

# Bill of Materials

**TI DESIGNS**

TIDA-00417

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	PCB Footprint	Note
1	1			Printed circuit board	Any	TIDA-00417		
2	2	U1,U2	DS125BR820N1Y	Low-Power 12 Gbps 8-Channel Linear Repeater With Equalization	Texas Instruments	DS125BR820N1Y	WQFN 54	
3	32	C1,C2,C3,C4,C5,C6,C7,C8,C9,C10,C11,C12,C13,C14,C15,C16,C24,C25,C26,C27,C28,C29,C30,C31,C32,C33,C34,C35,C36,C37,C38,C39	0.1 uF	CAP CER 0.1UF 16V 10% X5R 0201	Murata	C0603X5R1C104K030BC	0201	
4	10	C17,C18,C19,C20,C21,C40,C41,C42,C43,C44	0.1uF	CAP CER 0.1UF 16V 10% X5R 0201	Murata	C0603X5R1C104K030BC	0201	
5	4	C22,C46,C48,C50	10uF	CAP CER 10UF 6.3V 20% X5R 0603	Murata	GRM188R60J106ME47D	0603	
6	4	C23,C45,C47,C49	1uF	CAP CER 1UF 25V 10% X5R 0603	Murata	GRM188R61E105KA12D	0603	
7	2	D1,D2	SML-P12PTT86	LED GREEN 0.2MM 13MCD 0402	Rohm Semiconductor	SML-P12PTT86	0402	
8	1	J1	HEADER 4x1				4_HEADER	Regular
9	1	J2	4808-3004-CP	SOCKET IC OPEN FRAME 8POS .3"	3M	4808-3004-CP	DIP8	
10	1	J3	HEADER 3x1				3_HEADER	Regular 100mil header
11	1	J4	HEADER 10x2				HEADER_10x2	Regular
12	52	R1,R2,R4,R7,R8,R9,R11,R12,	1k	RES 1.0K OHM 1/10W 5% 0402	Panasonic	ERJ-2GEJ102X	0402	
13	22	R3,R10,R16,R17,R21,R22,R27,R28,R32,R36,R39,R46,R48,R51,R53,R58,R59,R64,R66,R69,R73,R77	20k	RES SMD 20K OHM 5% 1/10W 0402	Panasonic	ERJ-2GEJ203X	0402	
14	1	R5	4.7k	RES 4.7K OHM 1/10W 5% 0402 SMD	Panasonic	ERJ-2GEJ472X	0402	Do not populate
15	1	R6	4.7k	RES 4.7K OHM 1/10W 5% 0402 SMD	Panasonic	ERJ-2GEJ472X	0402	
16	2	R34,R71	220	RES SMD 220 OHM 5% 1/10W 0402	Panasonic	ERJ-2GEJ221X	0402	
17	2	R43,R80	1k	RES 1.0K OHM 1/10W 5% 0402 SMD	Panasonic	ERJ-2GEJ102X	0402	Do not populate
18	4	R81,R82,R83,R84	4.7K	RES 4.7K OHM 1/10W 5% 0402 SMD	Panasonic	ERJ-2GEJ472X	0402	
19	10	SW1,SW3,SW4,SW5,SW8,SW10,SW11,SW12,SW14,SW18	219-6MST	SWITCH TAPE SEAL 6 POS SMD 50V	CTS Electrocomponents	219-6MST	219_6MST	
20	5	SW2,SW9,SW13,SW17,SW19	219-2MST	SWITCH TAPE SEAL 2 POS SMD 50V	CTS Electrocomponents	219-2MST	219_2MST	
21	2	SW6,SW15	219-3MST	SWITCH TAPE SEAL 3 POS SMD	CTS	219-3MST	219_3MST	
22	2	SW7,SW16	EVQ-21505R	SWITCH TACTILE SPST-NO 0.02A	Panasonic	EVQ-21505R	EVQ_21505R	
23	1	SW20	SW_PB_SPST	SWITCH TACTILE SPST-NO 0.02A	Panasonic	EVQ-21405R	SW_PB_SPST	
24	3	TP1,TP3,TP4	TEST POINT	Test Point,Red,Thru Hole Color	Keystone	5000	0_100x0_100inc	
25	2	TP2,TP5	TEST POINT	Test Point,Black,Thru Hole Color	Keystone	5001	0_100x0_100inc	
26	1	U3	2x8A_81_MXP-S50-0-1	2x8 MXP Connector, high-speed	Huber+Suhner	2x8A_81_MXP-S50-0-1	2x8A_81_MXP_S	Example
27	1	U4	2x8A_81_MXP-S50-0-1	2x8 MXP Connector, high-speed	Huber+Suhner	2x8A_81_MXP-S50-0-1	2x8A_81_MXP_S50_0_1_U4	Example connector only
28	1	U5	Molex_zQSFP_cage	2x1 stacked QSFP+ cage	Molex	171208-0002	Molex_zQSFP_cage	

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