NV28M-P138, DAC, TMDS, LVDS, TVout, 64MB 4MX32 BGA DDR, AGP4X, Dell Mobile

X17 1. Use RUNPWRGD for all PS enabling. A01: X40 1. Corrected serial ROM hookup. A02: X42 1. Corrected I2C2 hookup at U9 (CH7009). 2. Changed R254 to 1.5K 1%. This raises NVVDD to 1.25V. 3. Connect GPIO1 to 90C387 PD, and disconnect SUS_STAT- from motherboard. 4. Change Q2 to FDS6982. X44 5. Change R287 to 2.67K and R254 to 1.1K when NVVDDSW stuff option is employed, with R254 = 1.5K when no NVVDDSW is used (NOSW stuff option). 6. Removed TP606 to allow better guard trace on thermal sensor D+ and D - lines. 7. Connected CH_GPIO0 to NSM_DUAL to select single or dual link panels.

1. Schematics taken from E153-A00.

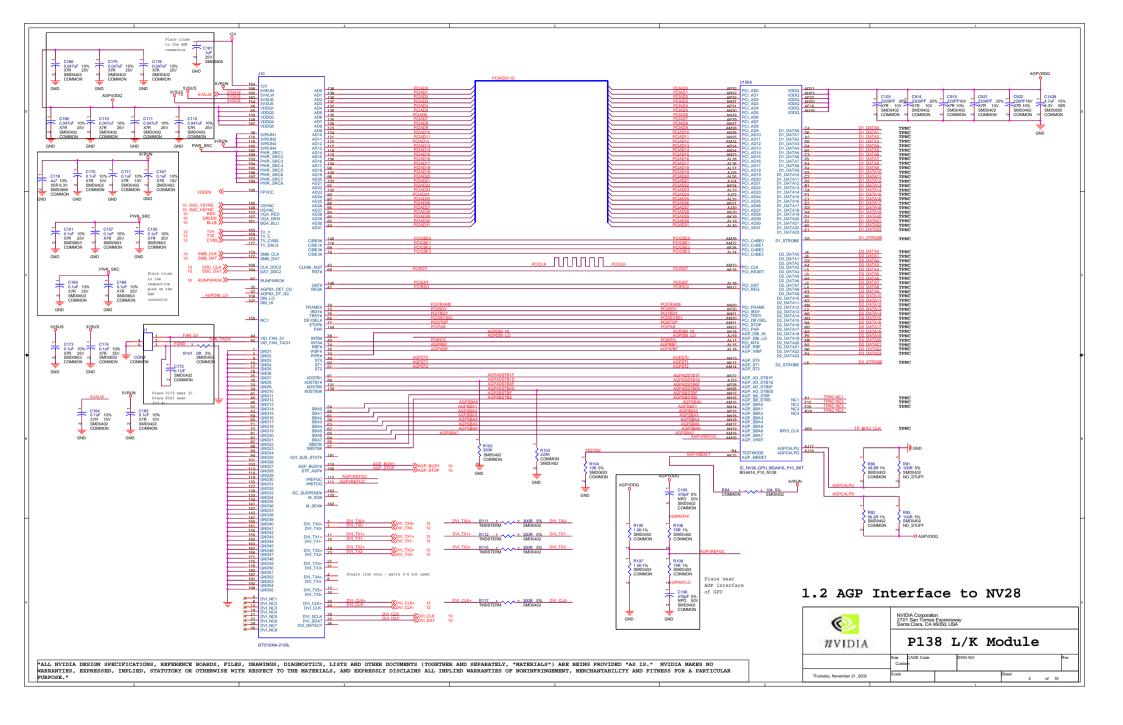
X00

