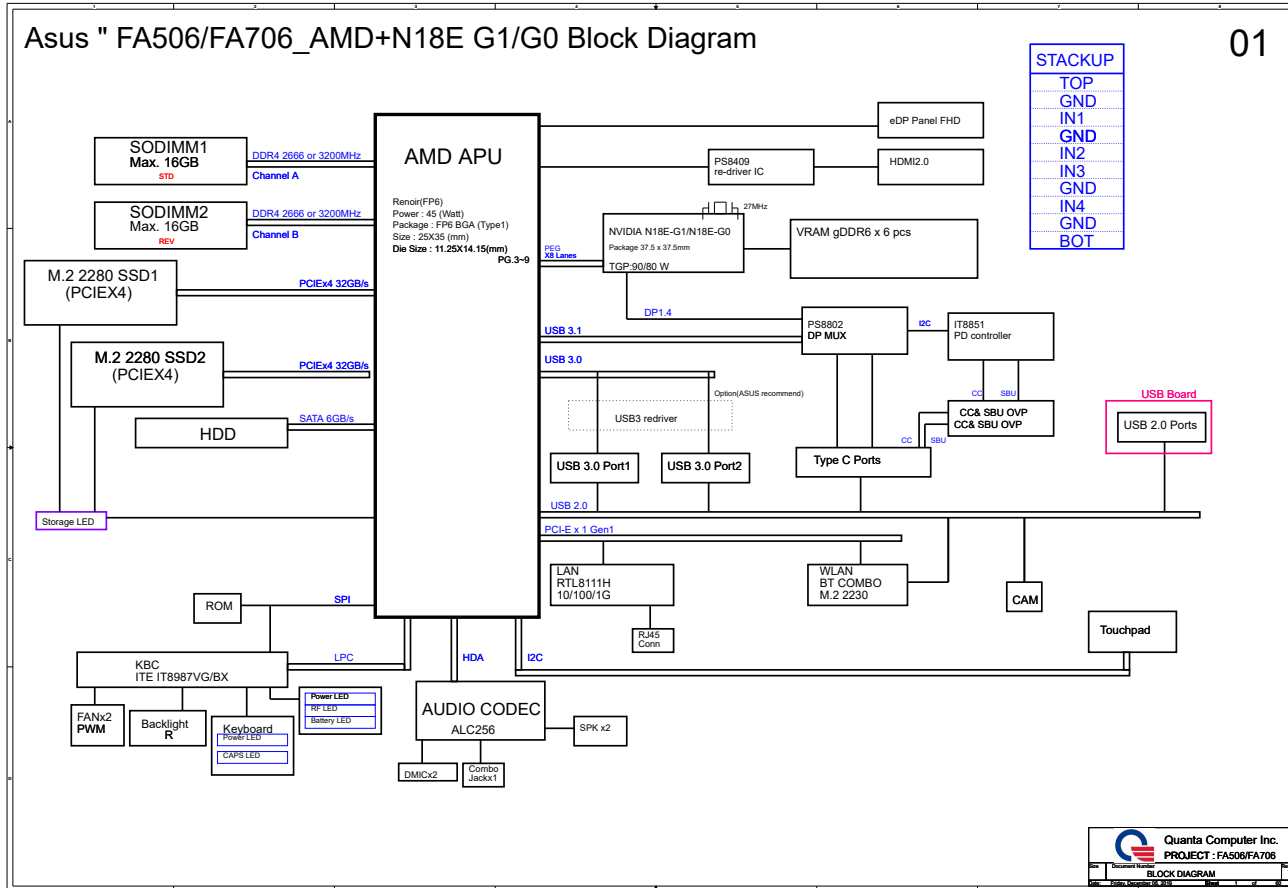
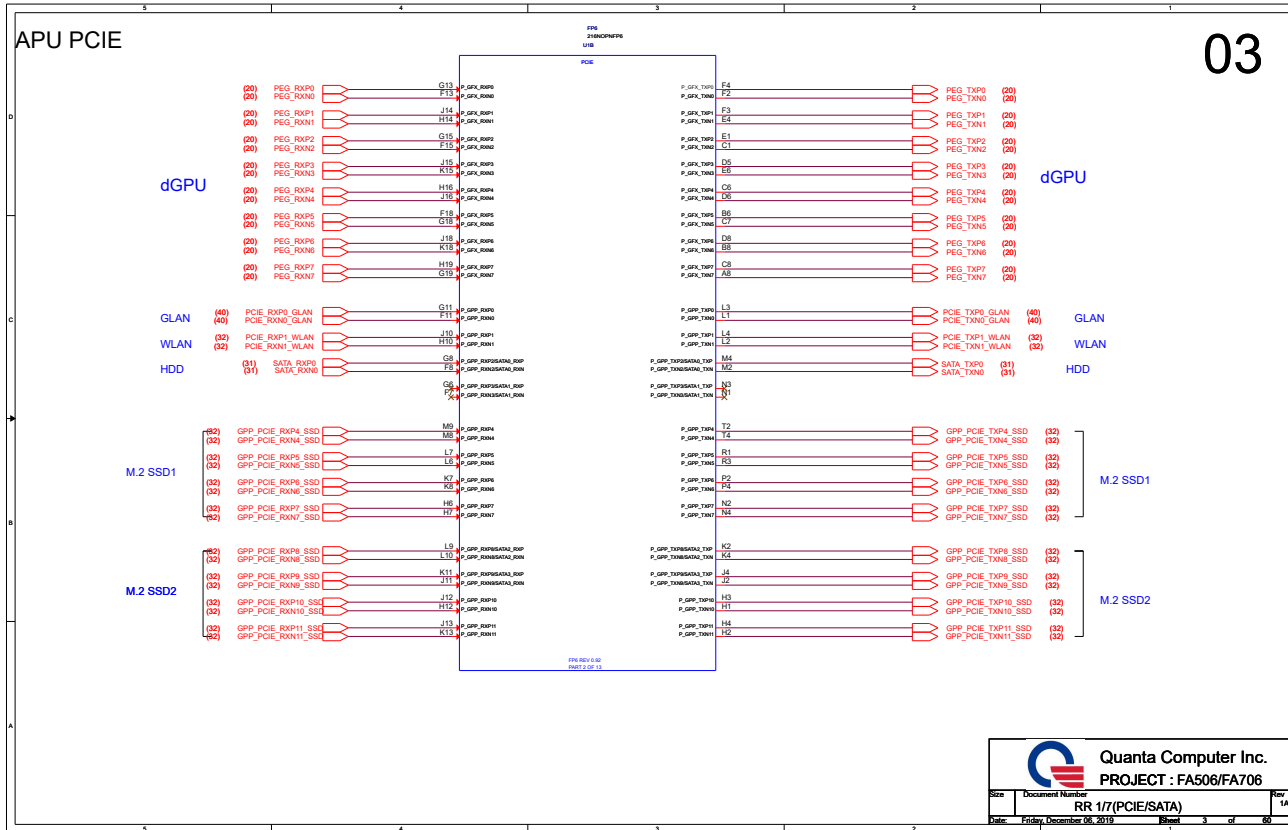


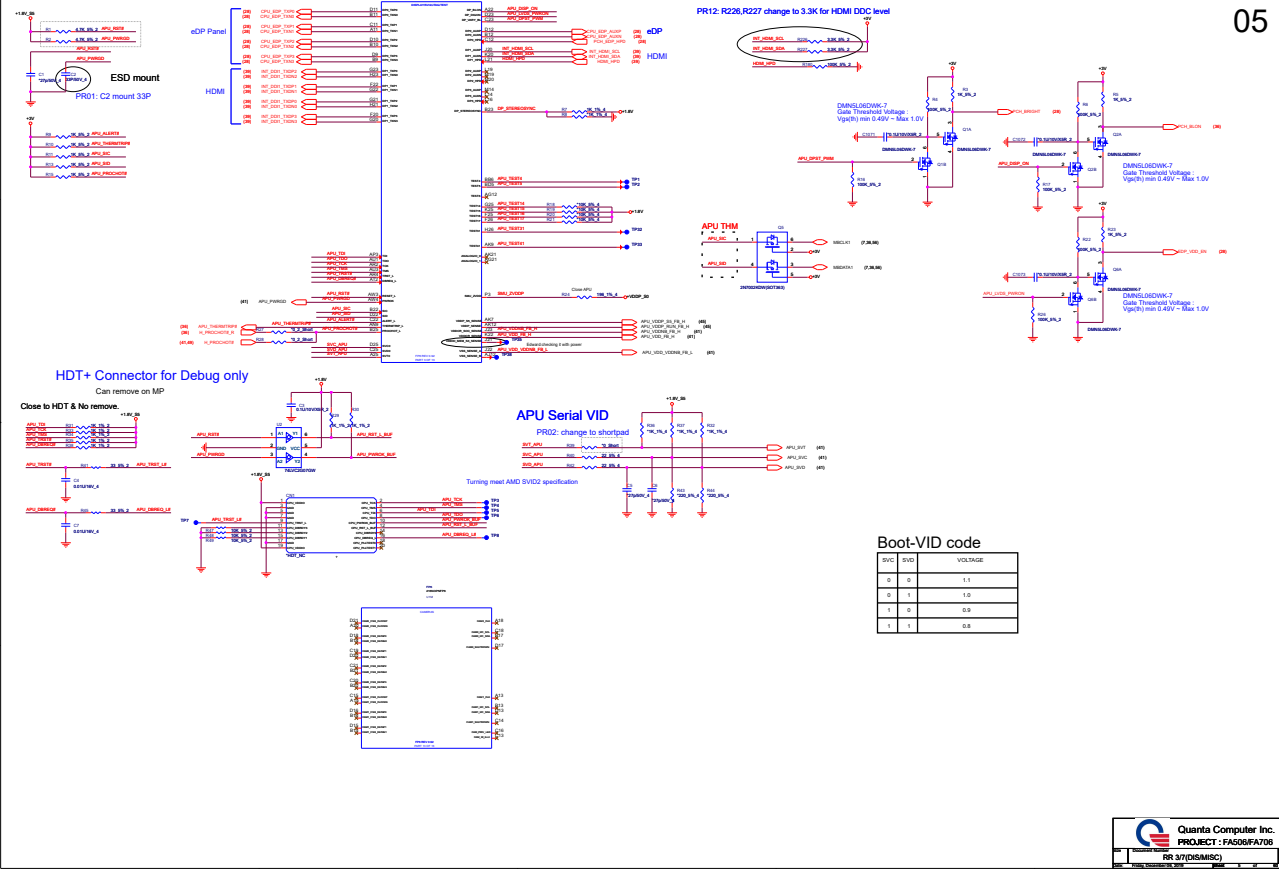
Asus " FA506/FA706_AMD+N18E G1/G0 Block Diagram

