

```
PRIMARY ** VGA1 DAC_A ** I2C_A(1).
SECONDARY ** VGA2 DAC_B ** I2C_B(0).
9pin DIN ** RGB2 I2C_C(2).
```

See PDS for Hookup

P150, NV17, 4/8Mx16 DDR, 32/64MB, LFH/RGB, TV-OUT, AGP4X

PCI DEVICE ID = 0X172 FOR GF4-MX420-XX.



Stuff Option	Meaning
COMMON	Common to all assemblies and 1st VGA comps
NO STUFF	Not present in any assembly
VIDCAP	Video In or Video Capture
VGA2	2nd VGA Components and Conenctor
DSUB	Standard single VGA Connector
TV	Second DAC channel goes to Svideo connector as TV Out
TVO	4pin DIN for TV Only
1117	Fixed 1117 linear regulator for A3.3V
1117_ADJ	Adjustable 1117 linear regulator for A3.3V
NO_1117	Connect A3.3V to 3.3V. No 1117 regulator.
CLAMP1	VGA1 Sync/I2C Clamping diodes
RGB_PROT	RGB Protection diodes on primary DAC outputs
CLAMP2	VGA2 Sync/I2C Clamping diodes
RGB2_PROT	RGB Protection diodes on secondary DAC outputs
CLAMP3	VIDCAP I2C/Video In Clamping diodes
TVCLAMP	TV Red/Green Clamping diodes
GPU	GPU ONLY
NV17-S	IDSTRAP OPTION-172H
MEMORY	Memory only
M2-8V	Memory PS output 2.8V
M2-5V	Memory PS output 2.5V
BUF_RESET	PCIRST through D-FF Circuit

PAGE OVERVIEW
1 top (this) page
2 1. AGP interface, core decoupling
3 2.a NV17 Frame Buffer
4 3.a Dual DAC, 1st VGA
5 3.b Dual DAC, 2nd VGA
6 3.c TMDS/LFH
7 4.a Frame Buffer 0..31
8 4.b Frame Buffer 32...63
9 5. TV-out
10 6. Power supply
11 7. BIOS, Strapping
12 8. TMDS Backdrive

140-10150-0000-A00
602-10150-0000-A00

REFER AGILE BOM FOR FINAL PARTNUMBERS AND VALUES

```
{Item}\t{Quantity}\t{Reference}\t{Value}\t{Assembly}\t{MAIN}\t{NVPN}\t{Source Package}\t{AVL1}\t{AVL2}\t{AVL3}\t{AVL4}\t{AVL5}
```

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P 150, NV17, 4/8MX16 DDR, 64MB, LFH/RGB, TV-OUT, AGP4X

