NV11, 2Mx32 SDR, DUAL RGB, TVOUT, AGP.

PCI DEVICE ID 0X0=0X110 FOR NV11.

HISTORY REV. A00:

1) A00: Imported P0049-A02
2) A00: Changed from Fairchild DAC to Analog Devices ADV7123
3) A00: Added parallel termination option to DAC clock.
4) A00: Added comparator circuit to external DAC output for monitor detect.
5) A00-X002: Added IC-SO8 PCB footprint to U521 comparator
6) A00-X003: Changed digital pull-up voltages for external DAC from 5Vdac to regular 5V
7) A00-X005: Add R126 to allow fast write disable.
   Change C881-C889 to match internal DAC filter.
   Add C221 decoupling for U200
   Add C879 noise filter
   Moved output of 2nd monitor detect circuit to GPIO4
   Add C811-C813 decoupling for analog power supplies
   Add C225 on DACVDD
   Add C226 on PLLVDD
8) A00-x006: Changed unstuffed leg of TV out filter to match other two.
   Changed value of R212 from 110 ohms to 102 ohms
9) A00-x007: Changed C811-C813 to 1uF 0805 caps
10) A00-X008: R616 and C812 - Assembly field set to DUAL
    Updated intersheet references
    Net on U100E.V4 changed to GND from PGND
    Added net names to replace Orcad defaults on comp inputs

Stuff options:

DUAL External DAC
DET2 Comparator circuit to detect 2nd monitor. Separate from DUAL
BT868 Puts Brooktree TV encoder and associated parts in.
BT Brooktree TV encoder third DAC parts.
CH7007 Chrontel TV encoder and associated parts
CH Chrontel TV encoder third DAC parts
CX25780 Conexant TV encoder and associated parts
CX Conexant TV encoder third DAC parts
TVDUAL Dual VGA and TV out. Bracket selection.
1RGBTV Single VGA with TV out - bracket selection.
PRO 200MHz GPU with heatsink 183 MHz memory (heatsinks?)
COMPAQ Not sure yet
SYNCBUF Install U200 H and V sync buffer
NOSYNCBUF Install 0 ohm resistors in place of U200 H and V sync buffer
VIDBAT54 Use BAT54SLT protection diodes for primary video I/Os
VIDBAV99 Use BAV99 protection diodes for primary video I/Os
GF2MX GeForce2 MX Device ID (One of GF2MX or Q2MX is required)
Q2MXR Quadro2 MXR Device ID

SKU options: (Combinations of stuff options = SKU)

SKUOPTION{ 0101 BT868:1RGBTV:NOSYNCBUF:VIDBAV99:GF2MX
P55 Dell build: NV11, 32MB, 128-BIT, 2Mx32-6 SDR,
Single VGA, TV (BT869), VIP, AGP4X}

SKUOPTION{ 0001 BT868:BT:DUAL:DET2:TVDUAL:SYNCBUF:VIDBAV99:GF2MX
P55 Generic build: NV11, 32MB, 128-BIT, 2Mx32-6 SDR, Dual VGA, TV
(BT869), VIP, AGP4X }

SKUOPTION{ w0001 PRO:BT868:DUAL:DET2:TVDUAL:NOSYNCBUF:VIDBAV99:Q2MXR
QUADRO2 MXR WORKSTATION P55 -- NV11GL, 32MB, 128-BIT, 2MX32-5.4 SDR,
DUAL-VGA W/ ANALOG DEVICES EXT RAMDAC, TV (BT869), VIP GENERIC}

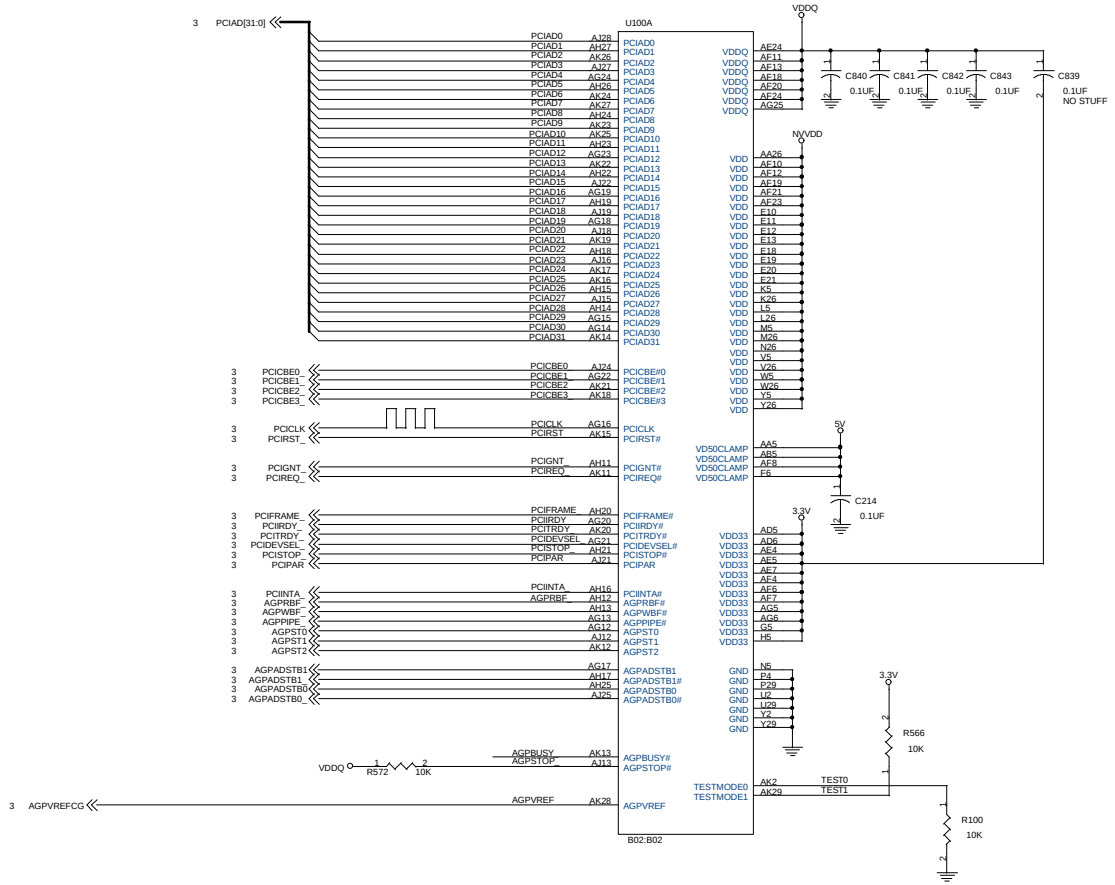
{Reference}\t{Source Package}\t{Value}\t{Assembly}\t{Item}\t{Quantity}
{Assembly}{Source Package} {Value}{PN}{AVL1}{AVL2}{AVL3}{AVL4}{AVL5}