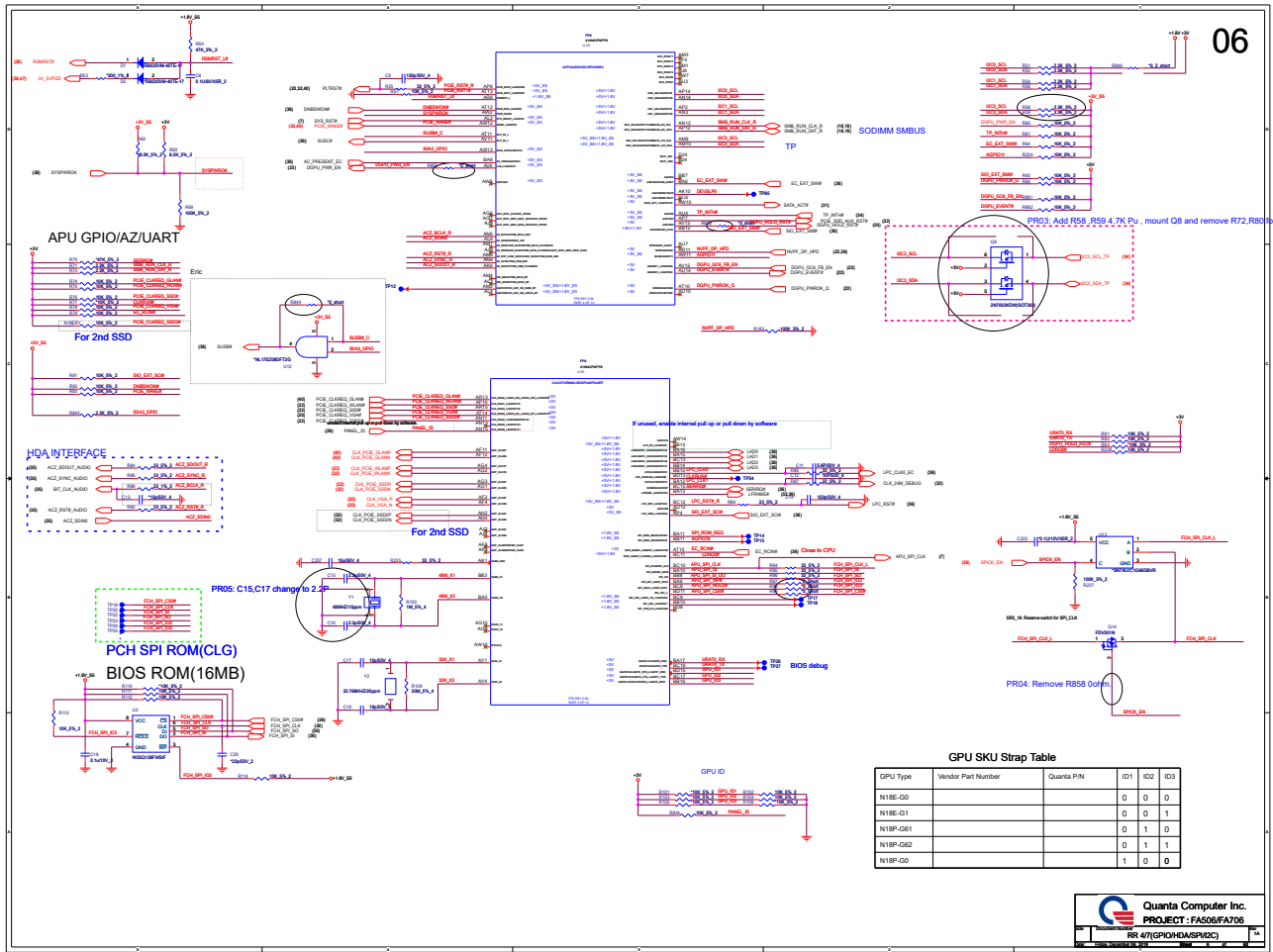
01





APU DISPLAY and MISC

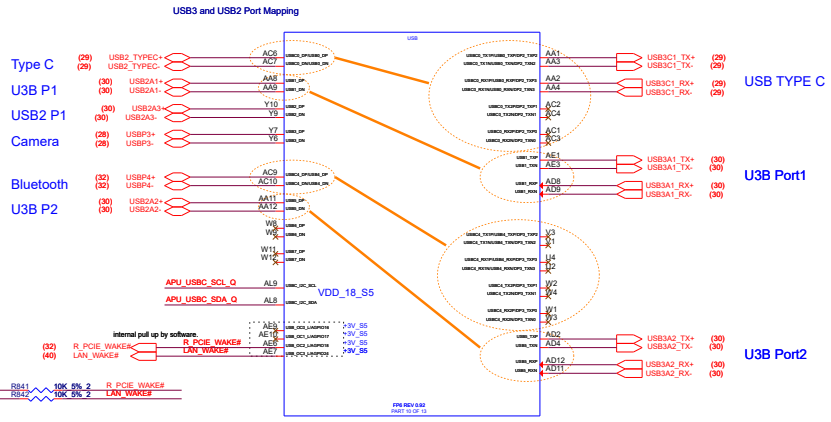




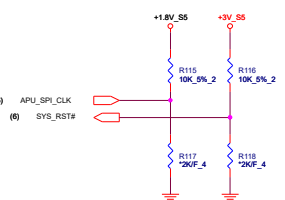
GPU SKU Strap Table

GPU Type	Vendor Part Number	Quanta P/N	ID1	ID2	ID3
N1E-G0			0	0	0
N1E-G1			0	0	1
N1E-G61			0	1	0
N1E-G62			0	1	1
N1E-G0			1	0	0

USB2 Port	Function
USB0	TYPE-C
USB1	U3B PORT1
USB2	USB2 P1
USB3	Camera
USB4	Bluetooth
USB5	U3B PORT2
USB6	
USB7	

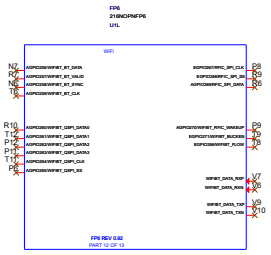
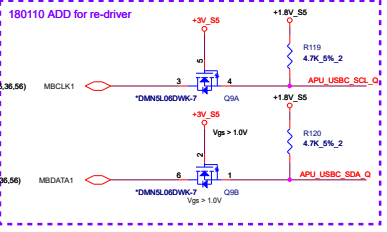


STRAPS PINS



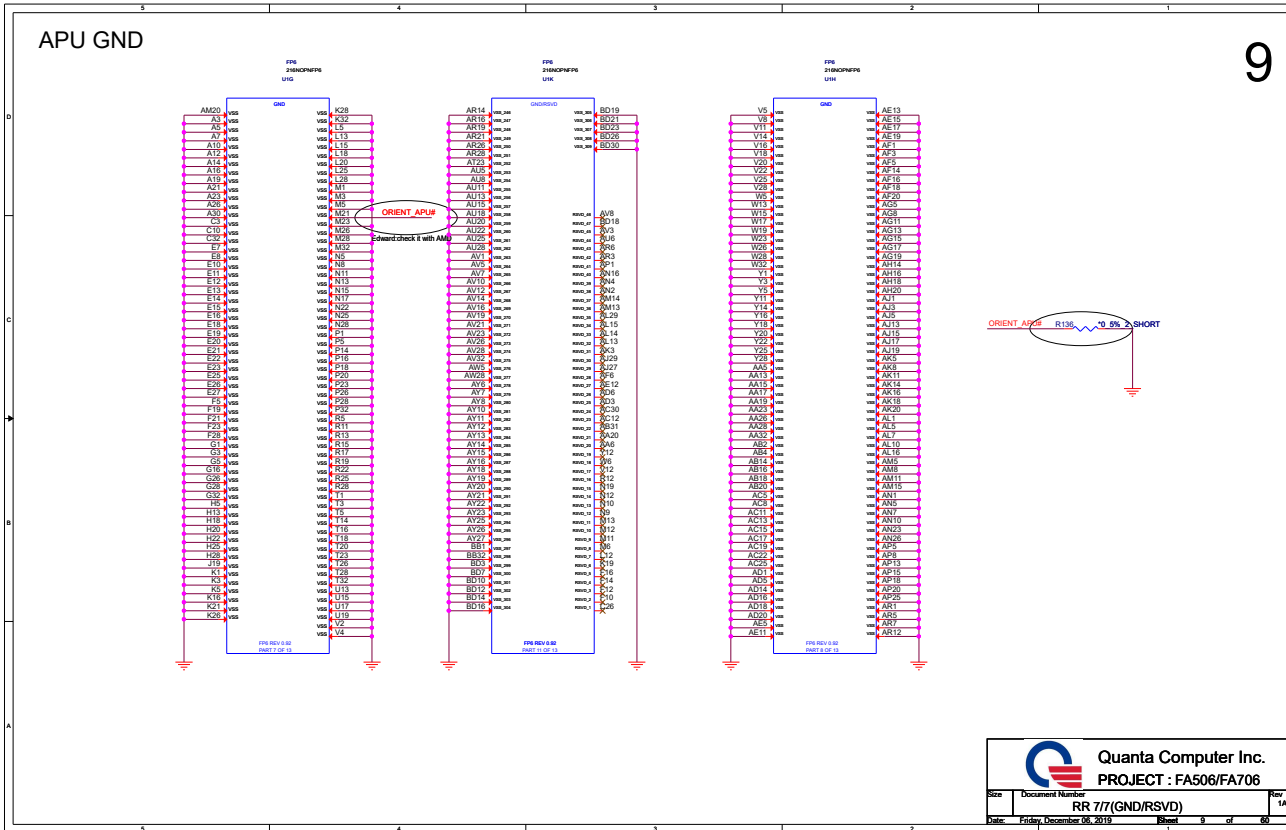
REQUIRED STRAPS

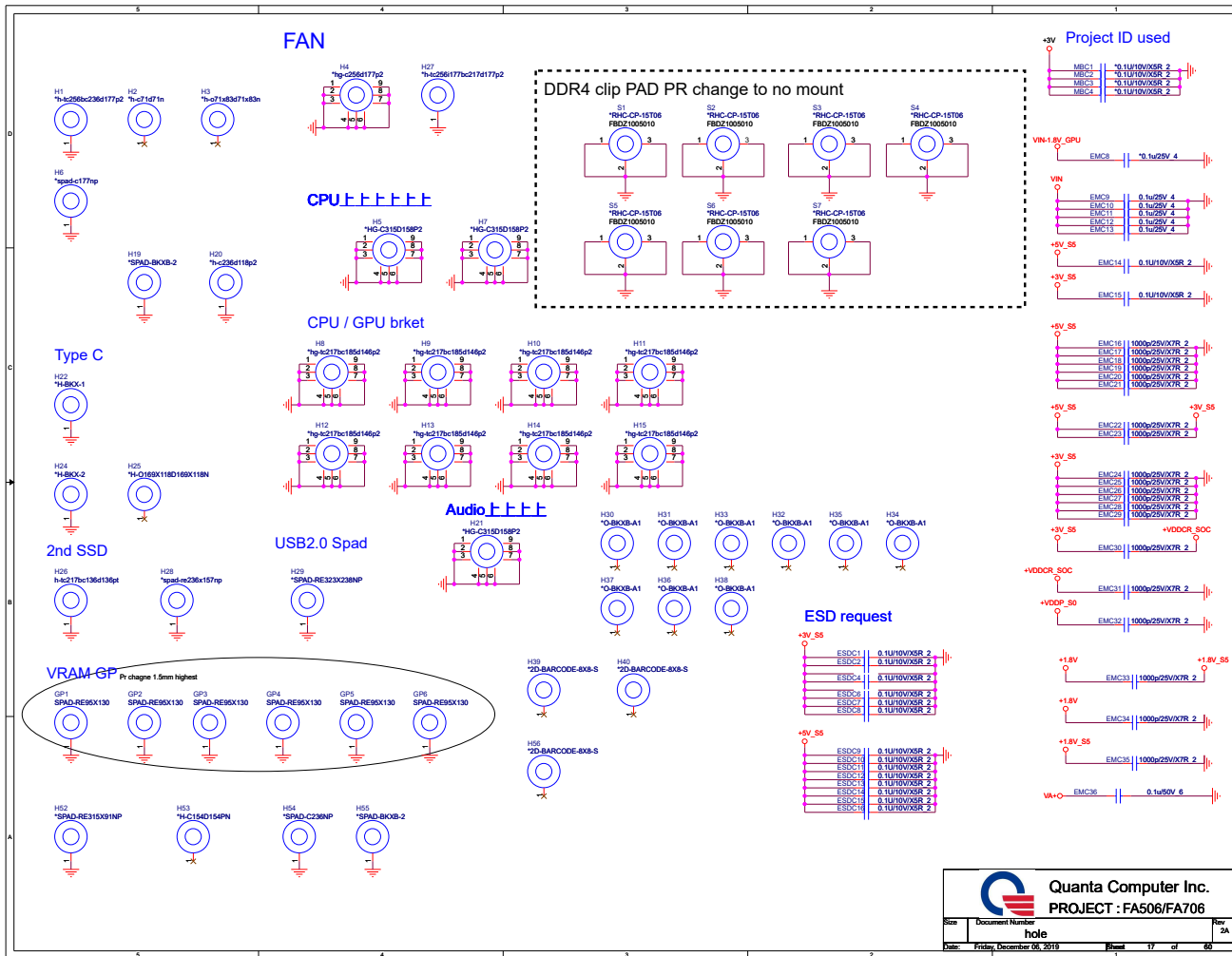
	APU_SPI_CLK	SYS_RST#
PULL HIGH	Use 48Mhz crystal clock and generate both internal and external clocks DEFAULT	normal reset mode DEFAULT
PULL LOW	Use 100Mhz PCIe clock as reference clock and generate internal clocks only	short reset mode

