Revision History

## Schematics taken from P151-A00-X24 MS-8889 00A

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00A-0621
1)Page 10,13,18 of the original design (P151) has been delete.
2)Page 10,12 U816,U817,U818,U811(single gate) share one ACT08/SO8.
 3.Page 13 a.P300 change reference to P600.
           b.Add P300 (long D-sub)for SEC D-sub.
 4.Page 14 a.Remove P602.
      b.Add S_OUT1,S_IN1,AV_OUT1,AV_IN1,J1,J2 connector.
5 Page 16 17 Modify power supply solution
   a.PWM from SC1102A,SC1541-3.3V,SC1565 share one ISL6529.
   b.FBVDDQ is transfered from Q800,U4 by 5V.
   c.SC2610 change to HIP6012.
004-0624
 1)Page 16 a.Remove C1250,C1251,R1076,R1071,Q10,U4.O800.
           b.FBVDDQ Remove Q800 and U4 ,Add U812/NIKO-1085S/TO-263.
            c.Q905 and Q201 from 45N02LD change to 55N02LD for low Rdson.
 2)page 17 Remove Q9,R2086,Q8,R2087.
 3)page 11 Add R2217/33ohm and C2495 for "DVOCLK_IN"
 4)page 15 change Text Note "PCI DEVID =253" to "PCI DEVID =283".
5)page 17 a.R2085 change value to 4.7K.
           b.U3 change refernce to U813.
002-0625
1)Page 16 ADD C1250,C1251,R1076,C1071.
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
1)Page 9 - Change the 47ohm RPack to 33ohm RPack.
2)Page 2 - a.ADD C106/4.7U for "12V to gnd".
b.R80,R81,R82,and R83 from 5% change to 1%.
3)Page 16 - U812 from L1085/3A change to L1084/5A for FBVDDQ.
4)Page 14 - S OUT1 & S IN1 chage to P500 & P501.
00A-0701
1)Page 2 - a.ADD thermal sensor RT1 (in GPU solder side).
            b.ADD C113/220PF "AGPVREFCG" pull down.
 2)Page 14 - Remove J1.
 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.luF change to 0.0luF
              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 Oohm for thermal sensor.
2)Page 11 - Remove U1 7104H/QFP64.
 002-0704
 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
                   EMT 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".
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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 'VDDO'.
                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 2N7002 to IRLML2502 (N-ch 20V 3A 0.08 on resistence).
d.Q901A - change to MMBT4403LT1.
 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
UND-0730

1)Page 2 - Add U200/FDC6301N,R93/0R,R101/121K,R108/121K,R96/1K for AGPVrefcg.

2)Page 16 - R1076 change to 64.9 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%.
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

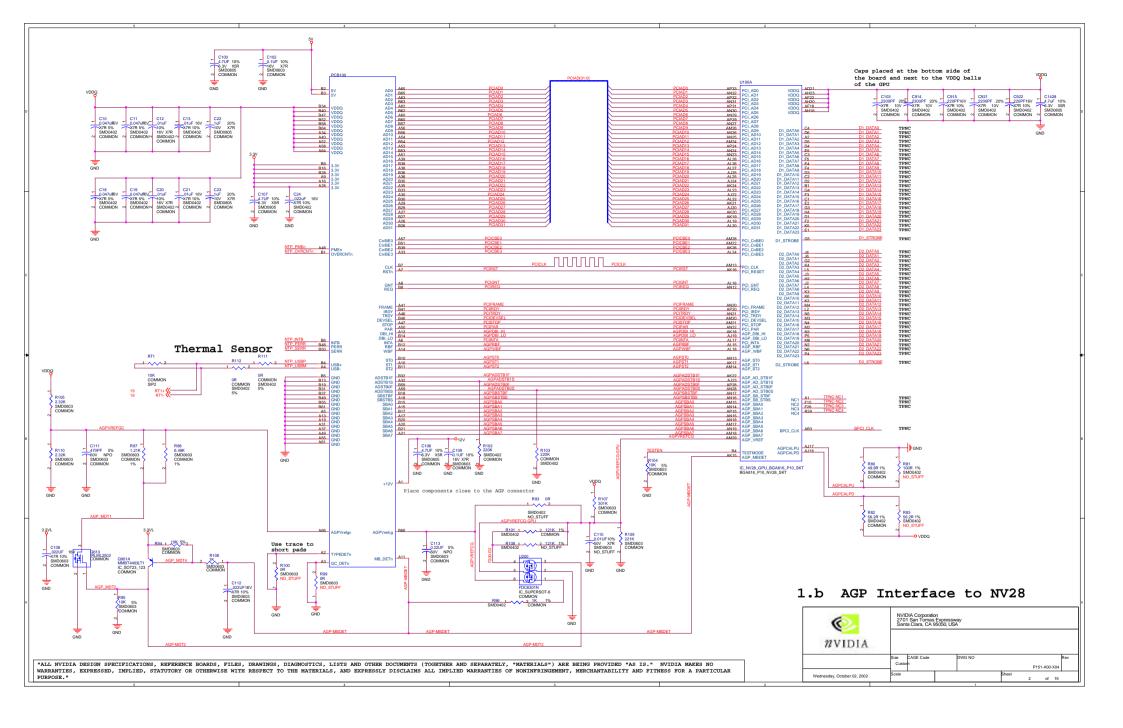
```
1)Page 16,17 - Remove C1263,C2267,C2301,C2303,C2309,C2310 for layout.
2)Page 16,17 - L801,L802 change Footprint to CHK_3052_08.
3)Page 3 - change R1107 to 113R and change R927 to 110R
4)Page 10.12 - C325.C320.C1120.C1121 from 22PF change to 47PF
```