Micro-Star International Co., LTD.

602-P0055-0000-A01

Size	Document Number	Rev
B	MS-8835/P55	1.0

Date: Tuesday, May 15, 2001 Sheet 1 of 14



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1a. NVXX HOST		
Size: C	Document Number: MS-8835/P55	Rev: 1.0
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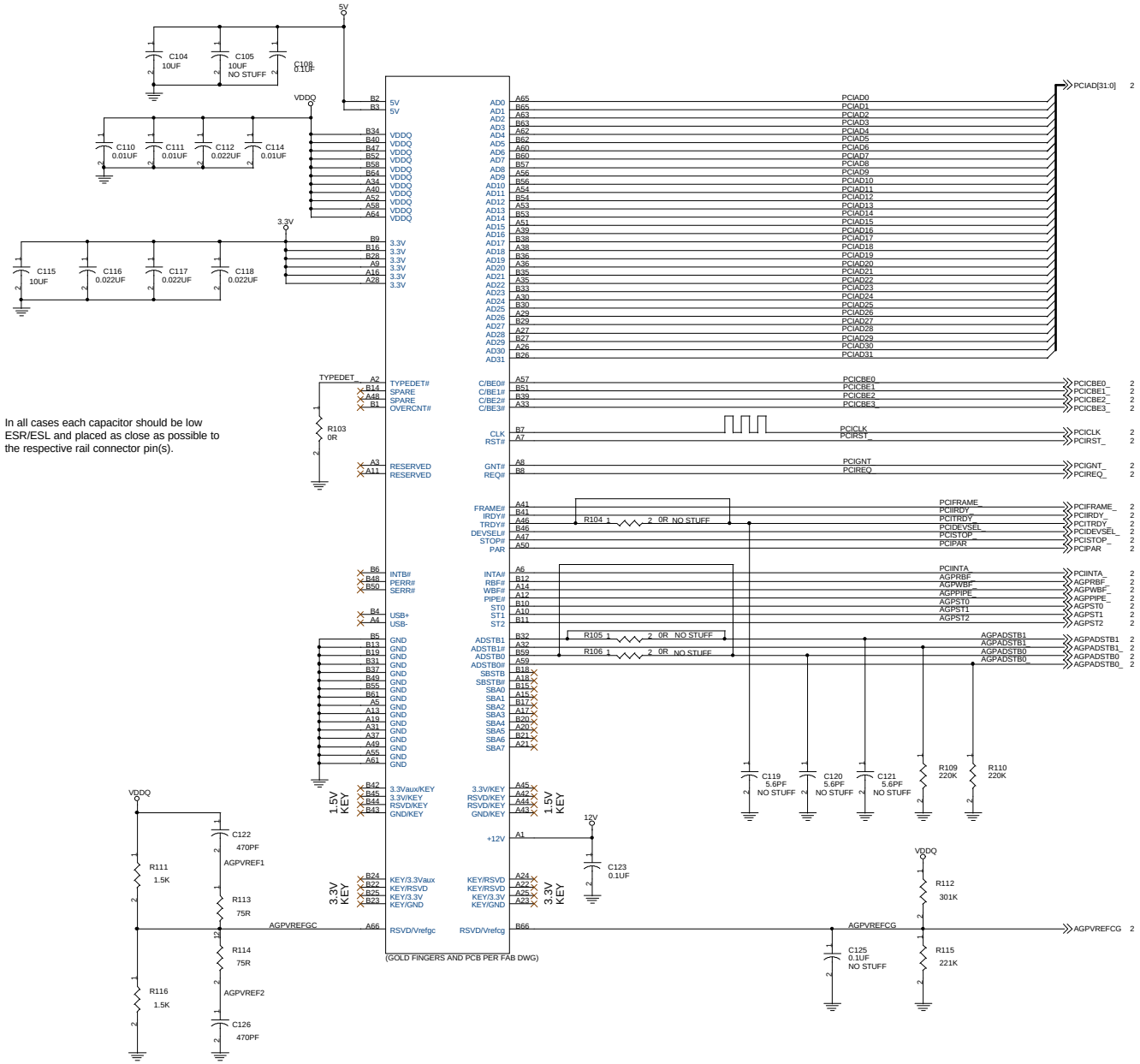

In all cases each capacitor should be low ESR/ESL and placed as close as possible to the respective rail connector pin(s).

