P75, NV17-Pro, 4MX32 DDR BGA, 64MB, RGB, dual DVI-I, VGA TV-out, video capture, stereo, AGP4X

PCI DEVICE ID 0X0 see strapping options.

NVIDIA

A01-X00: started with P75-A00 added the TV-OUT filter to the TV_OUT_CX assembly fixed strapping bugs for xtal and rom remove the Connexant TV encoder add serial termination for the DVO port A01-X01: changed switcher input to 3.3V added 2.8V supply for IPPPLLVDD A01-X02: added possible OCSet circuit to Semtech switcher (R640,R641,C640) A01-X03: DVO pinswap A01-X04: fixed 0603 caps on 0402 footprints

HISTORY:

PAGE OVERVIEW
1 TOP (this) page

2 1. AGP interface, core decoupling

3 2.a NV17 Frame Buffer 4 2.b Frame Buffer 0..63

5 2.b Frame Buffer 64...127

6 3.a DAC_A, DAC_B, XTAL 7 3.c DAC A VGA

8 3.d DAC_B VGA 9 3.e Int. Transmitter

10 5.b PH-Video Decoder

11 5.c TV out, Video Capture 12 6.a NVVDD Power Supply, VDD33

13 6.b Analog Power Supply, FBVDDQ

14 7 BIOS, Strapping

Stuffing Options Meaning

COMMON

1117 stuff fixed 1117 linear regulator for analog 3.3V 1117 ADJ stuff adjustable 1117 linear regulator for analog 3.3V NO 1117 bypass the linear regulator for analog 3.3V BP_FBVDDQ bypass the linear regulator for FBVDDQ (=> FBVDDQ=FBVDD) SET FBVDDQ set the FBVDDQ voltage (memory IO) SET_FBVDD set the FBVDD voltage (memory core) SET NVVDD set the NVVDD voltage (GPU core) BP VDD33 bypass the VDD33 voltage for the GPU VDD33 stuff the VDD33 regulator components SET_VDD33 set the VDD33 voltage SC stuff the Semtech switcher SC1565 stuff FBVDDQ voltage regulator SC1565 IRU stuff the IR switcher IRU VID stuff the VID setting resistors of the IR switcher

the common components

IRU_POWSEQ stuff the power sequencing circuit for the IR switcher VIDCAP stuff the video capture circuit with SAA7114 TV_OUT_PH stuff TV-out with the Philips encoder SAA7102 VIVO stuff video in/out with SAA7108

VGA-B_PROT stuff the protection diodes around DAC B
DVI-I-A PROT stuff the protection diodes around DVI-I A

VGA-B
VGA-B-SYNCBUFF
DVI-I-A-SYNCBUFF
NO_DVI-I-A-SYNCBUFF
NO_VGA-B-SYNCBUFF
DVI-I-A
SYNCBUFF
DVI-I-B
STUff the VGA connector at DAC B
Stuff the Sync buffer for DAC B/DVI-I-B
STUFF

DVI-I-B stuff the DVI-I at DAC B (and internal transmitter)
STEREOSYNC1 stuff the stereo synchronisation for DAC A
STEREOSYNC2
STEREOSYNCS stuff the stereo synchronisation for DAC B
stuff the switchable stereo synchronisation

STEREO stuff the stereo circuit

A_HPLUG stuff the hot plug detection for DVI-I-A
B_HPLUG stuff the hot plug detection for DVI-I-B
XOR_HPLUG stuff the hot plug detection for DVI-I-A and B

VGA-TV-DVI use the VGA-TV-DVI bracket
VGA-TV use the VGA-TV bracket
VGA use the VGA bracket
DVI-TV-DVI use the DVI-TV-DVI bracket
PASSIVE_HS use the passive heatsink