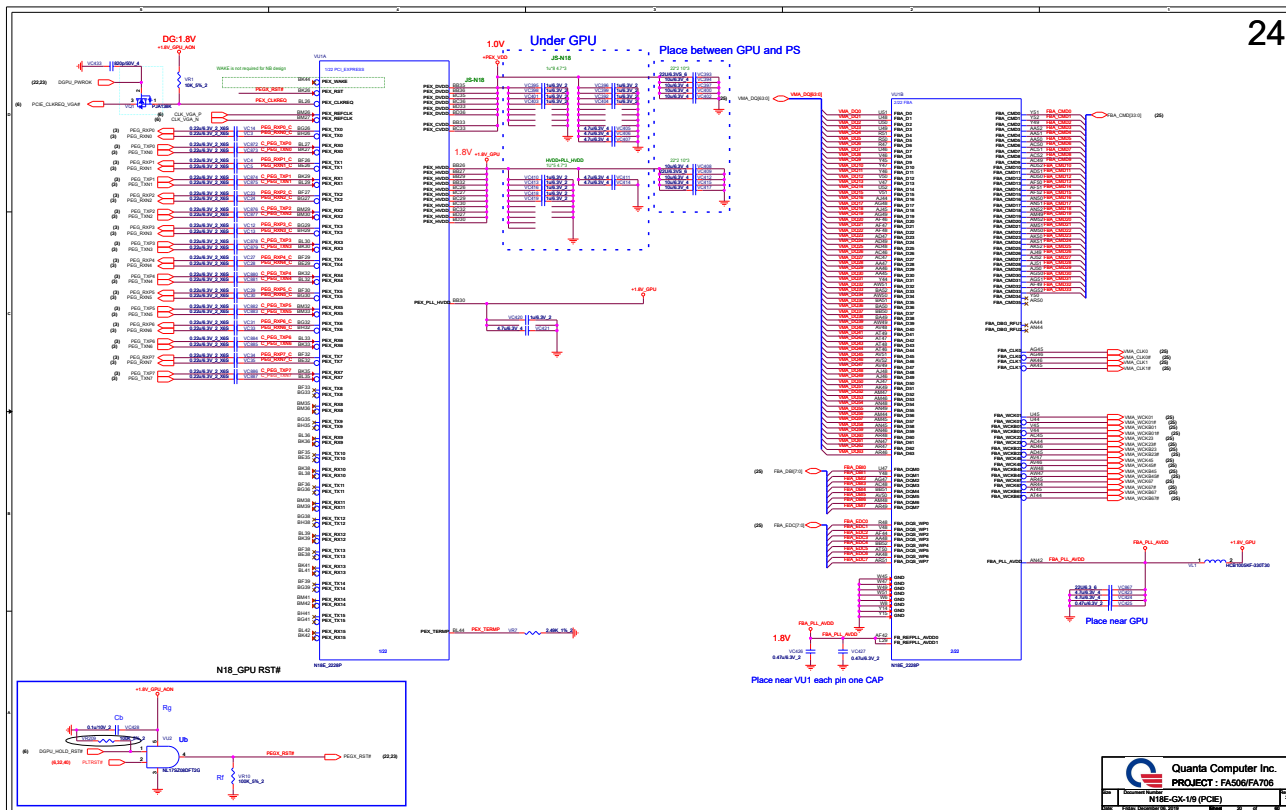


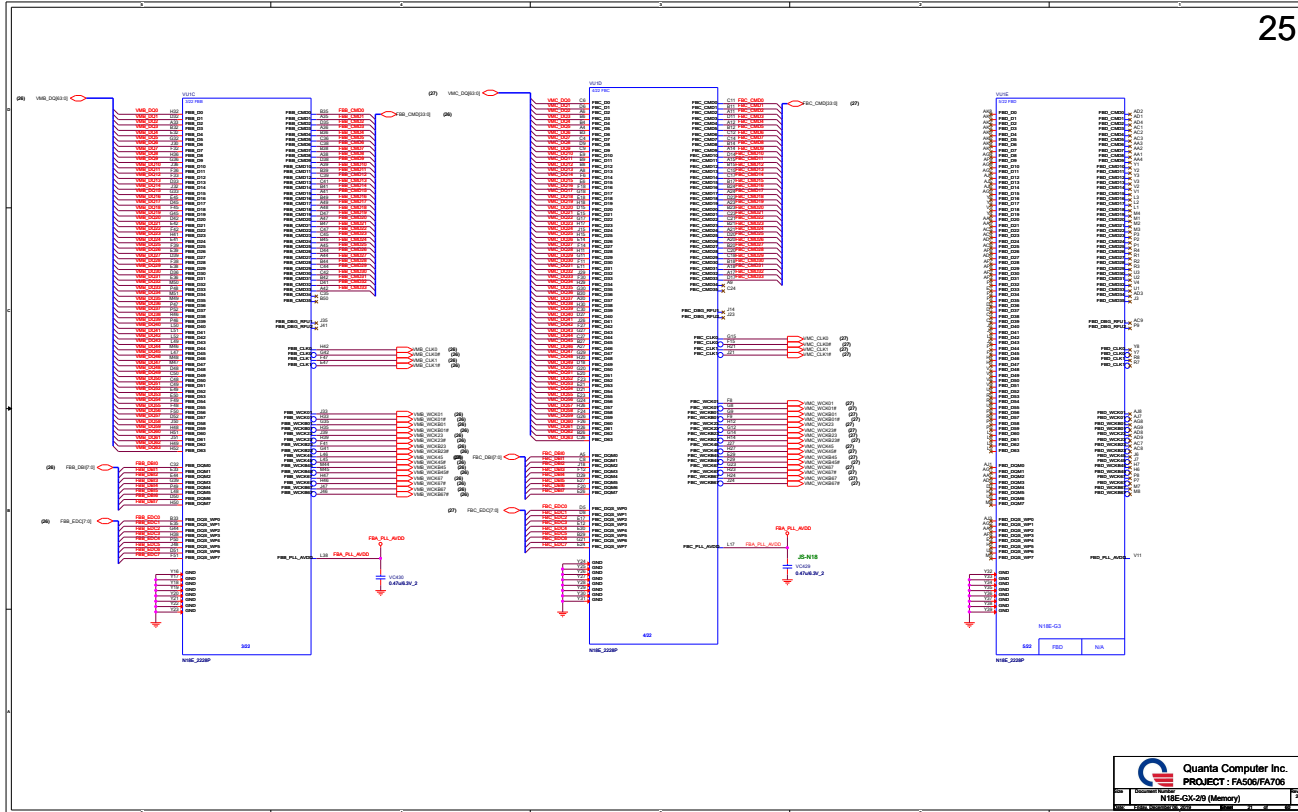
APU GND

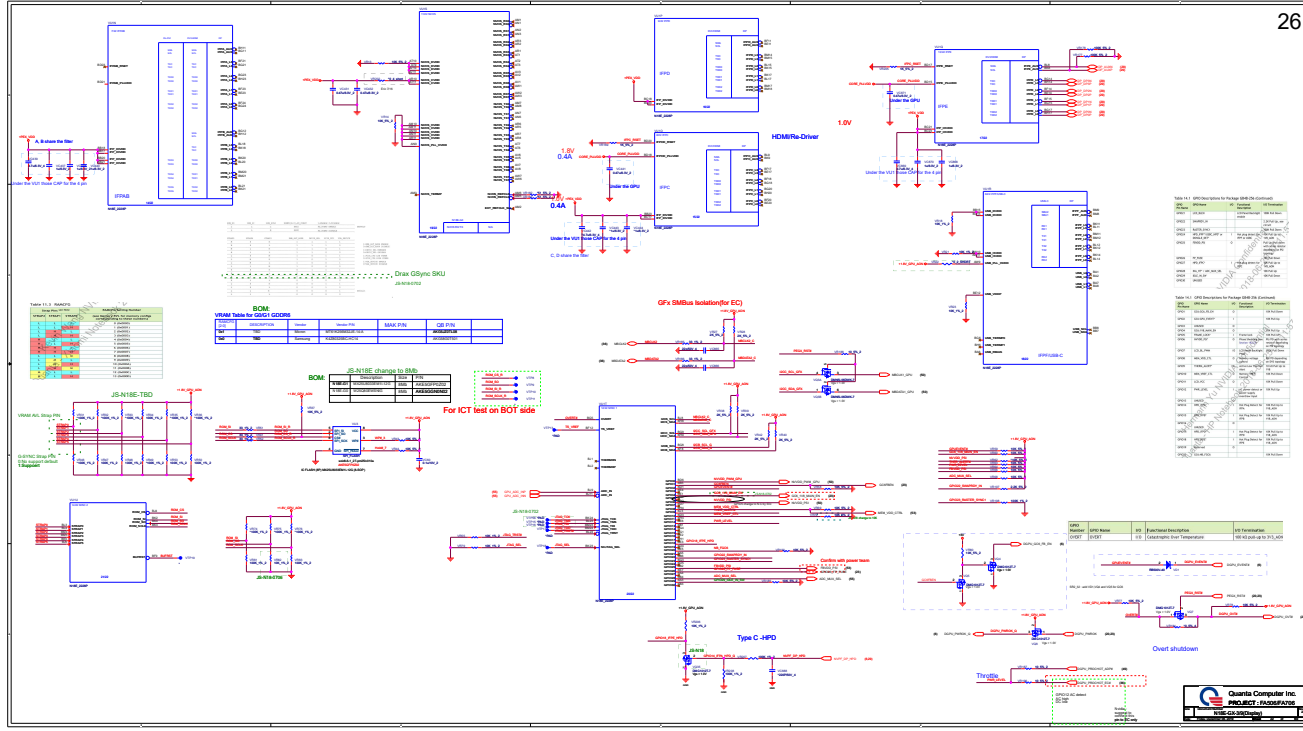
9

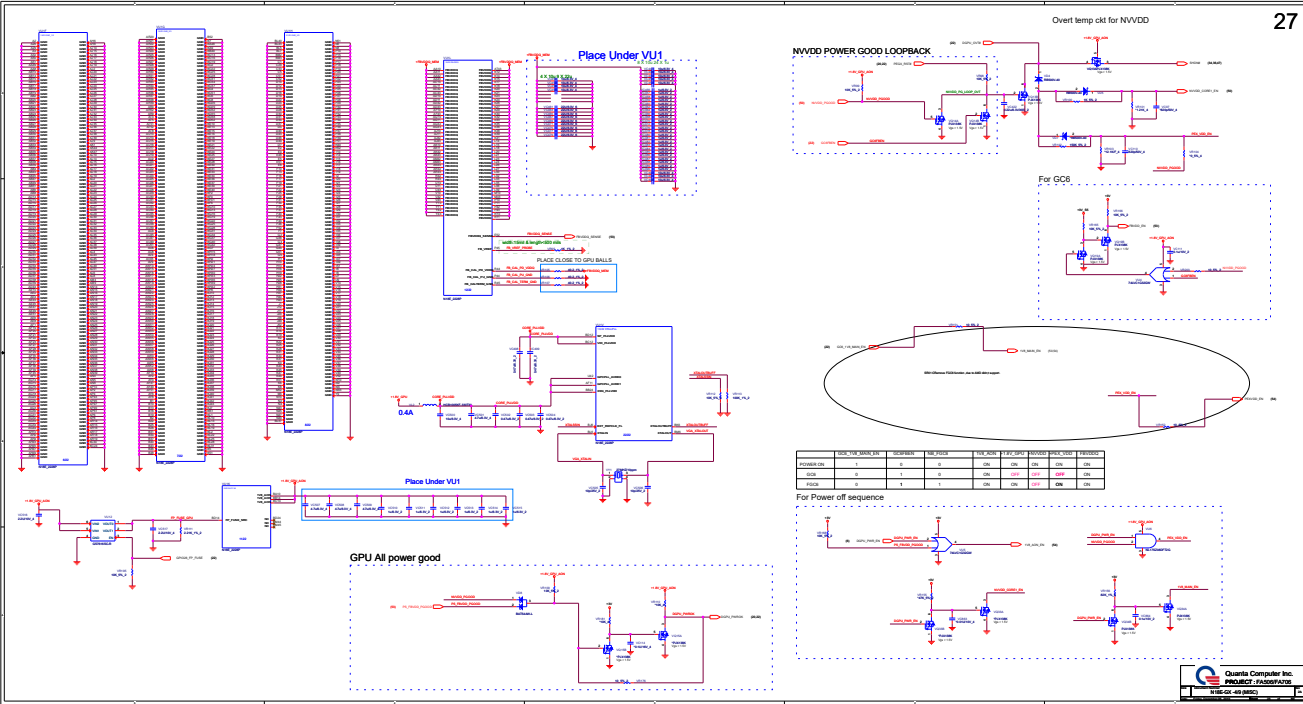


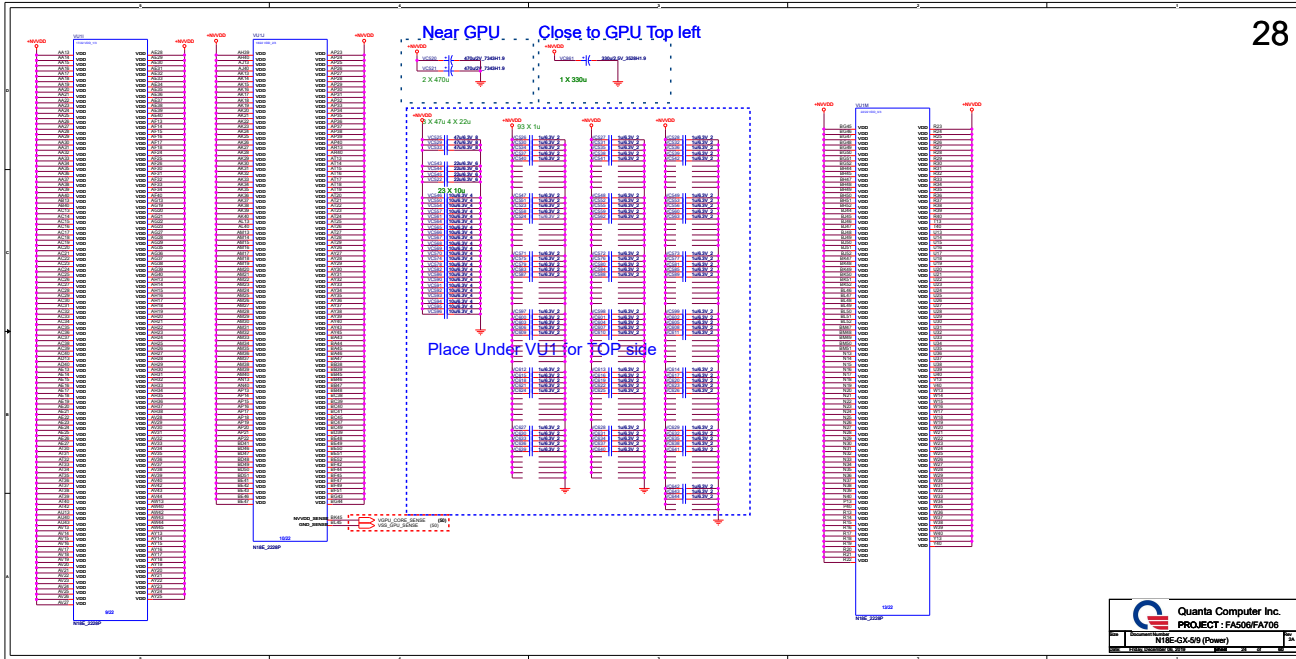




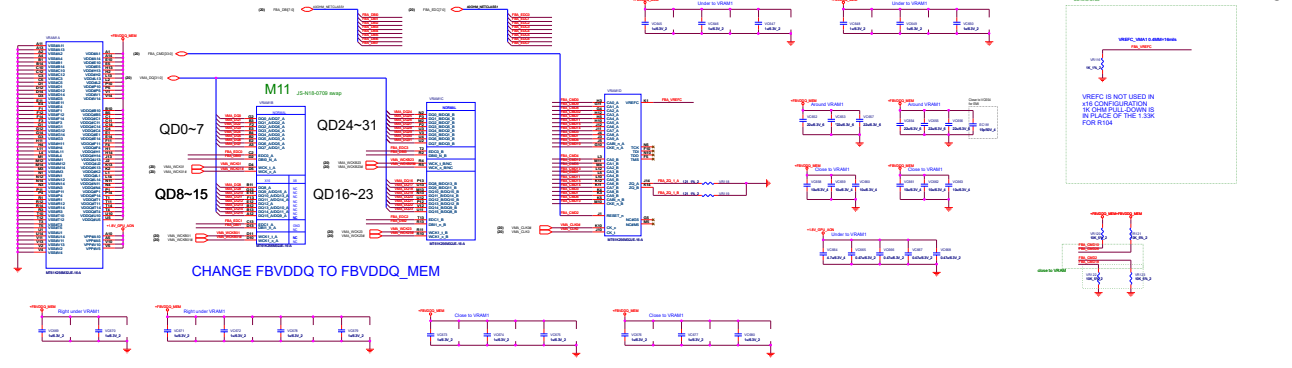




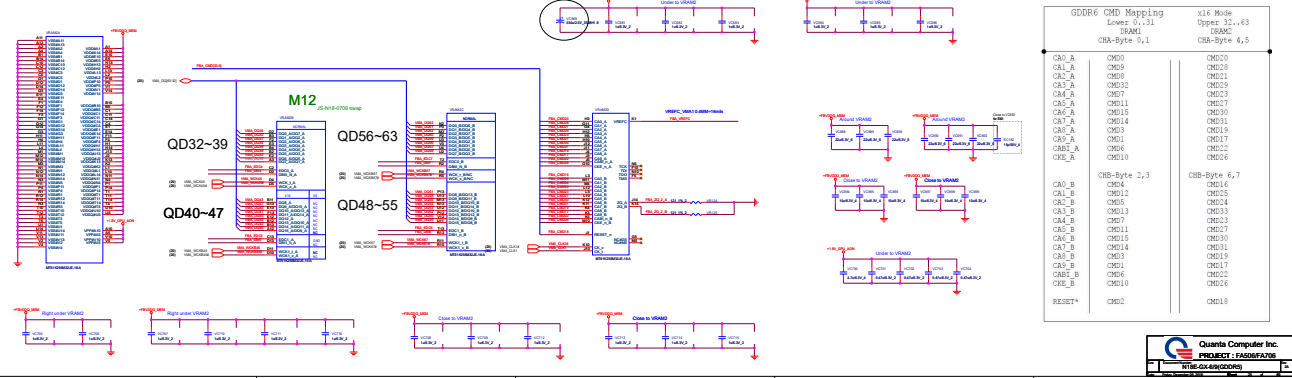




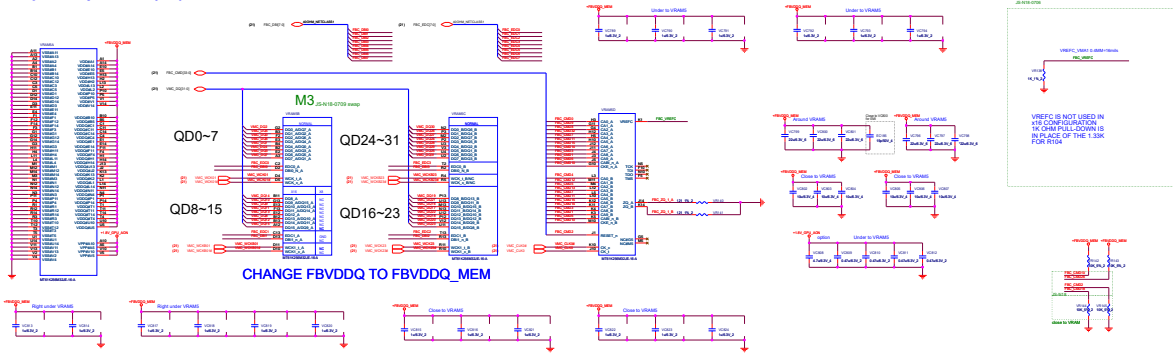
MEMORY: FBA Partition 31..0



MEMORY: FBA Partition 63..32

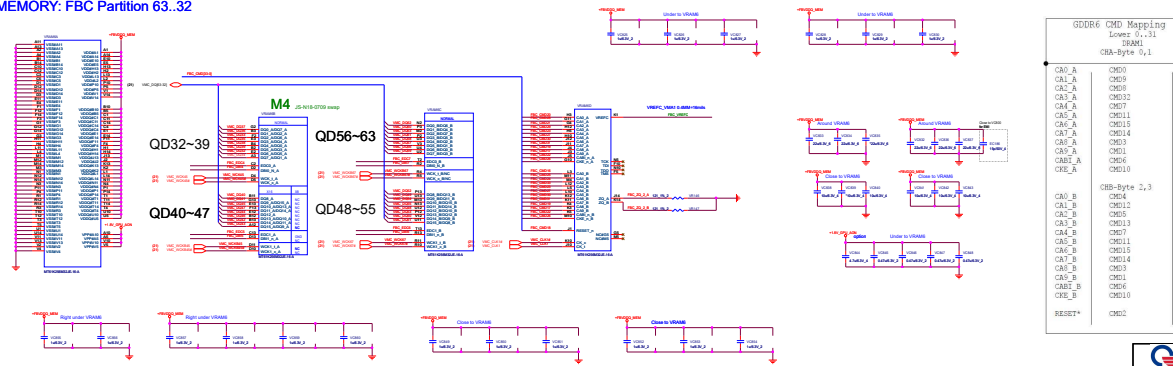


