Schematic Review Form

Tony

Pin #	Name	Info	Violations	*Description*
4	GRSTz	10Kohm pullup to 3V3_PER.	Is GRSTz deasserted 2ms after power supply as recommended?	Global power reset. This reset brings all of the TUSB9261 internal registers to their default states. When GRSTz is asserted , the device is completely nonfuncitonal.
52	XI	Connected to crystal.		Crystal input. This terminal is the crystal input for the internal oscillator. The input may alternately be driven by the output of an external oscillator. When using a crystal, a 1-Mohm feedback resistor is required between XI and XO.
54	XO	Connected to crystal.		Crystal output. This terminal is the crystal output for the internal oscillator. If XI is driven by an external oscillator, this pin may be left unconnected. When using a crystal, a 1-Mohm feedback resistor is required between XI and XO.
31, 30	FREQSEL[1:0]	10kohm pullup to 3.3V.		Frequency select. These terminals indicate the oscillator input frequency and are used to configure the correct PLL multiplier. The field encoding is as follows: FREQSEL[1]=1, FREQSEL[0]=1, Input clock frequency=40Mhz.
57	SATA_TXP	Connected to J30 SATA connector; no polarity swap.		Serial ATE transmitter differential pair (positive)
56	SATA_TXM	Connected to J30 SATA connector; no polarity swap.		Serial ATE transmitter differential pair (negative)

60	SATA_RXP	Connected to J30 SATA connector; no polarity swap.		Serial ATE receiver differential pair (positive)
59	SATA_RXM	Connected to J30 SATA connector; no polarity swap.		Serial ATE receiver differential pair (negative)
43	USB_SSTXP	Connected to USB controller.		SuperSpeed USB transmitter differential pair (positive)
42	USB_SSTXM	Connected to USB controller.		SuperSpeed USB transmitter differential pair (negative)
46	USB_SSRXP	Connected to USB controller.		SuperSpeed USB transmitter differential pair (positive)
45	USB_SSRXM	Connected to USB controller.		SuperSpeed USB receiver differential pair (negative)
36	USB_DP	Connected to USB controller.		USB high-speed differential transceiver (positive)
35	USB_DM	Connected to USB controller.		USB high-speed differential transceiver (negative)
50	USB_VBUS	Has 91Kohm and 10K divider.		USB bus power
38	USB_R1	Has 10Kohm resistor.		Precision resistor reference. A 10-kohm +1% resistor should be connected between R1 and R1RTN.
39	USB_R1RTN	Has 10Kohm resistor.		Precision resistor reference return.
17	SPI_SCLK	Connected to ———.		SPI clock
18	SPI_DATA_OUT	Connected to ———.		SPI master data out
20	SPI_DATA_IN	Connected to ———.		SPI master data in
21	SPI_CS0	4.7K pullup to 3.3V. No need for pullup. TUSB9261 has integrated pullups.		Primary SPI chip select for flash RAM

23	SPI_CS2/GPIO11	Floating.		SPI chip select for additional peripherals. When not used for SPI chip select, this pin may be used as a general-purpose I/O.
22	SPI_CS1/GPIO10	Floating.		SPI chip select for additional peripherals. When not used for SPI chip select, this pin may be used as a general-purpose I/O.
25	JTAG_TCK	Floating.		JTAG test clock
26	JTAG_TDI	Floating.		JTAG test data in
27	JTAG_TDO	Floating.		JTAG test data out
28	JTAG_TMS	Floating.		JTAG test mode select
29	JTAG_TRSTz	Floating.		JTAG test reset
6	GPIO9/UART_TX	Connected to J32.		GPIO/UART transmitter. This terminal can be configured as a GPIO or as the transmitter for a UART channel. This pin defaults to a general-purpose output.
5	GPIO8/UART_RX	Connected to J32.		GPIO/UART receiver. This terminal can be configured as a GPIO or as the receiver for a UART channel. This pin defaults to a general-purpose output.
16	GPIO7	Floating.		Configurable as a general-purpose inputs/outputs.
15	GPIO6	Floating.		Configurable as a general-purpose inputs/outputs.
14	GPIO5	Floating.		Configurable as a general-purpose inputs/outputs.
13	GPIO4	Floating.		Configurable as a general-purpose inputs/outputs.
11	GPIO3	Floating.		Configurable as a general-purpose inputs/outputs.
10	GPIO2	Floating.		Configurable as a general-purpose inputs/outputs.

9	GPIO1	Floating.		Configurable as a general-purpose inputs/outputs.
8	GPIO0	Floating.		Configurable as a general-purpose inputs/outputs.
2	PWM0	Connected to status LED through 470ohm resistor.		Pulse-width modulation (PWM). Can be used to drive status LEDs.
3	PWM1	Floating.		Pulse-width modulation (PWM). Can be used to drive status LEDs.
1, 12, 19, 32, 33, 42, 47, 49, 55, 61, 63	VDD	Connected to VDD11_9261.		1.1-V power rail
7, 24, 51	VDD33	Connected to VDD33_9261.		3.3-V power rail
34, 40, 48, 62	VDDA33	Connected to VDDA33_9261.		3.3-V analog power rail
53	VSSOSC	Connected to crystal GND.		Oscillator ground. If using a crystal, this should not be connected to a PCB ground plane. If using an oscillator, this should be connected to PCB ground. See Clock Source Requirements for more details.
44, 58	VSS	Connected to GND.		Ground
65	VSS	Connected to GND.		Ground - Thermal pad
37, 64	NC	Floating.		No connect, leave floating

Comments