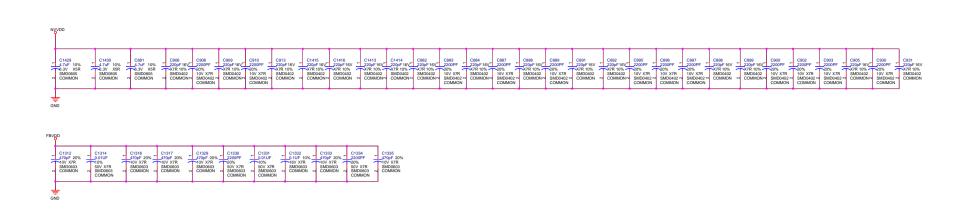
1.1 TOP PAGE

140-10138-0000-A01 602-10138-0000-A01

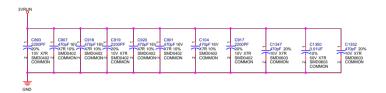
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	Thursday, November 21, 2002	Scale					Sheet	1	of	16		

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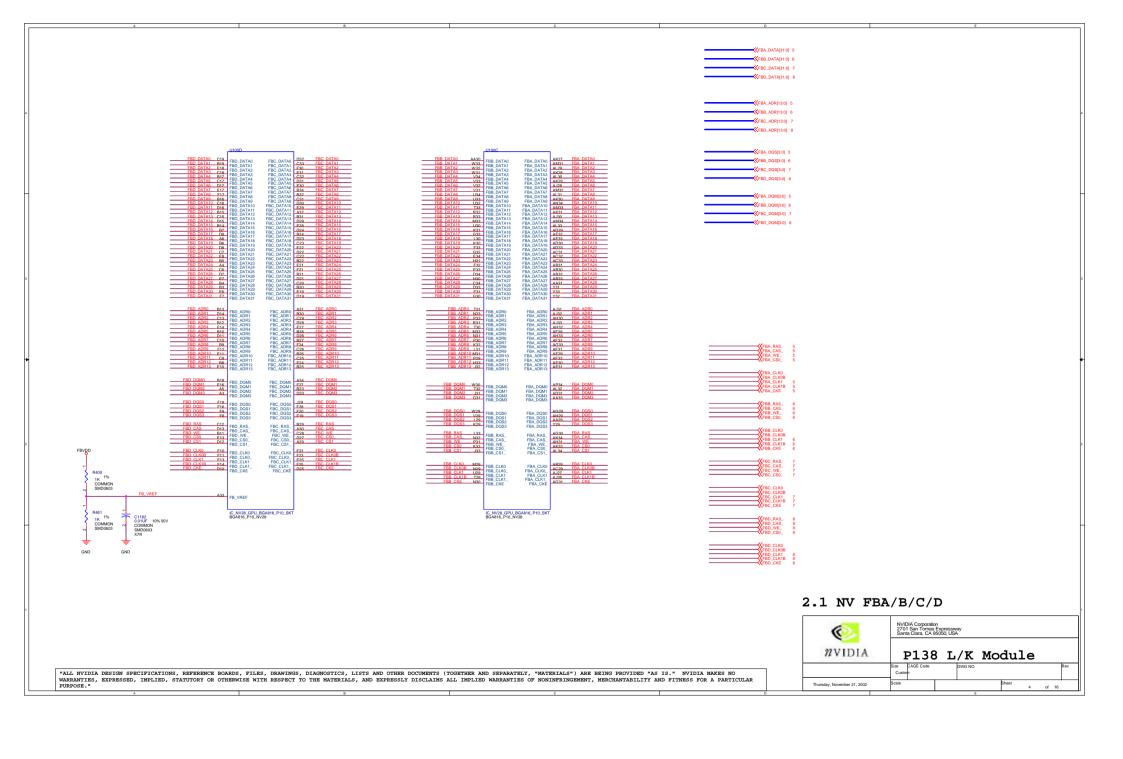
FBV)D														
7	C1336 2200PF 20% 50V X7R SMD0603 COMMON		C1338 0.1UF 10% 16V X7R SMD0603 COMMON N	C1339 470pF 10% 16V X7R SMD0603 COMMON N	C1340 2200PF	C875 470pF 16V X7R 10% SMD0402 COMMON		X7R 10% SMD0402	X7R 10% SMD0402	C879 470pF 16V X7R 10% SMD0402 COMMONN	X7R 10% SMD0402	X7R 10% - SMD0402	C890 470pF16V X7R 10% SMD0402 COMMONN	SMD0402	C904 2200PF 20% 10V X7R SMD0402 COMMON
-	-	COMMON			COMMON		COMMON								COMMON

