P621-A01: G98-GB1-64, MXM-I, 256/128MB GDDR2 (32M/16Mx16), LVDS, HDMI, TV_OUT, VGA, HD Audio, DP option

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SKU	VARI ANT	NVPN	ASSEMBLY
В	Base	600-10621-0000-100	BASE LEVEL GENERIC SCHEMATIC ONLY
1	SKU0001	600-10621-0001-100	NB9M-GS G98M ?/400MHz, 256MB(64bit) GDDR2 32Mx16 84FBGA, LVDS + HDMI + SD/HD(TV_OUT) + VGA
2	SKU0002	600-10621-0002-100	Cancelled 128MB version
3	SKU0003	600-10621-0003-100	NB9M-GE G98M ?/400MHz, 256MB(64bit) GDDR2 32Mx16 84FBGA, LVDS + HDMI + SD/HD(TV_OUT) + VGA
4	SKU9998	600-10621-9998-100	All components
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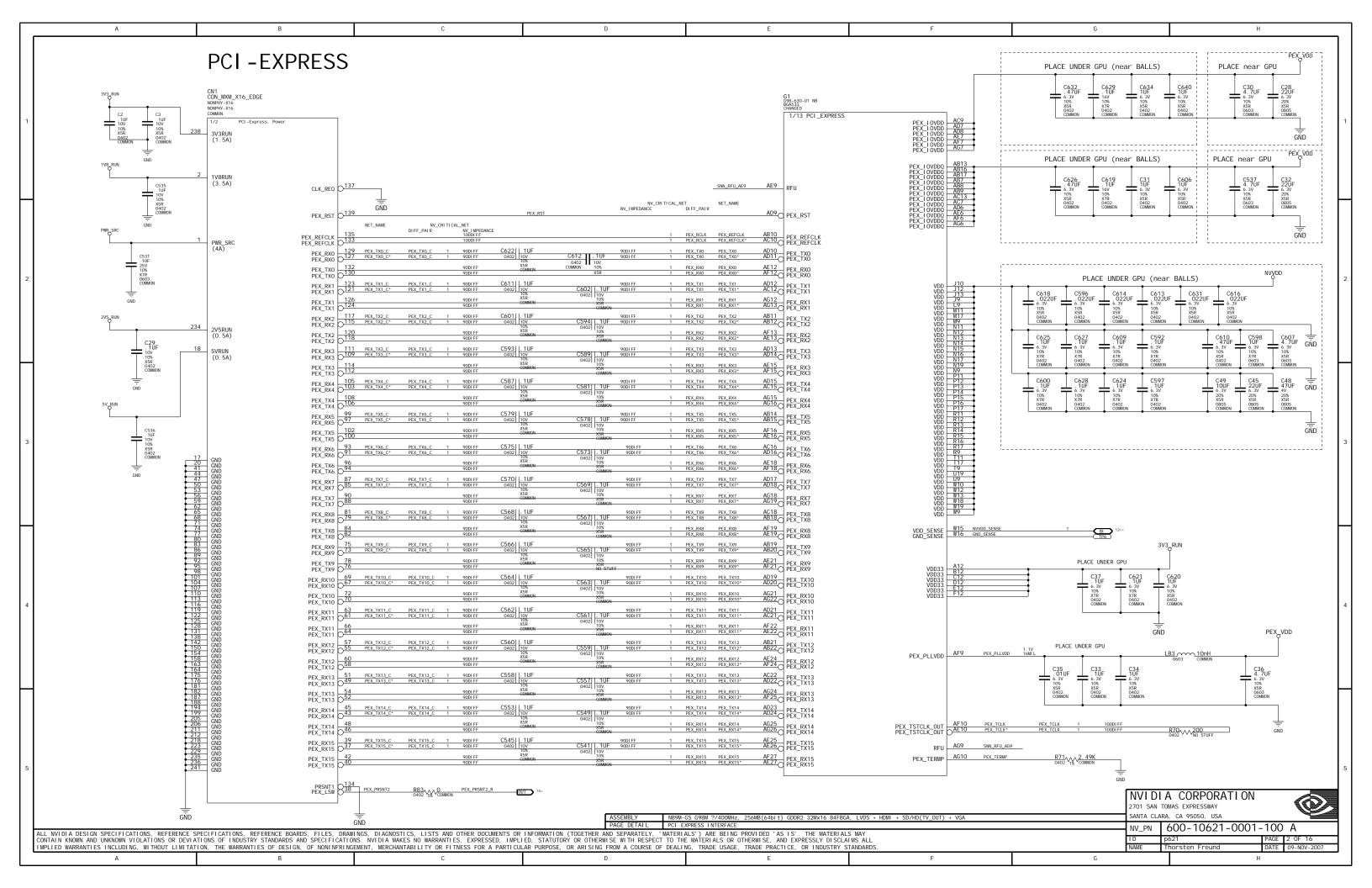
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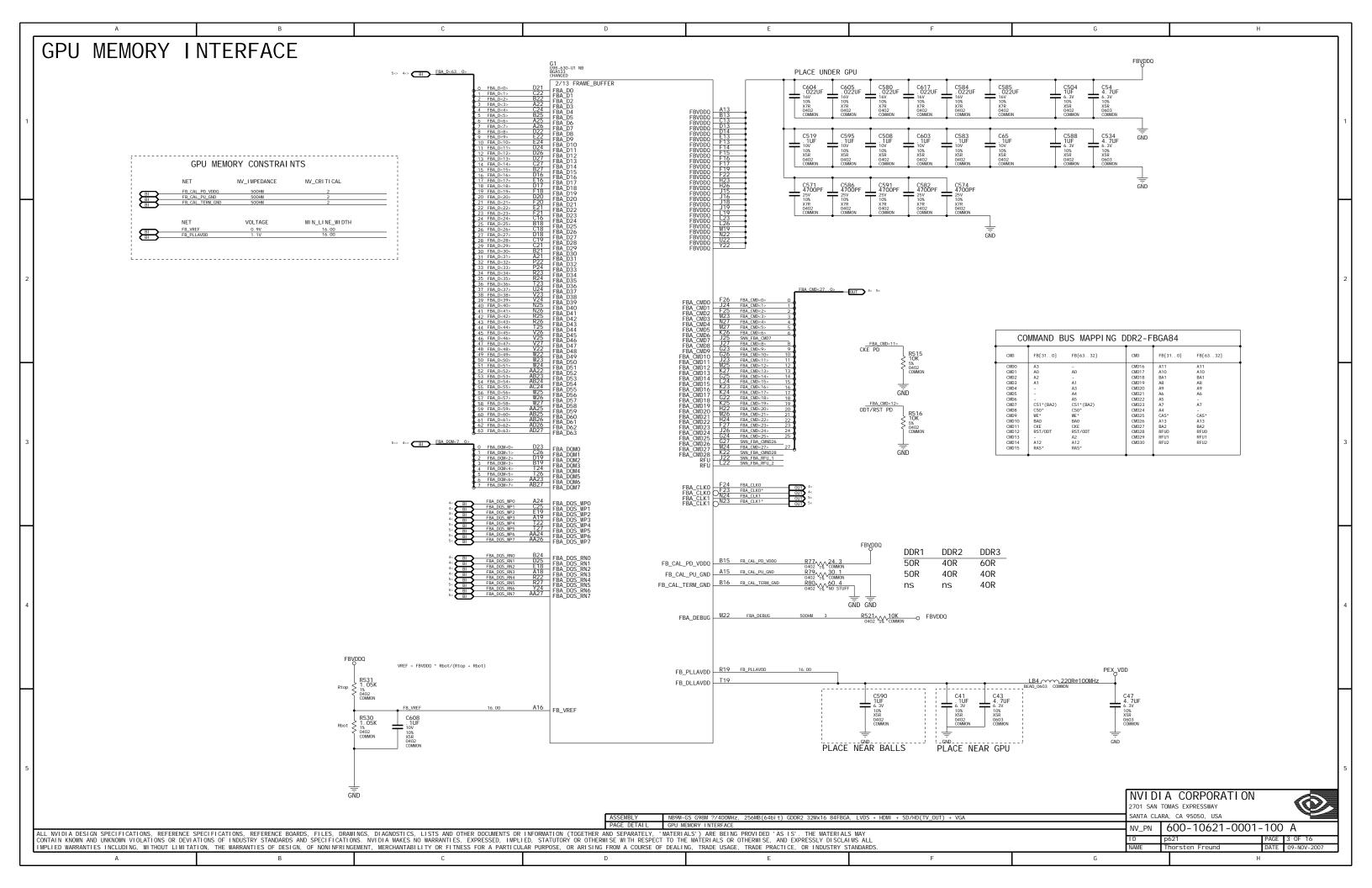
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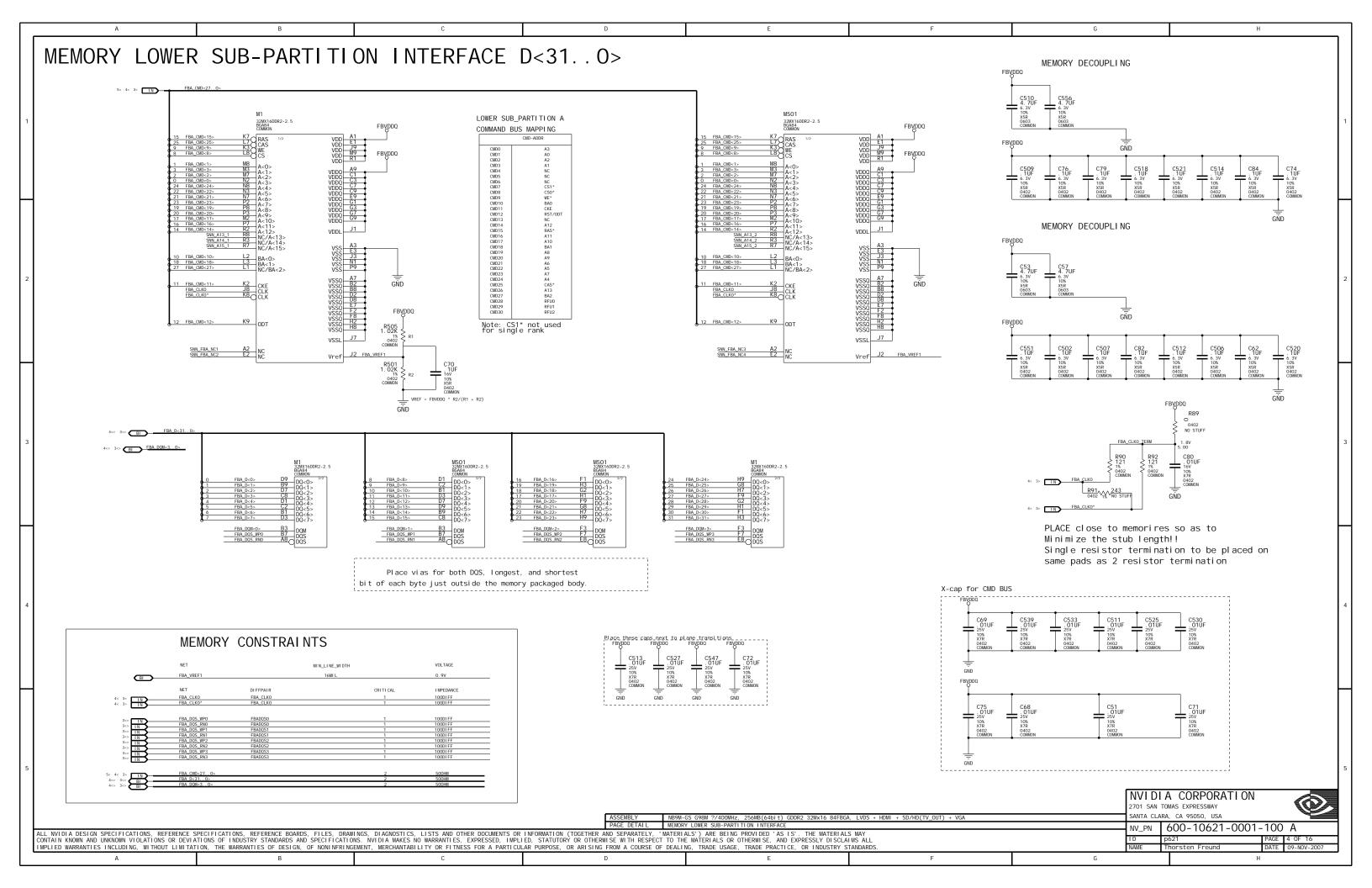
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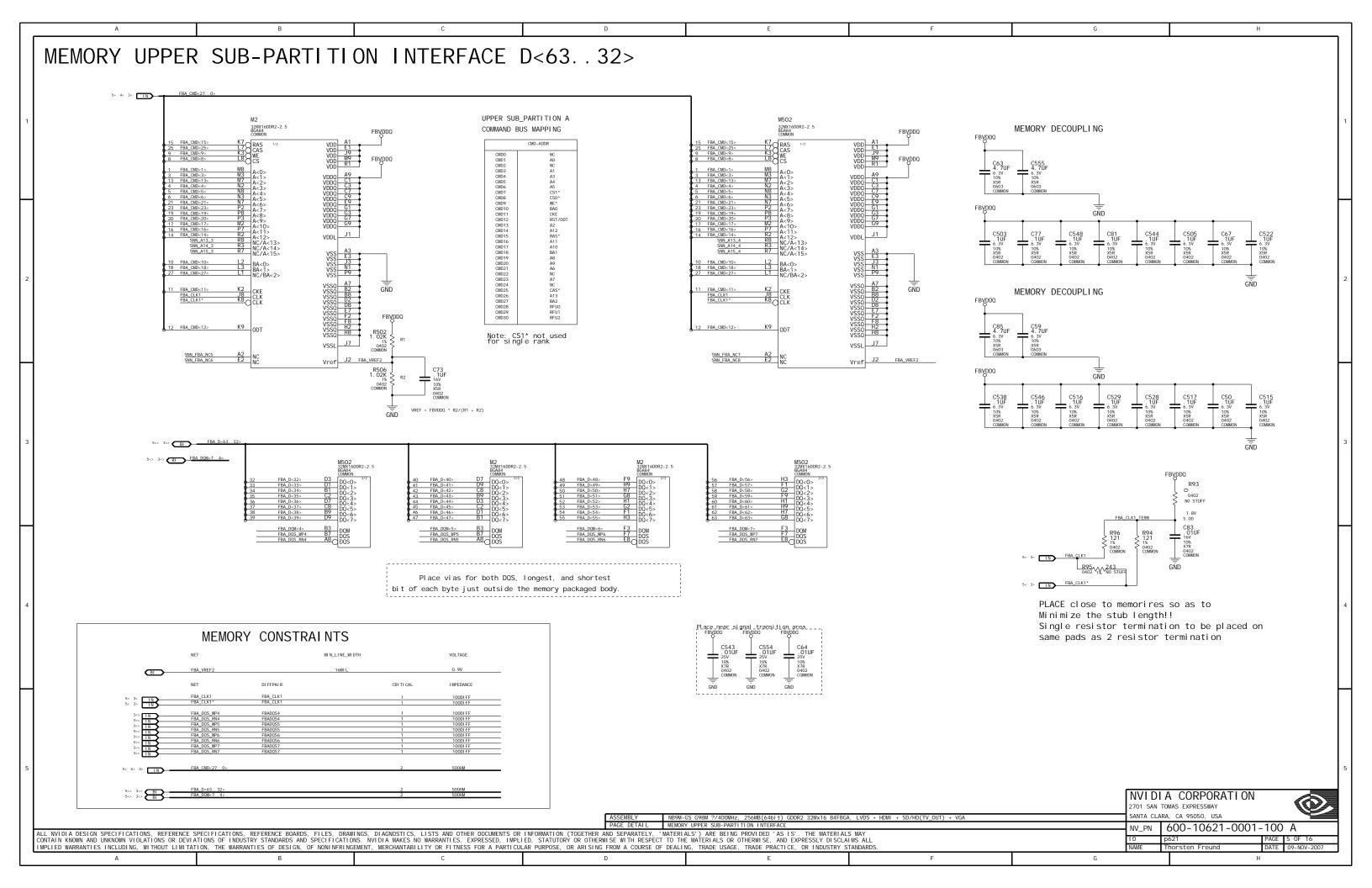
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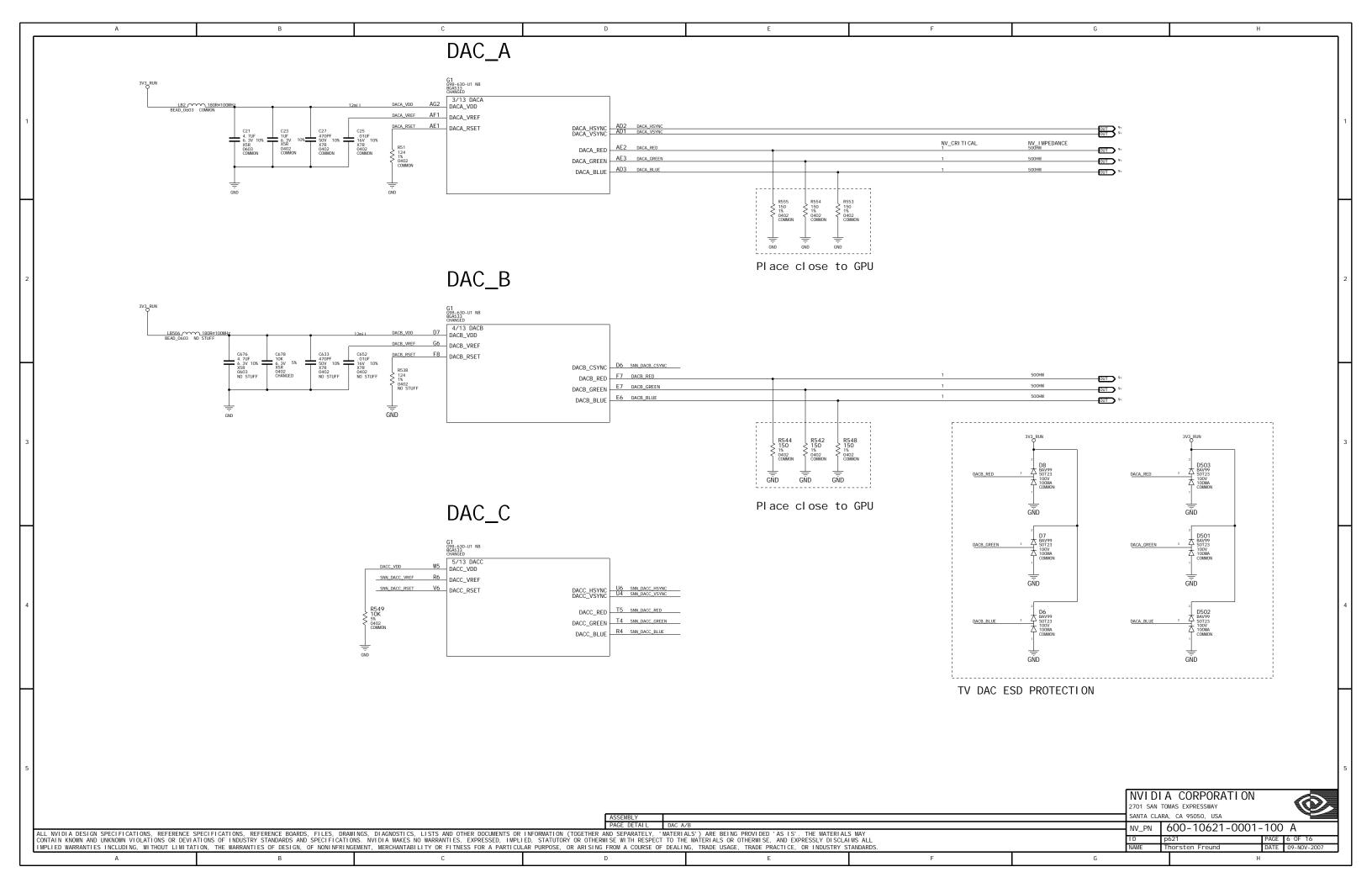
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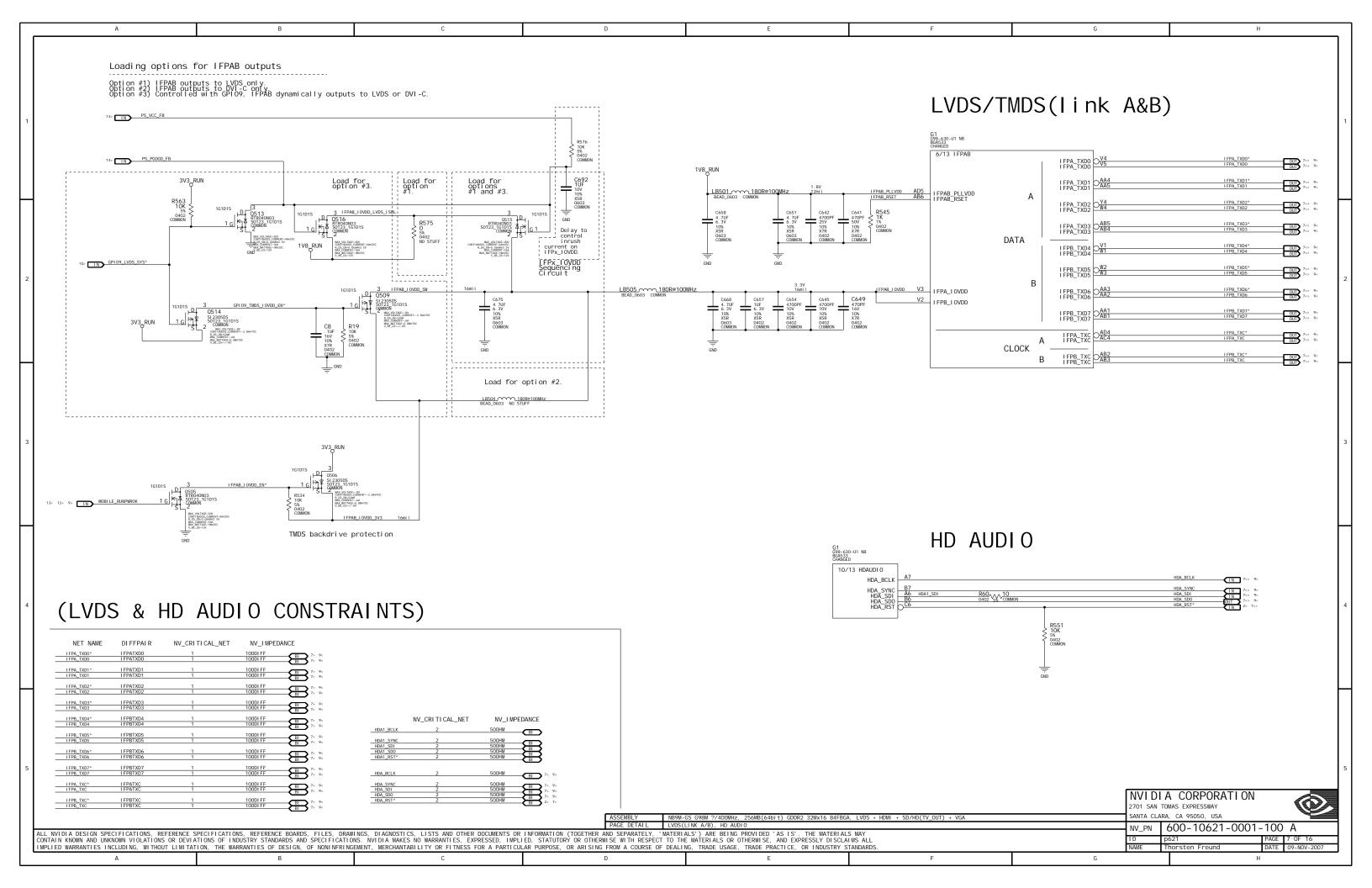


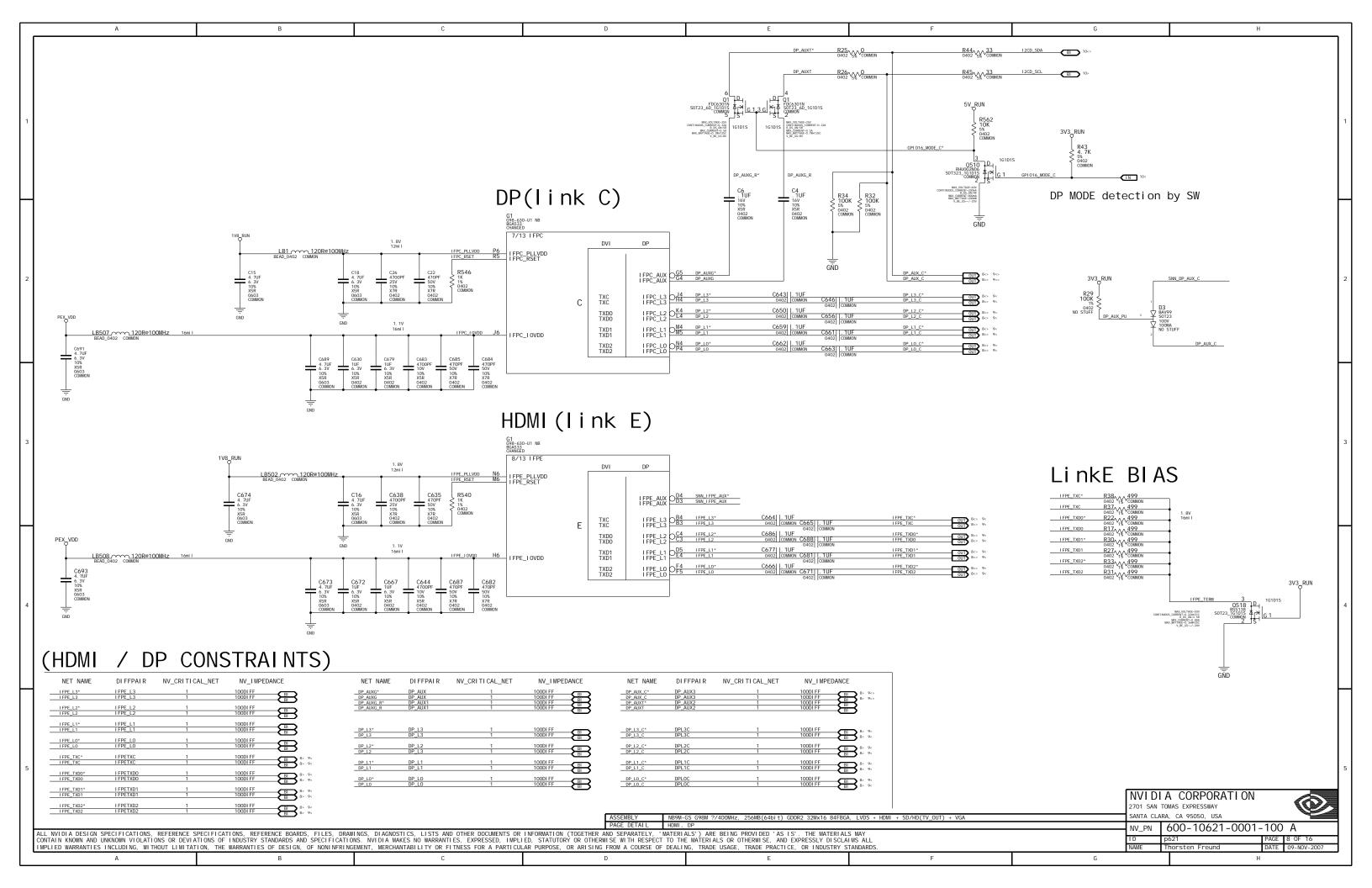


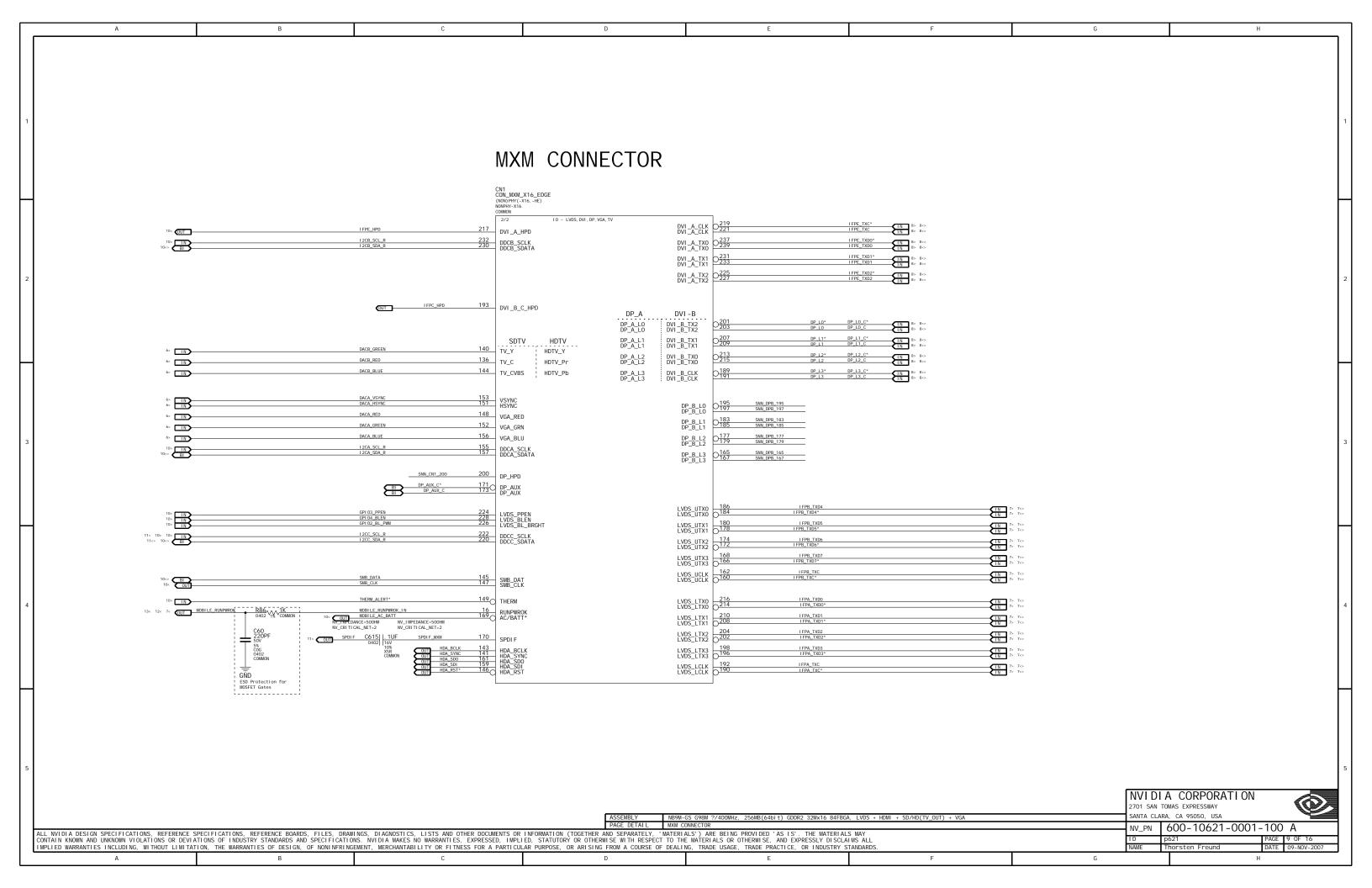


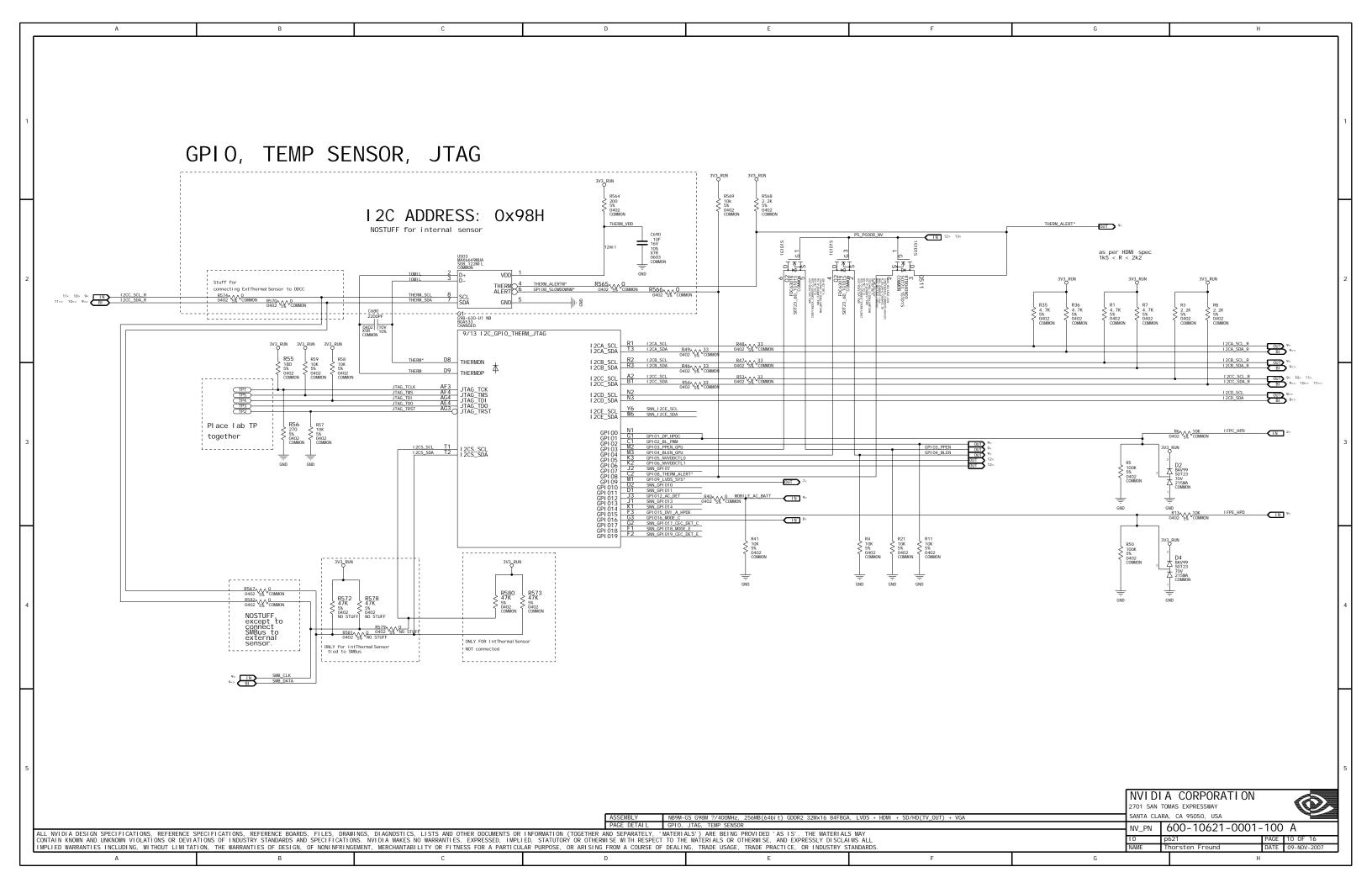


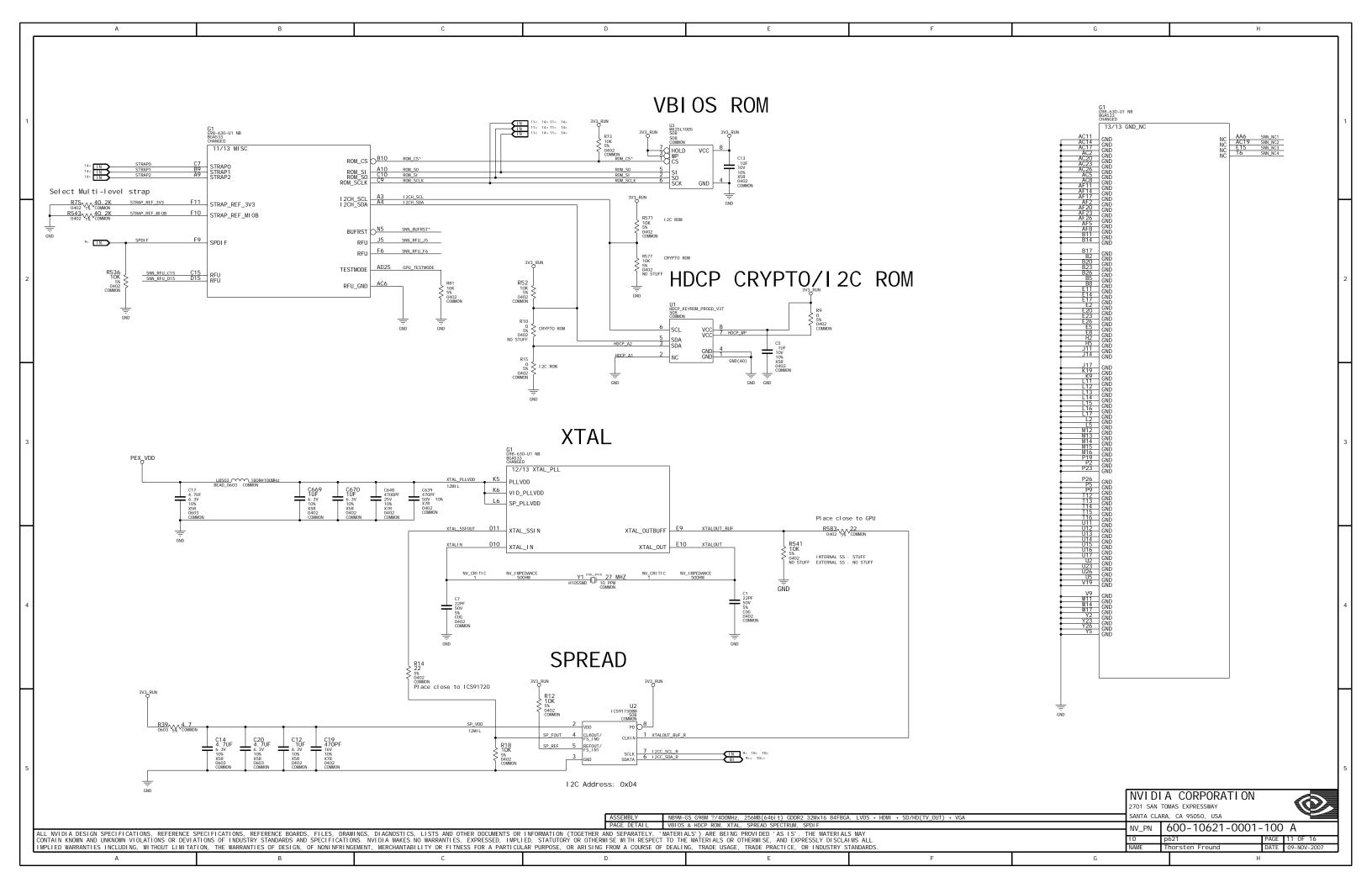


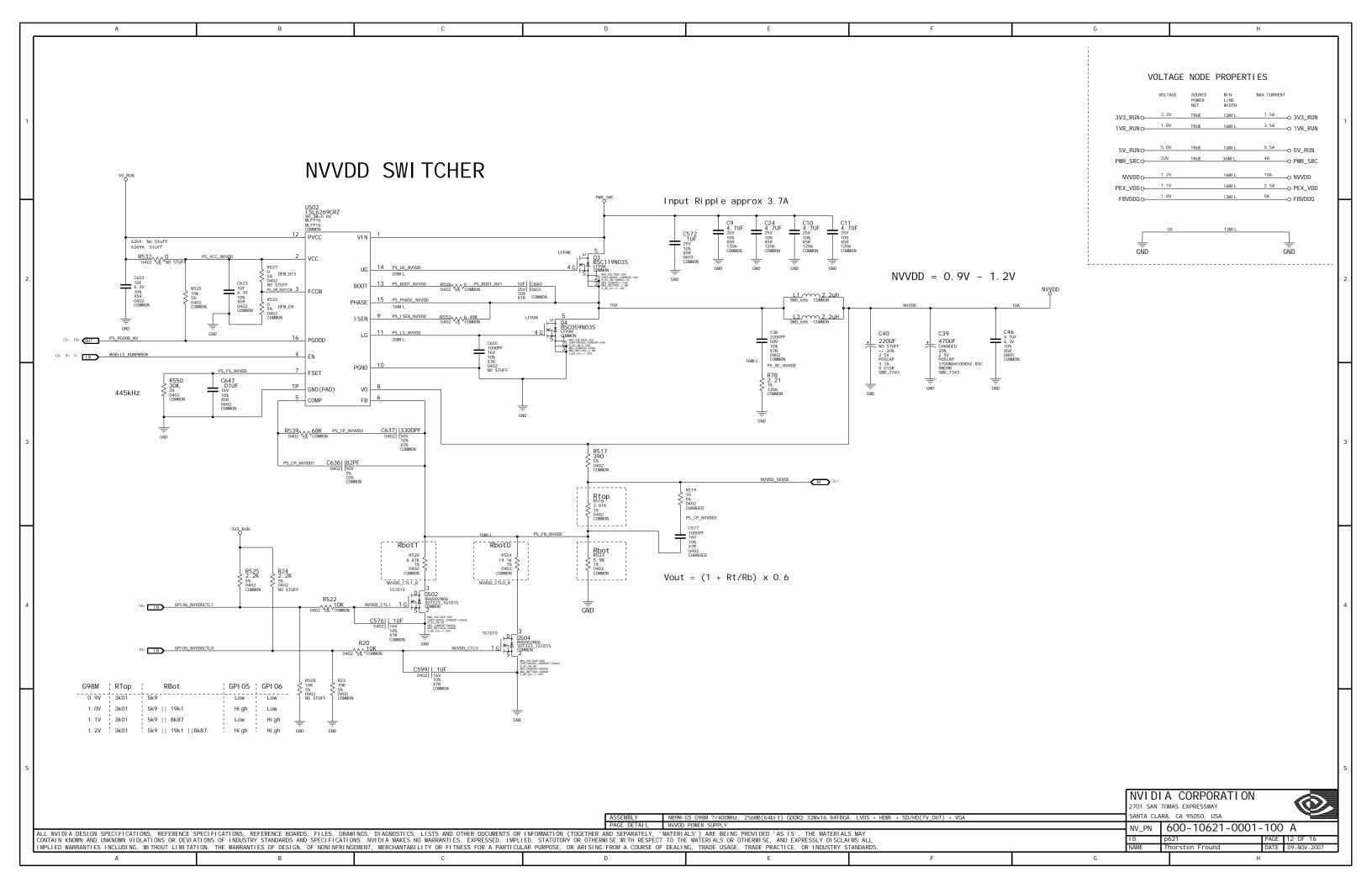


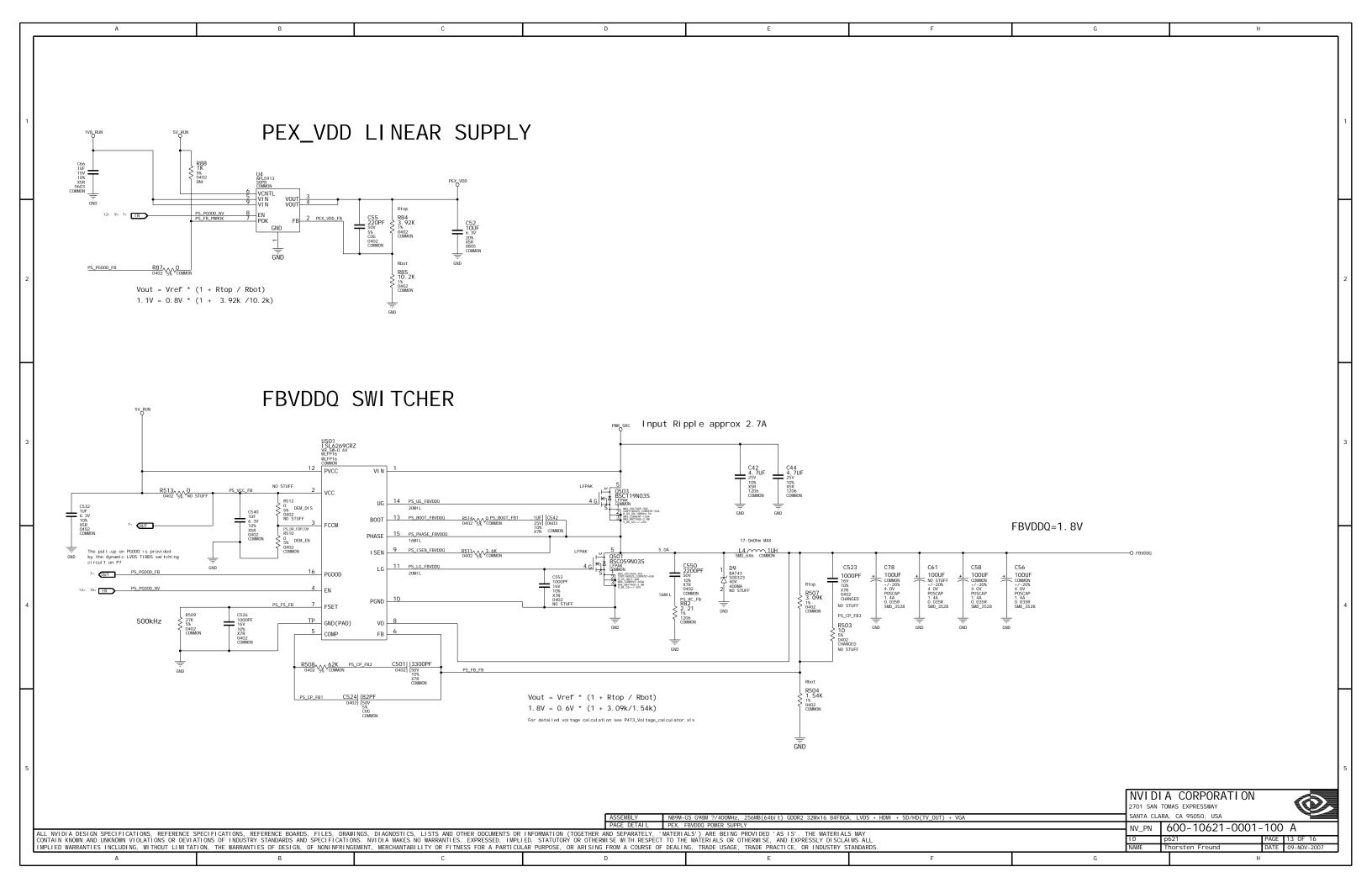


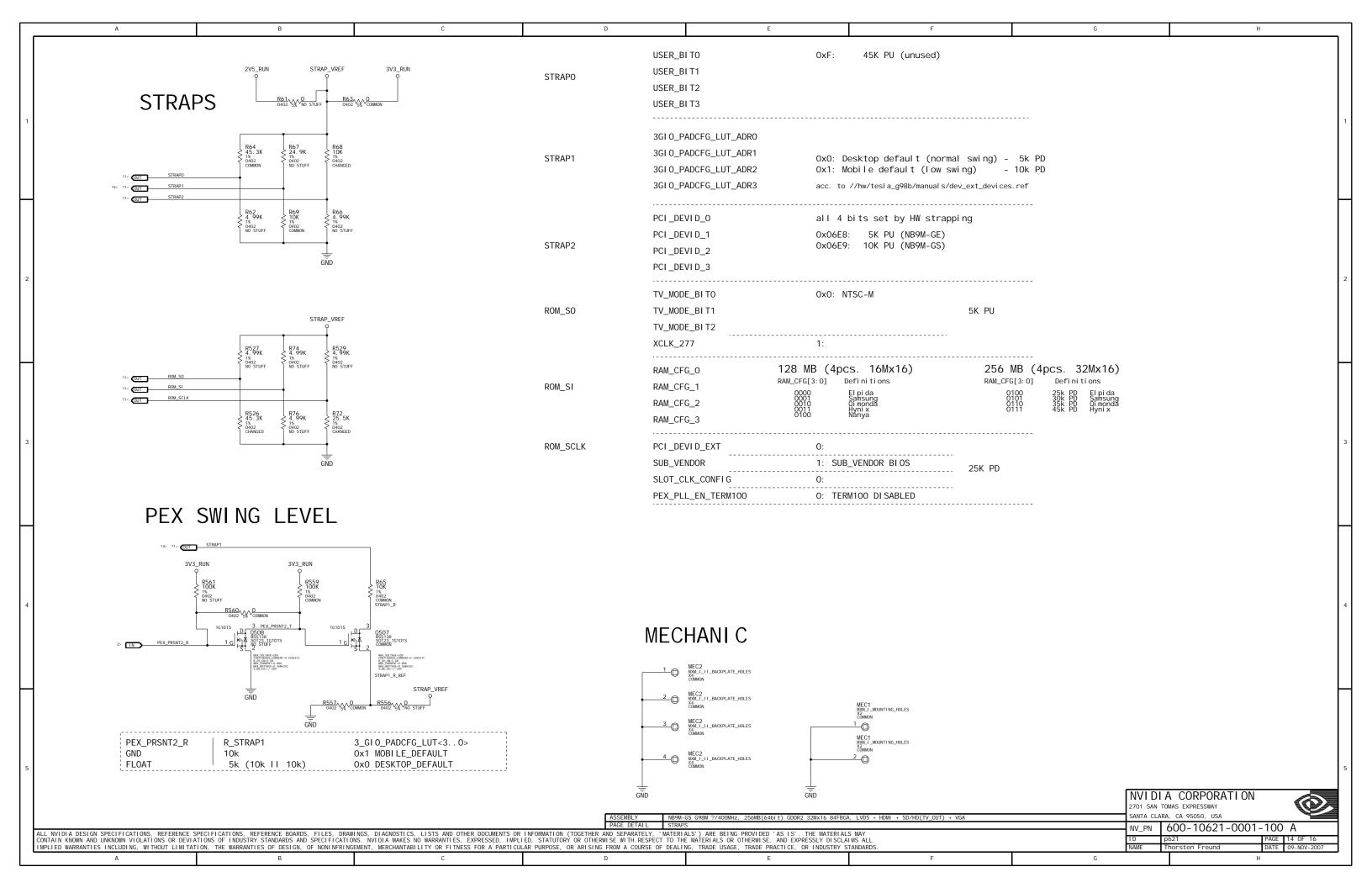












