PCB100

PCB

P200-1

SCREW

P200-2

SCREW

K100

FAN

BRACKET

BRACKET

Title <Title>		
Size B	Document Number <Doc>	Rev 0A
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NV15, 4MX16 TERMINATED DDR, RGB, INTERNAL DVI-I, TV I/F, AGP4X.

PCI DEVICE ID 0X0=0X150 FOR NV15.

GPU : GeForce2 PRO
STRAPS : AGP4X, SIDEBAND DIS, FAST WRITE ENA, ADP BIOS, NORMAL PCIAD, 14.318MHz
STRAP_RAM_TYPE [5 : 2]=1010 4MX16 DDR SDRAM
ALL "NO STUFF" COMPONENTS HIGHLITED
SWITCHER1(VTT) SET TO 1.25V
SWITCHER2(NVVDD) SET TO 2.05V
LINEAR(FBVDDQ) SET TO 2.5V

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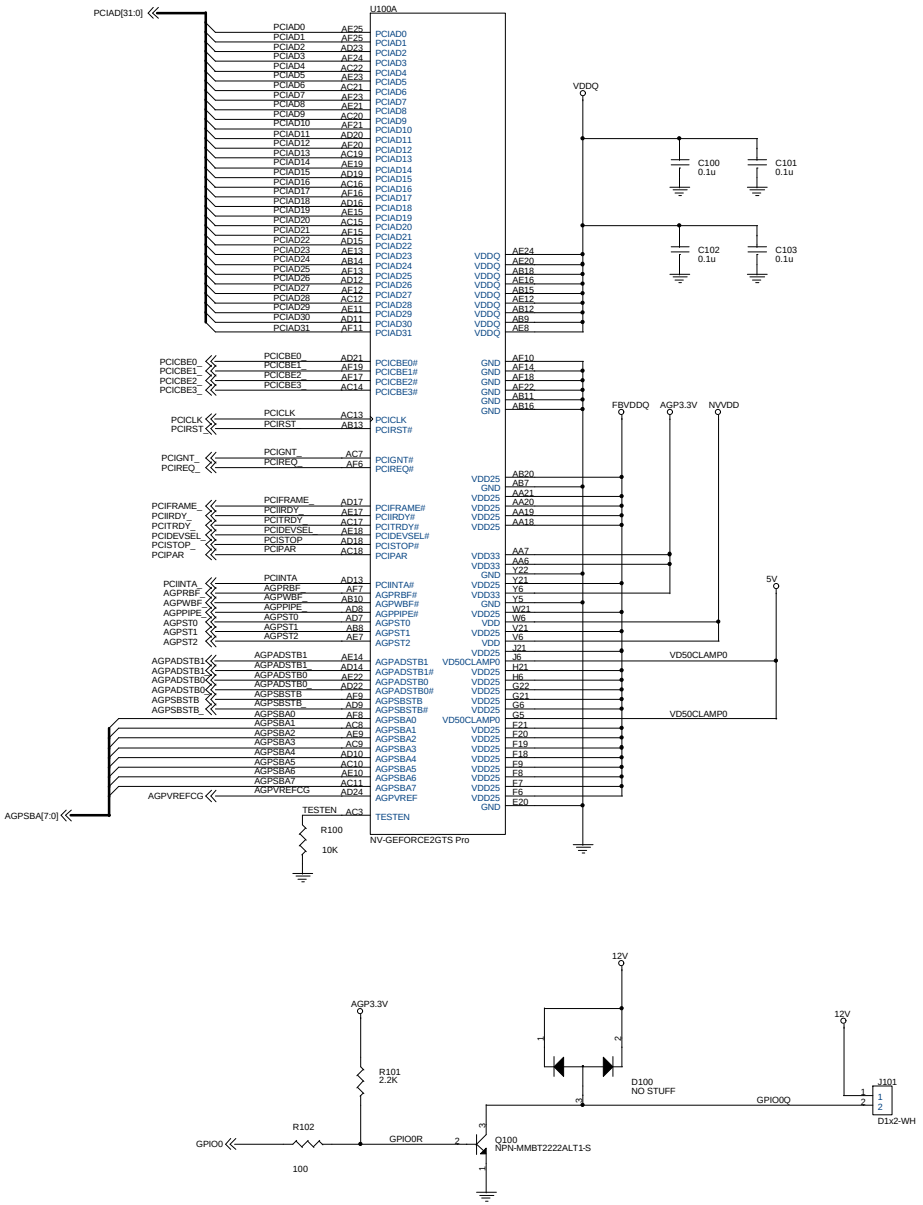

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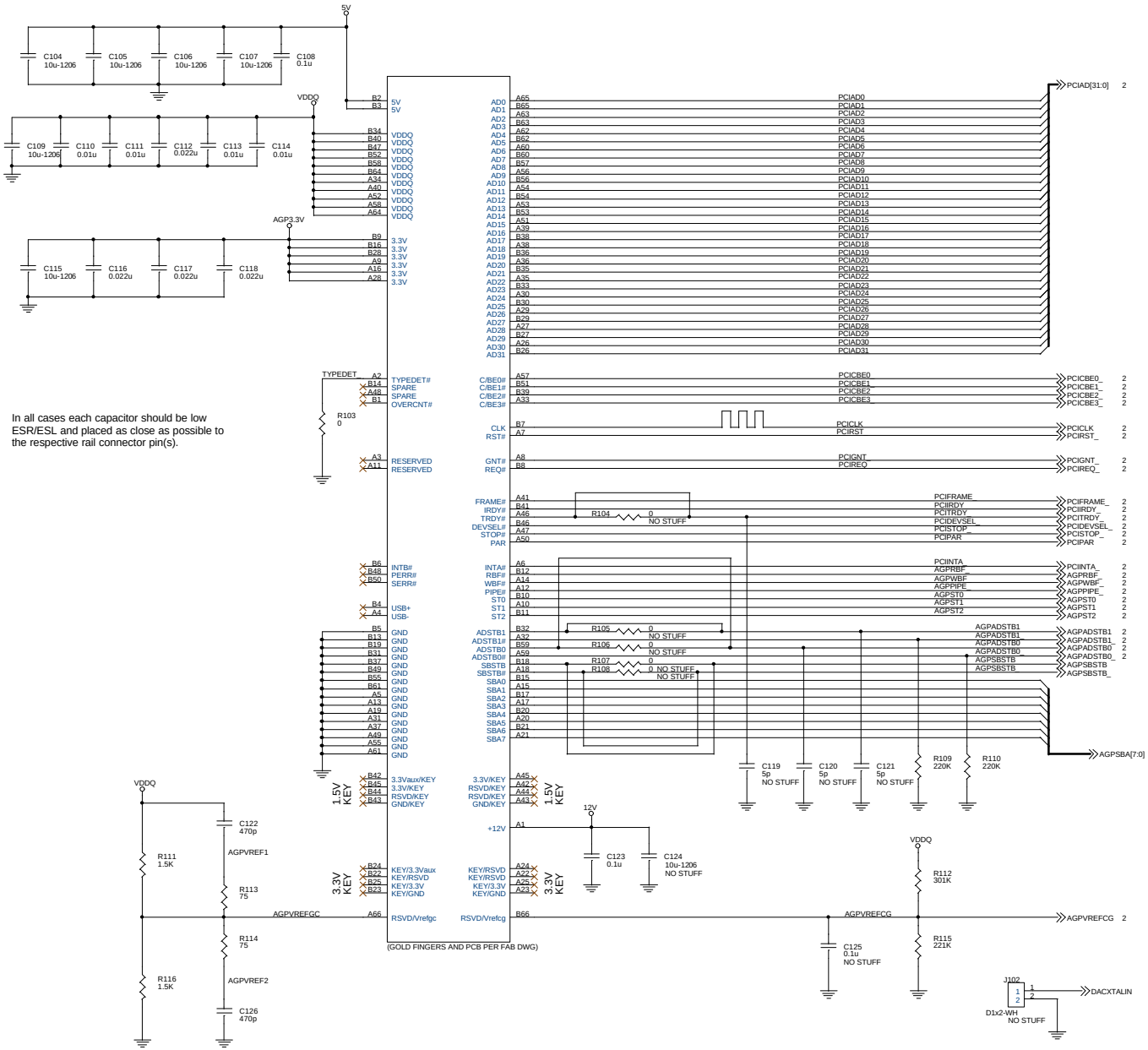

