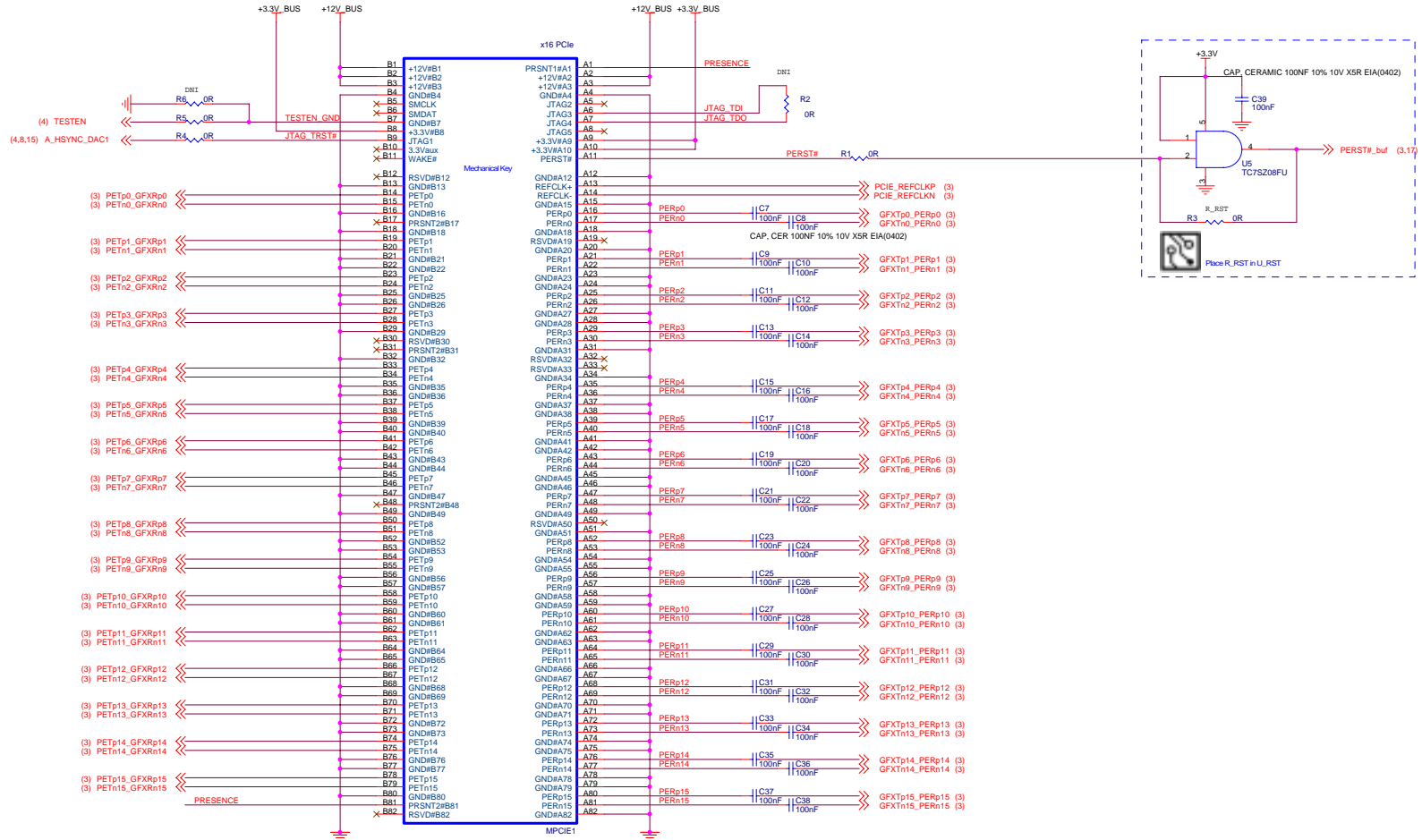
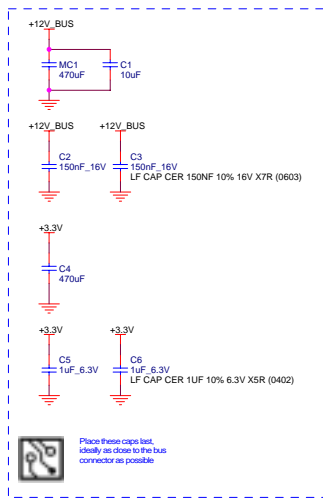


# PCI-EXPRESS EDGE CONNECTOR



Power Sequence Circuit to ensure SMPS\_EN is released after +12V\_BUS and +3.3V\_BUS are both in regulation. Pull-up may or may not be required on SMPS\_EN signal depending on SMPS design.

Node 1 When +12V ramps above min Vbe, SMPS\_EN will be held low

Node 2 When +3.3V gets close to regulation, one of the two conditions of releasing SMPS\_EN is active

Target ~ 900mV when +3.3 at min regulation (worse case)

Typical trigger when +3.3V ramps above 2.2V (650mV)

Node 3 When +12V gets close to regulation, one of the two conditions of releasing SMPS\_EN is active

Target ~ 1.25V when +12 at min regulation (worse case)

Typical trigger when +12V ramps above 10V (1.1V)

