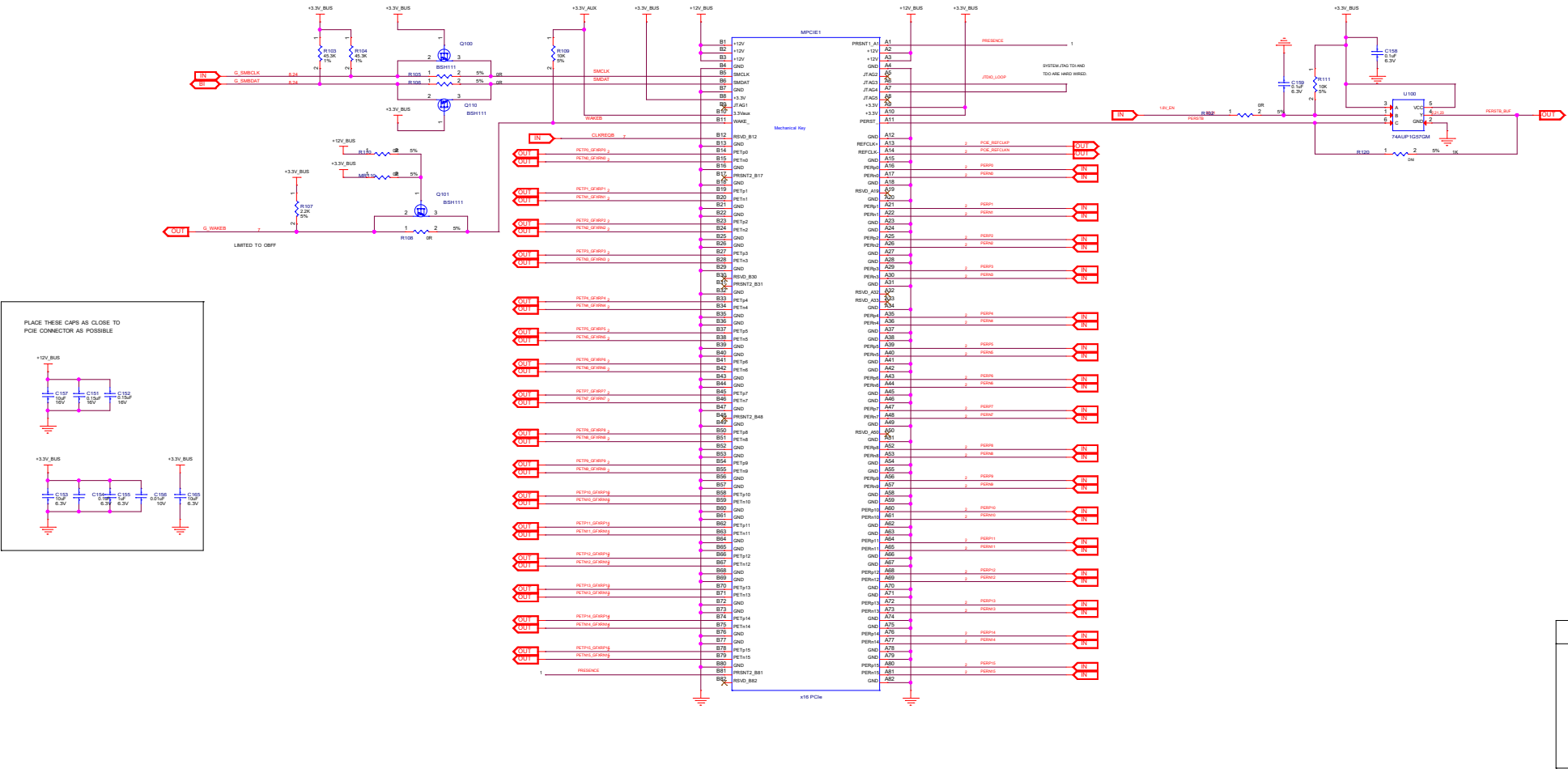
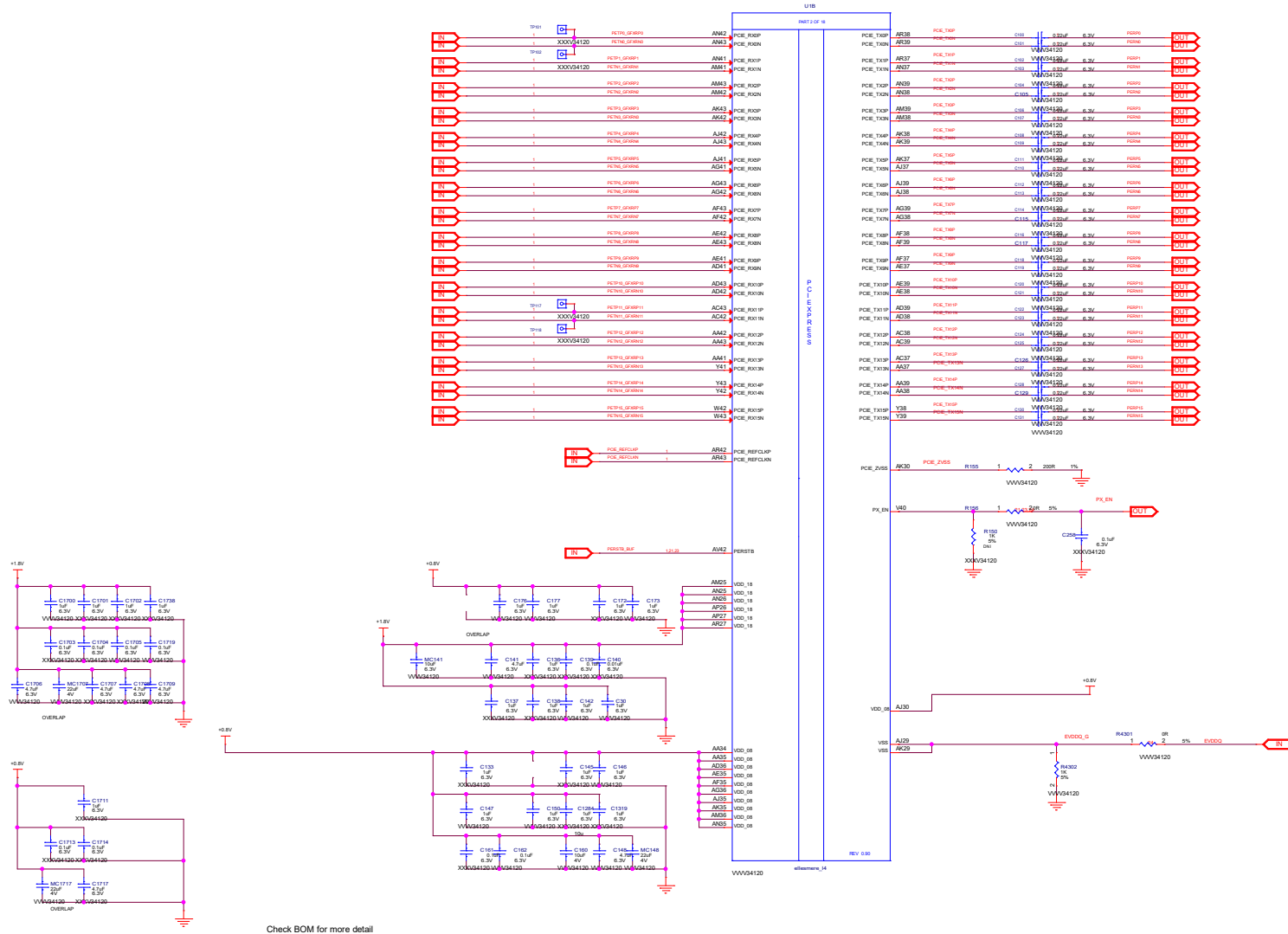