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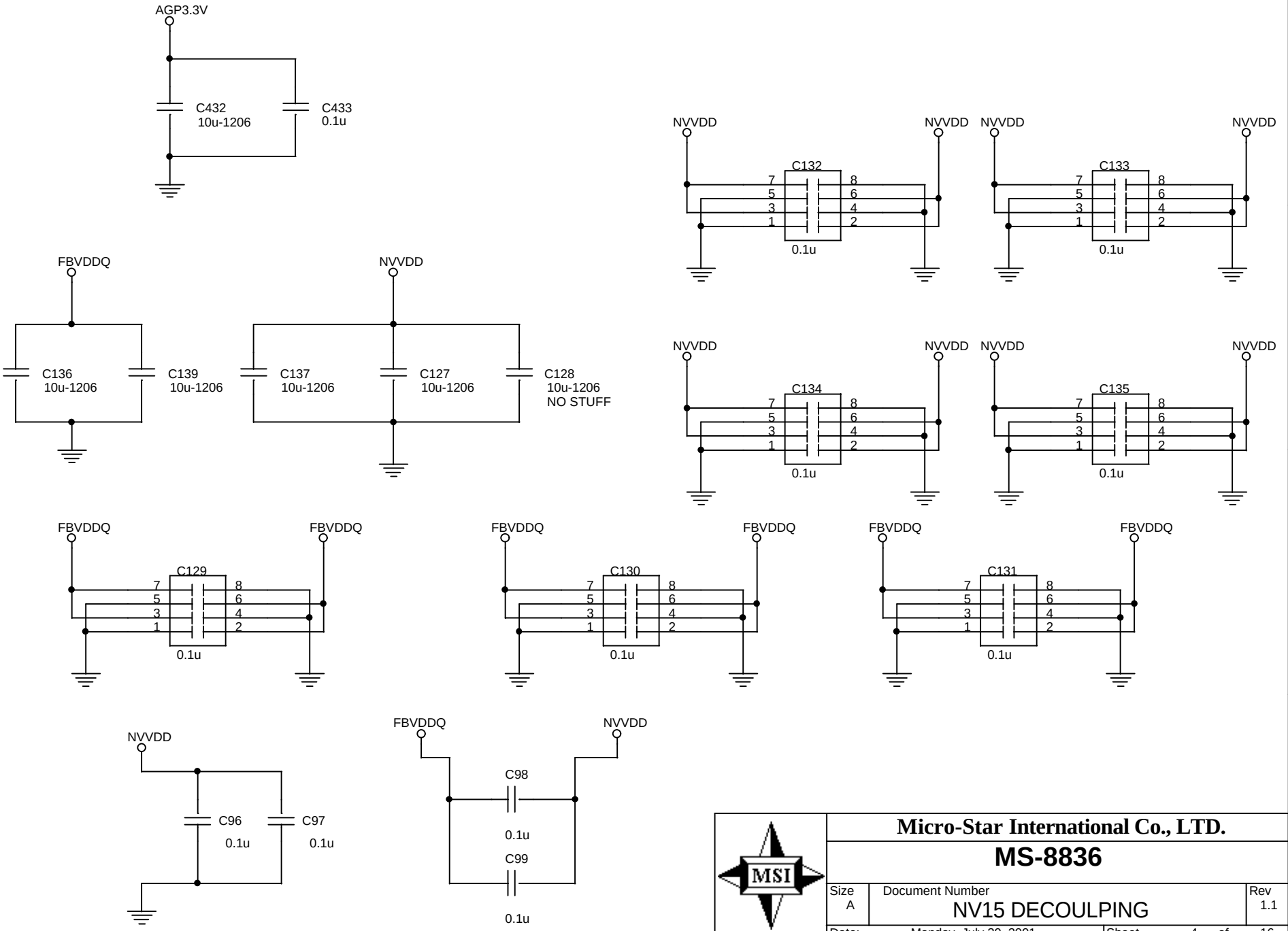
AGP3.3V
C432
10u-1206
C433
0.1u
NVVDD
C132
C133
0.1u
FBVDDQ
C136
10u-1206
C139
10u-1206
C137
10u-1206
C127
10u-1206
C128
10u-1206
NO STUFF
C134
C135
C129
C130
C131
C96
0.1u
C97
C98
C99
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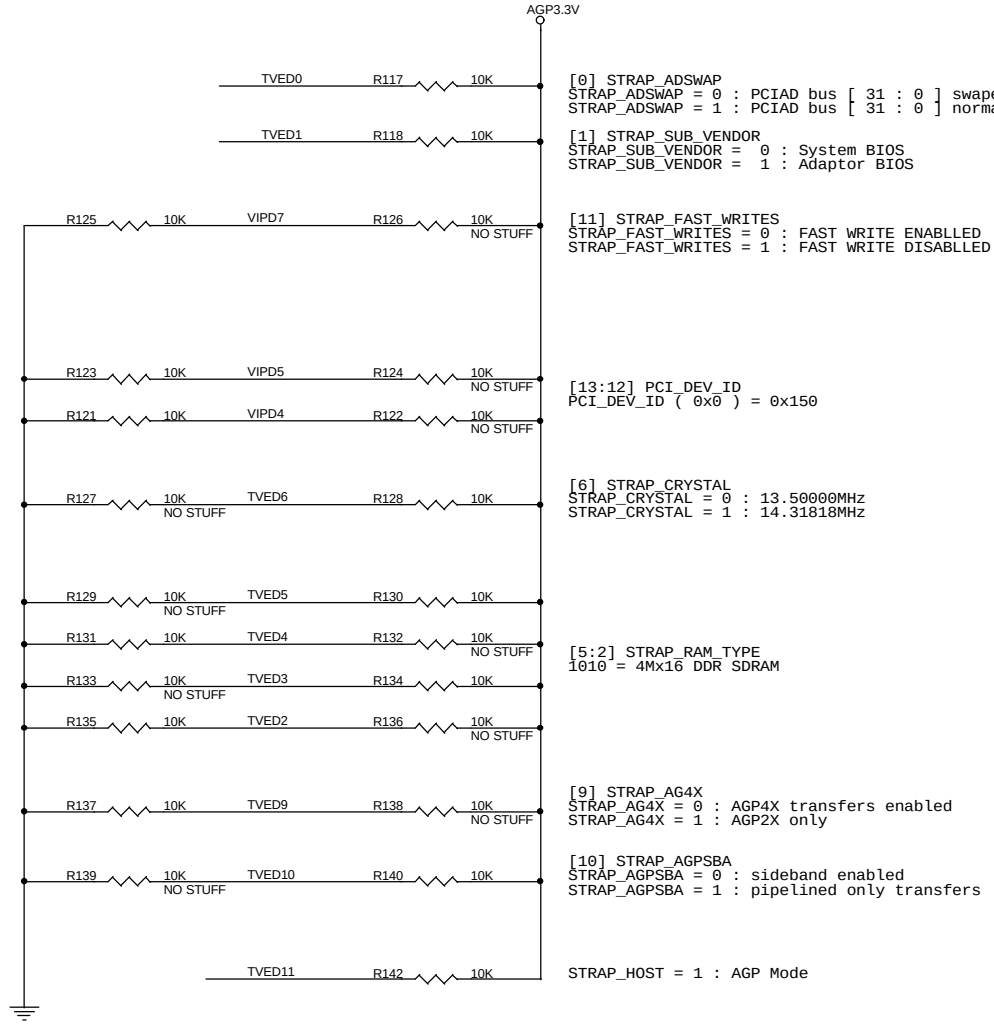