Α D G Ti tl e: Basenet Report FBA CMD<21> 3. 3E 4. 1A 4. 1E 5. 2A FBA DQS RN1 3. 4C<> 4. 4C 4. 5A< LEPB TXD4 Desi qn p621 FBA DOS RN2 3. 4C<> 4. 4D 4. 5A< LEPB TXD4* 7. 2H> 7. 5B<> 9. 3E< PEX RX15 2. 5F PS UG ERVDDO 13.3C XTALLN 11.4C . Aug 27 12: 32: 38 2007 3. 3E 4. 1A 4. 1E I FPB_TXD5 2. 5F FBA_CMD<22 FBA_DQS_RN3 PEX_TCLK PS_UG_NVVDD XTALOUT Date: 12. 2C FBA_CMD<23> 3. 3E 4. 2A 4. 2E 5. 2A FBA DOS RN4 3. 4C<> 5. 4B 5. 5A< LEPB TXD5* 7. 2H> 7. 5B<> 9. 4F< PEX TOLK 2. 5F PS_VCC_FB 7. 1A< 13. 4A> XTALOUT BUE 11.4F FBA_DQS_RN5 I FPB_TXD6 2. 5F PEX_TERM PS_VCC_NVVDD 12. 2B XTALOUT_BUF_R 3. 3E 4. 1A 4. 1E p621 lib. P621(@p621 lib. p621(sch 1)) FBA CMD<24> FBA DQS RN6 3. 4C<> 5. 4D 5. 5A< I FPB TXD6* 7. 2H> 7. 5B<> 9. 4F< PEX TXO 2. 2E ROM CS* 11. 1C 11. 1D XTAL PLLVDD 11. 3C 2. 2E FBA_CMD<25> FBA_DQS_RN7 I FPB_TXD7 PEX_TXO* ROM_SCLK XTAL_SSFOUT Location([Zone][dir]] Base Signal FBA DOS WPO 3. 3C<> 4. 4B 4. 5A< LEPB TXD7* 7. 2H> 7. 5B<> 9. 4F< PEX TXO C 2. 2C ROM SI 11. 1D< 11. 1D< 14. 3A 3. 3E 4. 2A 4. 2E 5. 2A 2. 2C DACA_BLUE FBA_CMD<27 FBA_DQS_WP1 3. 3C<> 4. 4C 4. 5A< I FPCE_I OVDD_EN 7. 1A> 8. 3A< 8. 4A< PEX_TXO_C* ROM_SO DACA GREEN 6. 1G> 6. 4G 9. 3A< 5. 2E FBA DQS WP2 3. 3C<> 4. 4D 4. 5A< LEPC HPD 2. 5A> 10. 3H< PEX TX1 2. 2E SMB CLK 9. 4A> 10. 4B< DACA_HSYNC FBA_DQS_WP3 3. 3C<> 4. 4D 4. 5A I FPC_I OVDD PEX_TX1* 2. 2E SMB_DATA 9. 4A<> 10. 4B<> 8. 2C DACA RED 6. 1G> 6. 3G 9. 3A FBA D<31...0: 4.3A<> 4.5A<> FBA DOS WP4 3. 4C<> 5. 4B 5. 5A< LEPC LOVDD T 8. 