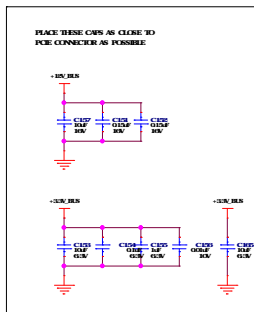
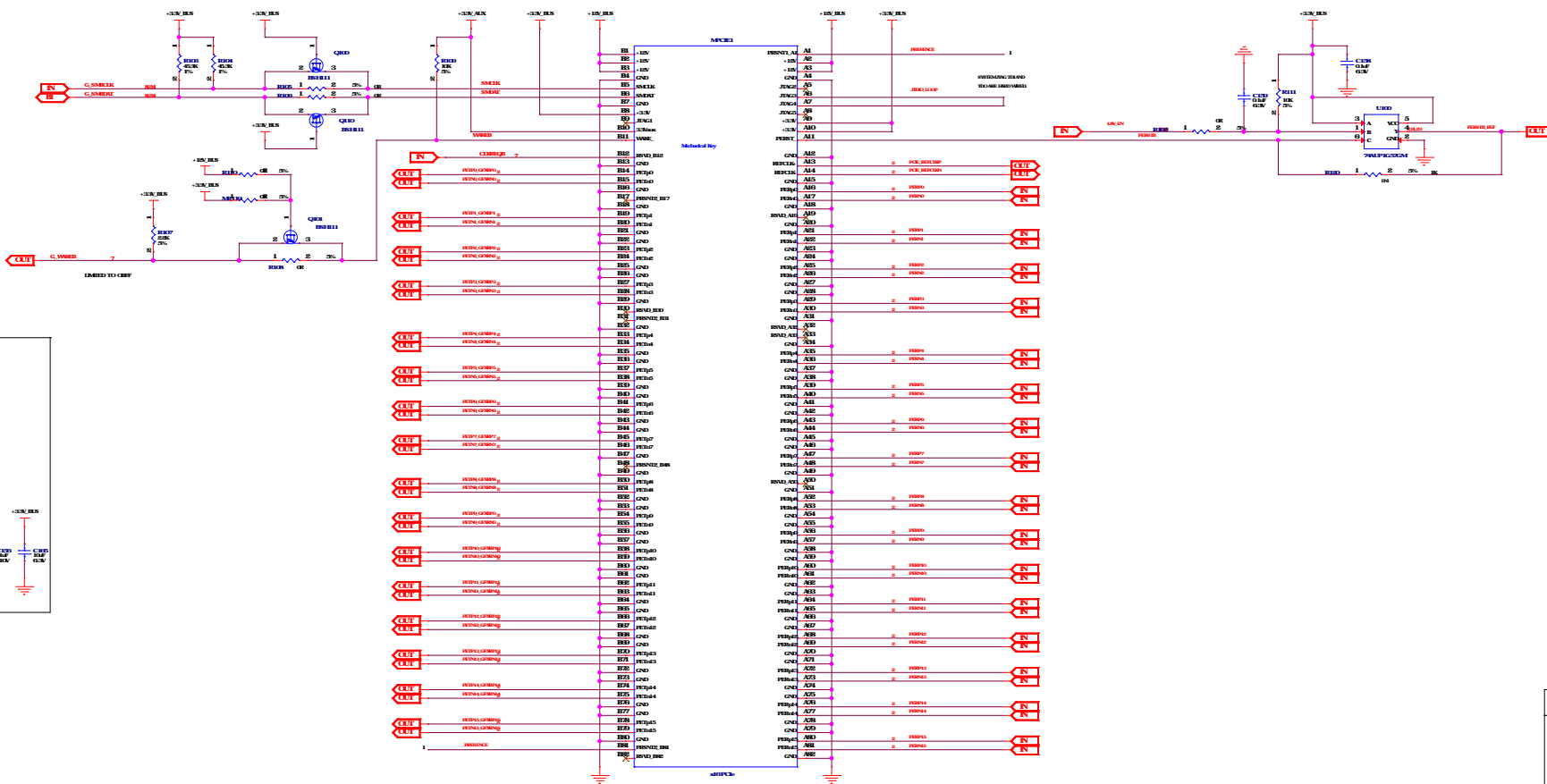