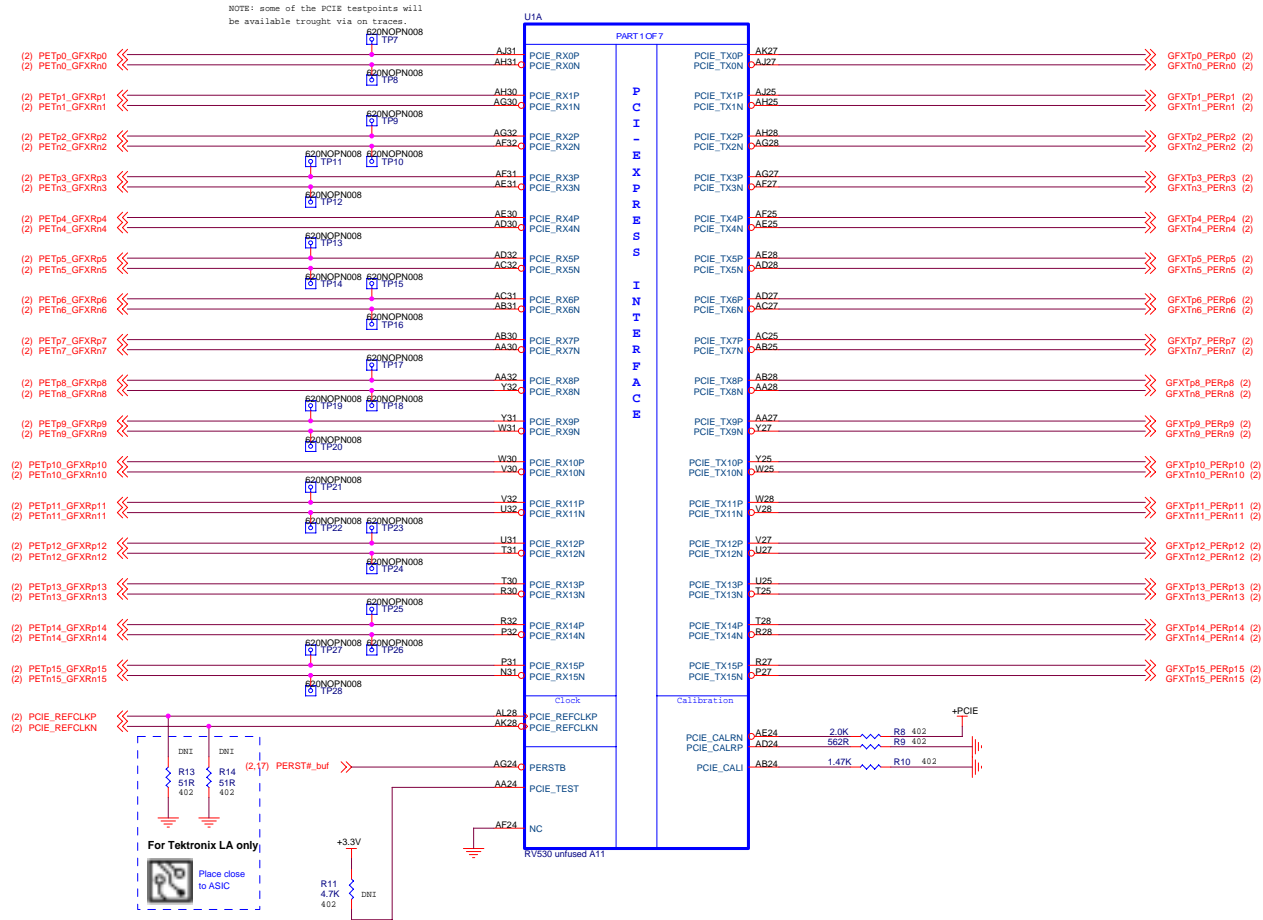
SYMBOL LEGEND	
DNI	DO NOT INSTALL
#	ACTIVE LOW
	DIGITAL GROUND
	ANALOG GROUND



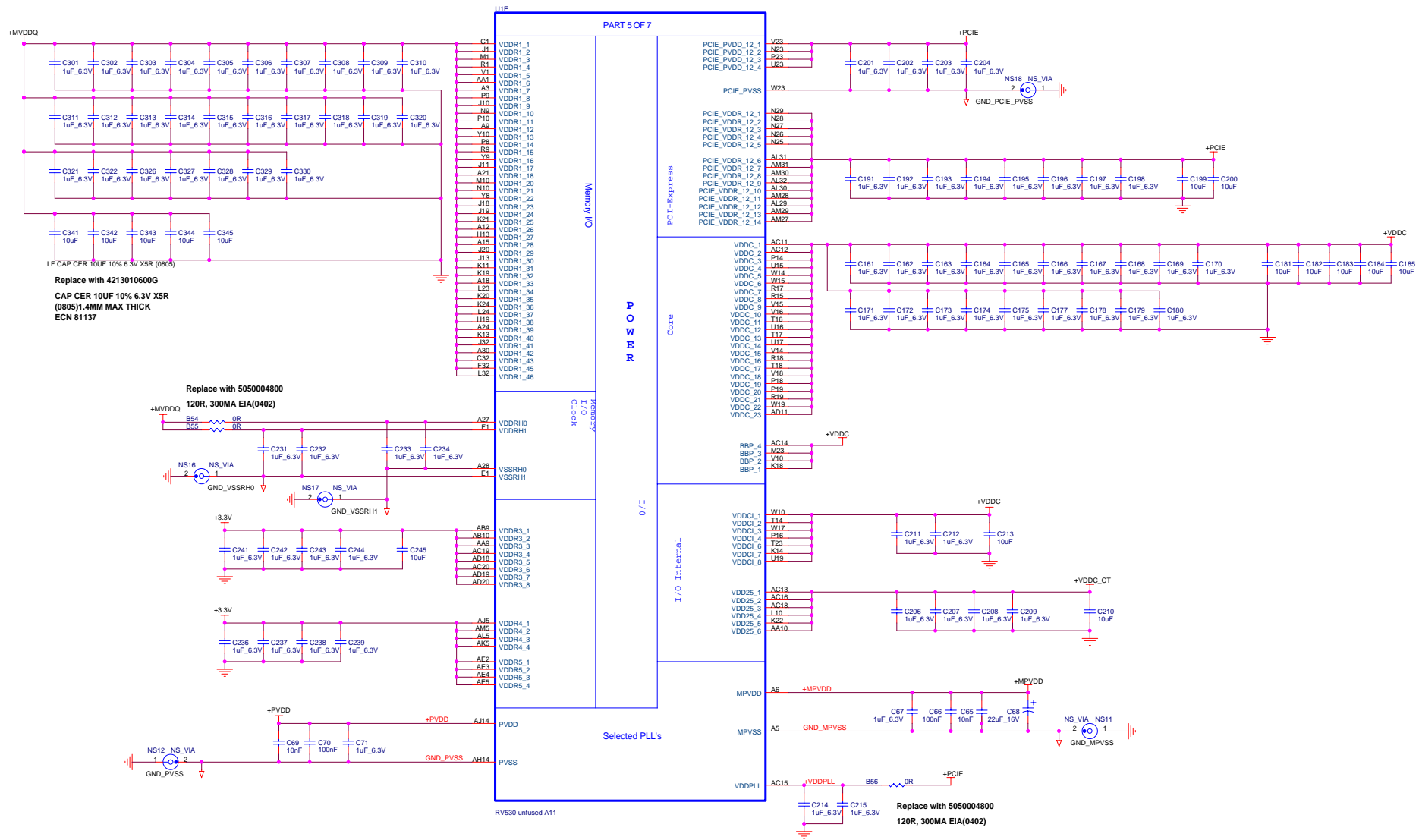
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