FAN use the fan heatsink and stuff all associated components

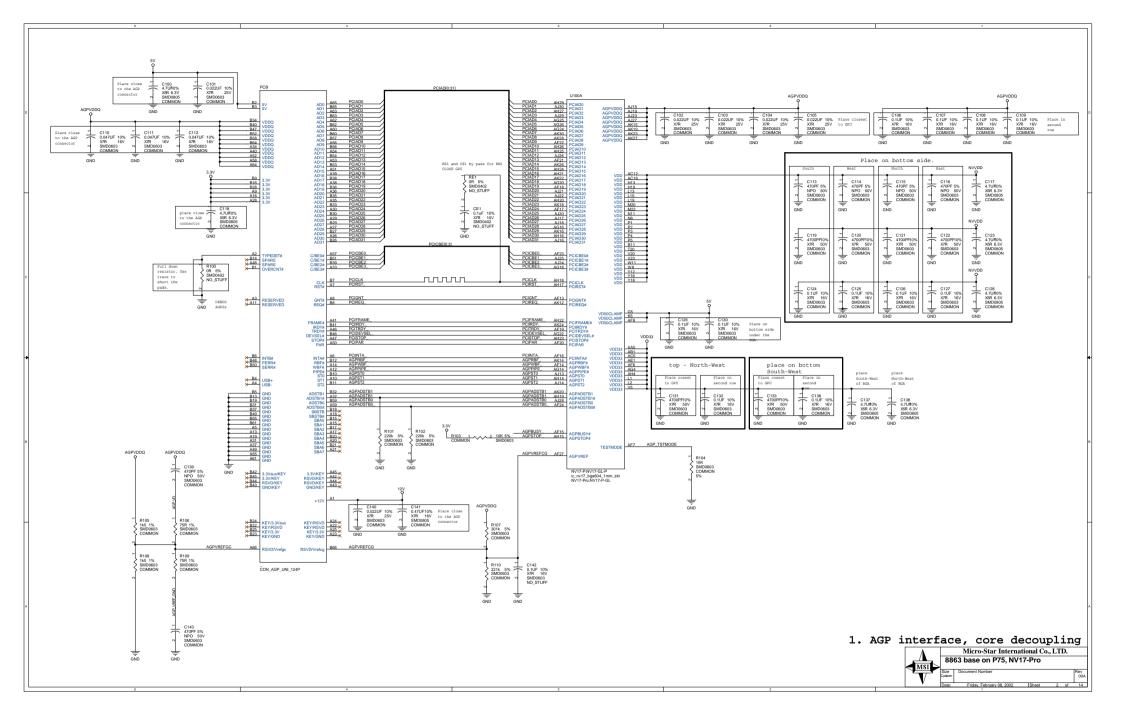
TH_Control stuff the thermal control circuit