MEMORY: FBC Partition 31..0

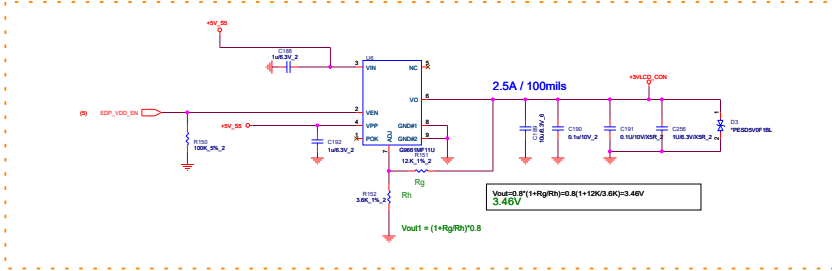
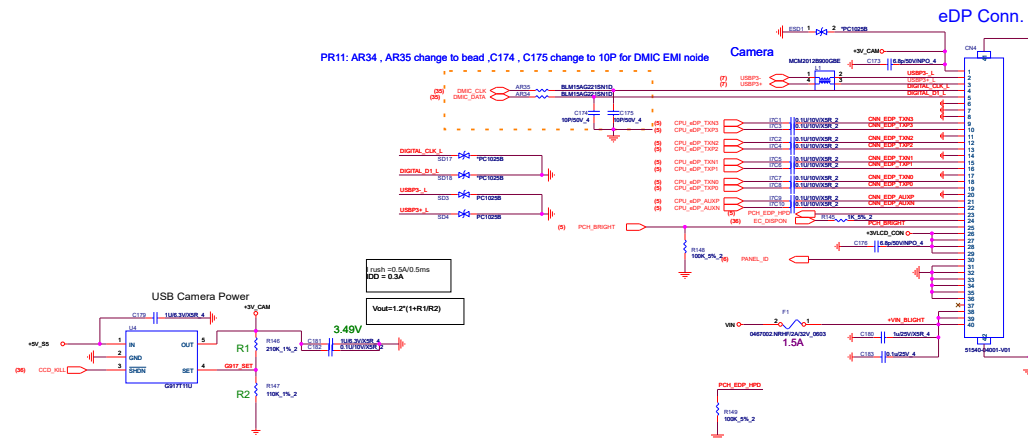


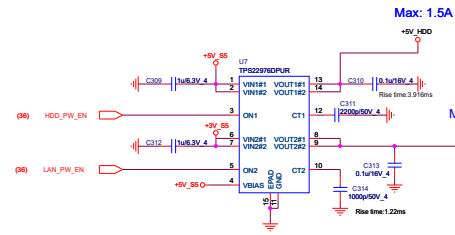
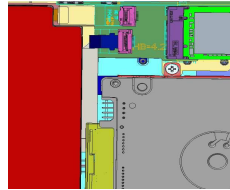
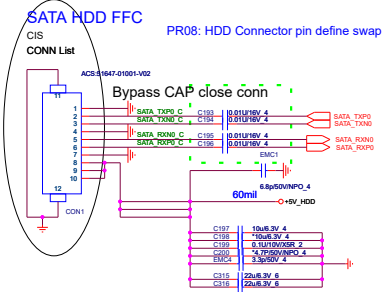
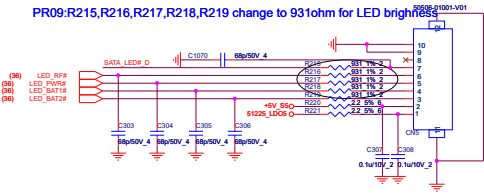
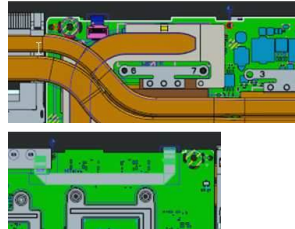
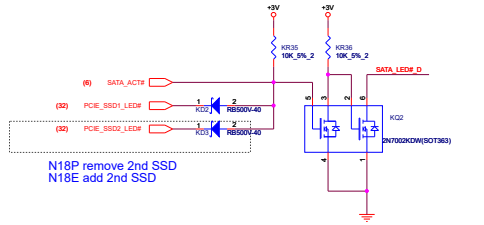
VBVDDQ_VDDQ & BDDQ-TRIP
 VREG is NOT USED IN
 this configuration
 IN OHM PULL-DOWN IS
 IN PLACE OF THE 1.8V
 FOR RDA