(1) PCI-EXPRESS EDGE CONNECTOR

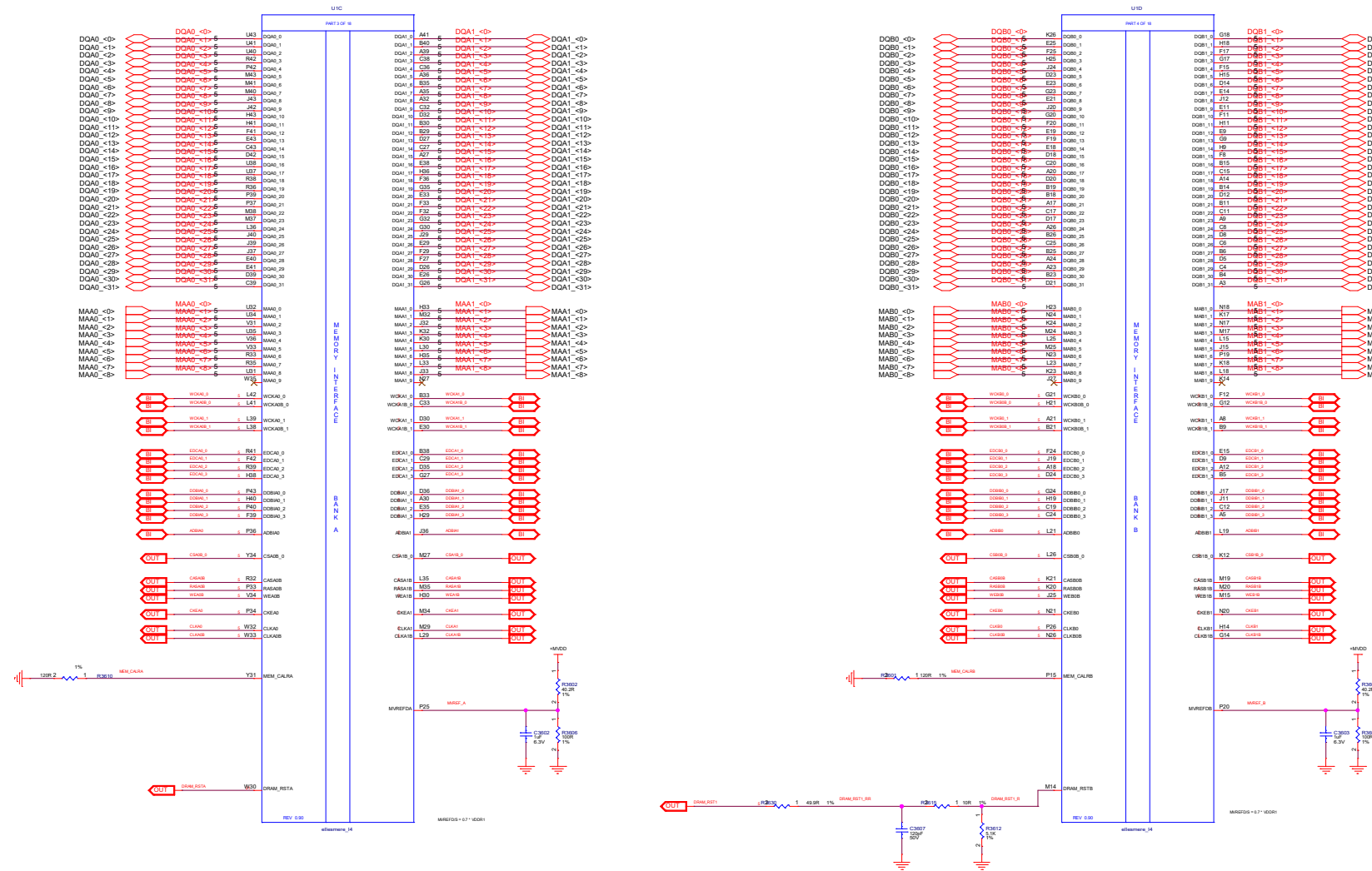


(2) ELLESMERE PCIE INTERFACE



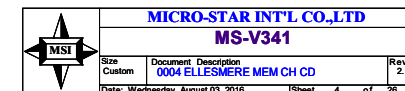
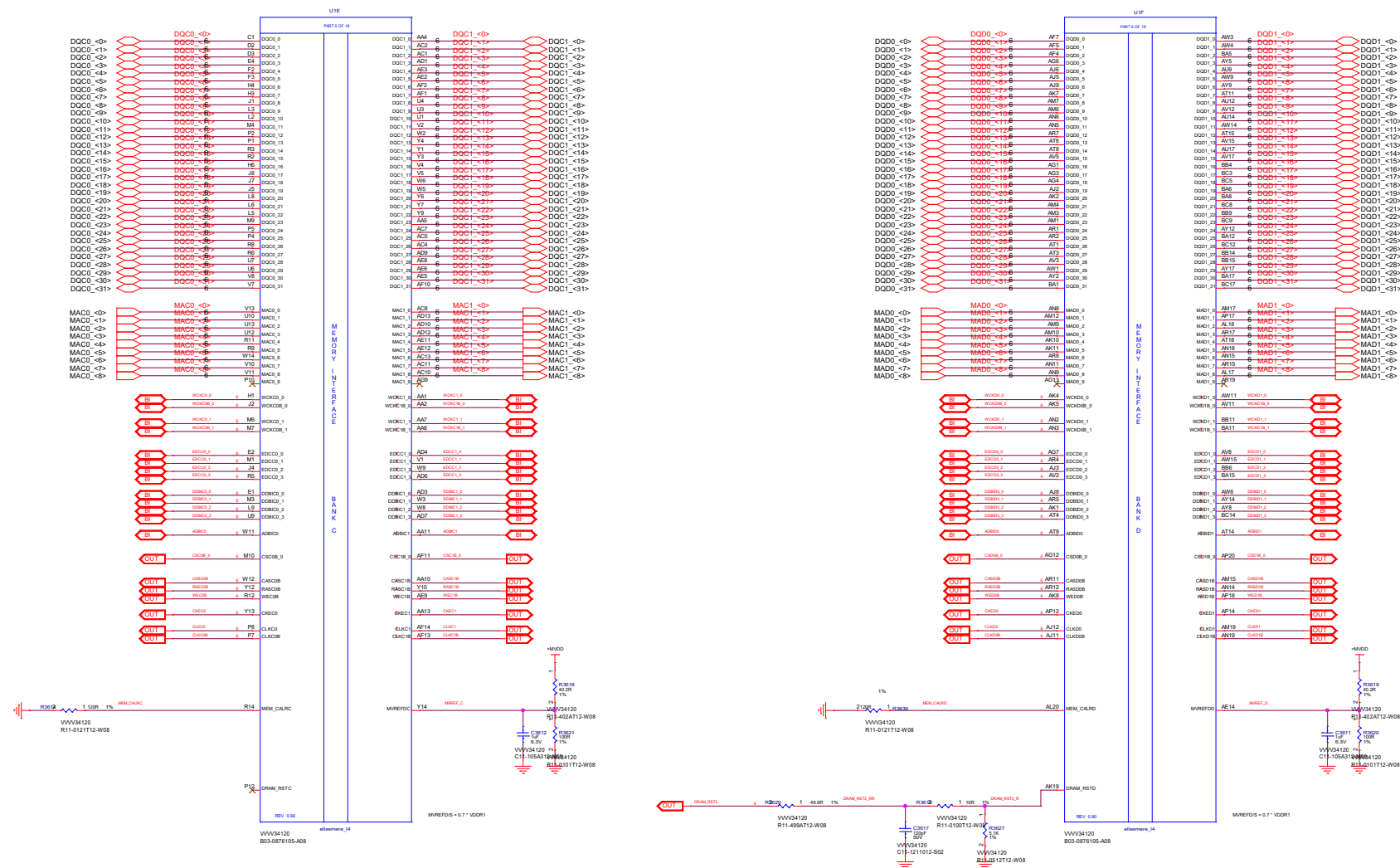
	MICRO-STAR INT'L CO.,LTD MS-V341		
	Size	Document Description	Rev.
	Custom	0002 ELLESIMERE PCIE INTERFACE	2.1
Date: Wednesday, August 02, 2016		Sheet 2 of 2	