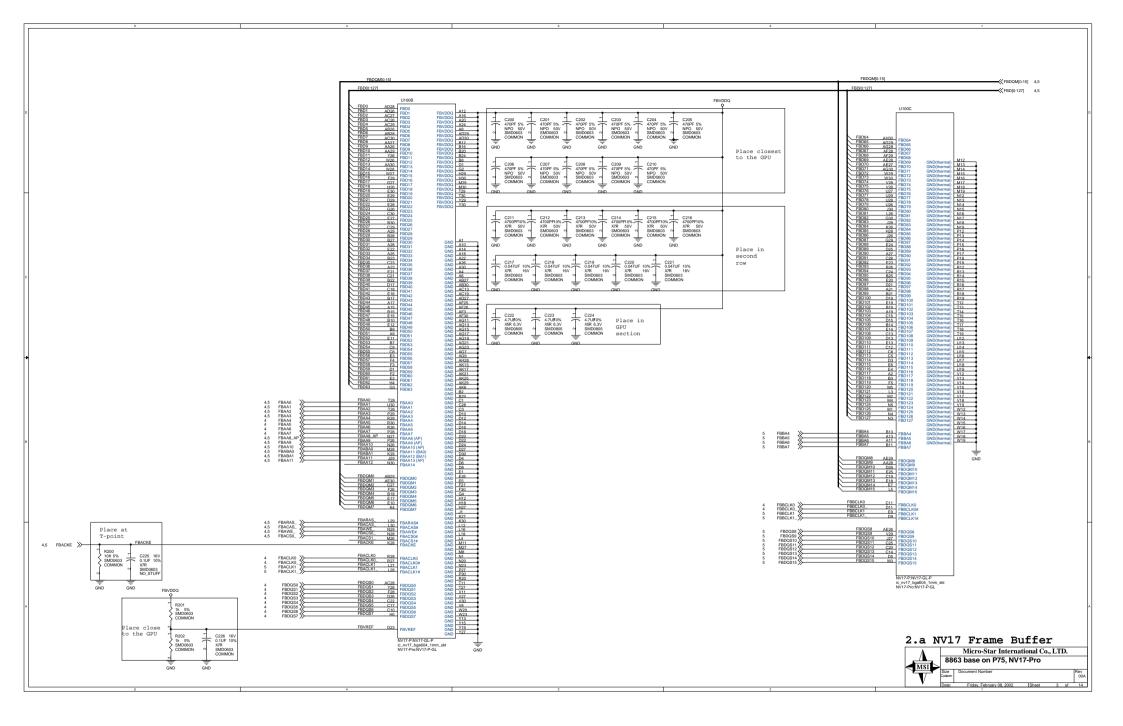
MEMORY the memory stuffing

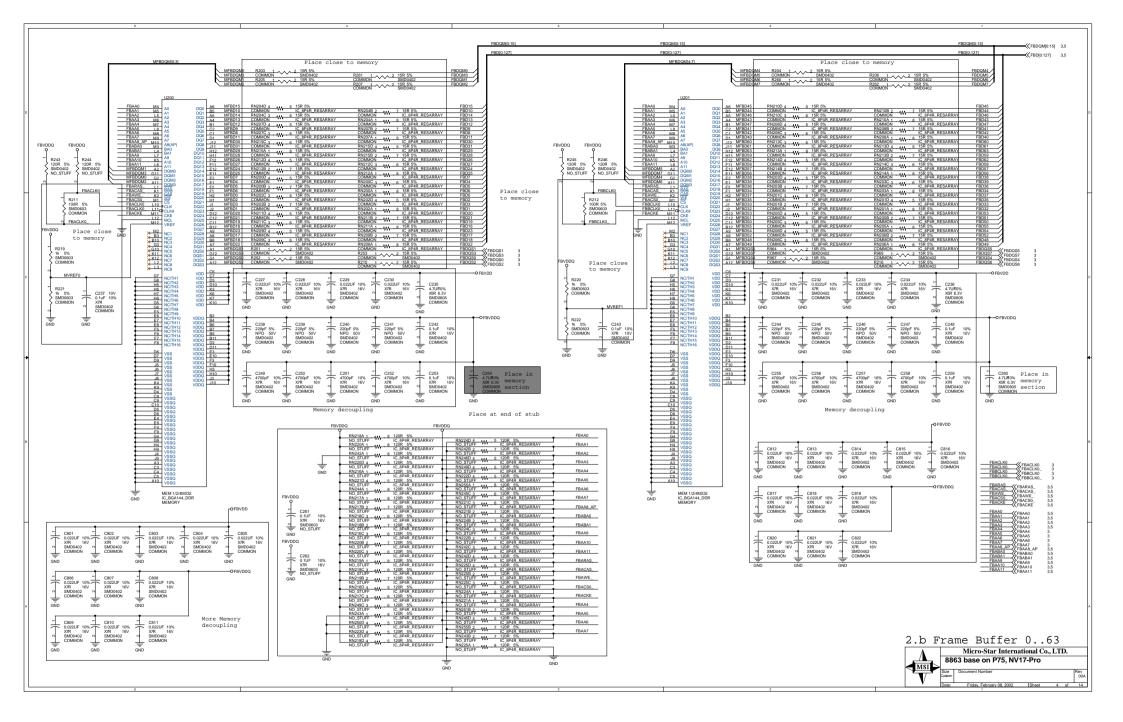
MEM_STRAP_1111 strap the memory to 1111 (= 4Mx32, 1DQS per 32bit)
MEM_STRAP_1101 strap the memory to 1101 (= 4Mx32, 1DQS per 8bit)

