

Analogue to Bluetooth® Low Energy - ABL Data sheet

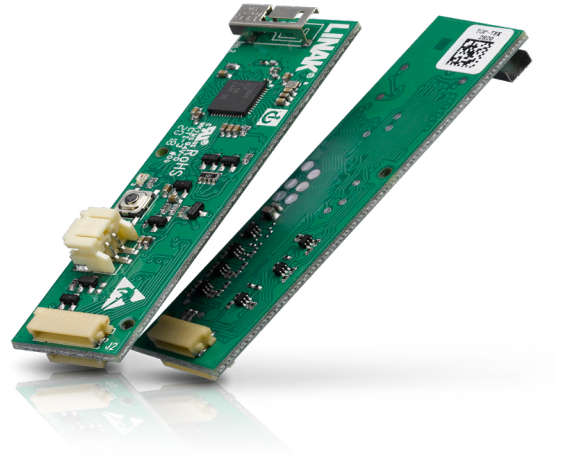
Analogue to Bluetooth® Low Energy - ABL

With the small ABL print it is possible to convert analogue input to Bluetooth Low Energy. The ABL print can be used as attendant control or hand control integrated in side rails in for instance healthcare applications and offers easy access to different positioning functions.

The ABL is a 2-sided PCBA for conversion of switches into Bluetooth commands. This can be used in specific OEM controls, such as side rails, hand controls, foot controls, touch panels.

Another benefit is the high and easy adaption to customer applications for easy build-in.

The ABL print can be used for third party products. Specific software makes it possible to control applications where wireless control is preferable.



Features and options:

- Input number and type: 10 analogue inputs
- Output number and type: 4 open collector outputs
- Battery: Prepared for battery operation (3-3.3V)
- Battery lifetime:
 - CR2032:** 2 years w. 140 seconds daily usage.
 - 2 x AAA:** 4 years w. 140 seconds daily usage.
- Current consumption: 3.7 mA during activation
- Housing: Circuit board without housing
- IP rating: No IP rating as standard.
The customer must ensure a proper application design and built-in of the PCBA to achieve the correct IP degree (e.g. IPX4)
- Cables: Not included
To be ordered separately - see Ordering Example page
- Number of connectors: 3
- Pairing: LINAK standard pairing procedure

Usage:

- Operation temperature: +5 °C to +40 °C
- Storage temperature: -10 °C to +50 °C
- Compatibility: Compatible with LINAK Bluetooth Low Energy (BLE) control boxes. Please contact LINAK.
- Relative humidity: 20% to 80% – non-condensing
- Atmospheric pressure: 700 to 1060 hPa
- Meters above sea level: Max. 3000 meters
- Approvals: IEC60601-1
ANSI/AAMI ES60601-1
CAN/CSA-22.2 No 60601-1

Ordering example:

	ABL			
Functionality	V1	V0 = V0	V1 = V1	V2 = V2
Housing	0	0 = No Housing		
Not Used	0	0 = None		
Not Used	0	0 = None		
Bluetooth Generation	4	0 = Gen. 1	4 = Gen. 2	
Not Used	0	0 = None		
Not used	0	0 = None		
Not used	0	0 = None		
Not used	0	0 = None		
Not Used	0	0 = None		
Not Used	0	0 = None		
Not Used	0	0 = None		
Chosen item number: ABLV10004000000				

Cable ordering

10P inputs connector (J2):

On PCB:

- Manufacturer part number: CI1410M1HRI-NH
- Manufacturer: CVILUX

Mates with cables with PH-connector (housing and terminals):

- Housing part number: CI1410SL00C-NH
- Terminals: CI14T011 PEO

LINAK part number for 150 mm open-end cable: 0965366

8P inputs/outputs connector (J3):

On PCB:

