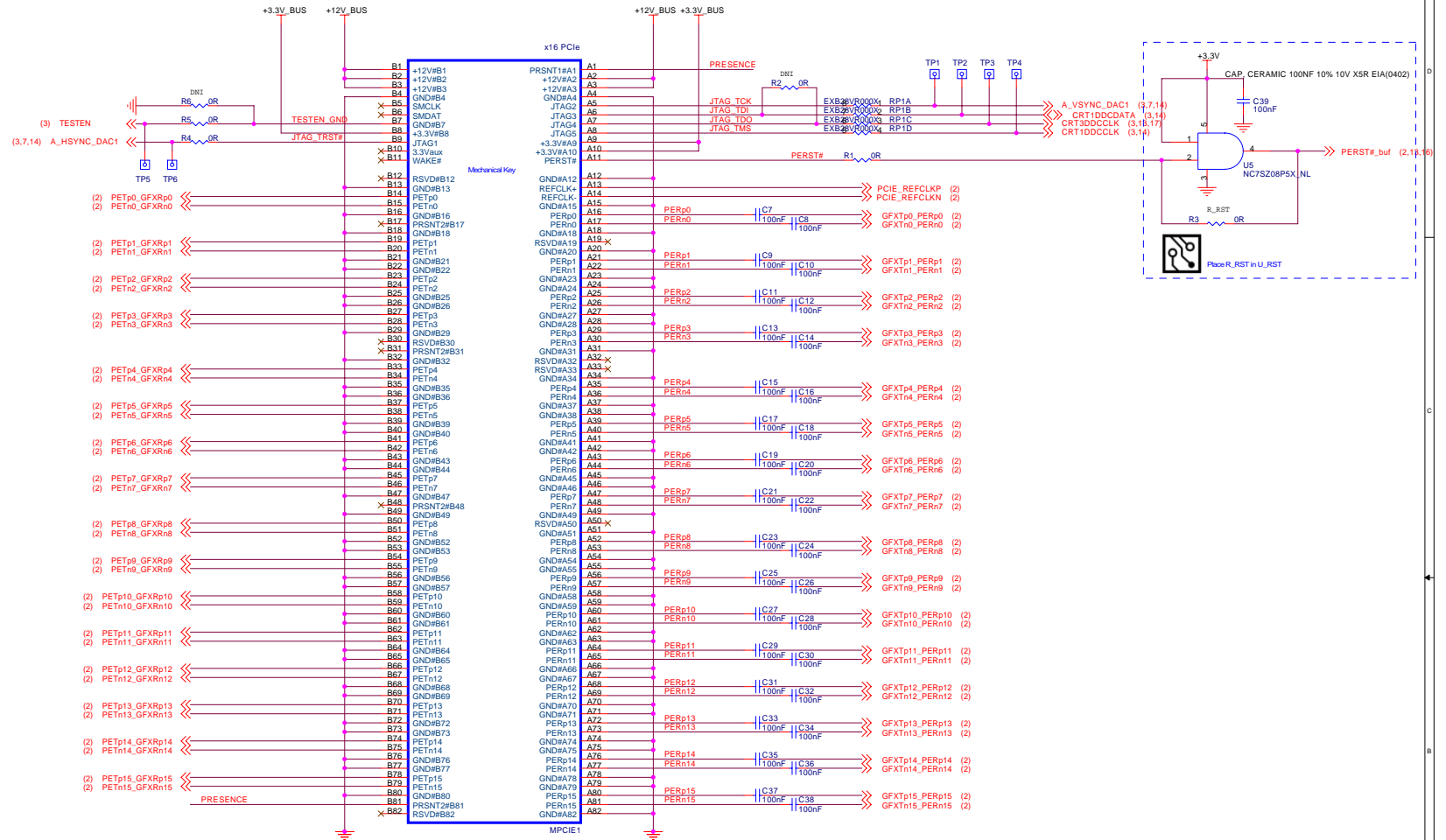
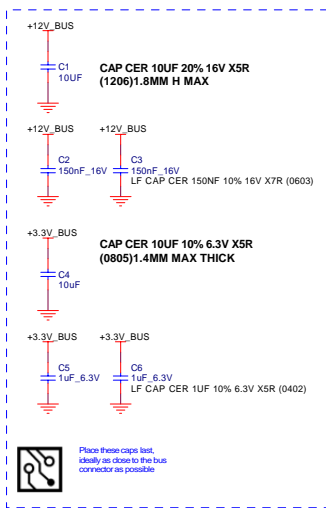
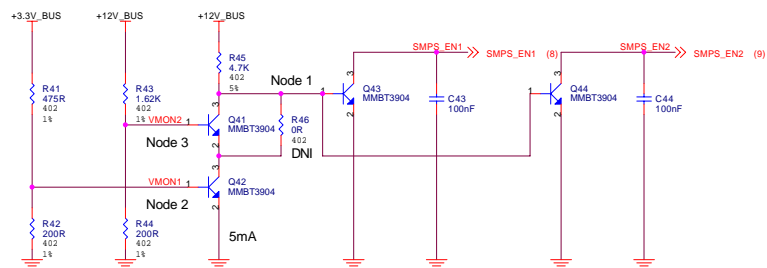