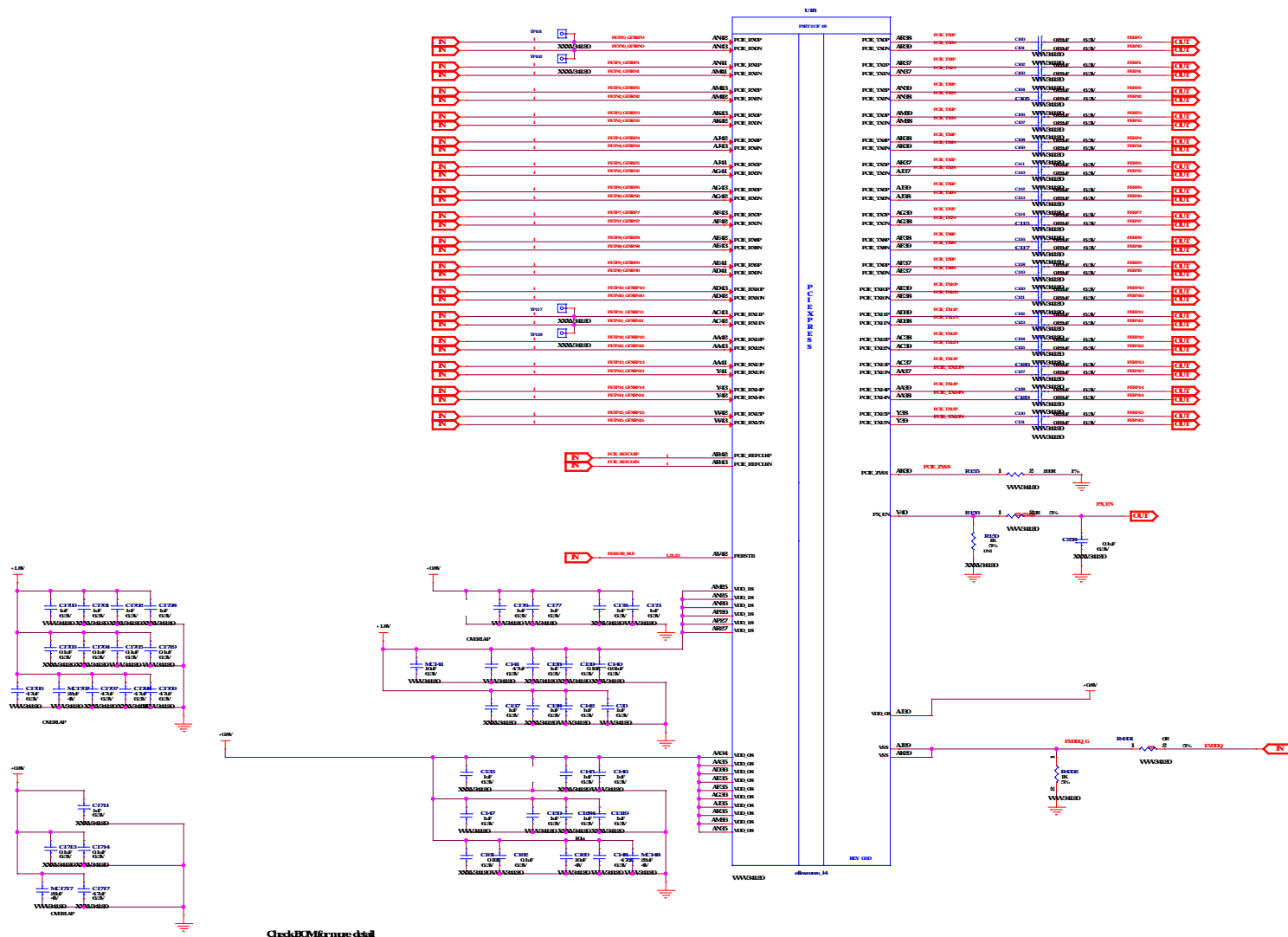


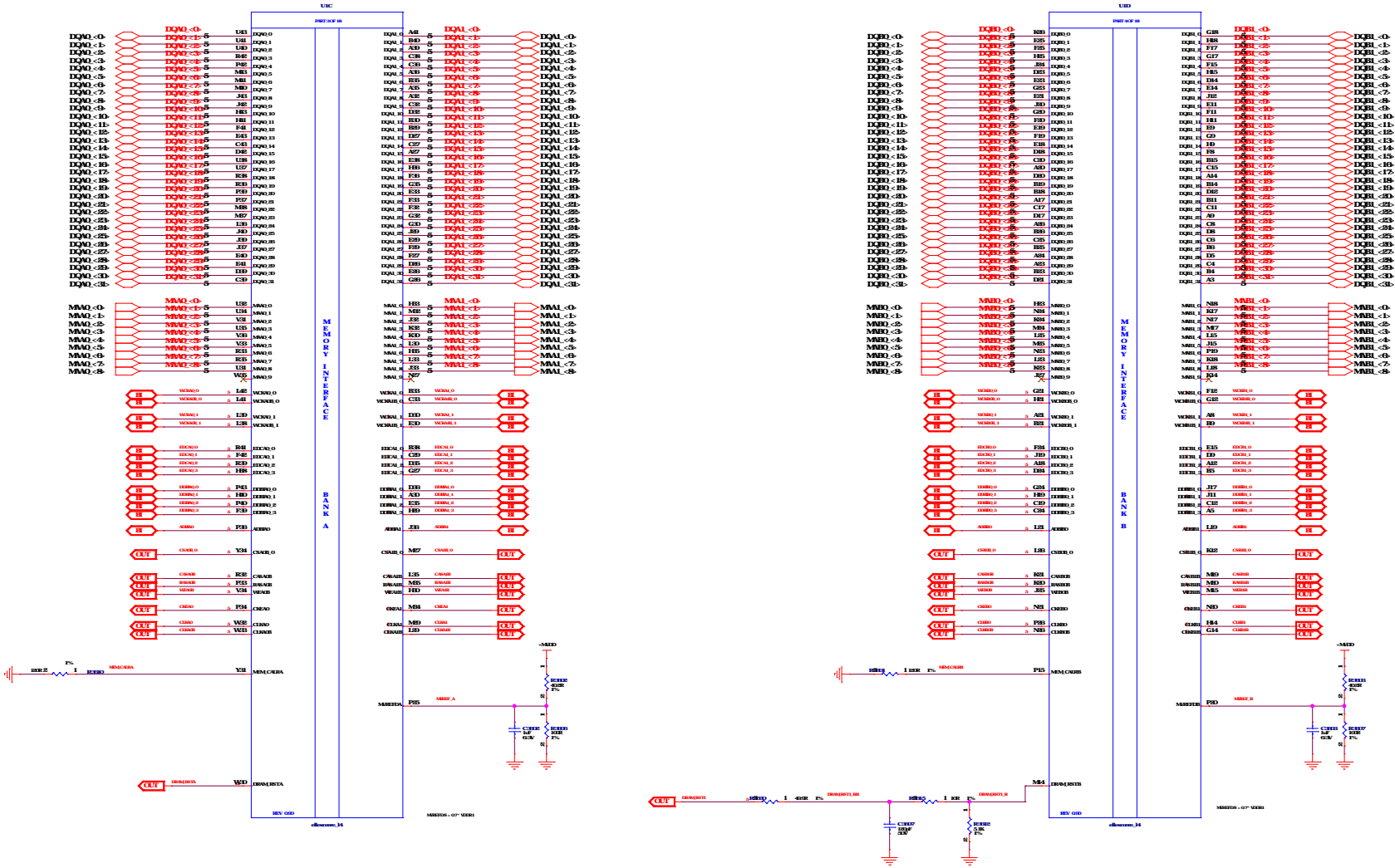
(1) PCI EXPRESS EDGE CONNECTOR

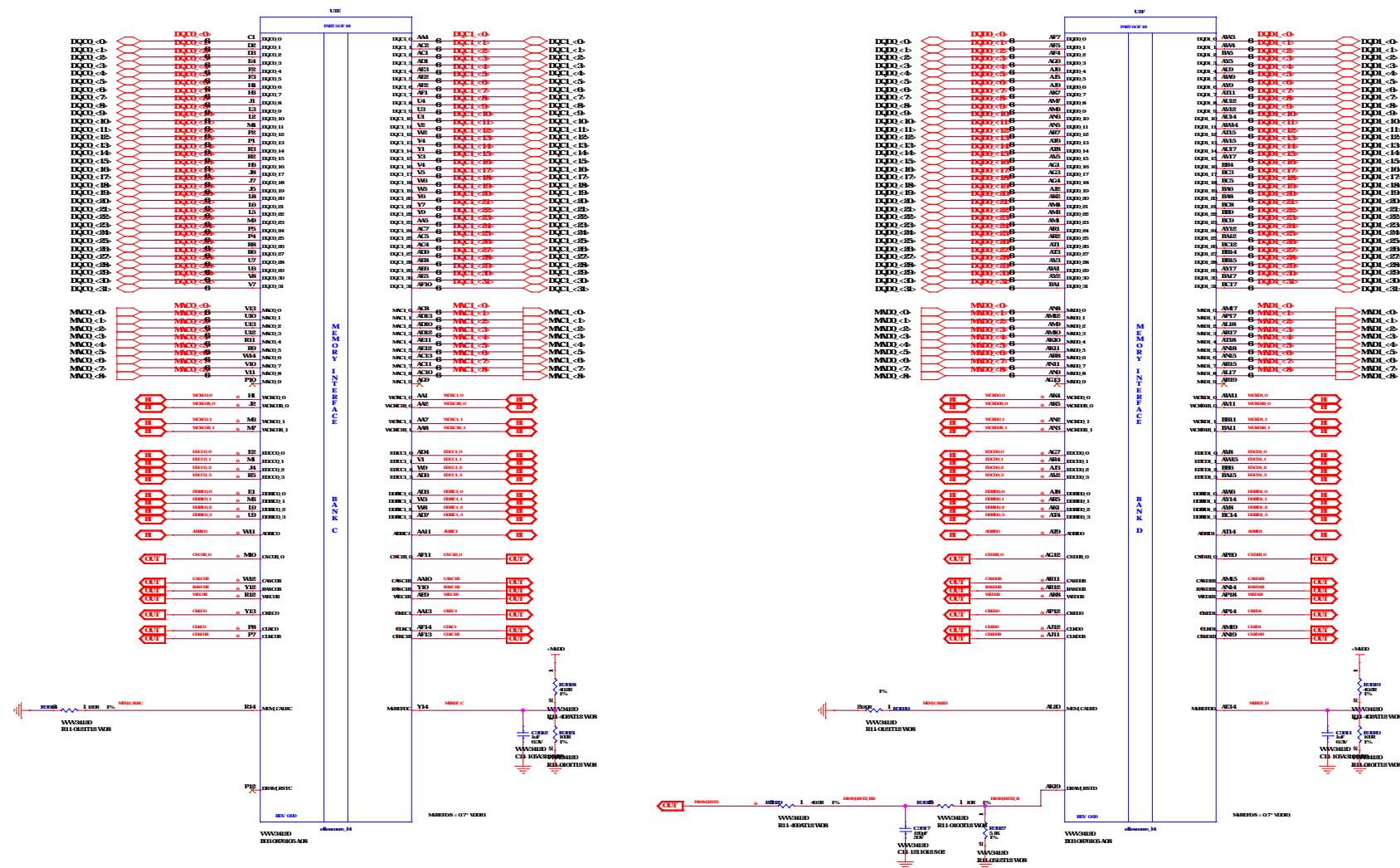


SYMBOL LEGEND	
DNI	DO NOT INSTALL
ACRE	ACRE LOW
BRG UP	BRG UP ONLY
	DIGITAL GROUND
	ANALOG GROUND

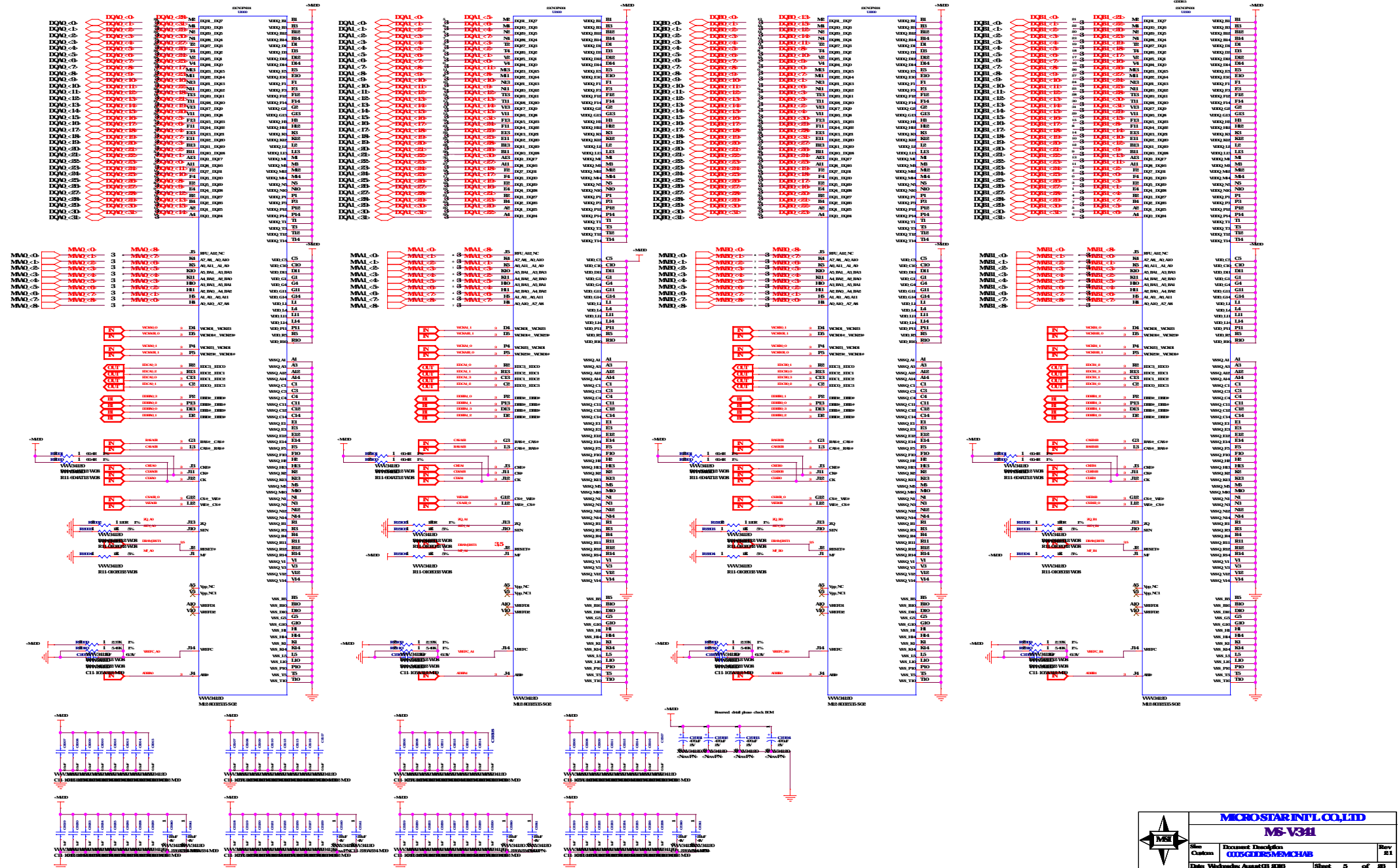
