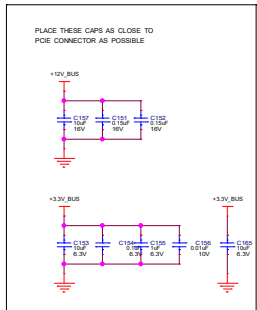
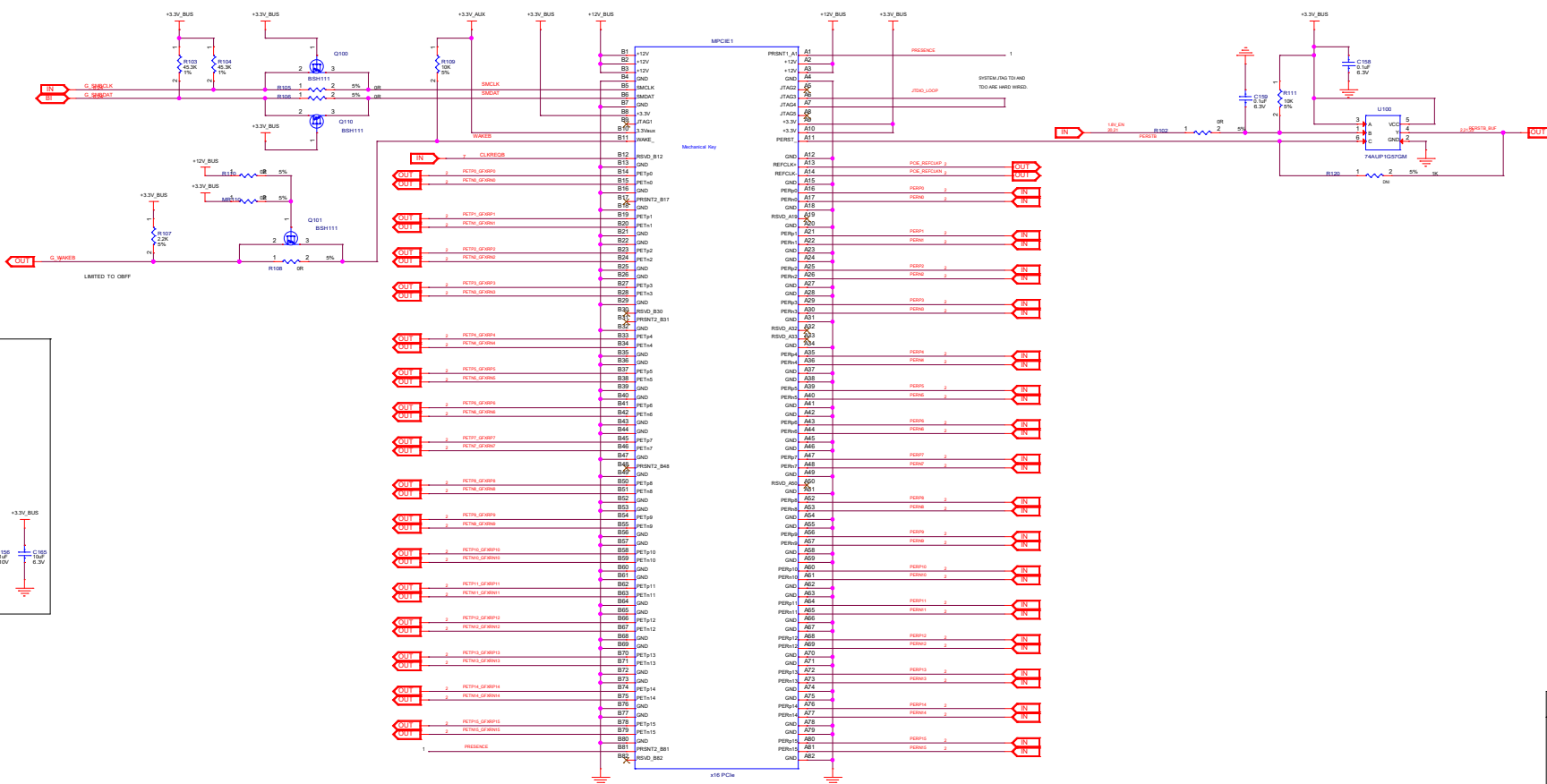


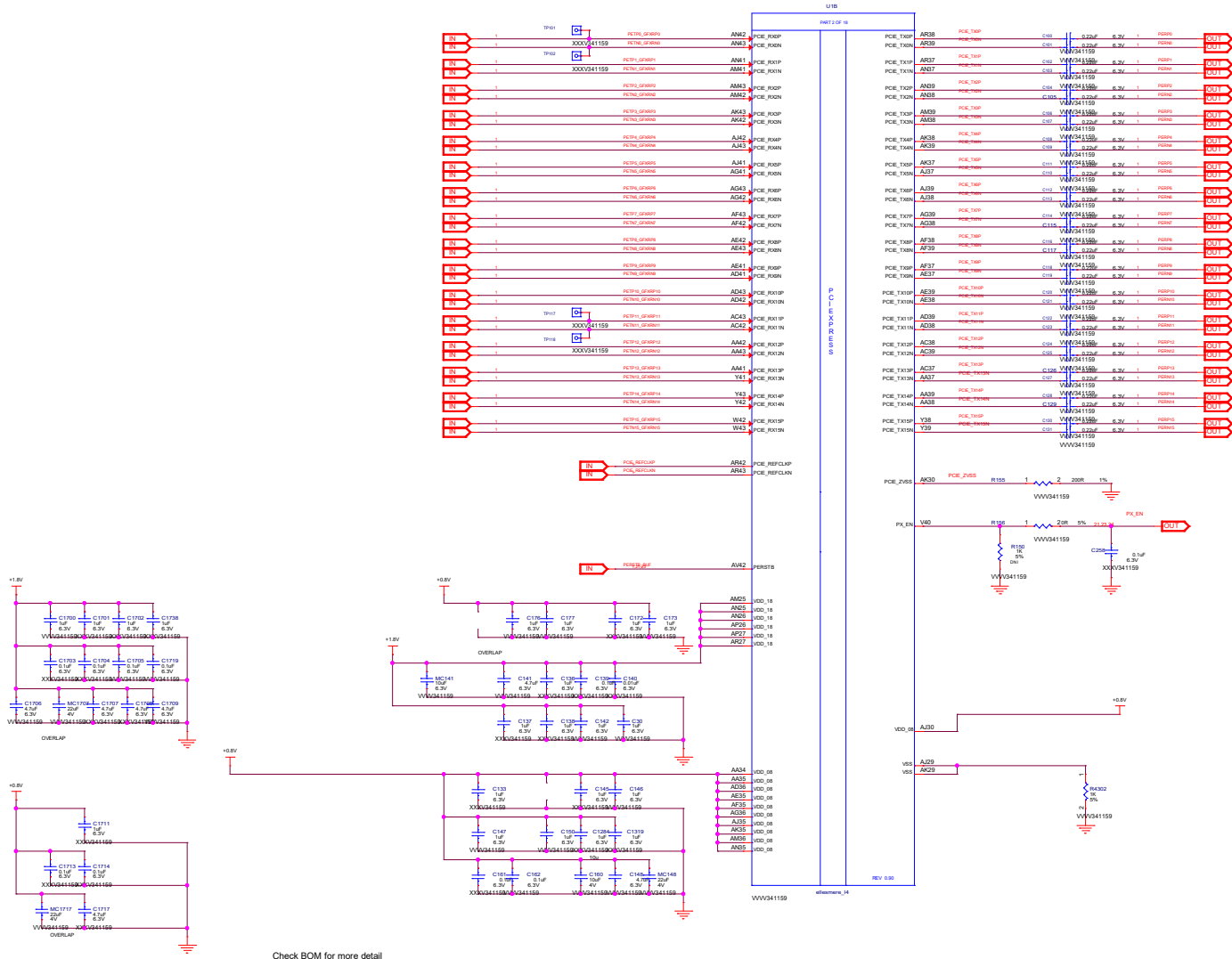


(1) PCI-EXPRESS EDGE CONNECTOR



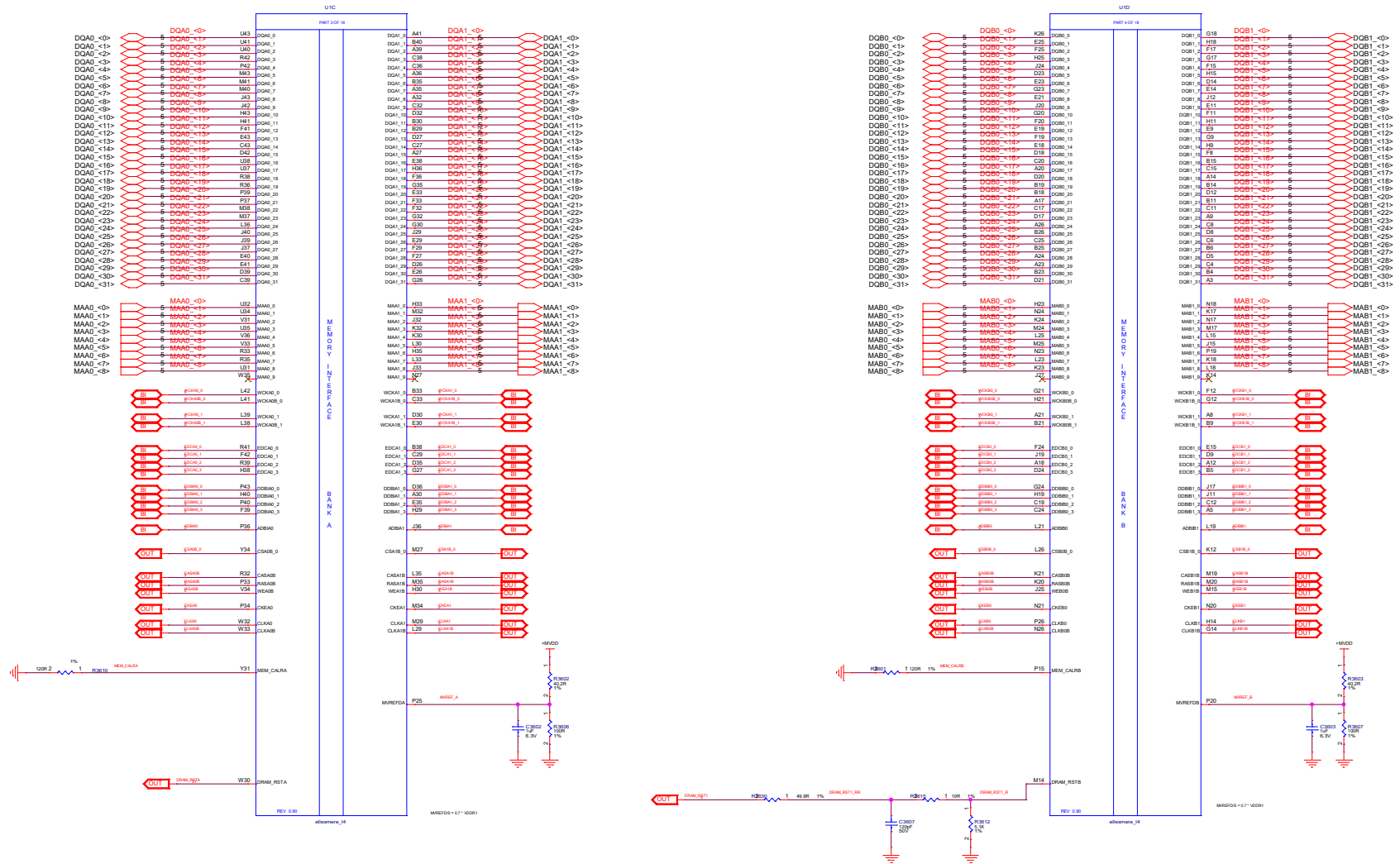
SYMBOL LEGEND	
DNI	DO NOT INSTALL
D or F	ACTIVE LOW
BUO	BRING UP ONLY
	DIGITAL GROUND
	ANALOG GROUND

