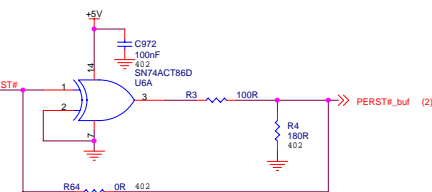
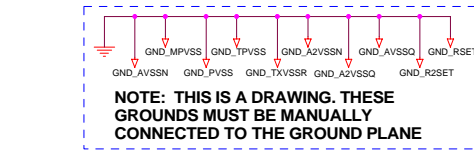
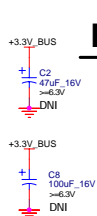
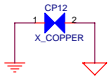
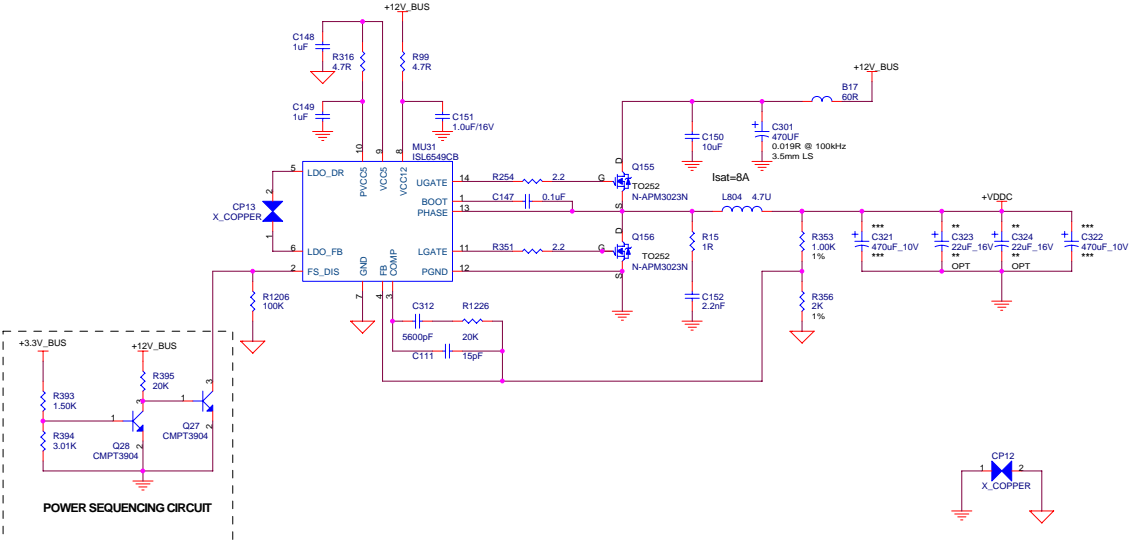