2B PEX TX1 C 2.20 SNN A13 1 4. 2B I FPC_PLLVDD DACA_RSET FBA_DQS_WP5 PEX_TX1_C* 2. 2C SNN_A13_2 DACA VDD 6.1C FBA D<63..0> 3. 1C<> FBA DQS WP6 3. 4C<> 5. 4D 5. 5A< LFPC RSET 8. 2C PEX TX2 2. 2E SNN A13 3 5. 2A 3. 4C<> 5. 4E 5. 5A DACA_VREF 5. 3A<> 5. 5A< FBA_DQS_WP7 I FPE_HPD 9. 2A> 10. 3H< PEX_TX2* 2. 2E SNN_A13_4 5. 2E DACA VSYNO 6. 1G> 9. 3A< FBA D<1: 3.1C 4.3B FBA VREF1 4. 2C 4. 2F 4. 4A<> I FPE I OVDD 8. 4C PEX TX2 C 2. 2C SNN A14 1 4. 2B 6. 3G> 6. 4F 9. 3A FBA_VREF2 I FPE_I OVDD_T PEX_TX2_C* 2. 2C DACB_BLUE FBA_D<2> SNN_A14_2 DACE GREEN 6.3G> 6.4F 9.2A FBA D<3> 3.1C 4.3B FR CAL PD VDDO 3. 1A<> 3. 4F LEPE LO 8.4F 8.5B<> PEX TX3 2. 2F SNN A14 3 5. 2A FB_CAL_PU_GND 2. 2E DACB_RED FBA_D<4 I FPE_L0* PEX_TX3* SNN_A14_4 DACB RSET 6. 2C FBA D<5> 3.1C 4.3B FB CAL TERM GND 3. 2A<> 3. 4E I FPE L1 8. 4E 8. 5B<> PEX TX3 C 2. 2C SNN A15 1 4. 2B DACB_VDD FBA_D<6> 3.1C 4.3B FB_PLLAVDD I FPE_L1* PEX_TX3_C* 2. 2C SNN_A15_2 DACB VRFF 6.2C FBA D<7> 3.1C 4.3B FB VRFF 3. 2A<> 3. 5C LEPF 12 8.4F 8.5B<> PFX TX4 2. 3F SNN A15 3 5. 2A DACC_VDD FBA_D<8> GND_SENSE I FPE_L2* PEX_TX4* 2. 3E SNN_A15_4 DP AUXG 8. 2E 8. 5D<> FBA D<9> 3.1C 4.3C GPI 00 HPDAB 10. 3D 10. 4G I FPE L3 8. 3E 8. 5B<> PEX TX4 C 2.3C SNN BUFRST 11. 2C DP_AUXG* FBA_D<10> GPI 01_DP_HPDC I FPE_L3* 8. 3E 8. 5B<> PEX_TX4_C* 2. 3C SNN_DACB_CSYNC DP AUXG R 8. 1E 8. 5D<> FBA D<11> 3.1C 4.3C GPI 02 BL PWM 9. 4A< 10. 3F> I FPE PLLVDD 8. 3C PEX TX5 2. 3E SNN DACC BLUE 6. 4D I FPE_RSET PEX_TX5* 2. 