

Ref Des	Description	Digi-Key Part #
IR Receiver Module	Sharp GP1UM281QK (38KHz)	425-1147
U1	TinyIR chip	---
U2	5V Linear Regulator, TO-92	LM78L05ACZNS
U3	Eight bit addressable latch, 16DIP	MM74HC259N
Q1	2N3904 NPN transistor, TO-92	2N3904
S1	Learn switch, SPST	SW400
D1-D3	Output type setting diodes	1N4148FS
D4	LED, 5mm Hi Eff Red	MV5754A
D5	POR cap discharge diode (optional)	1N4148FS
R2, R3	4.7K ohm resistor	4.7KQBK
R4	240 ohm resistor	240QBK
R5	1M ohm resistor	1.0MQBK
R6	1M ohm resistor (optional)	1.0MQBK
R7	470K ohm resistor	470KQBK
R11	47 ohm resistor	47QBK
R12	Install only if volt reg not used	0.0QBK
C1	0.1 uF ceramic cap	BC1133CT
C2, C3	0.1 uF ceramic cap, 0.1" leads	BC1148CT
C4	47 uF 16V electrolytic cap.	P5137
C5	0.1 uF POR ceramic cap (optional)	BC1148CT
JP1	Pin header	S2011-36

Female IDC connector for JP1:

ASC14G

Notes: Install D1-D3 as needed to select output configuration desired.
 Install either U2 or R12, but not both.
 Install R5 and IC3 for expansion mode. (normal for this board)
 To use CH8 pc bd without IC3, install R6, and jumper across IC3.
 Install D5 and C5 if power-up hardware reset of latch is needed.