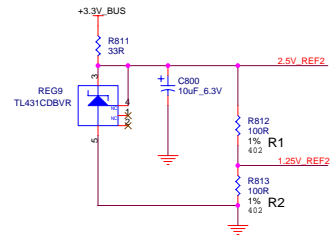
PCI-EXPRESS EDGE CONNECTOR

MS-8940 ATI RV370

Size C	Document Number	Rev 200
Date:	Thursday, October 07, 2004	Sheet 1 of 15

Regulator for VDDC (ASIC Core)
Vout = 1.2V ~ 1.3V





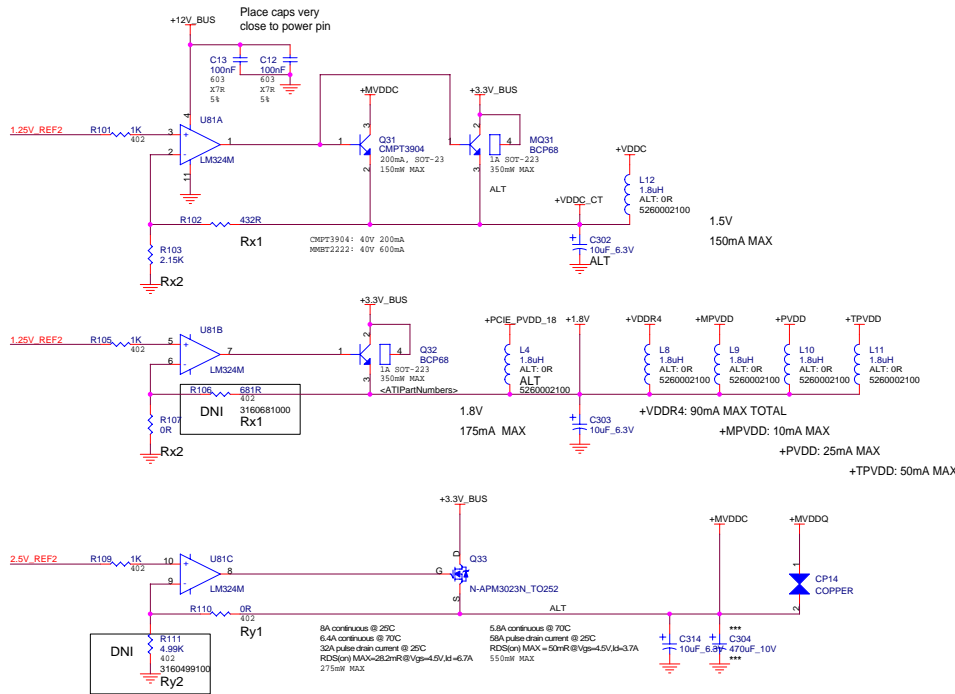
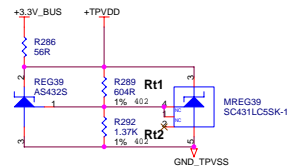
Voltage Req.	R1	R2
0.8V	150R P/N 3240150000	71.5R P/N 324075R500
1.25V	75R P/N 3240075000 603 P/N 316075R000 402	75R P/N 3240075000 603 P/N 316075R000 402
1.5V	49.9R P/N 3240049900	75R P/N 3240075000 603 P/N 316075R000 402
1.8V	54.9R P/N 3240054900	140R P/N 3240140000
1.84V	49.9R P/N 3240049900	140R P/N 3240140000

Voltage Req.	Rx1 for 1.25V Ref	Rx2 for 1.25V Ref
1.5	432R P/N 3240432000	2.15K P/N 3240215100
1.6V	432R P/N 3240432000	1.5K P/N 3240150100
1.7V	432R P/N 3240432000	1.21K P/N 3240121100
1.8175V	561R P/N 3240681000 603 P/N 3160681000 402	1.5K P/N 3240015200

Voltage Req.	Ry1 for 2.5V Ref	Ry2 for 2.5V Ref
3.3V	1.07K P/N 3240107100	3.32K P/N 3240332100
2.7V	301R (402, 1%) P/N 3160301000	3.32K P/N 3240332100
2.65V	301R (402, 1%) P/N 3160301000	4.99K (402, 1%) P/N 3160499100
2.5V	OR P/N 3230000000 603 P/N 3150000000 402	DNI

	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

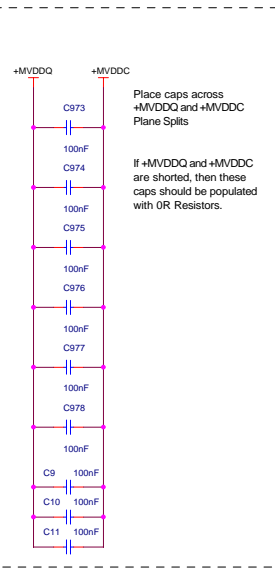
Alt. regulator for +TPVDD
Vout = 1.65V ~ 1.85V
Iout = 20mA MAX