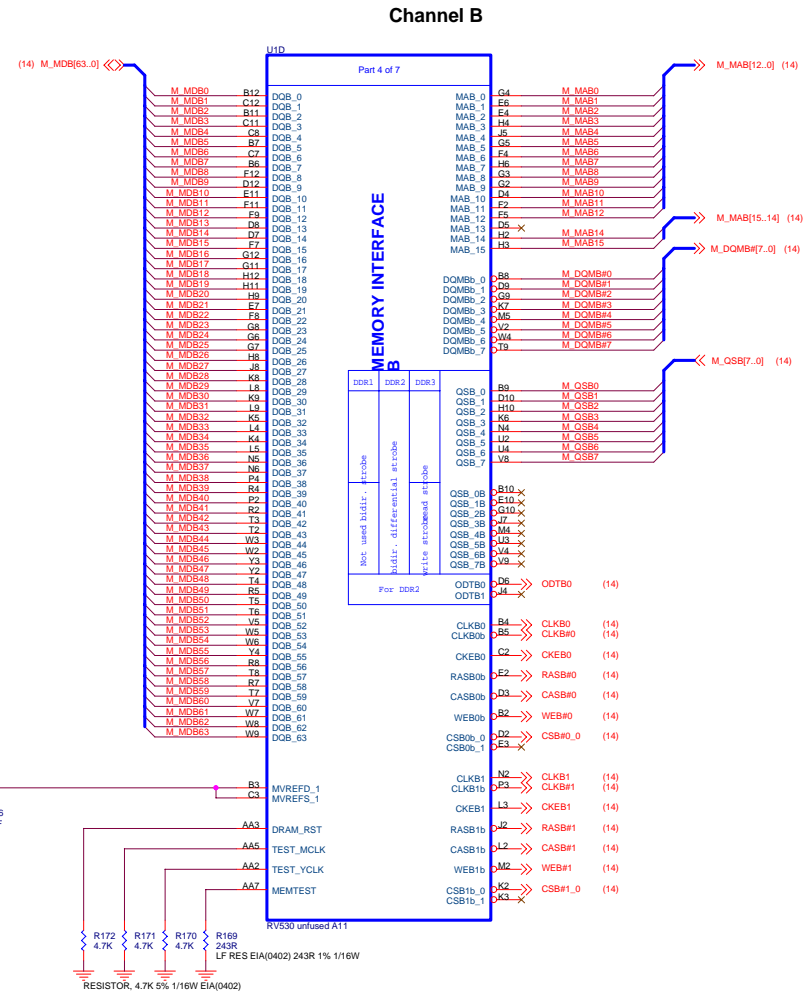
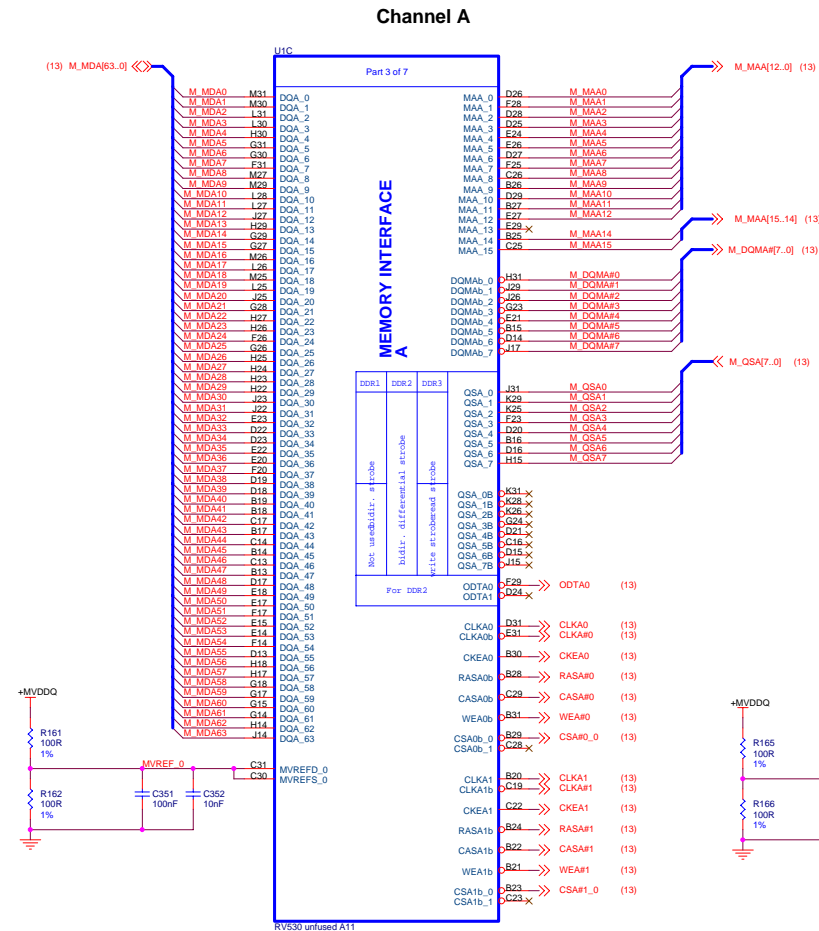
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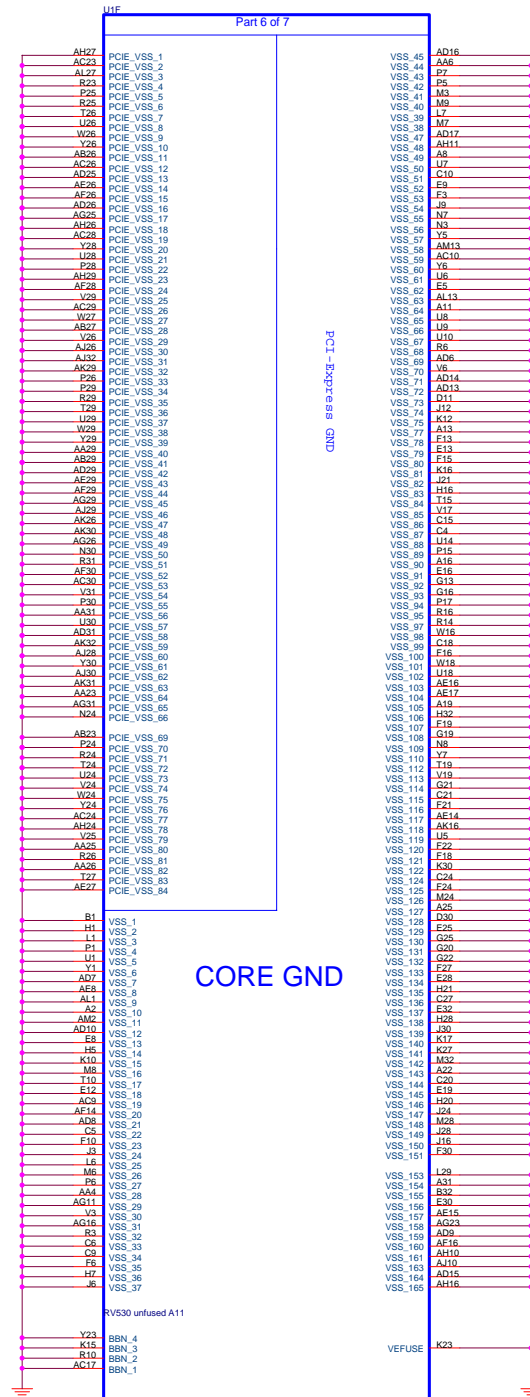


