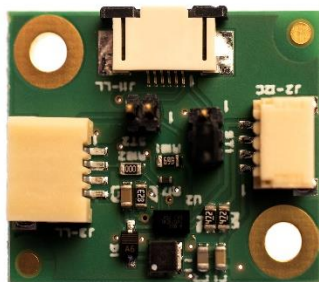




Maxim Drivboard User Guide



Introduction

Maxim Drivboard is a PCB with a Maxim MAX14574 driver, that allows to control Corning® Varioptic® variable focus lenses.

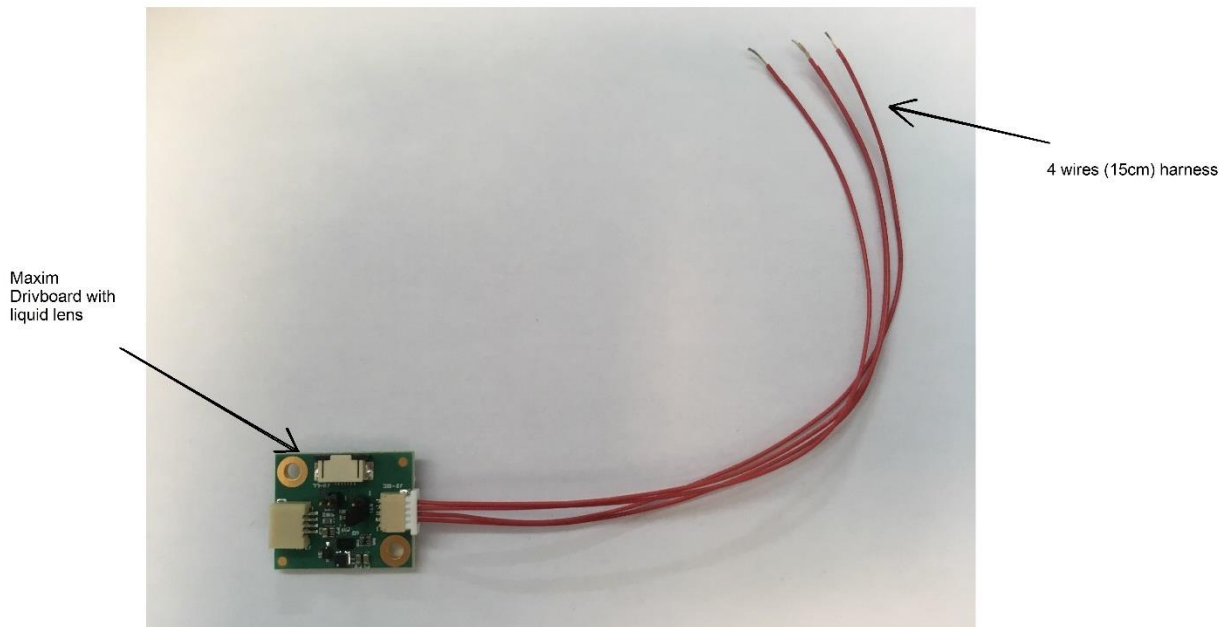
This document explains how to use the Maxim Drivboard.

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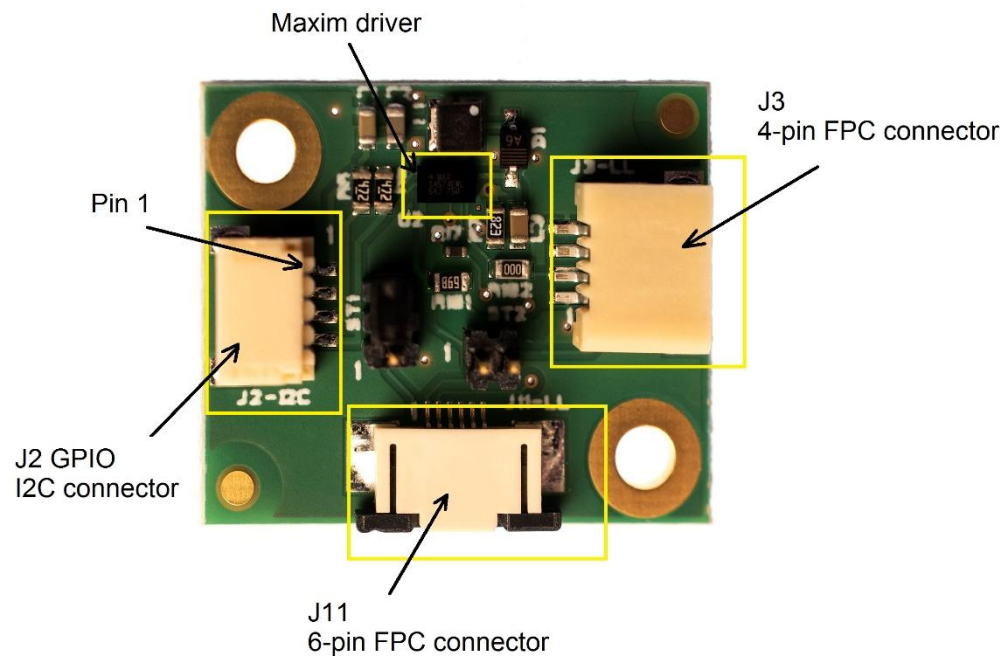
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1. Hardware description