(3) ELLESMERE MEM INTERFACE CH A/B

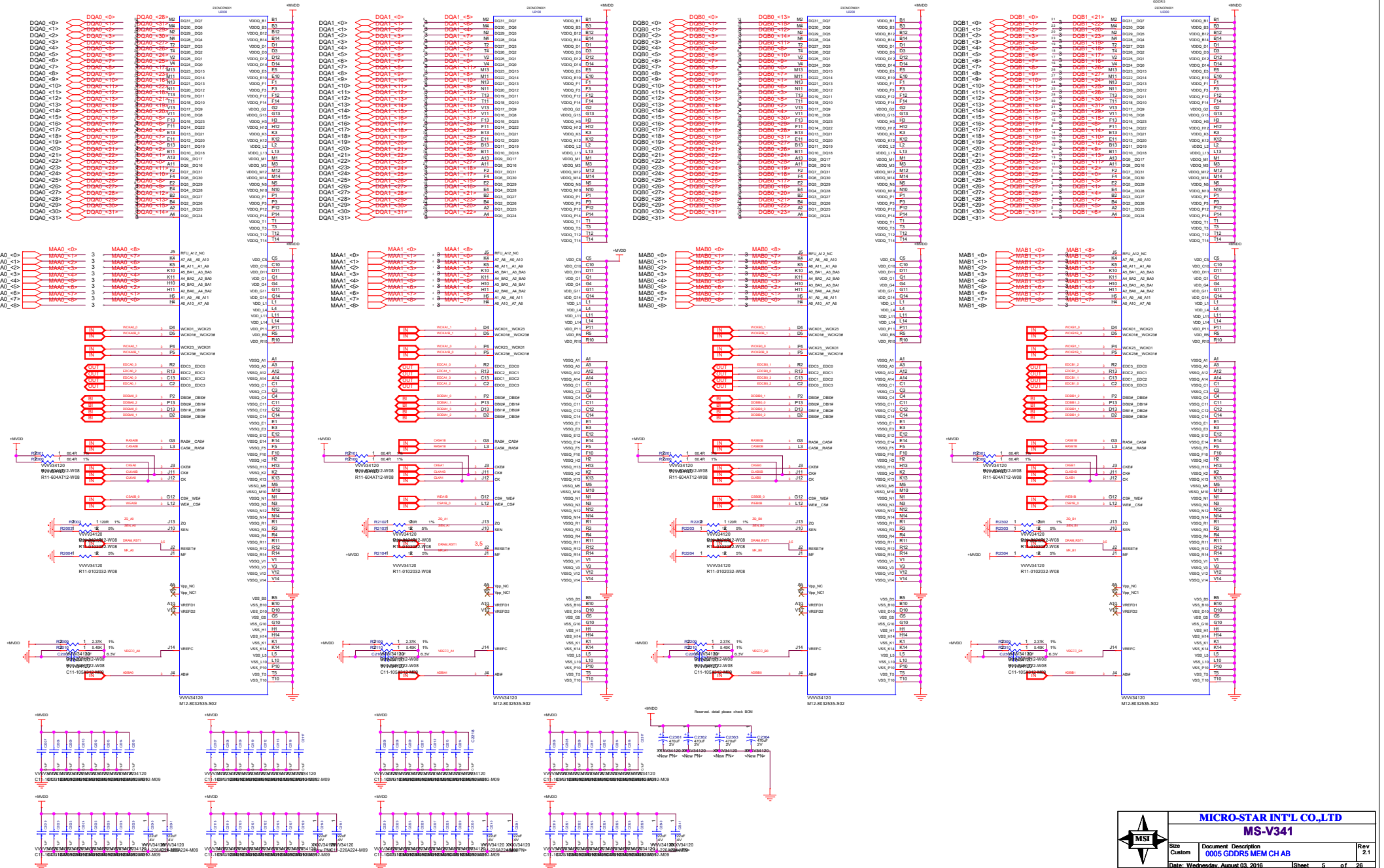


	MICRO-STAR INT'L CO.,LTD		
	MS-V341		
	Size	Document Description	Rev
	Custom	0003 ELLESMERE MEM CH AB	2.1
Date: Wednesday, August 03, 2016			Sheet 3 of 26

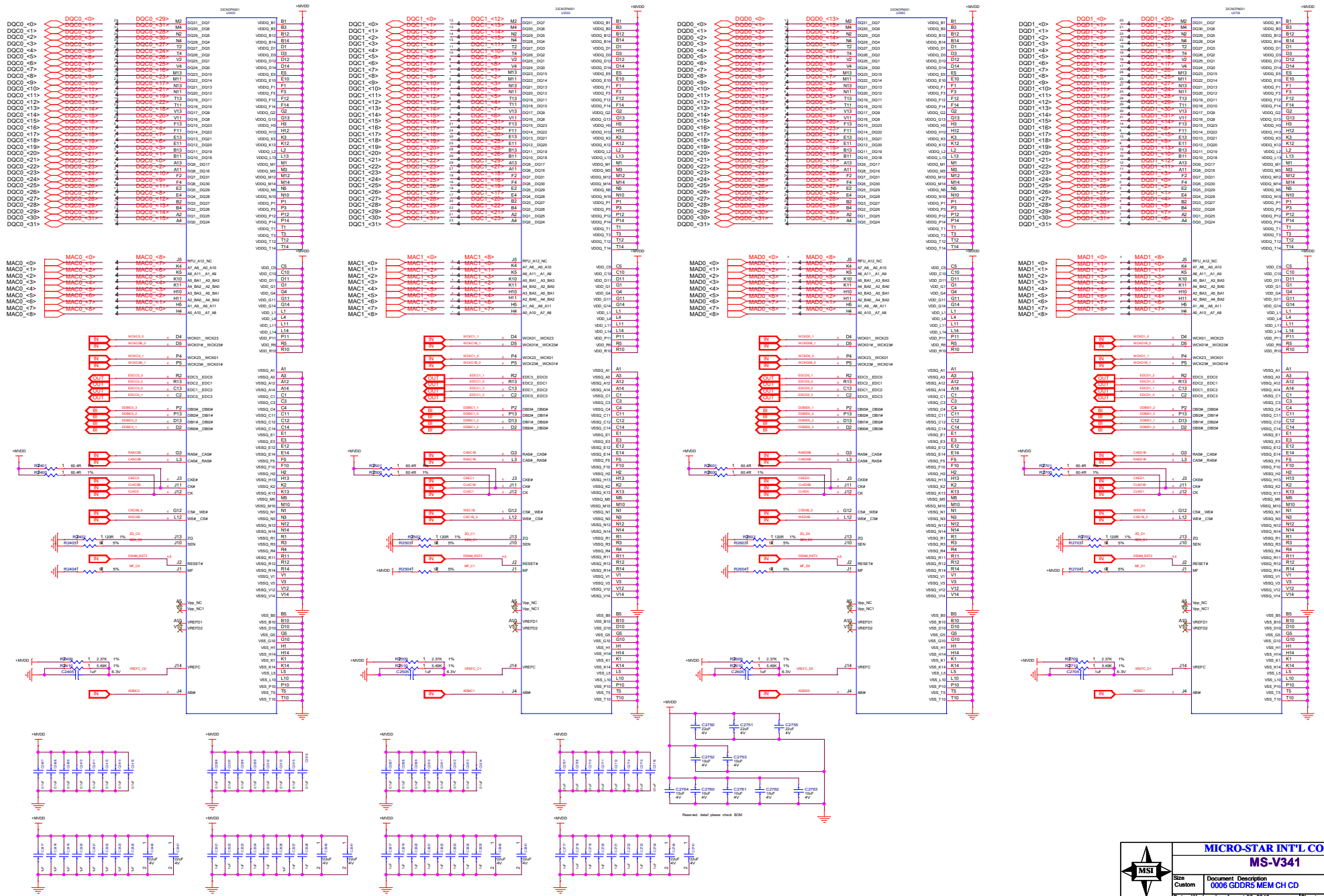
(4) ELLESMERE MEM INTERFACE CH C/D



(5) GDDR5 MEMORY CH A/B



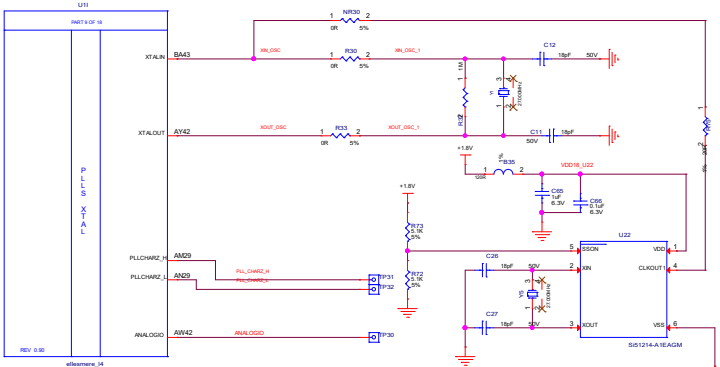
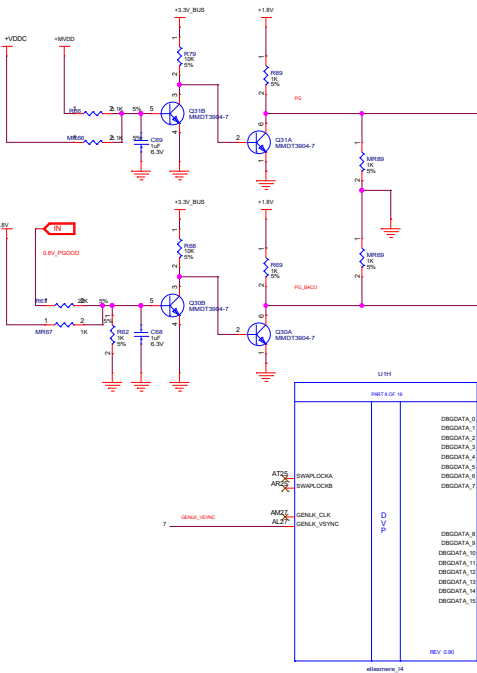
(6) GDDR5 MEMORY CH C/D