(2) ELLESMERE PCIE INTERFACE

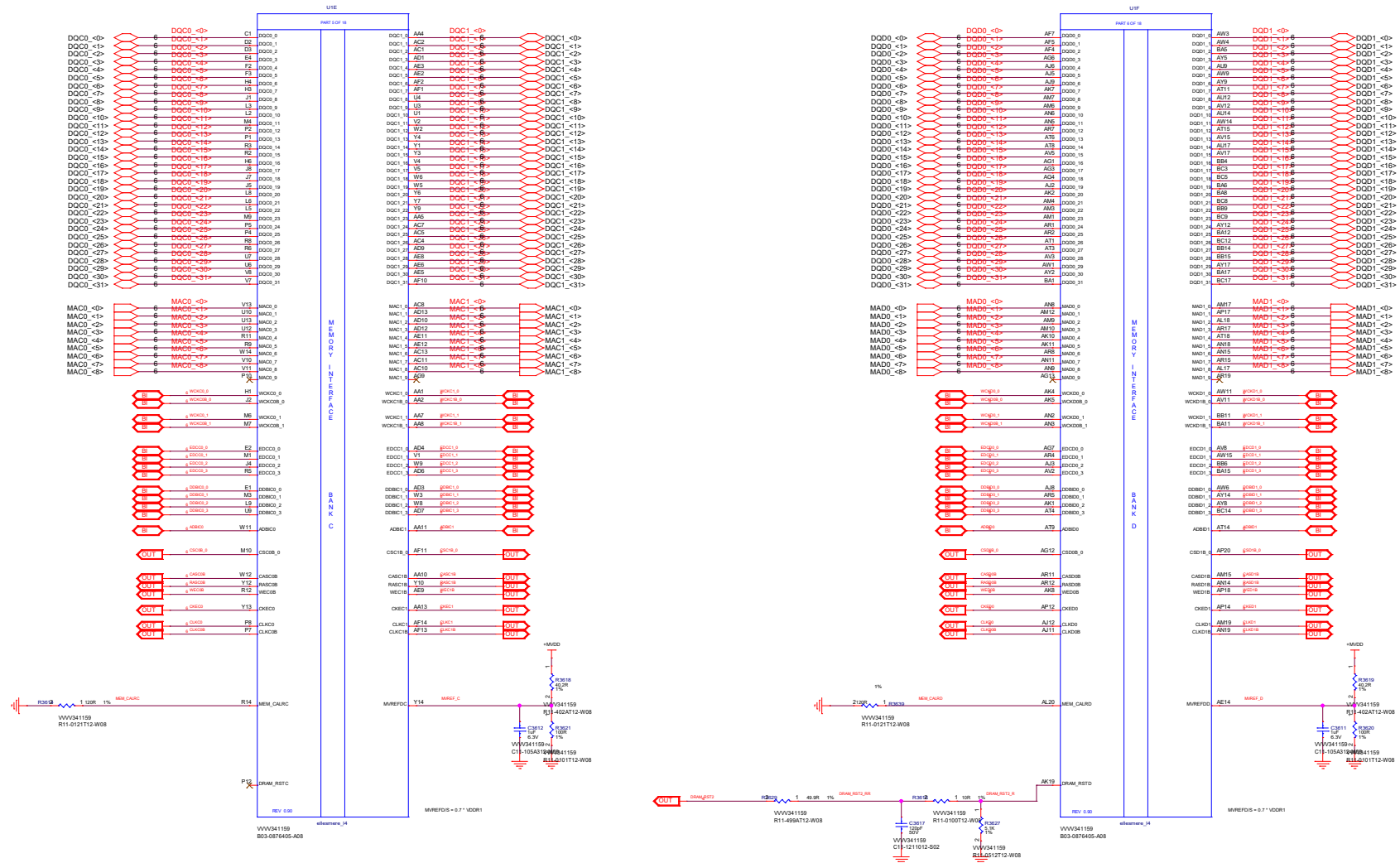


Check BOM for more detail

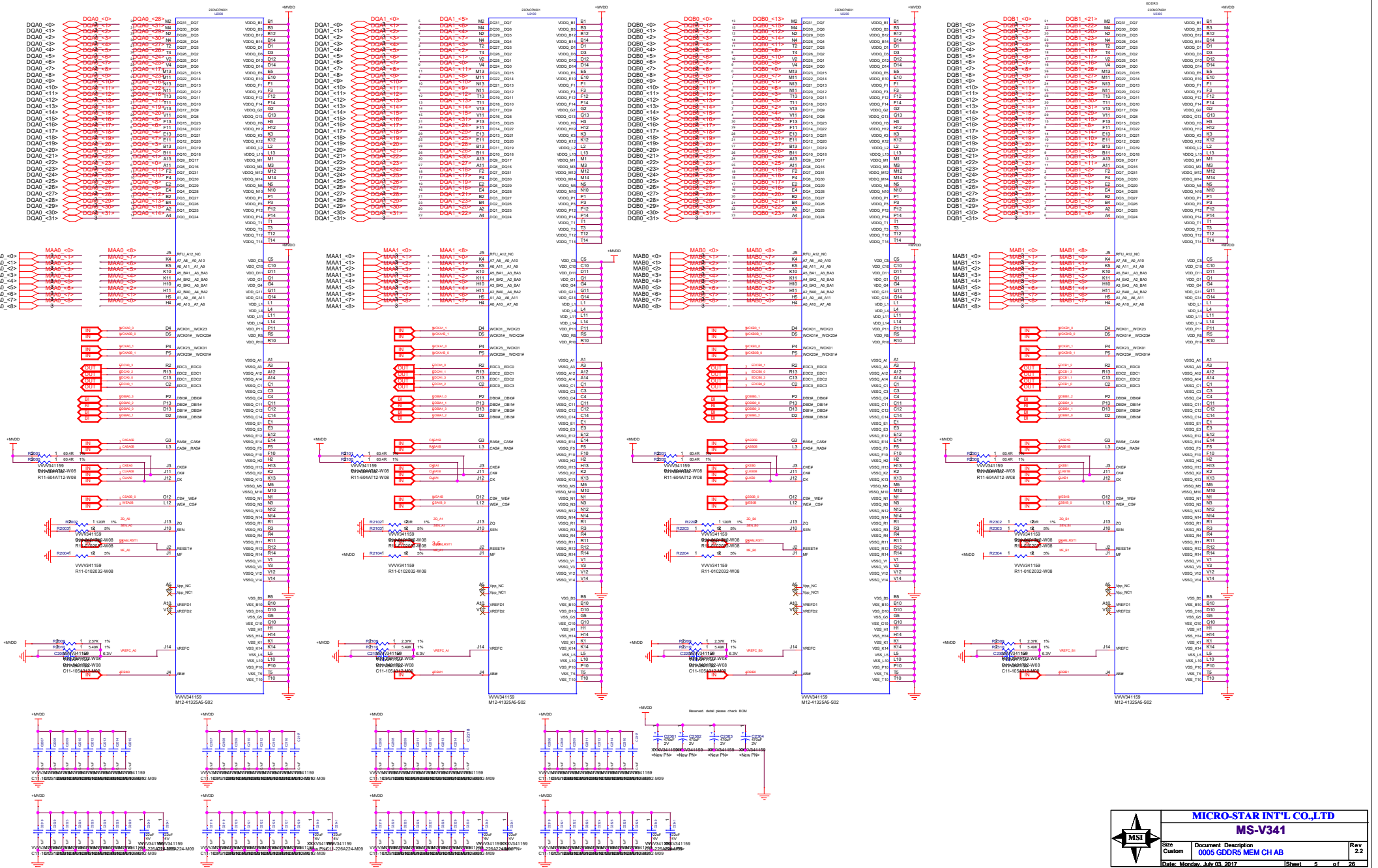
(3) ELLESMERE MEM INTERFACE CH A/B



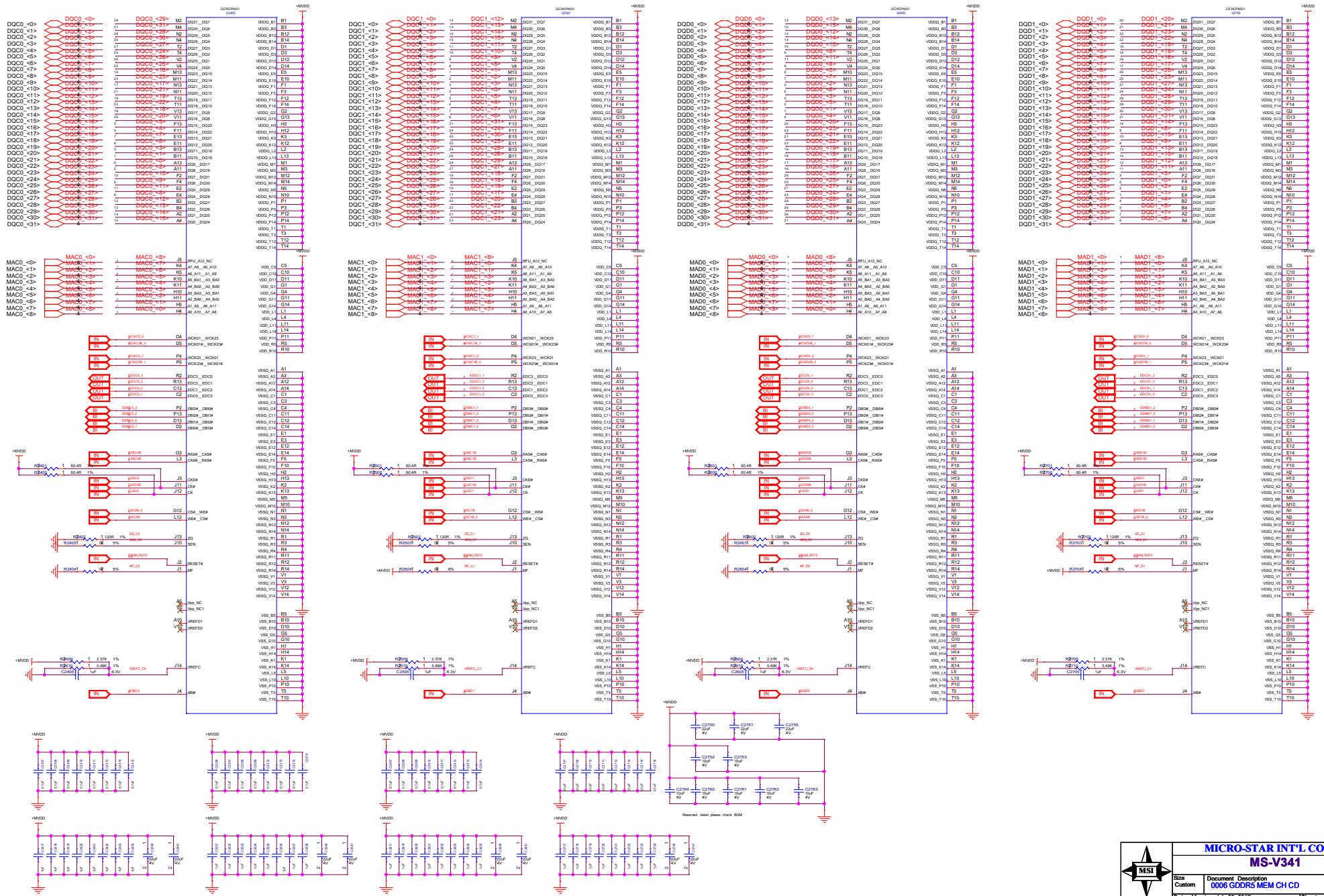