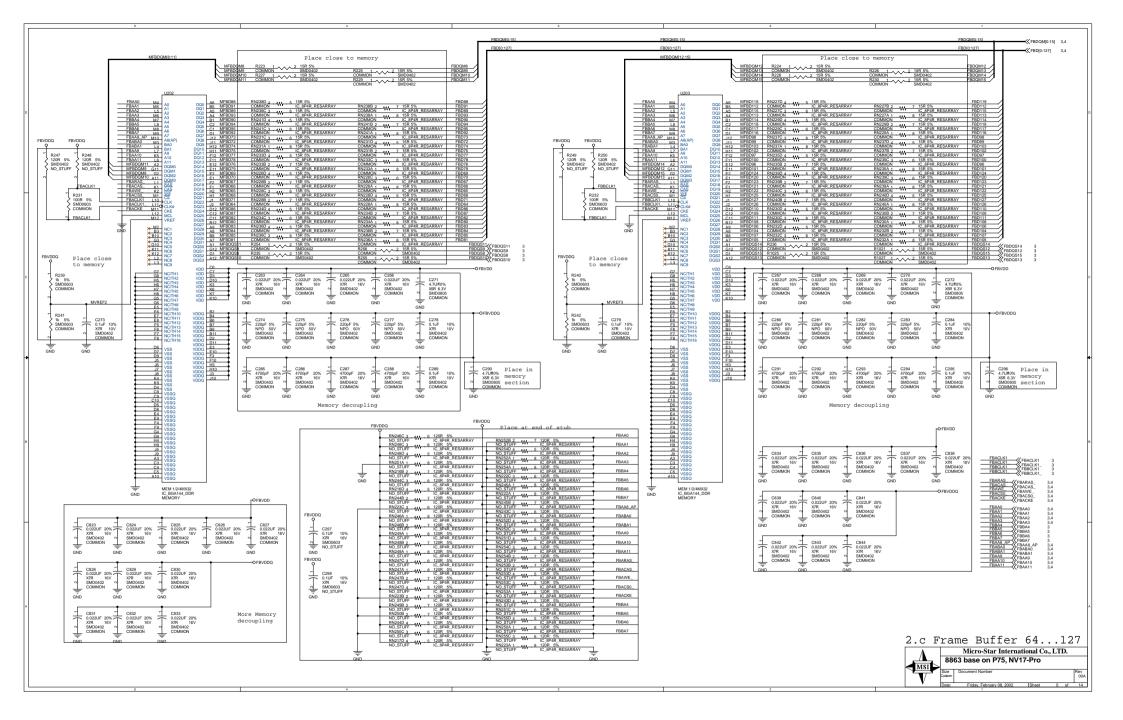
NV17-Pro stuff the NV17 Pro NV17-P-GL stuff the NV17 GL Pro