3E SNN_DACC_GREEN DP_AUXG_R FBA_D<12> GPI 03_PPEN DP AUXT 8.1F.8.5F<> FBA D<13: 3, 10, 4, 30 GPI 03 PPFN GPU 10. 3D LEPE TERM PEX TX5 C 2. 3C SNN DACC HSYNC 6. 4D DP_AUXT FBA_D<14> 9. 3A< 10. 3F> I FPE_TXC 8. 3G 8. 4F> 8. 5B<> PEX_TX5_C 2. 3C SNN_DACC_RED DP AUX C 8, 2F> 8, 2H 8, 5F<> FBA D<15> 3.1C 4.3C GPI 04 BLEN GPU 10. 3D 9. 2F< PEX TX6 2. 3E SNN DACC RSET 6. 4C GPI 05_NVVDDCTL0 I FPE_TXC* 8. 3F> 8. 3G 8. 5B<> PEX_TX6* 2. 3E SNN_DACC_VREF FBA_D<16: DP AUX C* 8. 2F> 8. 5F<> 9. 3F<: FBA D<17: 3.1C 4.3D GPLO6 NVVDDCTL1 10.3F> 12.4A< 9. 2F< PEX TX6 C 2.30 SNN DACC VSYNC 6. 4D DP_AUX_PU FBA_D<18> GPI 08_SLOWDOWNM* I FPE_TXD0 8. 4F> 8. 4G 8. 5B<> PEX_TX6_C* 2. 3C SNN_DP_AUX_C 8. 2E 8. 5D<> DP LO FBA D<19> 3.1C 4.3D GPI 08 THERM ALERT* 10.3D 9. 2F< PEX TX7 2. 3E SNN FBA CMD7 3. 2E I FPE_TXD0* 8. 3G 8. 4F> 8. 5B< 8. 2E 8. 5D<> FBA_D<20> GPI 09_LVDS_I 0VDD_E 7. 2B PEX_TX7* 2. 3E SNN_FBA_CMND26 DP_LO* DP_LO_C 8. 2F> 8. 5F<> 9. 3F< FBA_D<21> 3. 2C 4. 3D 9. 2F< PEX_TX7_C 2. 3C SNN_FBA_CMND28 3. 3E DP_LO_C* 8. 2F> 8. 5F<> 9. 3F FBA_D<22> 3. 2C 4. 3D GPI 09_LVDS_SYS* 7. 2A< 10. 3E> I FPE_TXD1 8. 4F> 8. 4G 8. 5B<> PEX_TX7_C* 2. 3C SNN_FBA_NC1 DP I 1 8. 2F 8. 5D<> FBA D<23: 3. 2C 4. 3D GPI 09_TMDS_I 0VDD_E 7. 2B PFX TX8 2. 3F SNN FBA NC2 4. 2A FBA_D<24> I FPE_TXD1* 8. 4F> 8. 4G 8. 5B<> PEX_TX8* 2. 3E SNN_FBA_NC3 DP L1 C 8. 2F> 8. 5F<> 9. 3F FBA D<25> 3. 2C 4. 3D GPI 012 AC DET 9. 2F< PEX TX8 C 2.3C SNN FBA NC4 4. 2E GPI 015_DVI _A_HPDE 10. 3D I FPE_TXD2 8. 4F> 8. 4G 8. 5B<> PEX_TX8_C* DP_L1_C 8. 