

# Customer evaluation kit description

## PROFET™

### About this document

#### Scope and purpose

This document provides an overview of the latest high-side switches evaluation boards. The user manual is intended as guidance for the Configuration Wizard and its usage related to the customer evaluation kit. The information given in this document is intended only as an implementation guide and not as a description or warranty of a certain functionality, condition or quality of the device.

#### Intended audience

This document is intended for anyone using boards of IPD with or without the IPD Configuration Wizard.

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1 Evaluation kit overview [MB & DB]

1 Evaluation kit overview [MB & DB]

The PROFET™ +2 12V customer evaluation kit consists of a motherboard (MB) and a daughterboard (DB). **Figure 1** below shows the DB [2] plugged onto the MB [1].

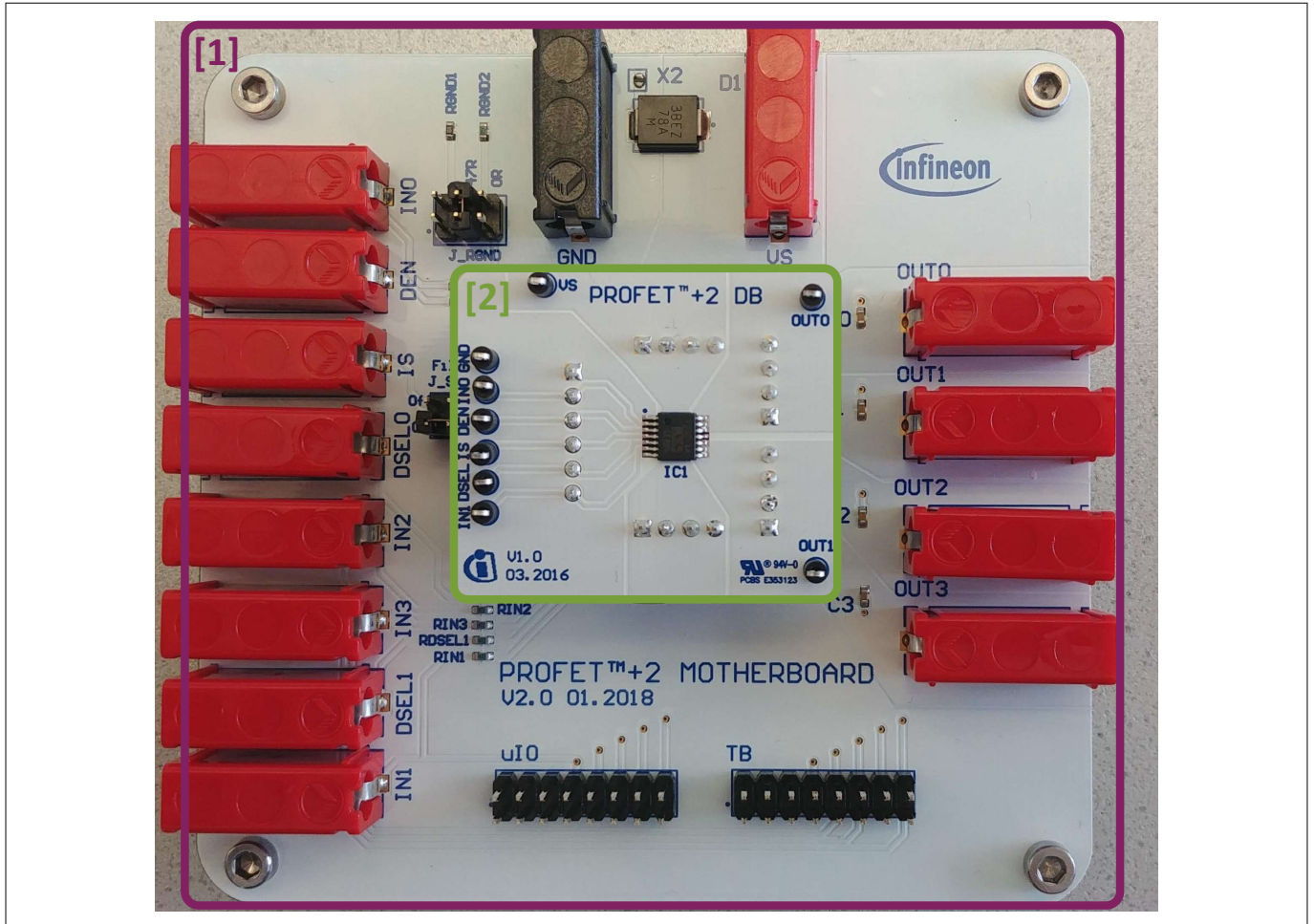


Figure 1 PROFET™ +2 12V MB [1] and DB [2]

Application description

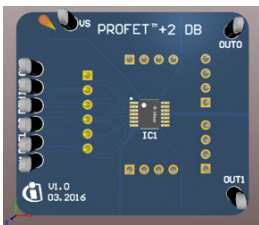
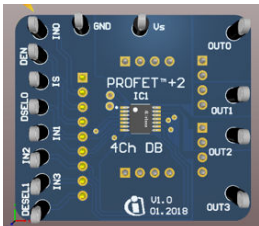
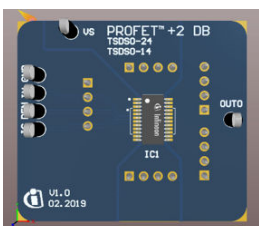
- The MB is designed to handle all devices within the PROFET™ +2 12V family
  - 1-channel, 2-channel or 4-channel PROFET™ +2 12V devices (DBs) can be plugged onto the MB
- It is suitable for the evaluation of resistive, capacitive and/or inductive loads
- The evaluation can either be done directly or with the Config Wizard for IPD (see [Chapter 5](#))

Note:

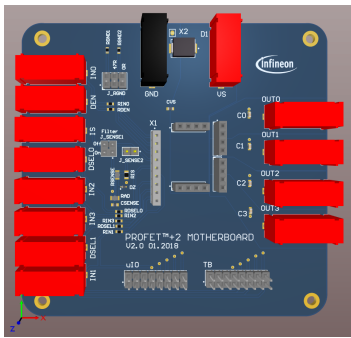
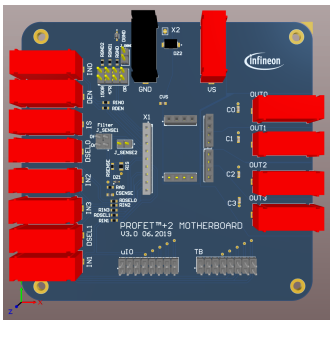
- The board is **not** designed for **EMC characterization**, including ISO pulses
- The board design is **not** optimized for **thermal performance characterization**

### 1 Evaluation kit overview [MB & DB]

**Table 1 Available daughterboards**

Name	Picture	TSDSO-14: 1-channel	TSDSO-14: 2-channel	TSDSO-14: 4-channel	TSDSO-24: 1-channel
PROFET™ +2 12V (2-channel)		YES	YES	NO	NO
PROFET™ +2 12V (4-channel)		NO	NO	YES	NO
PROFET™ +2 12V 14/24 pin		YES	NO	NO	YES

**Table 2 Recommended MB depending on DB**

Naming	Motherboard V2.0	Motherboard V3.0
Picture		
PROFET™ +2 12V (1-channel and 2-channel)	YES	YES
PROFET™ +2 12V (4-channel)	YES	YES
PROFET™ +2 12V 14/24 pin	YES	YES

2 Motherboards [MB]

2 Motherboards [MB]

Figure 2 and Table 3 below illustrate the location of the connectors and jumpers. The names of the jumpers are printed next to them. Chapter 2.1 provides detailed information.