PCI-EXPRESS EDGE CONNECTOR



POWER SEQUENCING



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

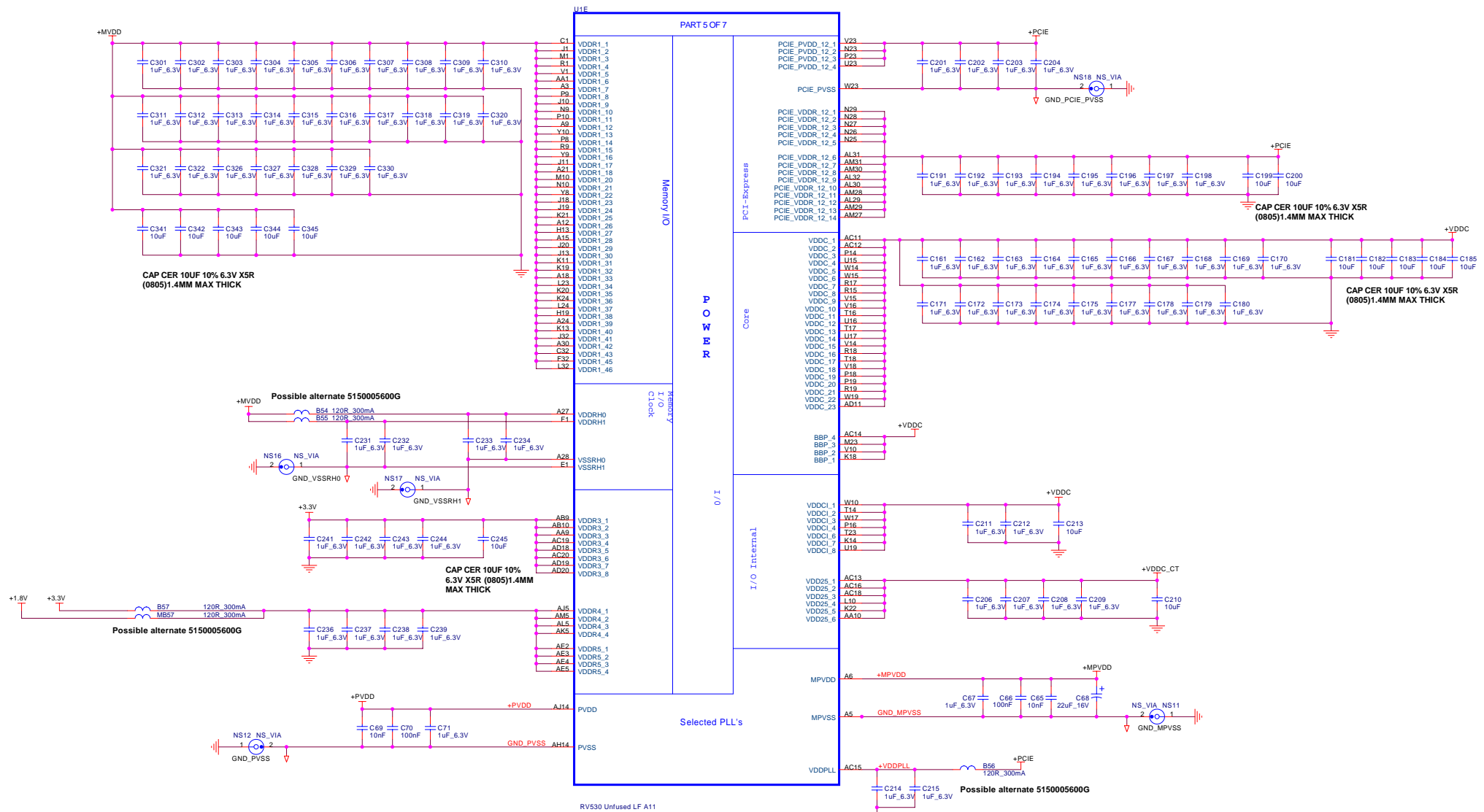
Target ~ 1.25V when +12 at min regulation (worse case)
Typical trigger when +12V ramps above 10V (1.1V)