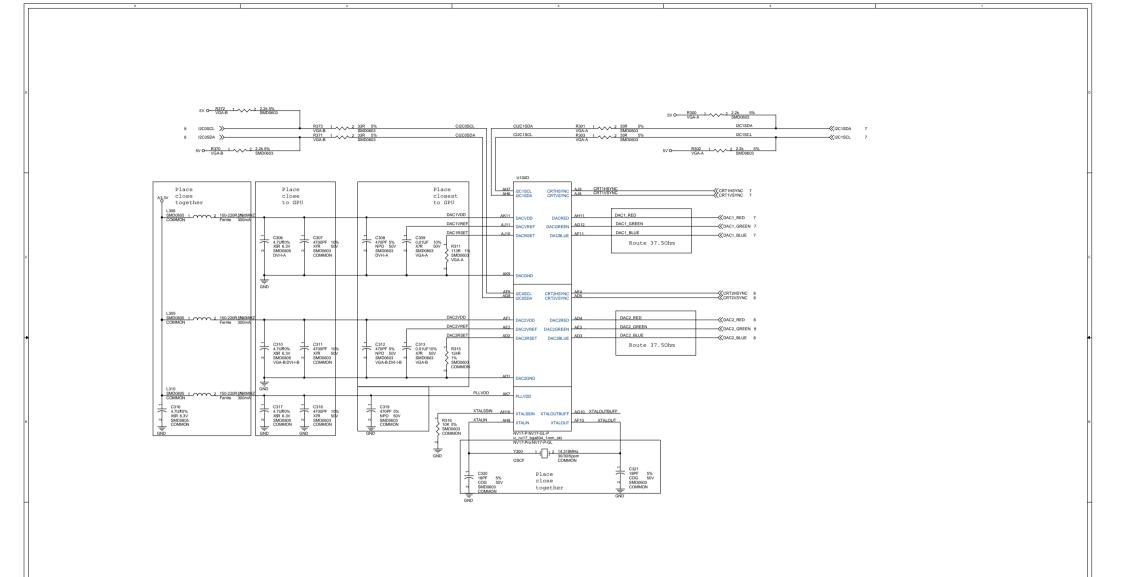




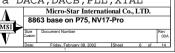


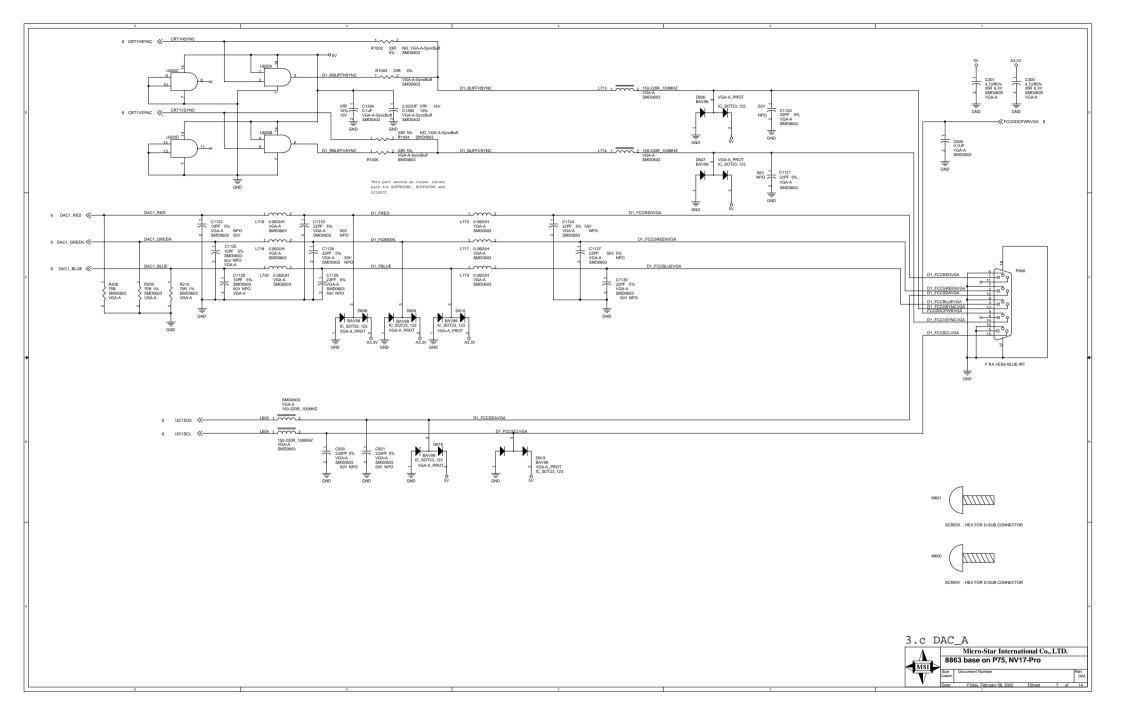


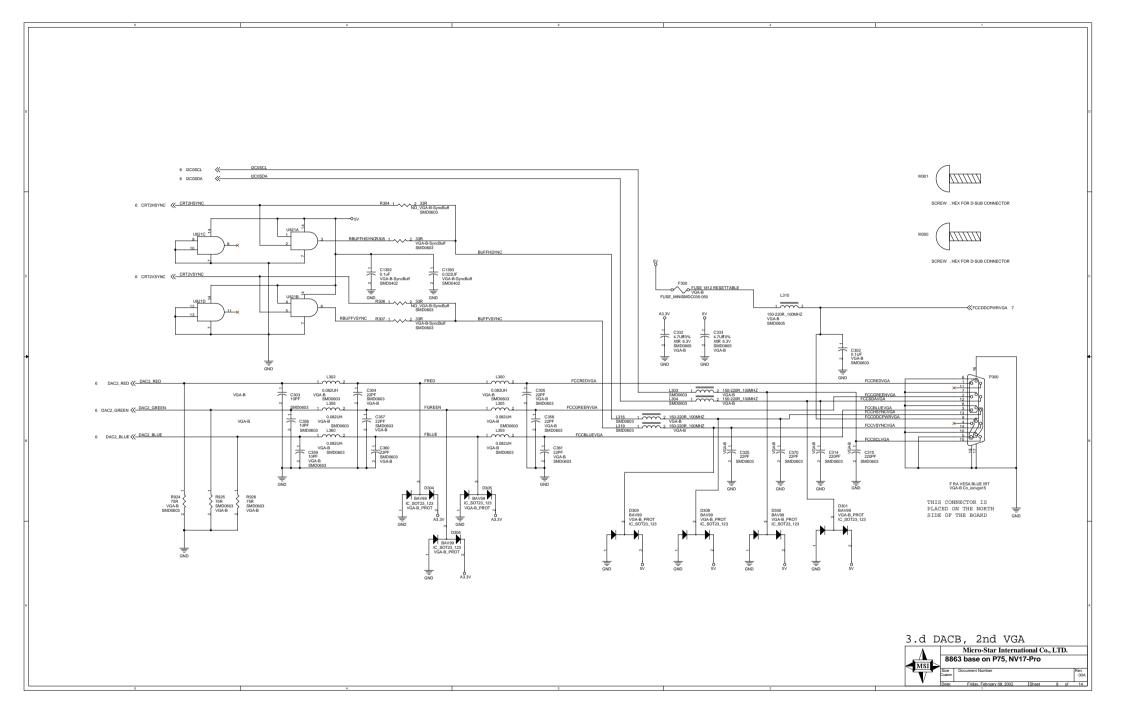


