

Ref Des	Description	Digi-Key Part#	Mouser Part #
S1	Vishay TSOP34838 IR Receiver Module	---	782-TSOP34838
U1	IRMimic2 chip (PIC18LF2420-I/SP)	---	
U2	5V Linear Regulator, TO-92	LM78L05ACZNS	512-LM78L05ACZ
Q1	2N3904 NPN transistor, TO-92	2N3904FS	
D1	IR LED, QED234	QED234	512-QED234
D2	LED, 5mm Hi Eff Red (LTL-307E)	160-1705	
X1	6.5 MHz HC-49 Crystal	X415	520-HCU650-20
R1	100 ohm 1/4 W resistor	100QBK	
R2,R5	470 ohm 1/4 W resistor	470QBK	
R3	22 ohm 1/4 W resistor	22QBK	
R4	240 ohm 1/4 W resistor	240QBK	
R6,R7	Install both only if volt reg not used	0.0QBK	
R8	10K ohm 1/4 W resistor	10KQBK	
C1	4.7 uF 50V electrolytic capacitor	P5177	
C2,C6,C7,C8	0.1 uF ceramic cap, 0.1" leads	399-2127	
C3,C4	22 pF ceramic cap, 0.1" leads	BC1005CT	
C5	1000 uF 16V electrolytic capacitor	P5142	
J1	Pin header	S2011E-36	
	Female IDC connector for J1:	ASC20H	
	Ribbon Cable	P/O MC20G-25	
	28-pin IC socket (optional, other sockets OK too)	ED3328	575-193328

Notes: If voltage regulator is installed, then install R6 to supply IR LED from +5V, or install R7 to supply IR LED from unregulated voltage.
If regulator is not installed, install both R6 and R7 to connect +5V to +V, and feed in a DC voltage that board can use directly.
To select keypad mode, do not install R5.
To select MCU mode, install R5.