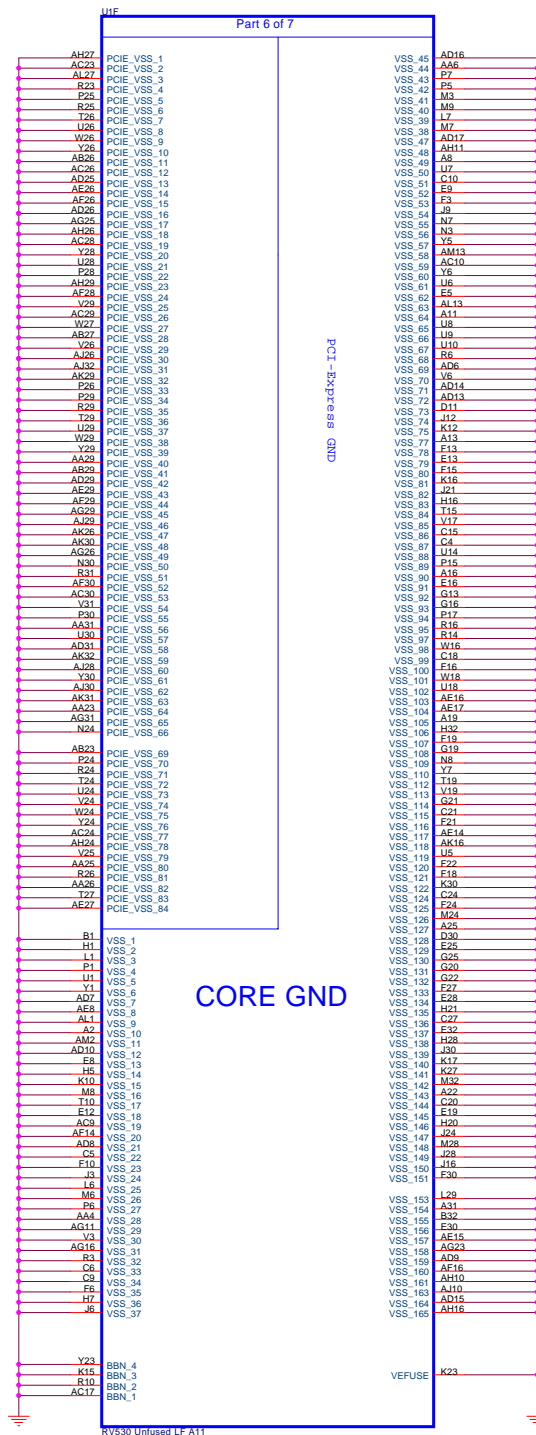
SYMBOL LEGEND	
DNI	DO NOT INSTALL
#	ACTIVE LOW
	DIGITAL GROUND
	ANALOG GROUND



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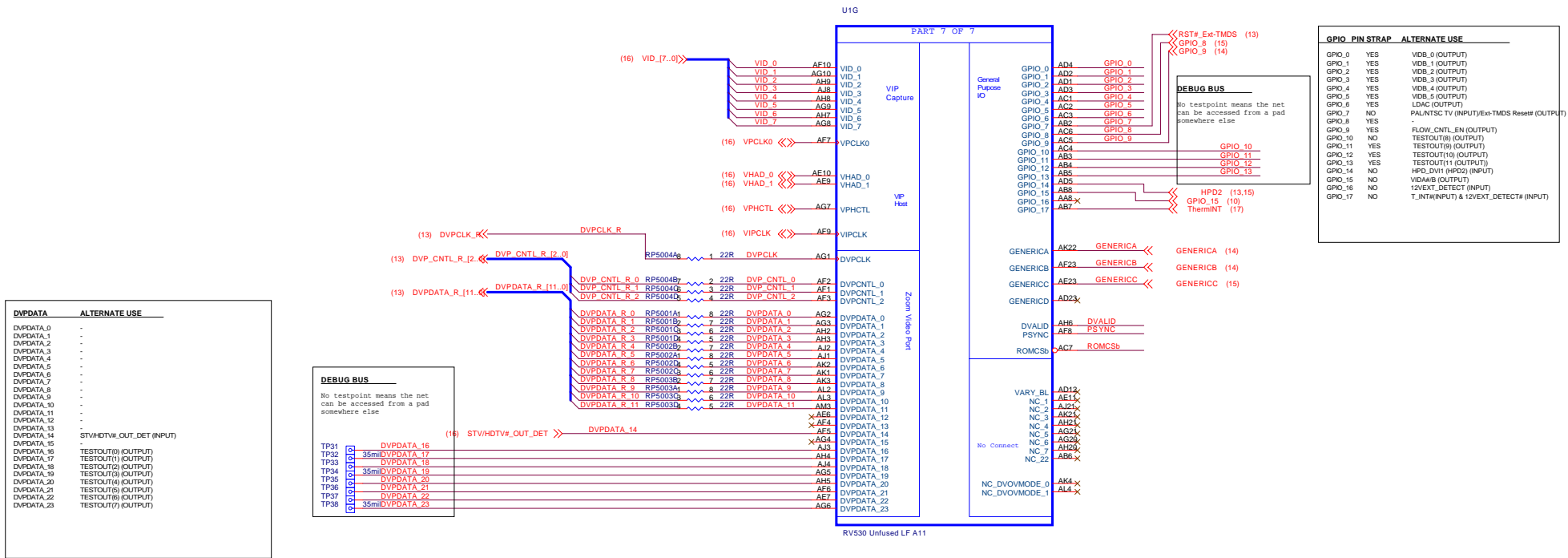
Title				RV530/RV515 256MB DDR3-136 Dual 2xDVI VIVO FH			
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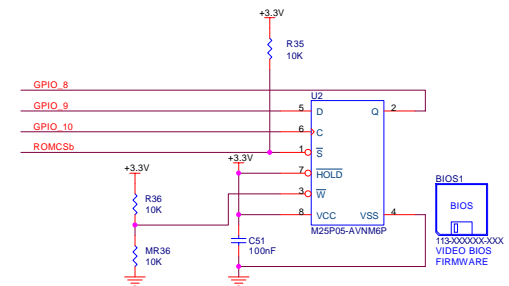
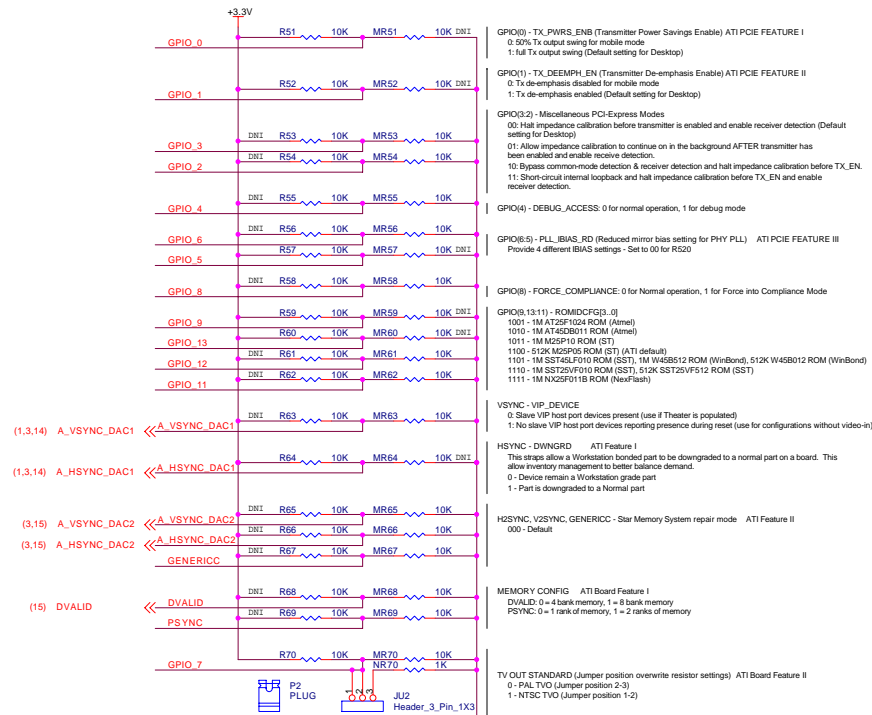


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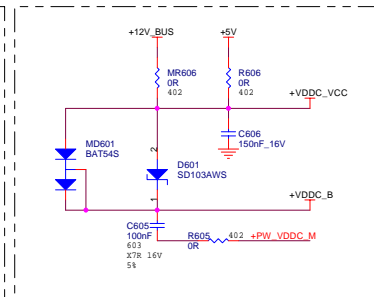
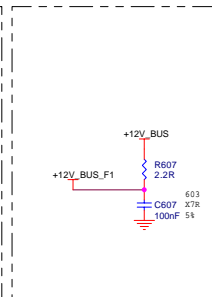
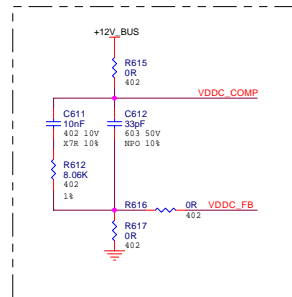
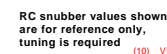
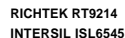
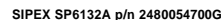
PIN BASED STRAPS



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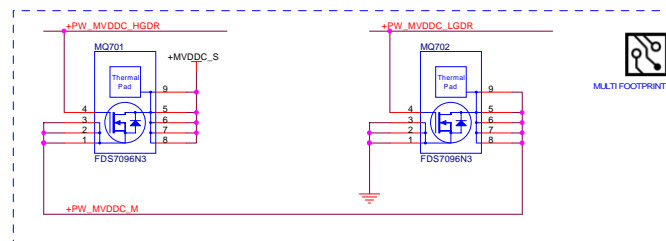