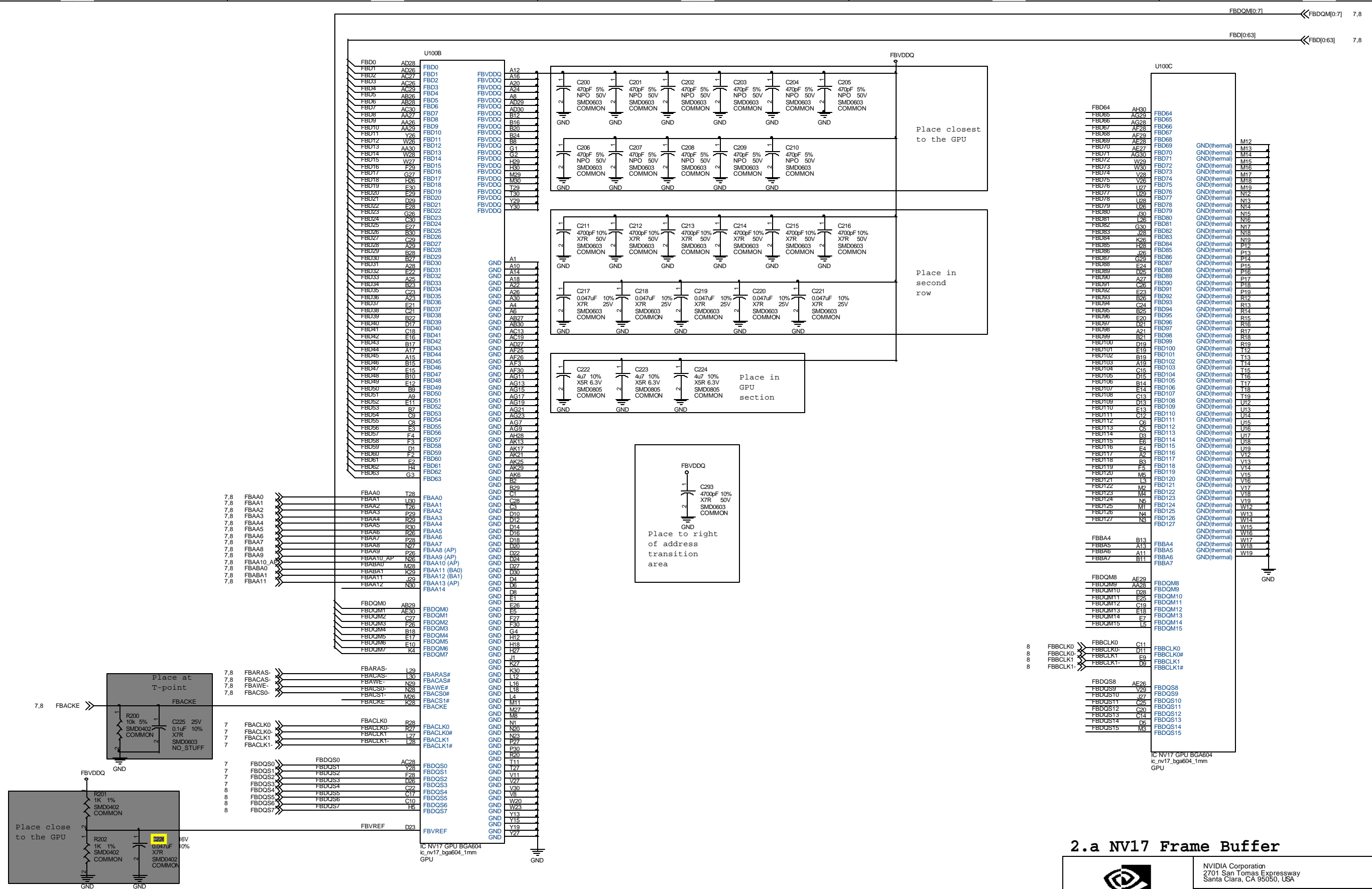
Size	CAGE Code	DWG NO	Rev
Custom			A00

Scale	Sheet
	1 of 12



P150, NV17, 4/8MX16 SDR, 64MB, LFH/RGB, TV-out, AGP4x

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2.a