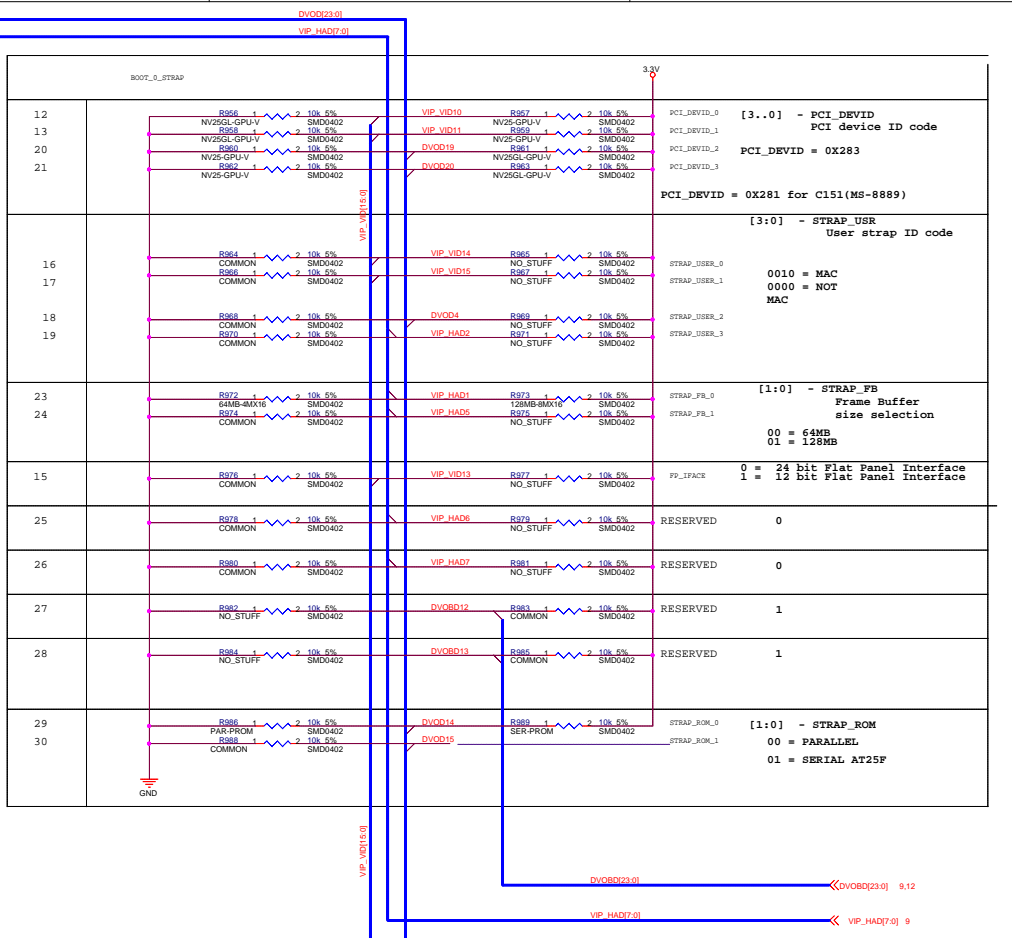


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Connector - S-Video-Vidcap

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	Connector - S-Video-Vidcap.		
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# 4.a NV STRAP - P-ROM

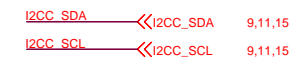
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NV STRAP - P-ROM			
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Component should be placed in the same footprint area as U500

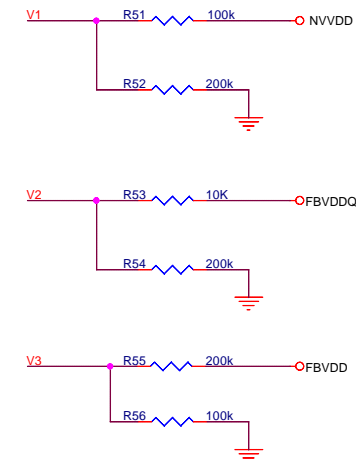






The schematic diagram illustrates the electrical connections for the fan speed control system. It includes two main sections:

- Fan Motor Driver Section:** This section controls the fan motor (FANIN1) using a PWM signal (PWMOUT1). The PWM signal is generated by a 3.3V source through resistor R43 (4.7K) and connected to the base of transistor Q2 (2N7002-SOT23 IC\_SOT23\_123) via resistor R44 (100Ω). Transistor Q2 drives the base of transistor Q1 (3906 IC\_SOT23\_123) through resistor R46 (1K). Transistor Q1 drives the fan motor through resistor R45 (4.7K). A 47μF capacitor (C62) is connected between the emitter of Q1 and ground. A 12V supply is connected to the collector of Q1 through resistor R58 (0.050 MAX NO\_STUFF), which also connects to the positive terminal of the fan motor (FAN+).
- Voltage Regulation Section:** This section provides regulated voltage for the fan motor. A 12V supply is connected to the VIN pin of the NIKO-L1087-SOT89-1.2A LDO regulator (U2). The VOUT pin of U2 is connected to the FAN+ terminal. The ADJ pin of U2 is connected to ground through resistor R59 (1K, 1% SMD0603 FAN\_NIKO1085S-LDO). Resistor R60 (5.36K, 1% SMD0603 FAN\_NIKO1085S-LDO) is also connected to ground.



### VOLTAGE SENSING CIRCUIT



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H/W MONITOR

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