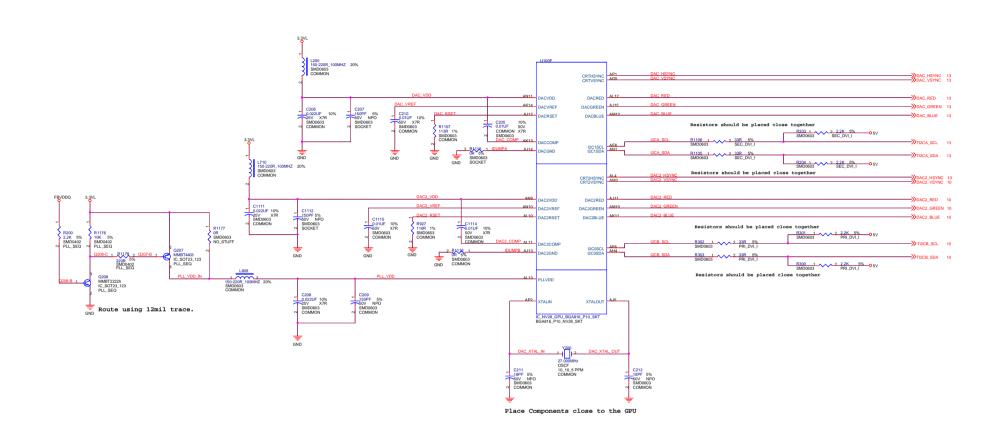
```
Sub
Assemblies
                 Description
COMMON
                 Components are stuffed for all SKUs
NO STITE
                 Components are not stuffed
PRI DVI I
                 Components stuffed for Primary VGA
                 Components stuffed for Primary Protection
ססד סס∩יד
SEC_DVI_I
                 Components stuffed for Secondary DVI
SEC PROT
                 Components stuffed for Secondary Protection
                 Components stuffed for AGP 3.3V to FBVDD
AGP3VFBDO
FBVDD-FBDO
                 Components stuffed for FBVDDQ 2.5V to FBVDD
PLL-SEQ
                 Components stuffed for PLL Sequence
                 Components stuffed for Power Sequence
DMD-GEO
PWR-SEQ-BP
                 Components stuffed for Power Sequence By-PASS
NVVDD-2602
                 Components stuffed for NVVDD Power
FB 2610 SWT
                 Components stuffed for FBVDD Power
SC1541
                 Components stuffed for 3.3VL Fixed
901565
                 Components stuffed for SC1565 - 3.3VL Adj.
FR64T.O
                 Components stuffed for FRA DATA and FRD DATA
FR64IIP
                 Components stuffed for FBC_DATA and FBD_DATA
SER-PROM
                 Components stuffed for Serial PROM
PAR-PROM
                 Components stuffed for Parallel PROM
                 Components stuffed for Fan / Blower left of the GPU
FAN HS-LFT
FAN_SNK
                 Fan Sink Component
HEAT SNK
                 Heat Sink Component
VTVO
                 Components stuffed for Video IN/OUT
VTD0-7104
                 SAA7104 Video Out
CX-ENC-TVOUT
                 Components stuffed for CX25871 - TV-OUT
SOCKET
                 Components stuffed for Socket
64MB-4MY16
                 Components stuffed for Mem-CFG: 64MB (4Mx16) memory
BRACKET
                 IO Bracket / VGA-DIN-DVI-I
BRACKET-VGA
                 IO Bracket / VGA- -DVI-I
FB 2610 LDO
                 Components stuffed for FBVDDO Power
FBVDD ADJ
                 Components to adjust FBVVD out voltage.
FBVDQ ADJ
                 Components to adjust FBVVDQ out voltage.
                         Table of Contents
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1. TOP Page 1 h AGD Interface 1.c NV25 .. PLL / DAC / I2C 2.a NV25 Frame Buffer Intf 2.b Frame Buffer 0..31 2.c Frame Buffer 32..63 2.d Frame Buffer 64..95 2.e Frame Buffer 96..127 3.a DVO A/B 3.b CX25871 TV-OUT 3.c DACB I/O, I2CB --PRI 3.d Video IN / OUT (SAA7801-SAA7804) 3.e DVOB External XMIT 3.f EX-XMIT Filter / I2CA 3.g DVI- / VGA Connectors / HotPlug 3.h S-Video Connector / Filter / Bracket 4.a NV STRAP // P/S-ROM 5.a Power Sequence / 3.3VL Supp 5.b NVVDD Power Supply 5.c.FBVDDQ Power Supply 5.c.FBVDD Power Supply Legend: TPNC = Test Point - Not Connected



602-10085-0000-A03 140-10085-0000-A03





## 1.c NV28 .. PLL / DAC / I2C

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NVIDIA			NV28PL / DAC / I2C								
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