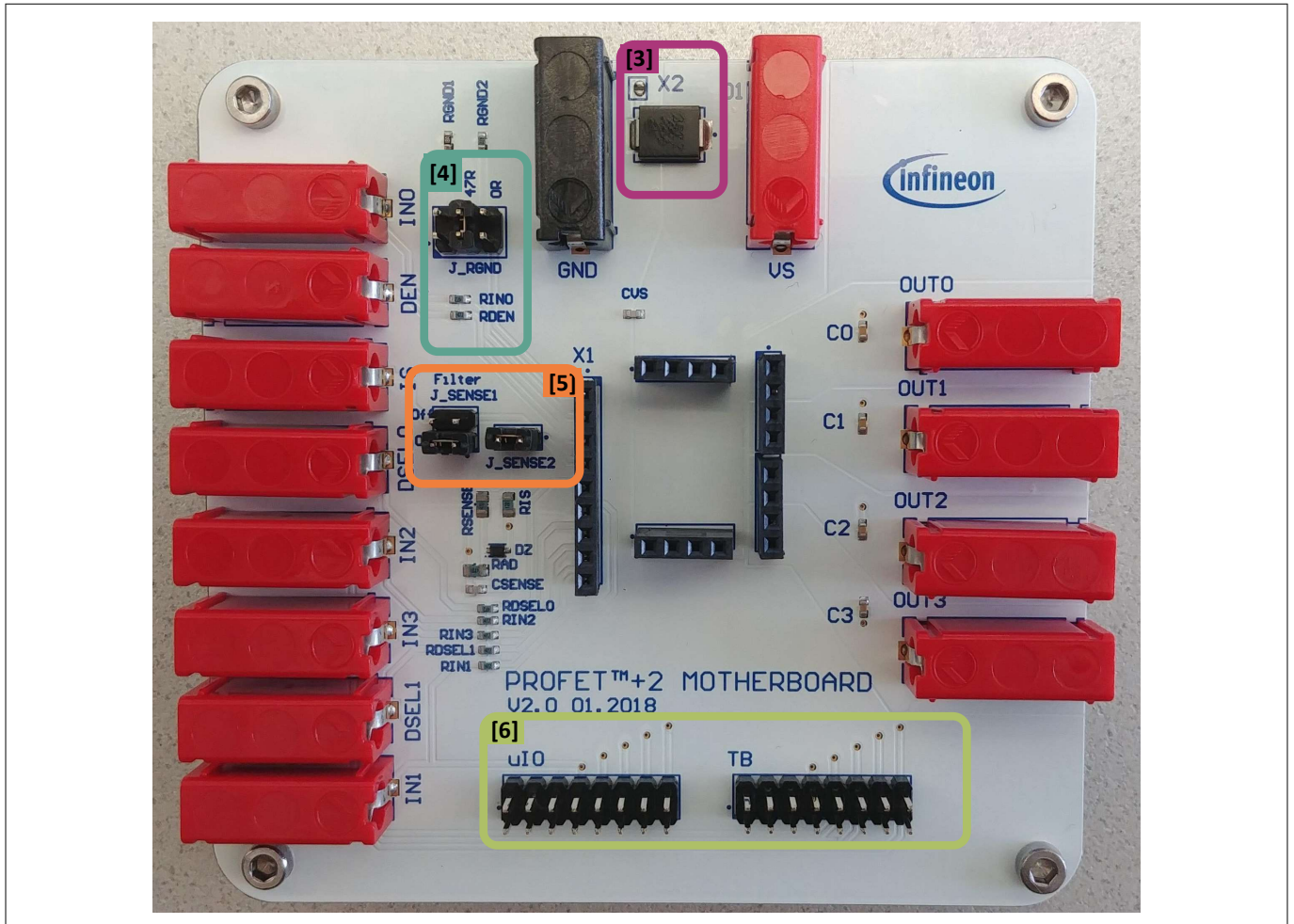


Figure 2 PROFET™ +2 12V MB - connectors and jumpers

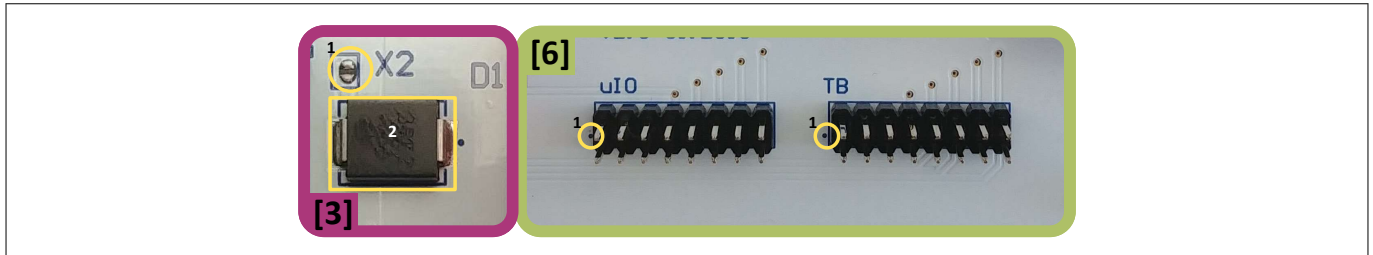
Table 3 PROFET™ +2 12V MB connectors and jumpers

#	Description
1	PROFET™ +2 12V motherboard (see Figure 1)
2	PROFET™ +2 12V daughterboard (see Figure 1)
3	TVS Diode (device protection)
4	J_RGND (GND resistor selection)
5	J_SENSE1, J_SENSE2 (sense configuration)
6	μIO connectors of the PROFET™ +2 12V MB (optional: microcontroller)

**2 Motherboards [MB]**

**2.1 Detailed information**

The two  $\mu$ IO connectors of the PROFET™ +2 12V MB [6] are used to connect the motherboard with the  $\mu$ IO-Stick <sup>1)</sup> (for further information see [Chapter 5](#)). The connector marked as **uIO** can only be used for 1-channel and 2-channel devices, whereas the connector marked with **TB** also can be used for 4-channel devices. The yellow circles illustrated in [Figure 3](#) and [Figure 4](#) indicate the position of the pin 1 indicator. In order to avoid overvoltages on the MB it is possible to close the solder bridge **X2** which connects a TVS diode between VS and GND. [Figure 3](#) and [Table 4](#) show the solder bridge X2, the TVS diode [3] and the two  $\mu$ IO connectors of the PROFET™ +2 12V MB.

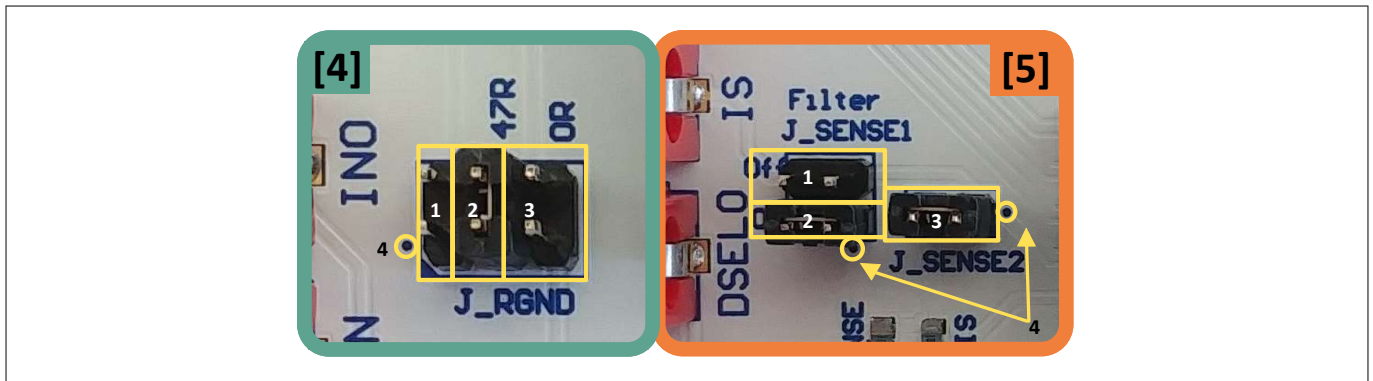


**Figure 3** Position of X2, uIO and TB

**Table 4** TVS diode [3]

Position	Description
yellow circle	Solder bridge X2, opened by default, close to enable overvoltage protection
yellow square	TVS diode

[Figure 4](#) and the tables below illustrate the jumpers, as well as the positions of the jumpers. The description of the positions is given in [Table 5](#) (J\_RGND [4]) and [Table 6](#) (J\_SENSE1, J\_SENSE2 [5]).



**Figure 4** Jumper positions

[Table 5](#) below lists the description of the three jumper positions of J\_RGND [4]. All jumpers are open by default.

**Table 5** J\_RGND [4] jumper positions

#	Description
1	The PROFET™ +2 12V DB ground is connected to the MB module ground via 150 $\Omega$ resistor
2	The PROFET™ +2 12V DB ground is connected to the MB module ground via 47 $\Omega$ resistor
3	The PROFET™ +2 12V DB ground is connected to the MB module ground via 0 $\Omega$ resistor

<sup>1)</sup> The Infineon  $\mu$ IO-Stick can be ordered at <https://www.ehitex.de/en/>.

**2 Motherboards [MB]**

**Table 6** below lists the description of J\_SENSE1 and J\_SENSE2 jumpers [5], as well as their positions and the position of pin 1.

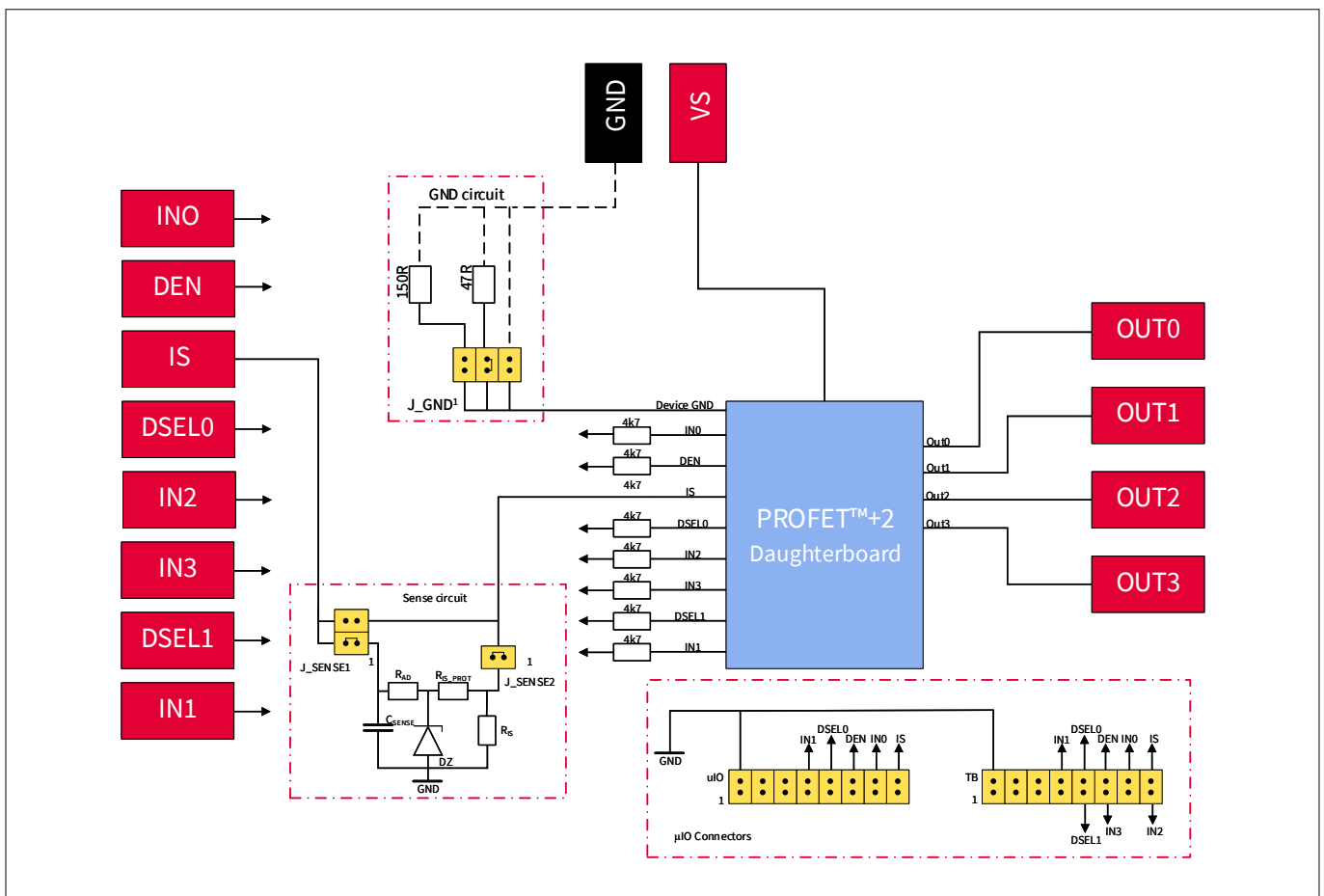
In order to convert the IS current into a voltage, J\_SENSE2 [3] needs to be closed. In case of using a different sense resistor, either replace RIS or use an external resistor. Therefore, remove J\_SENSE2 [3] and close JSENSE [1] to enable a direct path from the IS pin of the device to the banana connector. All jumpers are open by default.

**Table 6 J\_SENSE1/J\_SENSE2 [5] jumper positions**

#	Description
J_SENSE1 [1]	It connects the IS pin of the device directly to the banana connector of the MB and disables the on-board filter of the IS
J_SENSE1 [2]	It connects the IS pin of the device after the on-board filter to the banana connector of the MB
J_SENSE2 [3]	It connects the IS pin of the device to the 1.2 kΩ sense resistor RIS and to the μIO connectors

**2.2 PROFET™ +2 12V motherboard V2.0**

**Figure 5** shows the block diagram of the PROFET™ +2 12V MB. It provides an overview of the locations of jumpers and connectors.