(4) ELLESMERE MEM INTERFACE CH C/D



(5) GDDR5 MEMORY CH A/B



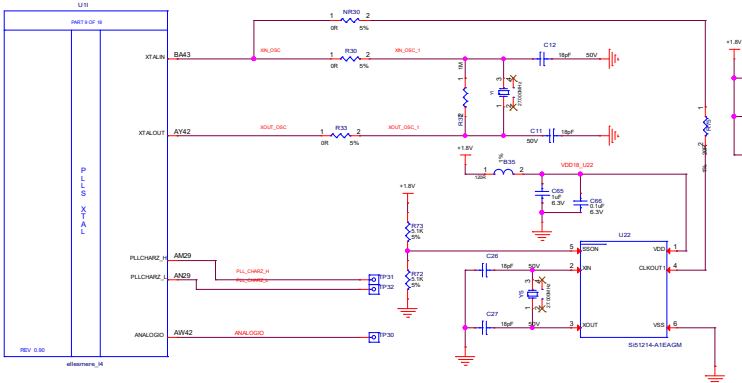
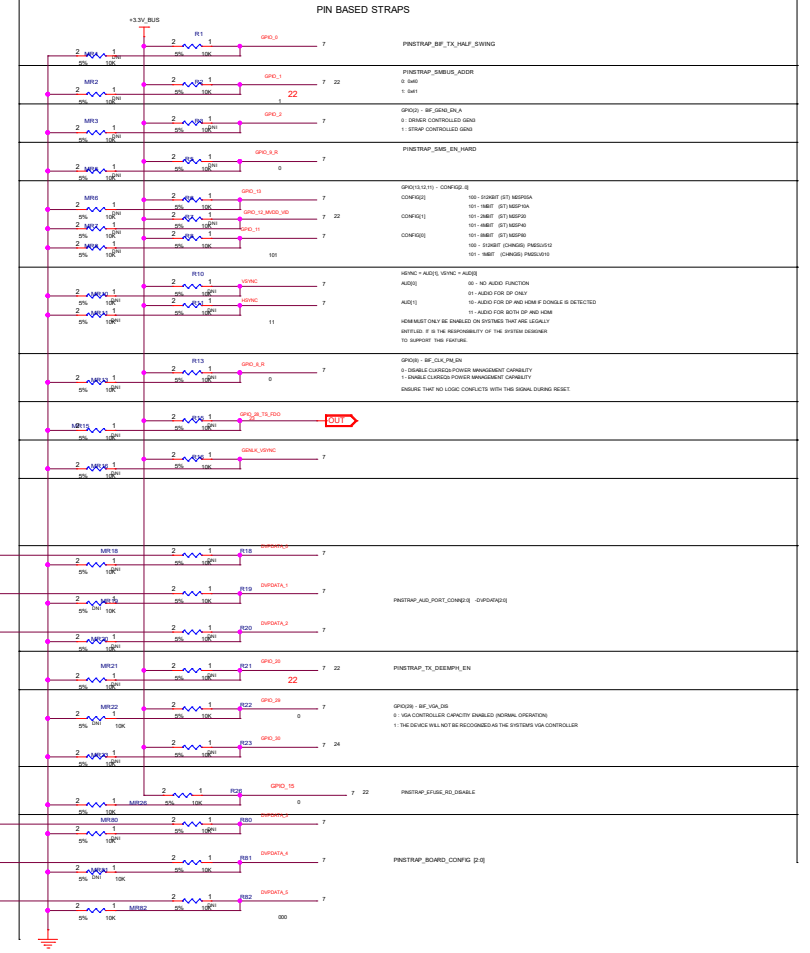
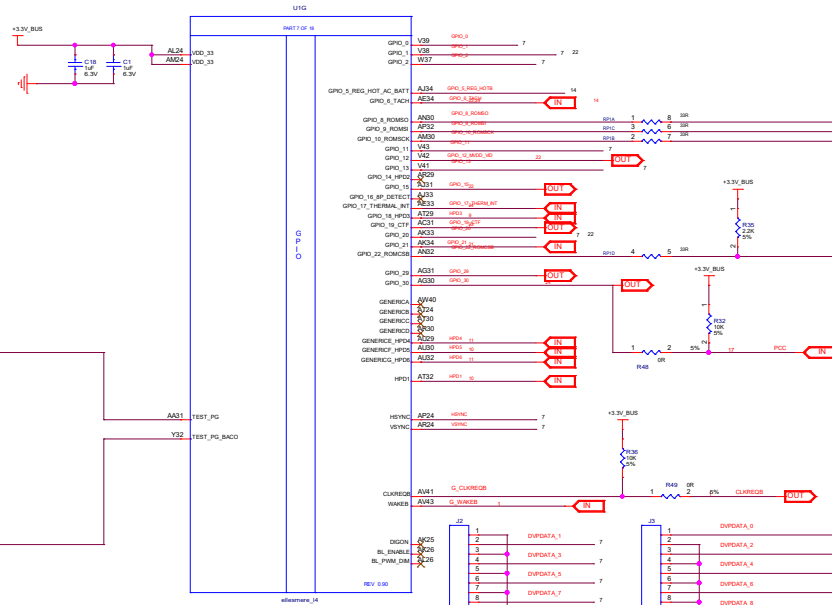
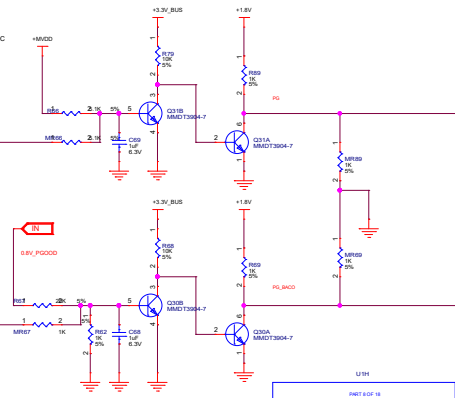
(6) GDDR5 MEMORY CH C/D