(2) ELLESMERE PCIe INTERFACE



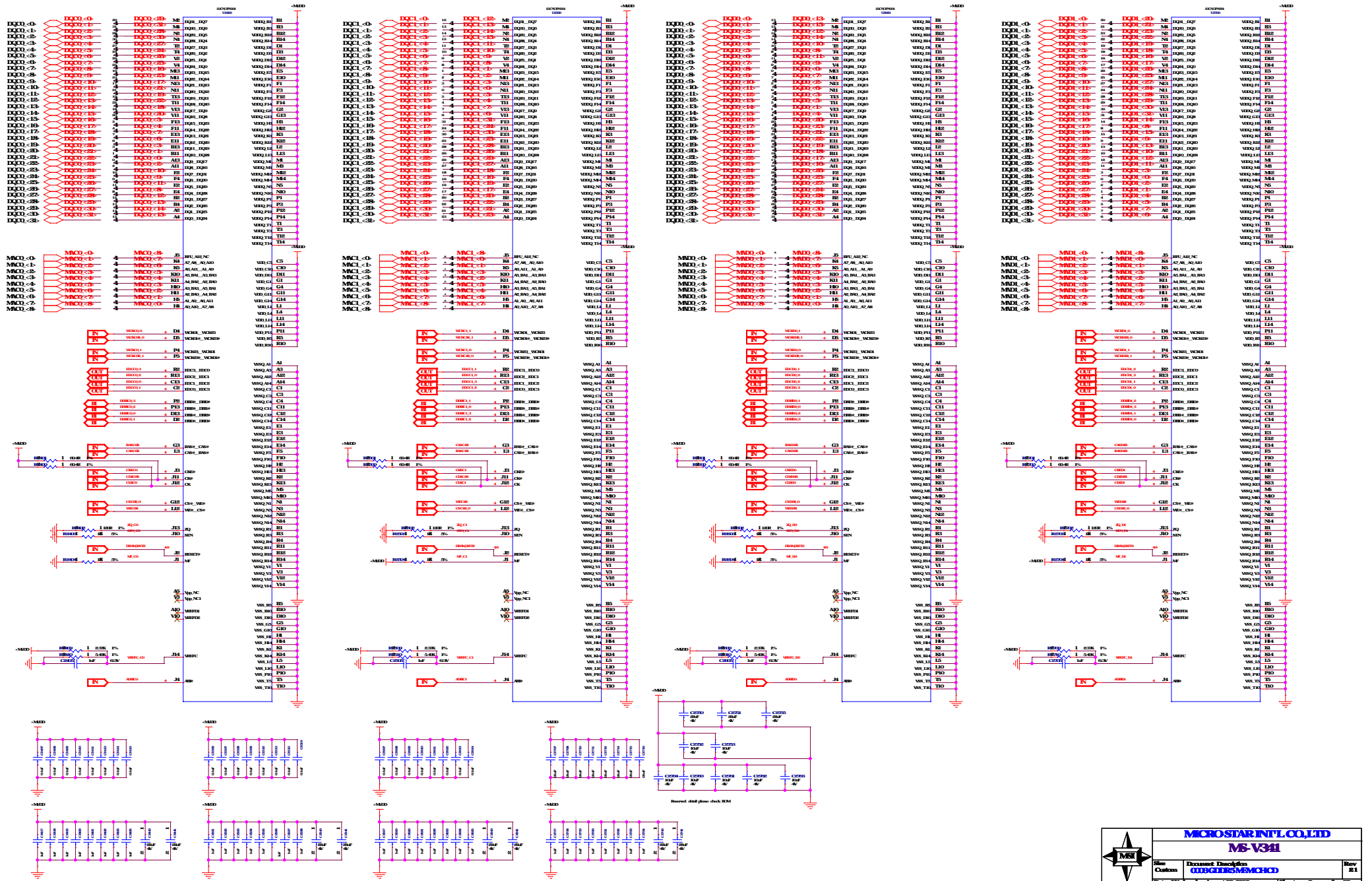




(5) GDDR5 MEMORY CHA/B



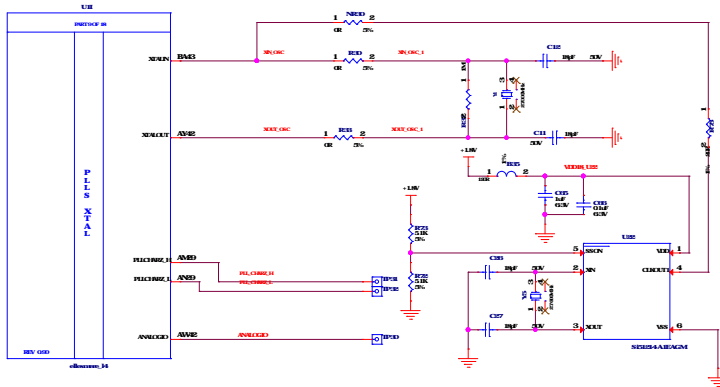
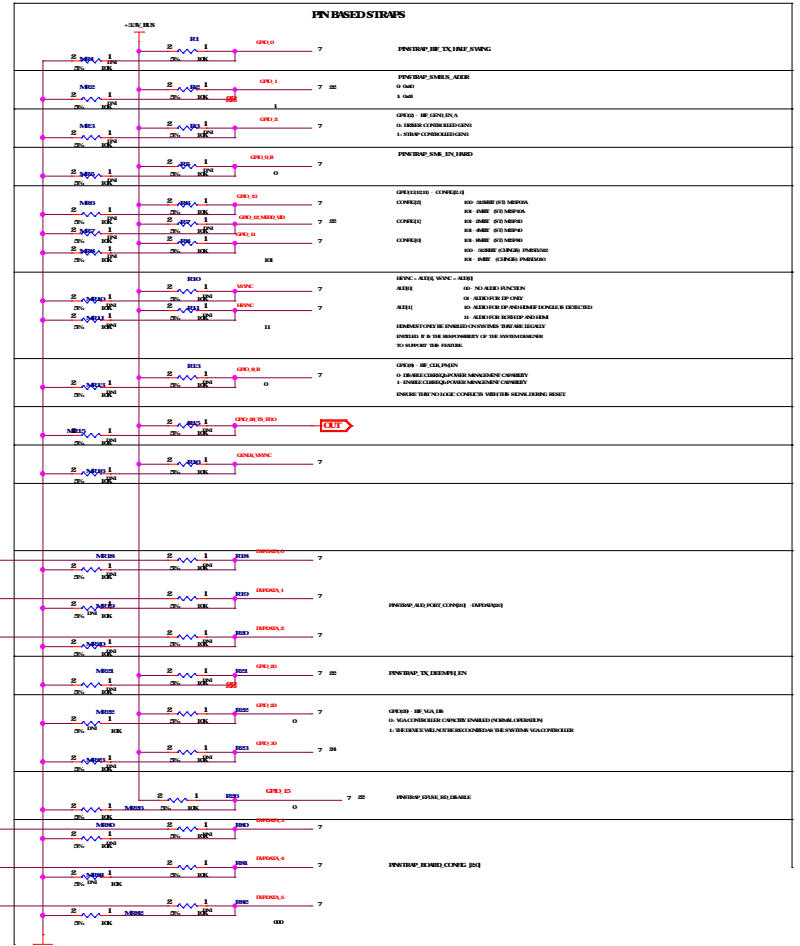
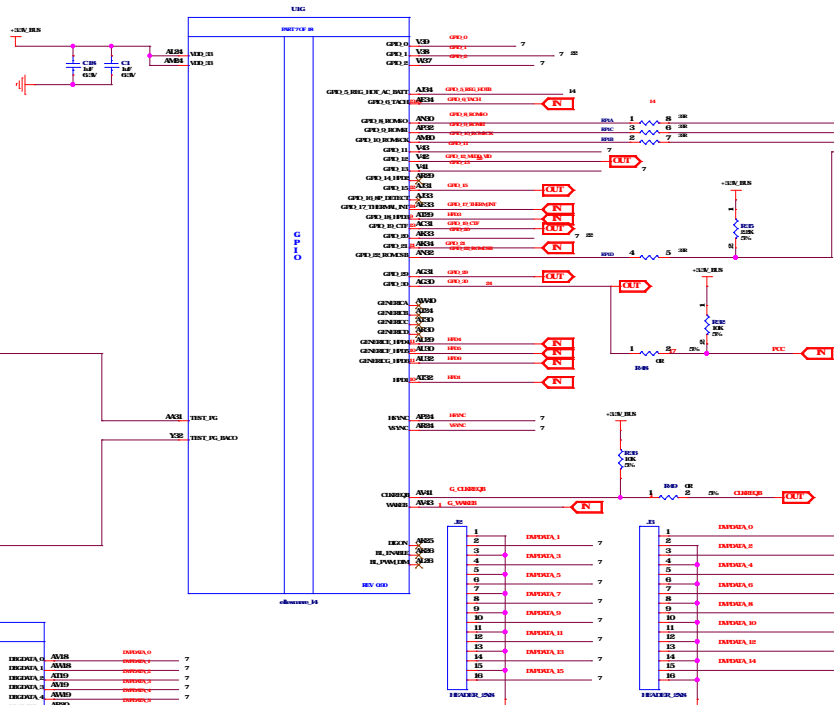
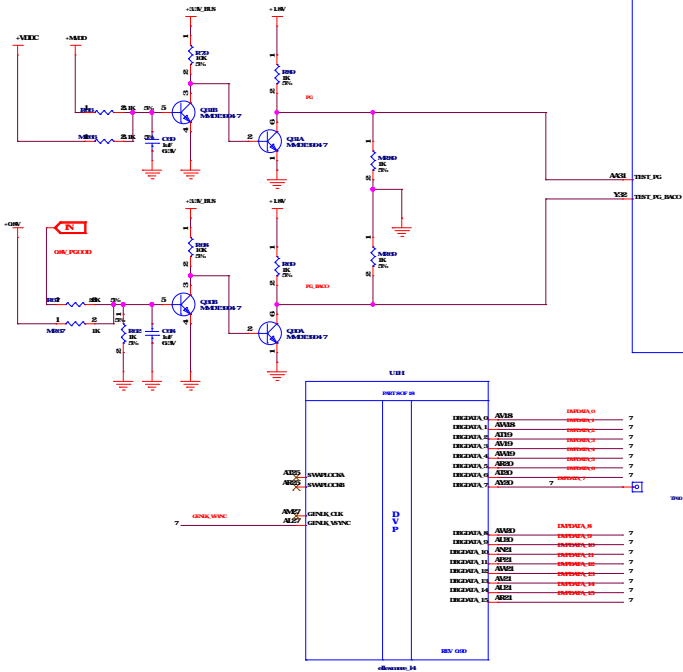
(6) GDDR5 MEMORY CHC/D