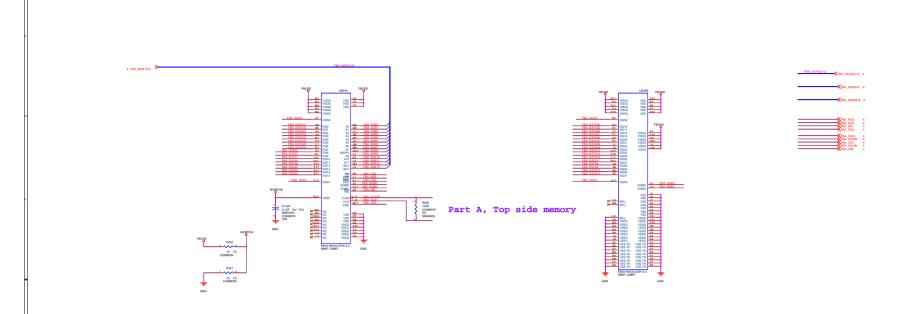


2.0 NV DECOUPLING

©	NVIDIA Corporation 2701 San Tomas Expressway Santa Clara, CA 95050, USA			
nvidia	P138 L/K Module			
	Size CAGE Code DWG NO Custom			Rev
Thursday, November 21, 2002	Scale Sheet 3	of	16	

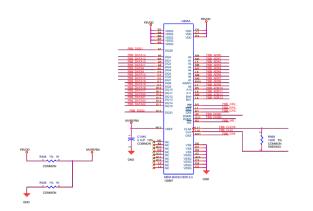
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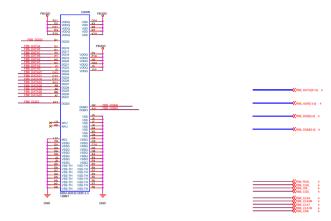