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1b1. AGP I/O		
Size: C	Document Number: MS-8835/P55	Rev: 1.0
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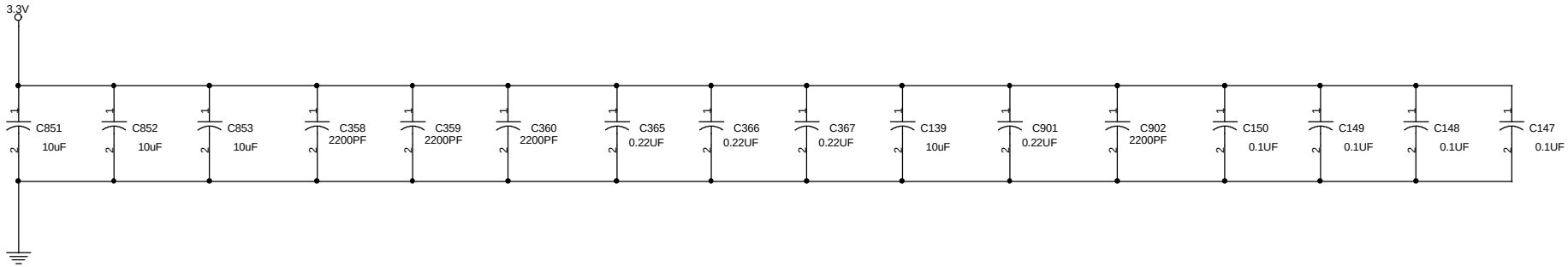
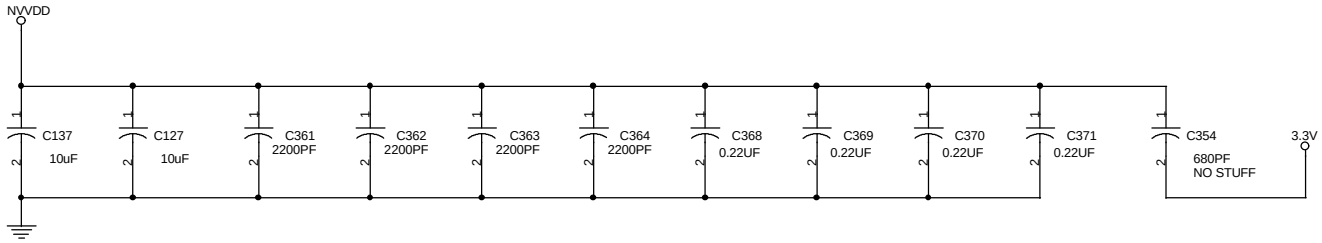
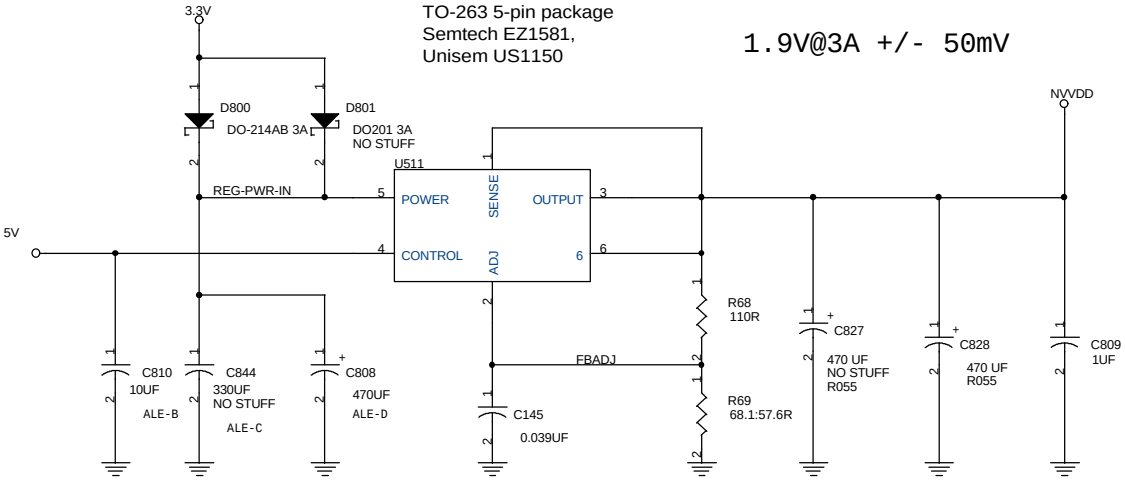


