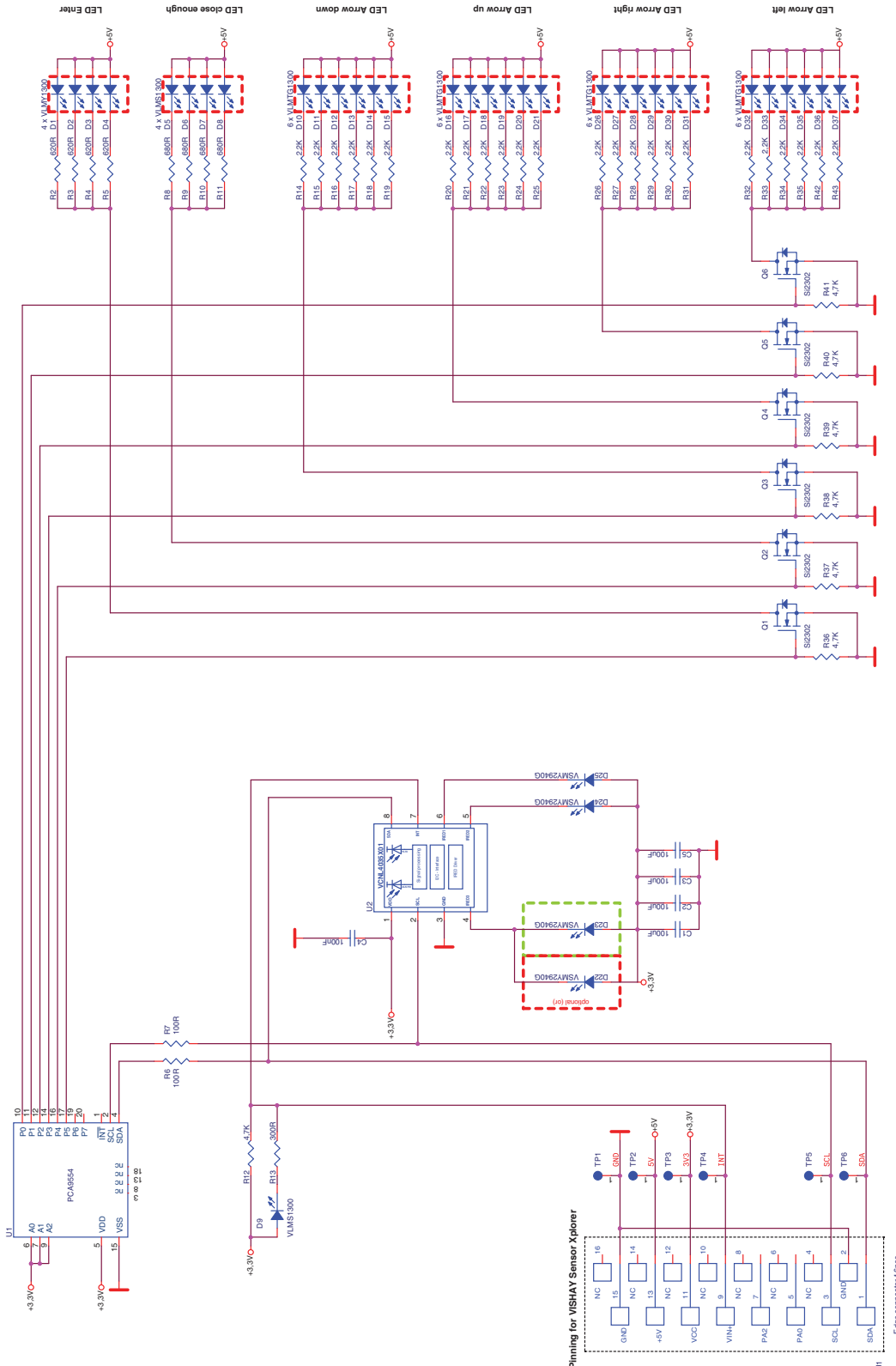


VCNL4035X01 Gesture Board

SCHEMATIC

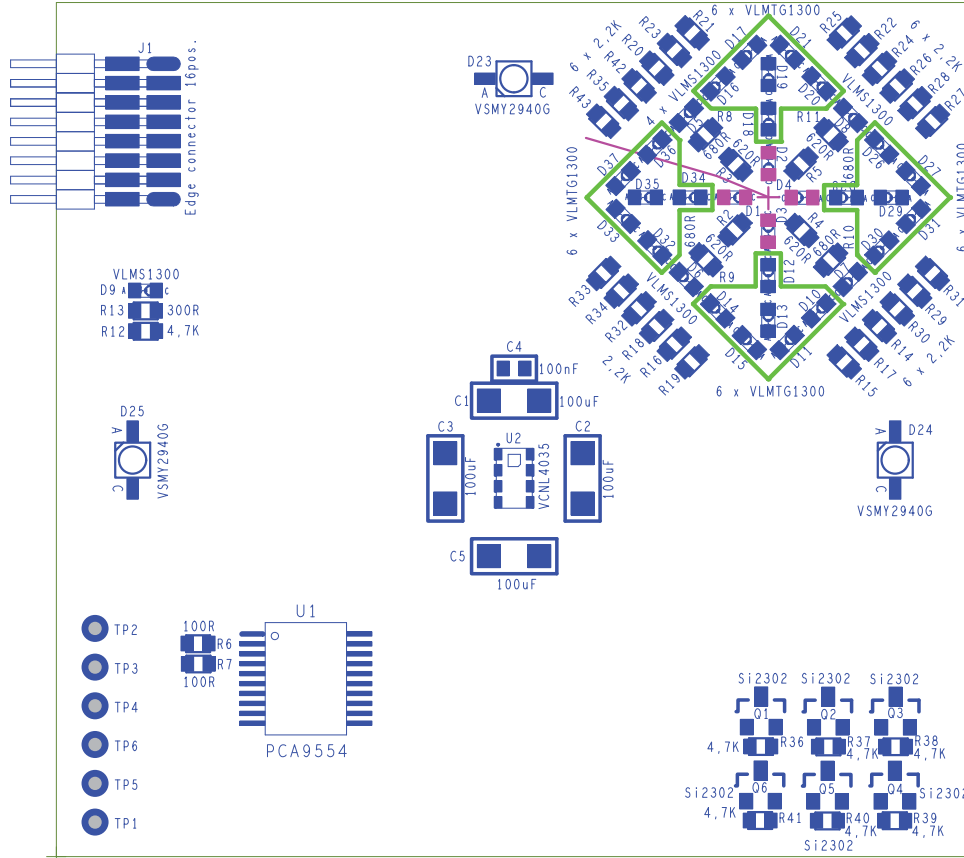


When using the VCNL4035X01 gesture board without Vishay SensorXplorer™ an additional pullup resistor (2.4 kΩ to 10 kΩ) on SDA and SCL is necessary



ASSEMBLY

VCNL4035X01 gesture board, rev. 5.0



Assembly top



BILL OF MATERIALS					
ITEM	QUANTITY	REFERENCE	COMPONENT CLASS	VALUE	PACKAGE
1	1	C1	Capacitor NP	100 µF	SMC1206
2	1	C2	Capacitor NP	100 µF	SMC1206
3	1	C3	Capacitor NP	100 µF	SMC1206
4	1	C4	Capacitor NP	100 nF	SMC0603
5	1	C5	Capacitor NP	100 µF	SMC1206
6	1	D1	LED orange	VLMO1300	SMD0603
7	1	D2	LED orange	VLMO1300	SMD0603
8	1	D3	LED orange	VLMO1300	SMD0603
9	1	D4	LED orange	VLMO1300	SMD0603
10	1	D5	LED red	VLMS1300	SMD0603
11	1	D6	LED red	VLMS1300	SMD0603
12	1	D7	LED red	VLMS1300	SMD0603
13	1	D8	LED red	VLMS1300	SMD0603
14	1	D9	LED red	VLMS1300	SMD0603
15	1	D10	LED true green	VLMTG1300	SMD0603
16	1	D11	LED true green	VLMTG1300	SMD0603
17	1	D12	LED true green	VLMTG1300	SMD0603
18	1	D13	LED true green	VLMTG1300	SMD0603
19	1	D14	LED true green	VLMTG1300	SMD0603
20	1	D15	LED true green	VLMTG1300	SMD0603