2.2 FBA DDR 4MX32 SDRAM

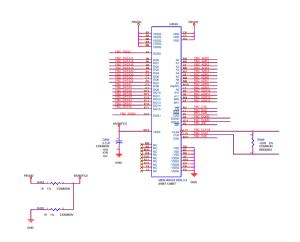


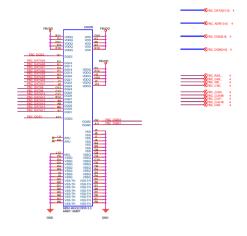




2.3 FBB DDR 4MX32 SDRAM

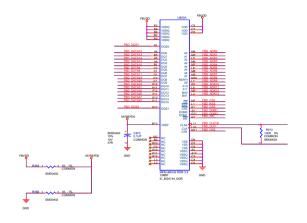


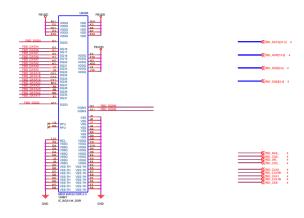




2.4 FBC DDR 4MX32 SDRAM

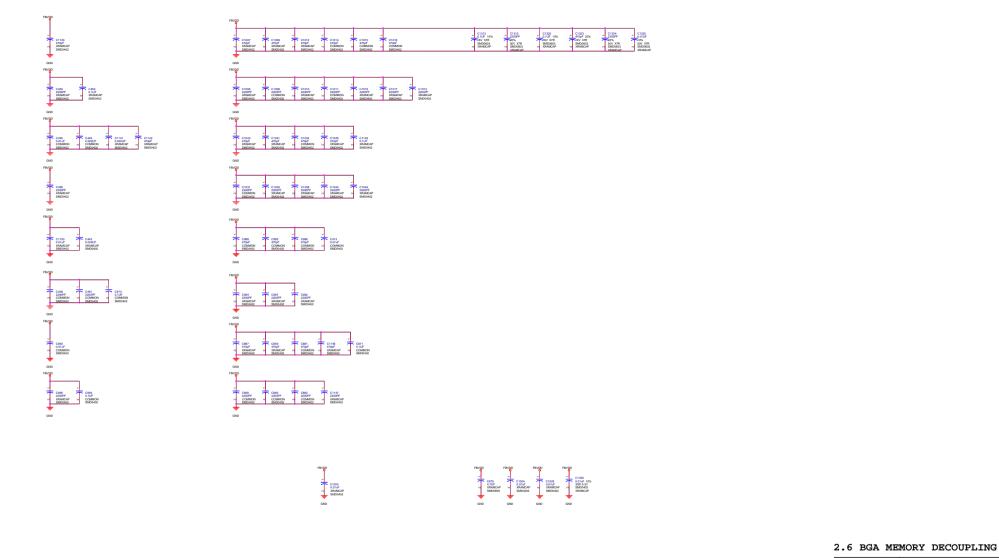




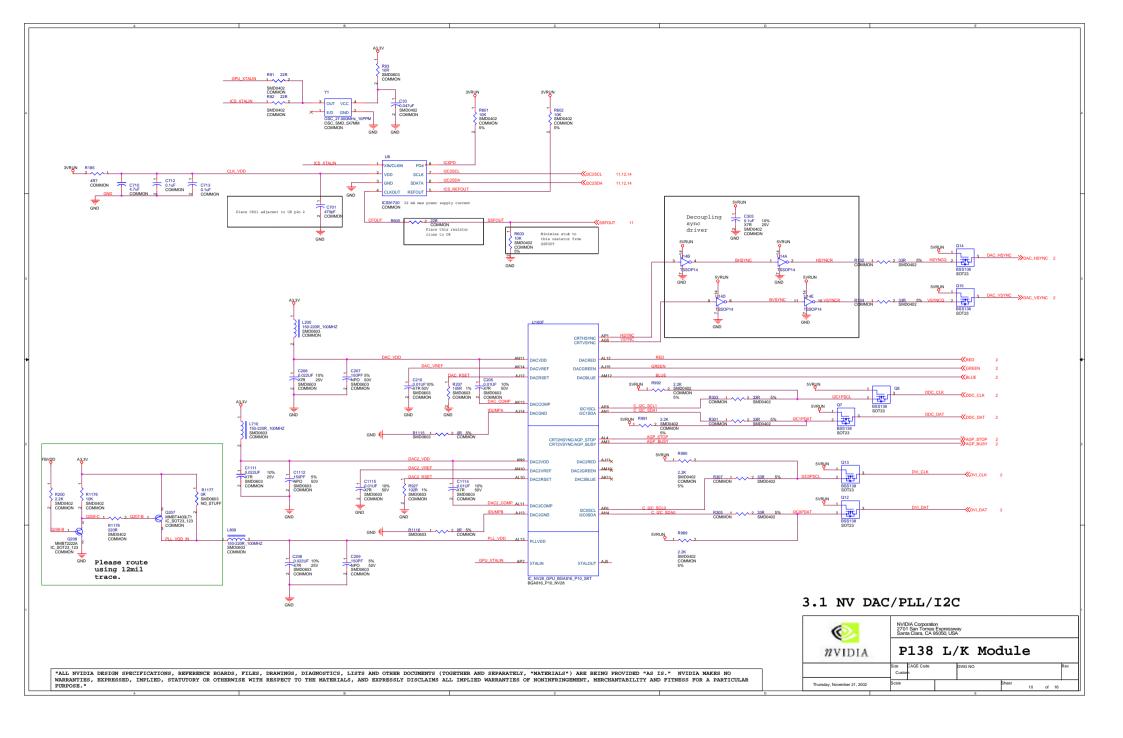


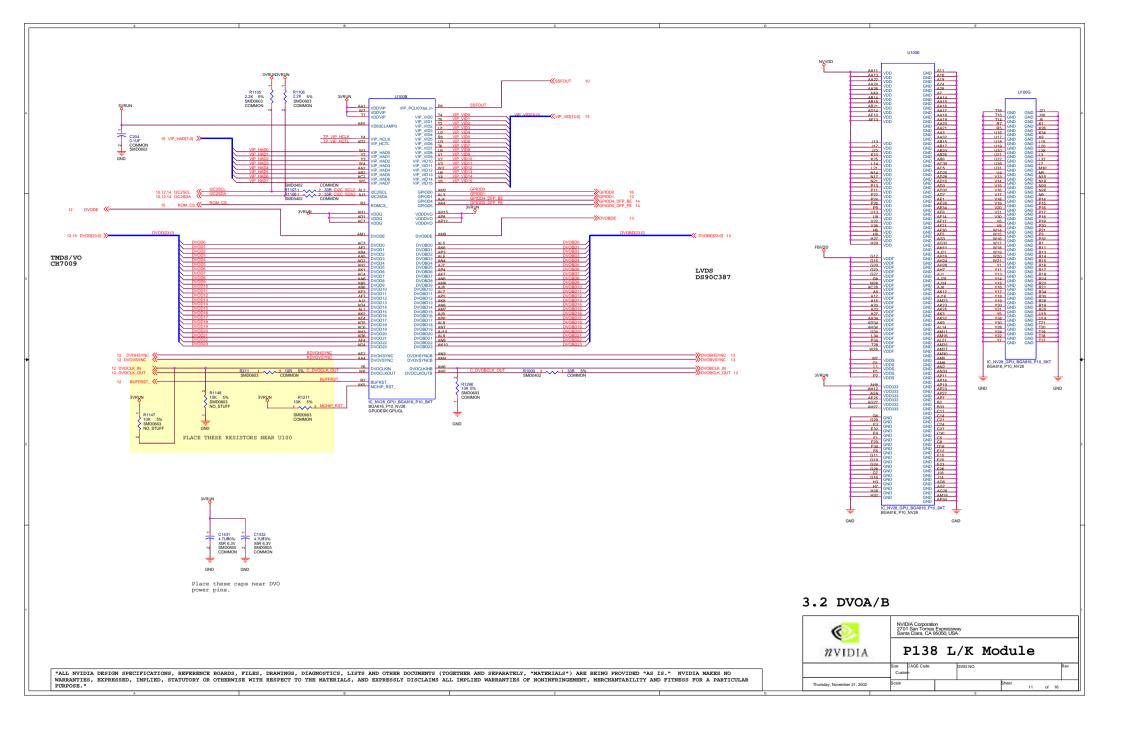
2.5 FBD DDR 4MX32 SDRAM