MEMORY: FBC Partition 63..32

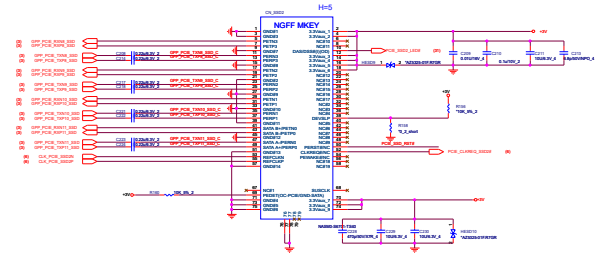
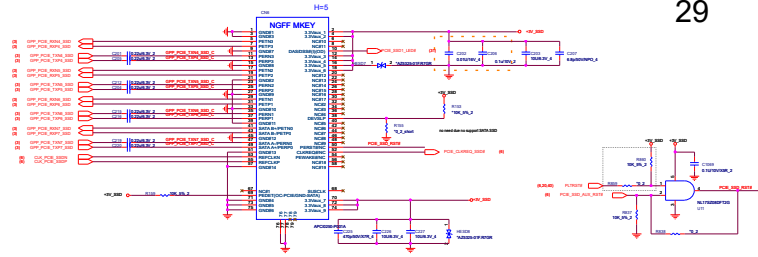


GDDR6 CMD Mapping		Bit Mode
Lower 0..31		Upper 32..63
BRAND		SRANK
CSA-Byte 0,1	CSB-Byte 4,5	
CSA_A	CSM0	CSM20
CAL_A	CSM9	CSM29
CRC_A	CSM8	CSM28
CSA_A	CSM32	CSM32
CMA_A	CSM7	CSM23
CSE_A	CSM11	CSM27
CAG_A	CSM15	CSM30
CST_A	CSM14	CSM31
CAS_A	CSM3	CSM19
CBS_A	CSM1	CSM17
CABE_A	CSM6	CSM22
CBE_A	CSM10	CSM26
CSB-Byte 2,3		CSB-Byte 6,7
CAL_B	CSM4	CSM16
CAL_B	CSM12	CSM25
CRC_B	CSM5	CSM24
CAL_B	CSM13	CSM33
CMA_B	CSM7	CSM23
CSE_B	CSM11	CSM27
CAG_B	CSM15	CSM30
CST_B	CSM14	CSM31
CAS_B	CSM3	CSM19
CBS_B	CSM1	CSM17
CABE_B	CSM6	CSM22
CBE_B	CSM10	CSM26
RESET*	CSM2	CSM18



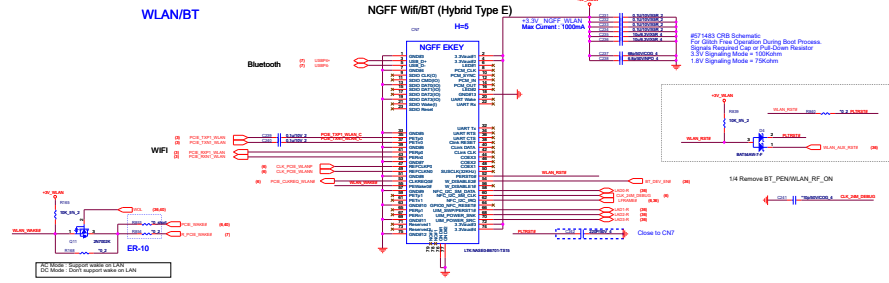


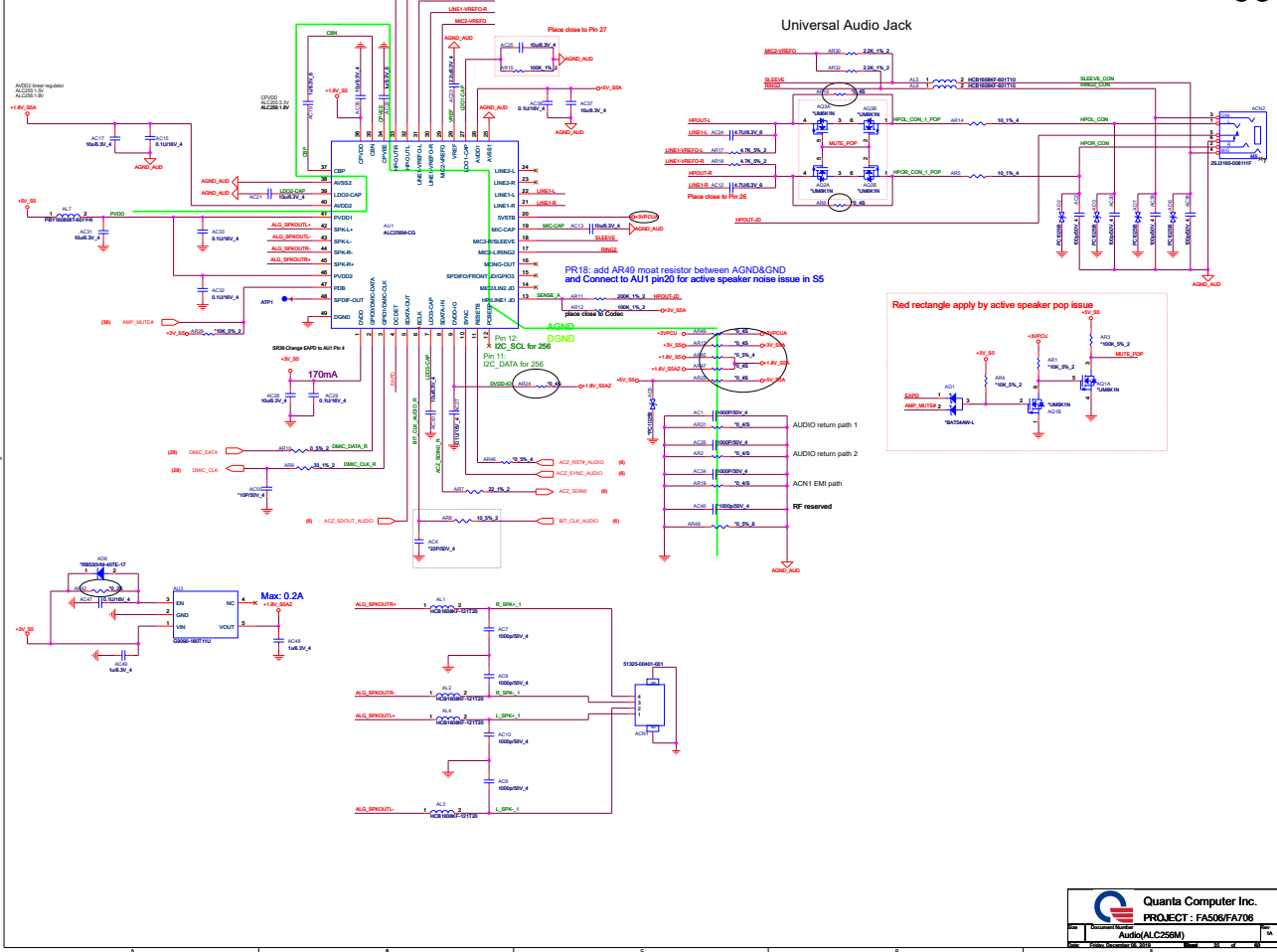
SSD



WLAN/BT

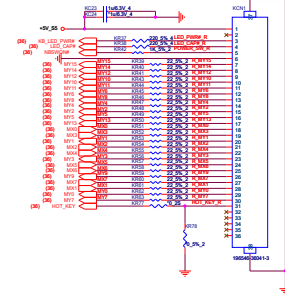
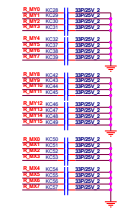
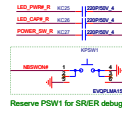
NGFF WIR/BT (Hybrid Type E)



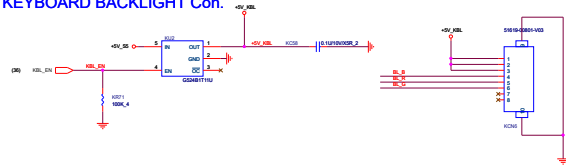


KEYBOARD Con.

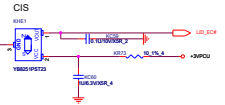
37



KEYBOARD BACKLIGHT Con.

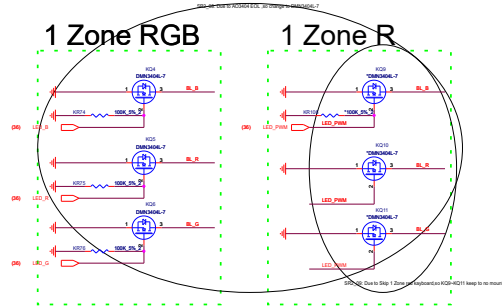


ESD23 CLOSE TO KHE1

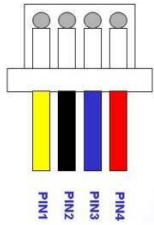


1 Zone RGB

1 Zone R



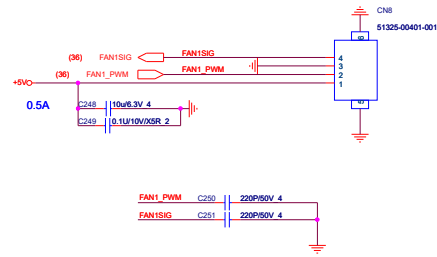
4Pins Fan Connector Pins Definition



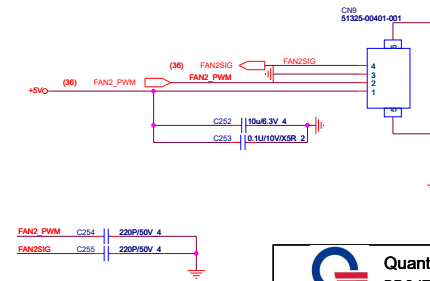
Pin No.	Function
Pin 1	TACHO
Pin 2	GNA
Pin 3	PWM
Pin 4	+5V


FAN1 for GPU(New)