21	1	D16	LED true green	VLMTG1300	SMD0603
22	1	D17	LED true green	VLMTG1300	SMD0603
23	1	D18	LED true green	VLMTG1300	SMD0603
24	1	D19	LED true green	VLMTG1300	SMD0603
25	1	D20	LED true green	VLMTG1300	SMD0603
26	1	D21	LED true green	VLMTG1300	SMD0603
28	1	D23	IR LED 940nm	VSMY2940G	Dome lens
29	1	D24	IR LED 940nm	VSMY2940G	Dome lens
30	1	D25	IR LED 940nm	VSMY2940G	Dome lens
31	1	D26	LED true green	VLMTG1300	SMD0603
32	1	D27	LED true green	VLMTG1300	SMD0603
33	1	D28	LED true green	VLMTG1300	SMD0603
34	1	D29	LED true green	VLMTG1300	SMD0603
35	1	D30	LED true green	VLMTG1300	SMD0603
36	1	D31	LED true green	VLMTG1300	SMD0603
37	1	D32	LED true green	VLMTG1300	SMD0603
38	1	D33	LED true green	VLMTG1300	SMD0603
39	1	D34	LED true green	VLMTG1300	SMD0603
40	1	D35	LED true green	VLMTG1300	SMD0603
41	1	D36	LED true green	VLMTG1300	SMD0603
42	1	D37	LED true green	VLMTG1300	SMD0603
43	1	Q1	Transistor	Si2302	SMSOT23GSD
44	1	Q2	Transistor	Si2302	SMSOT23GSD
45	1	Q3	Transistor	Si2302	SMSOT23GSD
46	1	Q4	Transistor	Si2302	SMSOT23GSD
47	1	Q5	Transistor	Si2302	SMSOT23GSD
48	1	Q6	Transistor	Si2302	SMSOT23GSD
50	1	R2	Resistor	620 Ω	SMR0603
51	1	R3	Resistor	620 Ω	SMR0603