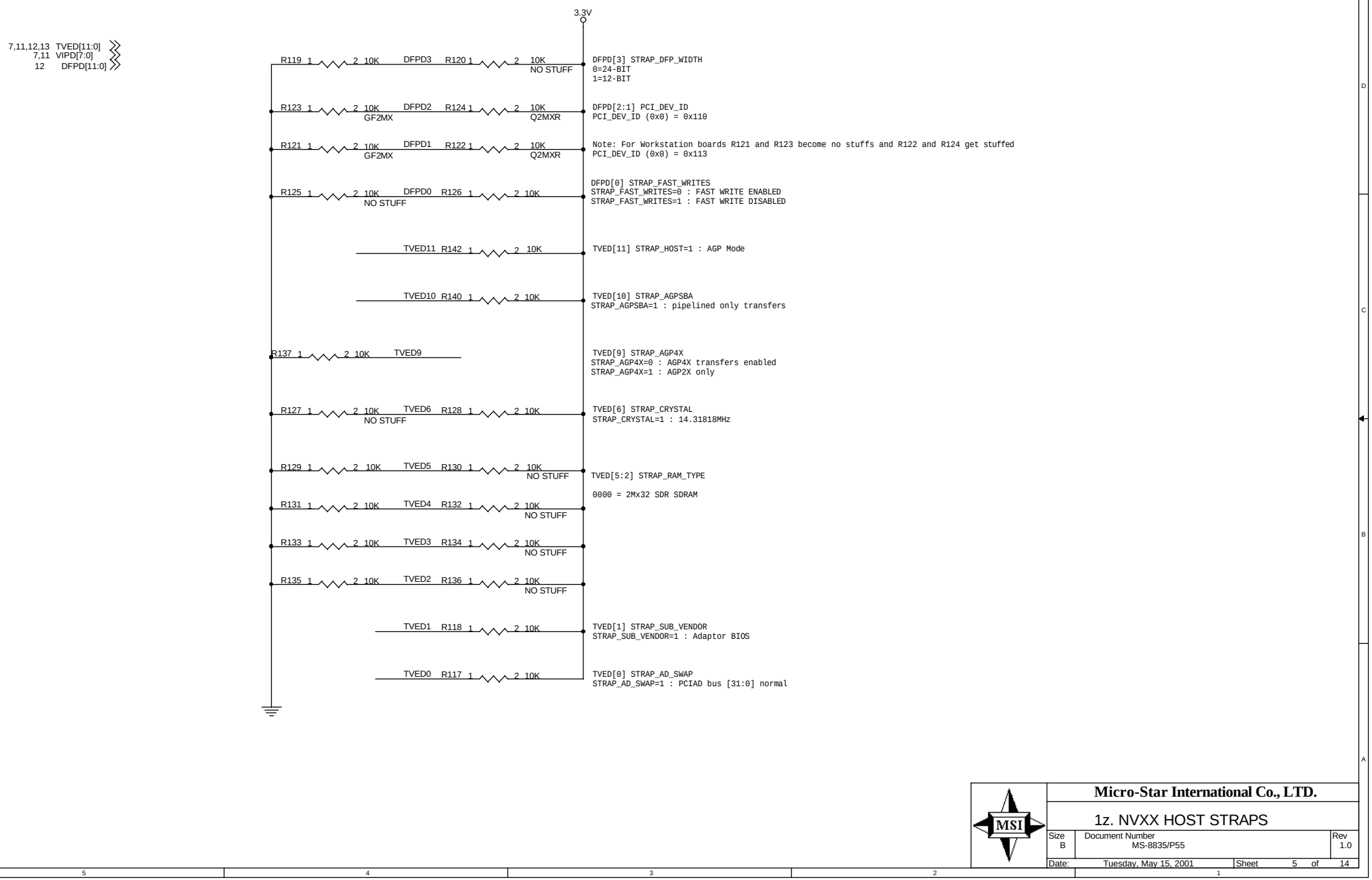


TO-263 5-pin package
Semtech EZ1581,
Unisem US1150

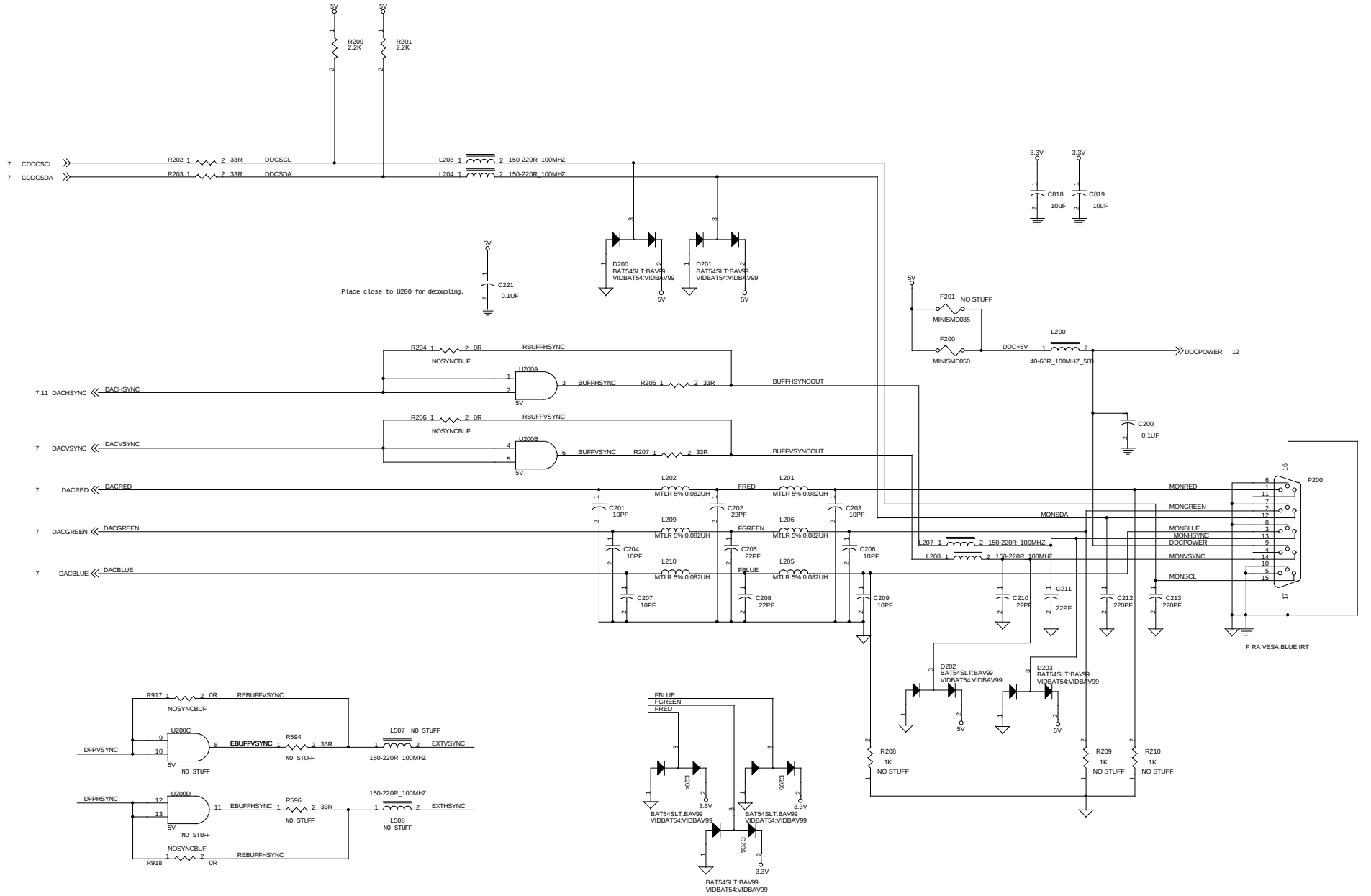
1.9V@3A +/- 50mV



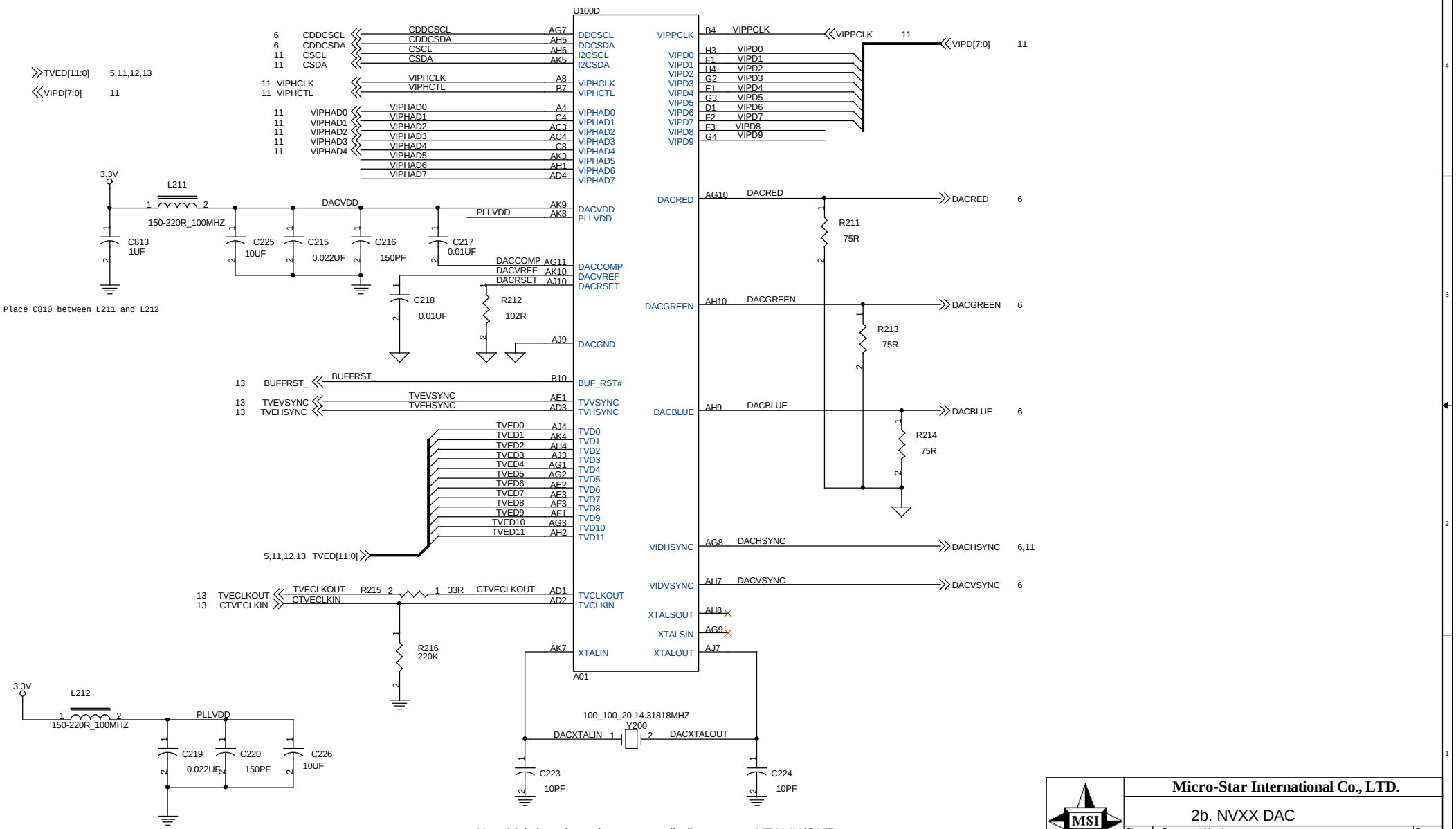
Micro-Star International Co., LTD.		
1y. NVXX DECOUPLING		
Size B	Document Number MS-8835/P55	Rev 1.0
Date: Tuesday, May 15, 2001	Sheet 4 of 14	



	Micro-Star International Co., LTD.	
	1z. NVXX HOST STRAPS	
Size: B	Document Number: MS-8835/P55	Rev: 1.0
Date: Tuesday, May 15, 2001	Sheet 5 of 14	



Micro-Star International Co., LTD.		
2a. DAC I/O		
Size C	Document Number MS-8835/P55	Rev 1.0
Date: Tuesday, May 15, 2001	Sheet 6 of 14	