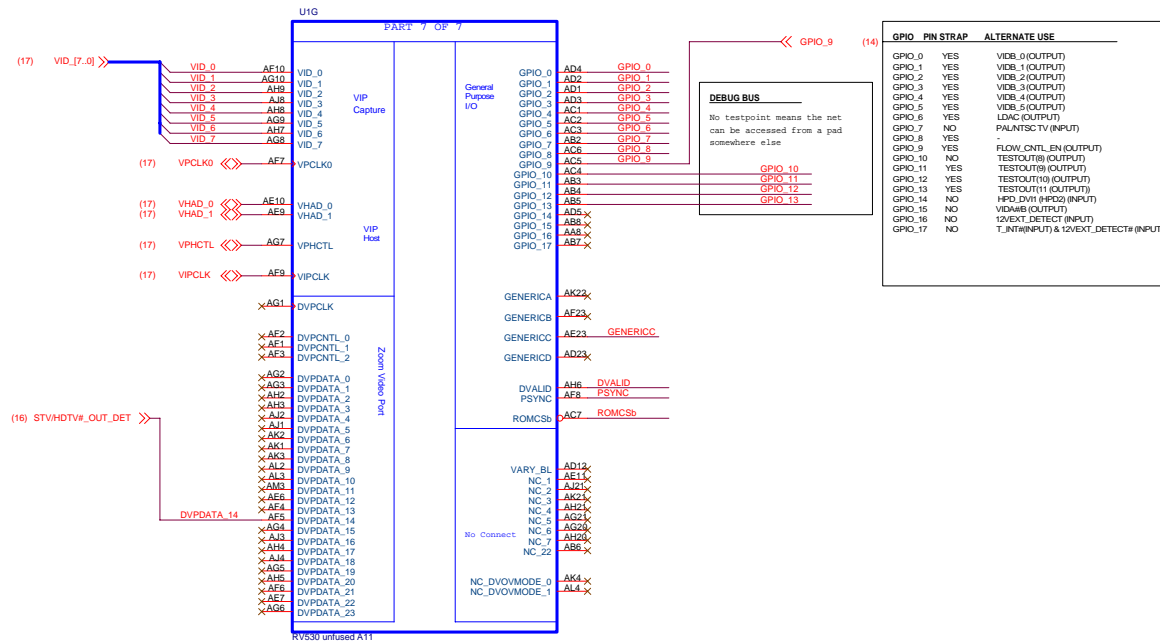




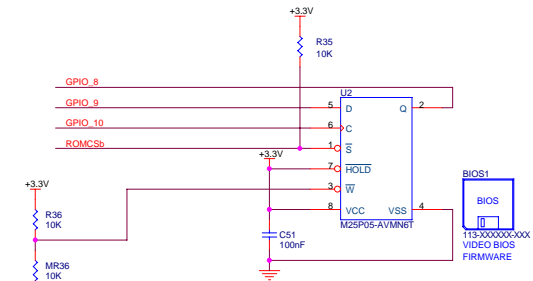
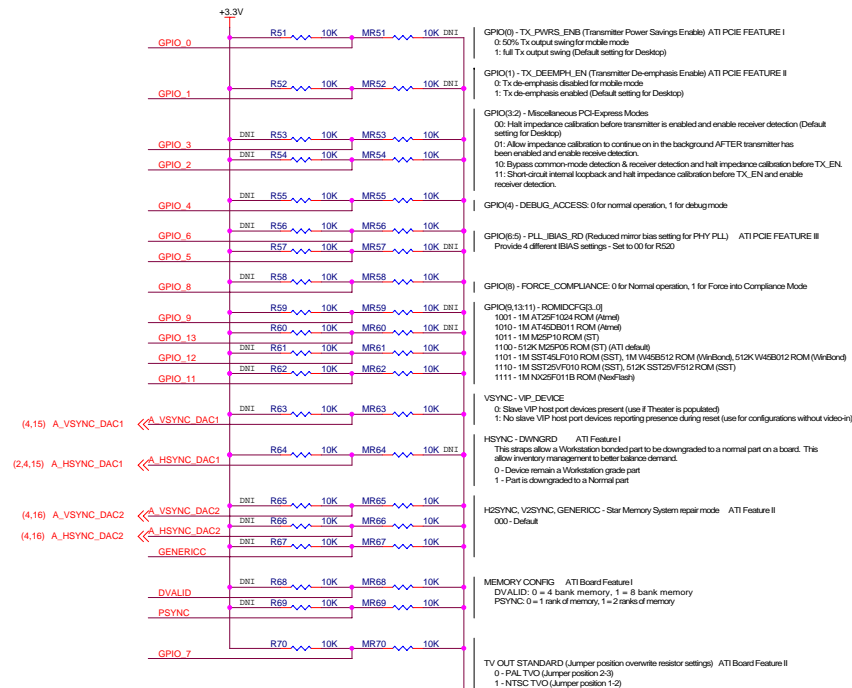
## RV530 MEMORY CHANNELS A and B





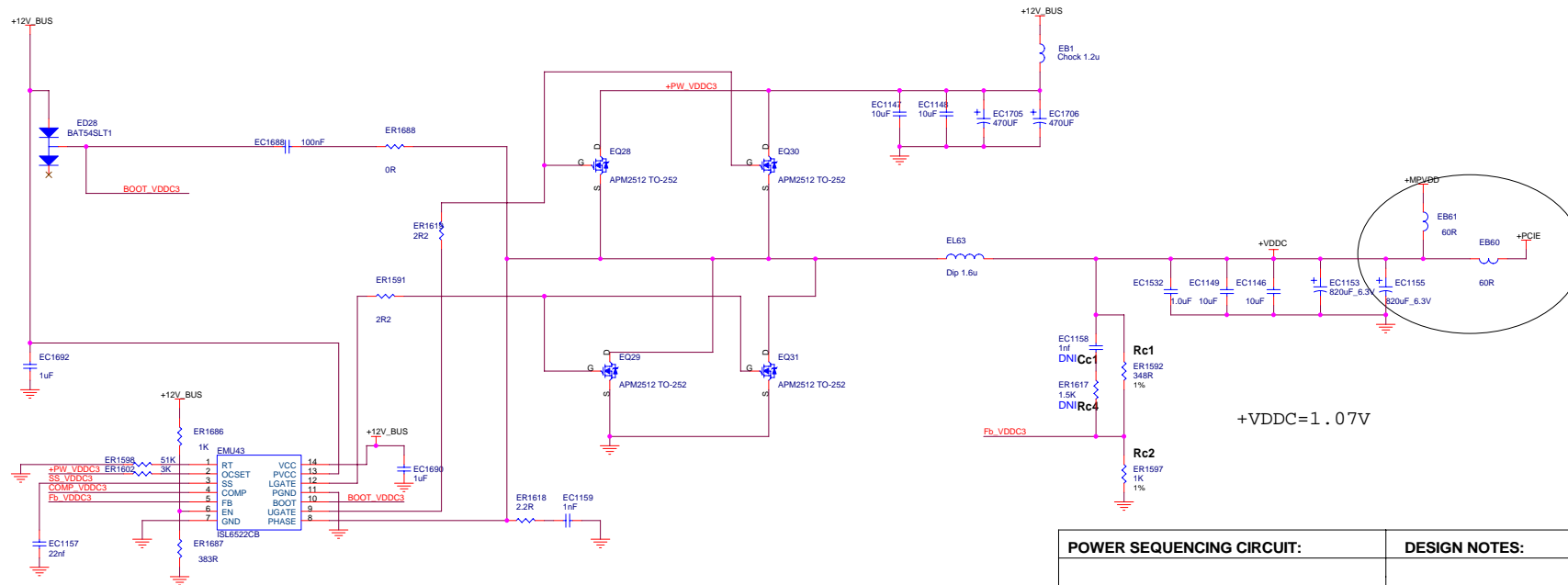


## PIN BASED STRAPS

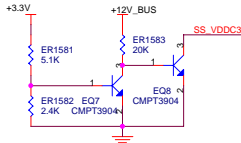
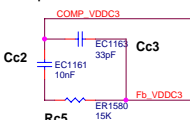


