



## Corning® Varioptic® A-PE series hardware

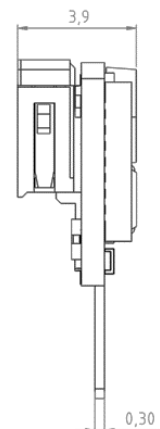
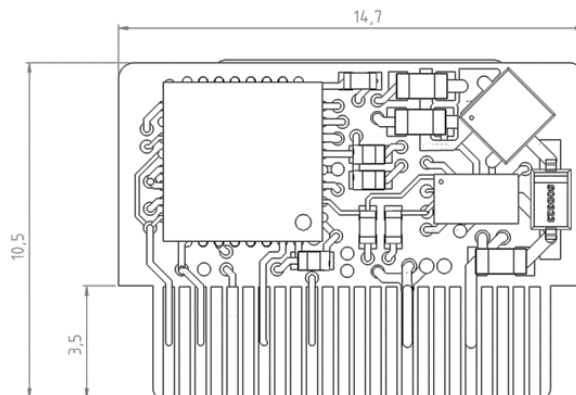
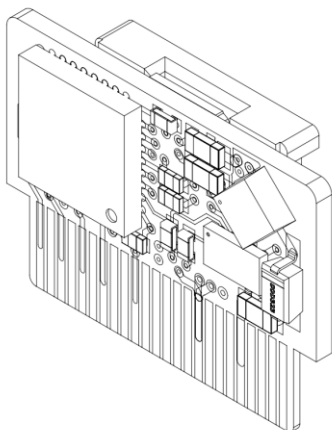
This document aims at giving all necessary information to drive the A-PE series. A full description of the hardware of the A-PE board.



### Table des matières

Mechanical dimensions .....	1
General Description Of The Board .....	2
Absolute Maximum Ratings .....	3

### Mechanical dimensions



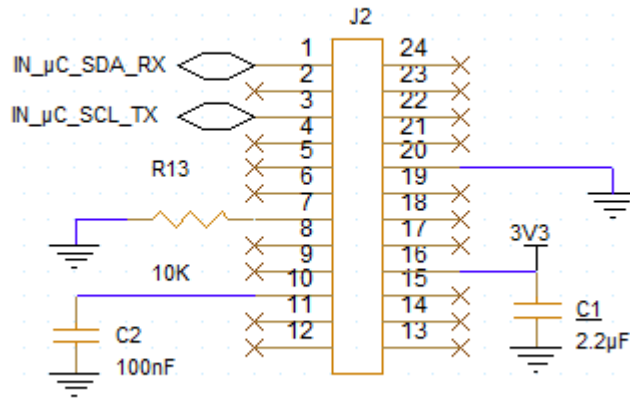
## General Description Of The Board



The A-PE electronics embeds a 32 bits microcontroller. The chip contains V-Temp temperature compensation algorithm, V-Speed response time optimization algorithm and individual lens thermal calibration parameters.

### Connector Pinout

Pin Number	PCB I/O name
1	OUT_I2C_RS232_SDA_RX
2	NC
3	OUT_I2C_RS232_SCL_TX
4	NC
5	SWDIO
6	NC
7	BOOT0
8	NC
9	NC
10	NRST
11	NC
12	NC
13	NC
14	NC
15	NC
16	3,3V
17	NC
18	NC
19	NC
20	GND
21	NC
22	NC
23	NC
24	NC



**Notes:**

- (1) The many unused pin on J2 connector are designed for improving PCB mechanical retention into the customer SMT connector.
- (2) Recommended connector for A-PE Series board is 24 pins ZIF connector 24FLT-SM2-TB(LF)(SN) from JST
- (3) IN\_μC\_SDA\_RX/IN\_μC\_SCL\_TX: Those pins can be used either in I2C or RS232, for I2C pull-ups are already present on the board.
- (4) R13 pull down resistor on pin 7(BOOT0) and C2 decoupling capacitor on pin 10 (Reset) can be optional depending of EMC conditions.

## Absolute Maximum Ratings

Parameter	Symbol	Min	Typ	Max	Unit	Notes
Operating Temperature	T	-30	..	85	°C	
Storage Temperature	T <sub>stg</sub>	-40	..	85	°C	
Input Voltage	V <sub>in</sub>	2.8	3.3	3.6	V	

**Important note:**

Corning Varioptic Lenses and electronic boards are sensitive to electrostatic discharge (ESD). Use caution when handling.

*Corning reserves the right to change its product specifications at any time without notice. Please ensure you have the latest applicable specification before purchasing a Corning product. Corning does not provide any warranty of merchantability or fitness for a particular purpose. Additionally, the products sold by Corning are not designed, intended or authorized for use in life support, life sustaining, medical device, healthcare, nuclear, military, or any applications in which the failure of such products could reasonably be expected to result in personal injury, loss of life or catastrophic property or environmental damage. Corning does not make any claims or statements that our products have been approved for such applications. Further, Corning has not tested its products for safety and efficacy in any such applications. The customer is responsible for determining the suitability of Corning's product for its application, including any testing, validation, and/or regulatory submissions that may be required to support the safety and efficacy of its intended use. Product specifications are available upon request at [variopic@corning.com](mailto:variopic@corning.com)*