(7) ELLESMERE GPIO STRAP CF XTAL

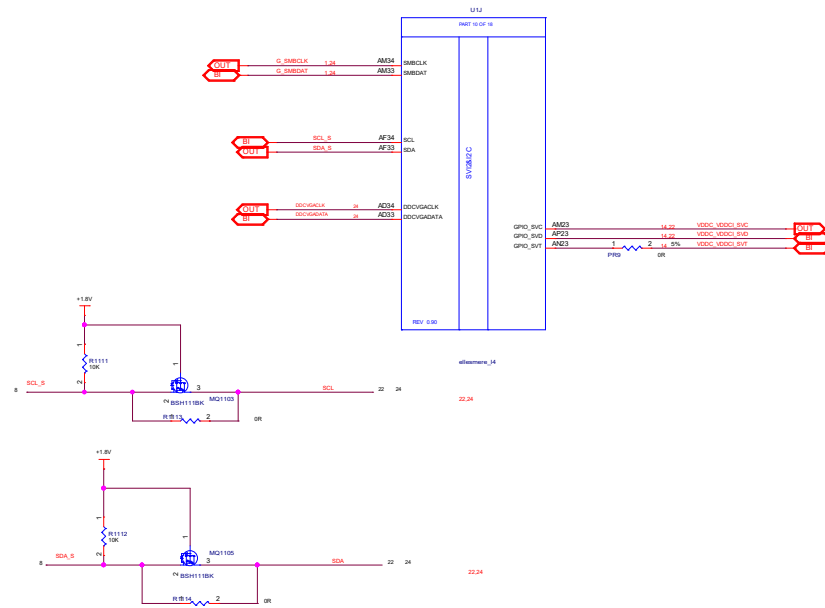
I2C ADDRESS			FUNCTION	DEVICE

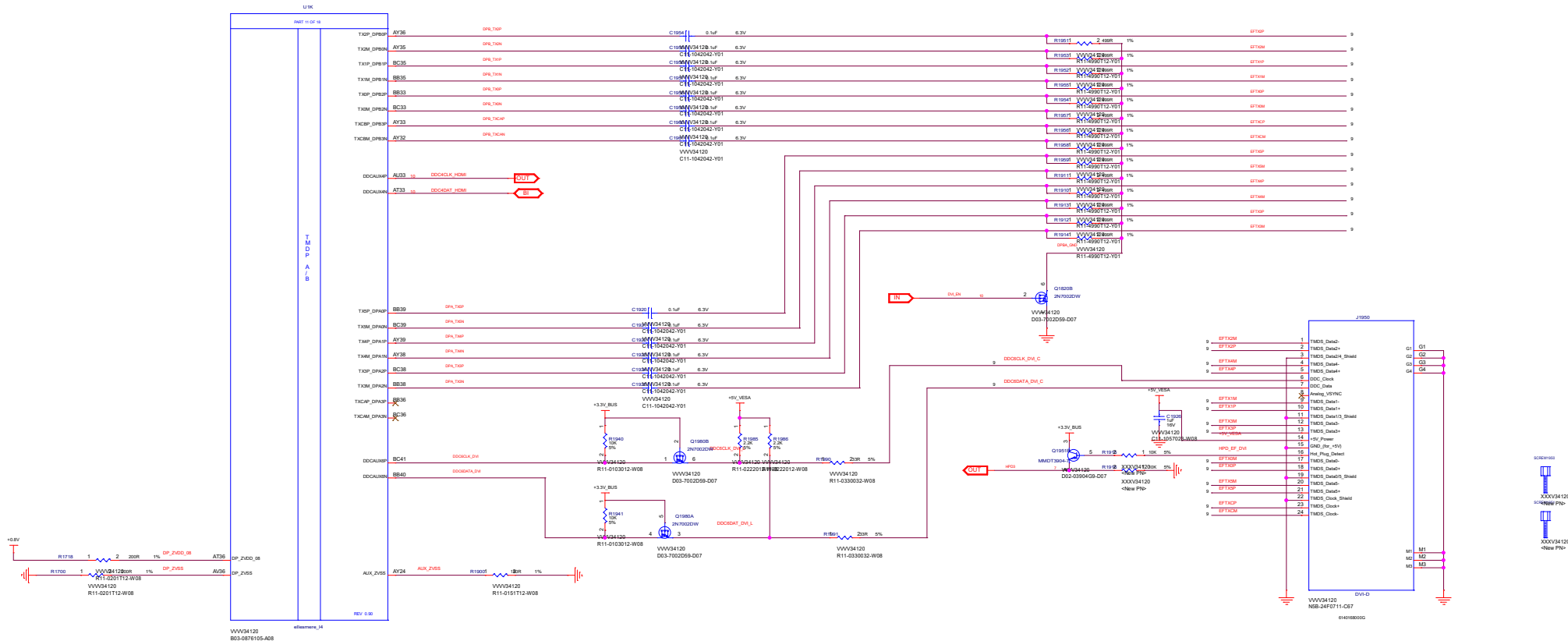
I2C ADDRESS			FUNCTION	DEVICE
0x48			EXT TEMP SENSOR	LM93C83



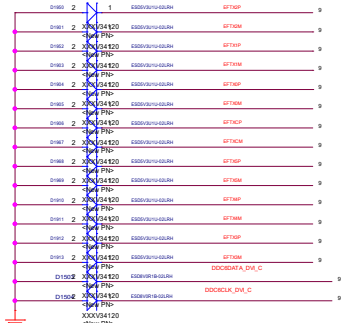
MICRO-STAR INT'L CO., LTD			MS-V341
Size	Document	Description	Rev
Custom	0007	ELLESMERE GPIO STRAP CF XT	2.1
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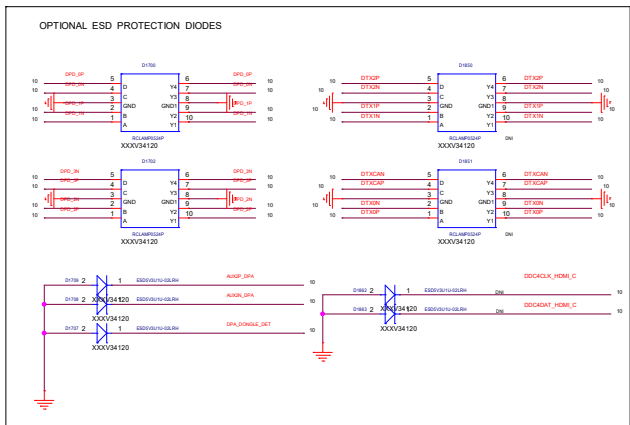
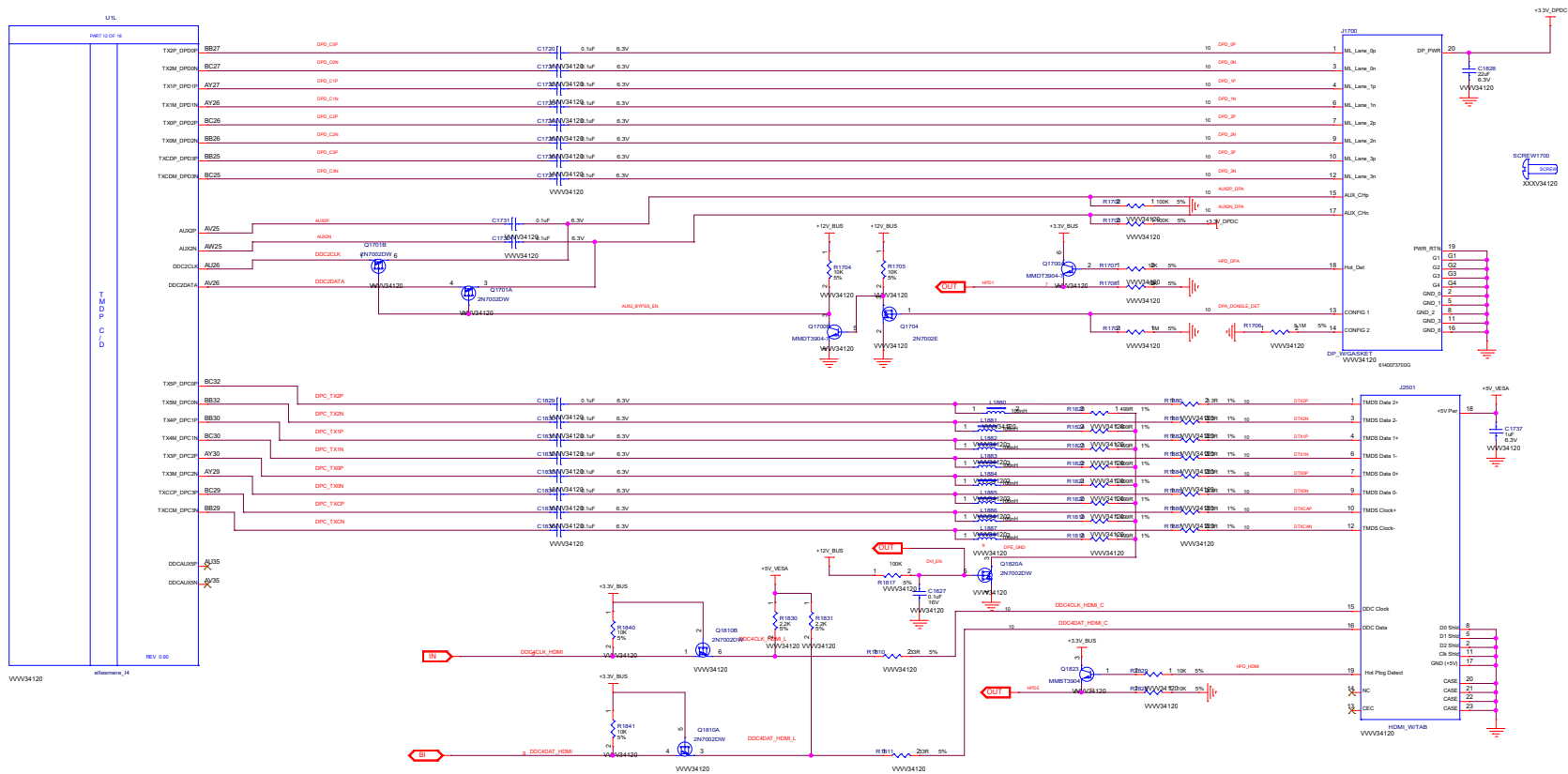
(8) ELLESMERE DAC1 LOCK