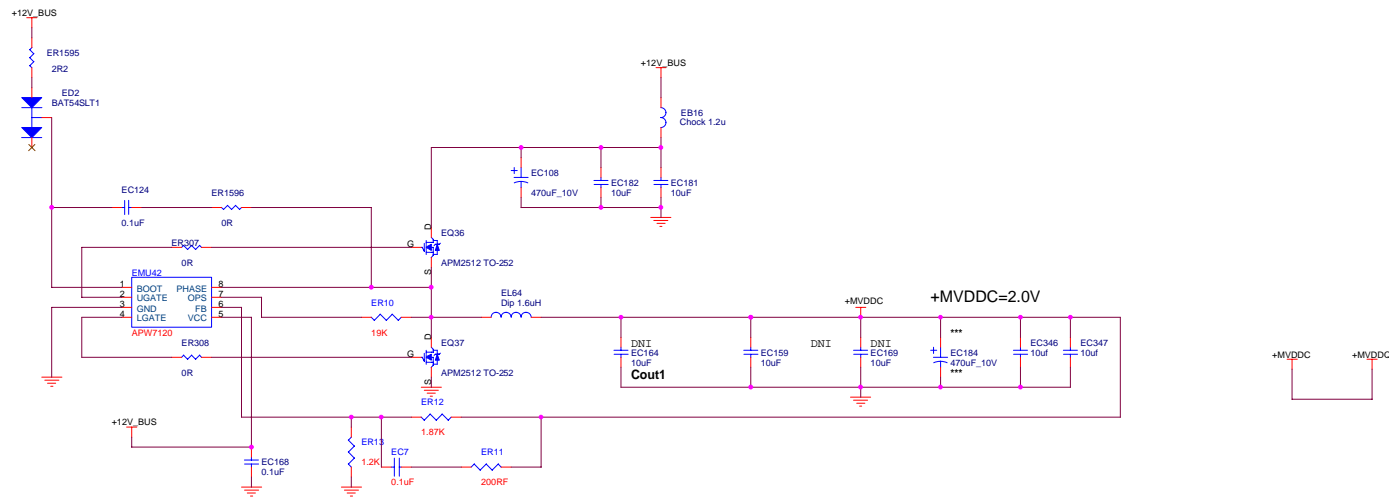


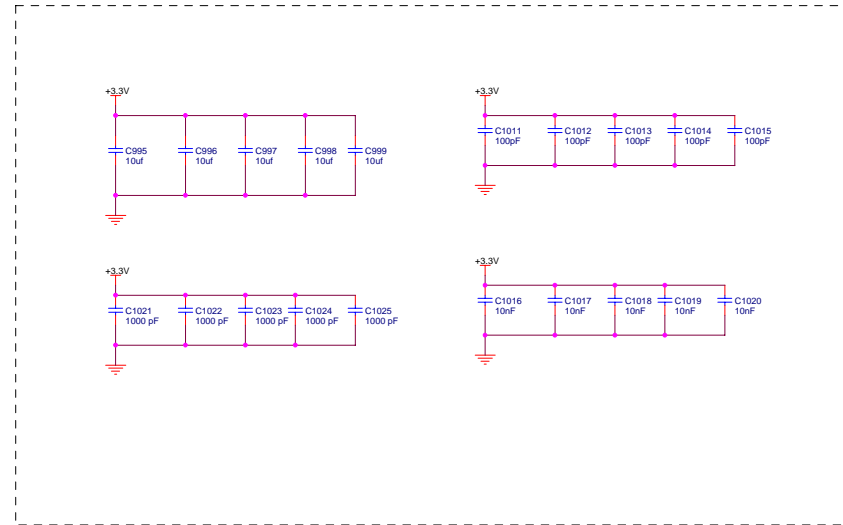
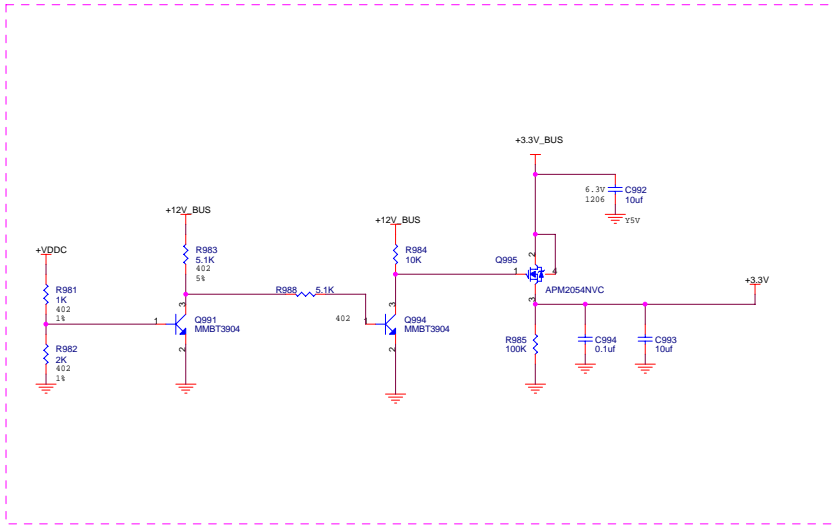
## CORE REGULATOR VDDC



Lower MOSFET should be surrounded by a lot of copper for heat dissipation

<p><b>POWER SEQUENCING CIRCUIT:</b></p>  <p>The diagram shows a power sequencing circuit. A +3.3V supply is connected to a 5.1K resistor (ER1581) in series with a 2.4K resistor (ER1582). The node between these resistors is connected to the base of an NPN transistor (EQ7, CMTPT3904). The emitter of EQ7 is grounded. The collector of EQ7 is connected to the base of another NPN transistor (EQ8, CMTPT3904). The emitter of EQ8 is grounded. The collector of EQ8 is connected to a +12V_BUS supply through a 20K resistor (ER1583). The output of the circuit is labeled SS_VDDC3.</p>	<p><b>DESIGN NOTES:</b></p> <p>Compensation Circuit</p>  <p>The diagram shows a compensation circuit. It consists of a feedback capacitor Cc3 connected between the output and the inverting input of an op-amp. The inverting input is also connected to a feedback resistor Rc5 (15K) and a feedback capacitor EC1161 (33pF). The non-inverting input is connected to a compensation capacitor COMP_VDDC3. The output is connected to a feedback capacitor EC1161 (33pF) and a feedback resistor Rc5 (15K). The output is also connected to a feedback capacitor EC1161 (33pF) and a feedback resistor Rc5 (15K).</p>
<p><b>FOR ALTERNATE #1</b></p> <p>Remove R374, R375, R371, C168 and U32</p> <p>Install R370, R112, R954, R305-R308, C168, C159 and MU32</p>	<p><b>FOR ALTERNATE #2</b></p> <p>Change C157 for 10 uF and C121 for 1 uF</p> <p>Replace G764 by 0 Ohm resistor</p> <p>Replace R314 with a bead</p> <p>Remove R954, R370, R305-R308, C159, R112, C160 and MU32</p> <p>Install R374, R375, R371, C168 and U32</p> <p><b>Compensation circuit</b></p> <p>Rc1 = 10K, Rc2 = 8.06K</p> <p>R313 = 93.1K, C171 = 3.9 nF, C170 = 10 pF</p>

