

TI Confidential - NDA Restrictions

Schematic Review Form

U3400 TUSB1142

Pin #	Name	Info	Violations	Description
1,6,20,28	VCC	Good		3.3V supply
2	SSEQ/A1	Good		In I2C mode, this pin along with A0 pin selects the 7-bit I2C target address In pin-strap mode, this pin along with SSEQ0 selects the receiver EQ for SSTX and/or SSTX
3	EQCFG	Good		In pin-strap mode, this controls how CEQ[1:0] pins and SSEQ[1:0] are used. In I2C mode, this pin is for TI internal test and must be left floating for normal operation.
4	SLP_S0#	Good		This pin will control whether or not Rx.Detect function is enabled. If this pin is low and device is in Disconnect state, Rx termination will be disabled. If this pin is low and device is U2/U3 state, Rx termination will be enabled. 1: Rx.Detect Enabled 0: Rx.Detect Disabled
5,11,24,25,32	NC	Good		No internal connection
7	TESTOUT1	Good		For internal TI test only. For normal operation this pin should be left unconnected.
8	TESTOUT2	Good		For internal TI test only. For normal operation this pin should be left unconnected.

9,10,12,13	RSVD	Good		Reserved. Leave pin unconnected.
14	VIO_SEL	Good		Selects the input thresholds for I2C (SDA and SCL). "0": I2C 3.3 V "R": I2C 1.8 V "F": I2C 3.3 V. "1": I2C 1.8 V.
15	SSTXn	Routed to PCH through 220nF cap		Differential negative input for USB port. Should be connected to USB 3.2 Host transmit port through an external 220 nF AC-coupling capacitor
16	SSTXp	Routed to PCH through 220nF cap		Differential positive input for USB port. Should be connected to USB 3.2 Host transmit port through an external 220 nF AC-coupling capacitor
17	MODE	Good (pin strap)		This pin selects whether device is in I2C mode or pin-strap mode. "0": Pin strap mode "R": Reserved "F": I2C "1": Reserved
18	SSRXn	Routed to PCH through 220nF cap		Differential negative output for USB port. Should be connected to USB 3.2 Host receiver port through an external 220 nF AC-coupling capacitor.
19	SSRXp	Routed to PCH through 220nF cap		Differential positive output for USB port. Should be connected to USB 3.2 Host receiver port through an external 220 nF AC-coupling capacitor.
21	FLIP/SCL	Routed to POL on Port controller through inverting FET		In I2C mode, this pin functions as I2C clock. In pin-strap mode, this pin controls the orientation of the MUX

22	AEQENZ/SDA	Routed to UFP pin on port controller through inverting fet	Recommend pulling up or pulling down to enable/disable AEQ	In I2C mode, this pin functions as I2C data. In pin-strap mode, this pin controls whether or not AEQ is enabled. 0: AEQ enabled 1: AEQ disabled
23	AEQCFG	Good		In pin-strap mode, this pin controls the FULLAEQ_UPPER_EQ limit. In I2C mode, this function is controlled by the FULLAEQ_UPPER_EQ register. "0": FULLAEQ_UPPER_EQ = Ah "R": FULLAEQ_UPPER_EQ = Fh "F": FULLAEQ_UPPER_EQ = 8h "1": FULLAEQ_UPPER_EQ = Ch
26	EN	Good		When low, the differential receiver's termination will be disabled and differential drivers will be disabled. On rising edge of EN, device will sample four-level inputs and function based on the sampled state of the pins. This pin has a internal 500k pull-up to VCC. Please note this pin will also reset internal configuration registers.
27	TEST1	Good		TI Test1. Under normal operations, this pin shall be connected directly or pull-down to GND.
29	CEQ1	Good		In pin-strap mode, this pin along with CEQ0 selects the receiver EQ for CRX1 and/or CRX2
30	CRX1p	Routed to connector through 220K pulldown and ESD		Differential positive input for USB port 1. Should be connected to RX1p pin of USB connector. Connection can be DC-coupled to USB connector. Optionally, connection can be through an external 330 nF AC-coupling capacitor

31	CRX1n	Routed to connector through 220K pulldown and ESD		Differential negative input for USB port 1. Should be connected to RX1n pin of USB connector. Connection can be DC-coupled to USB connector. Optionally, connection can be through an external 330 nF AC-coupling capacitor
33	CTX1p	Routed to connector through 220nF cap and ESD	Change capacitor size to 0201	Differential positive output for USB port 1. Should be connected to TX1p pin of USB connector through an external 220 nF AC-coupling capacitor
34	CTX1n	Routed to connector through 220nF cap and ESD	Change capacitor size to 0201	Differential negative output for USB port 1. Should be connected to TX1n pin of USB connector through an external 220 nF AC-coupling capacitor
35	SSEQ0/A0	Good		In I2C mode, this pin along with A1 pin selects the 7-bit I2C target address. In pin-strap mode, this pin along with SSEQ1 selects the receiver EQ for SSTX and/or SSTX
36	CRX2n	Routed to connector through 220K pulldown and ESD		Differential negative input for USB port 2. Should be connected to RX2n pin of USB connector. Connection can be DC-coupled to USB connector. Optionally, connection can be through an external 330 nF AC-coupling capacitor.
37	CRX2p	Routed to connector through 220K pulldown and ESD		Differential positive input for USB port 2. Should be connected to RX2p pin of USB connector. Connection can be DC-coupled to USB connector. Optionally, connection can be through an external 330 nF AC-coupling capacitor.
38	CEQ0	Good		In pin-strap mode, this pin along with CEQ1 selects the receiver EQ for CRX1 and/or CRX2

39	CTX2n	Routed to connector through 220nF cap and ESD	Change capacitor size to 0201	Differential negative output for USB port 2. Should be connected to TX2n pin of USB connector through an external 220 nF AC-coupling capacitor.
40	CTX2p	Routed to connector through 220nF cap and ESD	Change capacitor size to 0201	Differential positive output for USB port 2. Should be connected to TX2p pin of USB connector through an external 220 nF AC-coupling capacitor

Comments