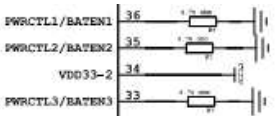
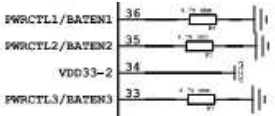
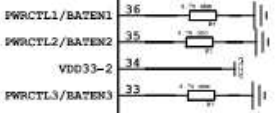
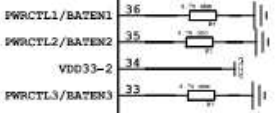
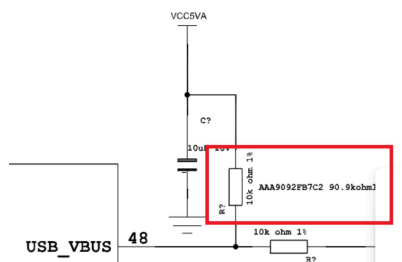


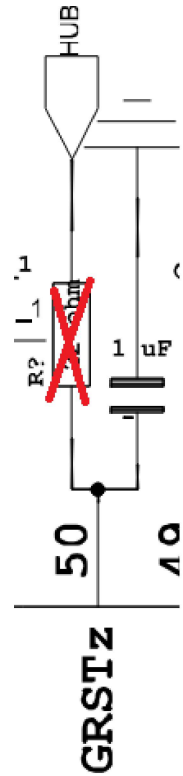
Schematic Review Form

Pin #	Name	Info	Violations	Description
1	USB_DP_DN1	to DS1 connector	▲ ▼	USB2 DOWNSTREAM PORT 1 +
2	USB_DM_DN1			USB2 DOWNSTREAM PORT 1 -
3	USB_SSTXP_DN1	has 100nf cap		USB3 DOWNSTREAM PORT 1 TXP
4	USB_SSTXN_DN1	has 100nf cap		USB3 DOWNSTREAM PORT 1 TXN
5	VDD_1		need 0.1uf and 0.01uf decoupling cap	1.1V SUPPLY
6	USB_SSRXP_DN1	has 330nf cap		USB3 DOWNSTREAM PORT 1 RXP
7	USB_SSRXN_DN1	has 330nf cap		USB3 DOWNSTREAM PORT 1 RXN
8	VDD_2		need 0.1uf and 0.01uf decoupling cap	1.1V SUPPLY
9	USB_DP_DN2	to DS2 connector		USB2 DOWNSTREAM PORT 2 +
10	USB_DM_DN2			USB2 DOWNSTREAM PORT 2 +
11	USB_SSTXP_DN2	has 100nf cap		USB3 DOWNSTREAM PORT 2 TXP
12	USB_SSTXN_DN2	has 100nf cap		USB3 DOWNSTREAM PORT 2 TXN
13	VDD_3		need 0.1uf and 0.01uf decoupling cap	1.1V SUPPLY
14	USB_SSRXP_DN2	has 330nf cap		USB3 DOWNSTREAM PORT 2 RXP

15	USB_SSRXN_DN2	has 330nf cap		USB3 DOWNSTREAM PORT 2 RXN
16	VDD33		need 0.1uf and 0.01uf decoupling cap	3.3V SUPPLY
17	USB_DP_DN3	to DS3 connector		USB2 DOWNSTREAM PORT 3 +
18	USB_DM_DN3			USB2 DOWNSTREAM PORT 3 -
19	USB_SSTXP_DN3	has 100nf cap		USB3 DOWNSTREAM PORT 3 TXP
20	USB_SSTXN_DN3	has 100nf cap		USB3 DOWNSTREAM PORT 3 TXN
21	VDD_4		need 0.1uf and 0.01uf decoupling cap	1.1V SUPPLY
22	USB_SSRXP_DN3	has 330nf cap		USB3 DOWNSTREAM PORT 3 RXP
23	USB_SSRXN_DN3	has 330nf cap		USB3 DOWNSTREAM PORT 3 RXN
24	USB_DP_DN4		port 4 is not used?	USB2 DOWNSTREAM PORT 4 +
25	USB_DM_DN4			USB2 DOWNSTREAM PORT 4 -
26	USB_SSTXP_DN4			USB3 DOWNSTREAM PORT 4 TXP
27	USB_SSTXM_DN4			USB3 DOWNSTREAM PORT 4 TXN
28	VDD_5		need 0.1uf and 0.01uf decoupling cap	1.1V SUPPLY
29	USB_SSRXP_DN4			USB3 DOWNSTREAM PORT 4 RXP
30	USB_SSRXN_DN4			USB3 DOWNSTREAM PORT 4 RXN
31	VDD_6		need 0.1uf and 0.01uf decoupling cap	1.1V SUPPLY