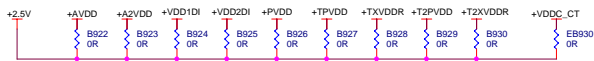
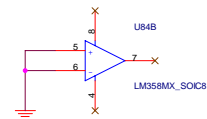
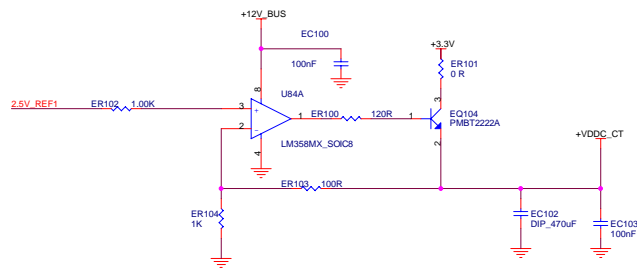
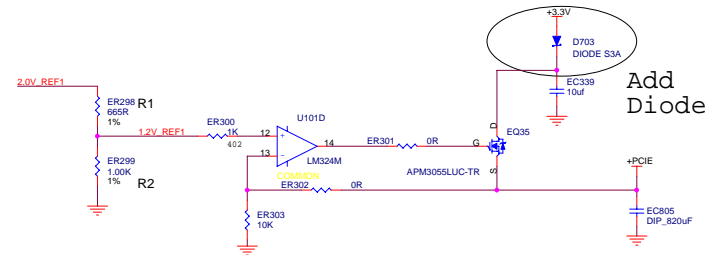
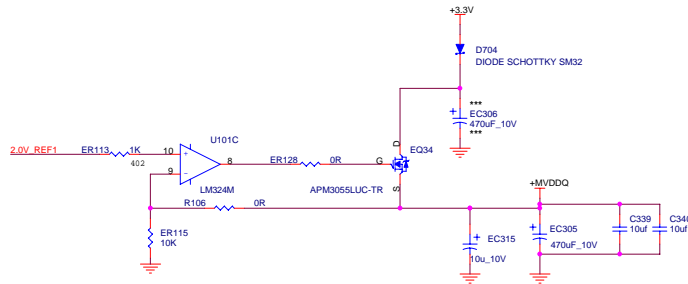
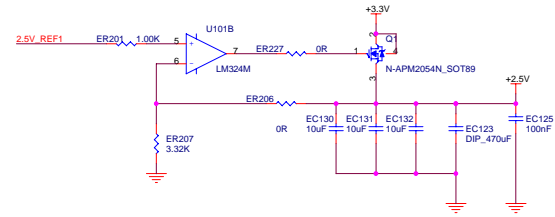
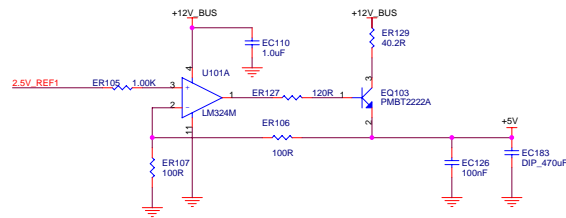
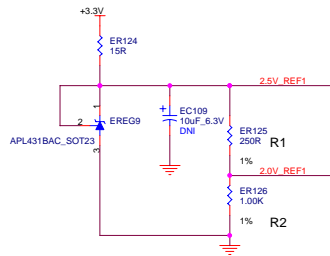




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Replace with 5050004800  
120R, 300MA EIA(0402)

