

EVB80104-B Short Description

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1. Scope

This document is intended to give a brief introduction of the EVB80104-B Evaluation add-on Board (EVB).

Beside of this document, several other important documentation papers are necessary for a detailed understanding.

The detailed information regarding our products including all required development tools will be distributed via the Melexis Softdist server (<u>https://softdist.melexis.com</u>).

2. Melexis Softdist Server

Melexis SoftDist (<u>https://softdist.melexis.com</u>) is a software distribution system which allows customers to download documents, development software and other stuff related to Melexis products. In case updates or new items are available a notification email will be send automatically to all subscribers.

It's required to register in order to access the Melexis Softdist server.

In case you are not registered yet, please contact our sales team and specify which Melexis product you are interested in, in order to create an account and grant access to the correct product specific information:

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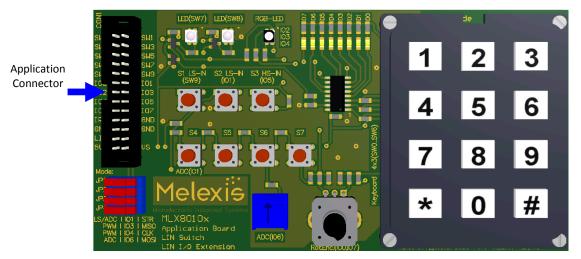
3. EVB - General Description

The EVB80104-B is an optional application add-on PCB which can be used together with:

- EVB80104-A1
- EVB80104-A2
- EVB80104-A3

The EVB80104-B can be connected to CON1 of the different EVBs mentioned above using a cable which will be delivered together with the EVB80104-B.

4. EVB - Hardware overview



Feature:

- Application connector
- Output:
 - SPI I/O extension
 - Single color LED
 - o RGB LED
- Inputs:
 - Keyboard switch matrix 4x3
 - Rotary encoder
 - Low side buttons
 - High side buttons
- ADC Input:
 - Resistor ladder
 - o Potentiometer



4.1. EVB - Application Connector CON1

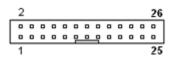


Figure 1 Application Connector - IDC MALE (Top view)

Pin	Name	Description
1	SW0	Keyboard switch matrix 4x3
2	SW1	Keyboard switch matrix 4x3
3	SW2	Keyboard switch matrix 4x3
4	SW3	Keyboard switch matrix 4x3
5	SW4	Keyboard switch matrix 4x3
6	SW5	Keyboard switch matrix 4x3
7	SW6	Keyboard switch matrix 4x3
8	SW7	Single color LED output
9	SW8	Single color LED output
10	SW9	Low side button input
11	100	Rotary Encoder
12	101	SPI (STR) or ADC Input (Resistor ladder)
13	102	PWM output for single color LEDs and RGB LED (red)
14	103	SPI (MISO) or PWM output for RGB LED (blue)
15	104	SPI (CLK) or PWM output for RGB LED (green)
16	105	High side button input
17	106	SPI (MOSI) or ADC Input (Potentiometer)
18	107	Rotary Encoder
19	IREF	Current Source for Creating External Supply Voltages
20	GND	System ground
21	GND	System ground
22	GND	System ground
23	LIN	Connection to LIN Bus
24	VBAT	12V Power Supply (Not Reverse Polarity Protected)
25	V5	Output from IREF supply
26	VS	Voltage After Polarity Protection Diode / Chip Supply Voltage

Table 1 EVB Application Connector



5. Revision History

Version	Changes	Remark	Date
001		Initial release	25.07.18



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