**Figure 5 Block diagram of the PROFET™ +2 12V MB V2.0**

**2 Motherboards [MB]**

The device can be controlled with or without the µIO-Stick (see [Chapter 2.1](#), [Chapter 5](#)). [Table 7](#) below explains the functionality of all jumpers as well as the purpose of the connectors shown in the block diagram above ([Figure 5](#)).

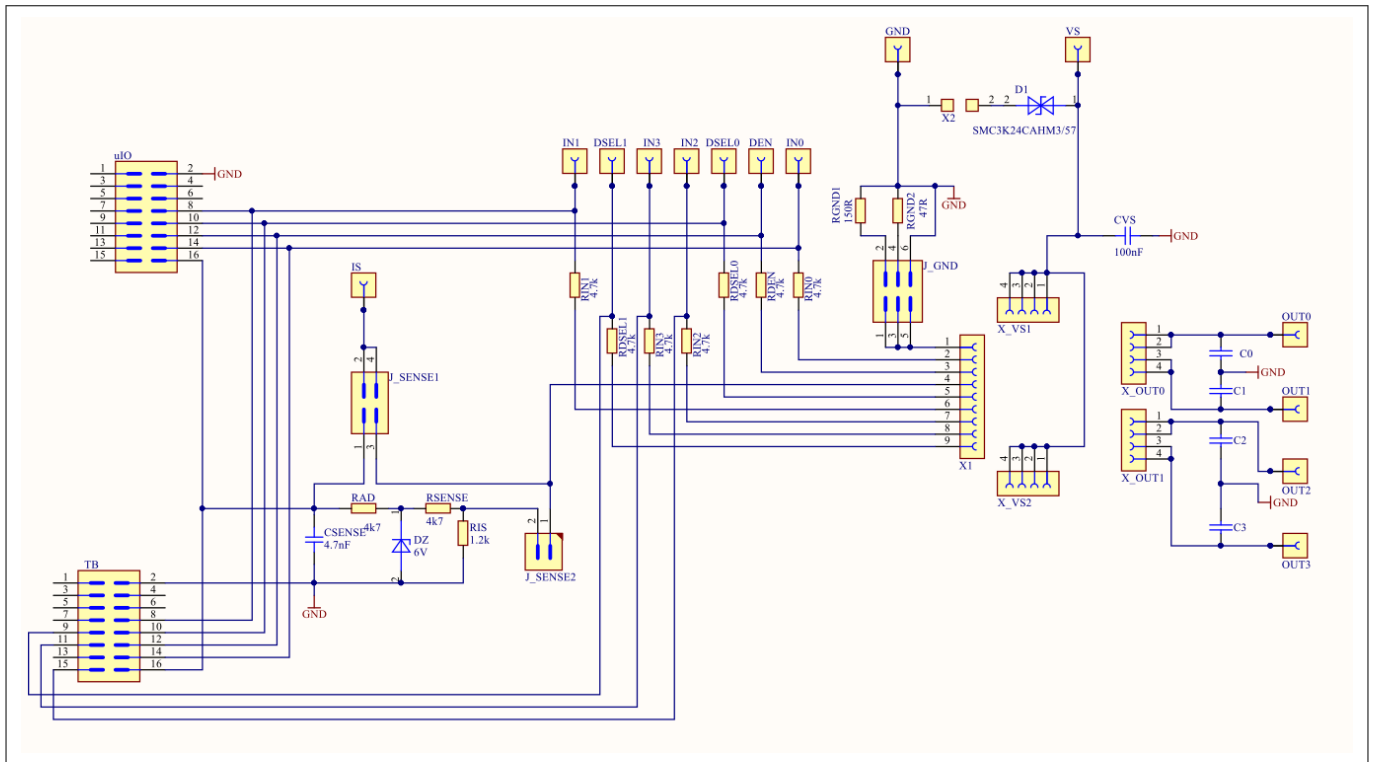
**Table 7 PROFET™ +2 12V MB connectors and jumpers**

Name	Description
VS	Connection of the supply voltage
GND	Connection of the GND module
OUT0	OUT0 from the PROFET™ +2 12V
OUT1	OUT0/OUT1 <sup>2)</sup> from the PROFET™ +2 12V
OUT2	OUT1/OUT2 <sup>3)</sup> from the PROFET™ +2 12V
OUT3	OUT1/OUT3 <sup>3)</sup> from PROFET™ +2 12V
IN0, IN1, IN2, IN3	External input control of the PROFET™ +2 12V device with serial 4.7 kΩ resistors
DEN	External control of DEN pin with serial 4.7 kΩ resistor; enables/disables the diagnosis functions of the device
DSEL0, DSEL1	External control of DSELx pins with serial 4.7 kΩ resistor to select a dedicated channel for diagnosis feedback
IS	Sense output of the PROFET™ +2 12V (see <a href="#">Chapter 2.1</a> )
J_GND	J_GND is used to connect the PROFET™ +2 12V to the motherboard's GND network. It is also possible to choose between three ground resistors (150 Ω, 47 Ω, 0 Ω) (see <a href="#">Chapter 2.1</a> )
J_SENSE1	Used to enable/disable the sense filtering (see <a href="#">Chapter 2.1</a> )
J_SENSE2	J_SENSE2 either enables the connection to a 1.2 kΩ onboard-resistor or a direct connection to the IS connector on the motherboard to add an external RSENSE with different values (see <a href="#">Chapter 2.1</a> )
µIO-Connectors	The PROFET™ +2 12V demoboard can either be used with external sources or with the µIO-stick by means of the Infineon Config Wizard (see <a href="#">Chapter 2.1</a> , <a href="#">Chapter 5</a> )

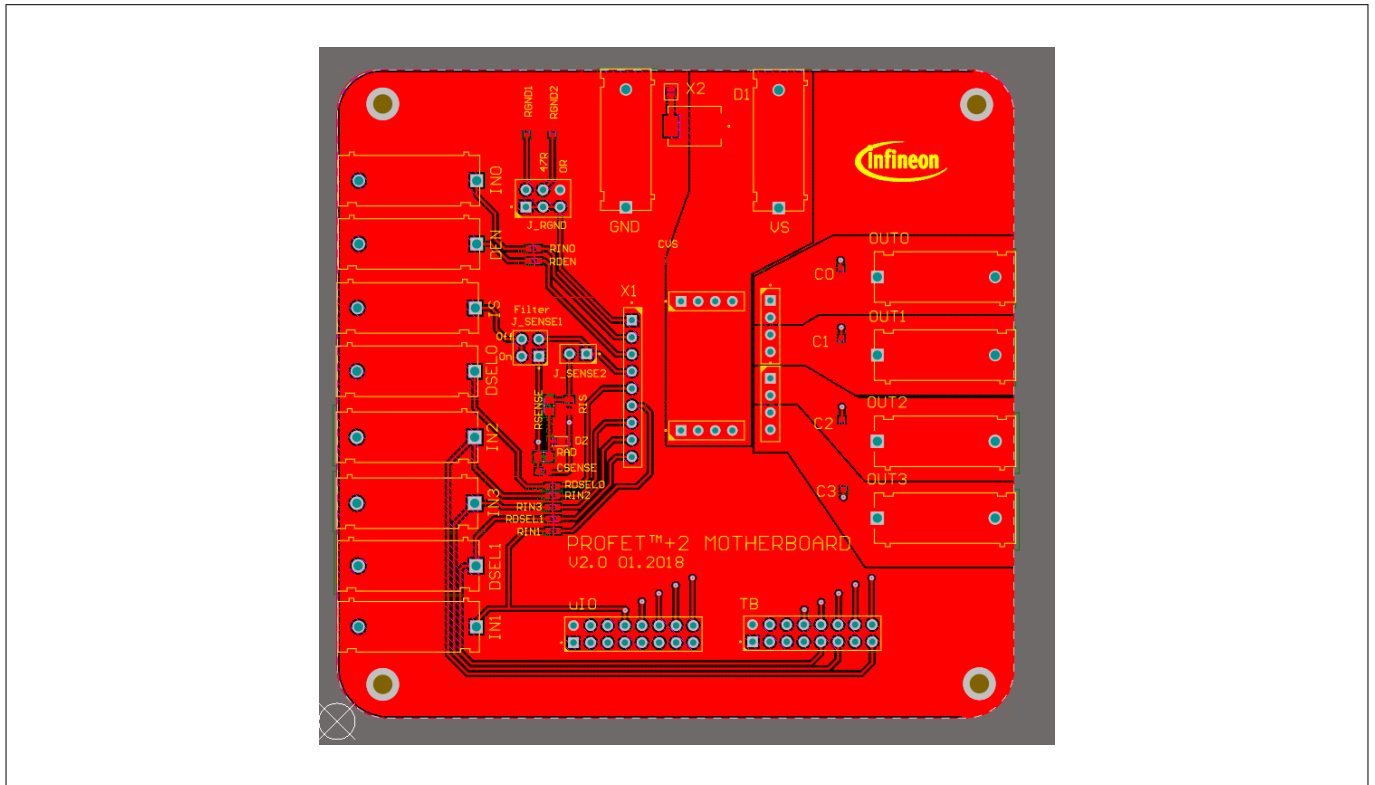
<sup>2</sup> If a 1-channel or 2-channel device is used, OUT0 and OUT1 are connected to OUT0 of the device connector.

<sup>3</sup> If a 2-channel device is used, OUT3 and OUT4 are connected to OUT1 of the device connector.