Part	Vout	R1	R2
0.8V Ref	1.2V	1.00K 1%	2.00K 1%
	1.25V	1.00K 1%	1.78K 1%
	1.3V	1.00K 1%	1.6K 1%



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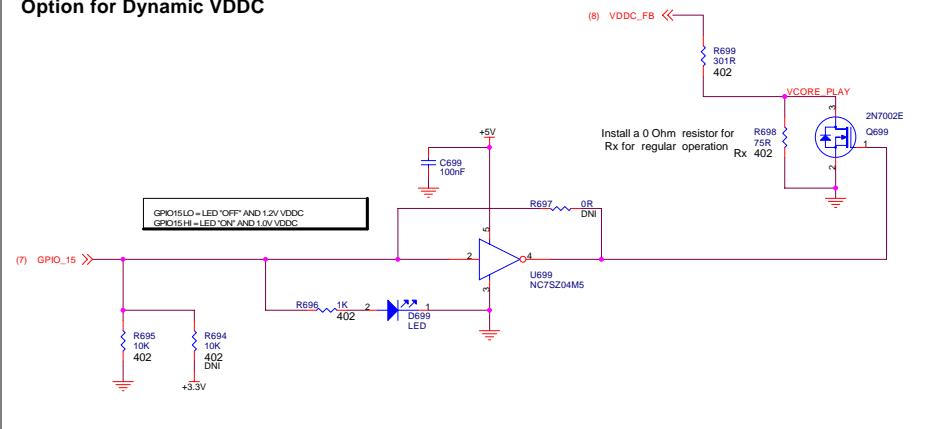
Part	Vout	R1	R2
0.8V Ref	1.9V	1.78K	1.3K
	2.0V	1.69K 1.78K	1.1K 1.21K



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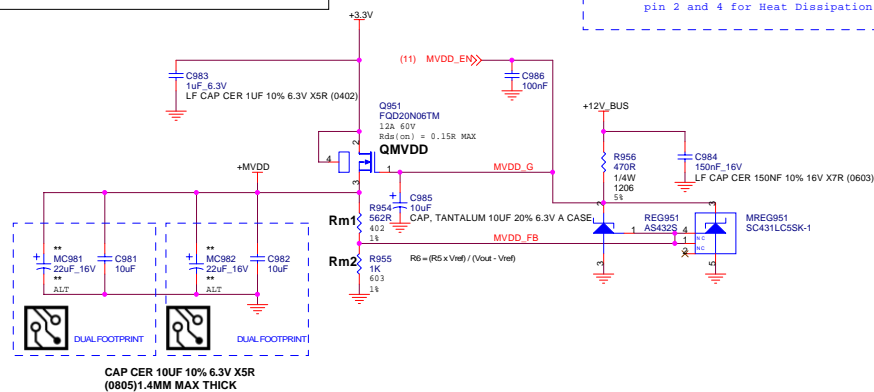
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Custom			
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Option for Dynamic VDDC

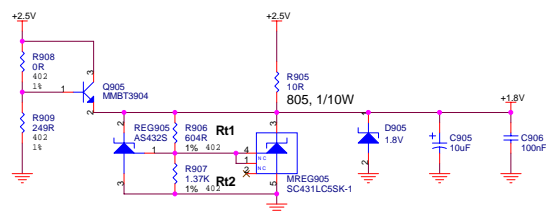


Regulator for +MVDDQ
Vout = 1.85V ~ 2.65V
Iout = 1.7A MAX
P_QMVDD = 2.5W MAX

Place Big Copper Area Under QMVDD
pin 2 and 4 for Heat Dissipation.



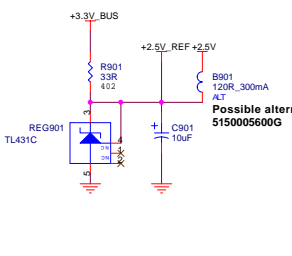
Voltage Req.	Rm1	Rm2	
2.85V			
2.55V	22.1R 316022R100G	1.1K 3240110100G	2.5V Ref.
2.5V	0R 3150000000	DNI	2.5V Ref.
2.1V min	681R 3160681000G	953R 3240953000	1.24V Ref.
2.0V min	681R 3160681000G	1K 3240110100G	1.24V Ref.
1.9V min, 1.94V nom.	562R 3160562000G	1.1K 3160100100G	1.24V Ref.



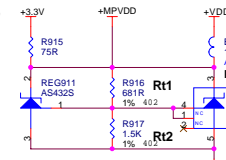
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Title				RV530/RV515 256MB DDR3-136 Dual 2xDVI VIVO FH			
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Alt regulator for +MPVDD
Vout = 1.2V (not tracking to VDDC)
Iout = 10mA MAX

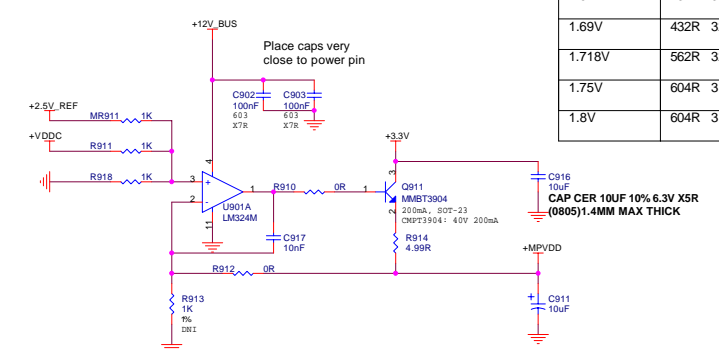


Possible alternate
5150005600G



Possible alternate 5150005600G

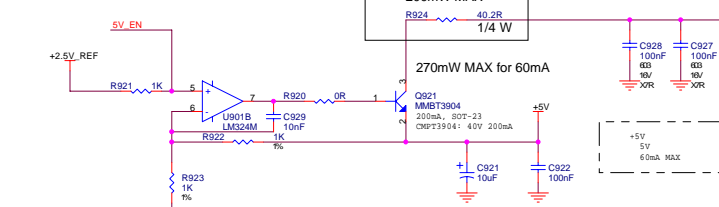
	Rt1	Rt2
1.52V	432R 3240432000 3160432000	2.15K 3160215100
1.61V	432R 3240432000	1.5K 3230015200 1.5K 3160150100
1.69V	432R 3240432000	1.21K 3240121100
1.718V	562R 3240562000	1.5K 3230015200 1.5K 3160150100
1.75V	604R 3160604000	1.5K 3230015200 1.5K 3160150100
1.8V	604R 3160604000	1.37K 3160137100