[0] STRAP_ADSWAP
STRAP_ADSWAP = 0 : PCIAD bus [31 : 0] swaped
STRAP_ADSWAP = 1 : PCIAD bus [31 : 0] normal

[1] STRAP_SUB_VENDOR
STRAP_SUB_VENDOR = 0 : System BIOS
STRAP_SUB_VENDOR = 1 : Adaptor BIOS

[11] STRAP_FAST_WRITES
STRAP_FAST_WRITES = 0 : FAST WRITE ENABLLED
STRAP_FAST_WRITES = 1 : FAST WRITE DISABLLED

[13:12] PCI_DEV_ID
PCI_DEV_ID (0x0) = 0x150

[6] STRAP_CRYSTAL
STRAP_CRYSTAL = 0 : 13.50000MHz
STRAP_CRYSTAL = 1 : 14.31818MHz

[5:2] STRAP_RAM_TYPE
1010 = 4Mx16 DDR SDRAM

[9] STRAP_AG4X
STRAP_AG4X = 0 : AGP4X transfers enabled
STRAP_AG4X = 1 : AGP2X only

[10] STRAP_AGPSBA
STRAP_AGPSBA = 0 : sideband enabled
STRAP_AGPSBA = 1 : pipelined only transfers

STRAP_HOST = 1 : AGP Mode

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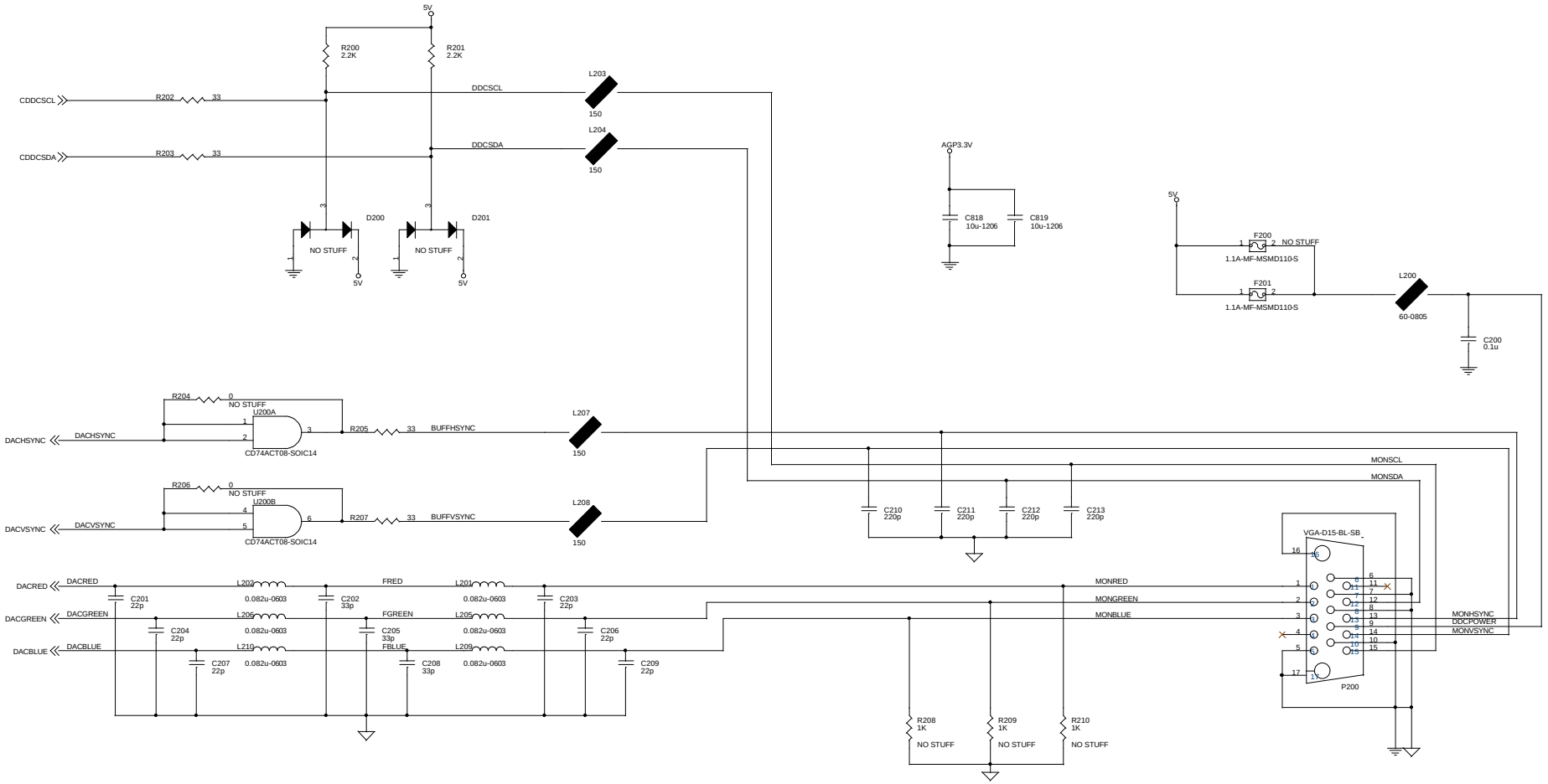