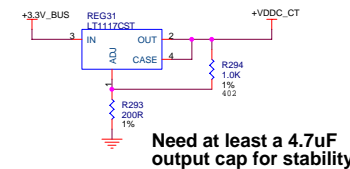
Alt. regulator for +MVDDC
Vout = 2.5V ~ 2.6V
Iout = 500mA MAX

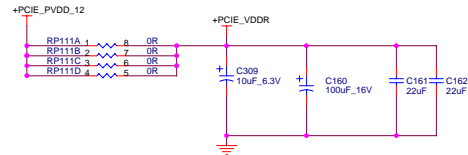
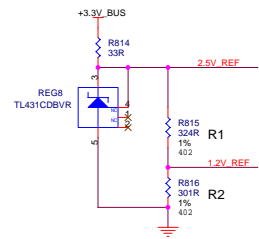
Alt regulator for +MVDDQ
Vout = 2.5V ~ 2.6V
Iout = 200mA MAX

Voltage Req.	Rq1	Rq2
1.8V	681R 3240681000	1.5K 3230015200
[-0.09V/+0.18V]	1K 3240100100	1K 3240100100
2.5V	1K 3240100100	1K 3240100100
2.6V	4.75K 3240475100	4.32K 3240432100



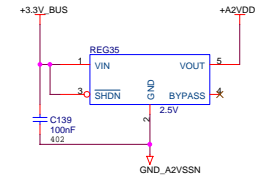
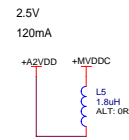
Alt regulator for +VDDC_CT
Vout = 1.5V
Iout = 150mA MAX





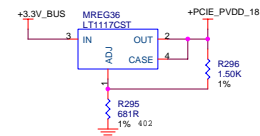
+PCIE_PVDD_12: 1.2V 250mA MAX

Alt. regulator for +A2VDD
Vout = 2.5V
Iout = 120mA MAX



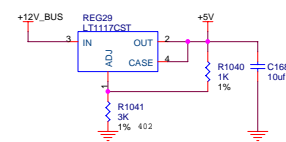
+A2VDD and GND_A2VSSN routed with at least 15 mil trace and not longer than 1.5 inch.