Use thick (non-impedance controlled) traces on XTALIN/OUT

Micro-Star International Co., LTD.		
2b. NVXX DAC		
Size: B	Document Number: MS-8835/P55	Rev: 1.0
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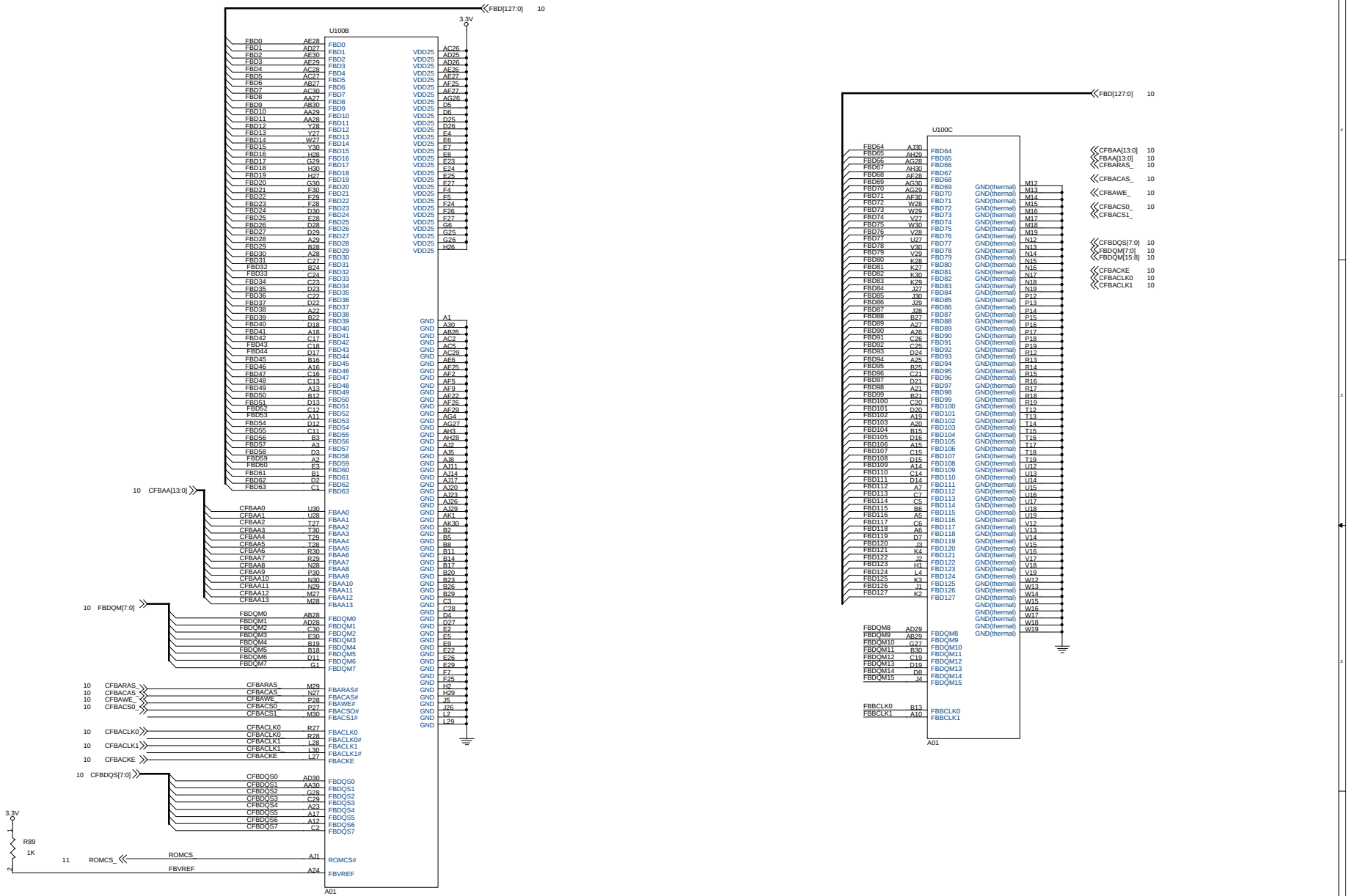
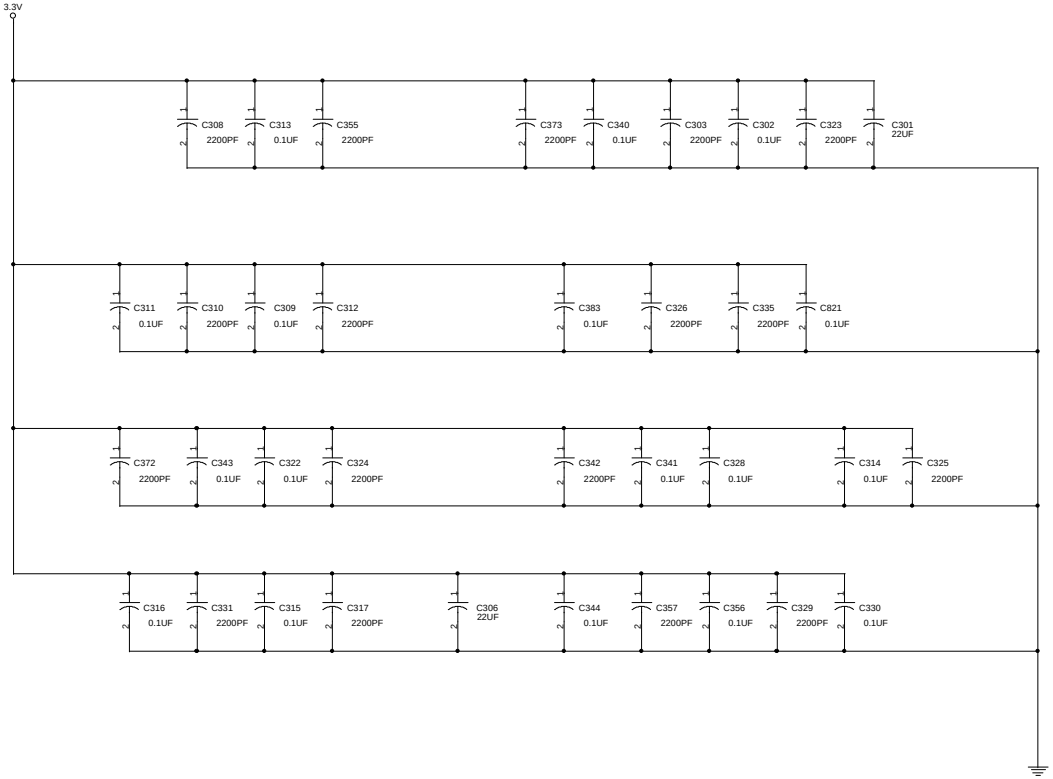
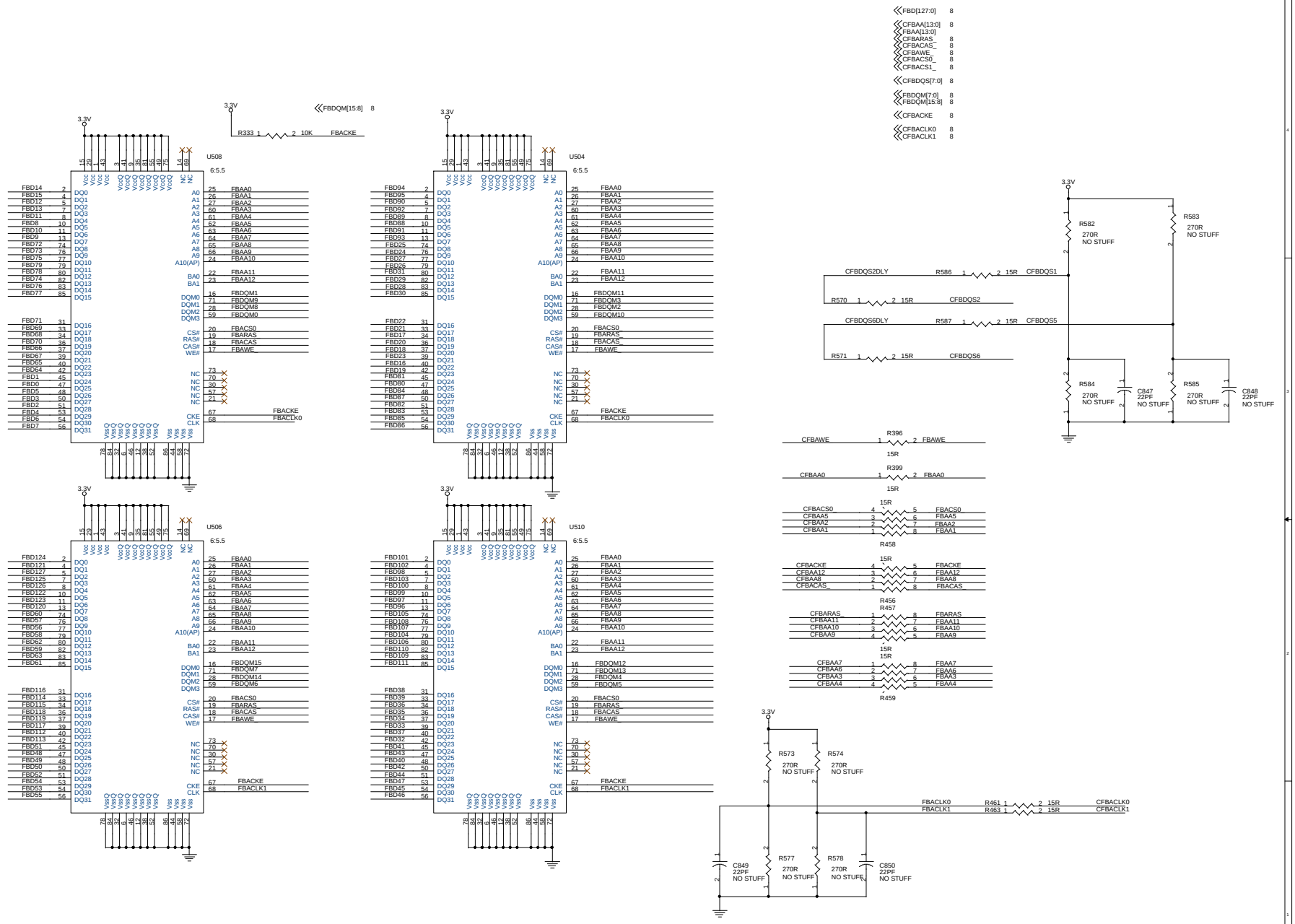