1.1. Items



1.2. General description of the board



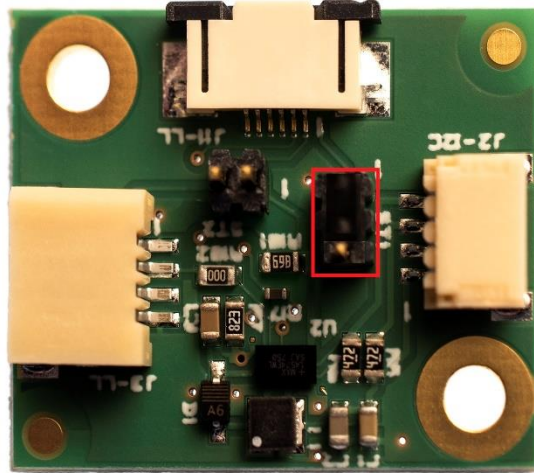
Dimensions: 23 x 18 x 8 mm

Weight: 2g

1.3. Jumper position description

Two jumpers are present on the board:

- Jumper located in ST1 allows customer to use either the thermistor populated 6 pin FPC (i.e FPC-A-10, FPC-A-14 or FPC-A-16) or the thermistor located on the board. To use thermistor on the flex, please set the jumper between pin 1 and 2 as shown in the picture below:



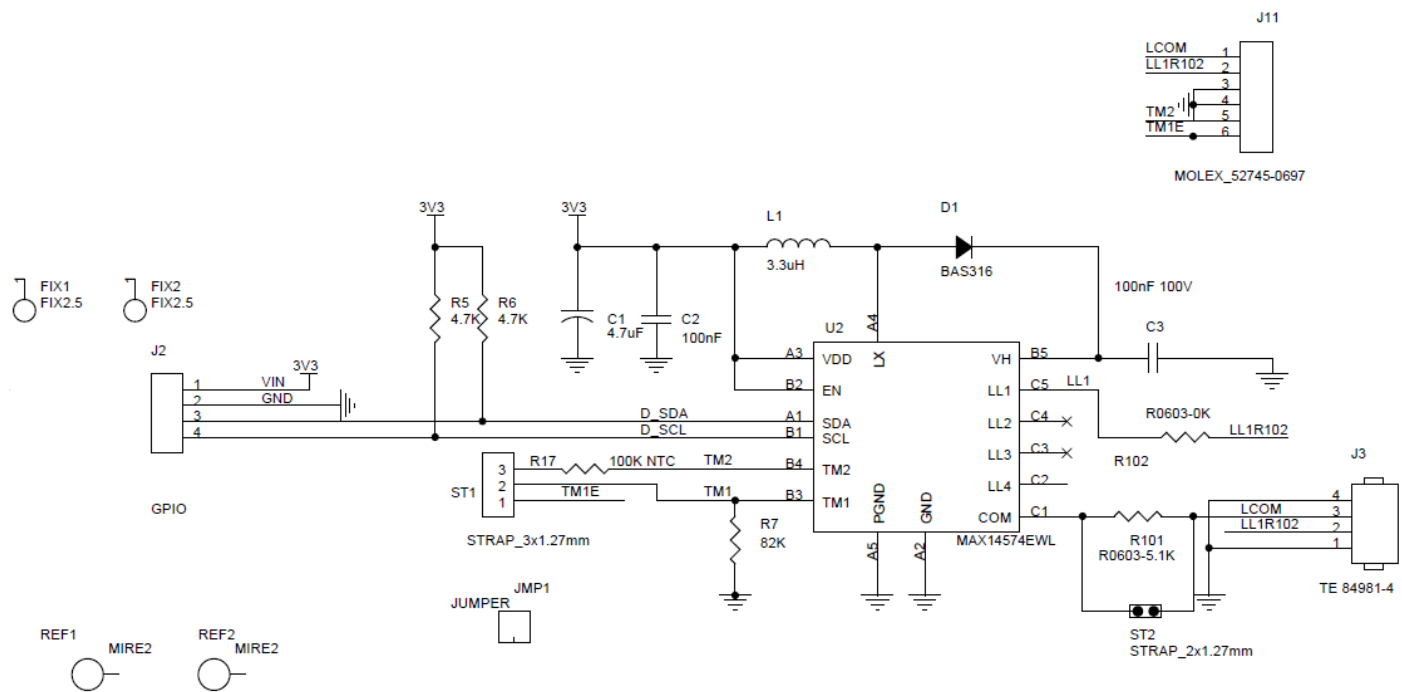
To use thermistor located on the board, please set the jumper between pin 2 and 3.

- Jumper located in ST2 allows customer to use or bypass serial 5k Ω resistor on the COM output of the Maxim driver. When the jumper is plugged in, the resistor is bypassed. As a reminder this resistor is recommended when driving A-39N0 lens.

1.4. Control of the board

Refer to MAX14574 datasheet for any information about driver communication protocol.

2. Board schematic



3. Bill of material

Item	Quantity	Reference	Part number	PCB Footprint
1	1	C1	4.7uF	603
2	1	C2	100nF	603
3	1	C3	100nF 100V	603
4	1	D1	BAS316	SOD323
5	2	FIX1, FIX2	FIX2.5	
6	1	JMP1	JUMPER	
7	1	J2	JST SM04B-SRSS-TB(LF)(SN)	
8	1	J3	TE 84981-4	
9	1	J11	MOLEX_52745-0697	
10	1	L1	3.3uH	2x19
11	2	REF1, REF2	MIRE2	
12	2	R5, R6	4.7K	603
13	1	R7	82K	603
14	1	R17	100K NTC	402
15	1	R101	R0603-5.1K	603
16	1	R102	R0603-0K	603
17	1	ST1	STRAP_3x1.27mm	
18	1	ST2	STRAP_2x1.27mm	
19	1	U2	MAX14574EWL	5X3WLP