NV17 Frame Buffer

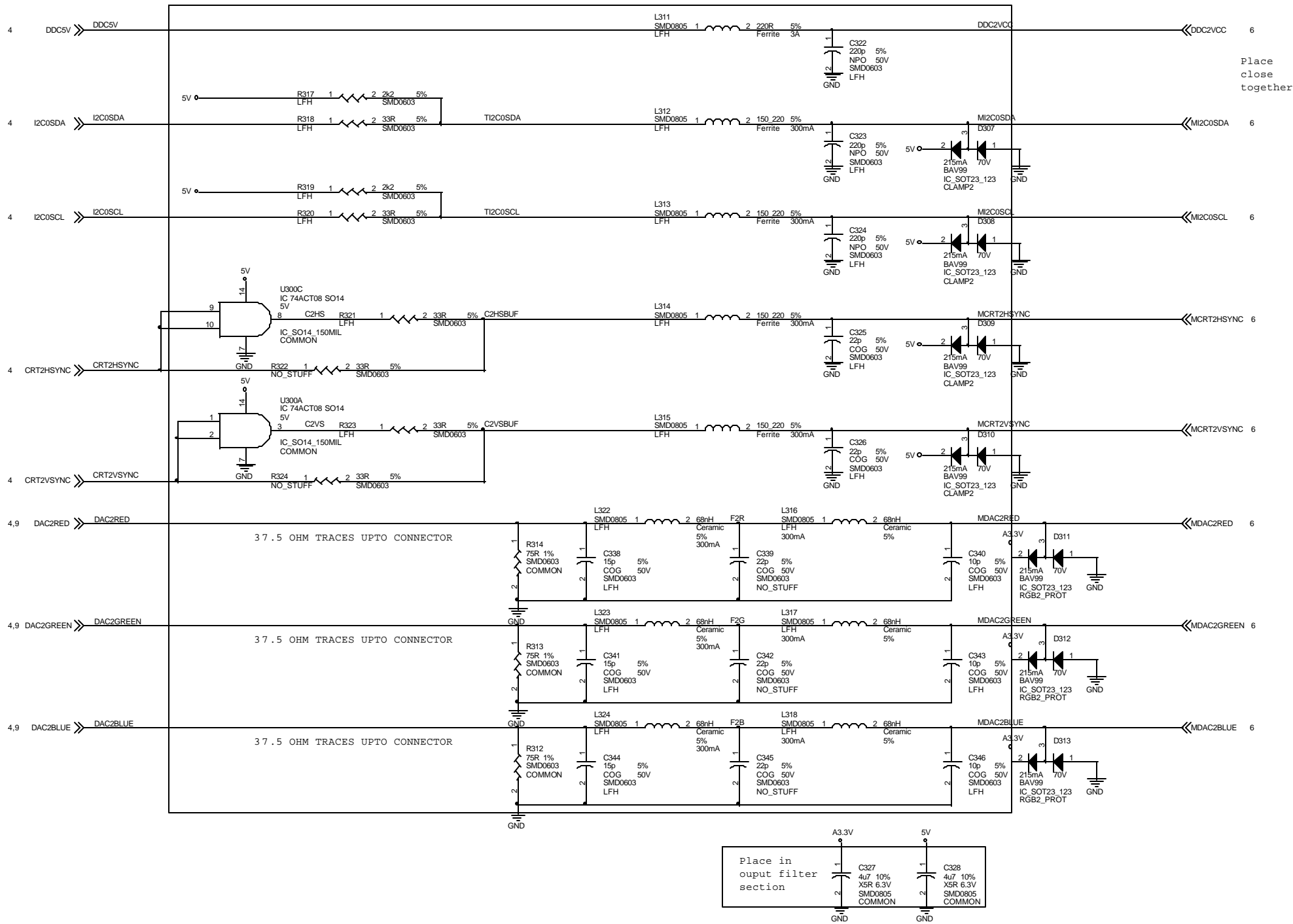


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Wednesday, April 24, 2002	Scale		Sheet 3 of 12	