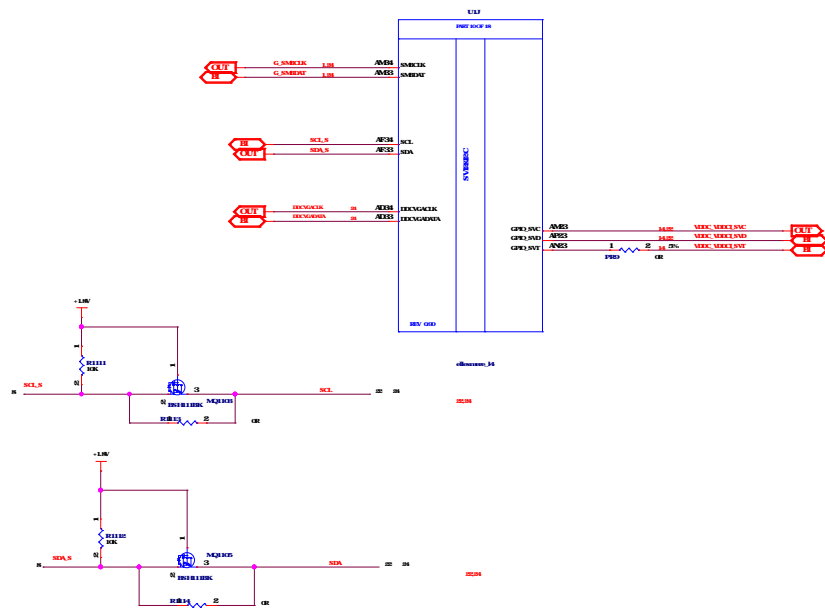


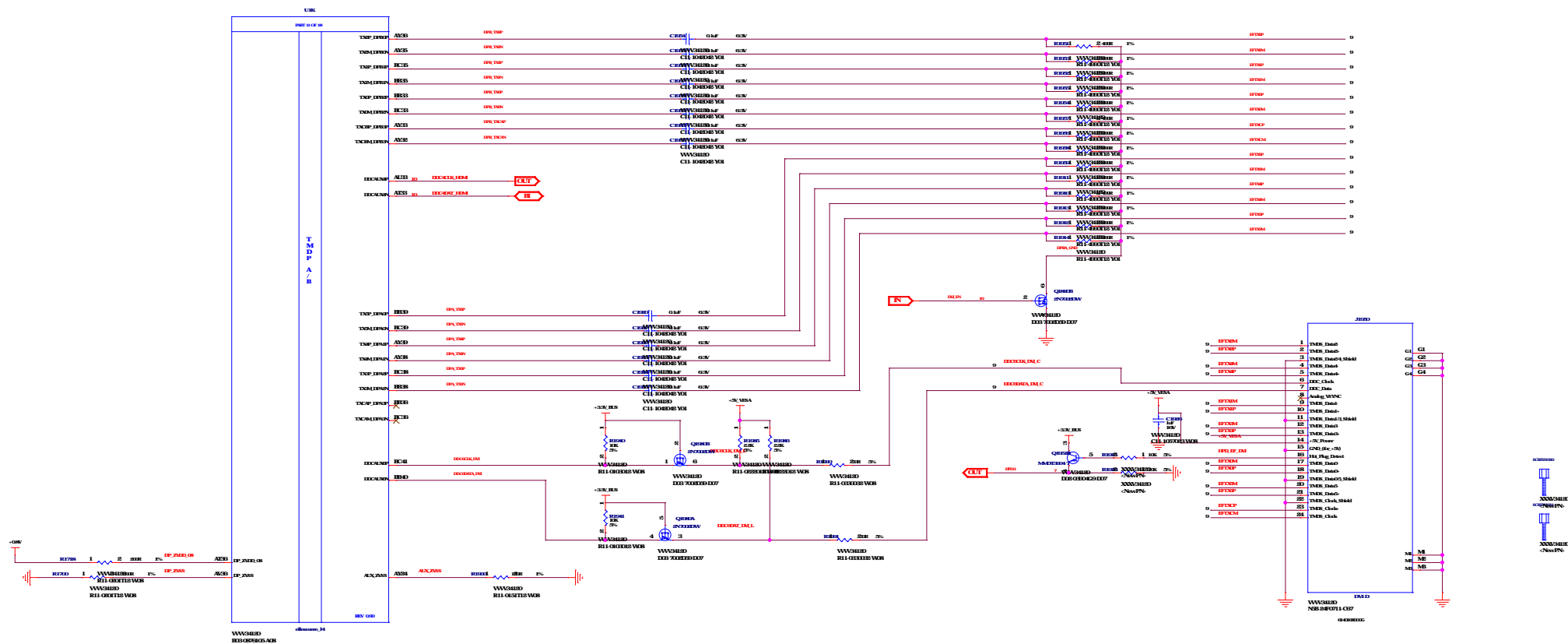
ELLESmere GPIO STRAP OF XIAL

REMARKS	FUNCTION	REMARK

REMARKS	FUNCTION	REMARK
QAR	EXT. TEMP. SENSING	UNTESTED

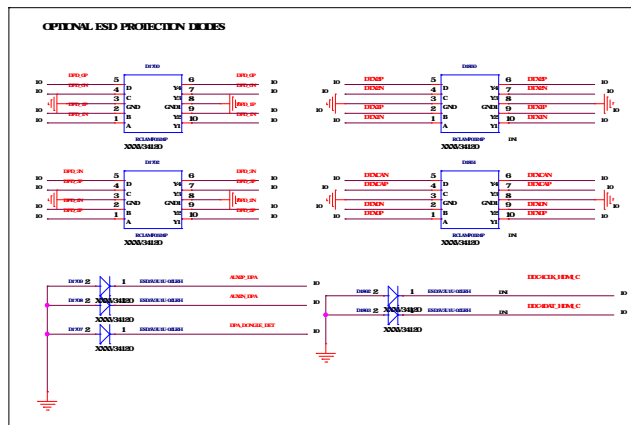
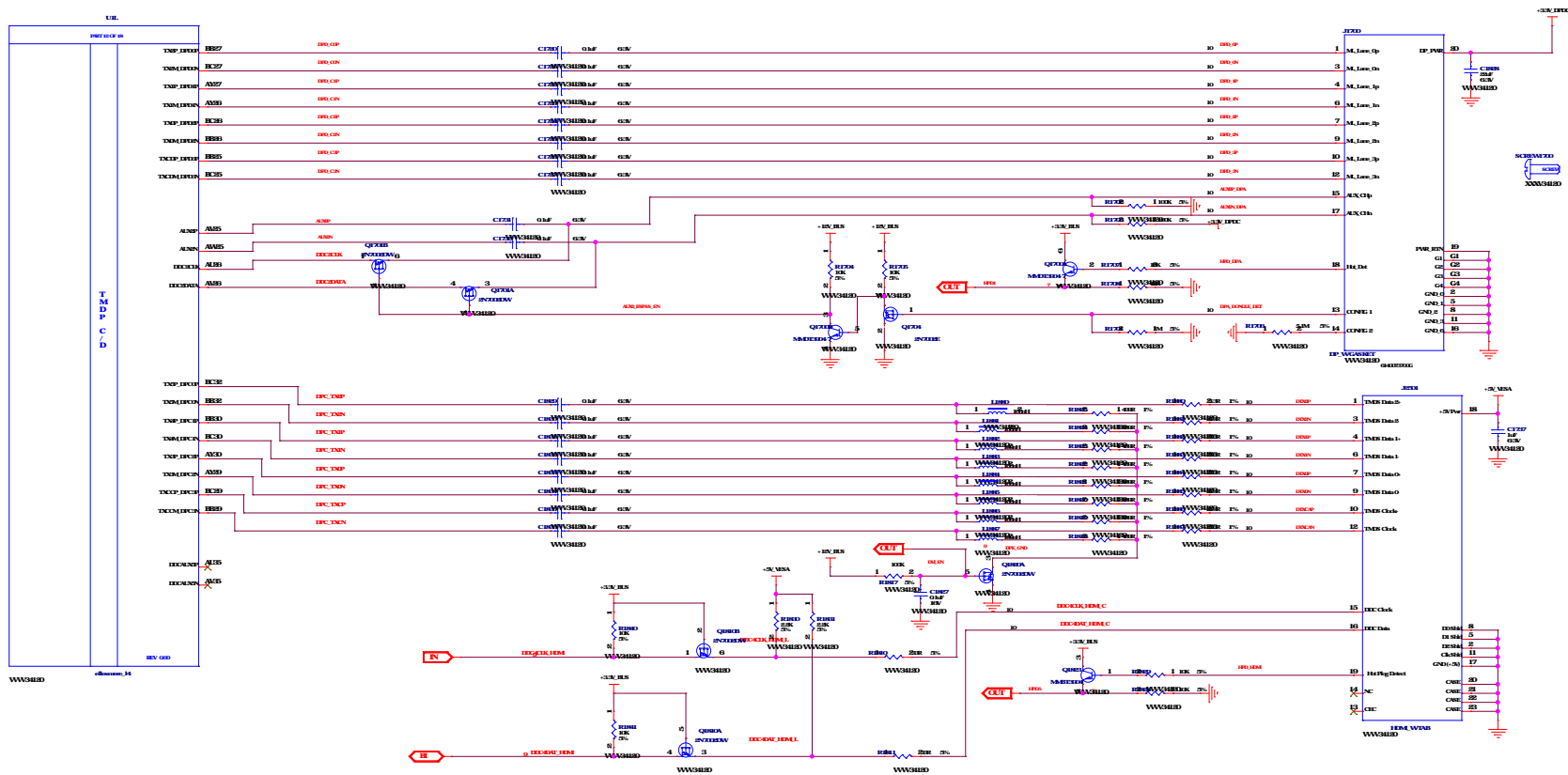