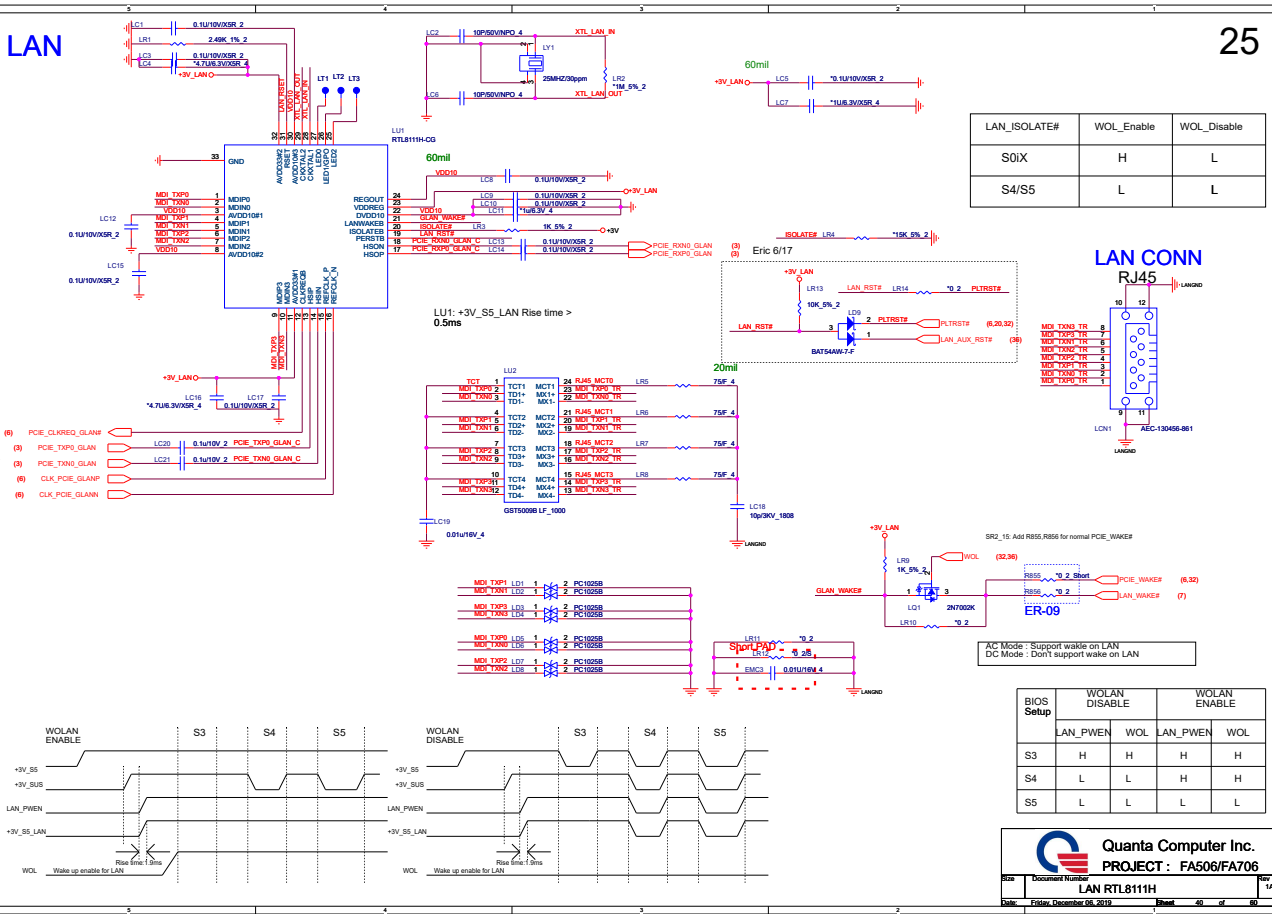
38



FAN2 for CPU



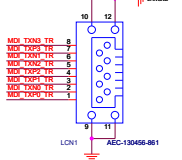

Quanta Computer Inc.
PROJECT : FA506/FA706
 Size Document Number
 FAN
 Date: Friday, December 06, 2010 8:58am 38 of 60 Rev 1A



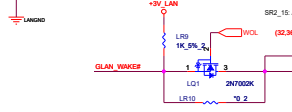
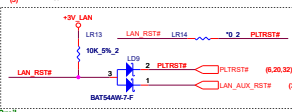
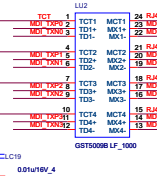
25

LAN_ISOLATE#	WOL_Enable	WOL_Disable
S0/X	H	L
S4/S5	L	L

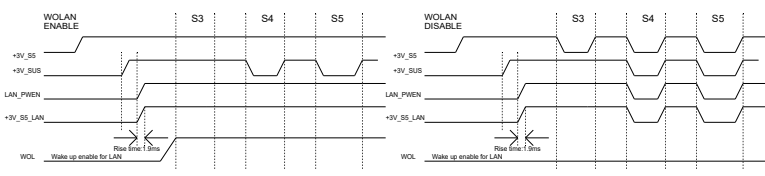
LAN CONN RJ45



LU11 +3V_S5_LAN Rise time > 0.5ms



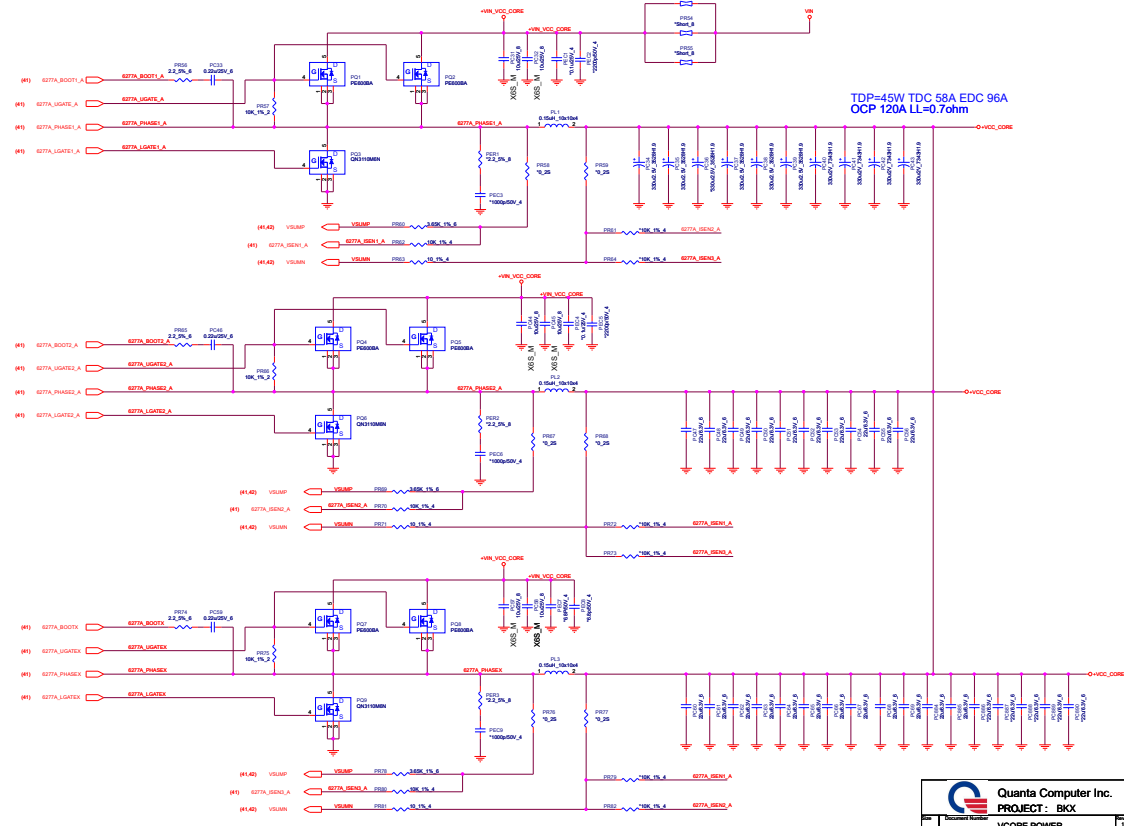
AC Mode: Support wake on LAN
DC Mode: Don't support wake on LAN



BIOS Setup	WOLAN DISABLE		WOLAN ENABLE	
	LAN_PWEN	WOL	LAN_PWEN	WOL
S3	H	H	H	H
S4	L	L	H	H
S5	L	L	L	L

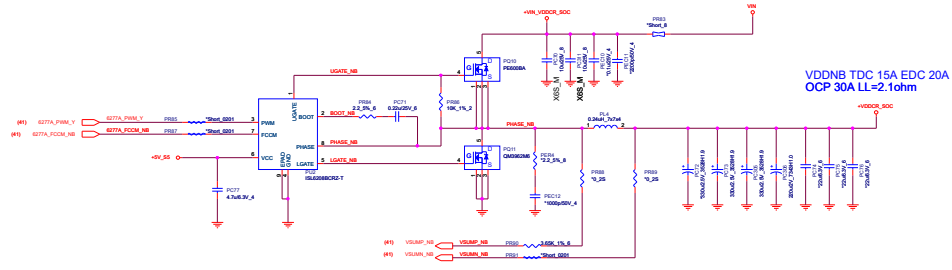
Quanta Computer Inc.
PROJECT : FA506/FA706
LAN RTL8111H

VCORE

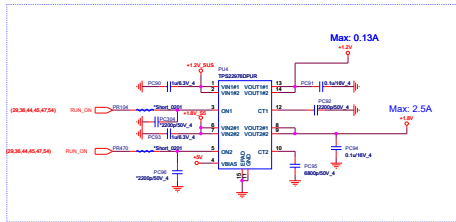
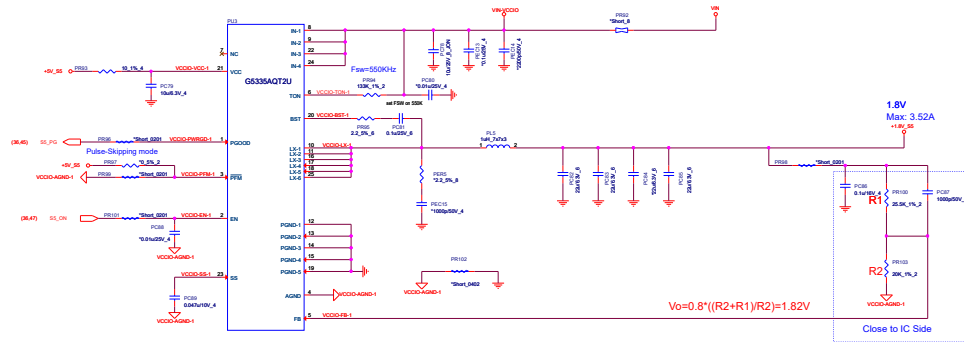


Quanta Computer Inc.
PROJECT: BKX
VCore POWER
Rev: 1.0

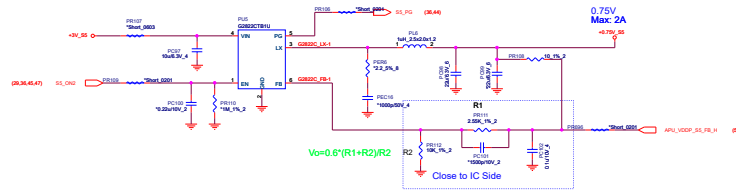
+NB_CORE



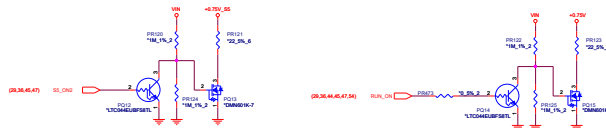
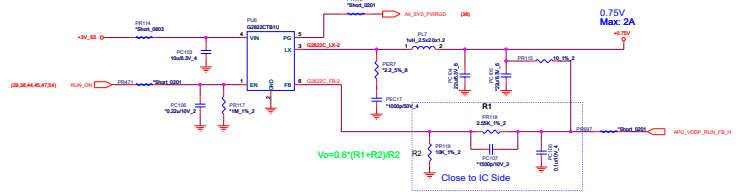
+1.8V_S5