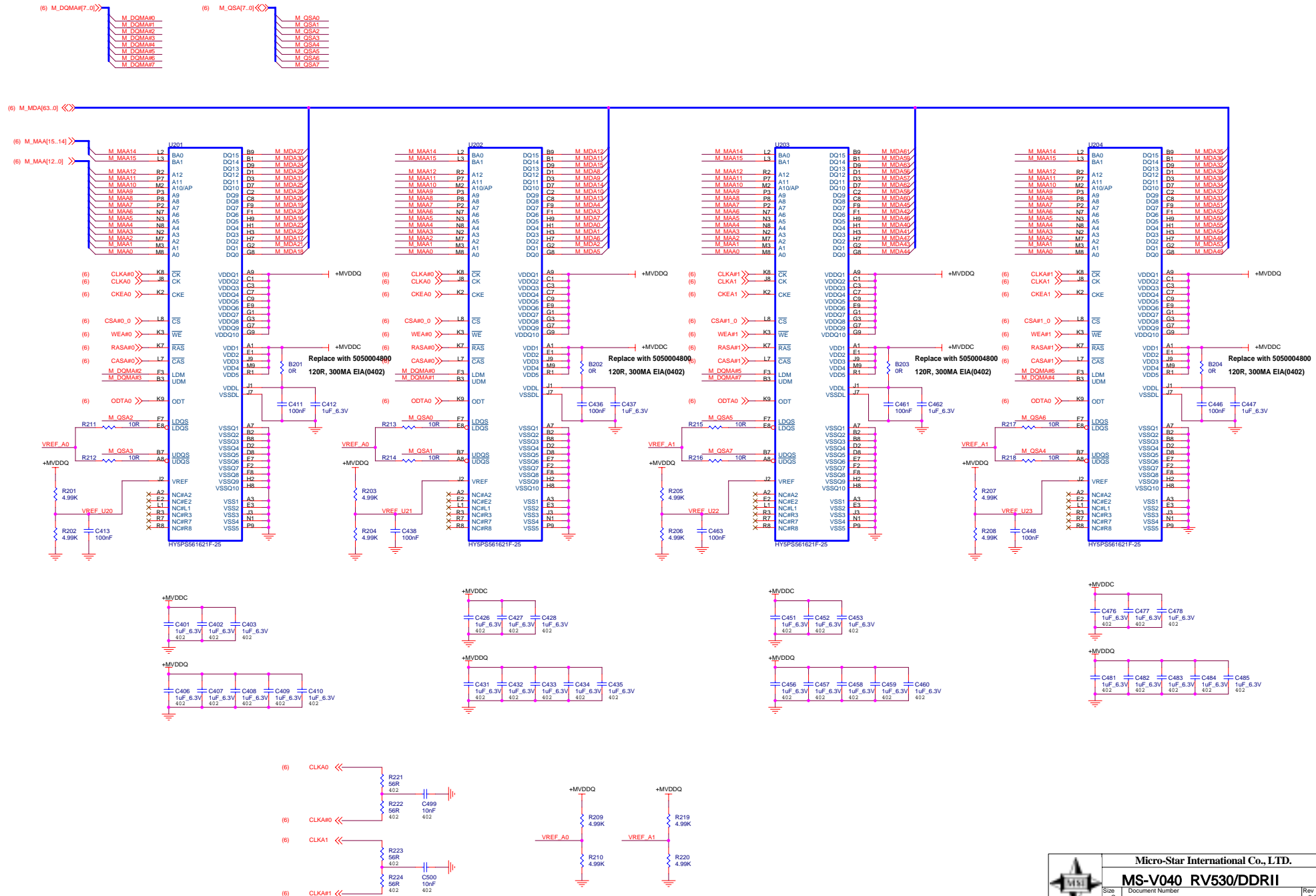


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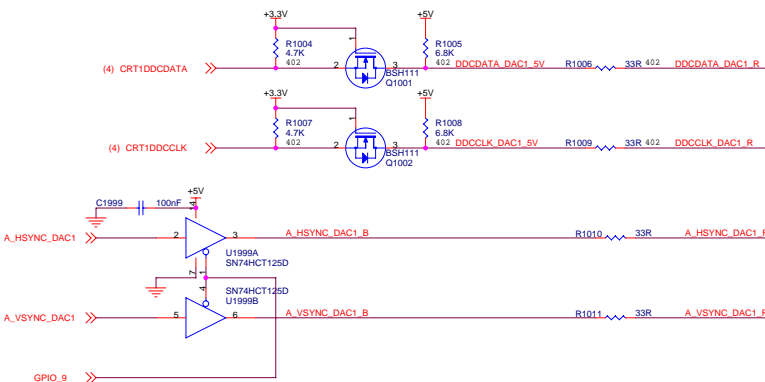
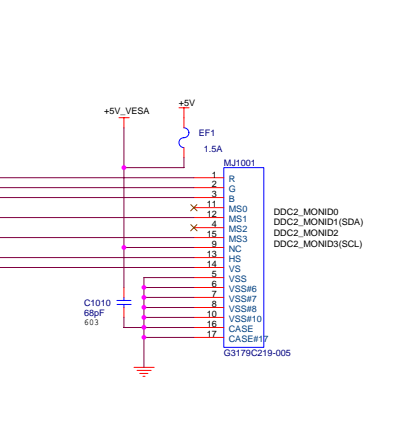
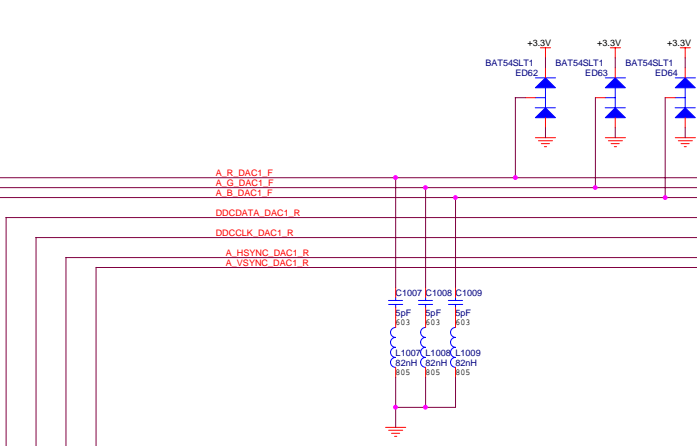
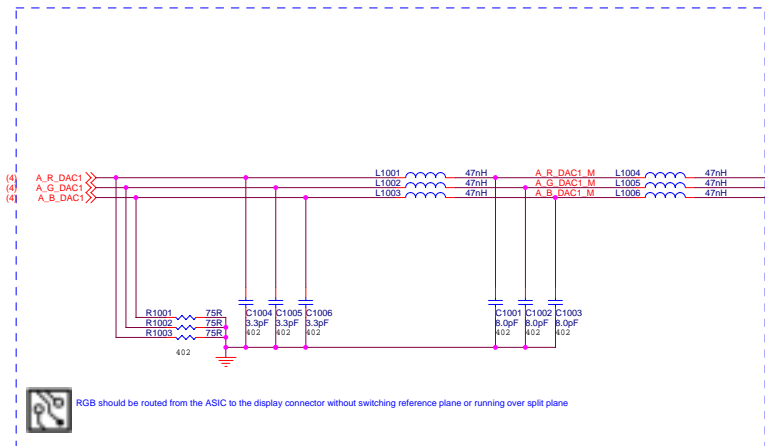
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**CHANNEL A: RANK 0 128MB DDR2**

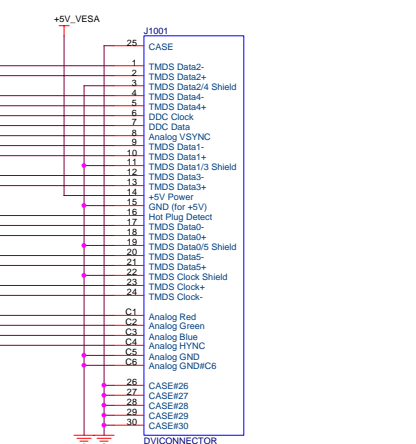
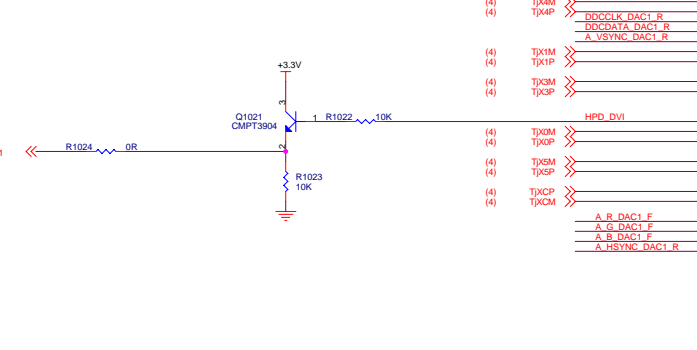
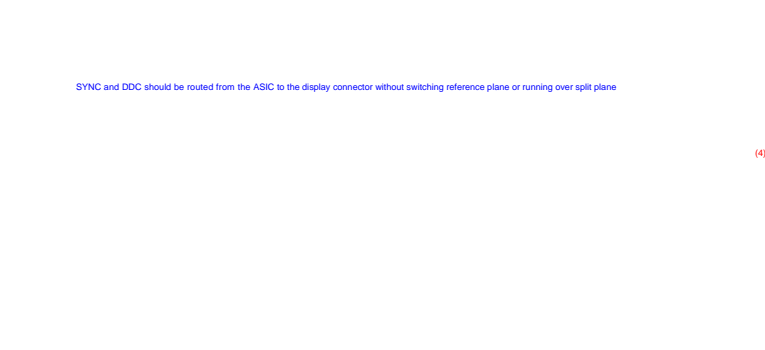


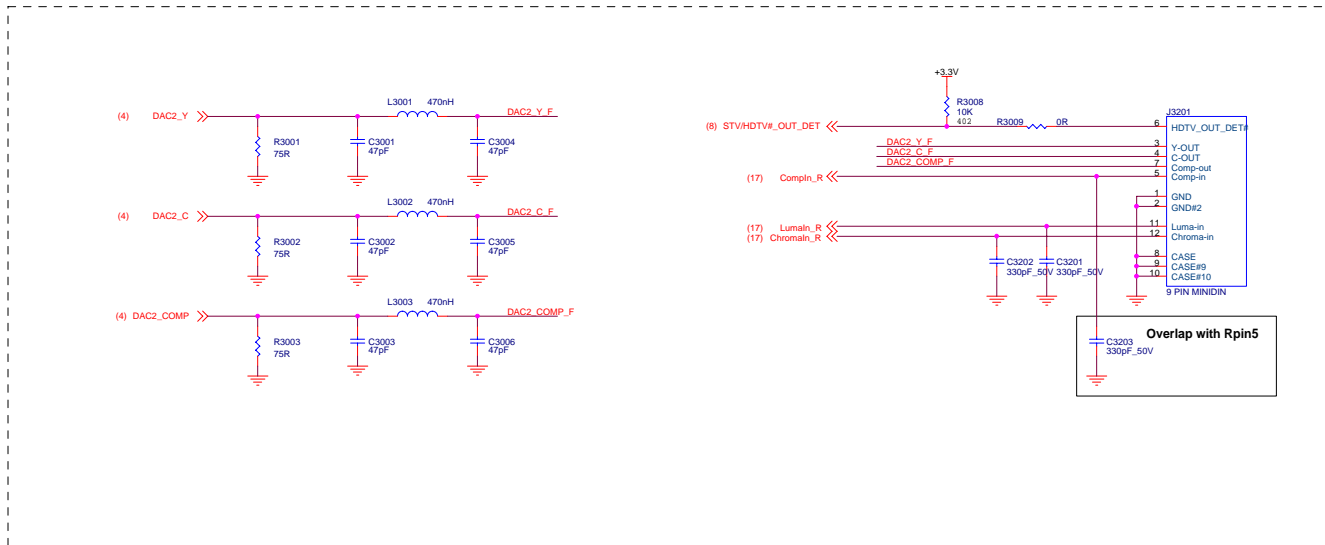
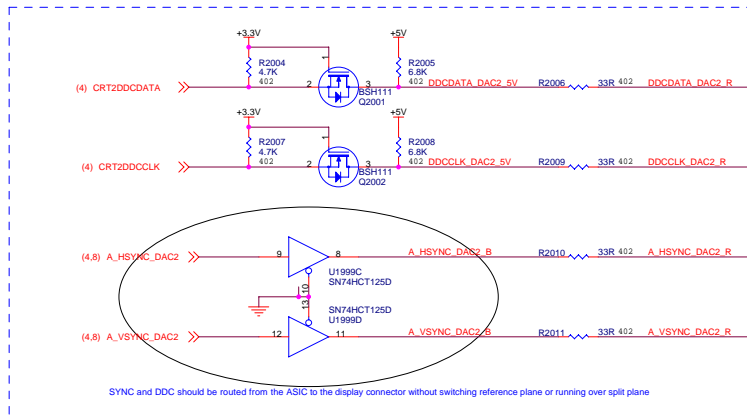
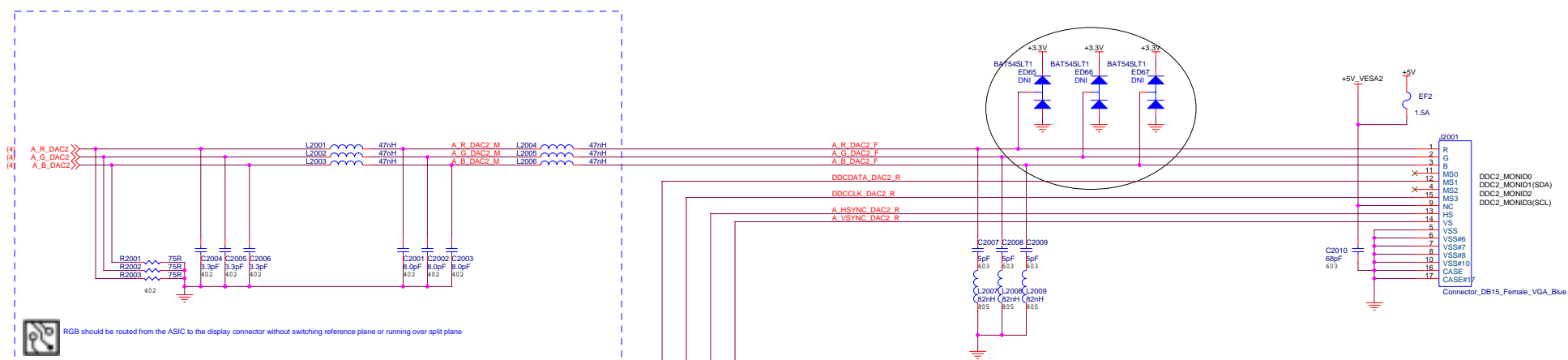




