



Optical Receiver (Digital)

Bill-of-Materials

HW A, Document 1.0, September 21, 2016

Item	Quantity	Reference	Manufacturer	Manuf. Part #	Distributor	Distrib. Part #	Description
1	1	C1	Vishay BC	A104K15X7RF5TAA	Digi-Key	1109PHCT-ND	Capacitor, 0.1uF, 50V, Ceramic, X7R, Axial
2	1	C2	AVX	TAP105K020SCS	Digi-Key	478-1833-ND	Capacitor, 1uF, 20V, Tantalum, Radial
3	1	C3	AVX	TAP106K016SCS	Digi-Key	478-1839-ND	Capacitor, 10uF, 16V, Tantalum, Radial
4	1	D1	Lite-On	LTL-1CHG	Digi-Key	160-1710-ND	LED, Green diffused, 2.1V, 569nm, 3mm
5	1	L1	EPCOS (TDK)	B78108S1473J	Digi-Key	495-5568-1-ND	Inductor, 47uH, 1.1R, 450mA, Axial
6	1	P1	Molex	22-28-8062	Digi-Key	WM50015-06-ND	Header, Single row, R/A, 6-pin, 0.244" L, 0.1" P
7	1	Q1	Fairchild Semiconductor	2N3904BU	Digi-Key	2N3904FS-ND	Transistor, NPN, 40V, 0.2A, TO-92
8	2	R1, R3	Any	Any	Digi-Key	1.0KQBK-ND	Resistor, 1k, 5%, 1/4W, Axial
9	1	R2	Any	Any	Digi-Key	10KQBK-ND	Resistor, 10k, 5%, 1/4W, Axial
10	1	S1	NKK Switches	SS312SAH4	Digi-Key	360-3250-ND	Switch, Slide, SPDT, R/A, 0.4VA @ 24V
11	3	TP1, TP2, TP3	Keystone	5016	Digi-Key	5016KCT-ND	Testpoint, SMT
12	1	U1	Everlight	PLR135/T9	Digi-Key	1080-1432-ND	Fiber Optic Receiver, 3-pin, 0.1" P
13	1	U2	Texas Instruments	LP2950CZ-3.0/NOPB	Digi-Key	LP2950CZ-3.0-ND	Linear Regulator, LDO, 3.0V @ 100mA, TO-92
14	1	PCB	OSH Park	OPTICSPY DIGITAL	N/A	N/A	PCB, Fabrication