Alt. regulator for PCIE_PVDD_18
Vout = 1.85V
Iout = 500mA MAX

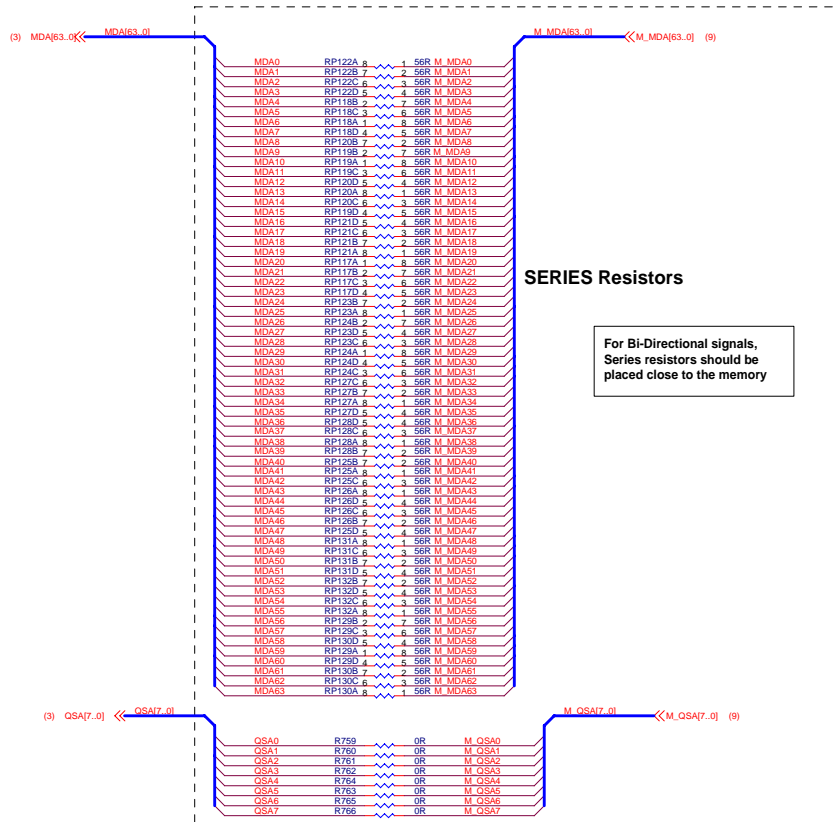


Need at least a 4.7uF output cap for stability

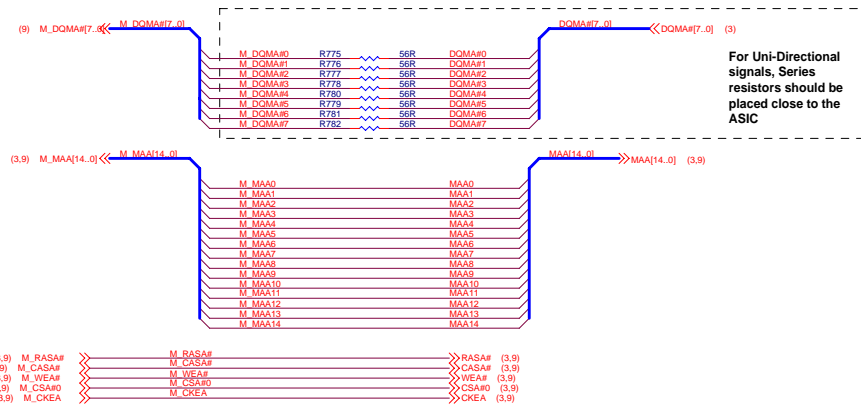
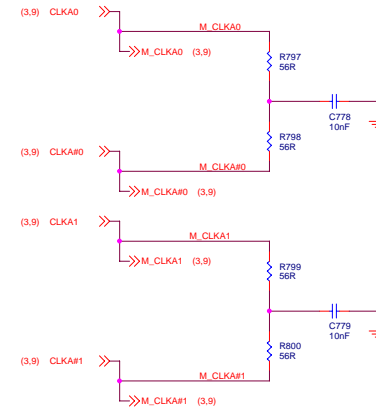
Regulator for +5V
Vout = 5V
Iout = 20mA MAX



Part	Vout	R1	R2
MAX1935 0.8V Ref	1.2V	1.00K 1% 402 ATI P/N 3160100100	2.00K 1% 402 ATI P/N 3160200100
	1.79V	6.81K 1% ATI P/N 3160681100	5.49K 1% 402 ATI P/N 3160549100



CLOCK terminations



MS-8940 ATI RV370

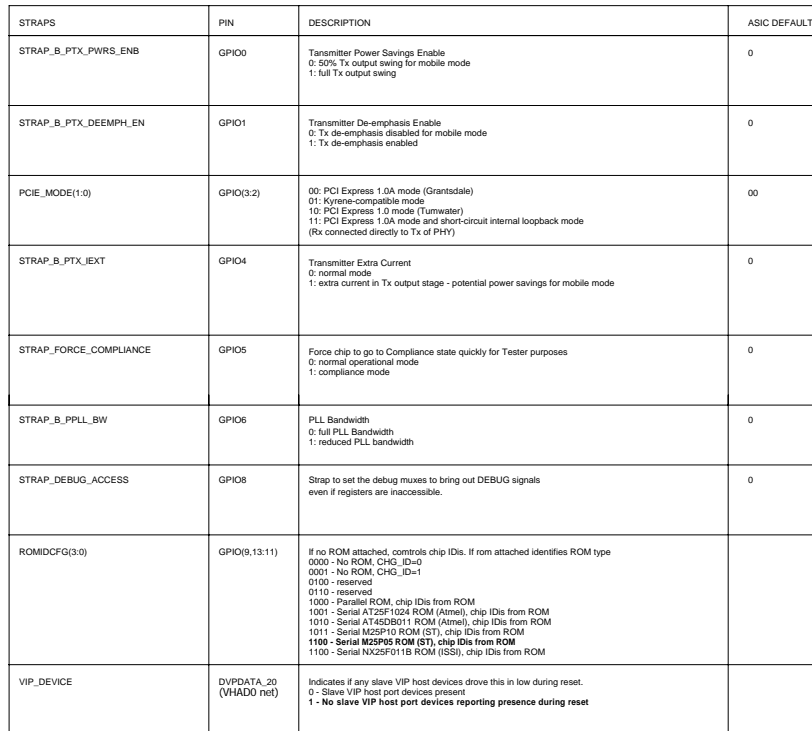
Size	Document Number	Rev
Custom		200
Date:	Thursday, October 07, 2004	Sheet 8 of 16