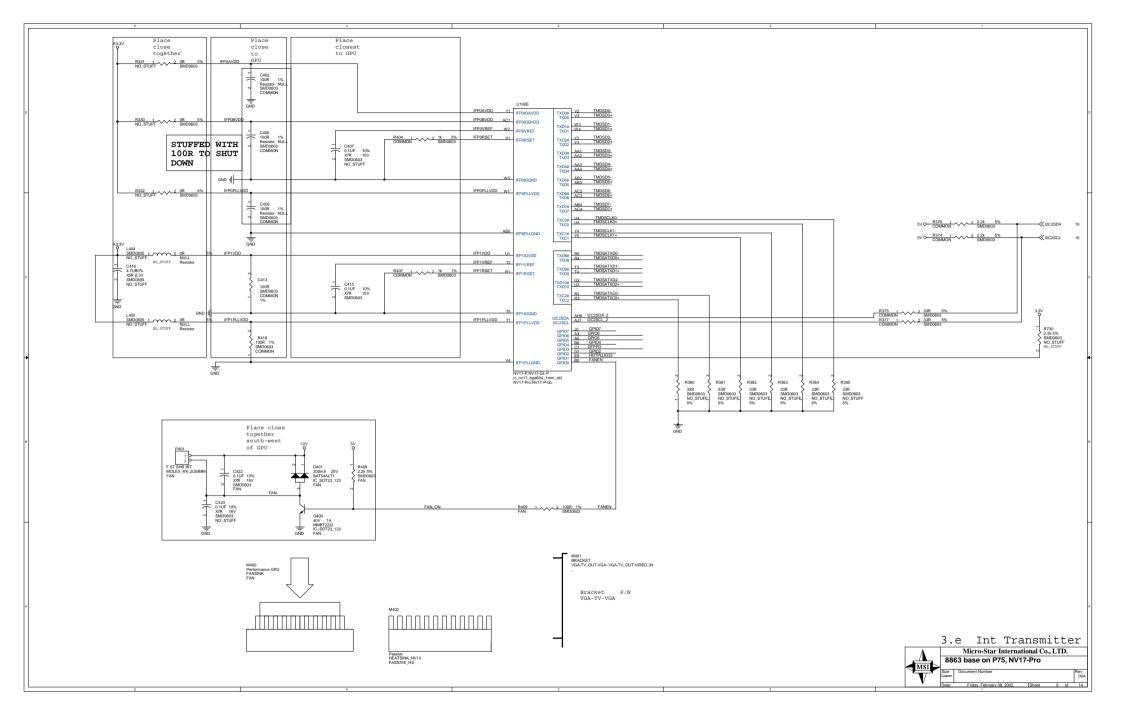


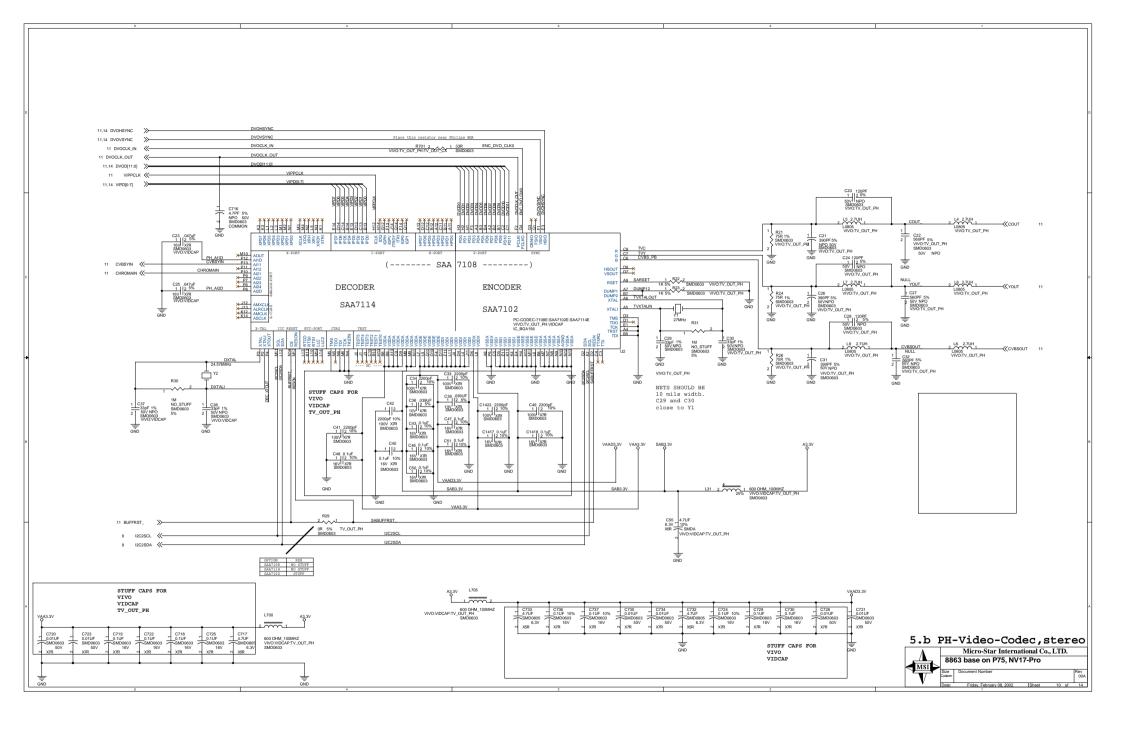
3.a DACA, DACB, PLL, XTAL

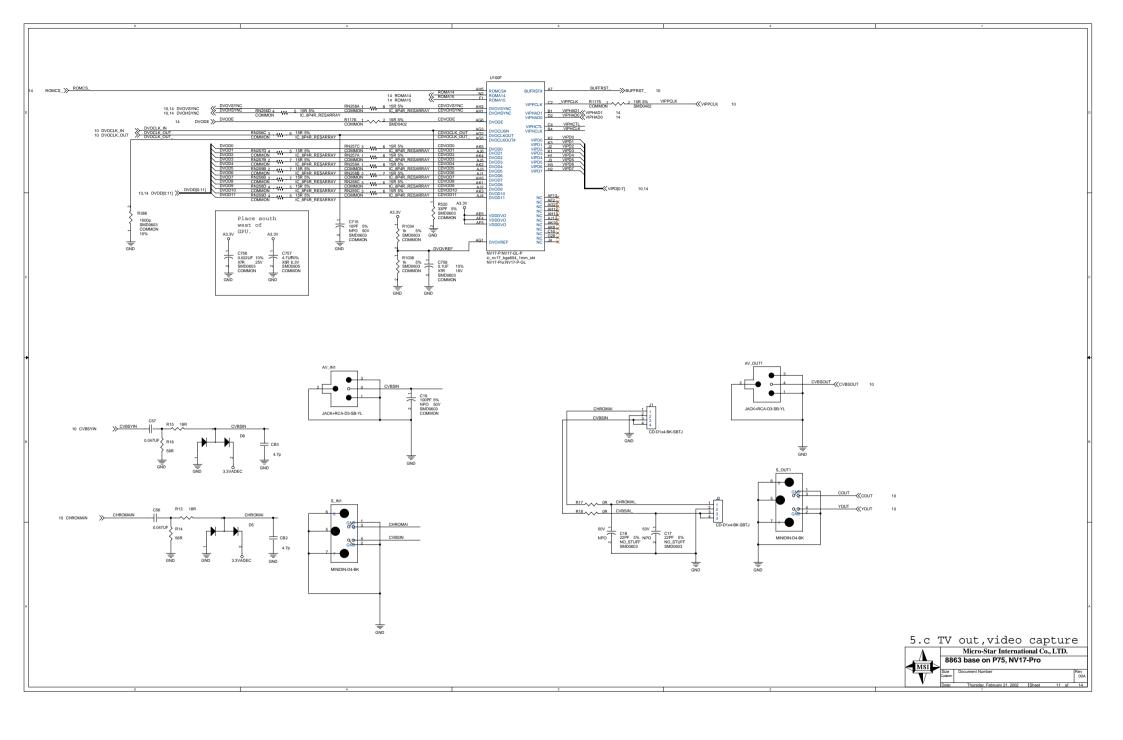


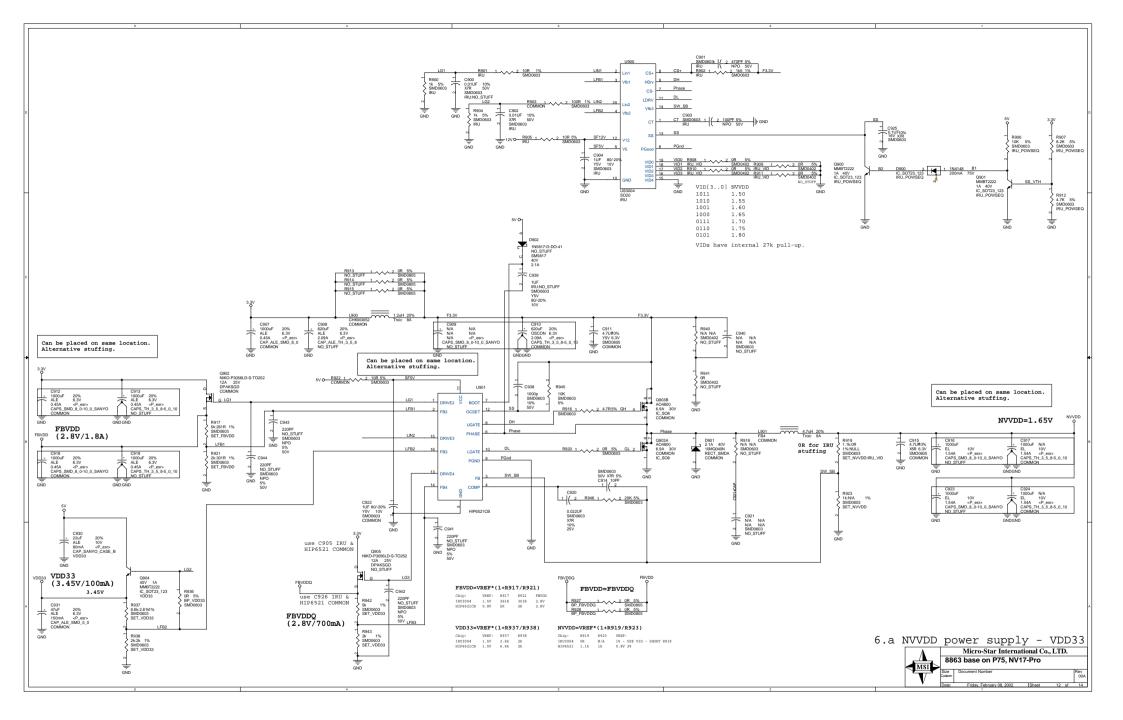