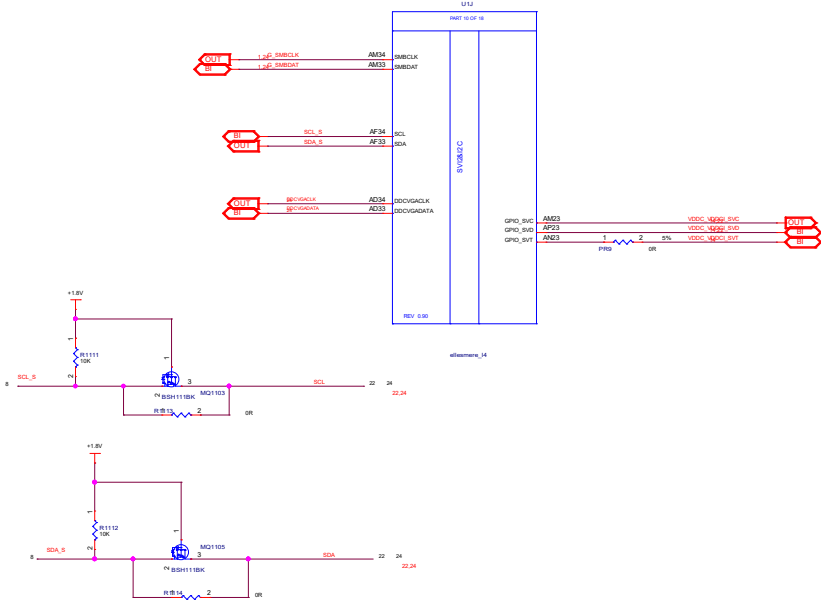
(7) ELLESMERE GPIO STRAP CF XTAL

I2C ADDRESS			FUNCTION	DEVICE

I2C ADDRESS			FUNCTION	DEVICE



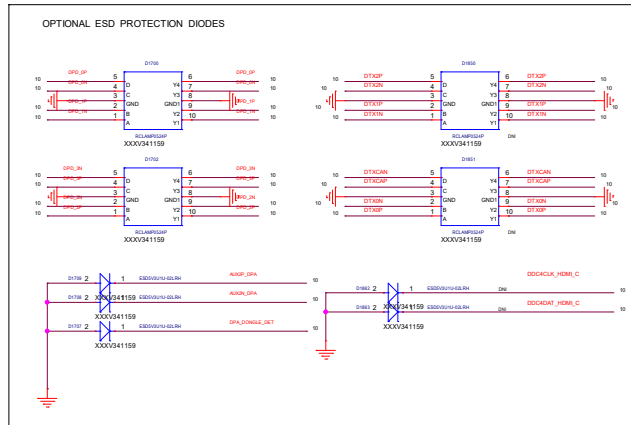
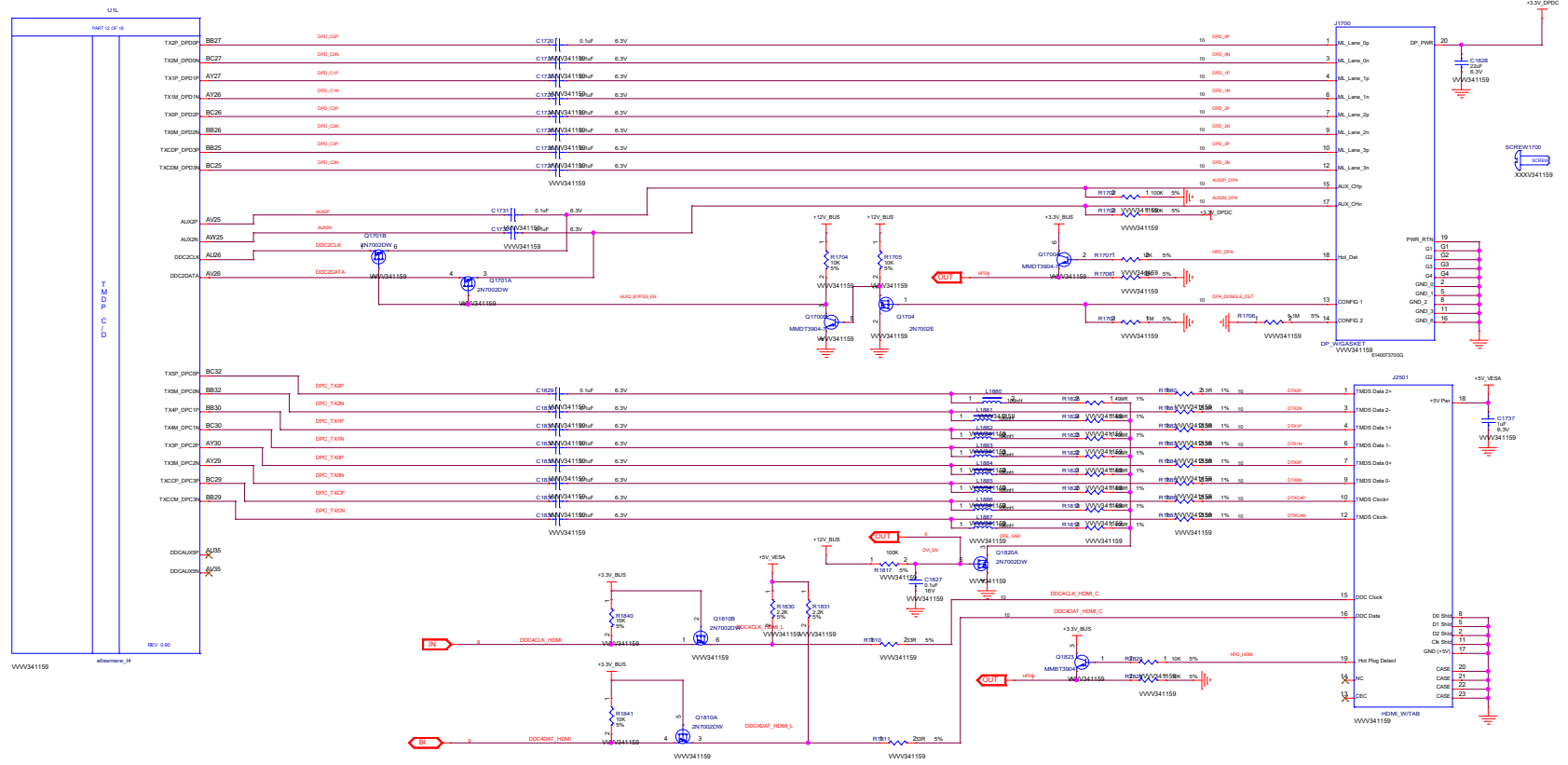
(8) ELLESMERE DAC1 LOCK

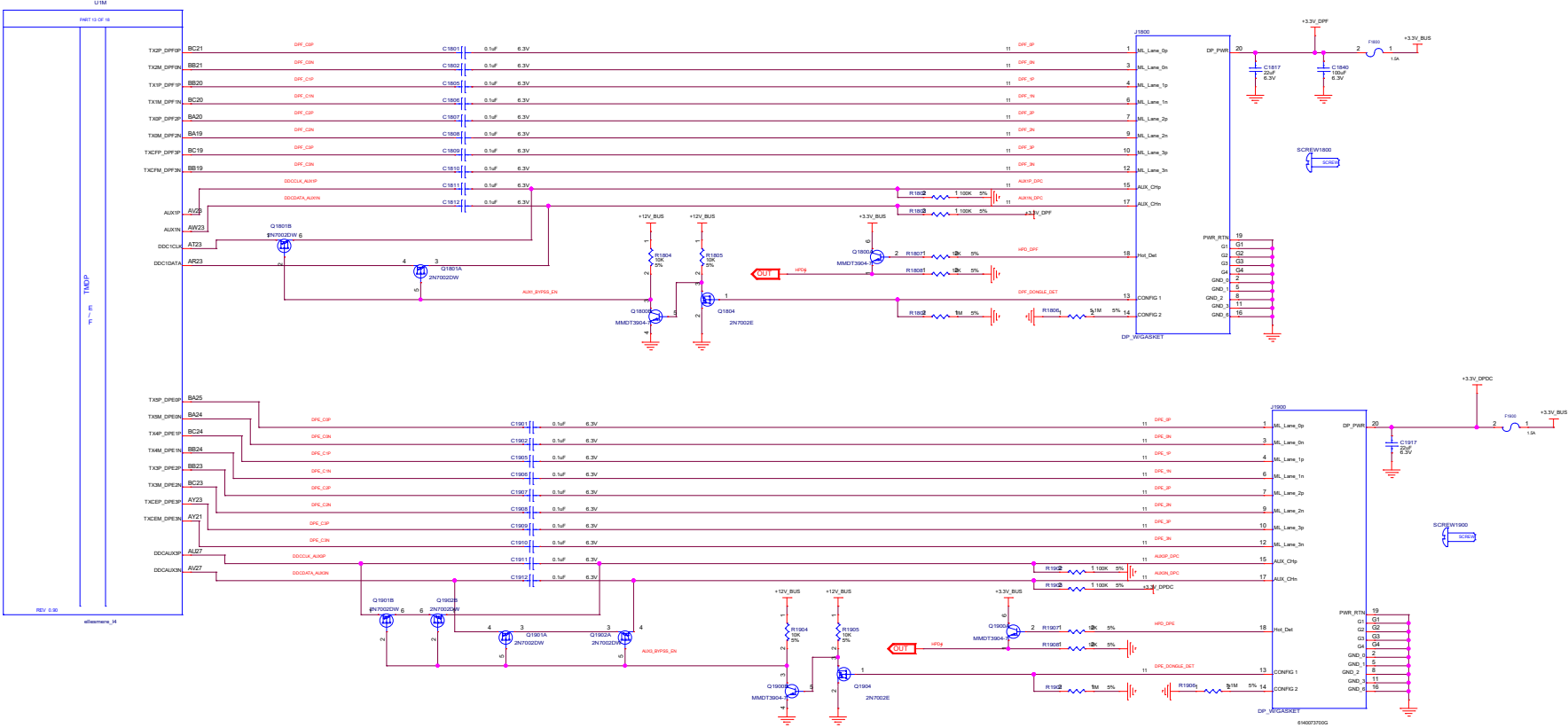


(9) ELLESMERE TMDP A/B

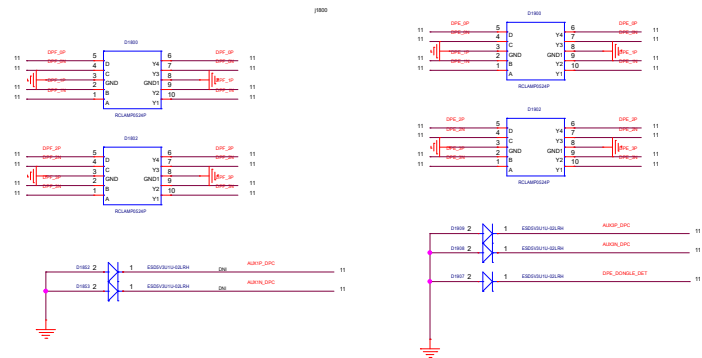


	MICRO-STAR INT'L CO.,LTD		
	MS-V341		
	Size Custom	Document Description 0009 ELLESMERE TMDPAB dDVI	Rev 2.2
Date: Monday, July 03, 2017		Sheet 9 of 26	

