Shift Register

U1
74HC165
VCC
GND

Pin	Label		Pin	Label
10	DS	Q7	9	Data_Out_T
11	D0	Q7	7	Data_Out_Inv_T
12	D1			
13	D2			
14	D3			
3	D4			
4	D5			
5	D6			
6	D7			
1	PL			
2	CP			
15	CE			

Data_T, IN0, IN1, IN2, IN3, IN4, IN5, IN6, IN7
Load_T, Clock_T, Clock_Inhibit_T

RN0A 10K — GND
RN0B 10K — Clock_Inhibit_T — GND
RN0C 10K — Clock_T — GND
RN0D 10K — Load_T — GND

Shift Register Inputs

Pin headers J3

IN0	16	15	GND
IN1	14	13	GND
IN2	12	11	GND
IN3	10	9	GND
IN4	8	7	GND
IN5	6	5	GND
IN6	4	3	GND
IN7	2	1	GND

SW1 Tactile, right-angle — IN0 — GND
SW8 Tactile, right-angle — IN7 — GND
SW2 Tactile 3.3mm — IN1 — GND
SW4 Tactile 3.3mm — IN3 — GND
SW6 Tactile 3.3mm — IN5 — GND
SW3 Tactile 3.3mm — IN2 — GND
SW5 Tactile 3.3mm — IN4 — GND
SW7 Tactile 3.3mm — IN6 — GND

VCC — RN3D 10K — IN0
VCC — RN3C 10K — IN1
VCC — RN3B 10K — IN2
VCC — RN3A 10K — IN3
VCC — RN4D 10K — IN4
VCC — RN4C 10K — IN5
VCC — RN4B 10K — IN6
VCC — RN4A 10K — IN7

Output LEDs

LED_VCC

LED		Resistor	IN
LED1 LED	LED1_K_T	RN1A 5K1	IN0
LED2 LED	LED2_K_T	RN1B 5K1	IN1
LED3 LED	LED3_K_T	RN1C 5K1	IN2
LED4 LED	LED4_K_T	RN1D 5K1	IN3
LED5 LED	LED5_K_T	RN2A 5K1	IN4
LED6 LED	LED6_K_T	RN2B 5K1	IN5
LED7 LED	LED7_K_T	RN2C 5K1	IN6
LED8 LED	LED8_K_T	RN2D 5K1	IN7

Control Inputs Connectors

J6 JST SH

1	GND
2	VCC
3	Data_Out_T
4	Load_T
5	Clock_T

J1 Pin headers

1	GND
2	VCC
3	Data_Out_T
4	Data_Out_Inv_T
5	Load_T
6	Clock_T
7	Clock_Inhibit_T

GND

Control Output Connectors

J7 JST SH

1	GND
2	VCC
3	Data_T
4	Load_T
5	Clock_T

J2 Pin socket

1	GND
2	VCC
3	Data_T
5	Load_T
6	Clock_T
7	Clock_Inhibit_T

GND

LEDs Toggle

VCC

Q1 AO3401A
LED_VCC_GATE_T
LED_VCC

SW0 SW_SPDT_MountingPin
LED_VCC_GATE_T
R1 10K
GND
VCC
GND

PWR_FLAG — VCC
PWR_FLAG — GND