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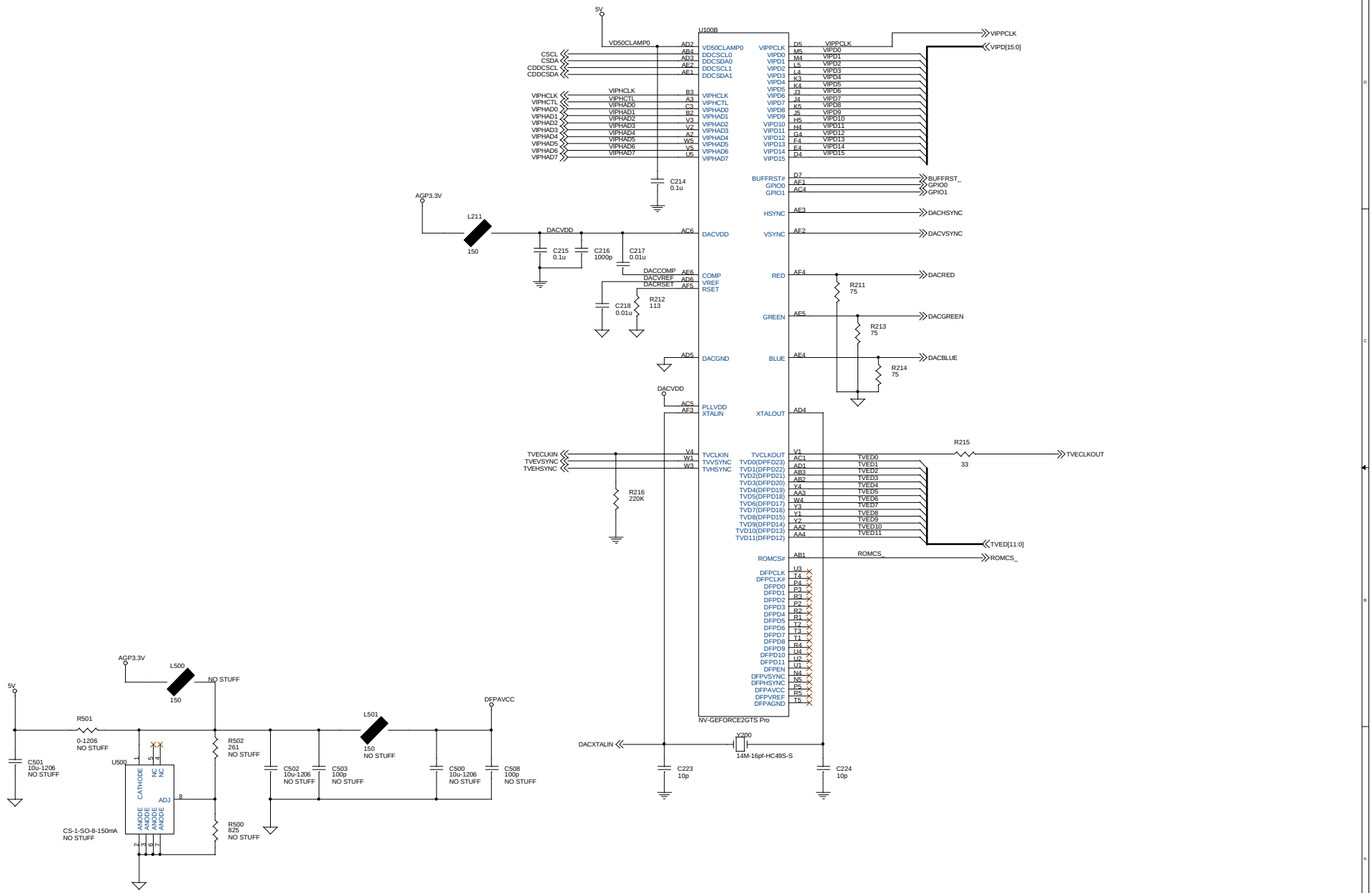

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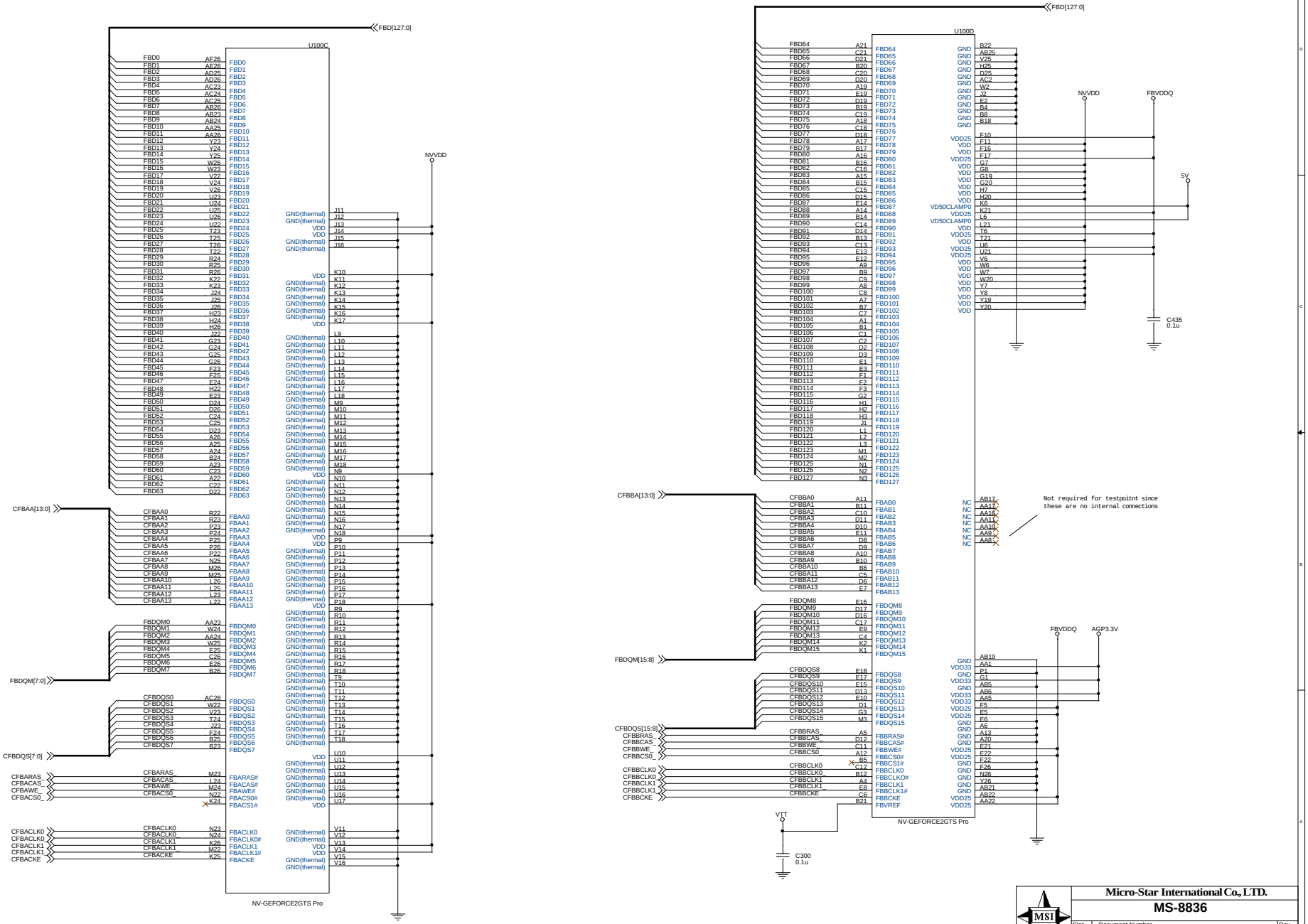