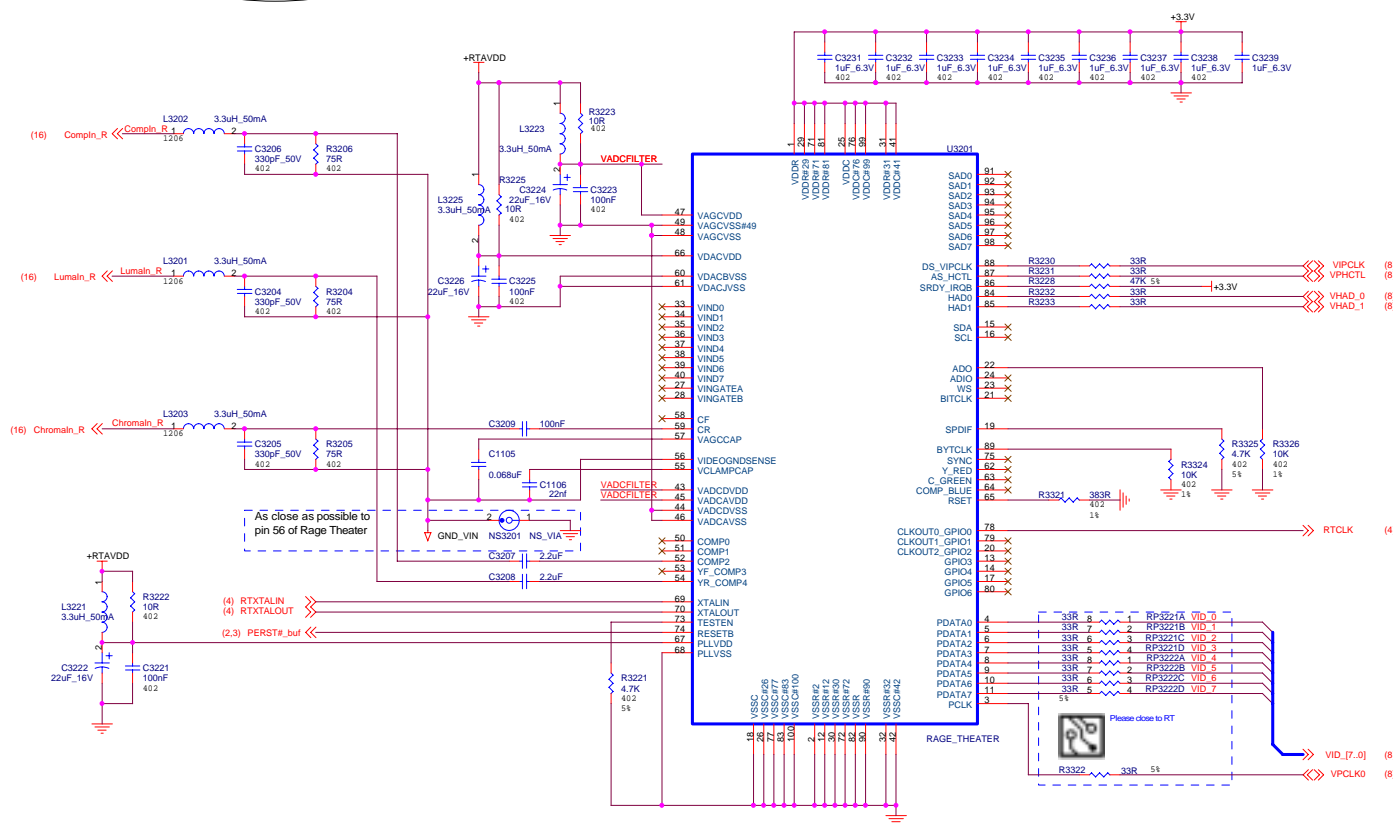
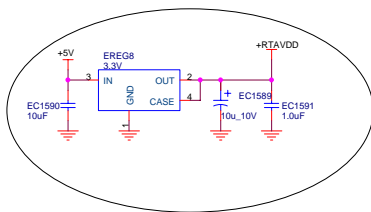
DB15 pin	Standard VGA	DDC1 Host	DDC2B or DDC2B+ Host	DDC2AB Host	DDC1/2 Display
11	Monitor ID bit 0	Monitor ID bit 0	Monitor ID bit 0	Monitor ID bit 0	Optional
12	Monitor ID bit 1	Monitor ID bit 1	Monitor ID bit 1	Monitor ID bit 1	Optional
4	Monitor ID bit 2	Monitor ID bit 2	Monitor ID bit 2	Monitor ID bit 2	Optional
15	Monitor ID bit 3	Open	Open	Open	Optional
9	N/C	+5V	+5V	+5V	Optional
Hardware Support	No	Yes	Yes	No	Yes

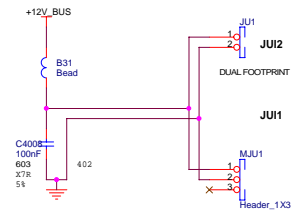
Based on VESA Display Data Channel (DDC) Standard Ver. 3 Dec. 15, 1997











DVI/VGA SCREWS

- SCREW1

SCREW

JACKSCREW

ASSY

7020000800
- SCREW2

SCREW

JACKSCREW

ASSY

7020000800
- SCREW3

SCREW

JACKSCREW

ASSY

7020000800
- SCREW4

SCREW

JACKSCREW

ASSY

7020000800