2F> 8. 5F<> 9. 3F SNN_FBA_NC5 DP 12 8. 2F 8. 5D<> FBA D<27: 3, 2C, 4, 3D GPI 016 MODE C 8. 1G< 10. 3F< 9. 2F< PFX TX9 2.4F SNN FBA NC6 5. 2A I FPE_TXD2* 8. 4F> 8. 4G 8. 5B< 8. 2E 8. 5D<> FBA_D<28> 3. 2C 4. 3D GPI 016_MODE_C PEX_TX9* 2. 4E SNN_FBA_NC7 DP_L2 5. 2E DP L2 C 8. 2F> 8. 5F<> 9. 3F< FBA D<29> 3. 2C 4. 3D GPU TESTMODE 11. 2C 9. 2F< PEX TX9 C 2.4C SNN FBA NC8 5. 2E FBA_D<30> HDA1_BCLK JTAG_TCLK PEX_TX9_C* SNN_FBA_RFU_1 DP_L2_C DP_L3 8. 2E 8. 5D<> FBA_D<31> 3. 2C 4. 3D HDA1_RST* 7.4F 7.5D<> JTAG_TDI 10. 3C PEX_TX10 2. 4E SNN_FBA_RFU_2 3. 3E JTAG_TD0 3. 2C 5. 3B HDA1_SDI PEX_TX10 SNN_GPI 07 DP L3 C 8. 2F> 8. 5F<> 9. 3F< FBA D<63..32 3. 1C<> HDA1 SD0 7. 4F 7. 5D<> JTAG TMS 10.3C PEX TX10 C 2.4C SNN GPI 010 10. 3D 5. 3A<> 5. 5A< JTAG_TRST PEX_TX10_C* DP_L3_C* 8. 2F> 8. 5F<> 9. 3F< HDA1_SYNO 7.4F 7.5D<> SNN_GPI 011 DVI HPDB 9. 2A> 10. 4H< FBA D<33> 3, 2C 5, 3B HDA BCLK 7. 4H< 7. 5D<> 9. 3F> MOBILE AC BATT 9. 4B> 10. 3E< PEX TX11 2. 4E SNN GPI 013 10. 3D 3. 3E> 4. 2A 4. 2E 4. 3G< HDA_RST* 2. 4A> 7. 4H< 7. 5D< PEX_TX11* SNN_GPI 014 FBA_D<34> MOBI LE_RUNPWROM 4.5A< FBA D<35> 3, 2C, 5, 3B HDA SDI 7. 4H< 7. 5D<> 9. 3E> 13. 2A< PEX TX11 C 2.4C SNN GPI 017 CFC DFT 10.3D FBA_CLKO* 3. 3E> 4. 2A 4. 2E 4. 3G< HDA_SDO MOBI LE_RUNPWROK_ PEX_TX11_C SNN GPI 018 MODE E 10.4D 4. 5A< FBA D<37> 3. 2C 5. 3B HDA SYNC 7. 4H< 7. 5D<> 9. 3F> NVVDD 12. 2F PEX TX12 2. 4E FBA_D<38> 3. 2C 5. 3E HDCP_A2 NVVDD_CTLO PEX_TX12* 2. 4E SNN_GPI 019_CEC_DET 10. 4D FBA_CLK1 3. 