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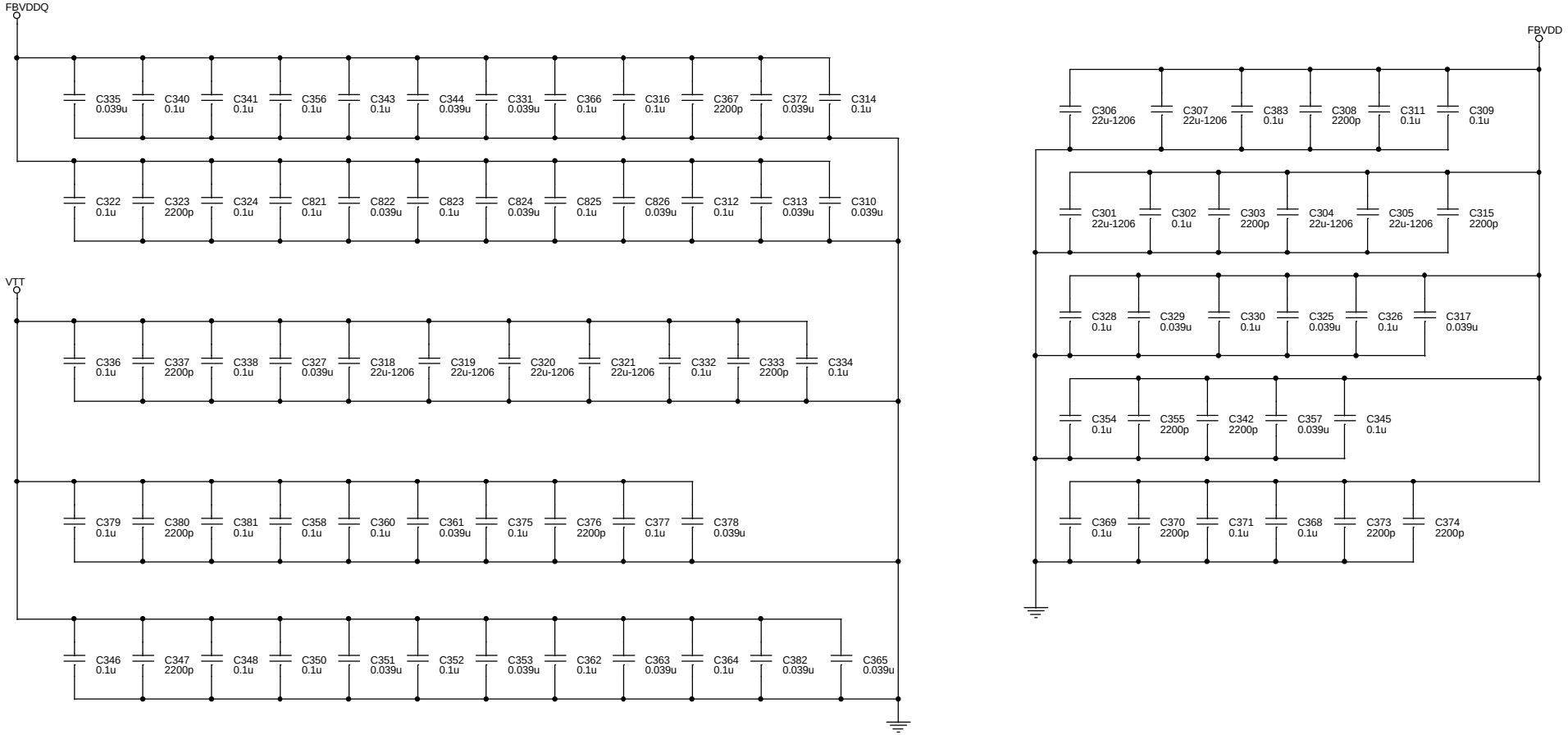

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	MS-8836	
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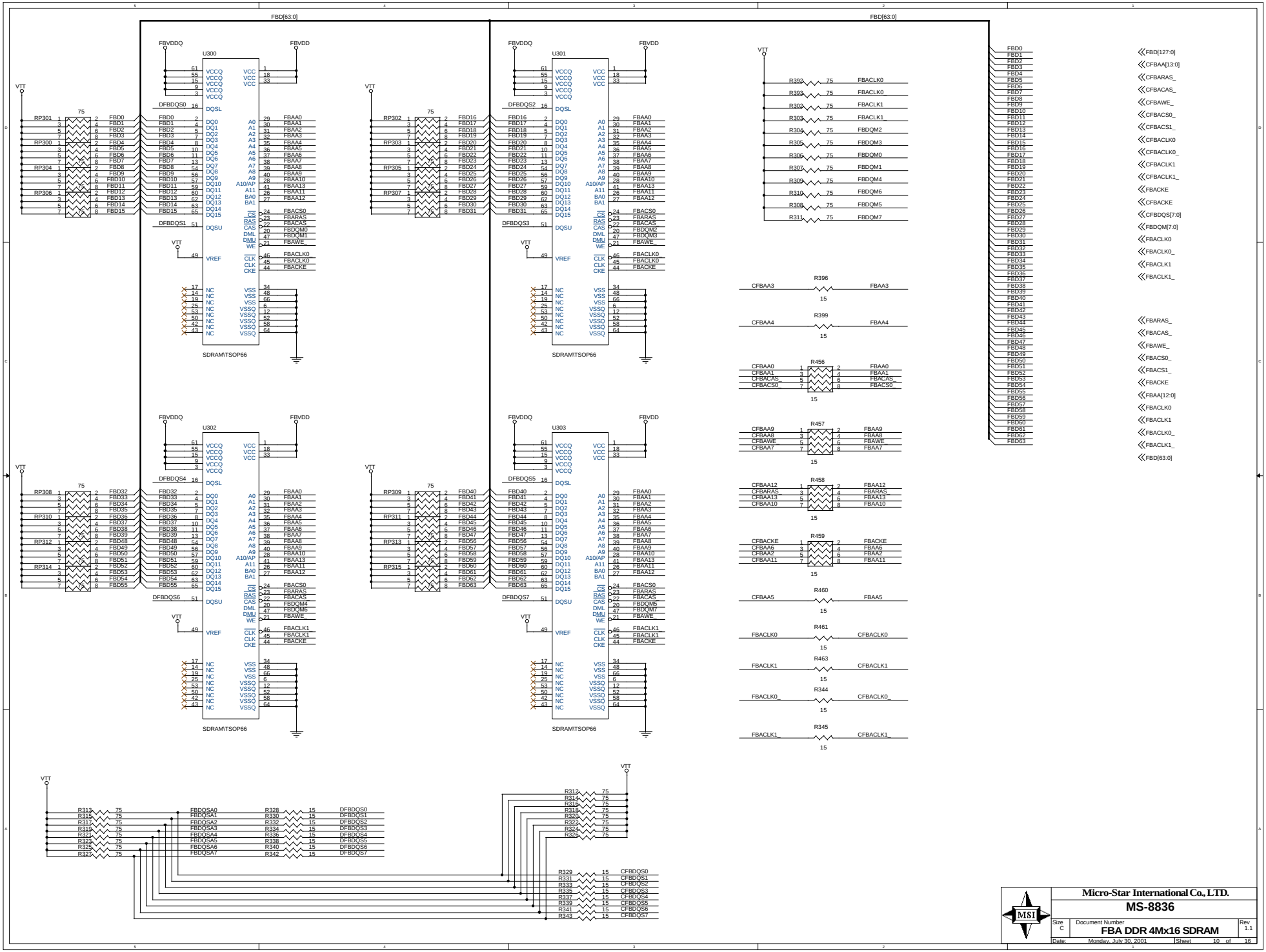