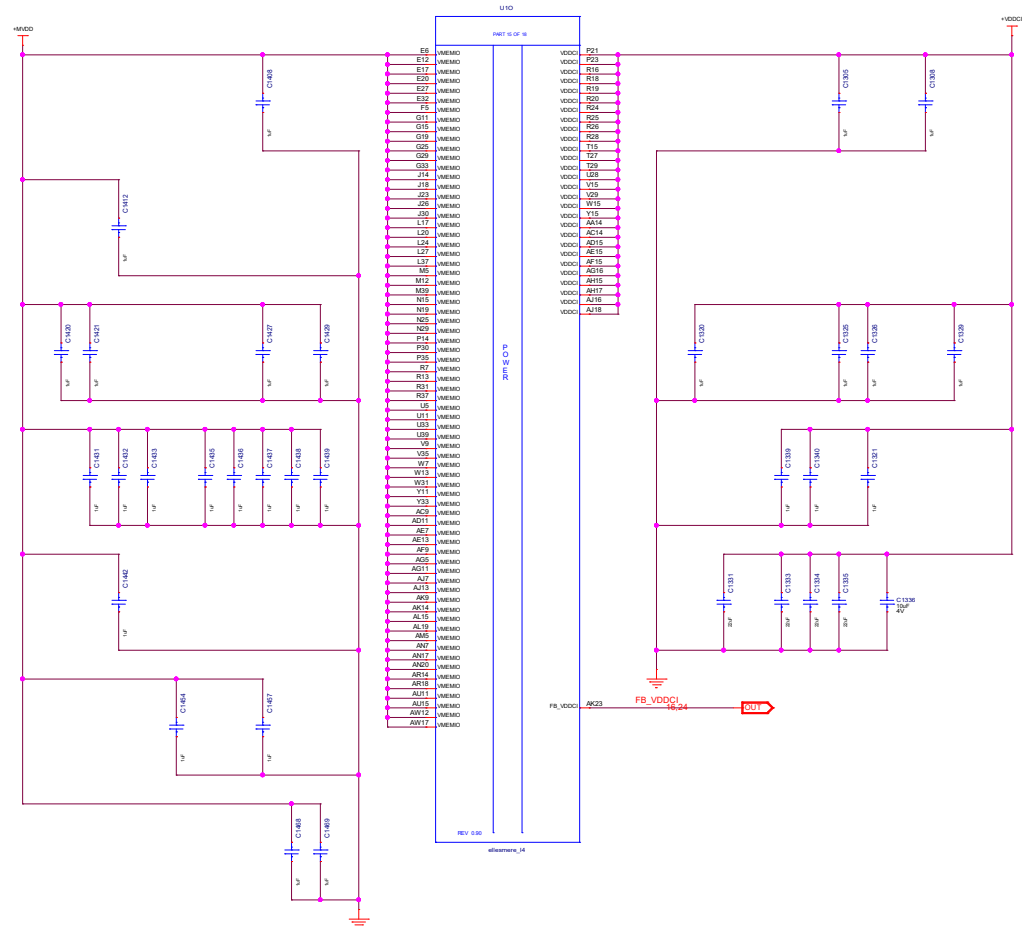
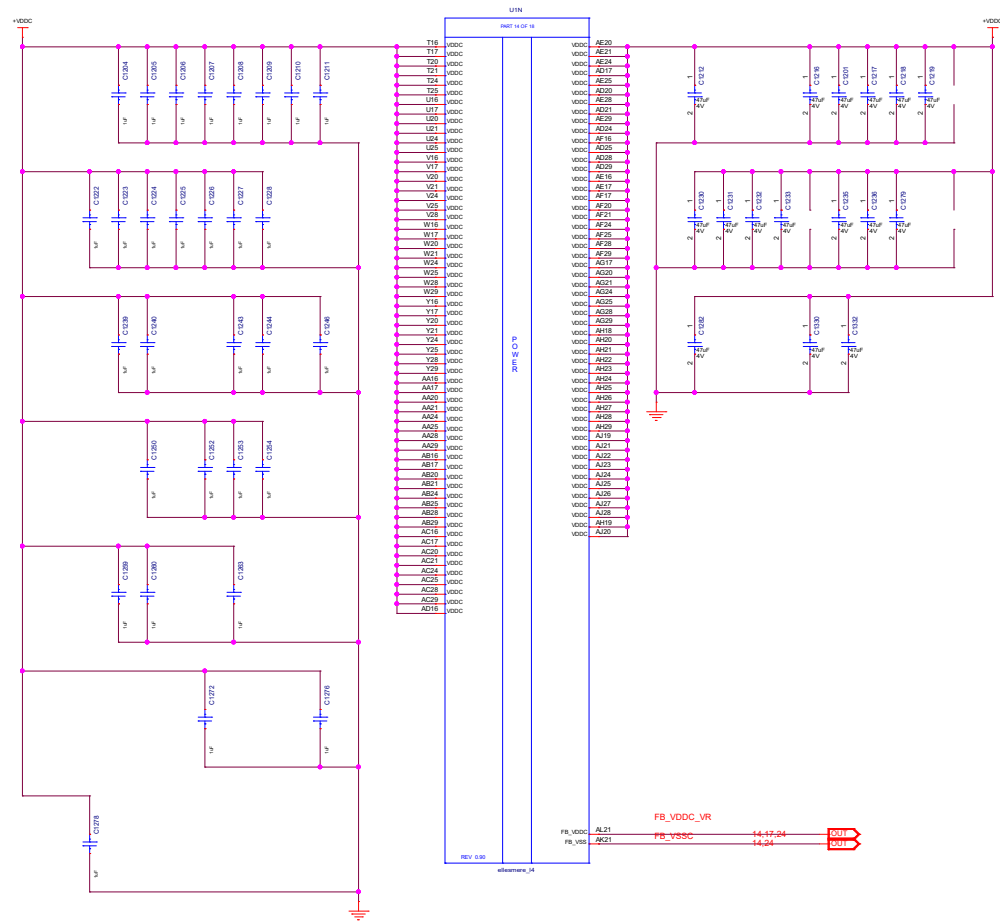