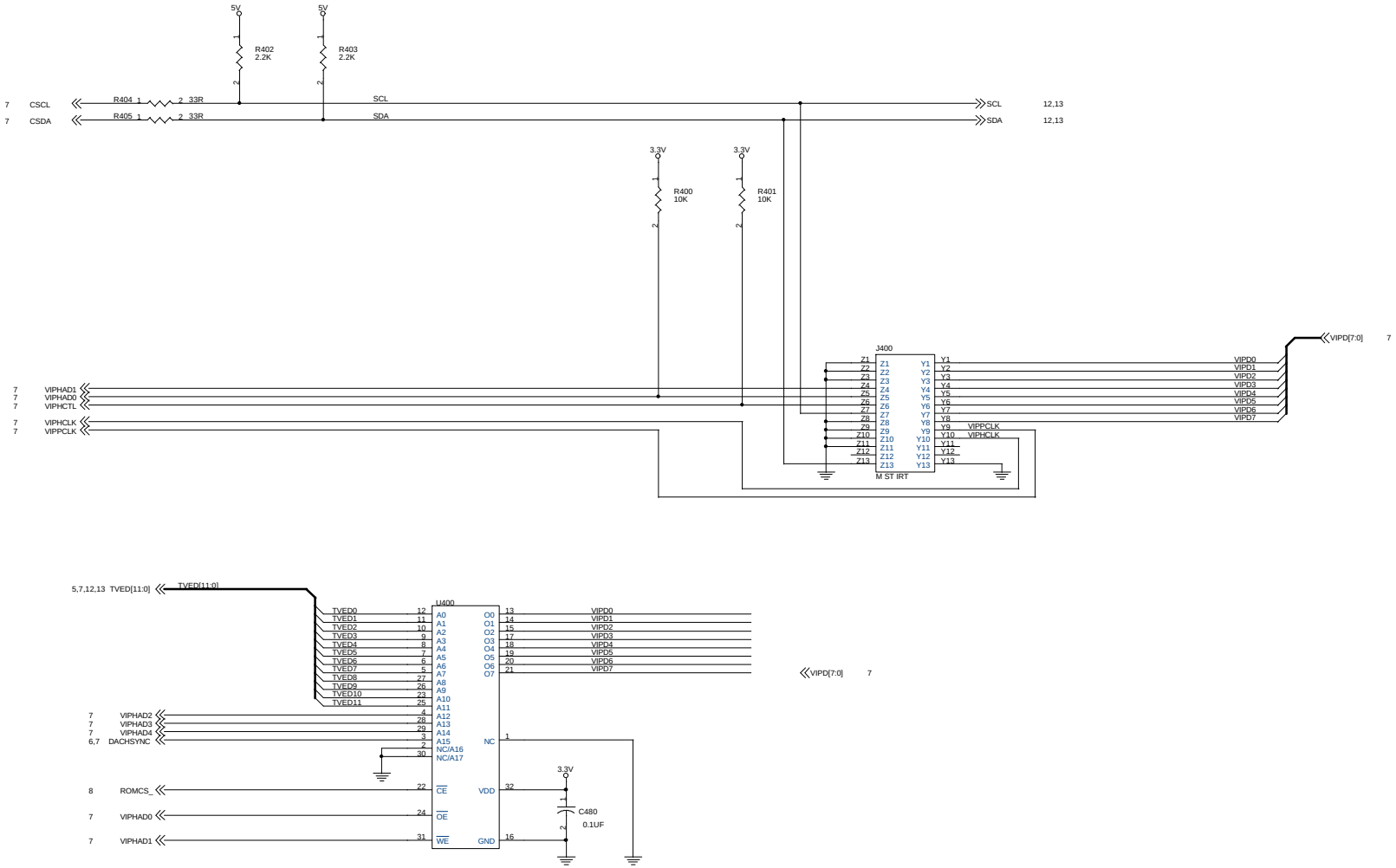
MSI	Micro-Star International Co., LTD.	
	3a. NVXX FBA/FBB	
Size C	Document Number MS-8835/P55	Rev 1.0
Date: Tuesday, May 15, 2001	Sheet 8 of 14	