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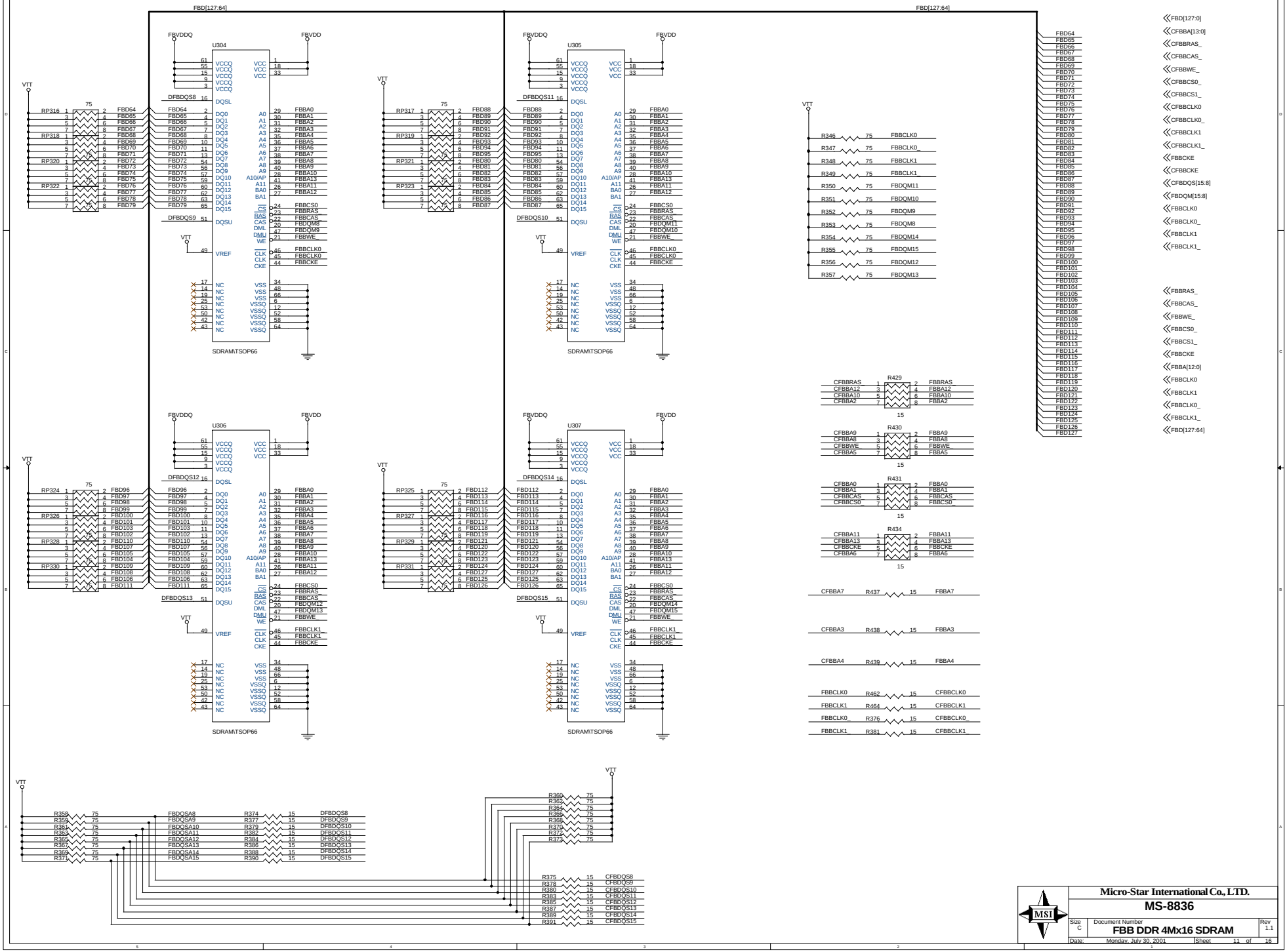

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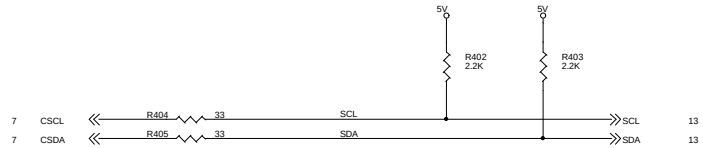