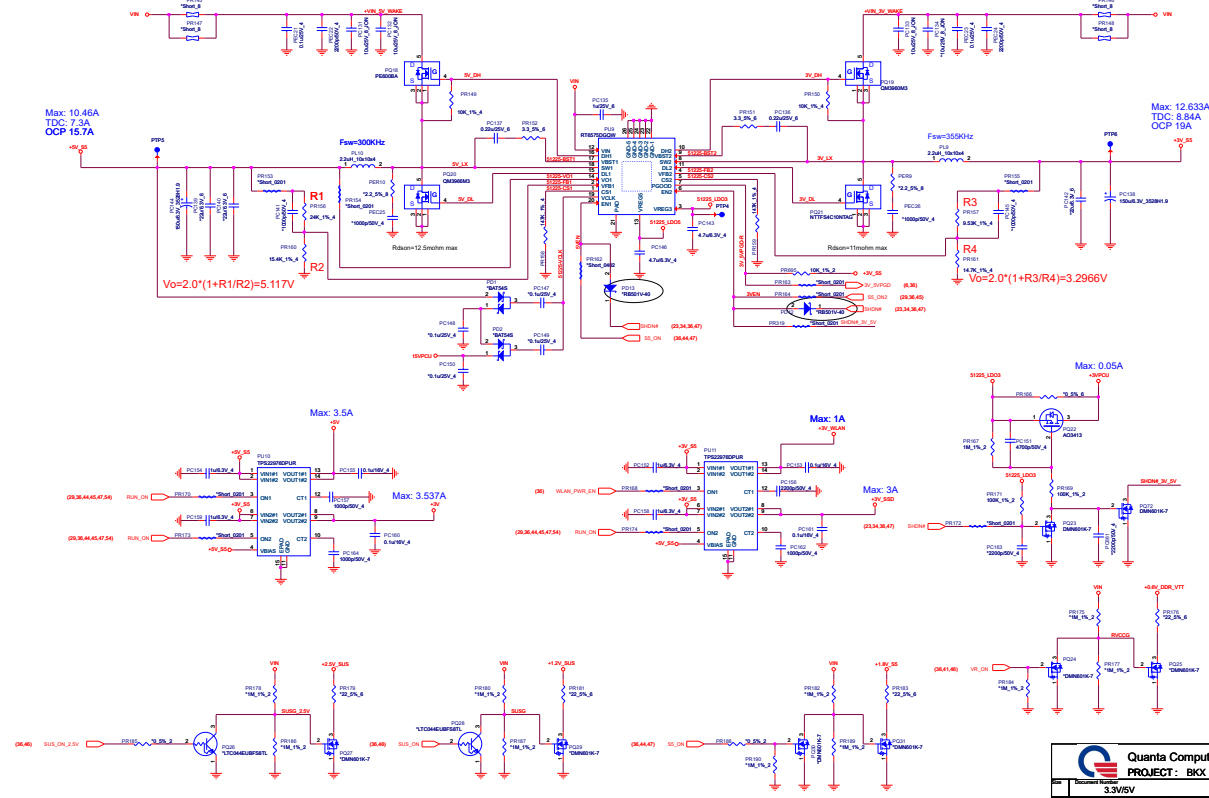


+0.75V_S5



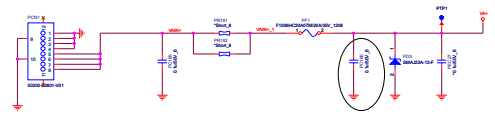
+0.75V





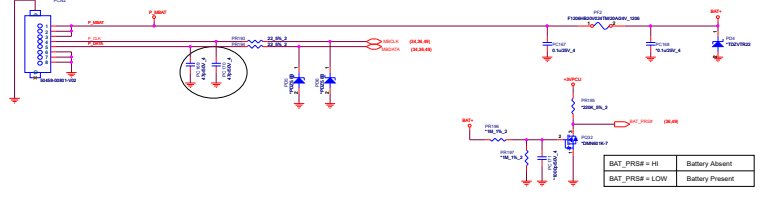
AC IN (On-Board DC-Jack)

Fuse Rating =
 (R04A) (0.75/0.88)
 230V/19.5V / 0.66 = 17.87A

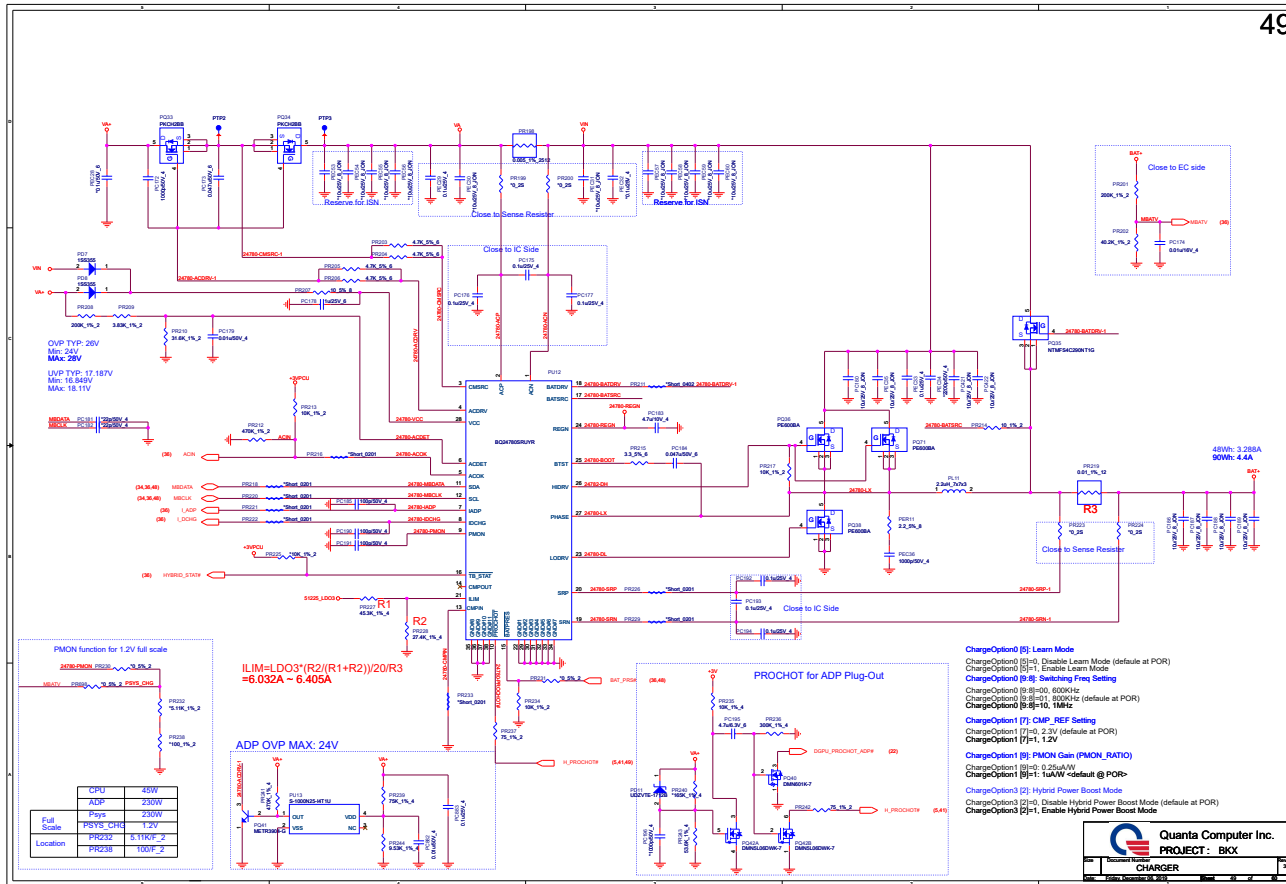


Battery IN

Fuse Rating =
 (R04A) (0.75/0.88)
 300W/11.35A / 0.66 = 17.2A



BAT_PRES# = HI	Battery Absent
BAT_PRES# = LOW	Battery Present



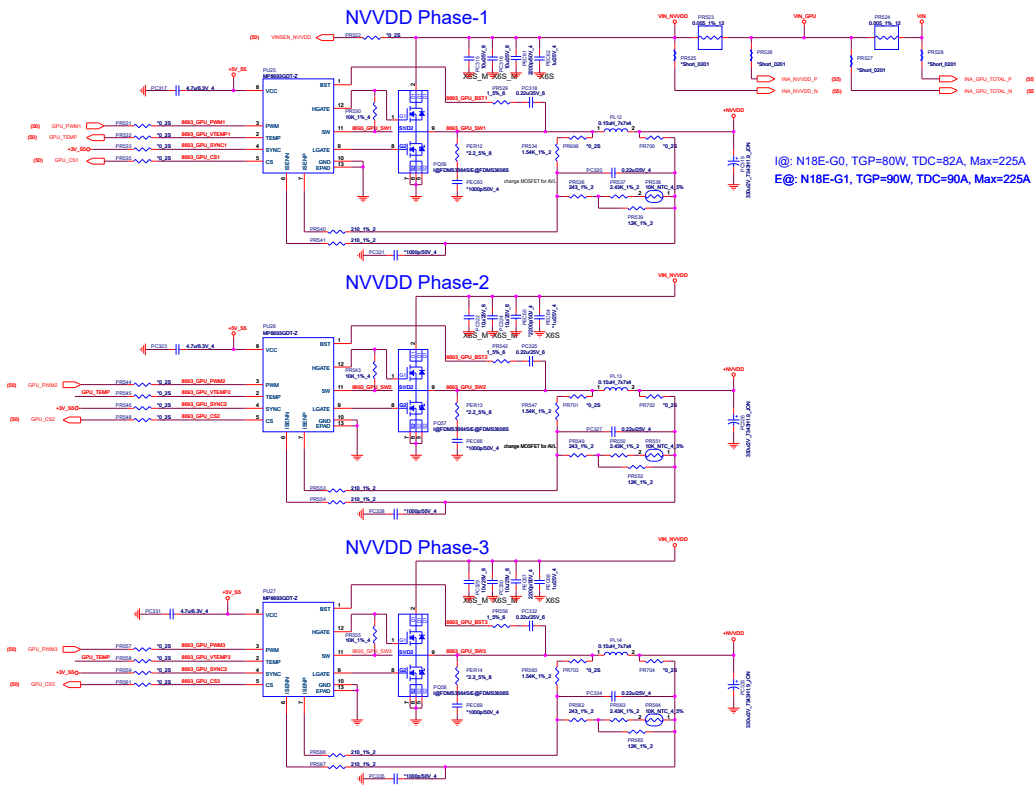
PMON function for 1.2V full scale

Full Scale	CPU	45W
	ADP	230W
	PSys	230W
	PSYS_CHG	1.2V
Location	PR23V	5.1TDF_2
	PR23S	10DF_2

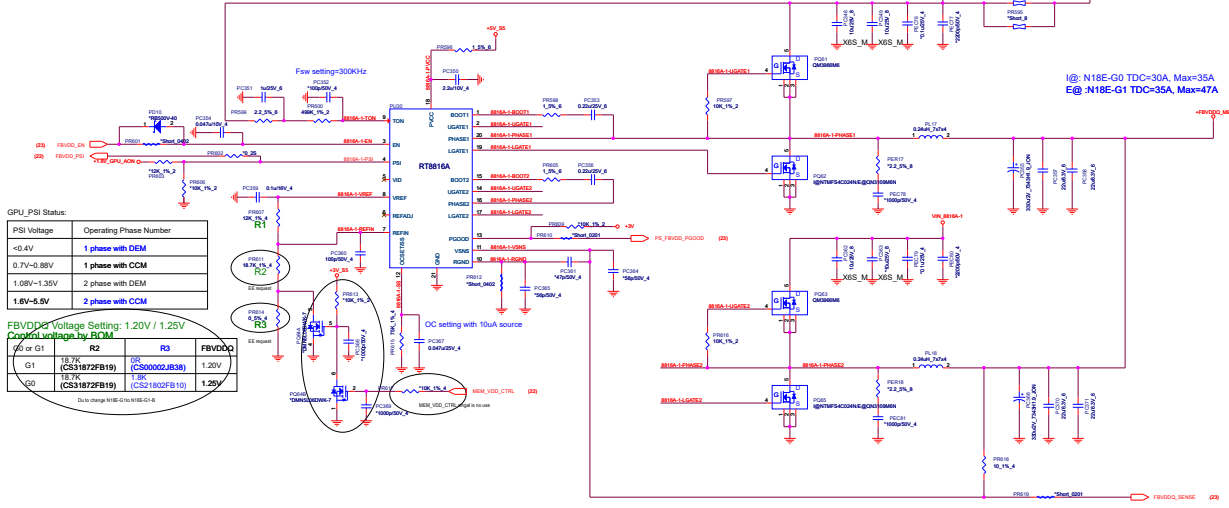
$$ILIM=LDO3*(R2/(R1+R2))/R3 = 6.032A - 6.405A$$

ADP OVP MAX: 24V

- ChargeOption0 [0]: Learn Mode
- ChargeOption0 [0]: Disable Learn Mode (default at POR)
- ChargeOption0 [5]=1, Enable Learn Mode
- ChargeOption0 [6]: Switching Freq Setting
- ChargeOption0 [9]=0, 600KHz
- ChargeOption0 [9]=1, 800KHz (default at POR)
- ChargeOption0 [9]=10, 1MHz
- ChargeOption1 [7]: CMP_REF Setting
- ChargeOption1 [7]=0, 2.3V (default at POR)
- ChargeOption1 [7]=1, 1.2V
- ChargeOption1 [9]: PMON Gain (PMON_RATIO)
- ChargeOption1 [9]=0, 0.25uA/W
- ChargeOption1 [9]=1, 1uA/W (default @ POR)
- ChargeOption2 [2]: Hybrid Power Boost Mode
- ChargeOption2 [2]=0, Disable Hybrid Power Boost Mode (default at POR)
- ChargeOption2 [2]=1, Enable Hybrid Power Boost Mode