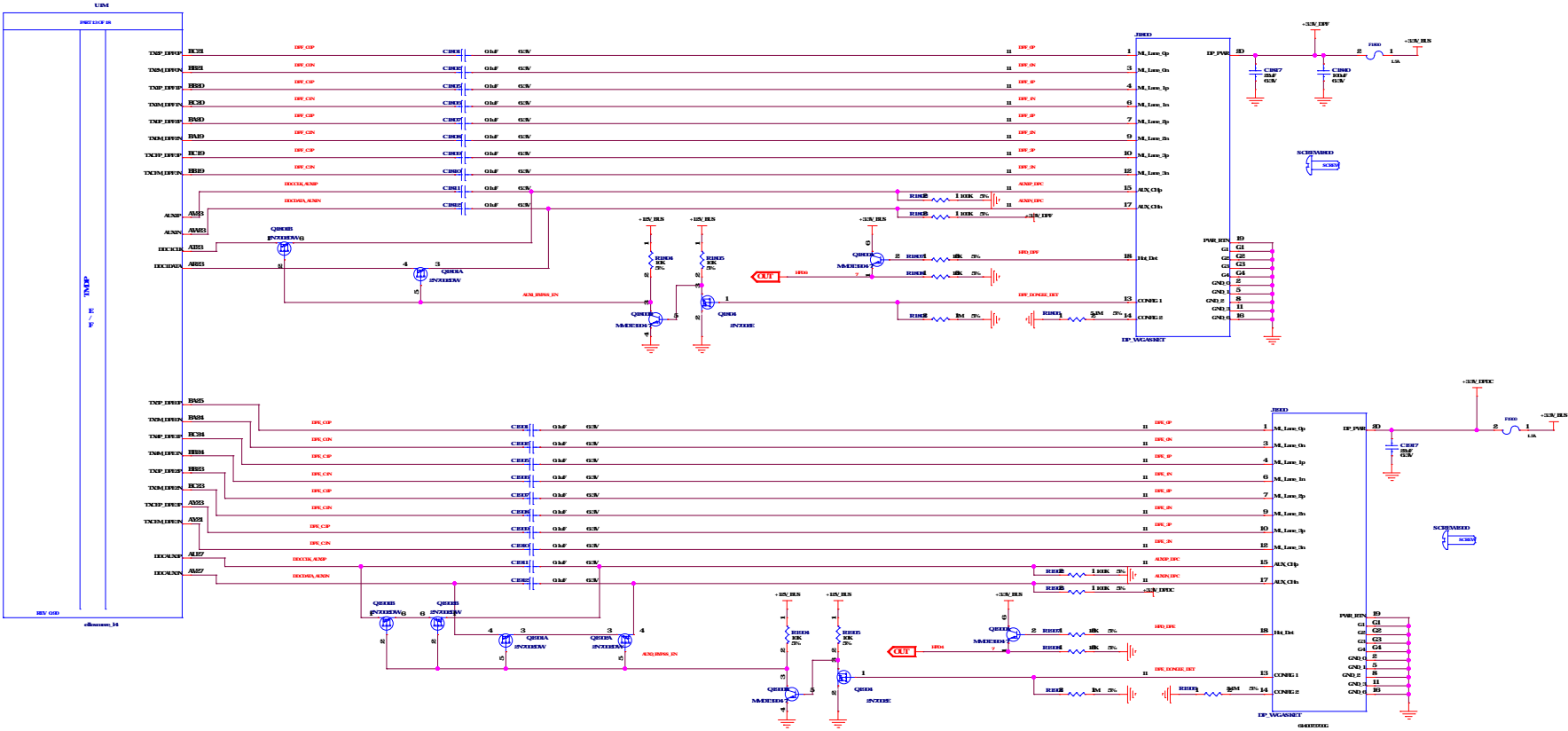


OPTIONAL ESD PROTECTION DIODES

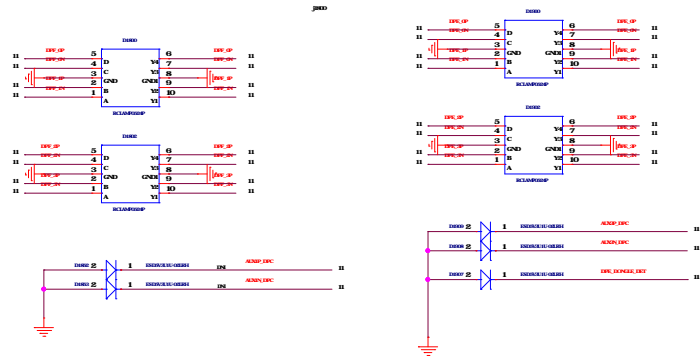


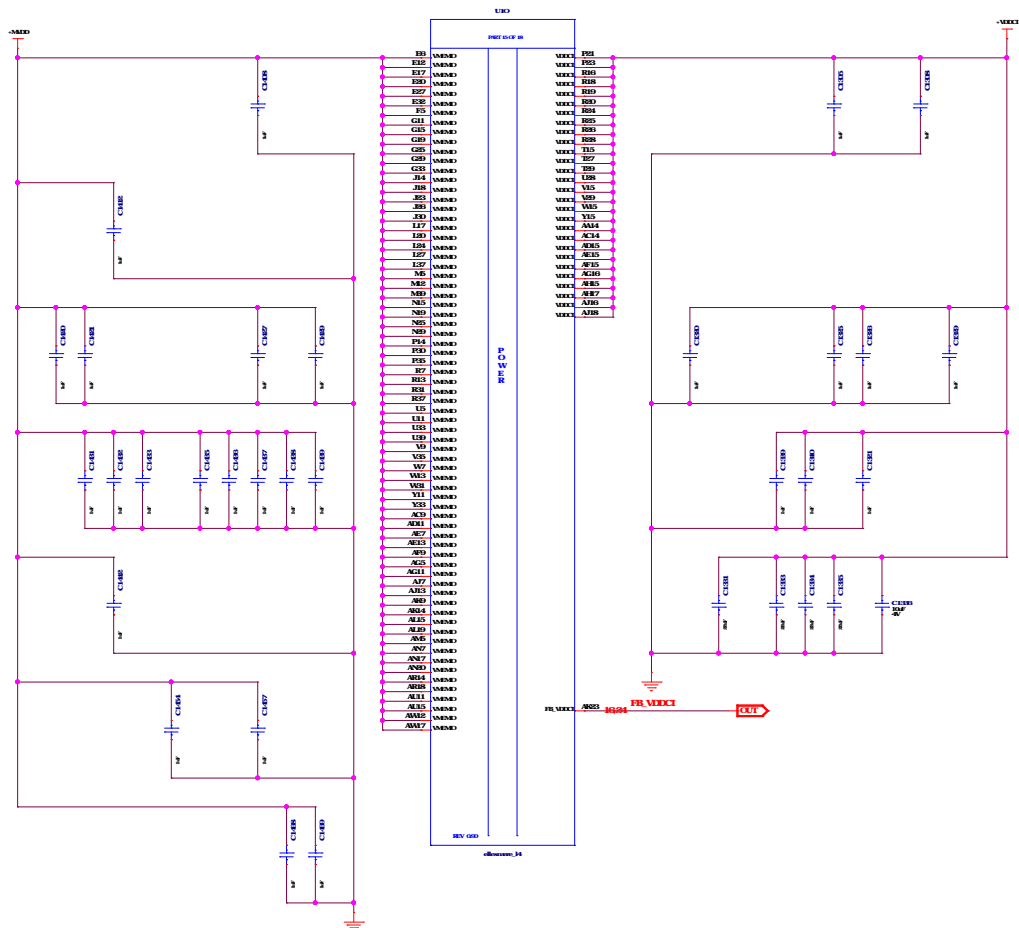


(11) ELLESME RE IVIMP EF

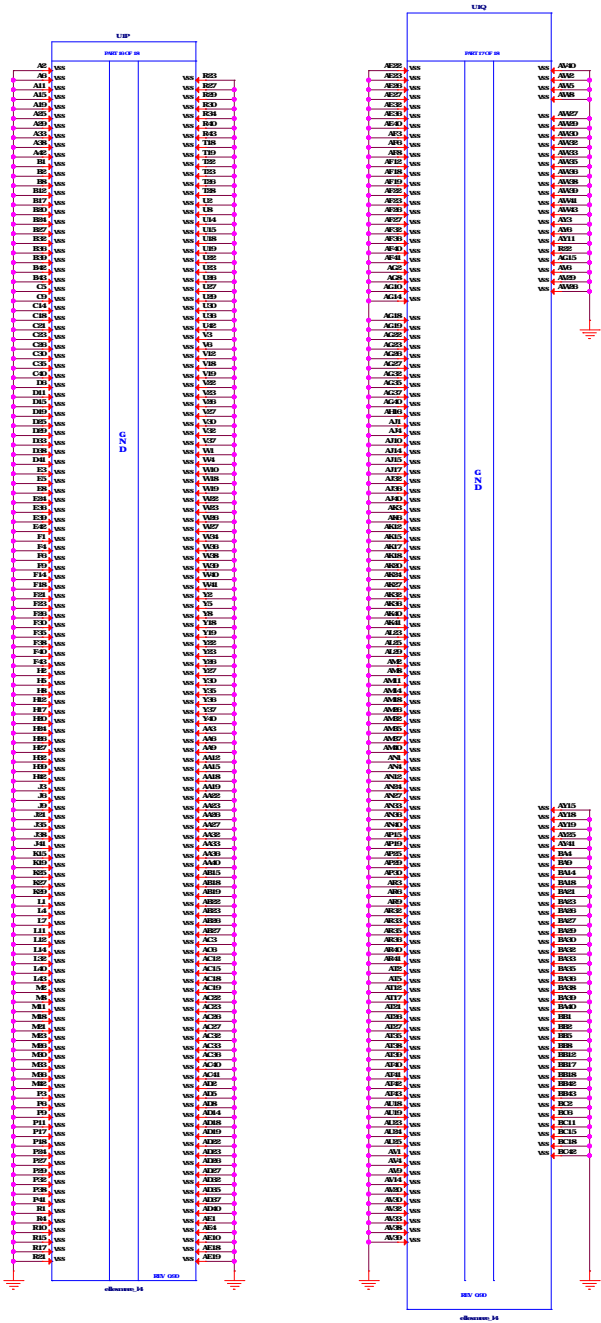


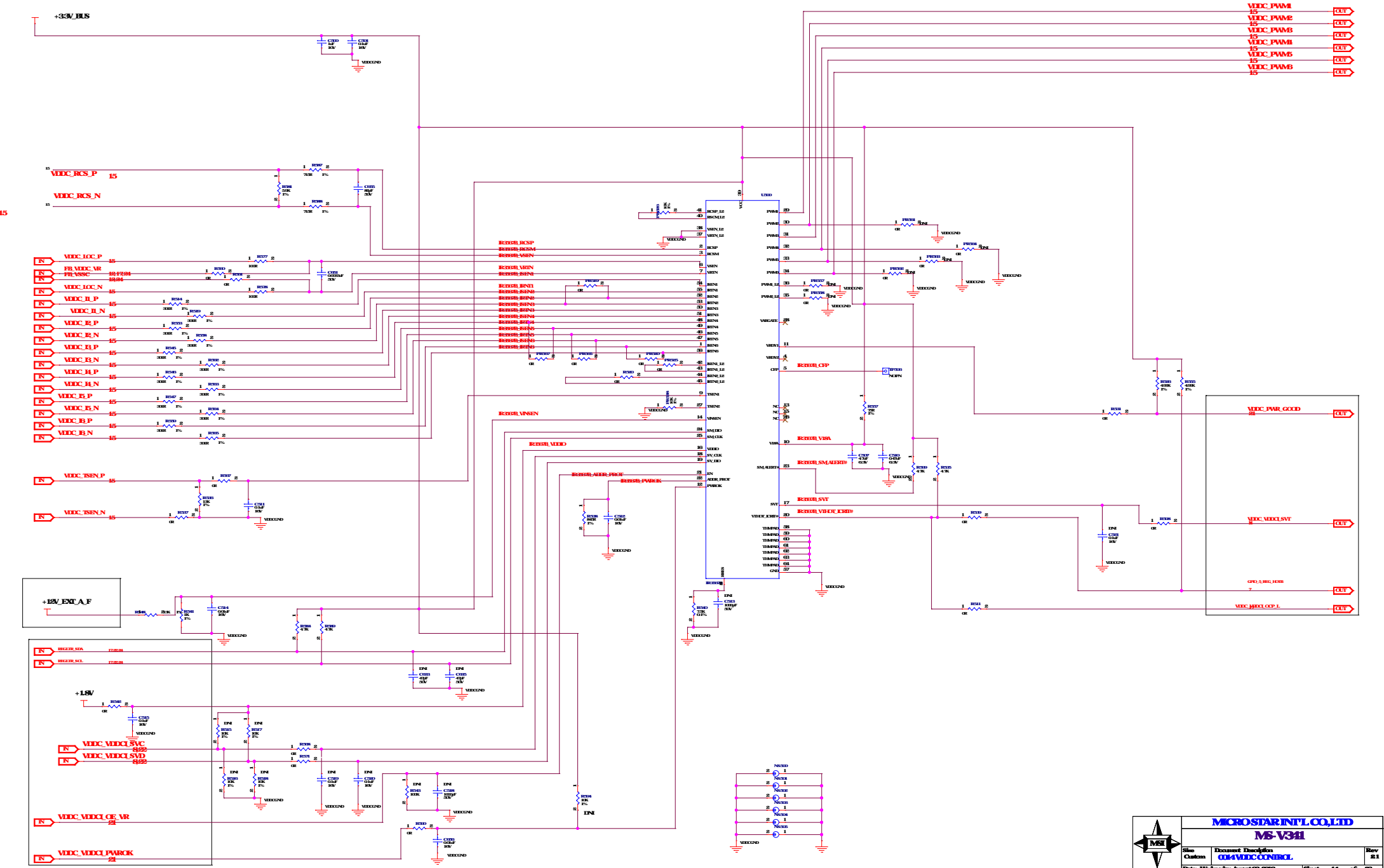
OPTIONAL ESD PROTECTION DIODES

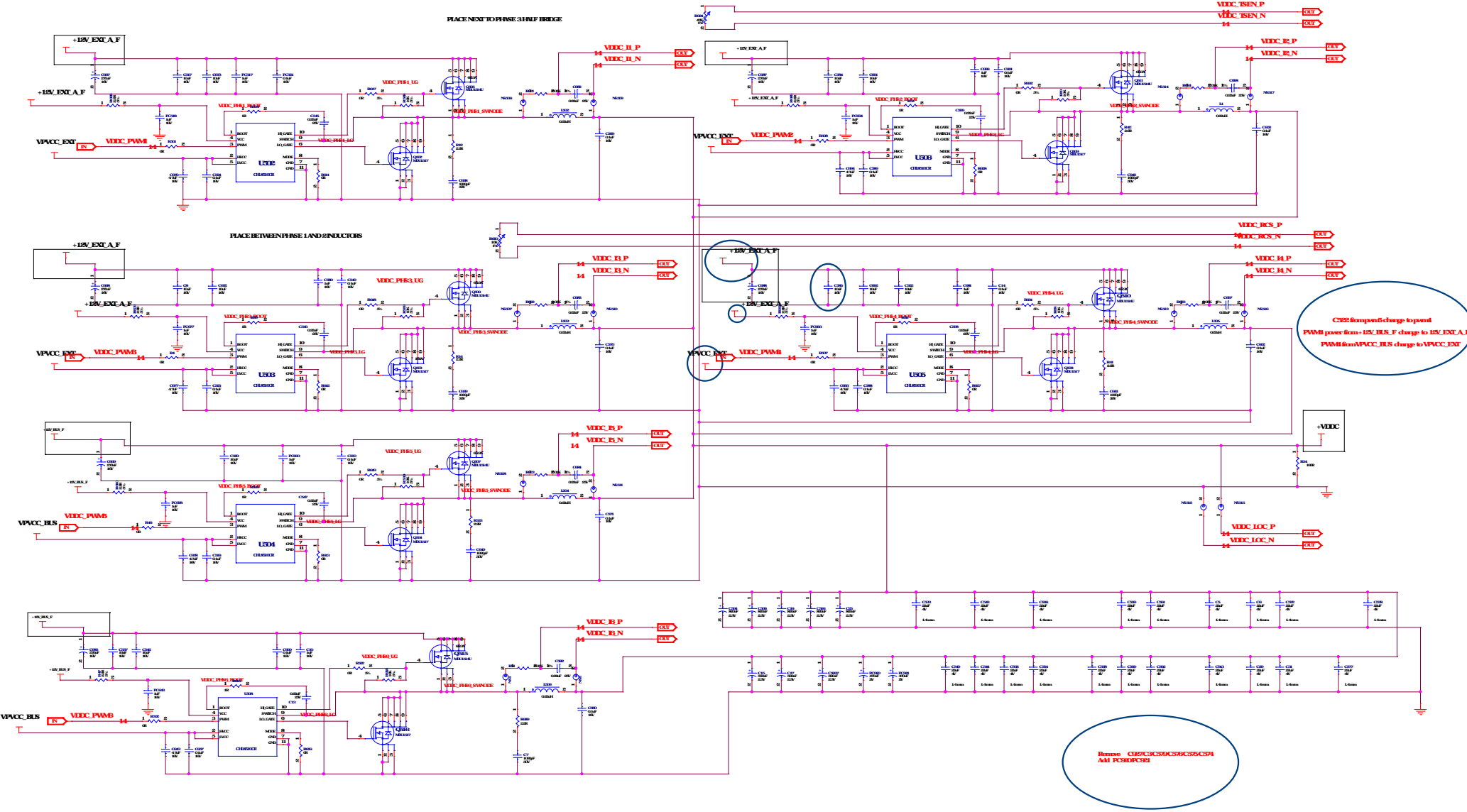


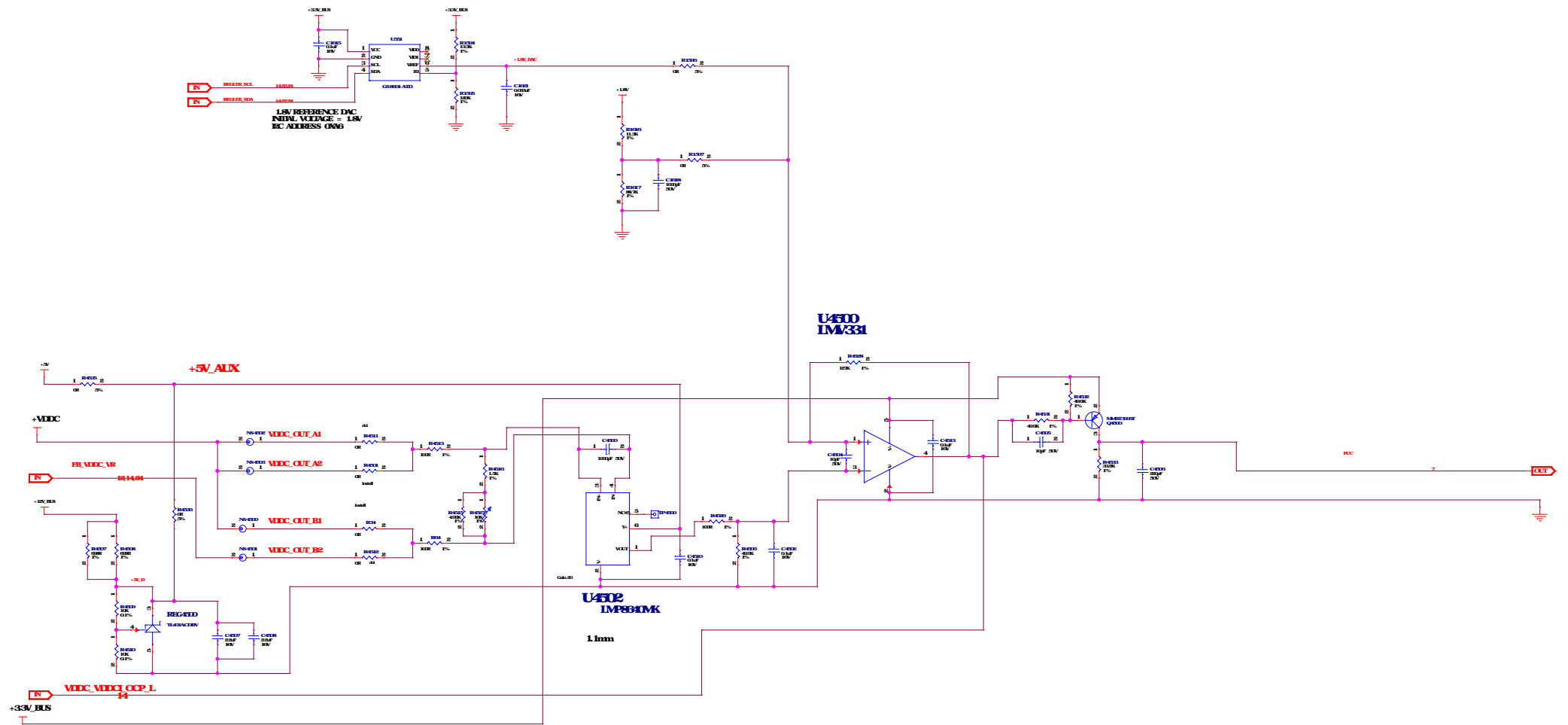