**2 Motherboards [MB]**



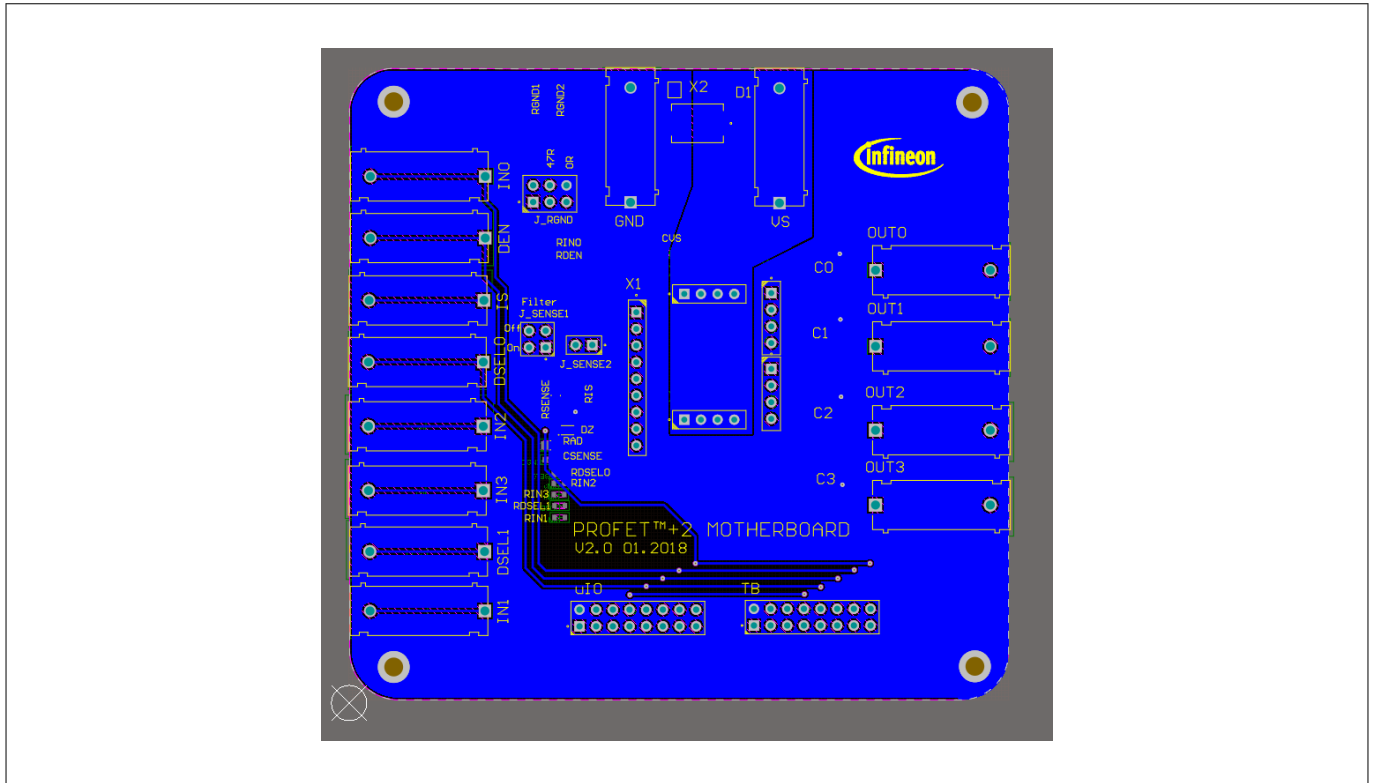
**Figure 6** Motherboard V2.0 schematic



**Figure 7** Motherboard V2.0 PCB top view



**2 Motherboards [MB]**

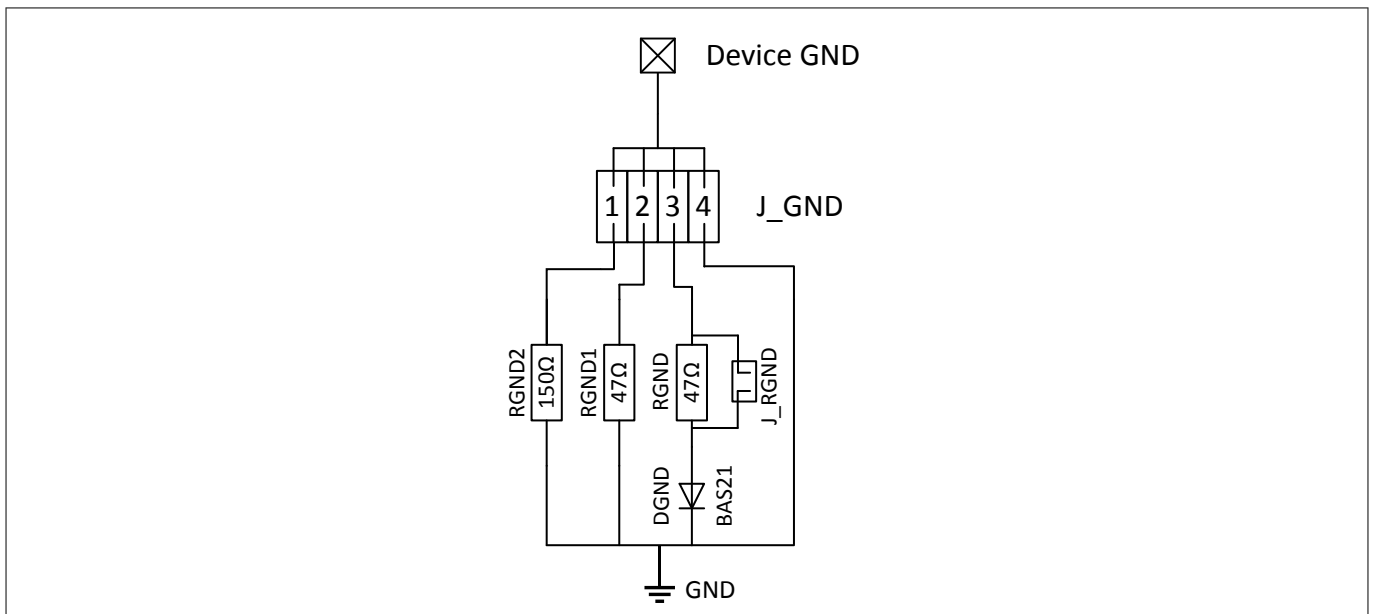


**Figure 8 Motherboard V2.0 PCB bottom view**

**2.3 PROFET™ +2 12V motherboard V3.0**

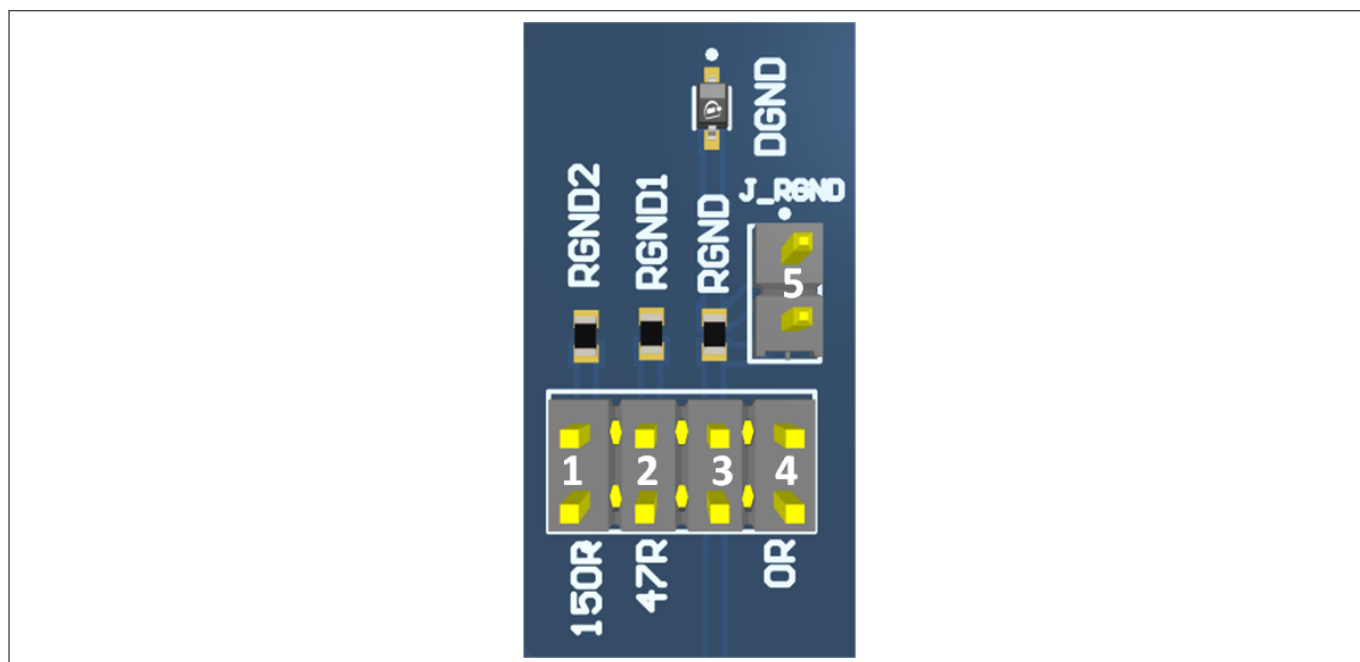
As a new option, the PROFET™ +2 12V motherboard V3.0 provides the possibility to easily plug in further PROFET™ devices with a DB. In comparison to the PROFET™ +2 12V motherboard V2.0, this improvement allows the use of more PROFET™ devices.

**Figure 9** shows the changes of the GND path. There are two jumpers: J\_GND and J\_RGND. Using J\_GND enables modification of the ground resistor value at four different positions. **Figure 10** shows the possible jumper positions and **Table 8** contains the description of the four possible jumper positions and their values.