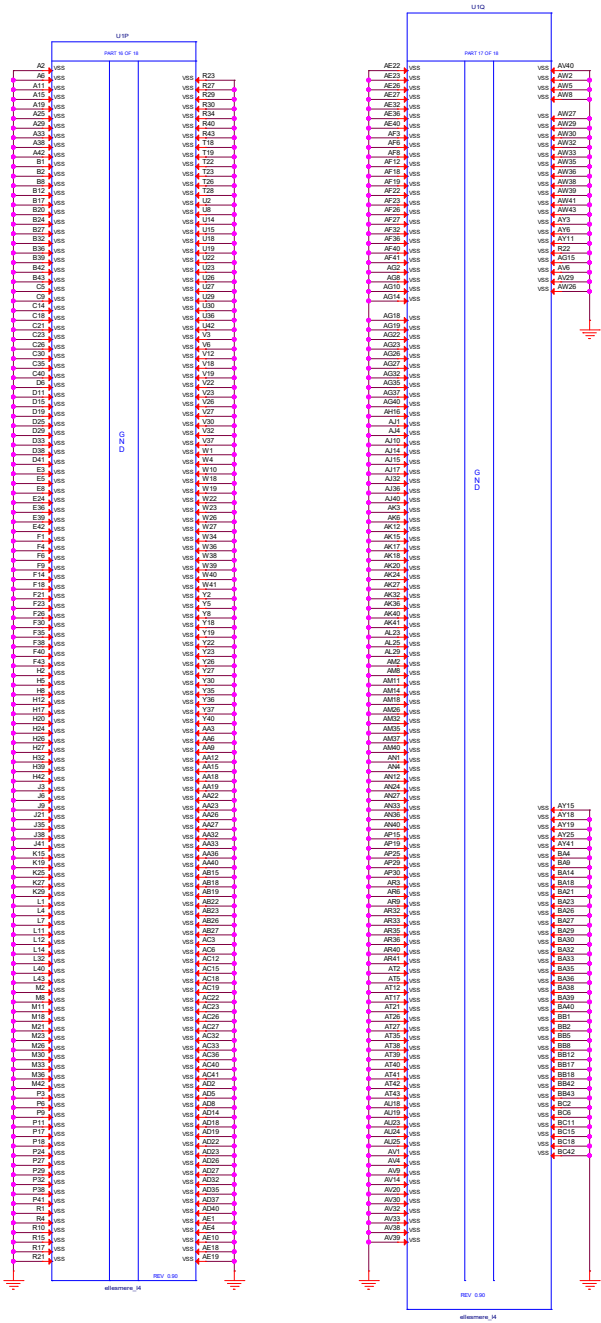
OPTIONAL ESD PROTECTION DIODES

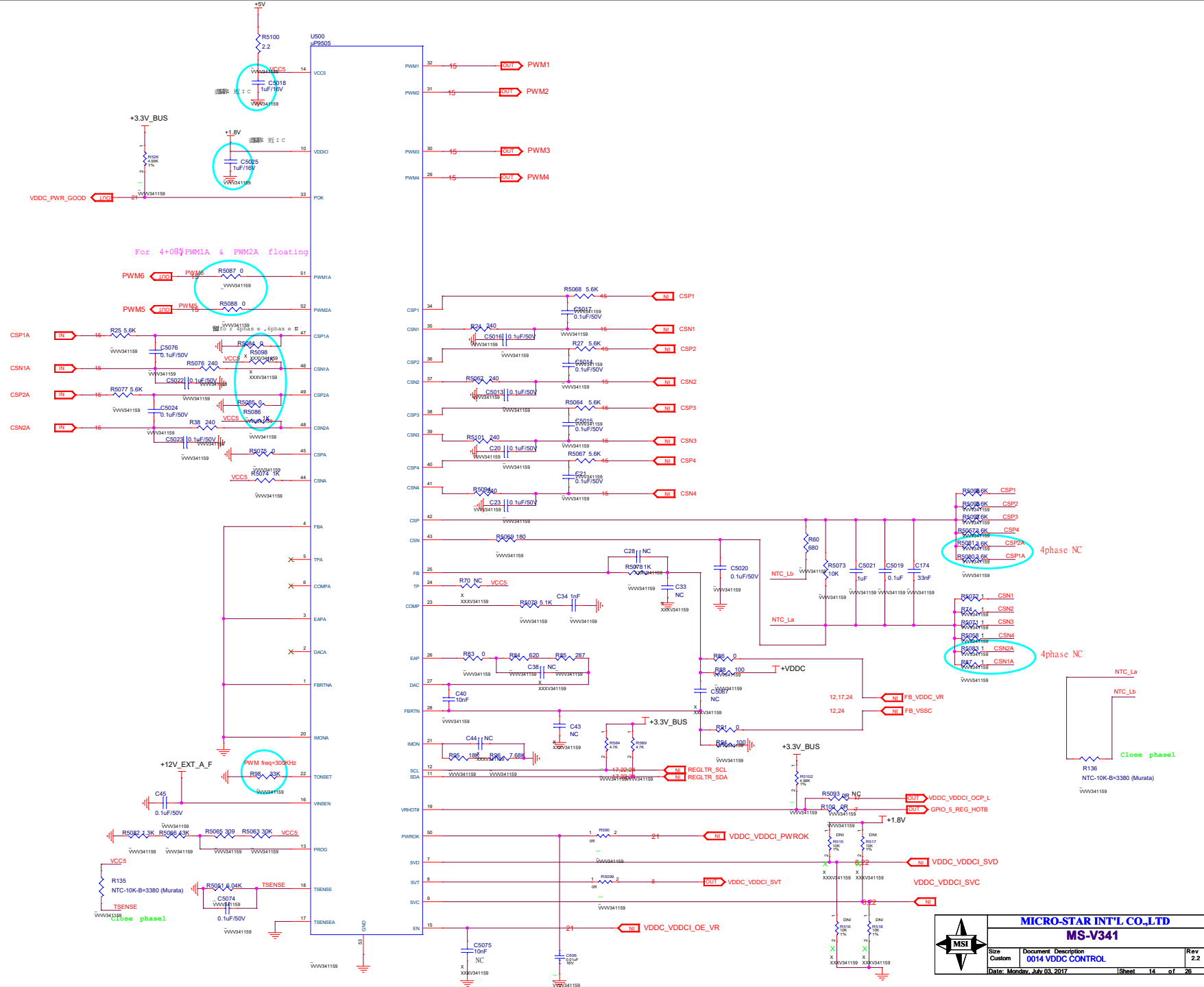


(12) ELLESMERE POWER

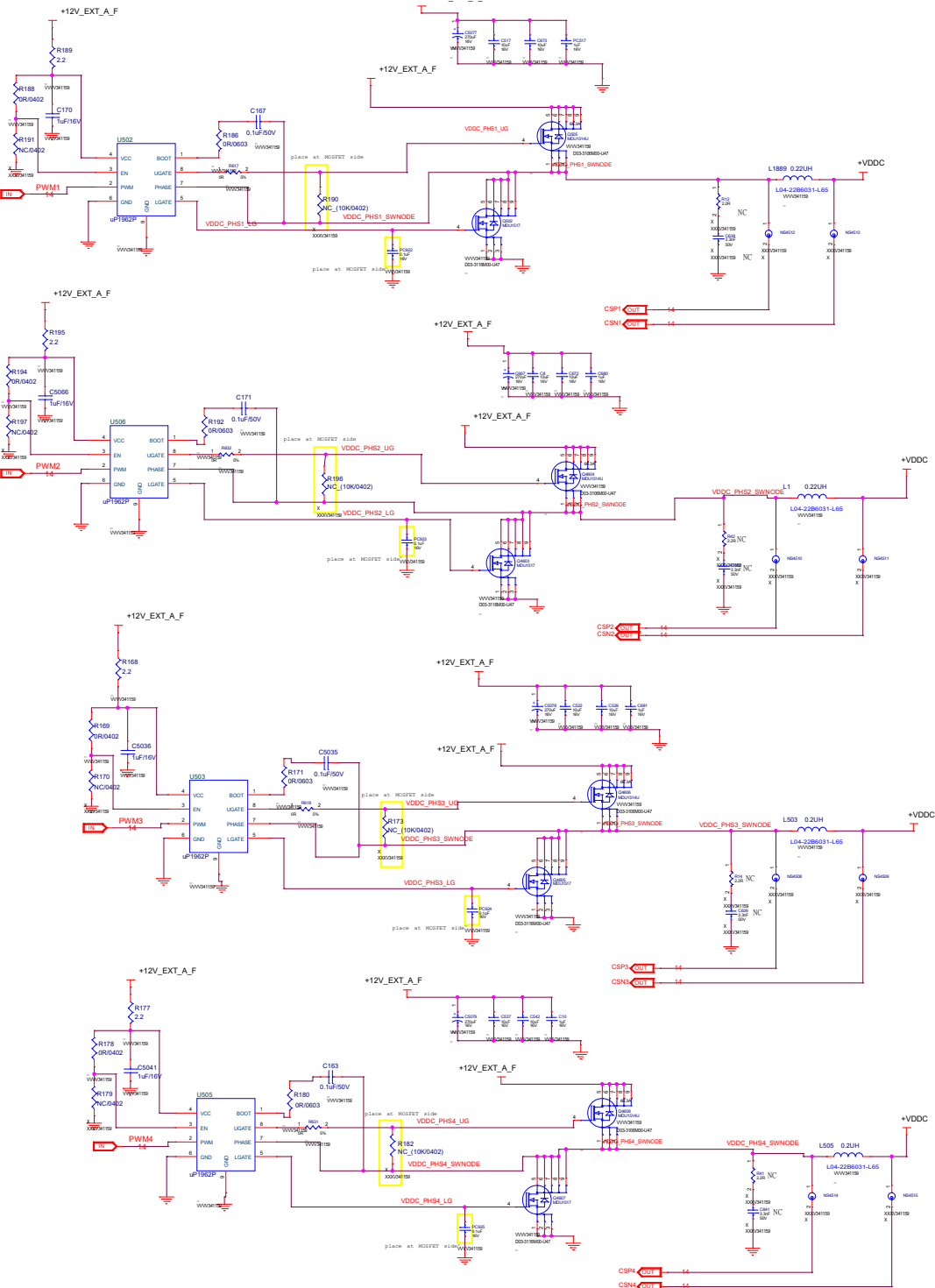


(13) ELLESMERE GROUND

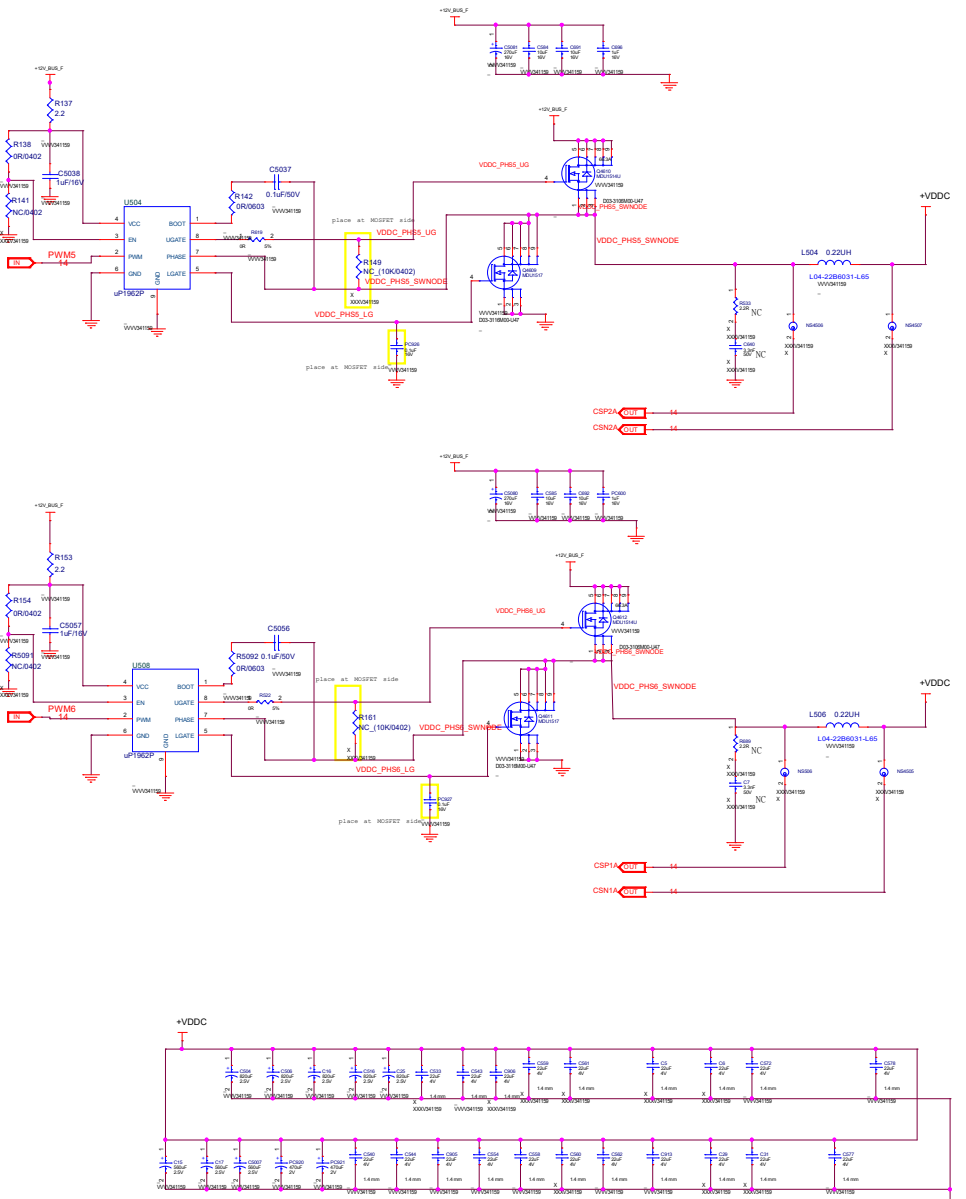


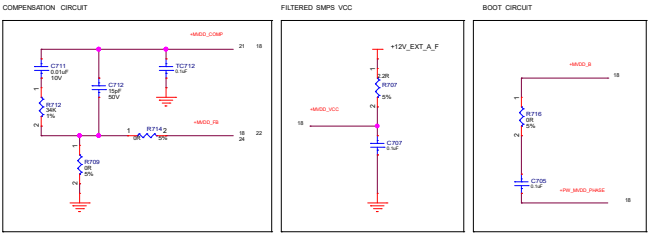


VDDC

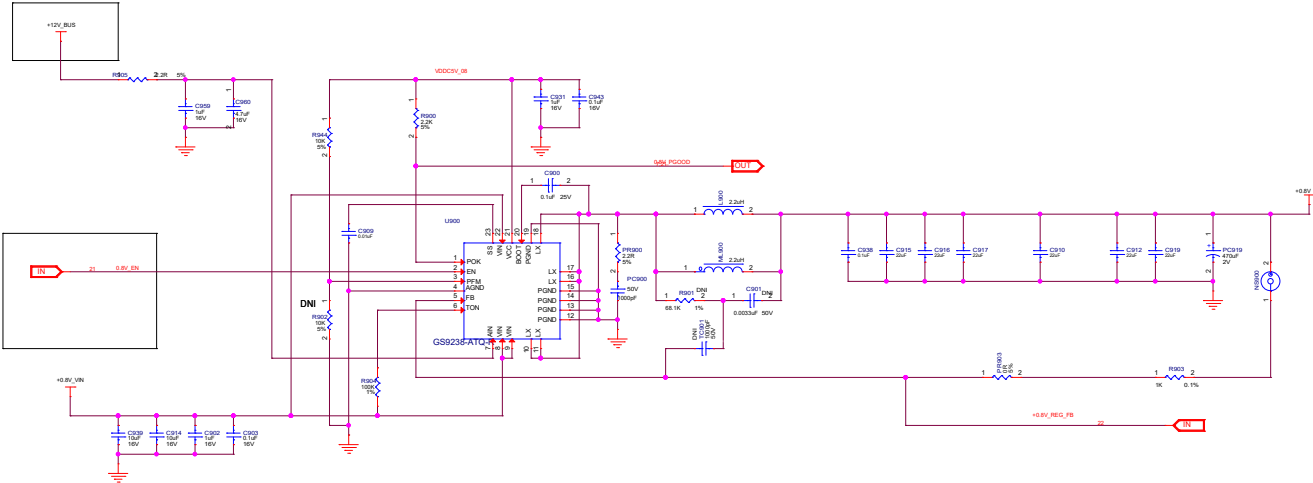


要 Fo r 4+ 時 寧