3E> 5. 2A 5. 2E 5. 4G< FBA_D<39> 3. 2C 5. 3B HDCP_WP 11. 2E NVVDD_CTLO_R 12.4C PEX_TX12_C 2. 4C PEX_TX12_C FBA_D<40> I 2CA_SCL NVVDD_CTL1 SNN_I 2CE_SCL 3. 3E> 5. 2A 5. 2E 5. 4G< FBA CLK1* FBA D<41> 3. 2C 5. 3C 12CA SCL R 9. 3A< 10. 2H> NVVDD CTL1 R 12.4C PEX TX13 2. 4E SNN I 2CE SDA 10. 3D I 2CA_SDA NVVDD_SENSE SNN_I FPE_AUX FBA_D<42 3. 2C 5. 3C PEX_TX13* FBA CLK1 TERM 5.3G FBA D<43> 3. 2C 5. 3C 12CA SDA R 9. 3A<> 10. 2H<> PEX PLLVDD 2. 4F PEX TX13 C 2.4C SNN I FPE AUX 8. 3E 3. 2E 4. 1A 4. 1E PEX_PRSNT2 PEX_TX13_C FBA_CMD<0: I 2CB_SCL SNN_NC1 9. 2A< 10. 3H> FBA CMD<27...0> 3. 2F> 4. 1A< 4. 5A< FBA D<45> 3, 20, 5, 30 L2CB_SCL_R PEX PRSNT2 R 2.5D> 14.4A< PFX TX14 2. 5F SNN NC2 11. 1H FBA_D<46> I 2CB_SDA PEX_PRSNT2_ PEX_TX14* 11. 1H SNN_NC3 9. 2A<> 10. 3H<> FBA CMD<1: 3. 2E 4. 1A 4. 1E 5. 1/ FBA D<47> 3. 2C 5. 3C 12CB SDA R PEX REFCLK 2. 2E PEX TX14 C 2.5C SNN NC4 11. 1H FBA_D<48> 3. 2C 5. 3D I 2CC_SCL PEX_REFCLK* PEX_TX14_C* SNN_RFU_AE9 3. 2E 4. 1A 4. 1E 9. 4A< 10. 2A< 10. 3H FBA_CMD<2> FBA_D<49> 3. 2C 5. 3D I 2CC_SCL_R PEX_RST 2. 2D PEX_TX15 2. 5E SNN_RFU_AG9 2. 5F FBA_CMD<3> 3. 2E 4. 1A 4. 1E 5. 1A FBA_D<50> 3. 2C 5. 3D PEX_RX0 2. 2E PEX_TX15* 2. 5E SNN_RFU_C15 11. 2A 12CC SDA FBA D<51> 3.3C 5.3D 10. 3D PEX RXO* 2. 2E PEX TX15 C 2.5C SNN RFU D15 11. 2A 9. 4A<> 10. 2A<> FBA_CMD<4> 3. 2E 5. 1A 5. 1E PEX_RX1 PEX_TX15_C* FBA_D<52> I 2CC_SDA_R SNN_RFU_F6 FBA_CMD<5> 3. 2E 5. 1A 5. 1E FBA_D<53> 3.3C 5.3D 10. 3H<> 11. 5E<> PEX_RX1* 2. 2E PEX_VDD_FB 13. 2B SNN_RFU_J5 11. 