+FBVDDQ_MEM



GPU PSI Status:

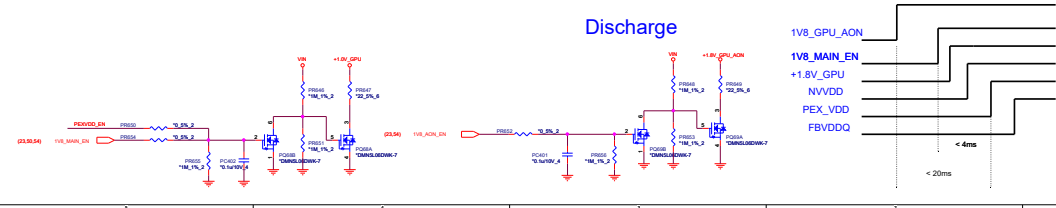
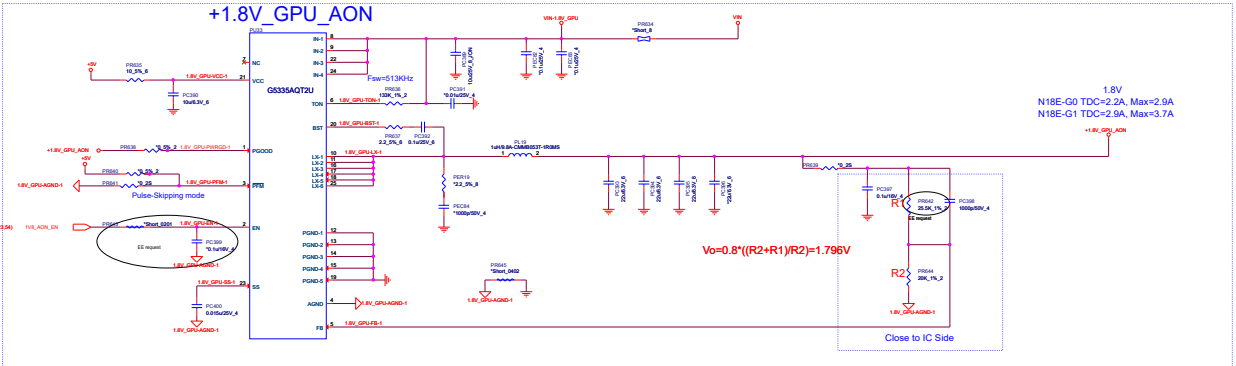
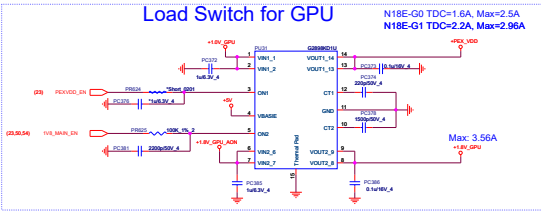
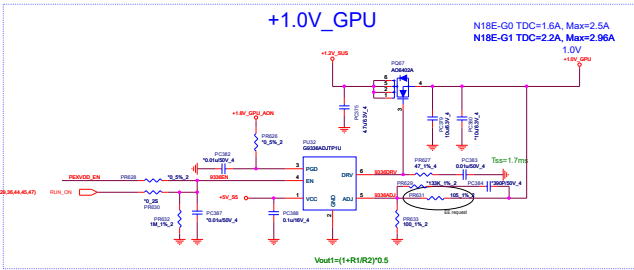
PSI Voltage	Operating Phase Number
-0.4V	1 phase with DEM
0.7V-0.88V	1 phase with CCM
1.08V-1.35V	2 phase with DEM
1.6V-5.5V	2 phase with CCM

FBVDDQ Voltage Setting: 1.20V / 1.25V
Control voltage by BCM

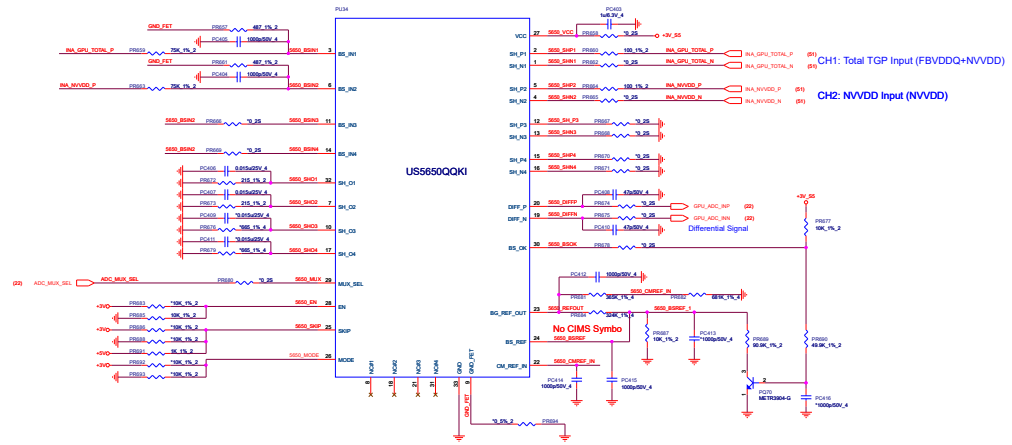
G0 or G1	R2	R3	FBVDDQ
G1	18.7K (CS3187ZF819)	1.35K (CS0000QJ838)	1.20V
G0	18.7K (CS3187ZF819)	1.35K (CS21802FB10)	1.25V

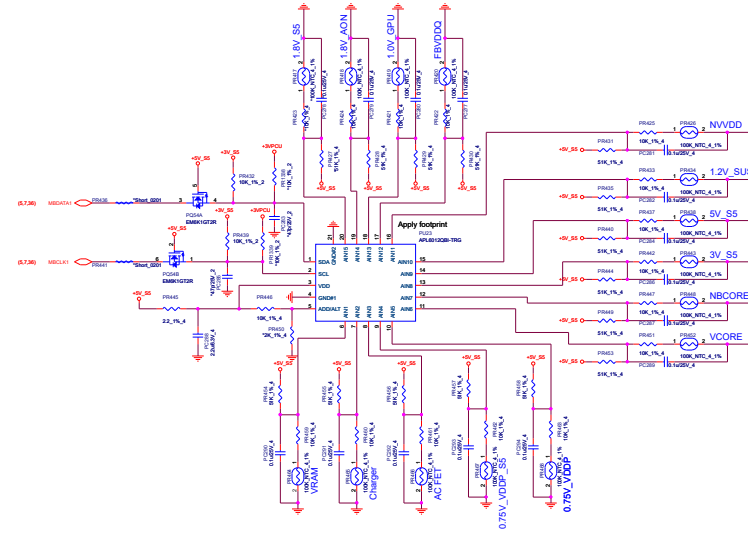
Do not change N18E-G1 to N18E-G1-8

I@: N18E-G0 TDC=30A, Max=35A
E@: N18E-G1 TDC=35A, Max=47A

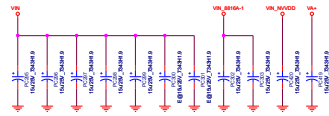


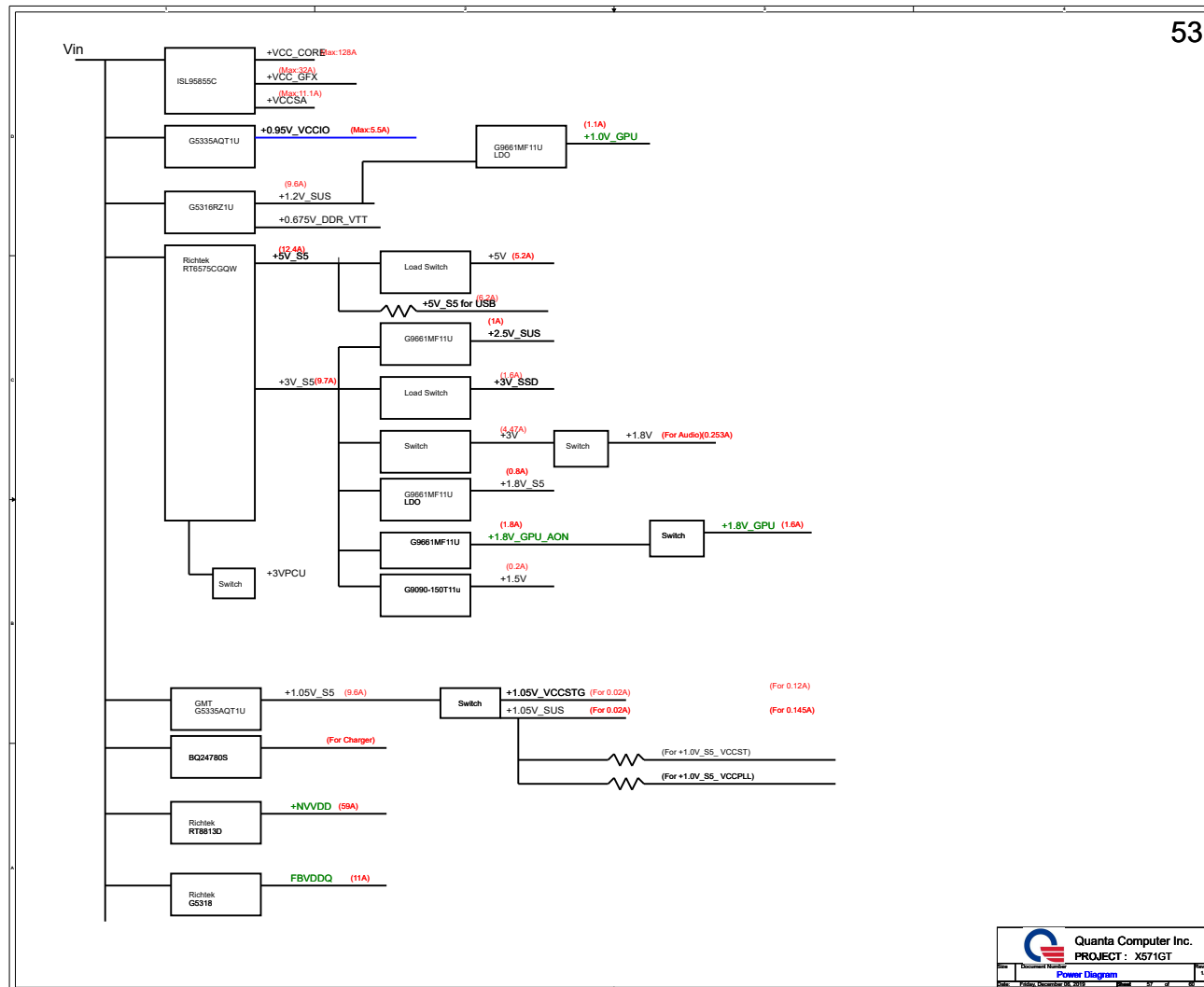
OVR-M





For ADP 180W & 230W





OS status	S0	S3	(Soft OFF)	(Soft OFF)	(Soft OFF)	(Soft OFF)
H/W status	S0	S3	S4 (Win10 off) RTC wake Enable WOLAN Enable	S4 (Win10 off) RTC wake Disable WOLAN Disable	S5 (Fast Startup "v")	S5 (Fast Startup "x")
RUN_ON	H	L	L	L	L	L
+3V	H	L	L	L	L	L
+5V	H	L	L	L	L	L
+0.675V_DDR_VTT	H	L	L	L	L	L
+12V	H	L	L	L	L	L
+3V_SSD/+3V_PCH_CARD/+1.5V	H	L	L	L	L	L
+1.05V_VCCSTG	H	L	L	L	L	L
+VCCSA	H	L	L	L	L	L
+VCC_GFX	H	L	L	L	L	L
+VCC_CORE	H	L	L	L	L	L
+0.95V_VCCIO	H	L	L	L	L	L
SUS_ON	H	H	L	L	L	L
+1.05V_VCCPLL/+1.05V_VCCST	H	H	L	L	L	L
+1.05V_SUS	H	H	L	L	L	L
+1.2V_SUS	H	H	L	L	L	L
SUS_ON_2.5V	H	H	L	L	L	L
+2.5V_SUS	H	H	L	L	L	L
S5_ON	H	H	H	L	L	L
+1.8V_S5	H	H	H	L	L	L
+1.05V_S5	H	H	H	L	L	L
S5_ON	H	H	H	L	H	L
+3V_S5	H	H	H	L	H	L
+5V_S5	H	H	H	L	H	L