OPTION STRAPS

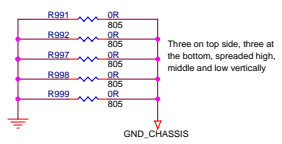
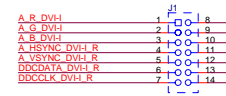
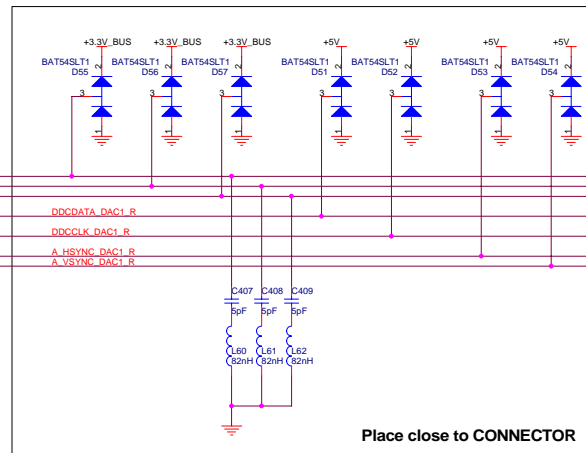
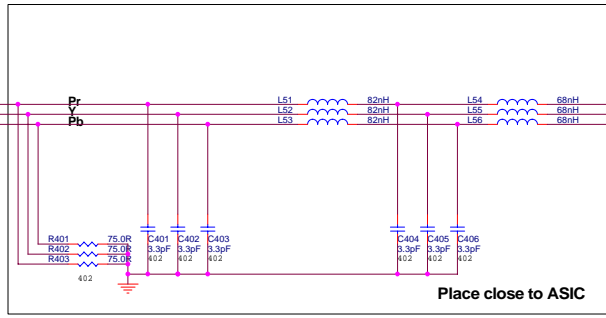
The diagram illustrates the wiring for various option straps on the Raspberry Pi 4B. The straps are connected to either the +3.3V_BUS or the +VDDR4 supply through 10K resistors. The connections are as follows:

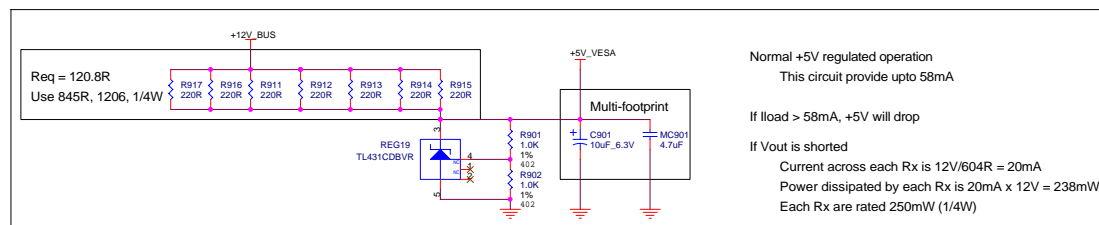
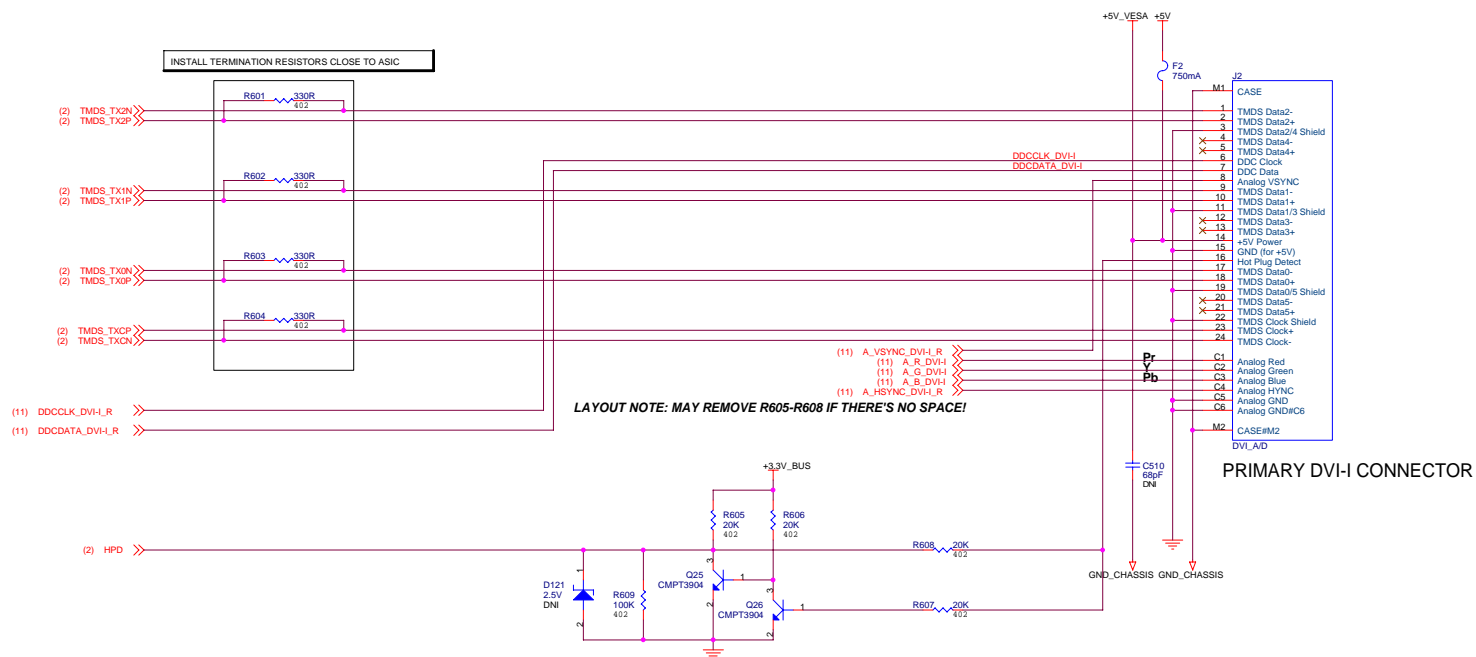
Signal	Resistor	Value	Destination
GPIO0	R201	10K	DESKTOP
	R202	10K	MOBO
GPIO1	R203	10K	DESKTOP
	R204	10K	MOBO
GPIO2	R205	10K	DNI
	R206	10K	DNI
GPIO3	R207	10K	Turnwater
	R208	10K	Grantsdale
GPIO4	R219	10K	DNI
	R220	10K	DNI
GPIO5	R221	10K	DNI
	R222	10K	DNI
GPIO6	R223	10K	DNI
	R224	10K	DNI
GPIO11	R209	10K	DNI
	R210	10K	DNI
GPIO12	R211	10K	DNI
	R212	10K	DNI
GPIO13	R213	10K	DNI
	R214	10K	DNI
GPIO9	R215	10K	DNI
	R216	10K	DNI
GPIO8	R217	10K	DNI
	R218	10K	DNI
(2) Mem_Strap0	R235	10K	DNI
	R236	10K	DNI
(2) Mem_Strap1	R237	10K	DNI
	R238	10K	DNI
(2) LCDDATA16	R227	10K	DNI
	R228	10K	DNI
(2) LCDDATA17	R229	10K	DNI
	R230	10K	DNI
(2) VHADO	R231	10K	DNI
	R232	10K	DNI