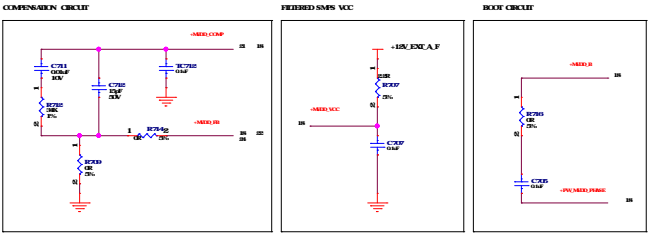
(13) EILSMERE GROUND



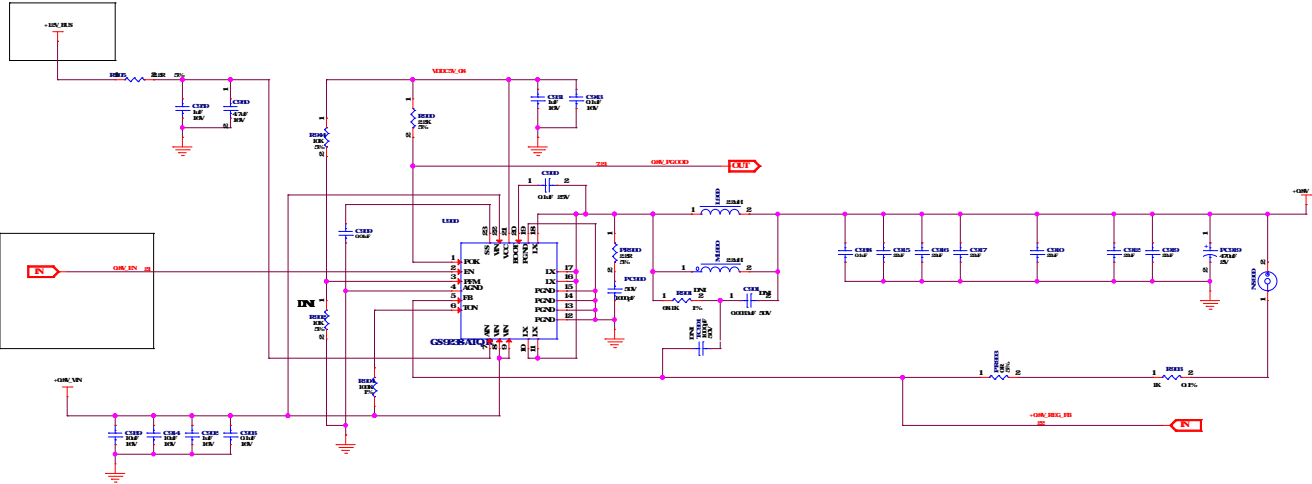








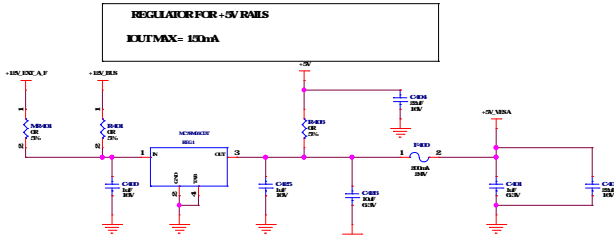
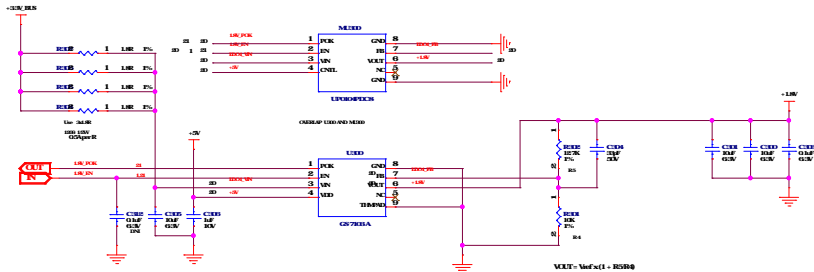
Size Custom	Document Description COIS.MDD	Rev 2
Date: Wednesday, August 13, 2003		Sheet 15 of 23



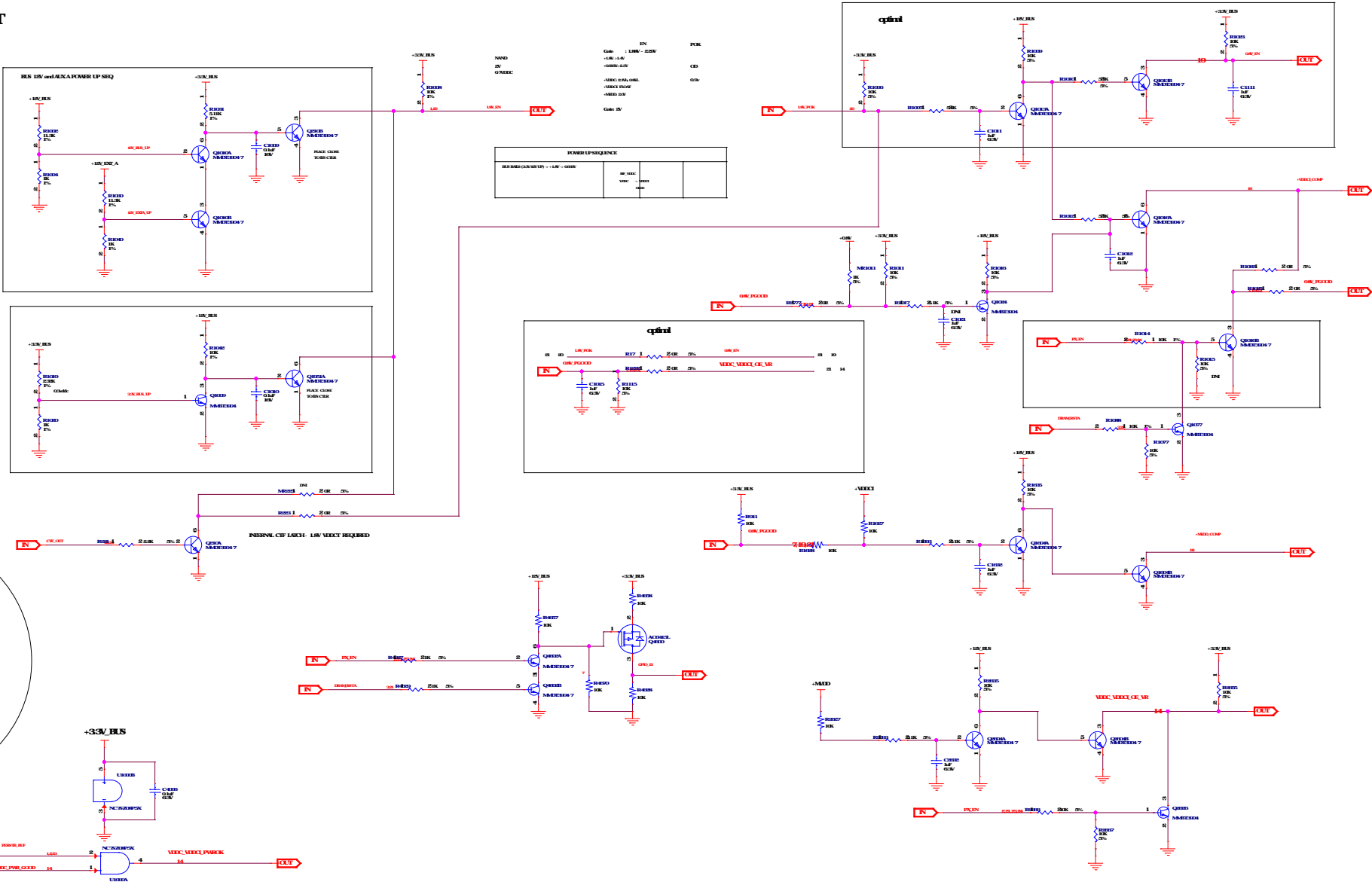