- Manufacturer part number: CI1408M1HRI-NH
- Manufacturer: CVILUX

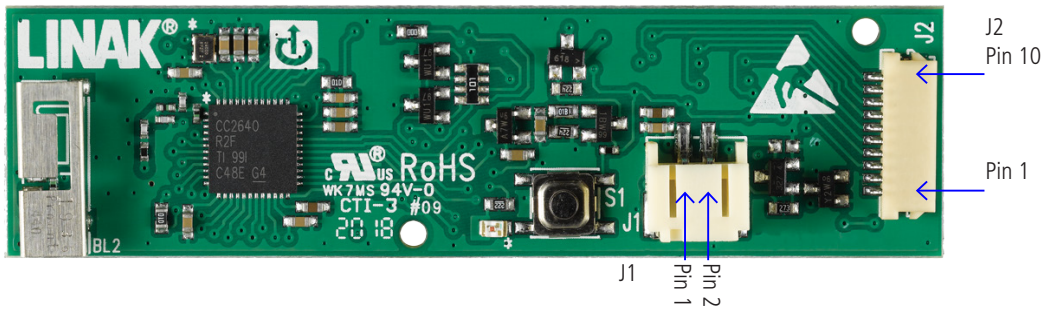
Mates with cables with PH-connector (housing and terminals):

- Housing part number: CI1408SL00C-NH
- Terminals: CI14T011 PEO

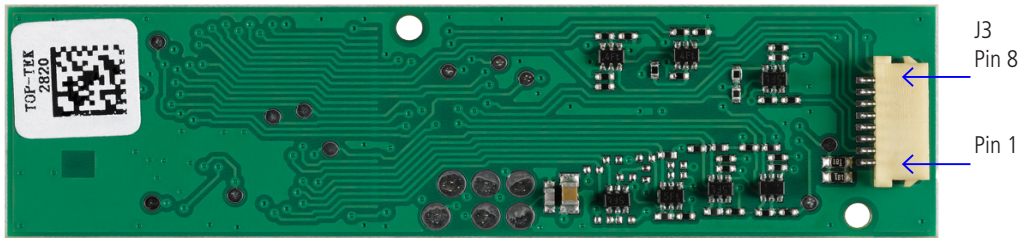
LINAK part number for 150 mm open-end cable: 0965367

Connectors on PCBA

Top side



Bottom side



External supply voltage:

- Connect through J1
 - Pin 1: +
 - Pin 2: -
- Includes reverse polarity protection for J1
- Operational voltage:
 - Minimum: 2.2V
 - Absolute maximum voltage: 3.8V
- Current consumption: 3.7 mA during activation

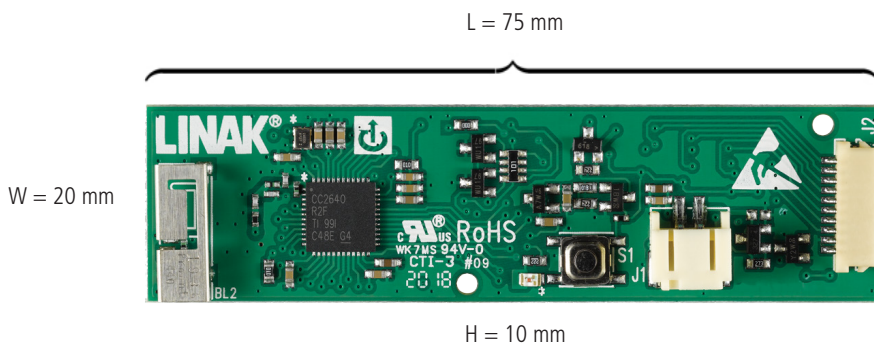
Inputs:

- 10 active-low inputs:
 - When input is active, it is connected to GND terminal (pin 2 on J2, pin 8 on J3)
 - Required impedance for activation of an input < 1k Ω

Outputs:

- 4 open-collector outputs (active-low). Requires external pull-up to pin 1 on J3.
- Pin 1 on J3: Connection from supply voltage with output impedance: 50 Ω .

Dimensions



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