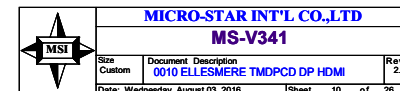


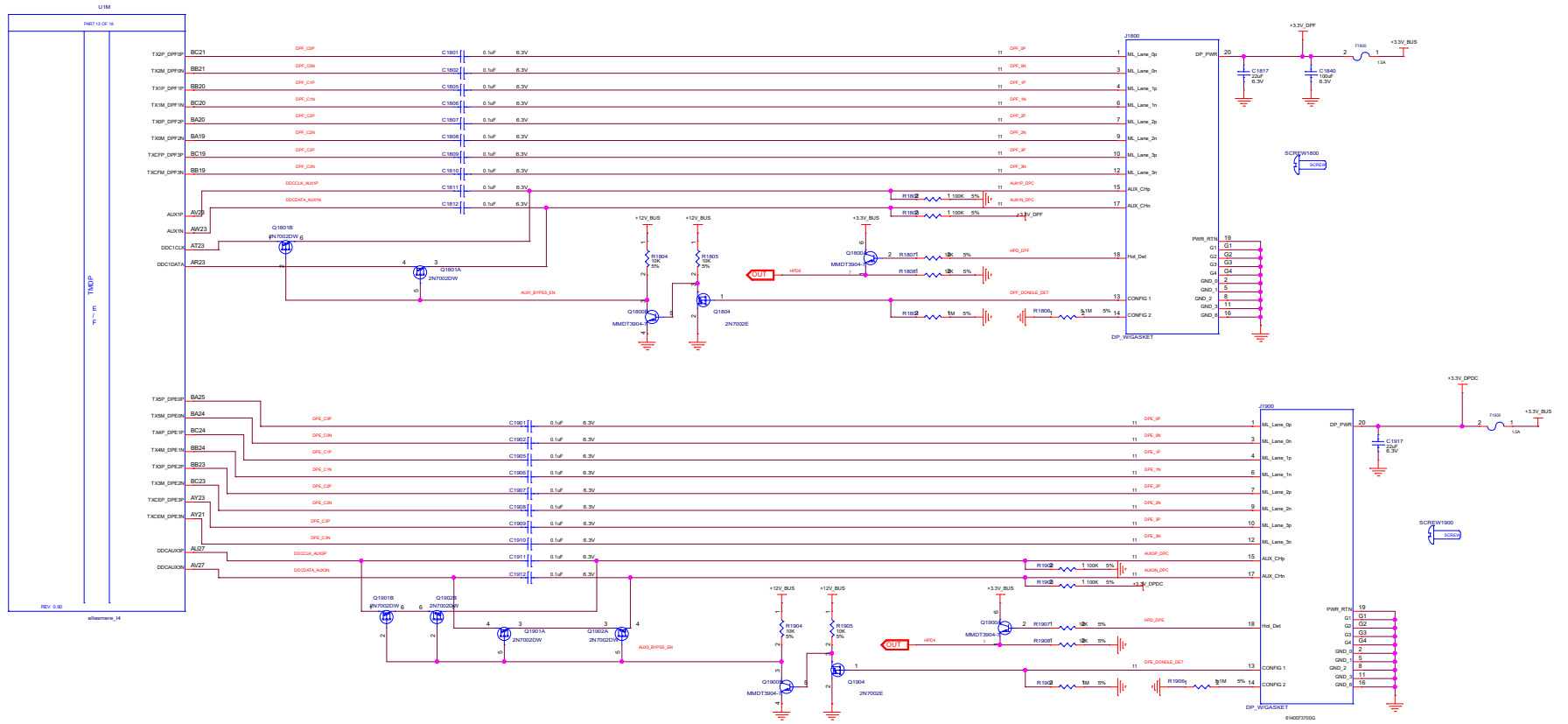
OPTIONAL ESD PROTECTION DIODES



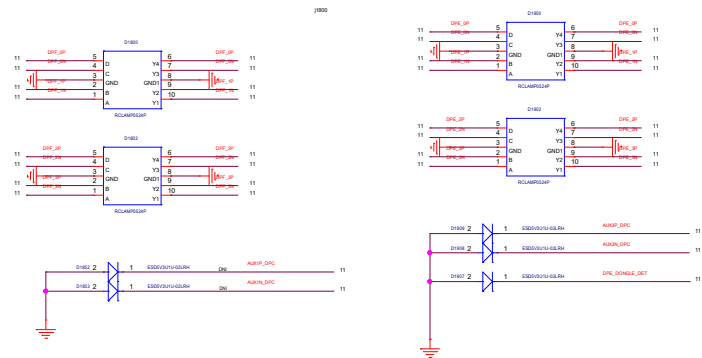


16ci203





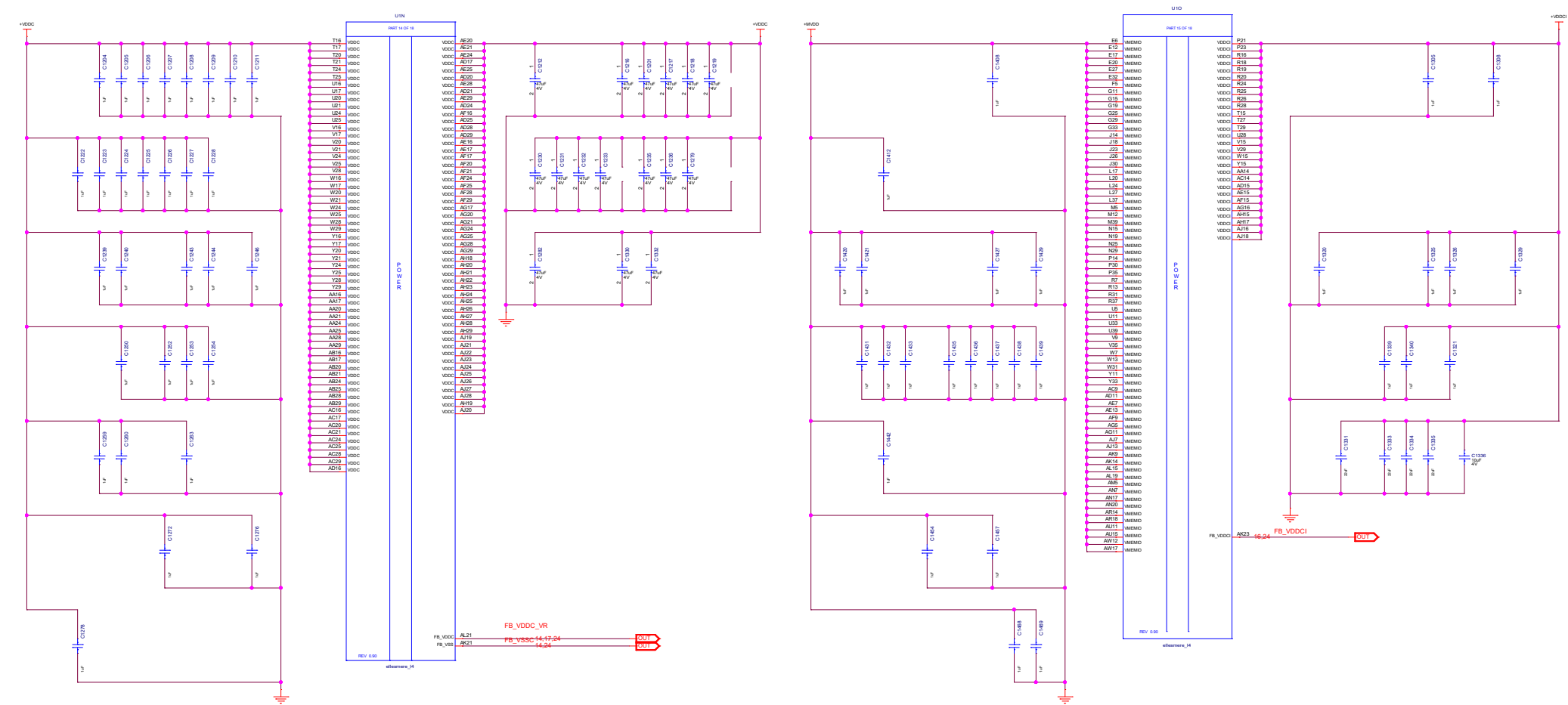
OPTIONAL ESD PROTECTION DIODES