Place caps very close to power pin

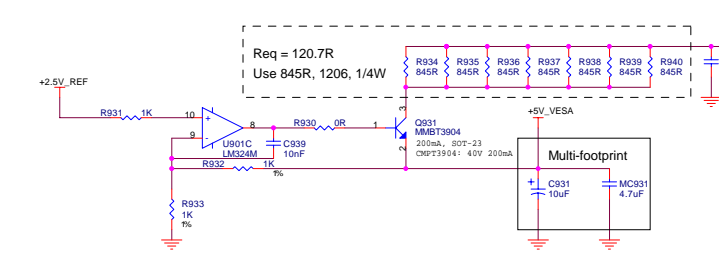
CAP CER 10UF 10% 6.3V X5R
 (0805)1.4MM MAX THICK

~ 2.5V Drop MAX
 200mW MAX



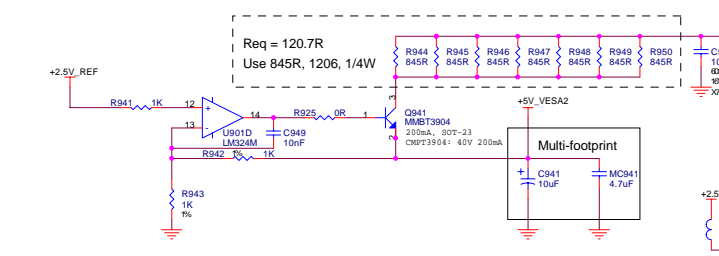
270mW MAX for 60mA

CAP CER 10UF 10% 16V X5R
 (1206)1.8MM H MAX



Req = 120.7R
 Use 845R, 1206, 1/4W

Multi-footprint

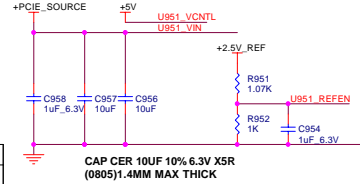


Req = 120.7R
 Use 845R, 1206, 1/4W

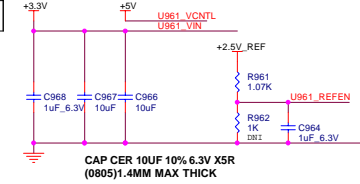
Multi-footprint

Possible alternate 5150005600G

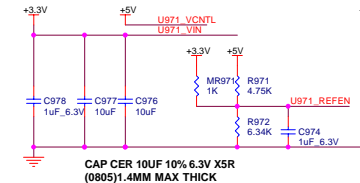
Optional regulator for +PCIE
Vout = 1.2V ~ 1.25V
Iout = 1.2A MAX



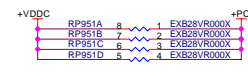
Optional regulator for +2.5V
Vout = 2.5V
Iout = 600mA MAX