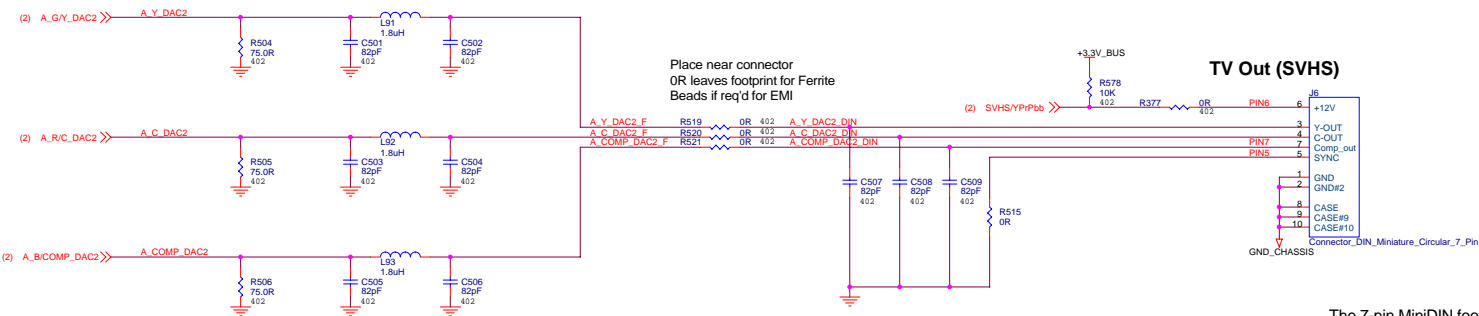
MEMORY TYPE STRAPS		
	Mem_Strap0	Mem_Strap1
SAM	0	0
INF	1	0
HYN	0	1
ELPIDA	1	1





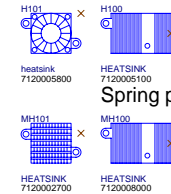
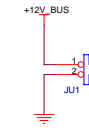
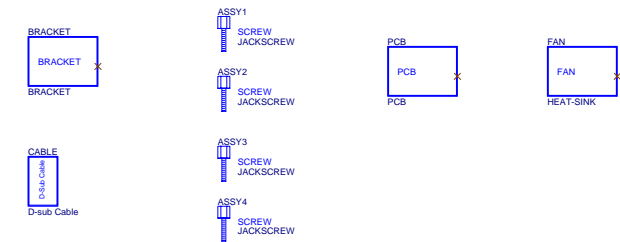
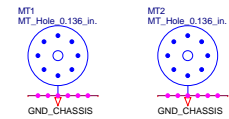
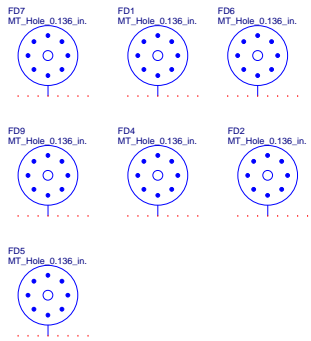


Place Resistors close to ASIC.



TV Out (SVHS)

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



Spring push-pin

ITW push-pin