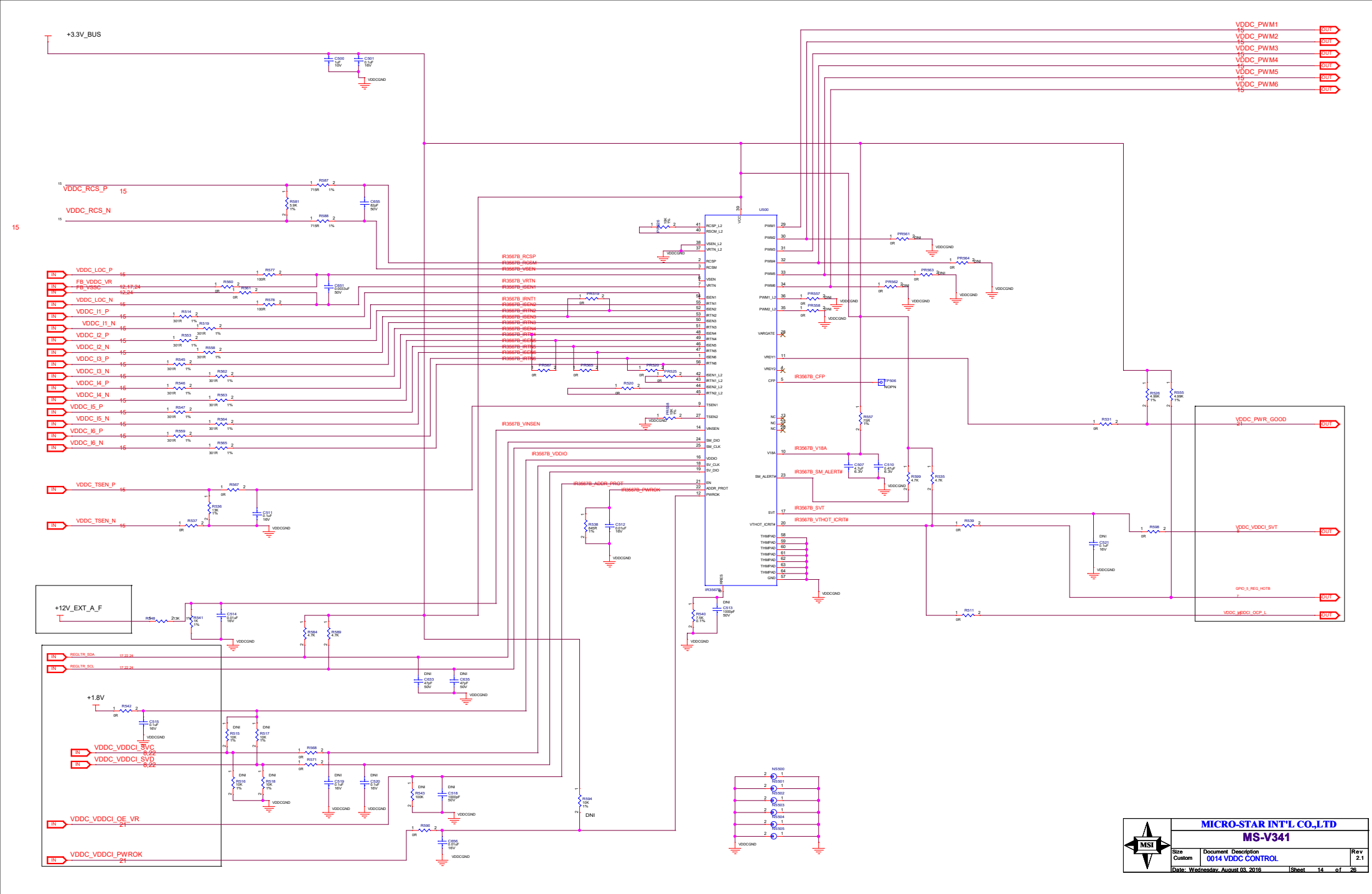
16ci203

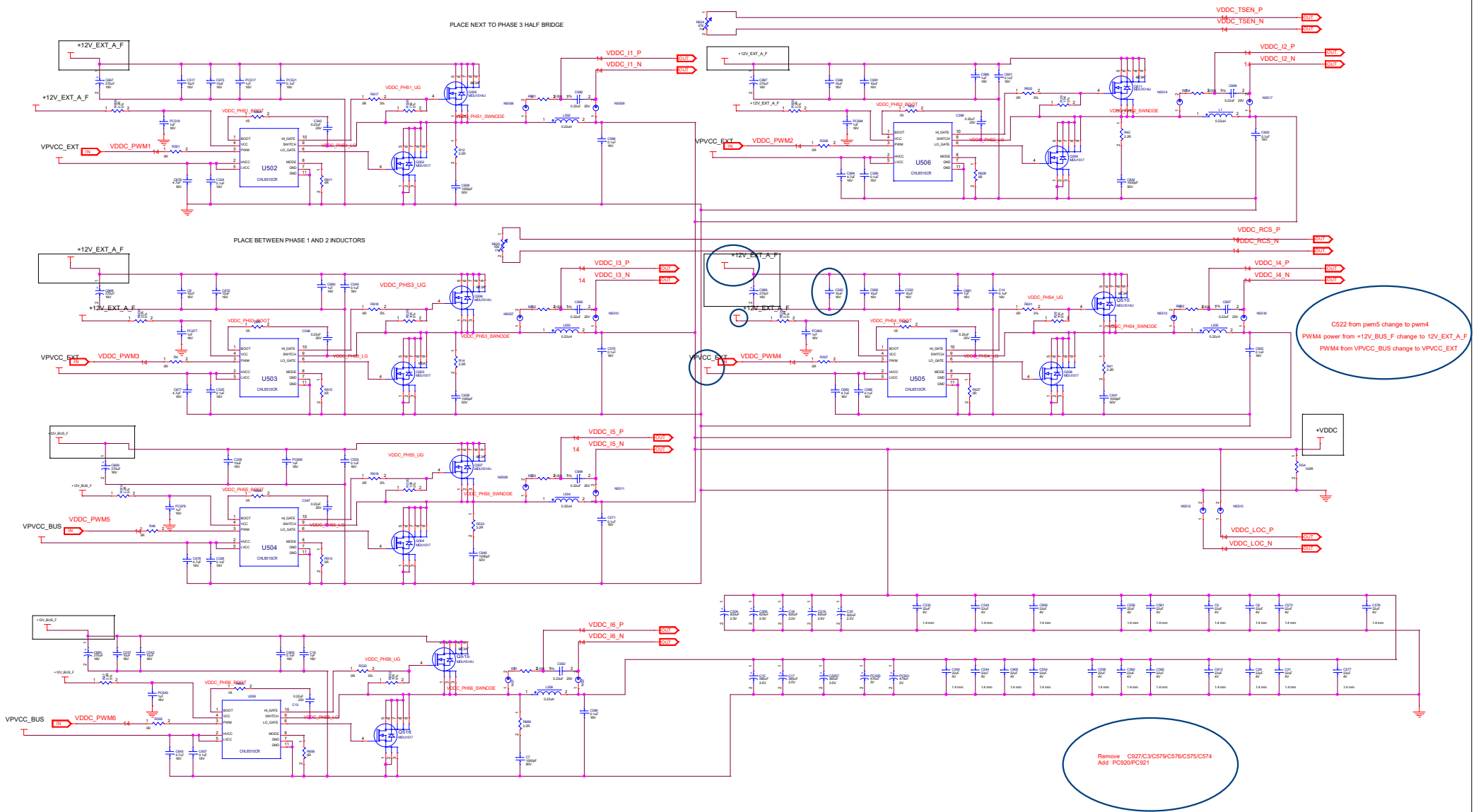
	MICRO-STAR INT'L CO.,LTD		
	MS-V341		
	Size Custom	Document Description 0011 ELLESMEER TMDPEF DP DP	Rev 2.1
Date: Wednesday, August 03, 2016		Sheet 11 of 26	