VERIFY SKU FOR PROTECTION DIODES




3.b Dual DAC, 2nd LFH

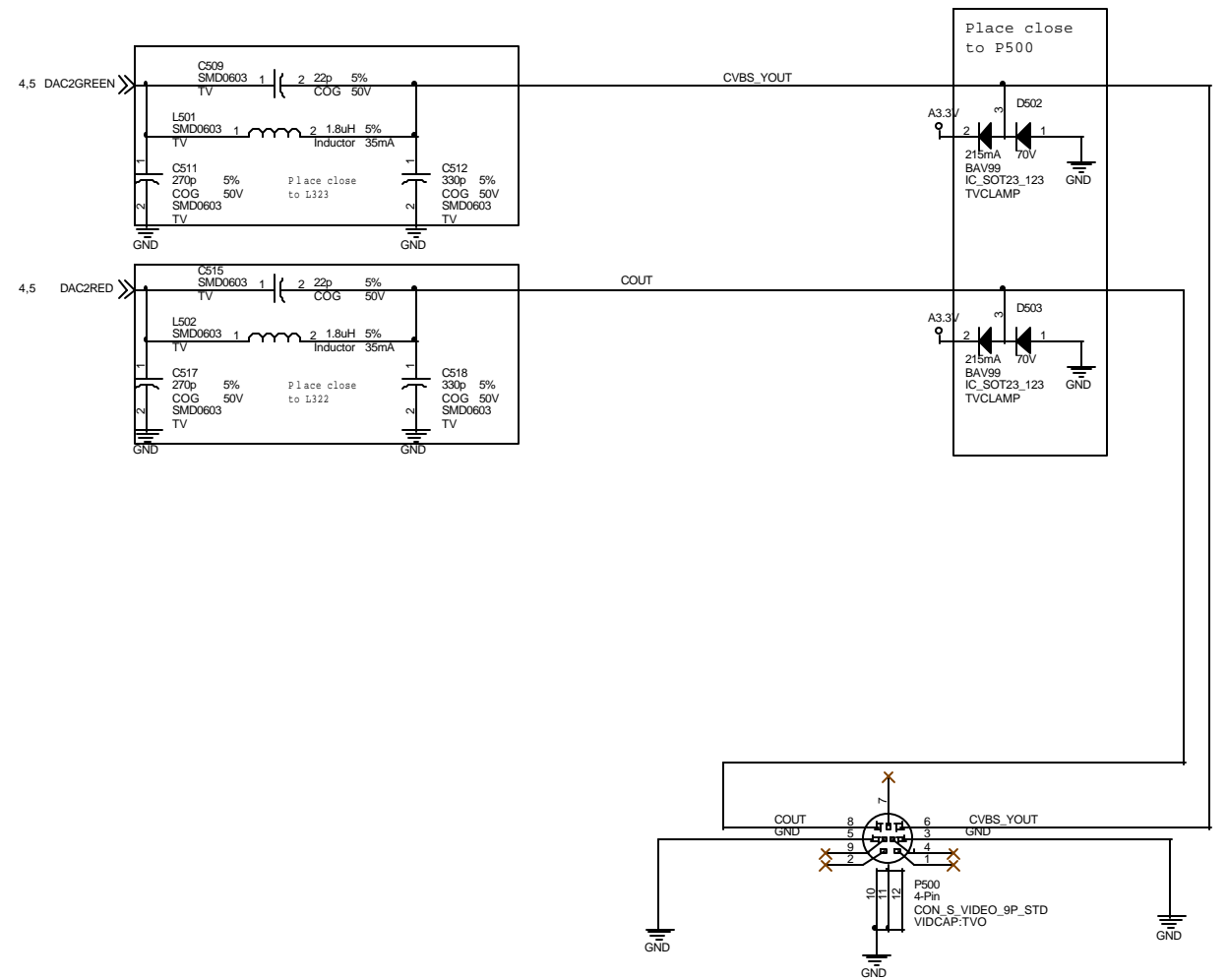
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	