MICROSTAR INT'L CO., LTD			
MS-V341			
Rev	Docu	Docu	Rev
00908/REG	00908/REG	00908/REG	00908/REG
Date: Microstar August 08, 2008		Sheet 30 of 31	

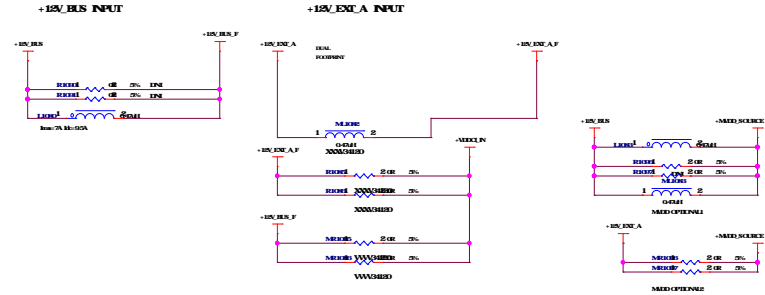
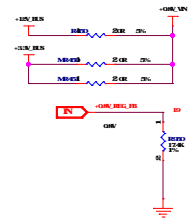
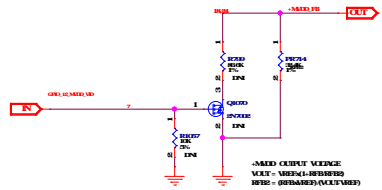
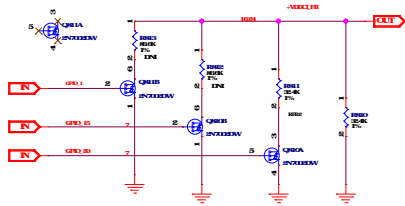
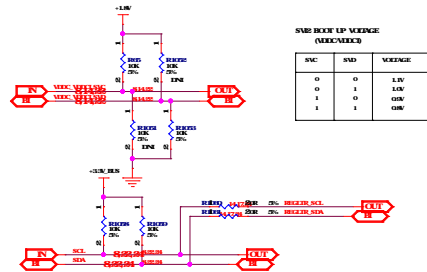
(18) SMALL RAIL REGULATORS