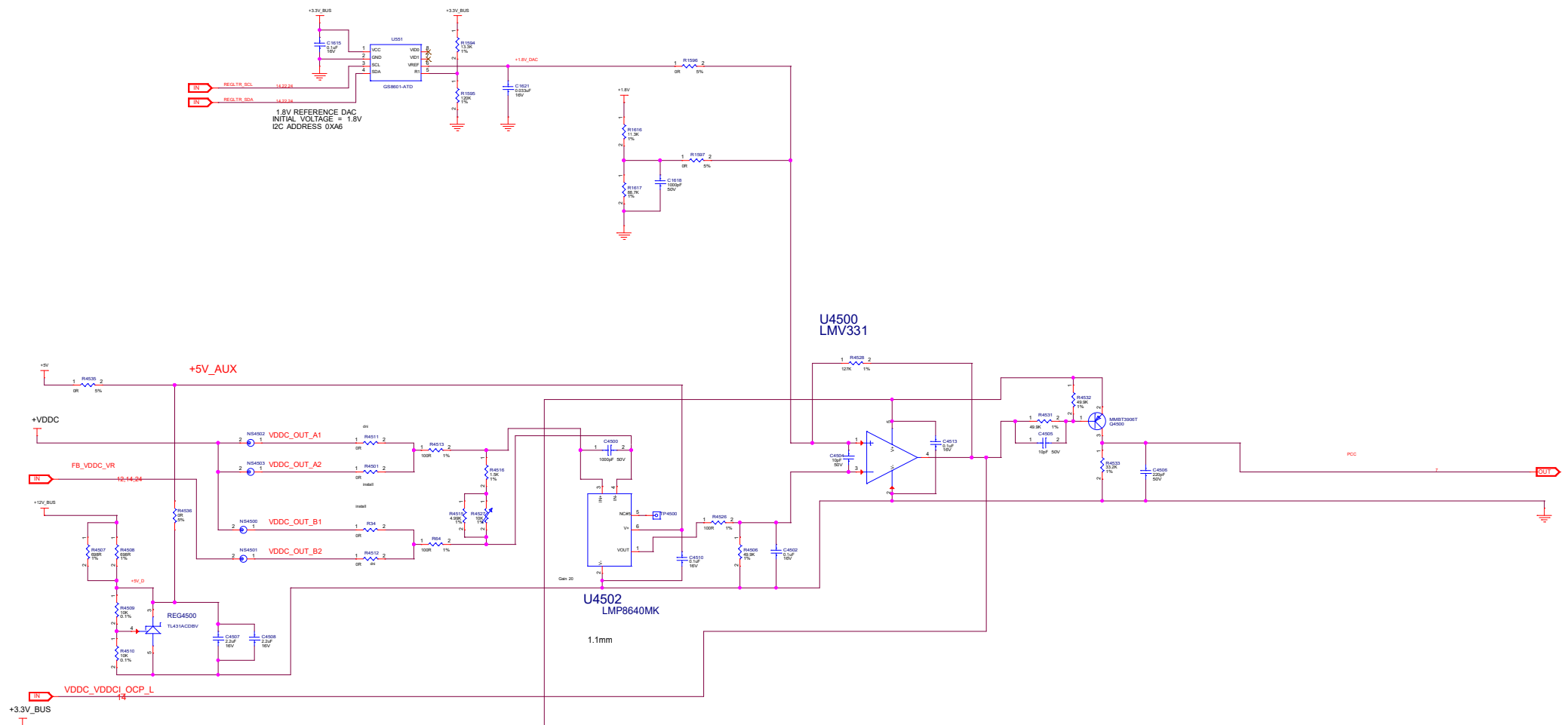
(12) ELLESMERE POWER



[illegible]



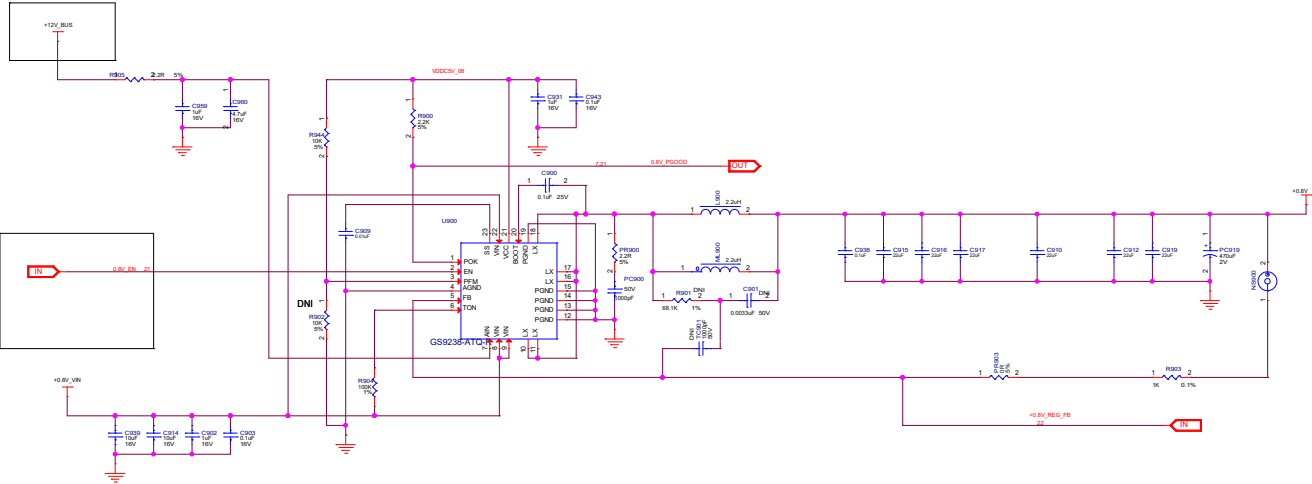




16ci203

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MS-V341			
Size	Document	Description	Rev
Custom	0017	PCC VDDC	2.1
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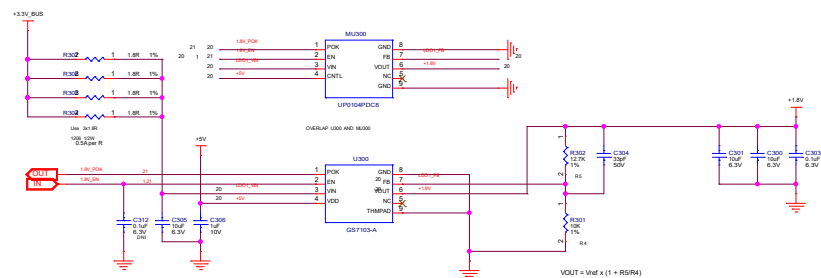




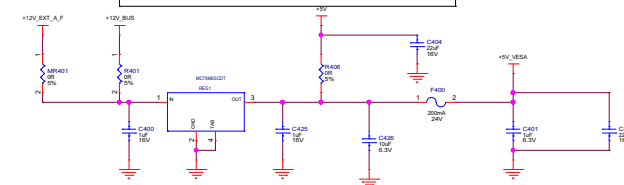
MICRO-STAR INT'L CO.,LTD		
MS-V341		
Size	Document Description	Rev
Custom	0019 0.8V REG	2.1
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(18) SMALL RAIL REGULATORS

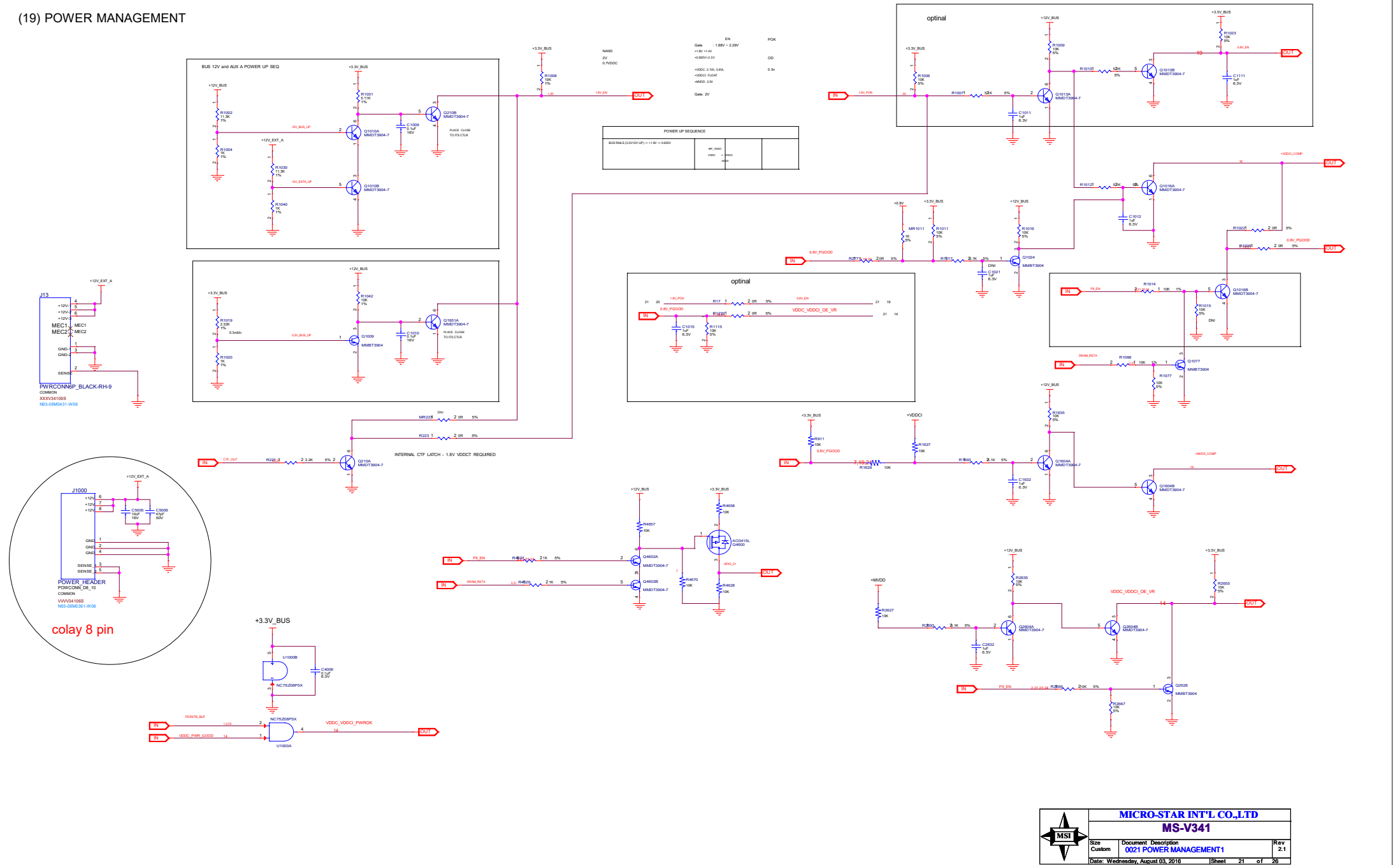
LDO #1: VIN = 3.0V TO 3.6V MAX VOUT = +1.8V +/- 2% IOUT = 1.3A RMS MAX
PCB: 50 TO 70mm SQ. COPPER AREA FOR COOLING