Scale	DWG NO	Sheet 5 of 12


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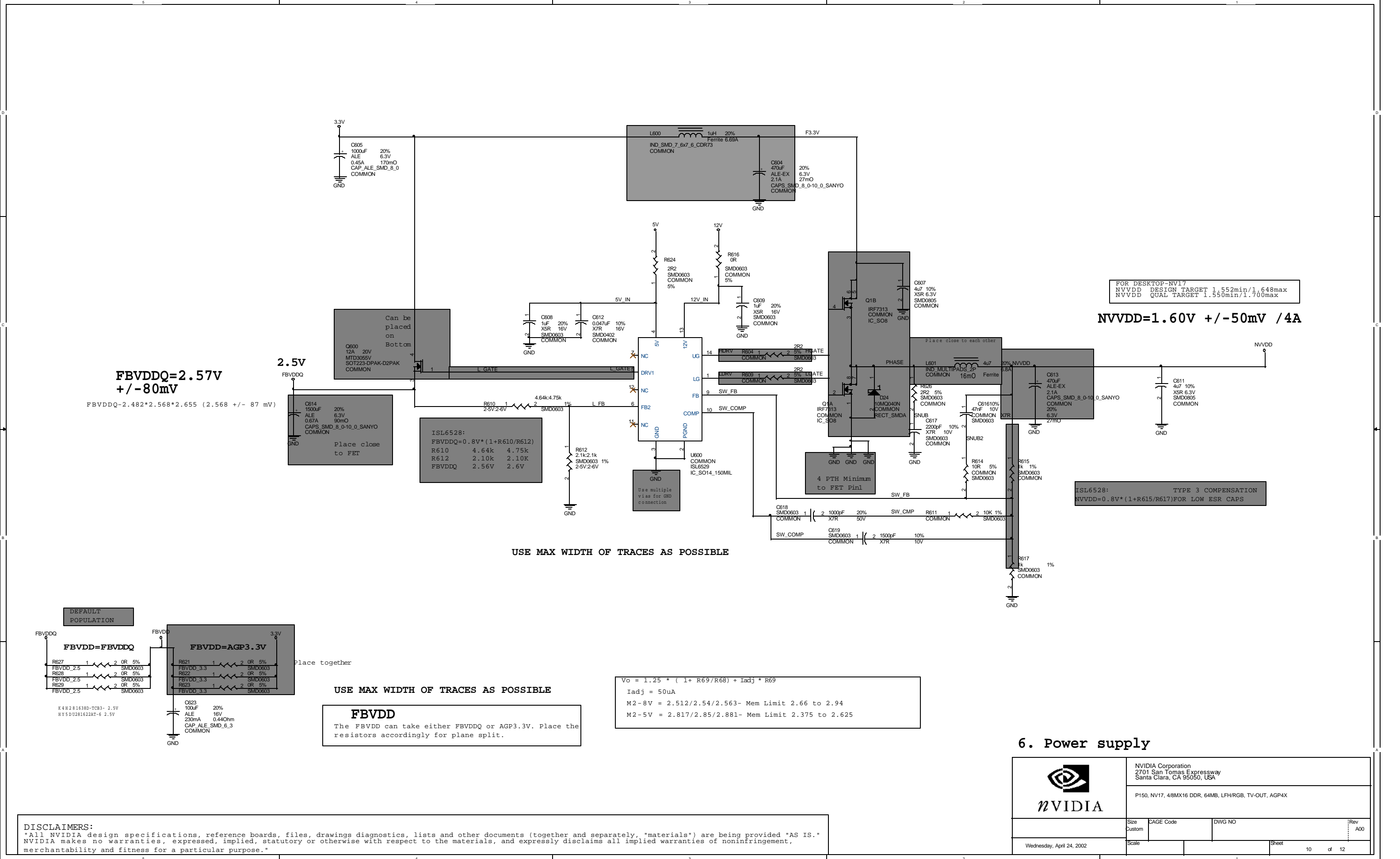