**Figure 9 Motherboard V3.0 GND schematic**

2 Motherboards [MB]

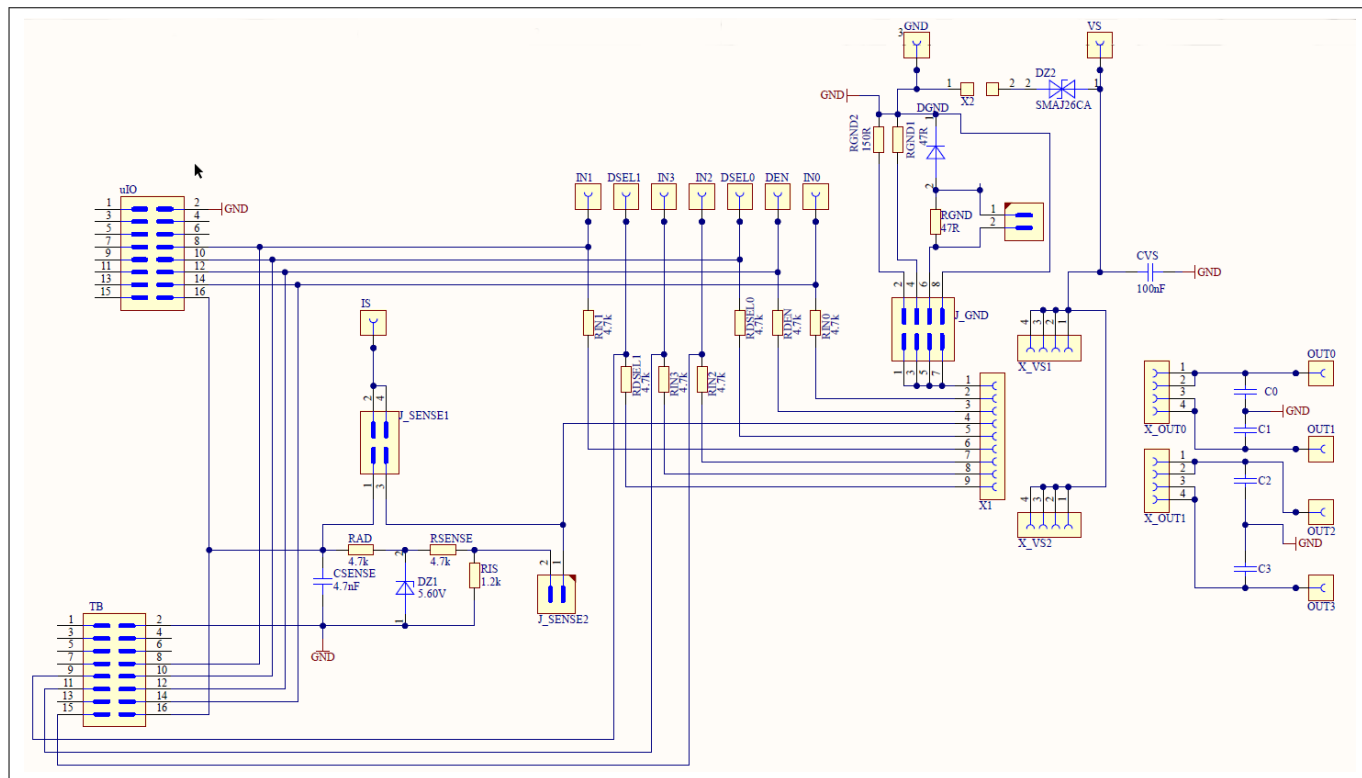


**Figure 10** Motherboard V3.0 GND path layout

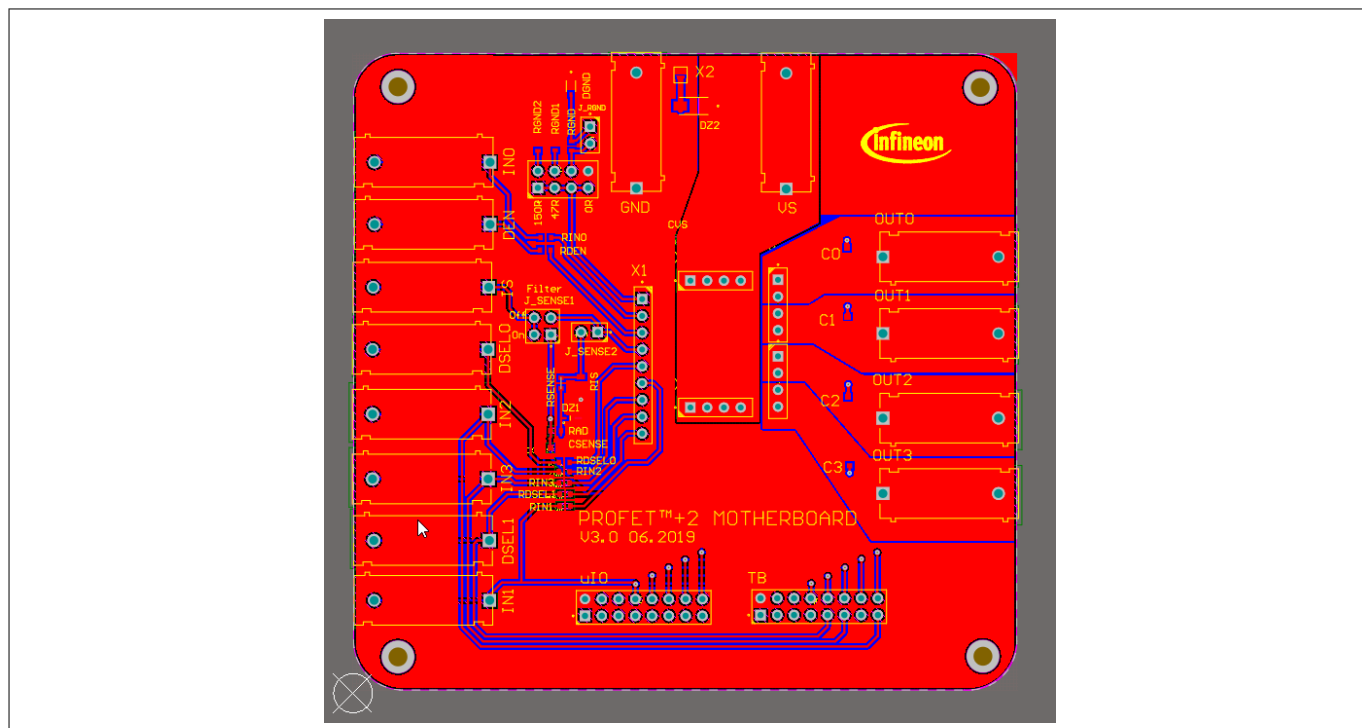
**Table 8** Motherboard V3.0 J\_GND jumper positions

#	Description
1	The PROFET™ +2 12V DB ground is connected to the MB module ground via a 150 Ω resistor
2	The PROFET™ +2 12V DB ground is connected to the MB module ground via a 47 Ω resistor
3	The PROFET™ +2 12V DB ground is connected to the MB module ground via a 47 Ω resistor and a serial diode (BAS21-03W)
4	The PROFET™ +2 12V DB ground is connected to the MB module ground via a 0 Ω resistor
3 + 5	The PROFET™ +2 12V DB ground is connected to the MB module ground via a serial diode (BAS21-03W)

**2 Motherboards [MB]**



**Figure 11** Motherboard V3.0 schematic



**Figure 12** Motherboard V3.0 PCB top view

2 Motherboards [MB]

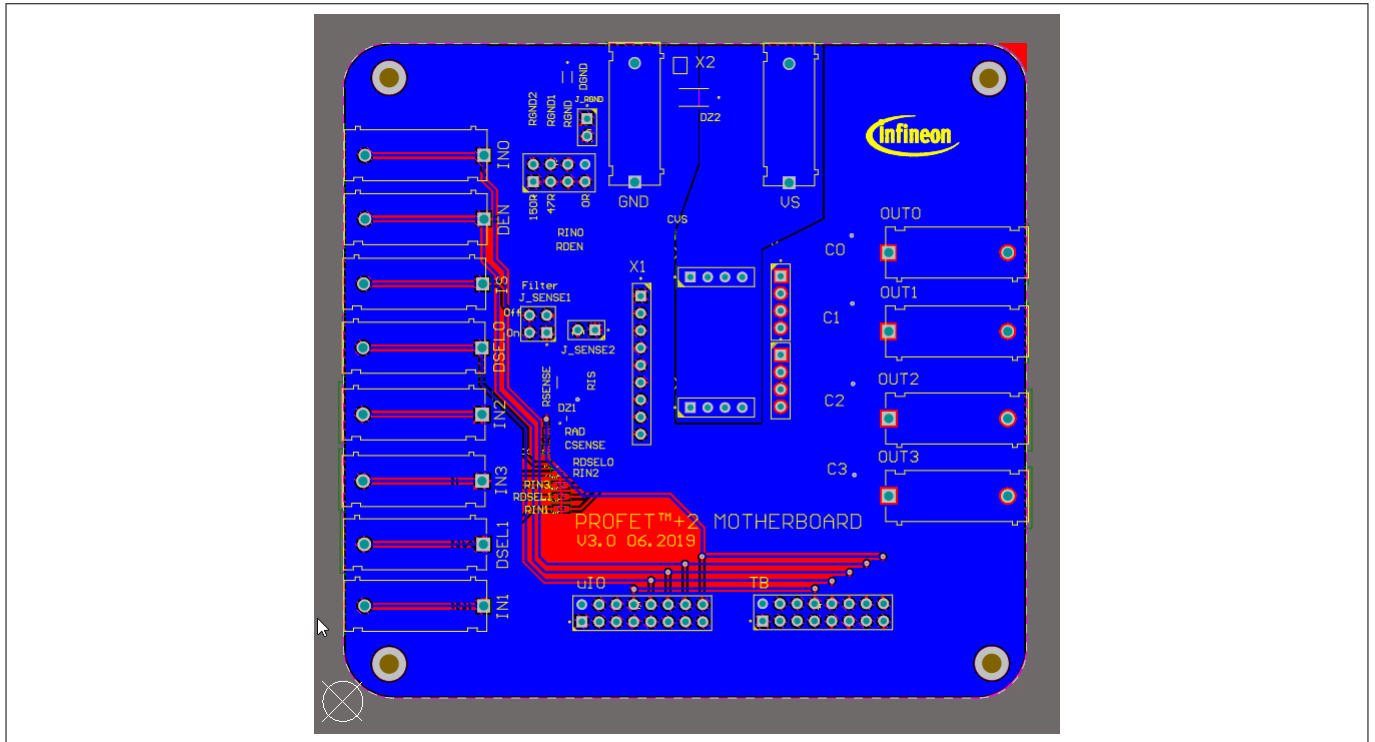


Figure 13 Motherboard V3.0 PCB bottom view

3 Daughterboards [DB]

3 Daughterboards [DB]

3.1 PROFET™ +2 12V 2-channel daughterboard

Figure 14 below shows the PROFET™ +2 12V DB in top and bottom view. As can be seen, depending on the required product (1-channel or 2-channel), this device is located on the DB. The DB is plugged onto the MB.