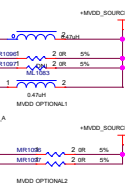
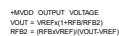
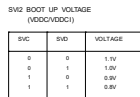


REGULATOR FOR +5V RAILS
IOUT MAX = 150mA



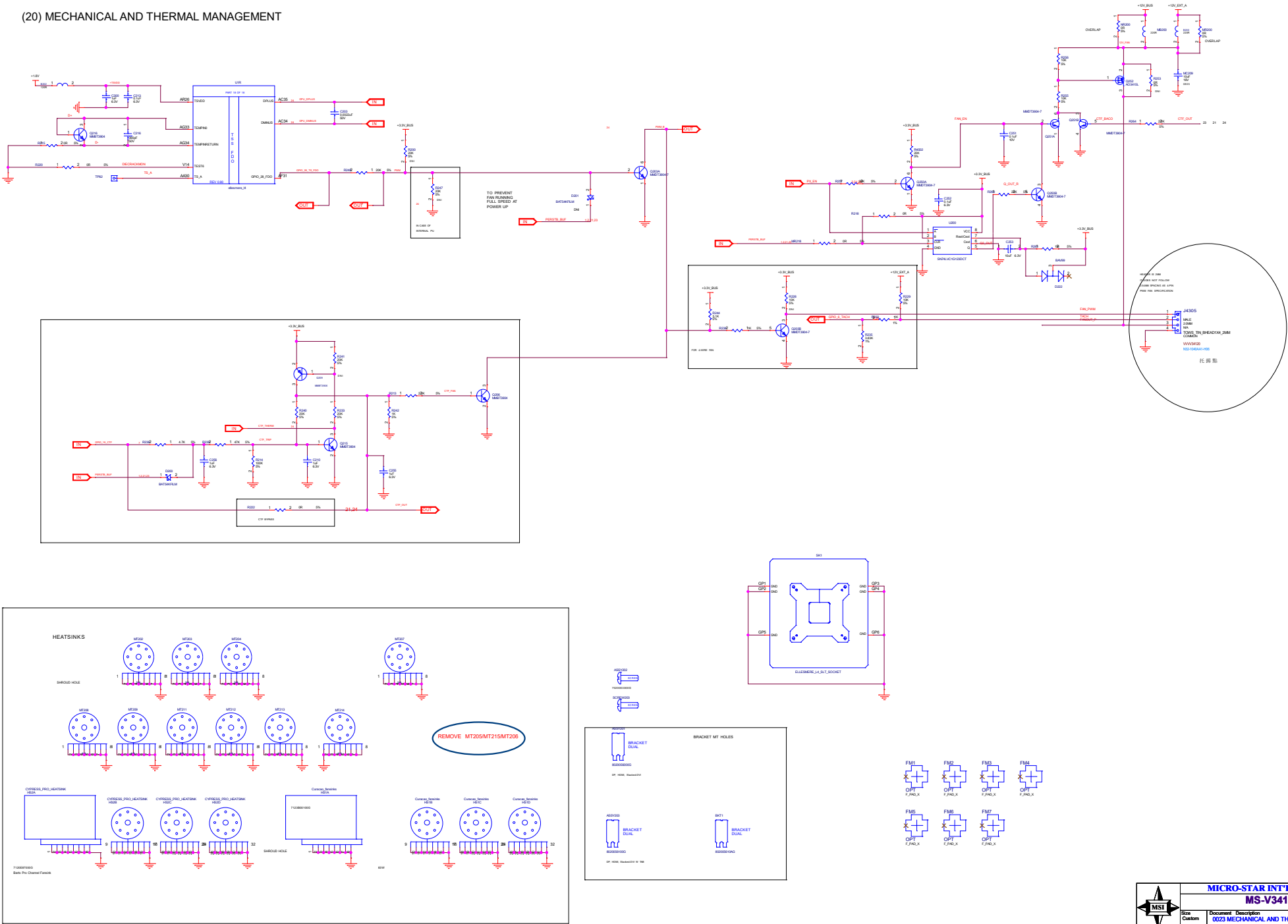
(19) POWER MANAGEMENT



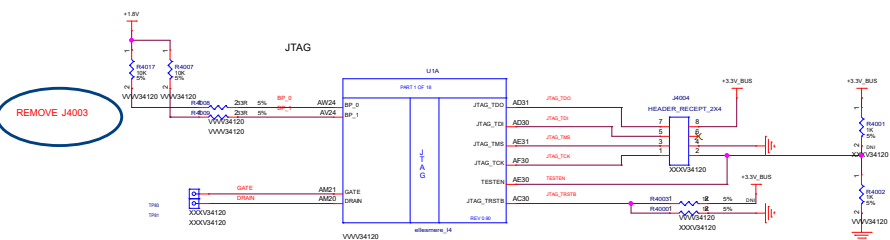


	MICRO-STAR INT'L CO.,LTD		
	MS-V341		
	Size Custom	Document Description 0022 POWER MANAGEMENT2	Rev 2.1
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(20) MECHANICAL AND THERMAL MANAGEMENT



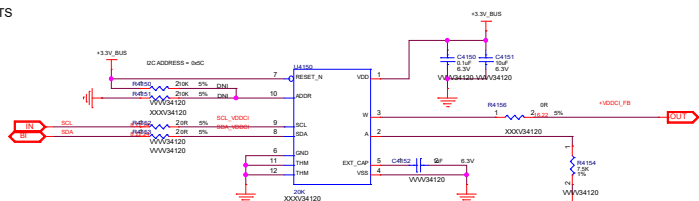
(21) DEBUG CIRCUITS



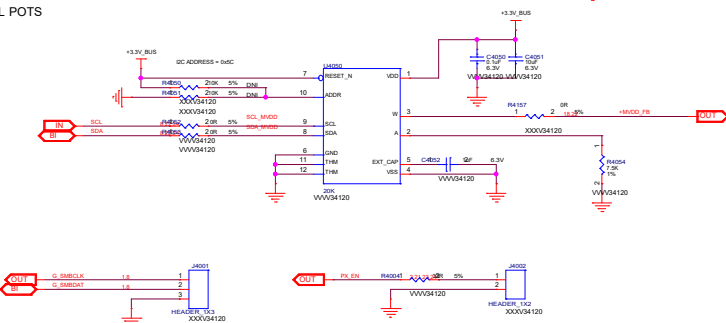
REMOVE

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

DIGITAL POTS



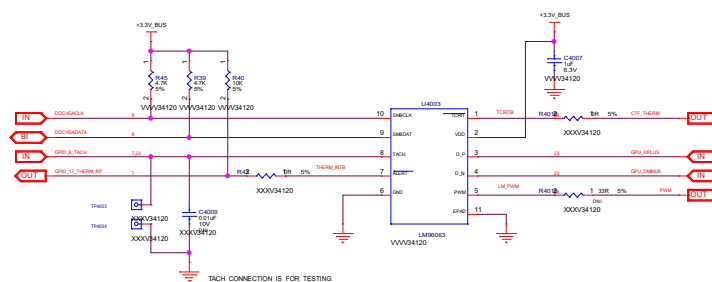
DIGITAL POTS



SWITCHES



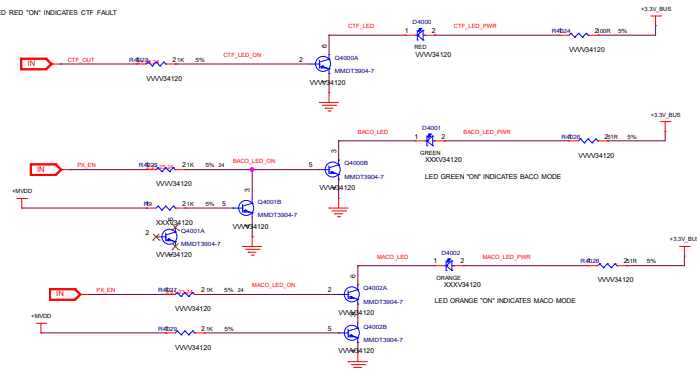
LM96163 FOR BACKUP THERMAL CONTROL



TACH CONNECTION IS FOR TESTING

LED LIGHTS

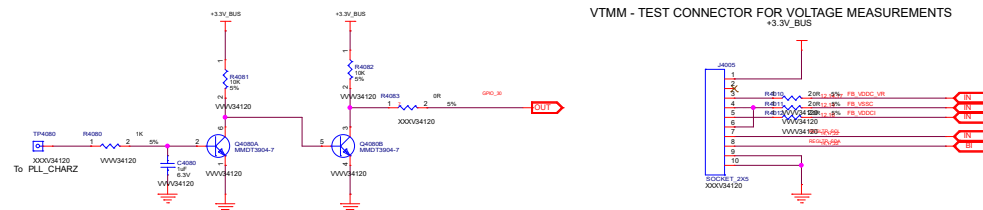
LED RED "ON" INDICATES CTF FAULT



LED GREEN "ON" INDICATES BACO MODE

LED ORANGE "CM" INDICATES MACO M

VTMM - TEST CONNECTOR FOR VOLTAGE MEASUREMENTS



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	MS-V341		
Size Custom	Document Description 0024DEBUG CIRCUITS/ E-FUSE	Rev. 2	
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