2C FBA_CMD<6 FBA_D<54> I 2CD_SCL PEX_RX2 PS_BOOT_FB1 SNN_TXC FBA CMD<8> 3. 2F 4. 1A 4. 1F 5. 1A FBA D<55> 3, 3C, 5, 3D L2CD SDA 8. 1G<> 10. 3H<> PFX RX2* 2. 2F PS BOOT FBVDDO 13.30 SNN TXC* 9. 3F FBA_D<56> I 2CH_SCL PEX_RX3 PS_BOOT_NV1 SNN_TXD0 3. 2E 4. 1A 4. 1E 5. 1A FBA CMD<9> FBA D<57> 3.3C 5.3E I 2CH SDA 11. 2C PEX RX3* 2. 3E PS BOOT NVVDD 12.2C SNN TXDO* 9. 2E FBA_D<58> I 2CS_SCL PEX_RX4 PS_CP_FB1 SNN_TXD1 FBA_CMD<10> 3. 2E 4. 2A 4. 2E 5. 2A FBA_D<59> 3. 3C 5. 3E I 2CS_SDA 10.3C PEX_RX4* 2. 3E PS_CP_FB2 13. 4B SNN_TXD1* 9. 2E I FPAB_I OVDD FBA_D<60> PEX_RX5 PS_CP_FB3 3. 2E 3. 2F 4. 2A 4. 2E FBA CMD<11> FBA D<61> 3.3C 5.3E LEPAB LOVDD 3V3 7. 3B PEX RX5* 2. 3E PS CP NVVDD1 12. 3B SNN TXD2* 9. 2E FBA_D<62> I FPAB_I OVDD_EN* PEX_RX6 PS_CP_NVVDD2 FBA_CMD<12> 3. 3E 3. 3F 4. 2A 4. 2I FBA_D<63> 3.3C 5.3E I FPAB_I OVDD_LVDS_I PEX_RX6* 2. 3E PS_CP_NVVDD3 12.3D SPDI F_MXM 9.4C PS_DR_FBFCCM FBA_DEBUG PEX_RX7 SP_FOUT 3. 3F 5. 1A 5. 1F 3. 3C 4. 4B FBA CMD<13> FBA_DOM<O> LEPAR LOVDD SW 7. 2C PFX RX7* 2. 3E PS DR NVECCM 12. 2B SP REF 11.5D FBA_CMD<14> FBA_DQM<3. I FPAB_PLLVDD PEX_RX8 PS_FB_FB SP_VDD 3. 3C<> LEPAB RSET PEX RX8* 2. 4E PS FB NVVDD 12. 4D STRAPO 11. 1A< 14. 1A> 7. 2H> 7. 5B<> 9. 4F< FBA_CMD<15> 3. 3E 4. 1A 4. 1E 5. 1A FBA_DQM<7..0 I FPA_TXC PEX_RX9 PS_FB_PWROK 13. 2A STRAP1 5. 3A<> 5. 5A<> I FPA_TXC* 7. 2H> 7. 5B<> 9. 4F< PEX_RX9* 2. 4E PS_FS_FB 13. 4B STRAP1_R 14.4C FBA_CMD<16> 3. 3E 4. 2A 4. 2E 5. 2A FBA DQM<1> 3. 3C 4. 4C I FPA_TXDO 7. 