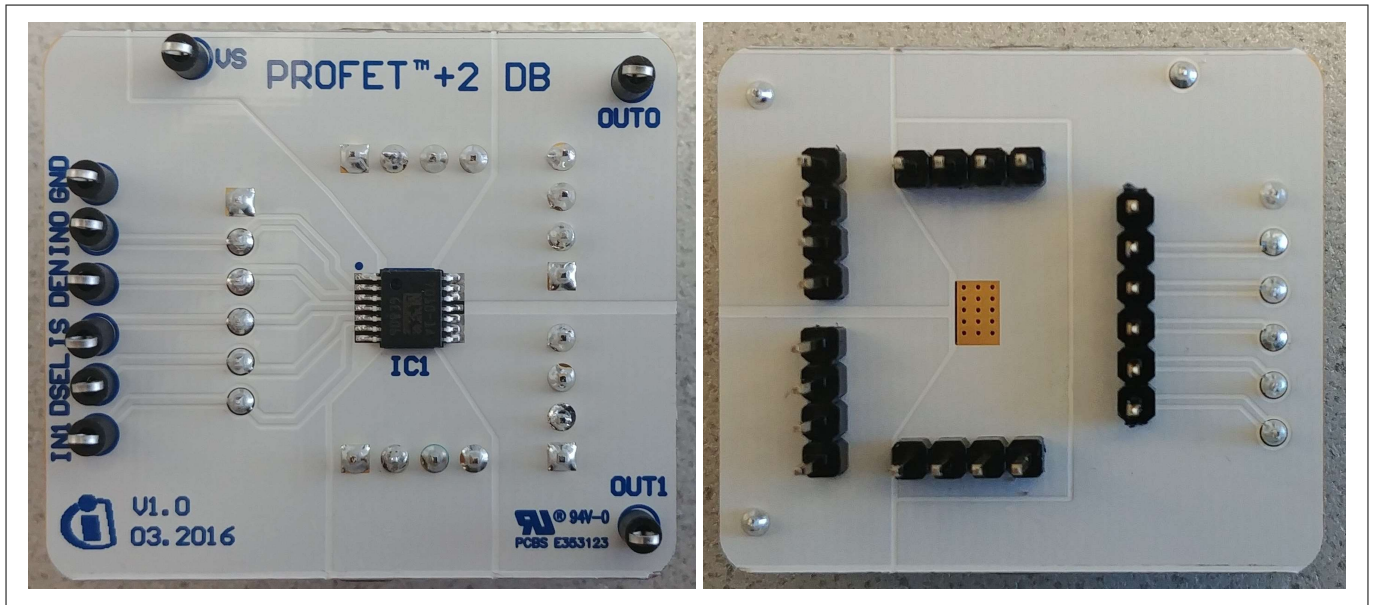


Figure 14 PROFET™ +2 12V 2-channel daughterboard top and bottom view

3.2 PROFET™ +2 12V 4-channel daughterboard

Figure 15 below shows the PROFET™ +2 12V DB in top view. As can be seen, depending on the required product (4-channel), this device is located on the DB. The DB is plugged onto the MB.

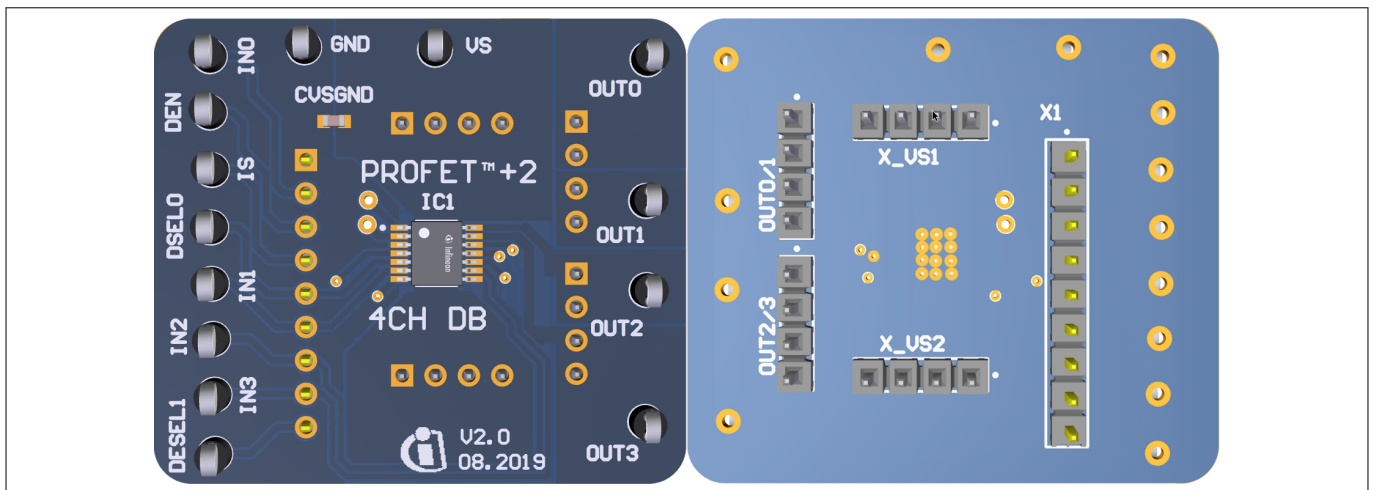


Figure 15 PROFET™ +2 12V 4-channel daughterboard top and bottom view

4 Evaluation boards [EB]

## 4 Evaluation boards [EB]

Note: Depending on the evaluation board, compatibility with the Infineon Toolbox and Config Wizard can not be guaranteed. Please check the availability of software for each board.

### 4.1 PROFET™ +2 12V Arduino H-bridge evaluation board

This chapter provides a quick introduction to the Arduino H-bridge evaluation board, which is designed to handle the H-bridge configuration of all 2-channel devices in the PROFET™ +2 12V family. The intention of the evaluation board is to give customers a quick start for lab evaluation of the performance of this board.

Note: Its recommended to use the Arduino H-bridge evaluation board with 5 V compatible Arduino microcontroller boards.

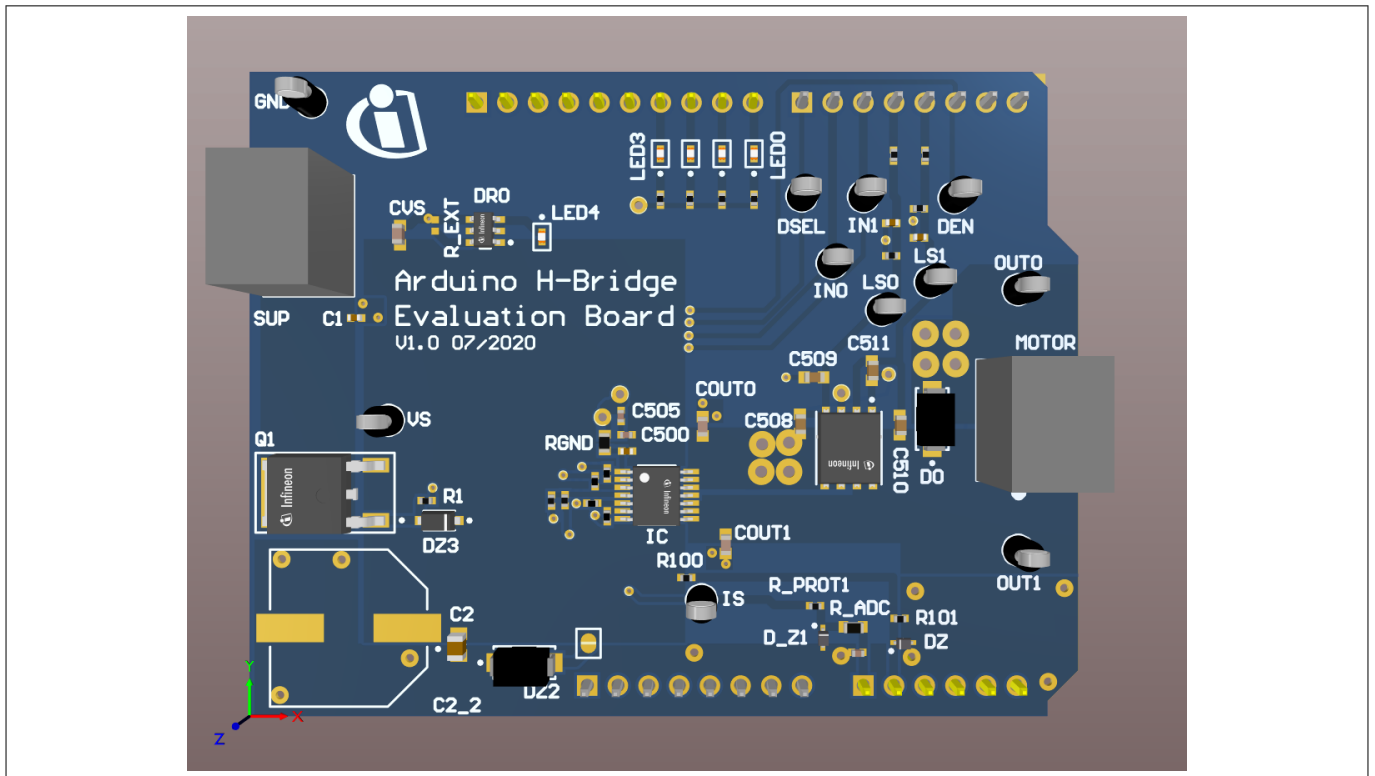


Figure 16 Arduino H-bridge evaluation board

#### Default assembly

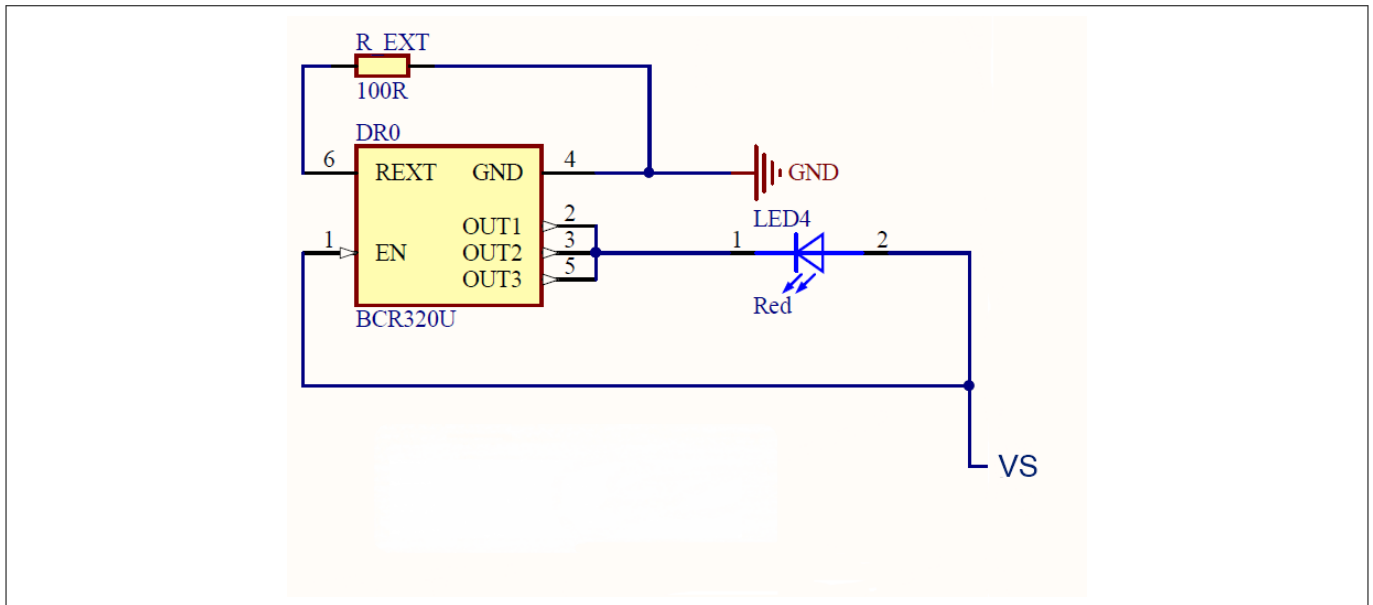
As seen in [Figure 16](#) and [Figure 19](#) some parts are not mounted on default assembling. The following parts are not mounted:

- C2\_2 with 470  $\mu$ F
- R\_EXT of the BCR320U circuit

#### BCR320U circuit

This circuit includes a red LED, an LED driver (BCR320U) and a footprint for the R\_EXT resistor. The BCR320U circuit is placed in parallel to the IC. The LED indicates if the PROFET™ +2 12V device is supplied. With the additional external resistor the current flow can be adjusted. The higher the current flow, the brighter the LED4 shines. For more information see the [datasheet](#) of the BCR320U LED driver.