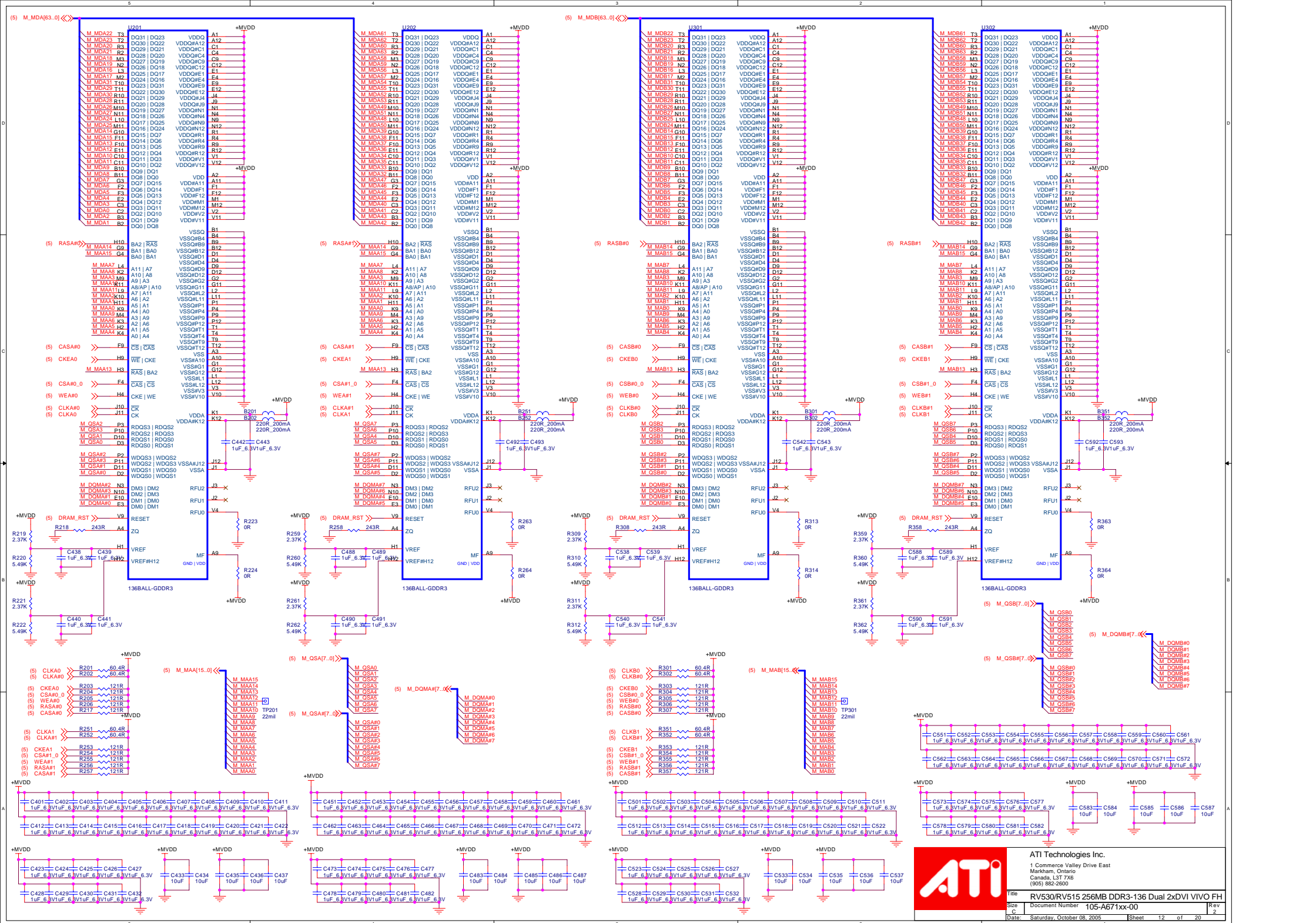


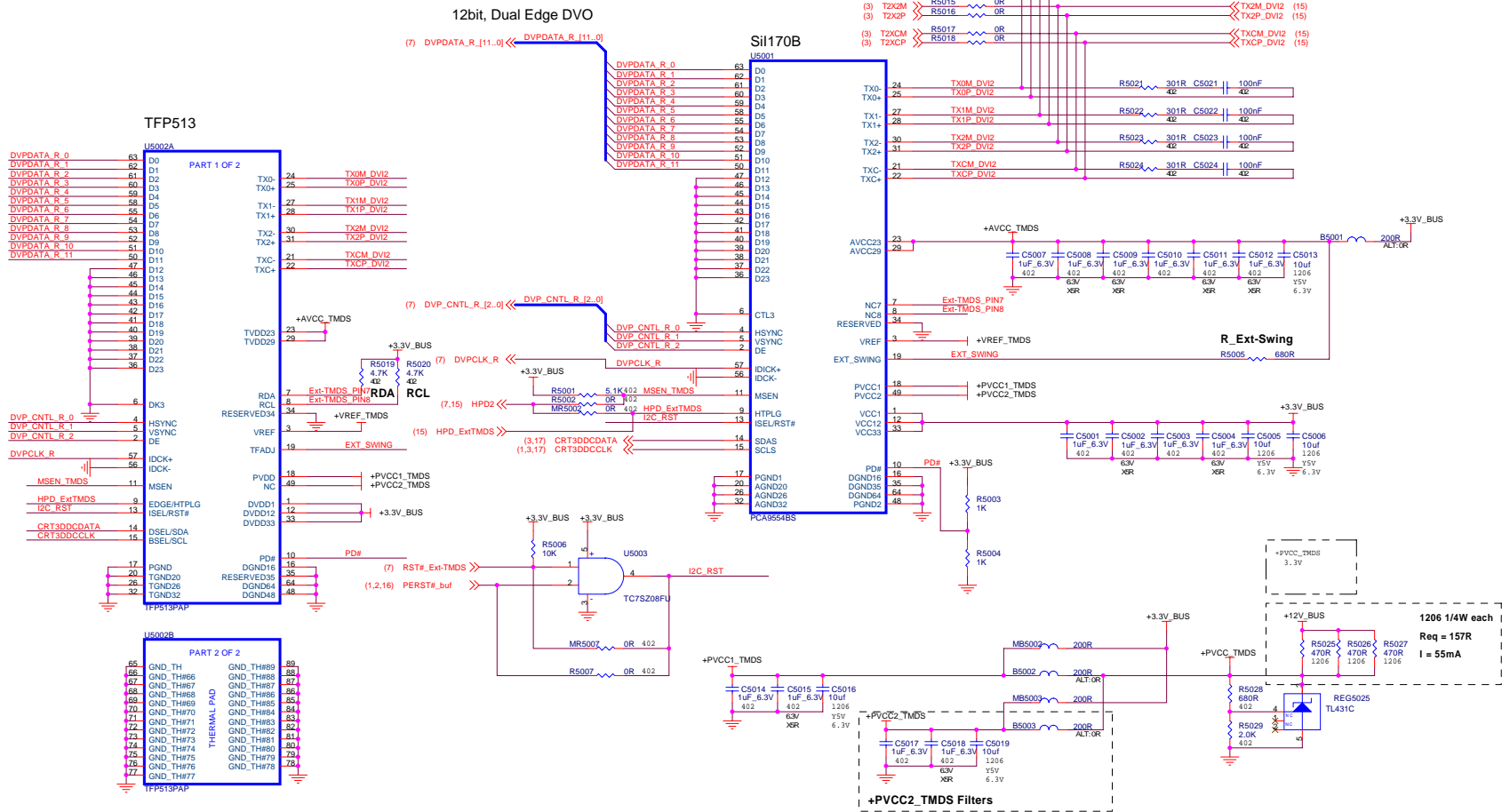
Optional Regulator for +VDDC_CT
Vout = 2.5V ~ 2.85V
Iout = 100mA MAX



CAP CER 10UF 10% 6.3V X5R
 (0805)1.4MM MAX THICK







STUFFING OPTIONS

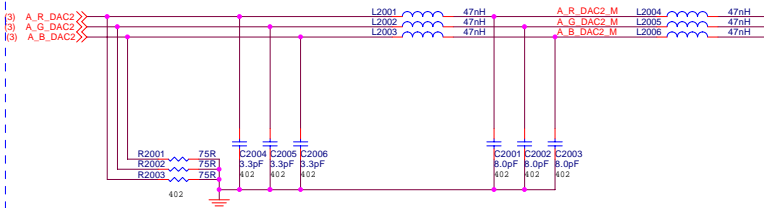
EXT TMSD TX TO BE USED	MUST INSTALL	MUST NOT INSTALL	CAN BE REMOVED
SiI170B	SiI170B, +PVCC2_TMSD Filters R_Ext-Swing =	TFP513	RDA, RCL
TFP513	TFP513, RDA, RCL 505R <= R_Ext-Swing <= 1515R	SiI170B	(Optional) +PVCC2_TMSD Filters

NOTE:
1 - Other components are to be installed.
2 - Components marked as DNI should not be installed. They should only be installed if default board settings are to be changed in which case other components may have to be adjusted accordingly.

