

Schematic Checklist for TMUXHS4212EVM and TMUXHS4412EVM



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1 Schematic Checklist for TMUXHS4212EVM and TMUXHS4412EVM

Table 1-1. Schematic Checklist^{(1) (2)}

Pin Name	TMUXHS4212 Pin Number	TMUXHS4412 Pin Number	Pin Description	Recommendation
D0P (A0P)	3	3	Host, device SuperSpeed TX positive	No AC cap needed if BxP/DxP has AC cap
D0N (A0N)	4	4	Host, device SuperSpeed TX negative	No AC cap needed if BxN/DxN has AC cap
D1P (A1P)	7	7	Host, device SuperSpeed RX positive	Biased by host controller
D1N (A1N)	8	8	Host, device SuperSpeed RX negative	Biased by host controller
DA0P (B0P)	19	38	Host, device SuperSpeed TX positive	Need 100-nf AC cap
DA0N (B0N)	18	37	Host, device SuperSpeed TX negative	Need 100-nf AC cap
DA1P (B1P)	17	34	Host, device SuperSpeed RX positive	Biased by host controller
DA1N (B1N)	16	33	Host, device SuperSpeed RX negative	Biased by host controller
DB0P (C0P)	15	36	Host, device SuperSpeed TX positive	Need 100-nf AC cap
DB0N (C0N)	14	35	Host, device SuperSpeed TX negative	Need 100-nf AC cap
DB1P (C1P)	13	32	Host, device SuperSpeed RX positive	Biased by host controller
DB1N (C1N)	12	31	Host, device SuperSpeed RX negative	Biased by host controller
OEn (PD)	2	18	Active low MUX enable	Adding a Cap 1uf to GND
SEL (PD)	9	17	Port select pin, L: A to B H: A to C	
D2P		10	Host, device SuperSpeed TX positive	No AC cap needed if DAxP has AC cap
D2N		11	Host, device SuperSpeed TX negative	No AC cap needed if DAxP has AC cap
D3P		14	Host, device SuperSpeed RX positive	Biased by host controller
D3N		15	Host, device SuperSpeed RX negative	Biased by host controller
DA2P		29	Host, device SuperSpeed TX positive	Need 100-nf AC cap
DA2N		28	Host, device SuperSpeed TX negative	Need 100-nf AC cap
DA3P		25	Host, device SuperSpeed RX positive	Biased by host controller
DA3N		24	Host, device SuperSpeed RX negative	Biased by host controller
DB2P		27	Host, device SuperSpeed TX positive	Need 100-nf AC cap
DB2N		26	Host, device SuperSpeed TX negative	Need 100-nf AC cap
DB3P		23	Host, device SuperSpeed RX positive	Biased by host controller
DB3N		22	Host, device SuperSpeed RX negative	Biased by host controller
RSVD	1,10	42	Reserved pins	Leave open
VCC	6	5,13	3.3-V supply (or 1.8V for 4412)	Decoupling capacitor near each pin
NC		1,2,12,19, 20,4041	NA	Leave open
GND	5,11,20	6,9,16,21, 30,39	Ground	
Thermal Pad	x	x	Thermal Pad	Must be connected to GND

(1) For TMUXHS4412, VCC can be either 3.3 v or 1.8 v

(2) Thermal pad must be connected to Gnd

2 References

1. Texas Instruments, [SLASEP7](#)
2. Texas Instruments, [SLASEW5](#)
3. Texas Instruments, [SLAU848](#)
4. Texas Instruments, [SLAU823](#)

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