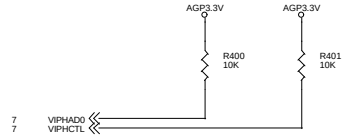

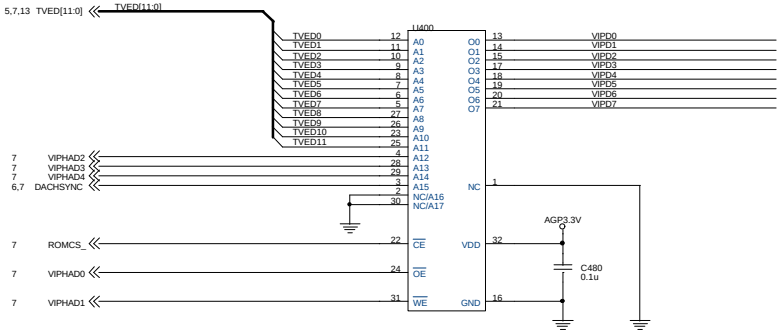

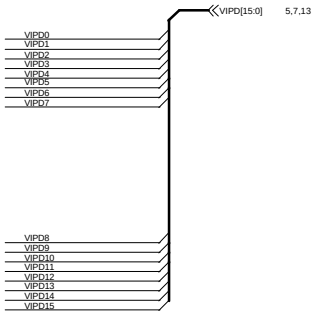

ROM

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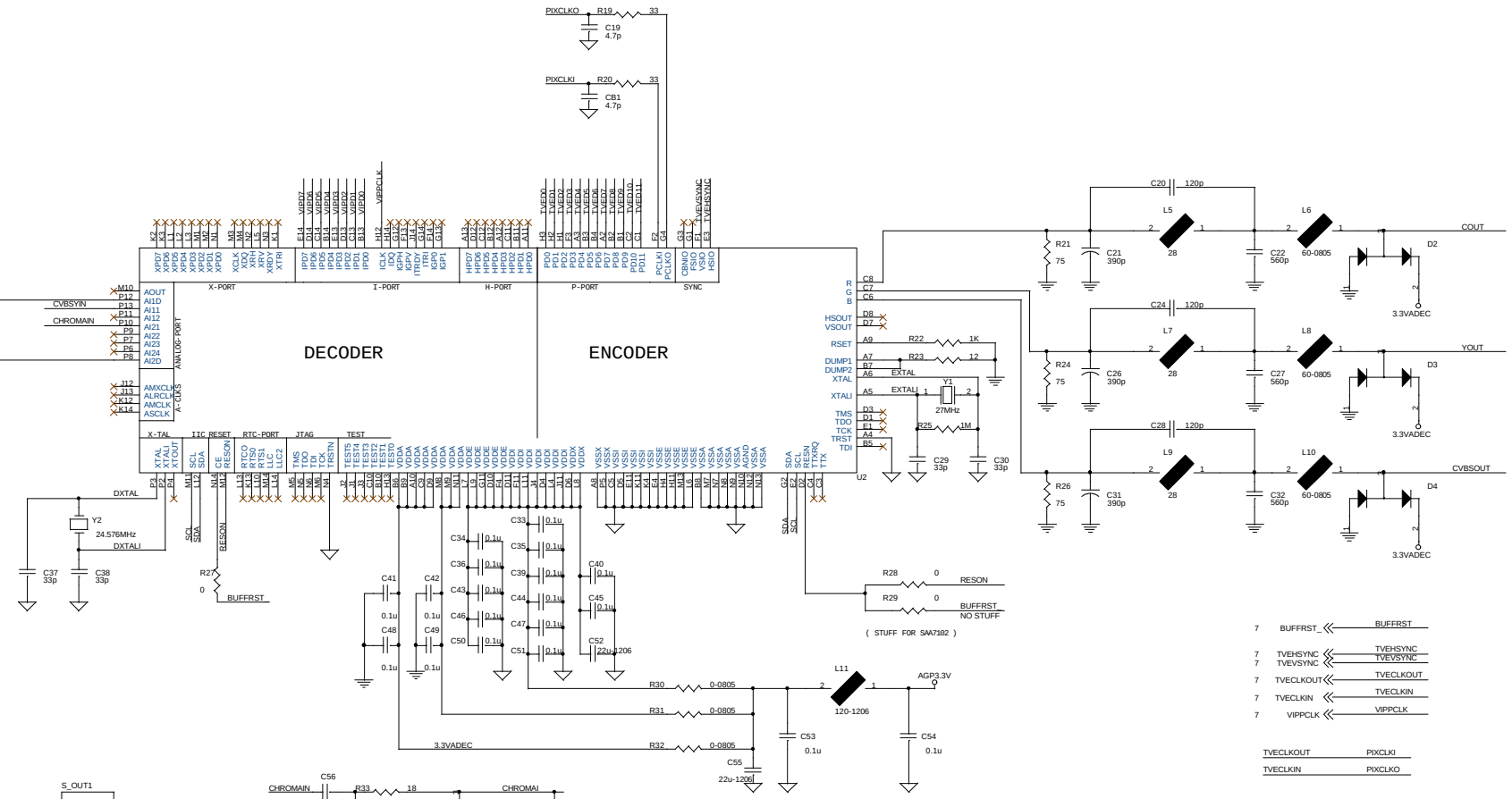

PHILIPS 7108 EN/DECORDER

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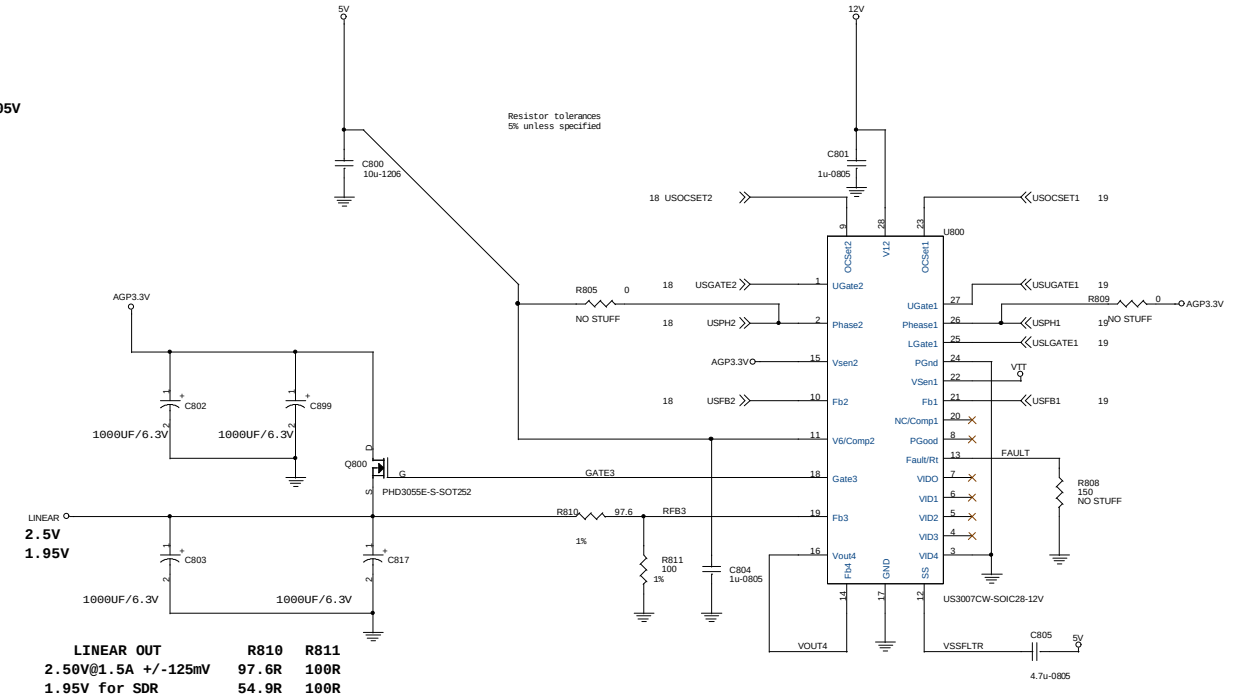
FBVDD — AGP3.3V **AGP3.3**

NVVDD — SWR2 **SWITCHER2=2.05V**

FBVDDQ — LINEAR **LINEAR=2.5V**



LINEAR OUT	R810	R811
2.50V@1.5A +/-125mV	97.6R	100R
1.95V for SDR	54.9R	100R

R810=((LINEAR OUT/1.26)-1)*100(R811)