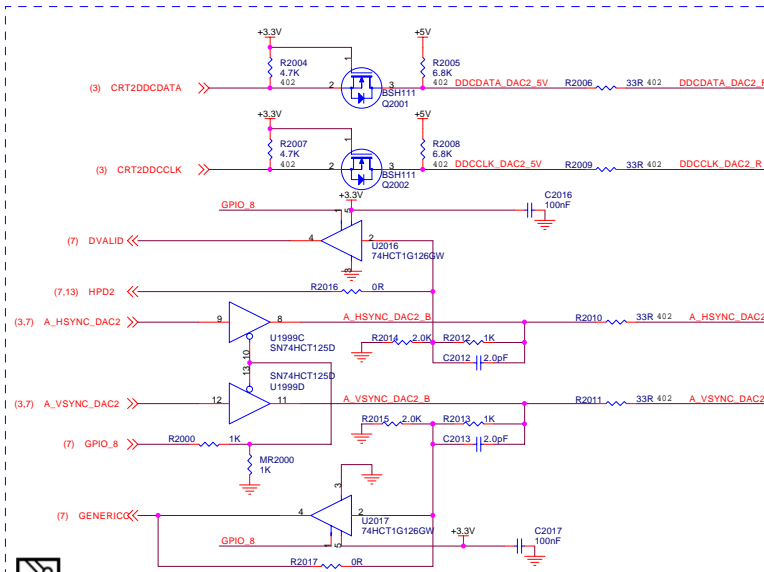


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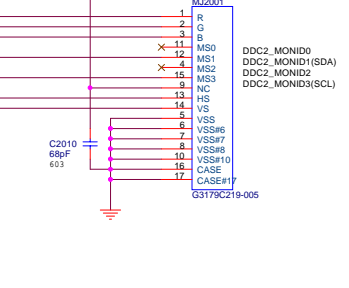
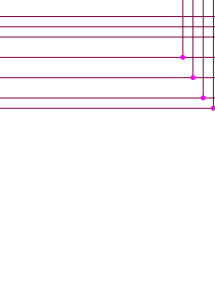
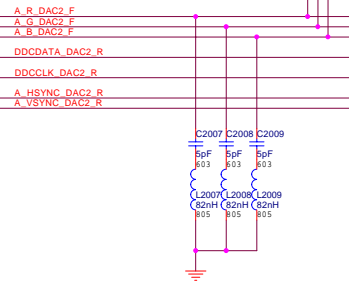
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RGB should be routed from the ASIC to the display connector without switching reference plane or running over split plane

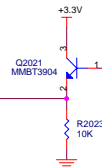
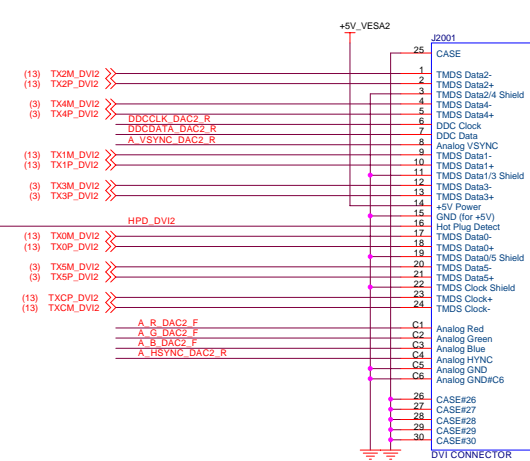


SYNC and DDC should be routed from the ASIC to the display connector without switching reference plane or running over split plane



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	Monitor ID bit 3	Monitor ID bit 3	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



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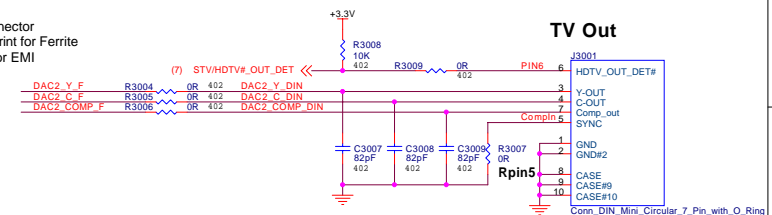
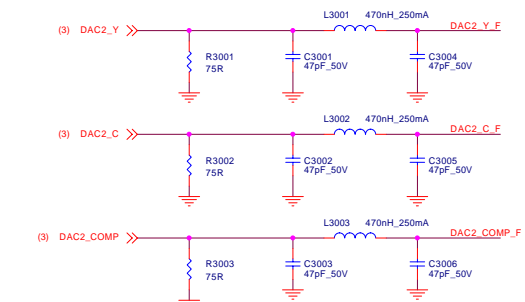
+RTAVDD
Vout = 3.3V
Iout = 125mA MAX, 80mA RMS


TV Out

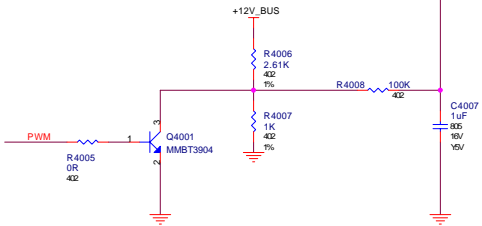
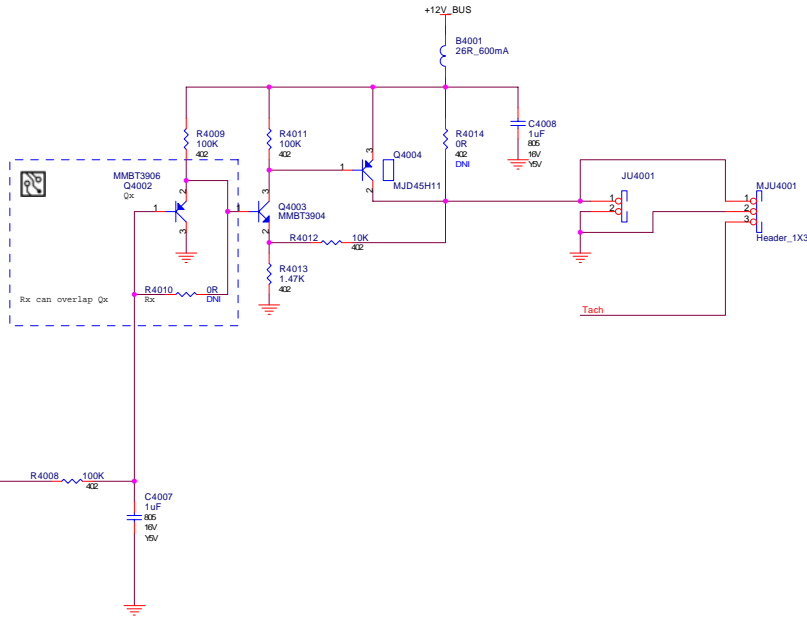
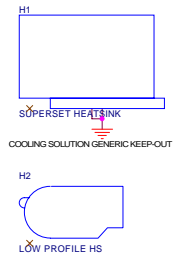
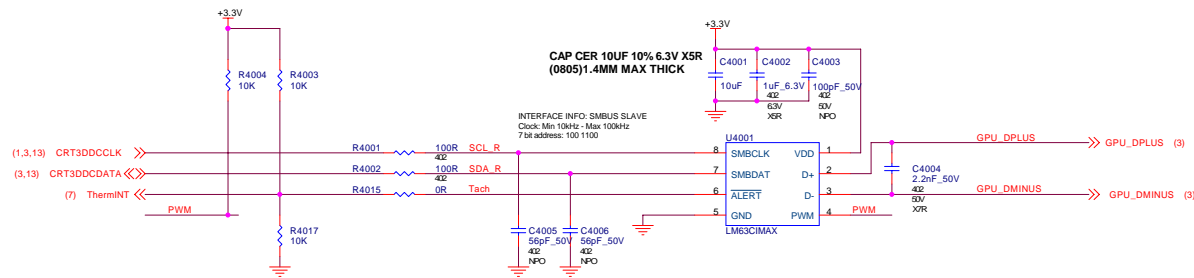
The 7-pin MiniDIN footprint allows one of the two MiniDINs:
- 7-pin Svideo/Composite MiniDIN P/N 6071001500G
- 4-pin Svideo MiniDIN P/N 6070001000G