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	Size Custom	CAGE Code <div></div>	DWG NO <div></div>	:Rev <div></div> A00
Wednesday, April 24, 2002	Scale <div></div>	<div></div>		Sheet <div>9 of 12</div>



FOR DESKTOP-NV17
NVVDD DESIGN TARGET 1.552min/1.648max
NVVDD QUAL TARGET 1.550min/1.700max

NVVDD=1.60V +/-50mV /4A

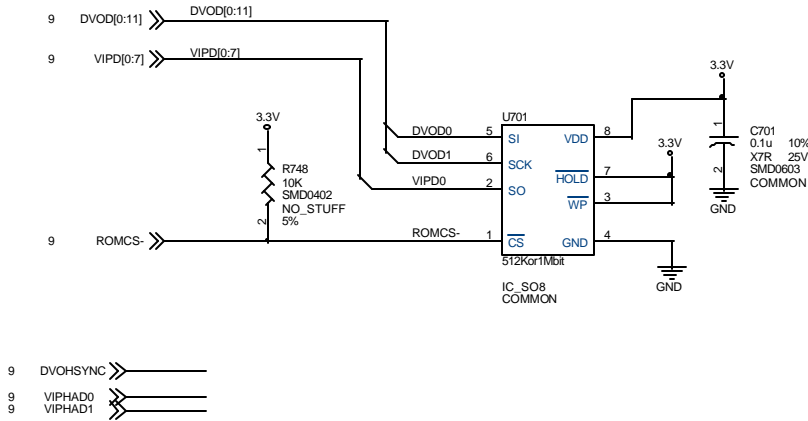
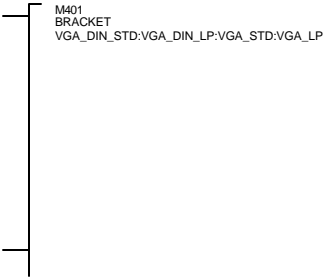
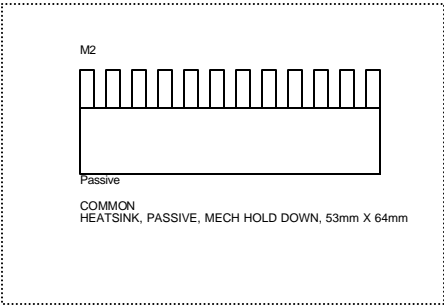
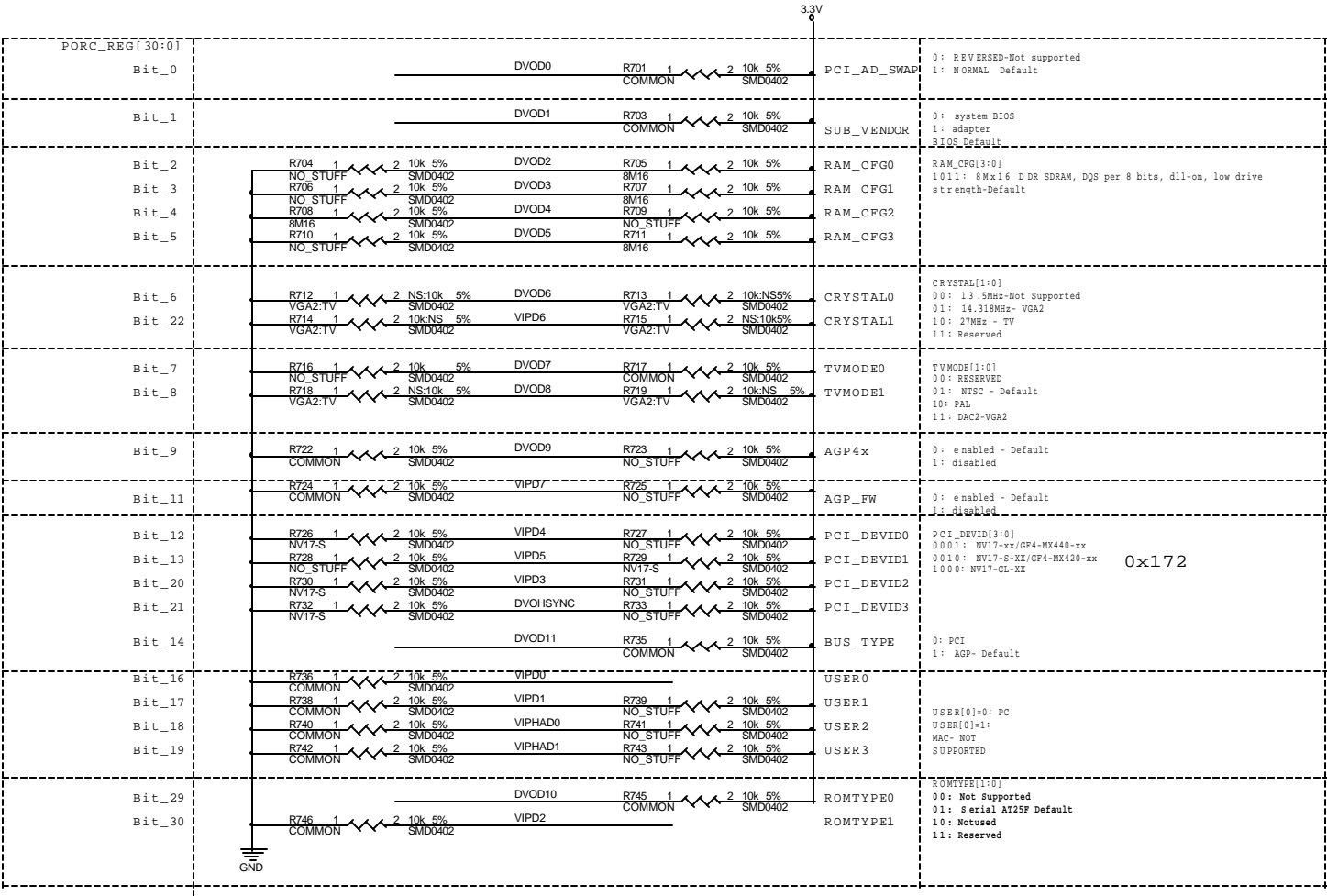
ISL6528: TYPE 3 COMPENSATION
NVVDD=0.8V*(1+R615/R617)FOR LOW ESR CAPS

$$V_o = 1.25 * (1 + R_{69}/R_{68}) + I_{adj} * R_{69}$$
$$I_{adj} = 50\mu A$$
$$M2-8V = 2.512/2.54/2.563- \text{Mem Limit } 2.66 \text{ to } 2.94$$
$$M2-5V = 2.817/2.85/2.881- \text{Mem Limit } 2.375 \text{ to } 2.625$$


6. Power supply

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7. BIOS, Strapping, Mech

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