IDO #: **VIN = 30V TO 36V/MAX** **VOUT = +1.8V /+/- 2%** **IOUT = 1.3ARMS MAX**
PCB 50 TO 70mmSQ COPPER AREA FOR COOLING

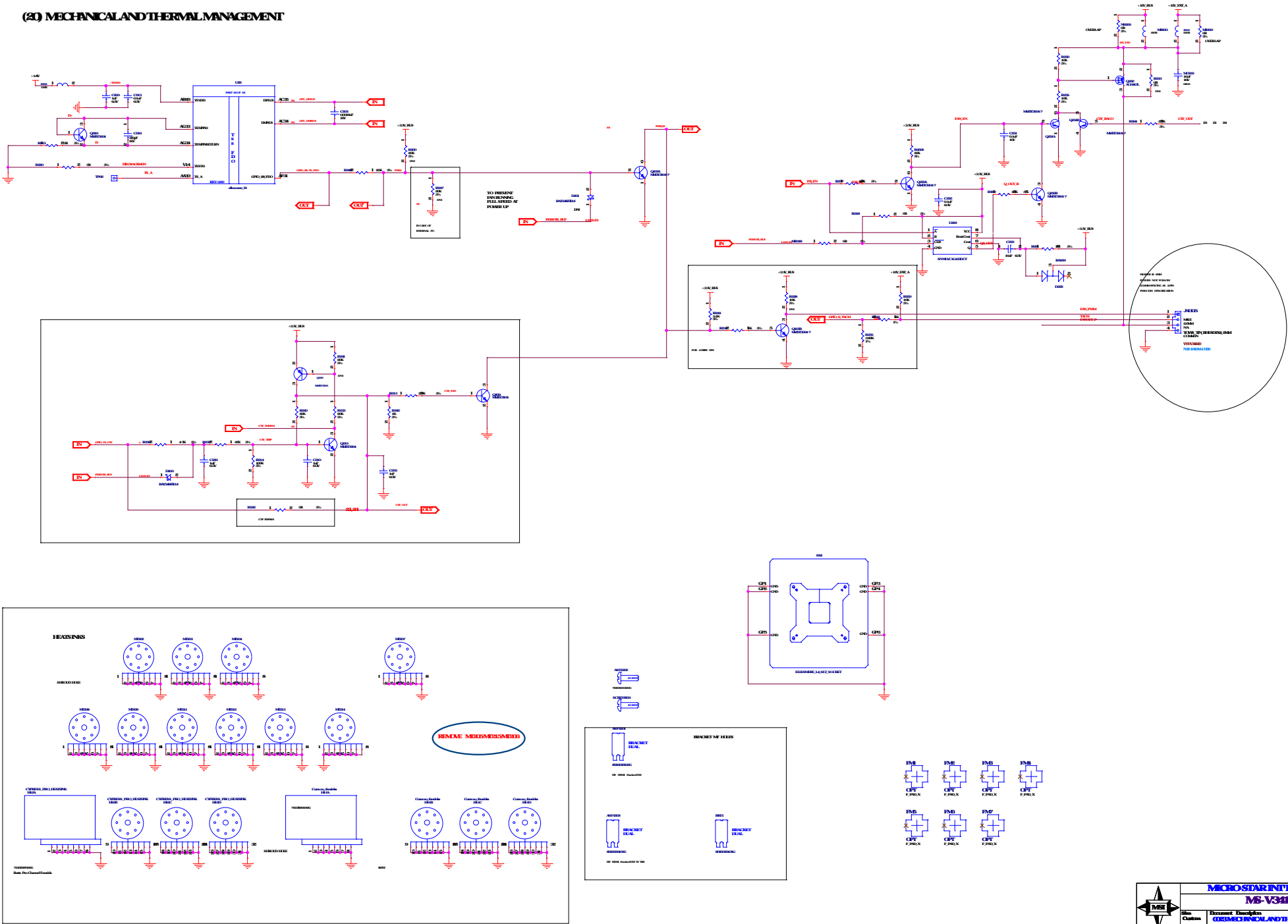


(19) POWER MANAGEMENT

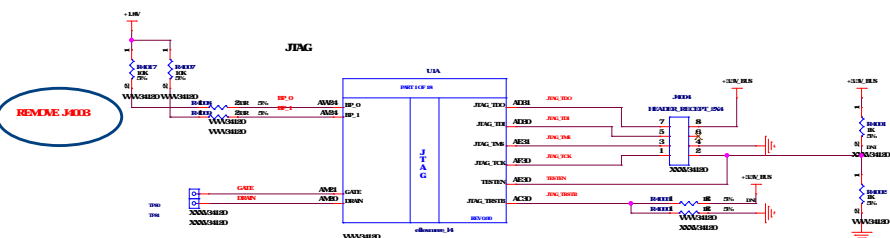




(2) MECHANICAL AND THERMAL MANAGEMENT



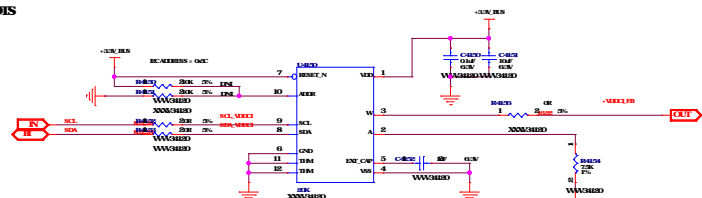
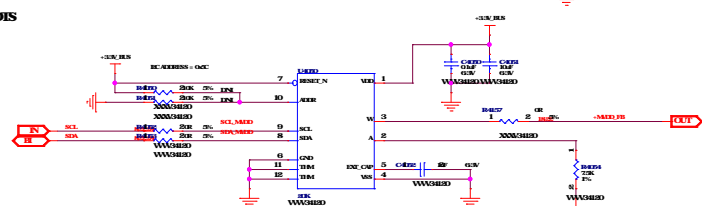
(21) DEBUG CIRCUITS



REMOVE

E-FUSE CAPABILITY
DEFAULT = GPIO-CONTROLLED
(MANUAL OPTION AS BACKUP)

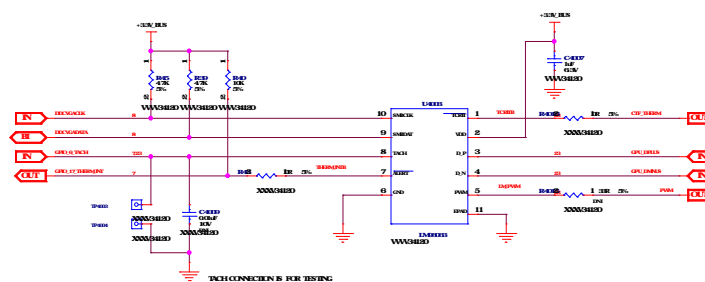
DIGITAL POIS

**DIGITAL POIS**

SWITCHES



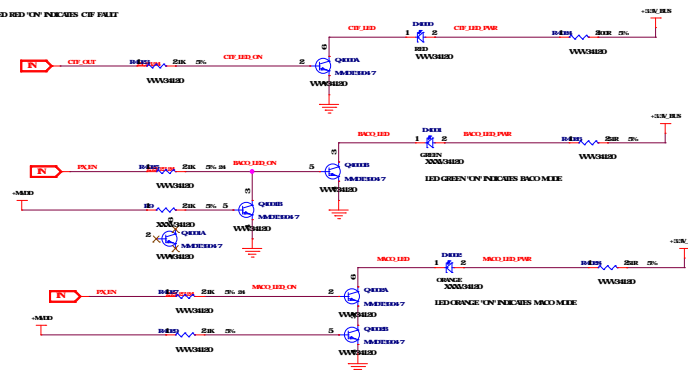
LMD6163 FOR BACKUP THERMAL CONTROL.



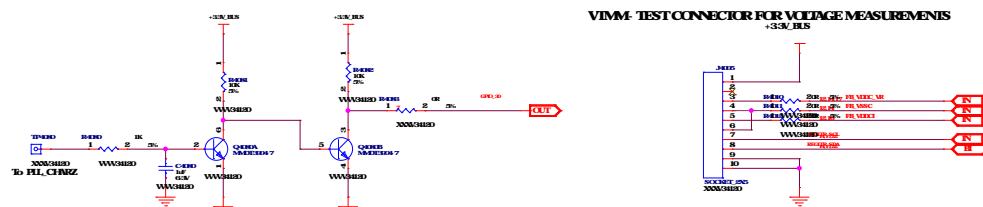
TACH CONNECTION IS FOR TESTING

LED LIGHTS

LED RED 'ON' INDICATES CTE ENIT



VIMM- TEST CONNECTOR FOR VOLTAGE MEASUREMENTS



MICROSTAR INTL.CO.LTD

MS-V341

Size	Document Description
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Custom	CODEBUG CIRCUITS/E-FUSE
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	Box
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21

- 23** EXT 6PIN change to 8 pin
REMOVE MI205/MI215/MI206
- 26** 1*4
- 15** C522 from pwn5 change to pwn4
PWM4 power from +12V_BUS_F change to 12V_EXT_A_F
PWM4 from VPCC_BUS change to VPCC_EXT
Remove C927/ C3/ C579/ C576/ C575/ C574
Add PC920/PC921
- 24** REMOVE J4003
REMOVE E-FUSE CAPABILITY