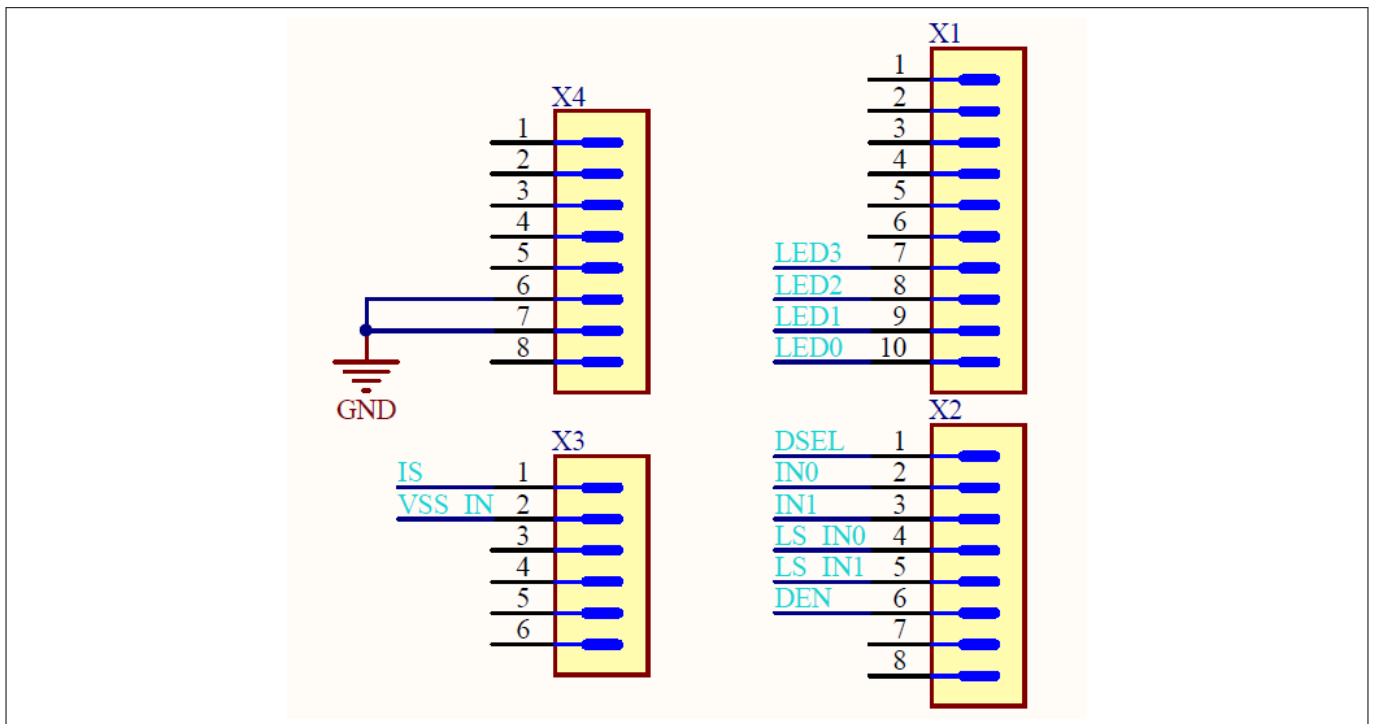
**4 Evaluation boards [EB]**



**Figure 17** BCR320U circuit

**Arduino pinout**

The Arduino H-bridge evaluation board can be controlled via Arduino board. See [Figure 18](#) and [Figure 19](#) of the pinout for the Arduino board. The Arduino pin connections are written in cyan font color.



**Figure 18** Arduino H-bridge pinout

**Table 9** Board connectors and functions

Connector	Function
VS	Supply pin connects the positive supply voltage to this pin

(table continues...)

**4 Evaluation boards [EB]**

**Table 9 (continued) Board connectors and functions**

<b>Connector</b>	<b>Function</b>
GND	Ground pin connects the supply ground to this pin
IN0	Input signal of channel 0 of IC turns the device on/off and resets the fault if triggered 3.3 V or 5 V logical input
IN1	Input signal of channel 1 of IC turns the device on/off and resets the fault if triggered 3.3 V or 5 V logical input
DEN	Sense enable signal of IC measurements at the IS pin are now possible and in addition it resets the counter if a fault is triggered 3.3 V or 5 V logical input
DSEL	Diagnostic select signal selects the channel to be diagnosed 3.3 V or 5 V logical input
IS	Sense output of IC
OUT0	Output 0 of IC connects a grounded load to this pin, such as a power resistor, a bulb or 12 V heating elements
OUT1	Output 1 of IC connects a grounded load to this pin, such as a power resistor, a bulb or 12 V heating elements
LS0	Low side pin 0 enables the low-side 0, input signal of channel 0 of IC T500/T501
LS1	Low side pin 1 enables the low side 1, input signal of channel 1 of IC T500/T501
MOTOR	2 pins for connecting the motor