NV15 BASE POWER SOLUTION

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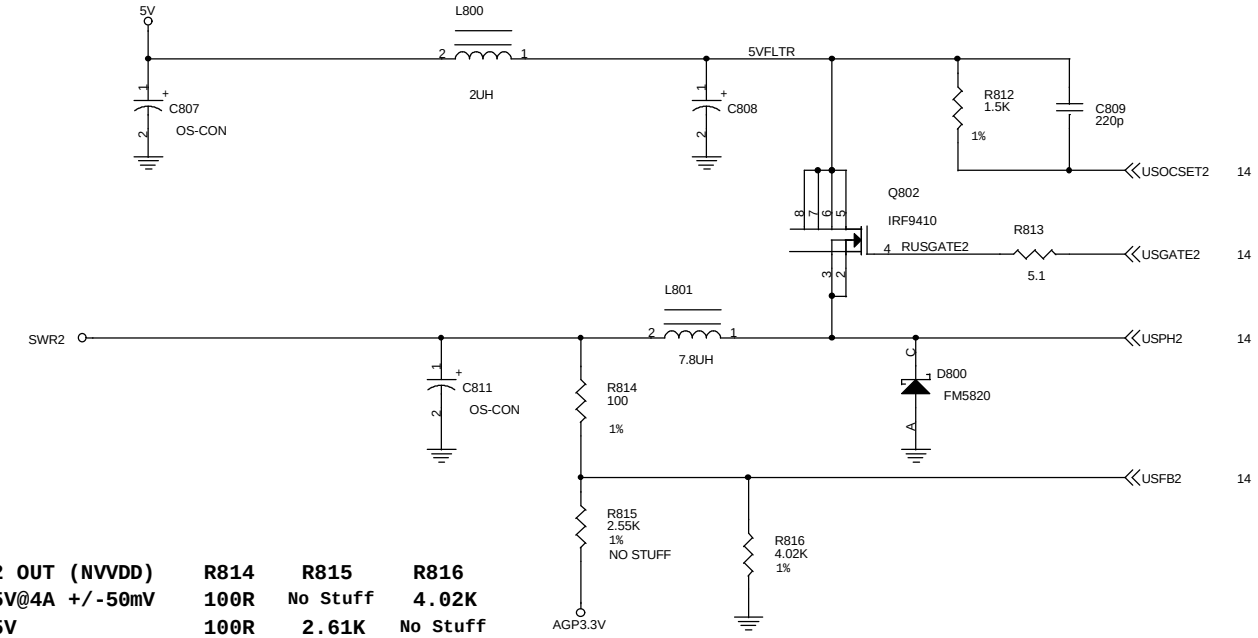
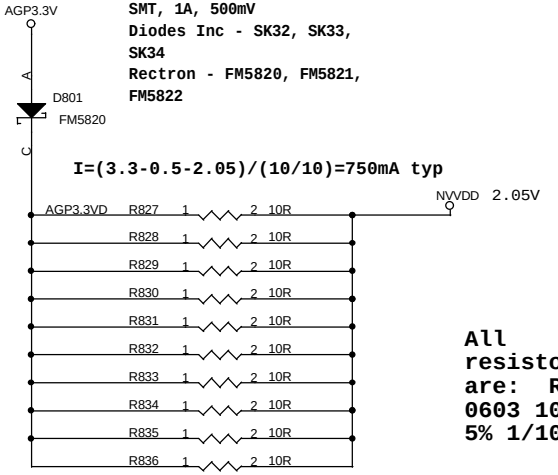


SWR2 OUT (NVVDD) R814 R815 R816
2.05V@4A +/-50mV 100R No Stuff 4.02K
1.95V 100R 2.61K No Stuff

R816=100/((2.05V/2)-1)

R815=130/(2-1.95v)



All resistors are: RES 0603 10R 5% 1/10W

Our measurements show that we are consuming slightly more power on the AGP 3.3V supply than the AGP spec allows. The attached circuit is needed to supply some power to the NVVDD circuit from 3.3V and thus reduce the power need on 5V to be below AGP limit. Please implemement this circuit on 8836.

NV15 DDR POWER ADDER

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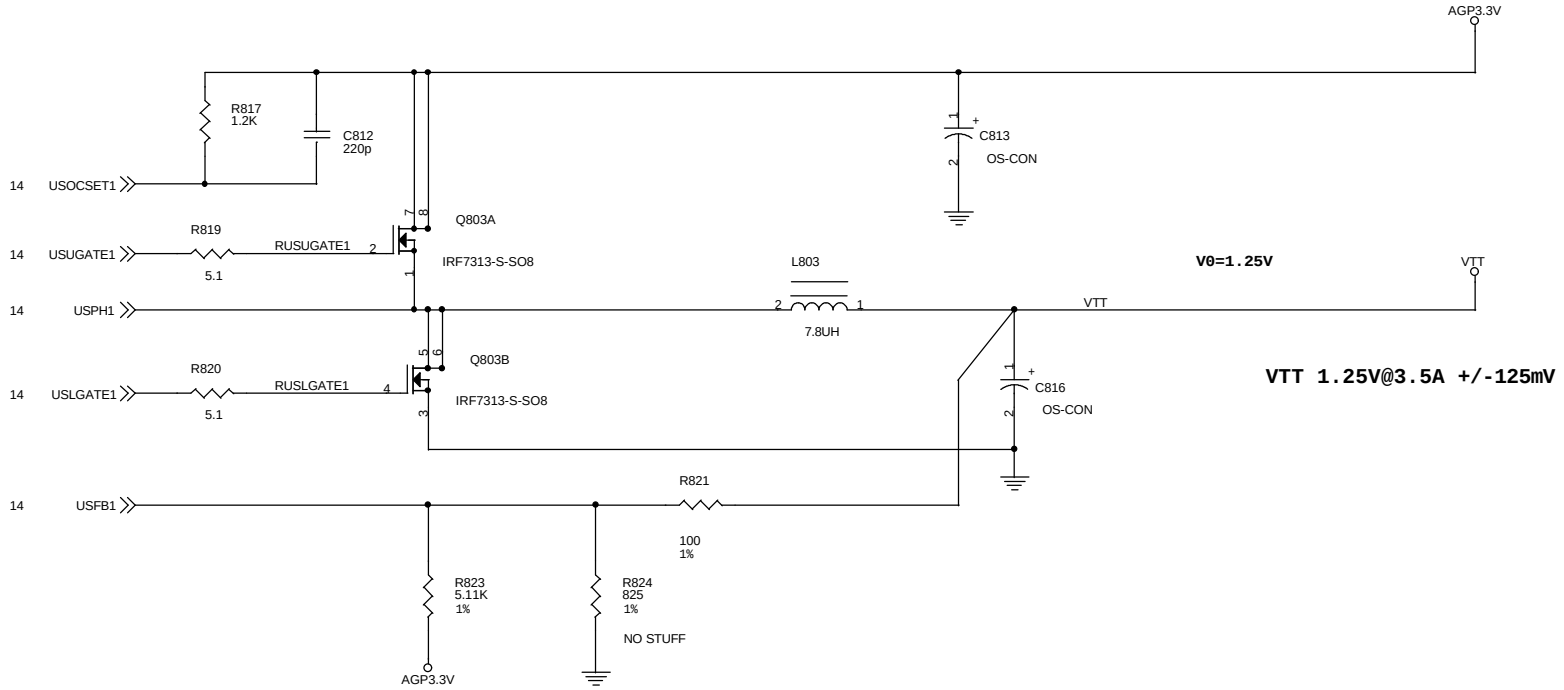

NV15 VTT POWER ADDER

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