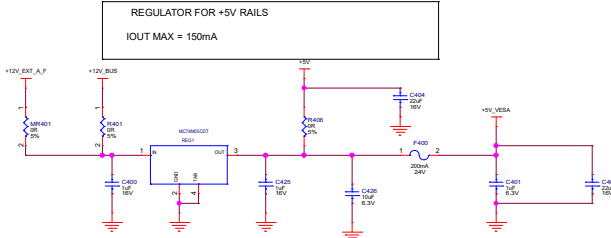
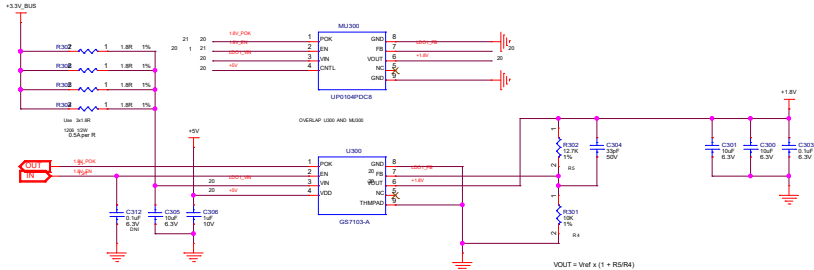


(17) 0.95V

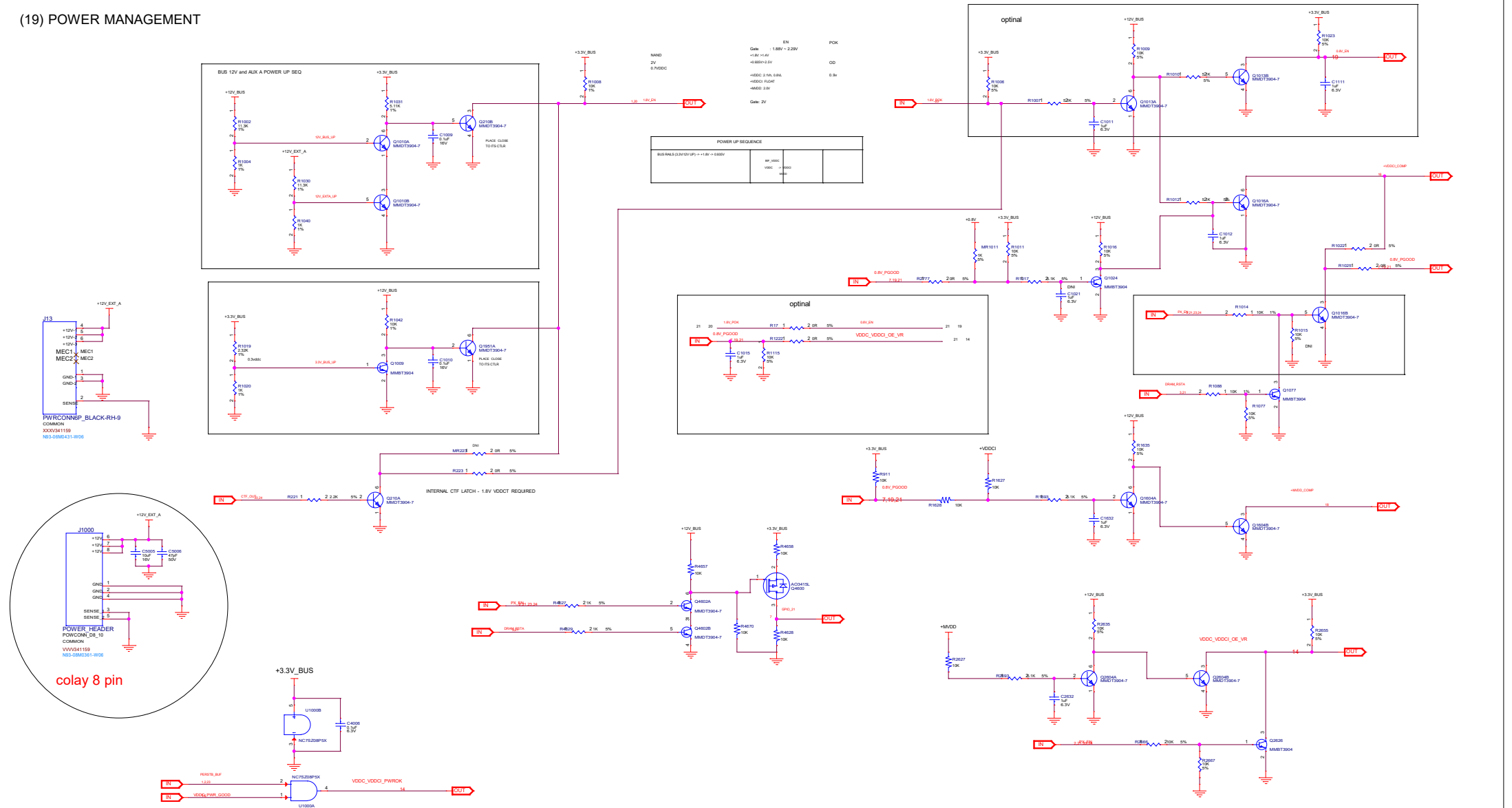


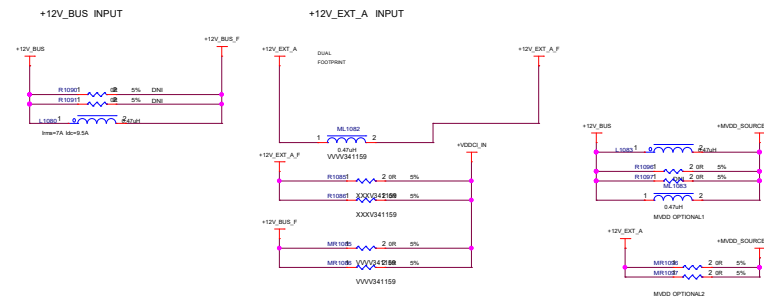
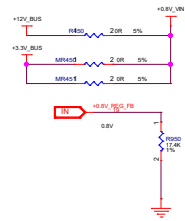
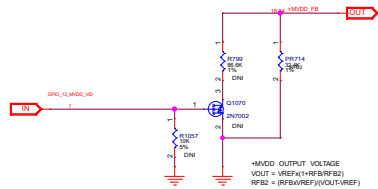
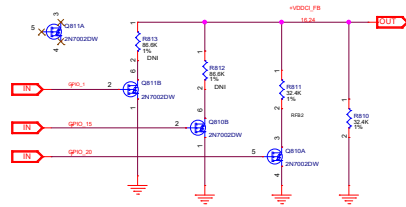
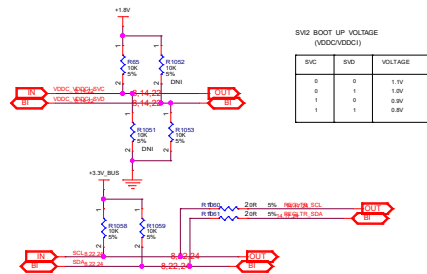
(18) SMALL RAIL REGULATORS