1H> 7. 4B<> 9. 4F PEX_RX10 2. 4E PS_FS_NVVDD 12. 3B STRAP1_R_REF FBA DQM<2> 3.3C 4.4D I FPA TXDO* 7. 1H> 7. 4B<> 9. 4F< PEX RX10* 2. 4E PS I SEN FBVDDQ 13.4C STRAP2 11. 1A< 14. 2A> 3. 3E 4. 2A 4. 2E 5. 2A STRAP_REF_3V3 FBA_CMD<17 FBA_DQM<3 I FPA_TXD1 PEX_RX11 PS_I SEN_NVVDD FBA_DQM<4> 3. 3C 5. 4B I FPA_TXD1* 7. 1H> 7. 4B<> 9. 4F< PEX_RX11* 2. 4E PS_LG_FBVDDQ 13.4C STRAP_REF_MI OB 11. 2A 3. 3E 4. 2A 4. 2E 5. 2A I FPA_TXD2 PS_LG_NVVDD FBA_CMD<18> FBA_DQM<7... 7. 2H> 7. 5B<> 9. 4F-PEX_RX12 THERM 5. 3A<> 5. 5A<> I FPA TXD2* 7. 2H> 7. 5B<> 9. 4F< PEX RX12* 2. 4E PS PGOOD FB 7. 1A< 13. 2A 13. 4A THERM* 10. 2C 3. 3E 4. 2A 4. 2E 5. 2A FBA_DQM<5 I FPA_TXD3 7. 2H> 7. 5B<> 9. 4F< PEX_RX13 2. 5E PS_PG00D_NV THERM_ALERT* 9. 4A< 10. 2G> FBA_CMD<19 3. 3C 5. 4C 5. 2E FBA DQM<6> 3.3C 5.4D I FPA TXD3* 7. 2H> 7. 5B<> 9. 4F< PEX RX13* 2. 5E PS PHASE FBVDDQ 13.4C THERM ALERTM* 10. 2D FBA_CMD<20> 3. 3E 4. 2A 4. 2E 5. 2A FBA_DQM<7> I FPB_TXC 7. 3H> 7. 5B<> 9. 4F< PEX_RX14 PS_PHASE_NVVDD THERM_SCL 5. 2E FBA_DQS_RNO 3. 4C<> 4. 4B 4. 5A I FPB_TXC* 7. 2H> 7. 5B<> 9. 4F< PEX_RX14* 2. 5E PS_RC_FB 13. 4D THERM_SDA 10. 2C NVIDIA CORPORATION 2701 SAN TOMAS EXPRESSWAY SANTA CLARA CA 95050 LISA 600-10621-0001-100 A NV_PN ALL NVIDIA DESIGN SPECIFICATIONS, REFERENCE SPECIFICATIONS, REFERENCE BOARDS, FILES, DRAWINGS, DIAGNOSTICS, LISTS AND OTHER DOCUMENTS OR INFORMATION (TOGETHER AND SEPARATELY, 'MATERIALS') ARE BEING PROVIDED 'AS IS'. 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