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DVI/VGA SCREWS

- ASSY-SCREW1

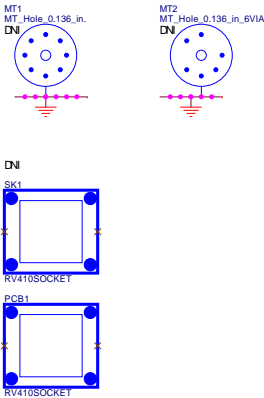
SCREW
JACKSCREW
ASSY
7020000800
- ASSY-SCREW2

SCREW
JACKSCREW
ASSY
7020000800
- ASSY-SCREW5

SCREW
PAN_HEAD
7020001700
- ASSY-SCREW3

SCREW
JACKSCREW
ASSY
7020000800
- ASSY-SCREW4

SCREW
JACKSCREW
ASSY
7020000800



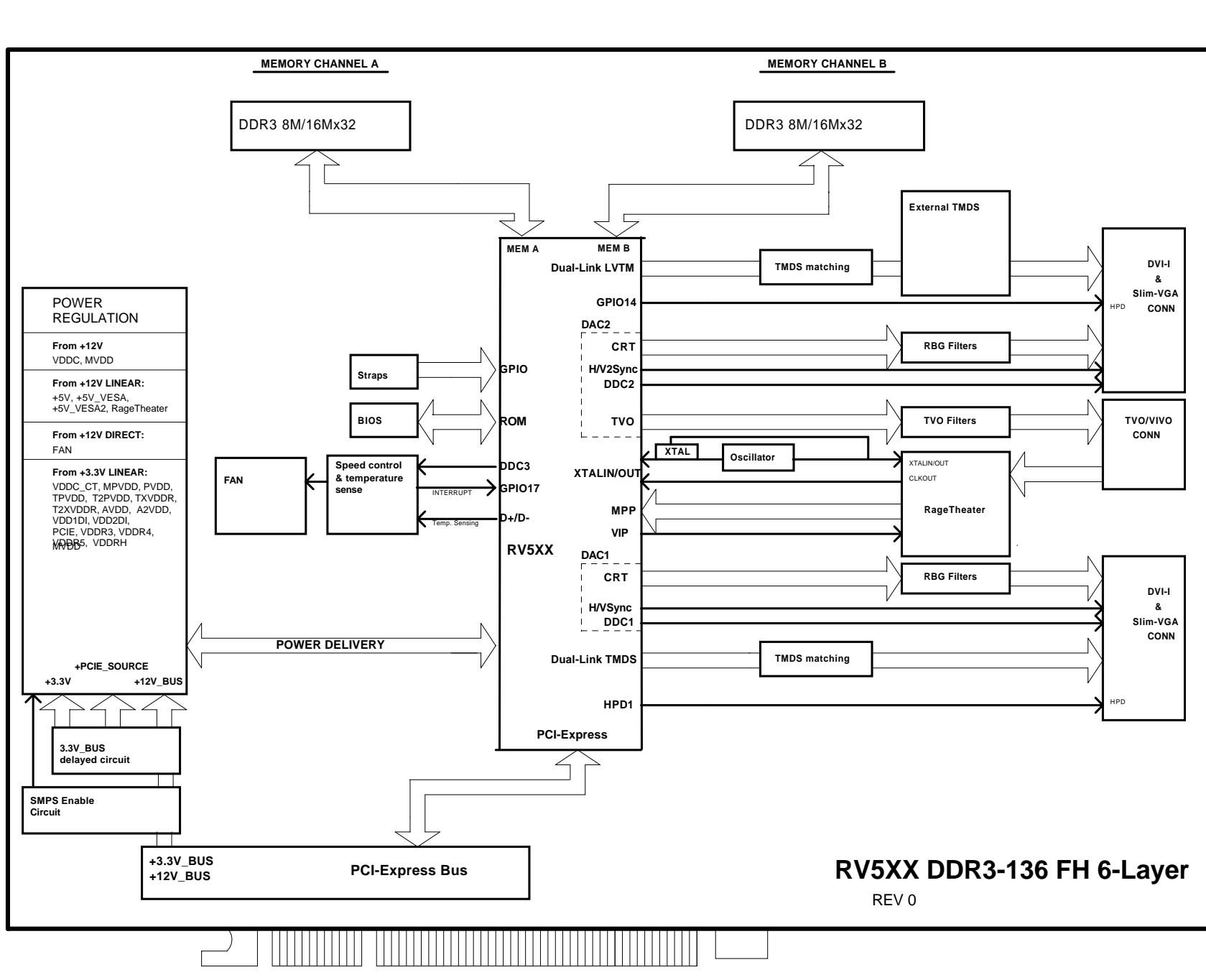
<Variant Name>



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RV5XX DDR3-136 FH 6-Layer
REV 0



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