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

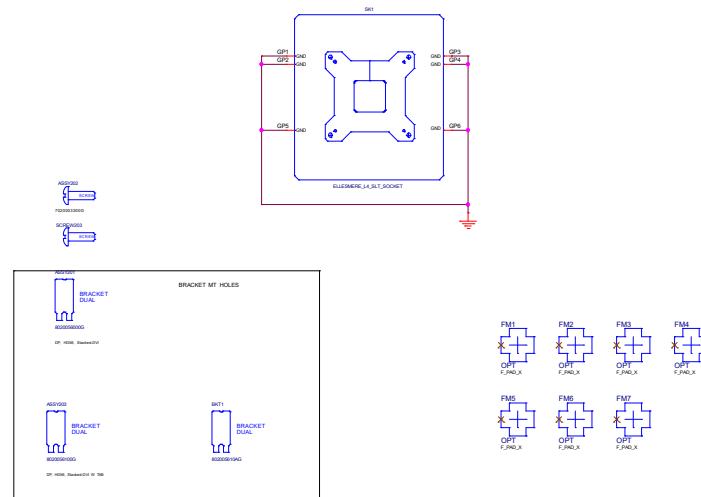
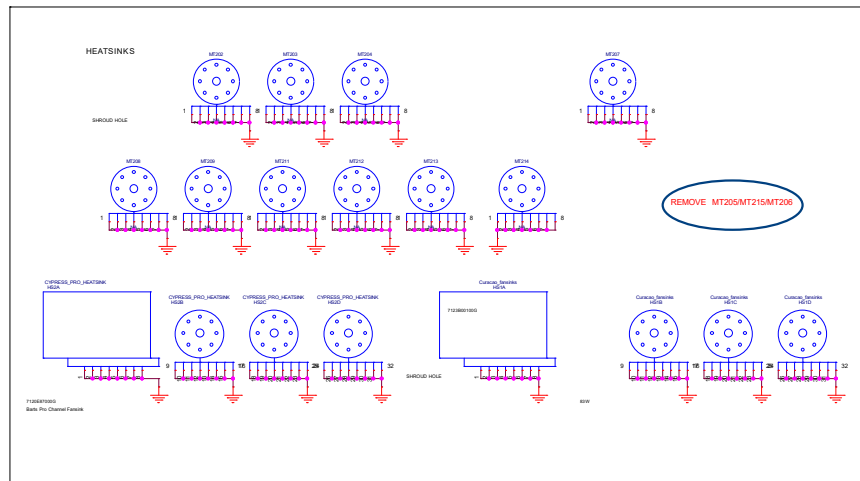
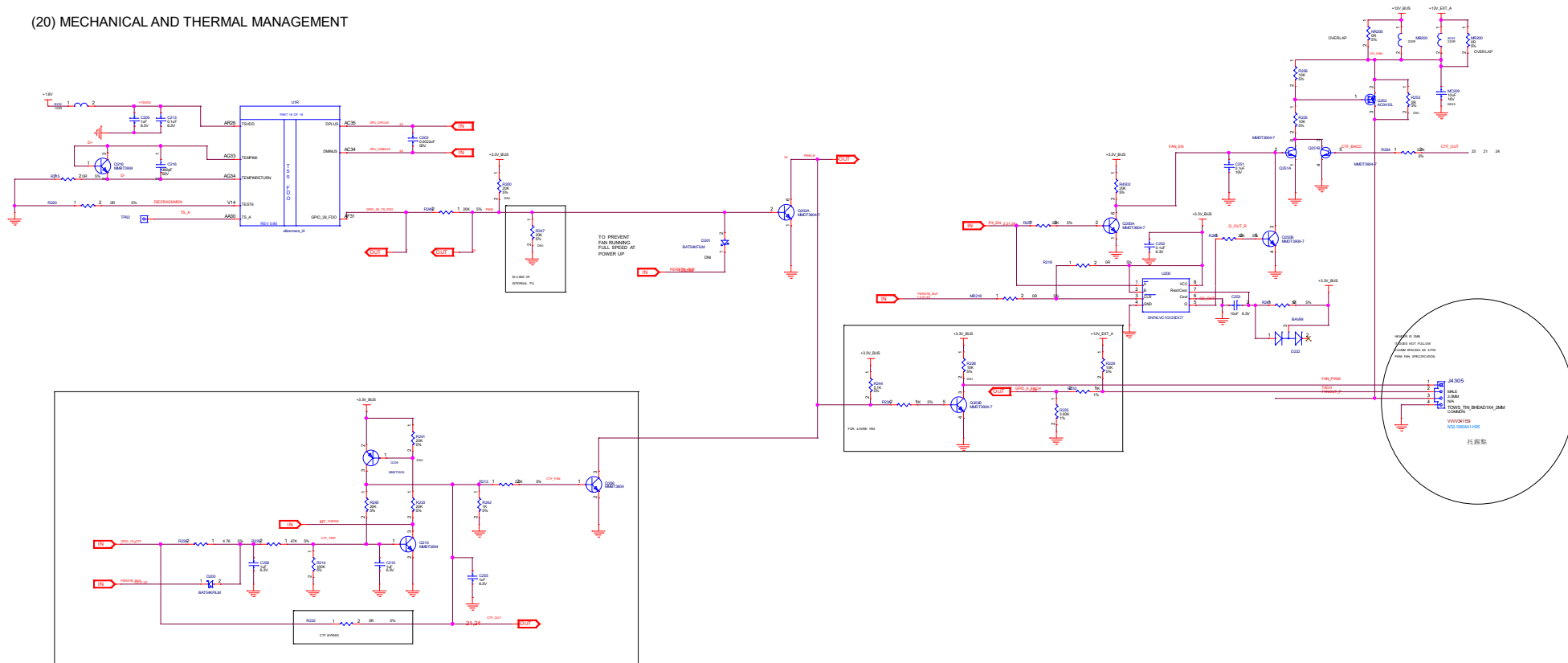


(19) POWER MANAGEMENT

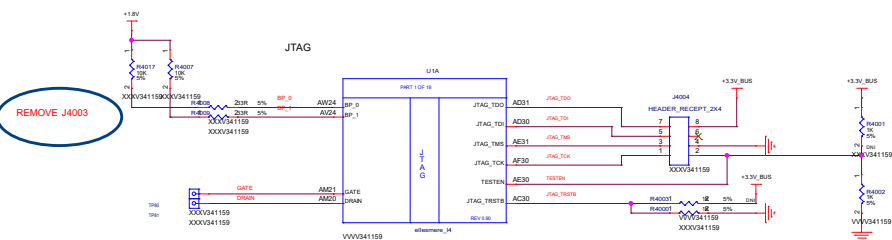




(20) MECHANICAL AND THERMAL MANAGEMENT



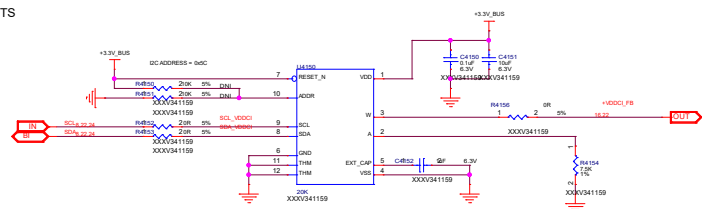
(21) DEBUG CIRCUITS



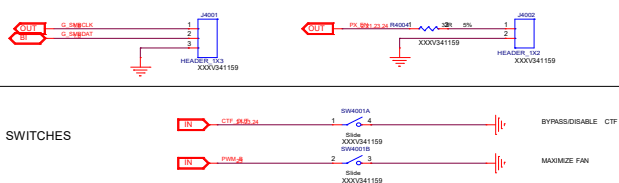
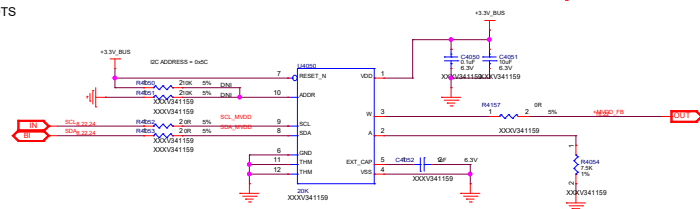
REMOVE

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

DIGITAL POTS



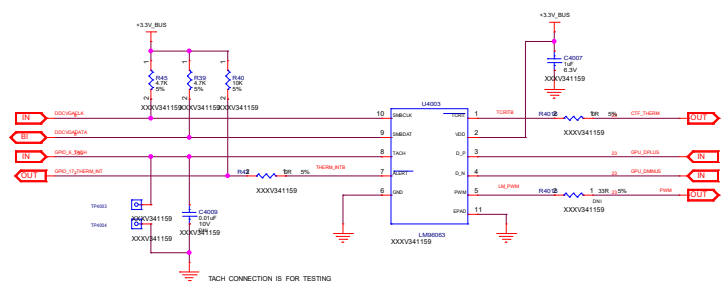
DIGITAL POTS



SWITCHES



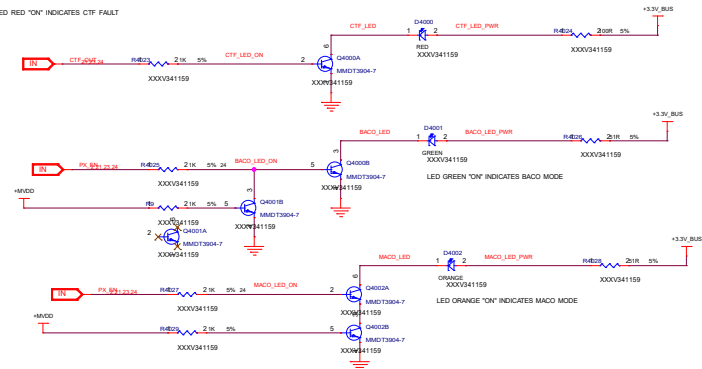
LM96163 FOR BACKUP THERMAL CONTROL



TACH CONNECTION IS FOR TESTING

LED LIGHTS

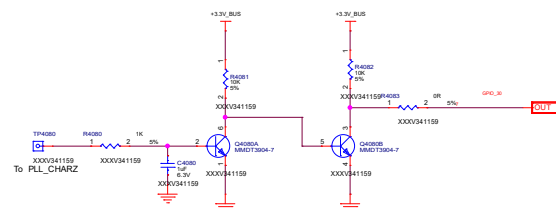
LED RED "ON" INDICATES CTF FAULT



LED GREEN "ON" INDICATES BACO MODE

LED ORANGE "ON" INDICATES MACO MODE

VTMM - TEST CONNECTOR FOR VOLTAGE MEASUREMENTS



XOOCV341159
To PLL CHARZ

	MICRO-STAR INT'L CO.,LTD		
	MS-V341		
	Size Custom	Document Description 0024DEBUG CIRCUITS/ E-FUSE	Rev. 2.
Date: Monday, July 03, 2017		Sheet 24 of 28	

23: EXT 6 PIN change to 反向 8 pin
REMOVE MT205/MT215/MT206

26: 1*4 托錫 點

15: C522 from pwm5 change to pwm4
PWM4 power from +12V_BUS_F change to 12V_EXT_A_F
PWM4 from VPVCC_BUS change to VPVCC_EXT
Remove C927/C3/C579/C576/C575/C574
Add PC920/PC921

24: REMOVE J4003
REMOVE E-FUSE CAPABILITY