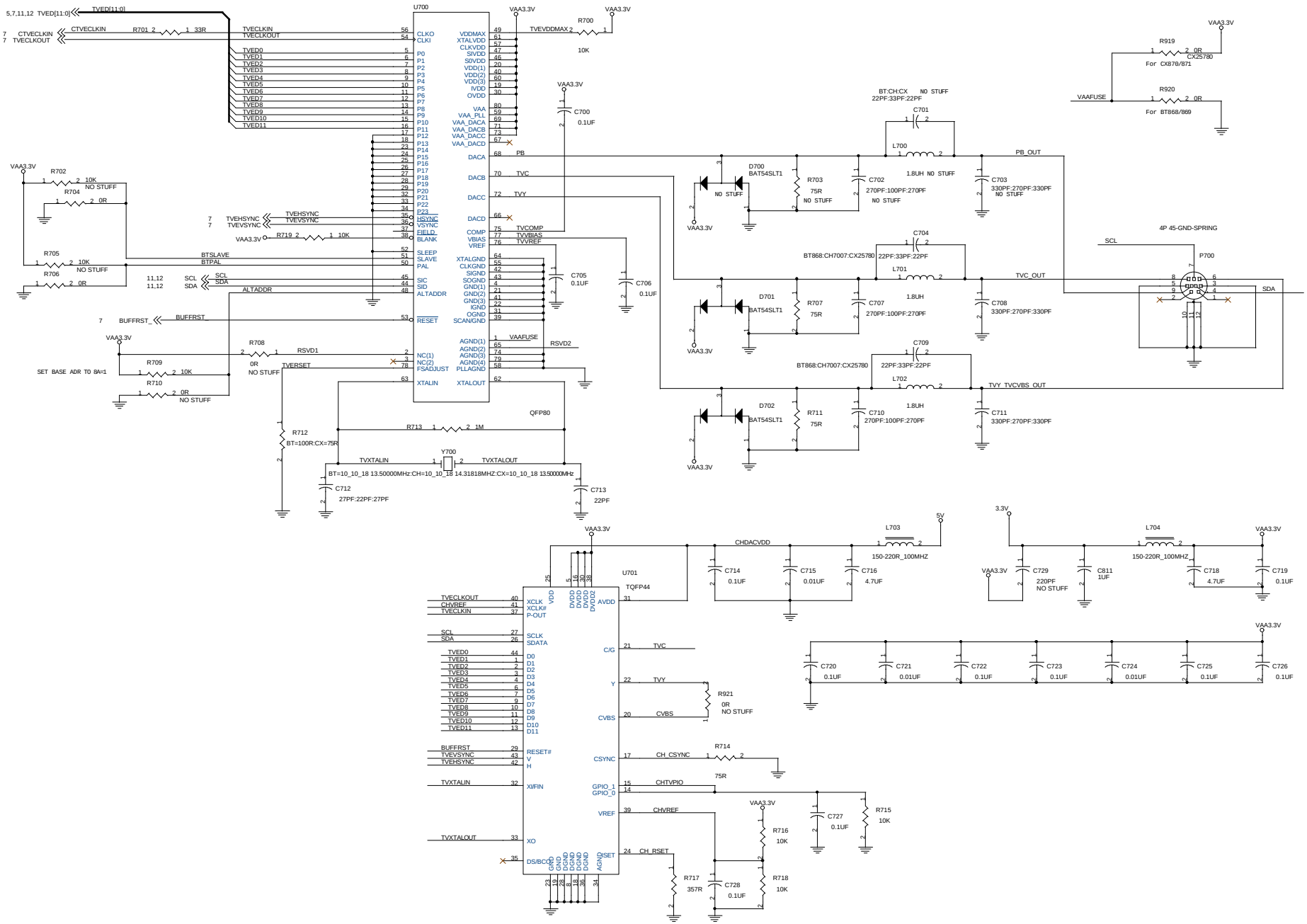
	Micro-Star International Co., LTD.	
	3b. FB DECOUPLING	
Size C	Document Number MS-8835/P55	Rev 1.0
Date: Tuesday, May 15, 2001	Sheet 9 of 14	



Micro-Star International Co., LTD.		
3c1. FBA 2MX32 SDRAM		
Size C	Document Number MS-8835/P55	Rev 1.0
Date: Tuesday, May 15, 2001	Sheet 10 of 14	



	Micro-Star International Co., LTD.	
	4a. ROM VIP & VIDEO IF	
Size C	Document Number MS-8835/P55	Rev 1.0
Date: Tuesday, May 15, 2001	Sheet 11 of 14	



Parts for Chrontel CH7008/8A only

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5a1. TV ENCODERS

Size	Document Number	Rev
C	MS-8835/P55	1.0

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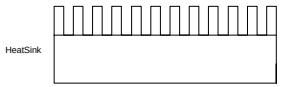
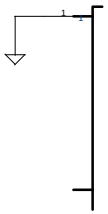


TNT2 M64-PRO



BRACKET WITH RIB VGA (3.235)

PCB

SCREW

Micro-Star International Co., LTD.		
MANUAL		
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