32	PWRCTL4/BATEN4		pin 40 shows power switching is supported ▲ ▼	USB Port 4 Power On Control for Downstream Power/Battery Charging Enable
33	PWRCTL3/BATEN3		pin 40 shows power switching is supported ▲ ▼	USB Port 3 Power On Control for Downstream Power/Battery Charging Enable
34	VDD33_2		need 0.1uf and 0.01uf decoupling cap	3.3V SUPPLY
35	PWRCTL2/BATEN2		pin 40 shows power switching is supported ▲ ▼	USB Port 2 Power On Control for Downstream Power/Battery Charging Enable
36	PWRCTL1/BATEN1		pin 40 shows power switching is supported ▲ ▼	USB Port 1 Power On Control for Downstream Power/Battery Charging Enable
37	SDA/SMBDAT	floating ▲ ▼		I2C data/SMBus data
38	SCL/SMBCLK	floating		I2C clk/SMBus clk
39	SMBUSz/SS_SUSPEND	floating, in I2C mode		I2C/SMBus mode select/SuperSpeed USB Suspend Status
40	FULLPWRMGMTz/SMBA1/SS_UP	external pulldown to support power switching		Full power management enable
41	PWRCTL_POL	external pullup, power switching active high		Power Control Polarity

42	GANGED/SMBA2/ HS_UP	external pulldown to support individual port	all downstream ports use the same Vbus	Ganged operation enable
43	OVERCUR4z			USB Port 4 Over-Current Detection
44	OVERCUR3z			USB Port 3 Over-Current Detection
45	AUTOENZ/ HS_SUSPEND	pulldown to enable auto mode battery charging		Automatic Charge Mode Enable/
46	OVERCUR1z			USB Port 1 Over-Current Detection
47	OVERCUR2z			USB Port 2 Over-Current Detection
48	USB_VBUS	0.5v on USB_VBUS 	make sure its 90k/10k divider	Vbus detect
49	TEST	4.7k pulldown to ground		This pin is reserved for factory test.
50	GRSTz		no need 22 ohm resistor	Global power reset



51	VDD_7		need 0.1uf and 0.01uf decoupling cap	1.1V SUPPLY
52	VDD33_2		need 0.1uf and 0.01uf decoupling cap	3.3V SUPPLY
53	USB_DP_UP			USB2 UPSTREAM PORT +
54	USB_DM_UP			USB2 UPSTREAM PORT -
55	USB_SSTXP_UP	has 100nf cap		USB3 UPSTREAM PORT TXP
56	USB_SSTXN_UP	has 100nf cap		USB3 UPSTREAM PORT TXN
57	VDD_8		need 0.1uf and 0.01uf decoupling cap	1.1V SUPPLY
58	USB_SSRXP_UP	has 330nf cap		USB3 UPSTREAM PORT RXP

59	USB_SSRXN_UP	has 3300nf cap		USB3 UPSTREAM PORT RXN
60	NC			NC PIN
61	XO	24Mhz crystal		Crystal output
62	XI			Crystal input
63	VDD33_4		need 0.1uf and 0.01uf decoupling cap	3.3V SUPPLY
64	USB_R1	9.53k pulldown resistor		

Comments

- 1: is upstream port connected to USB connector or to host directly
- 2: FULLPWRMGMTz is low, but Vbus switch is not controlled by PWRCTLx pin
- 3: GANGed pin is low, but all downstream port shared the same Vbus