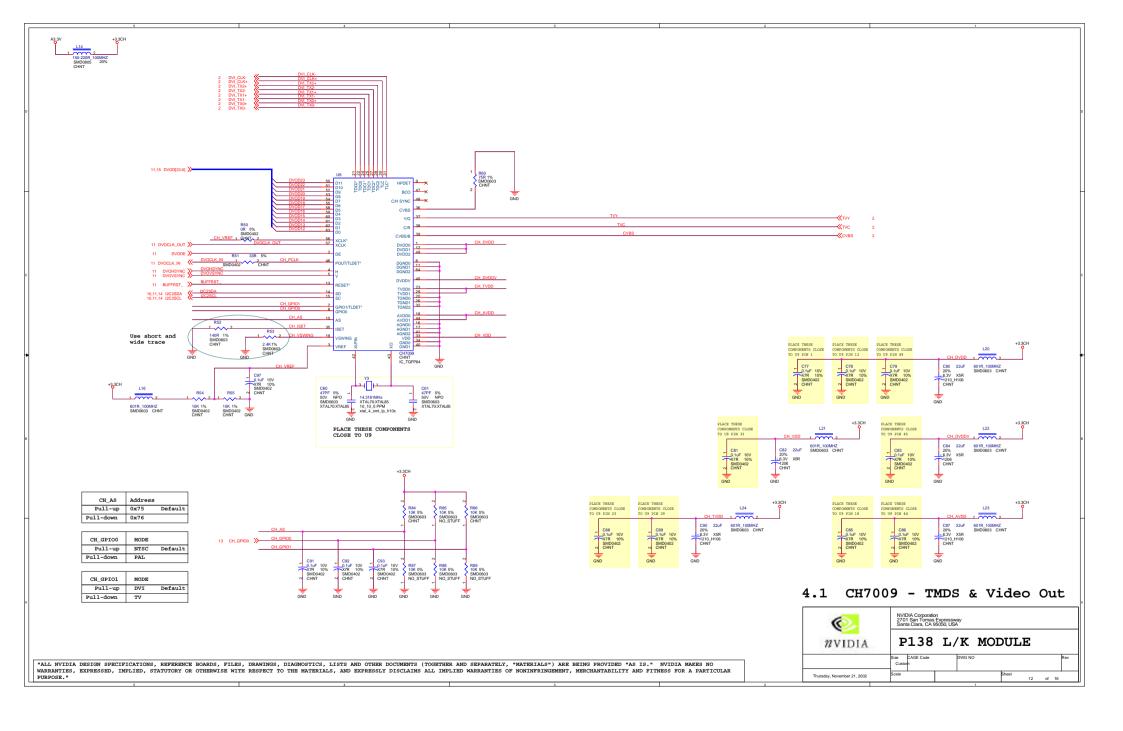




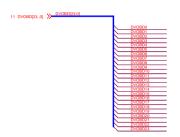
©	2701	DIA Corporati I San Tomas Ia Clara, CA 9	Expressway				
NVIDIA	P	138	L/K	Module			
	Size	CAGE Code	DWG NO				Rev
Thursday, November 21, 2002	Scale			Sheet 9	af	16	







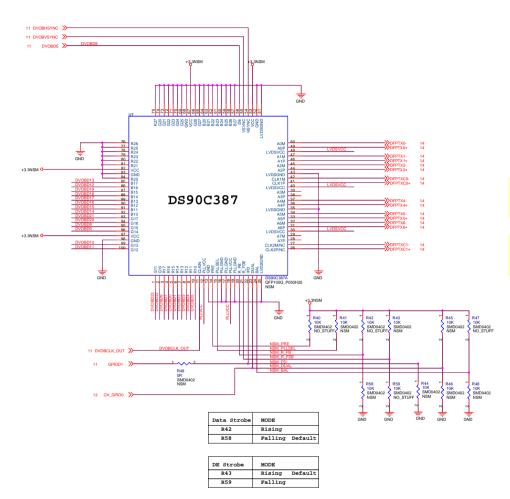


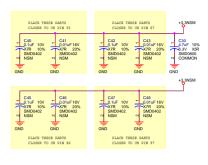


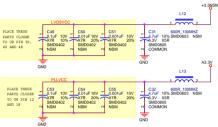
VGA	DVO	NSM
Color	Output	Input
R7	DVOB0	R15
R6	DVOB1	R14
R5	DVOB2	R13
R4	DVOB3	R12
R3	DVOB4	R11
R2	DVOB5	R10
R1	DVOB6	R17
R0	DVOB7	R16
G7	DVOB8	G15
G6	DVOB9	G14
G5	DVOB10	G13
G4	DVOB11	G12
G3	DVOB23	G11
G2	DVOB22	G10
Gl	DVOB21	G17
G0	DVOB20	G16
В7	DVOB19	B15
В6	DVOB18	B14
B5	DVOB17	B13
В4	DVOB16	B12
В3	DVOB15	B11
B2	DVOB14	B10
Bl	DVOB13	B17
В0	DVOB12	B16

NOTE:









4.2 DS90C387 - LVDS