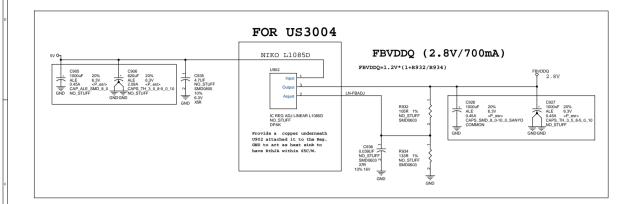


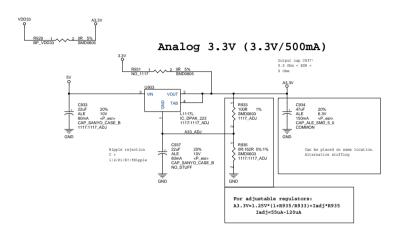


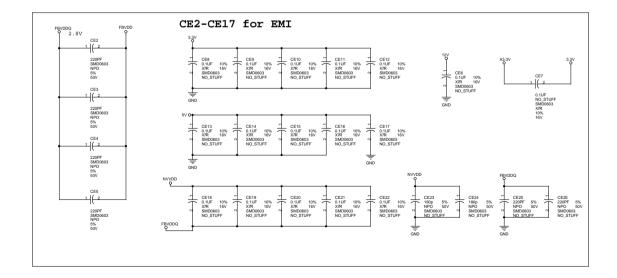


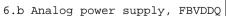








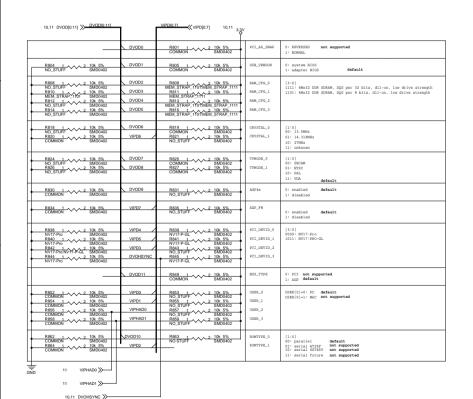


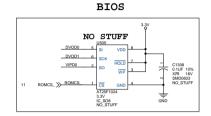


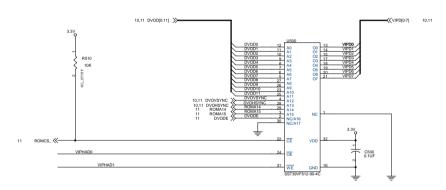




Strapping







7. BIOS, Strapping