BILL OF MATERIALS					
ITEM	QUANTITY	REFERENCE	COMPONENT CLASS	VALUE	PACKAGE
52	1	R4	Resistor	620 Ω	SMR0603
53	1	R5	Resistor	620 Ω	SMR0603
54	1	R6	Resistor	100 Ω	SMR0603
55	1	R7	Resistor	100 Ω	SMR0603
56	1	R8	Resistor	680 Ω	SMR0603
57	1	R9	Resistor	680 Ω	SMR0603
58	1	R10	Resistor	680 Ω	SMR0603
59	1	R11	Resistor	680 Ω	SMR0603
60	1	R12	Resistor	4.7 kΩ	SMR0603
61	1	R13	Resistor	300 Ω	SMR0603
62	1	R14	Resistor	2.2 kΩ	SMR0603
63	1	R15	Resistor	2.2 kΩ	SMR0603
64	1	R16	Resistor	2.2 kΩ	SMR0603
65	1	R17	Resistor	2.2 kΩ	SMR0603
66	1	R18	Resistor	2.2 kΩ	SMR0603
67	1	R19	Resistor	2.2 kΩ	SMR0603
68	1	R20	Resistor	2.2 kΩ	SMR0603
69	1	R21	Resistor	2.2 kΩ	SMR0603
70	1	R22	Resistor	2.2 kΩ	SMR0603
71	1	R23	Resistor	2.2 kΩ	SMR0603
72	1	R24	Resistor	2.2 kΩ	SMR0603
73	1	R25	Resistor	2.2 kΩ	SMR0603
74	1	R26	Resistor	2.2 kΩ	SMR0603
75	1	R27	Resistor	2.2 kΩ	SMR0603
76	1	R28	Resistor	2.2 kΩ	SMR0603
77	1	R29	Resistor	2.2 kΩ	SMR0603
78	1	R30	Resistor	2.2 kΩ	SMR0603
79	1	R31	Resistor	2.2 kΩ	SMR0603
80	1	R32	Resistor	2.2 kΩ	SMR0603
81	1	R33	Resistor	2.2 kΩ	SMR0603
82	1	R34	Resistor	2.2 kΩ	SMR0603
83	1	R35	Resistor	2.2 kΩ	SMR0603
84	1	R36	Resistor	4.7 kΩ	SMR0603
85	1	R37	Resistor	4.7 kΩ	SMR0603
86	1	R38	Resistor	4.7 kΩ	SMR0603
87	1	R39	Resistor	4.7 kΩ	SMR0603
88	1	R40	Resistor	4.7 kΩ	SMR0603
89	1	R41	Resistor	4.7 kΩ	SMR0603
90	1	R42	Resistor	2.2 kΩ	SMR0603
91	1	R43	Resistor	2.2 kΩ	SMR0603
92	1	U1	IC	PCA9554	SSOP20
93	1	U2	Sensor	VCNL4035X01	SMD
94	1	J1	Edge connector	2 x 8 pos.	SMD header strip