4 Evaluation boards [EB]

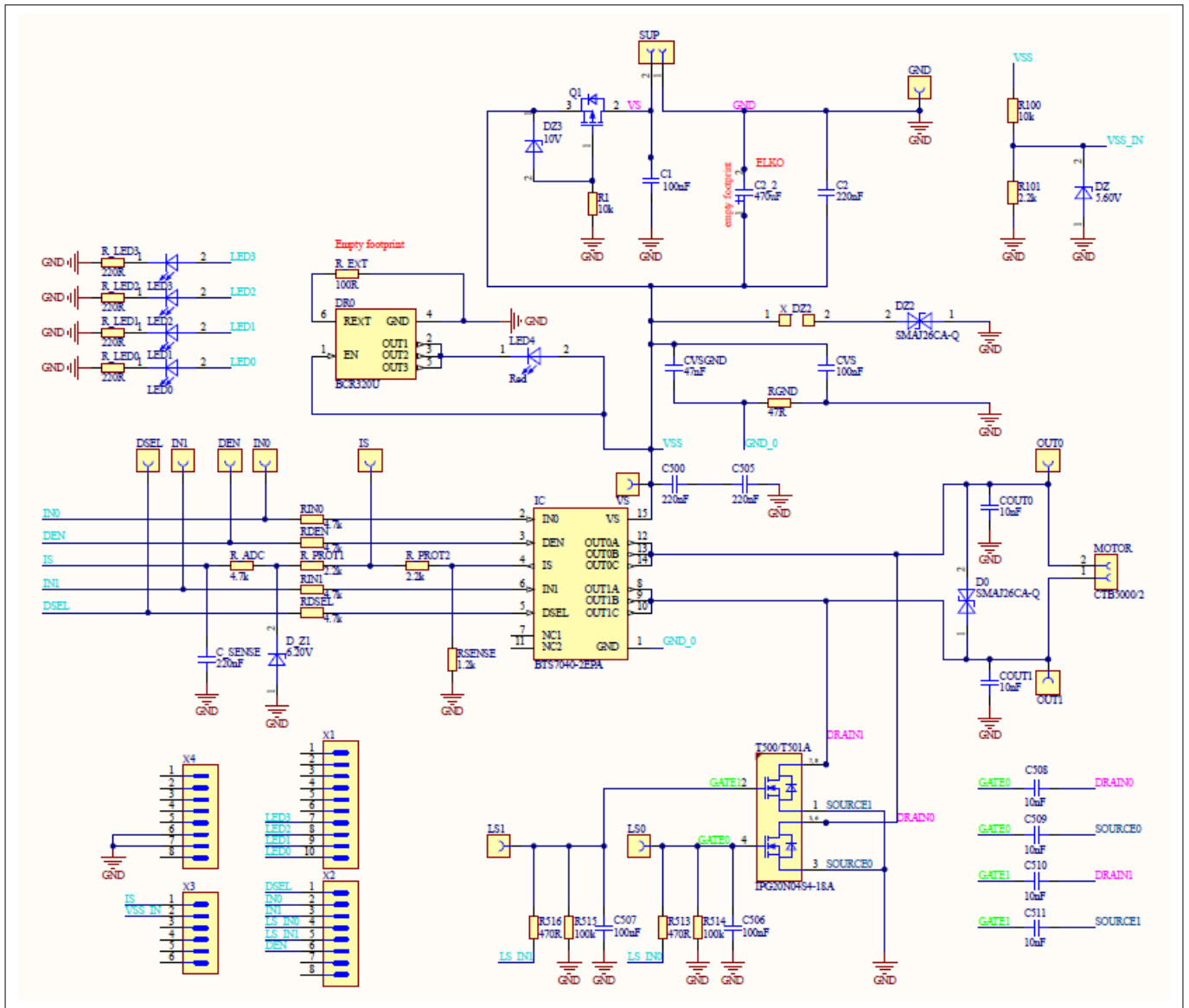


Figure 19 PROFET™ +2 12V Arduino H-bridge evaluation board schematic

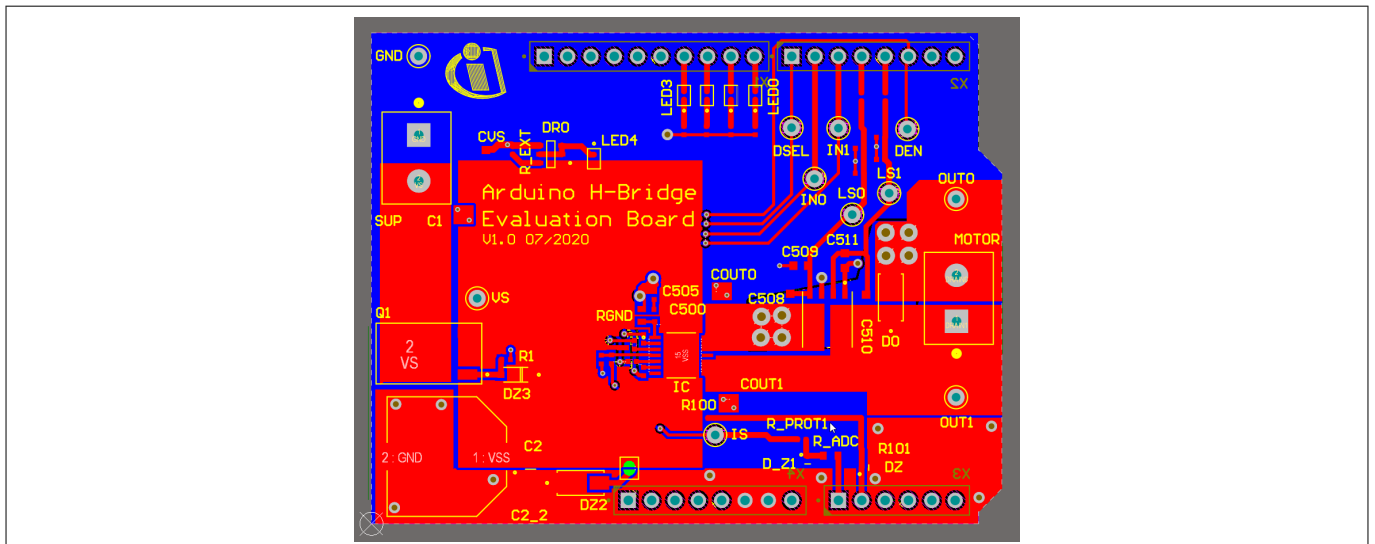
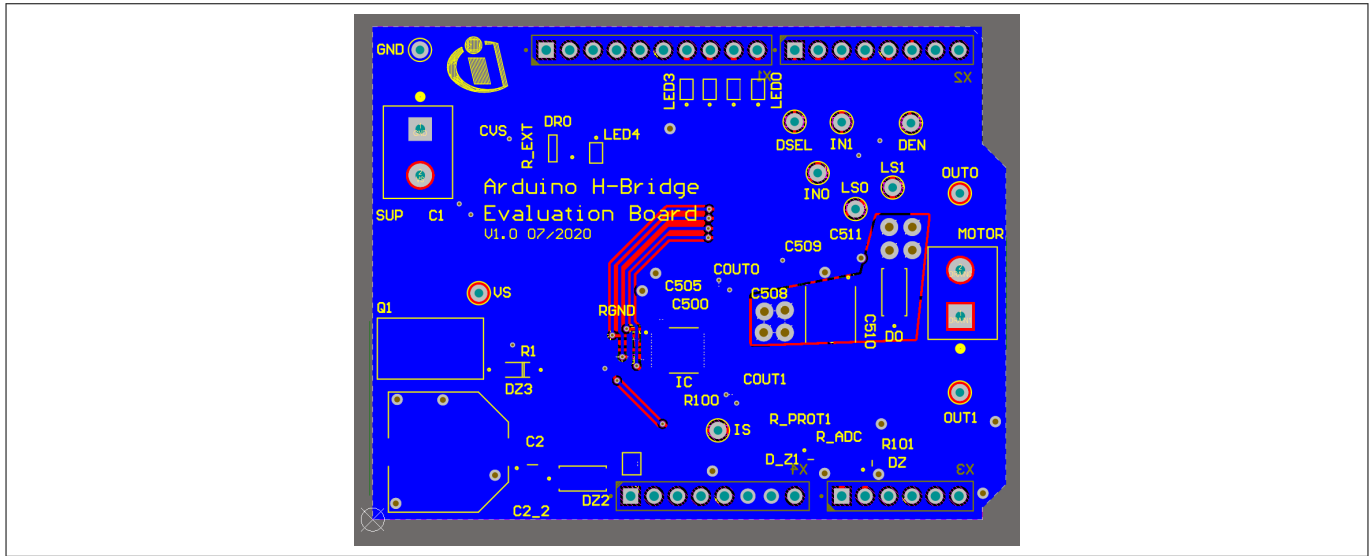


Figure 20 Arduino H-bridge top layout

**4 Evaluation boards [EB]**



**Figure 21** Arduino H-bridge bottom layout

**Bill of materials**

**Table 10** Arduino H-bridge evaluation board BOM

Designator	Comment	Manufacturer	Manufacturer order number
C1, C506, C507	100 nF	TDK Corporation	C1005X7R1H104K050BE
C2	220 nF	MuRata	GRM21BR71H224KA01
C2_2	470 µF	Nippon Chemi-Con	EMHS500ARA471MKG5S
C500, C505, C_SENSE	220 nF	TDK Corporation	CGA2B3X7R1E224K050BB
C508, C509, C510, C511	10 nF	AVX	06035F103K4Z2A
COUT0, COUT1	10 nF	AVX	06035C103K4Z2A
CVS	100 nF	AVX	06035C104K4Z2A
CVSGND	47 nF	MuRata	GRM155R61H473KE19
D0, DZ2		Bourns	SMAJ26CA-Q
D_Z1	6.20 V	Vishay	BZX584C6V2-V-G-08
DEN, DSEL, GND, IN0, IN1, IS, LS0, LS1, OUT0, OUT1, VS		Vero Technologies	20-2137
DR0		Infineon Technologies	BCR320U
DZ	5.60 V	Vishay	BZX584C5V6-V-G
DZ3	10 V	Nexperia	BZT52H-B10,115
IC		Infineon Technologies	BTS7040-2EPA
LED0, LED1, LED2, LED3	Yellowish green	ROHM Semiconductors	SML-P12MTT86R
LED4	Red	ROHM Semiconductors	SML-P12UTT86R
MOTOR, SUP		Camden Boss	CTB5000/2

**(table continues...)**

**4 Evaluation boards [EB]**

**Table 10 (continued) Arduino H-bridge evaluation board BOM**

<b>Designator</b>	<b>Comment</b>	<b>Manufacturer</b>	<b>Manufactuer order number</b>
Q1		Infineon Technologies	IPD90P03P4L-04
R1, R100	10 kΩ	Vishay	CRCW040210K0FK
R101, R_PROT1, R_PROT2	2.2 kΩ	Vishay	CRCW04022K20FK
R513, R516	470 Ω	Vishay	CRCW0402470RFK
R514, R515	100 kΩ	Vishay	CRCW0402100KFK
R_ADC	4.7 kΩ	Yageo	RC0603FR-074K7L
R_EXT			
R_LED0, R_LED1, R_LED2, R_LED3	220 Ω	Vishay	CRCW0402220RFK
RDEN, RDSEL, RIN0, RIN1	4.7 kΩ	Yageo	RC0402FR-074K7L
RGND	47 Ω	Vishay	CRCW060347R0FK
RSENSE	1.2 kΩ	Vishay	CRCW04021K20FK
T500/T501		Infineon Technologies	IPG20N04S4-18A
X1		Samtec	TSW-110-07-L-S
X2, X4		Samtec	TSW-108-23-F-S
X3		Samtec	TSW-106-07-L-S
X_DZ2	Solder jumper 2 pins		

5 Software (optional)

## 5 Software (optional)

The PROFET™ +2 12V MB can either be used directly or with the ConfigWizard for IPD. Accessing the software requires the Infineon Toolbox to be installed. [Download the Infineon Toolbox](#).

### 5.1 GUI description

The Infineon Config Wizard is designed to support an easy configuration of Infineon devices. configure Infineon devices easily. The graphical user interfaces (GUI) are product specific and not intended for detailed evaluation (use).

#### 5.1.1 $\mu$ IO-Stick

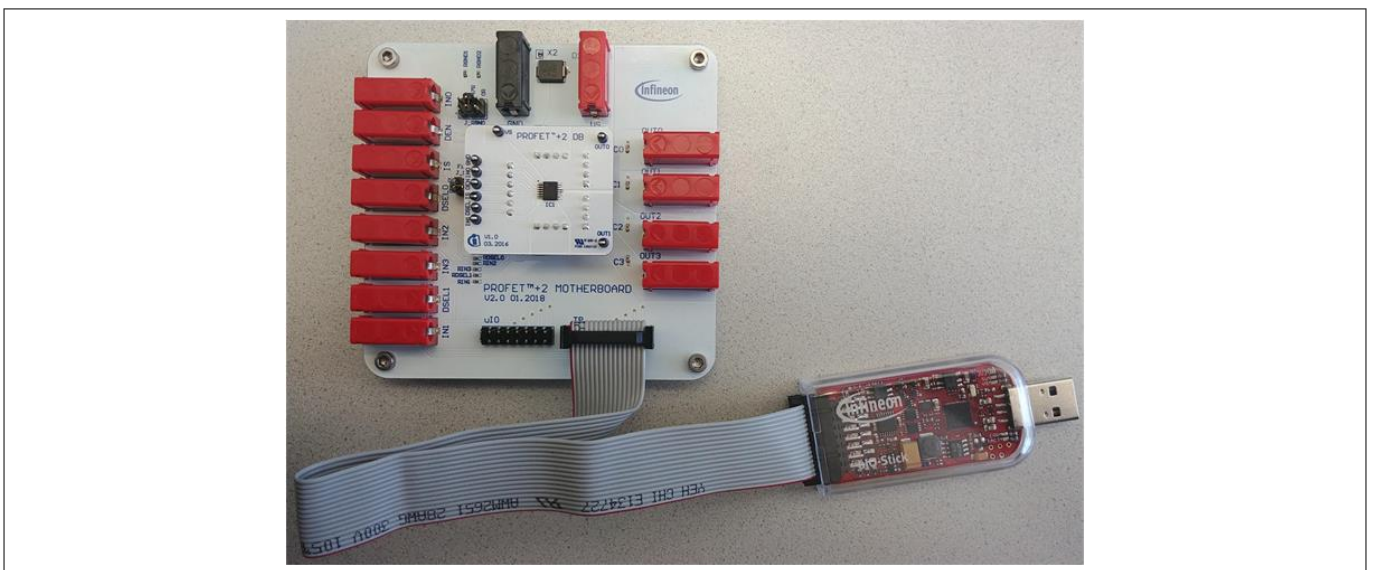
The Infineon  $\mu$ IO-Stick is the required tool to connect the Config Wizard to a device. [Figure 22](#) shows the  $\mu$ IO-Stick which is delivered with a 16-pin ribbon cable that enables to connect the  $\mu$ IO-Stick to the MB.



**Figure 22** Infineon  $\mu$ IO-Stick with ribbon cable

To connect the MB with the  $\mu$ IO-Stick please refer to  $\mu$ IO connector  $\mu$ IO and  $\mu$ IO connector TB.

[Figure 23](#) below illustrates the  $\mu$ IO-Stick connected to the PROFET™ +2 12V MB.



**Figure 23** Infineon  $\mu$ IO-Stick connected to the PROFET™ +2 12V MB

5 Software (optional)

5.1.2 Start screen

Figure 24 shows the start screen of the Config Wizard for IPD. It provides tile-like buttons named according to the product families.

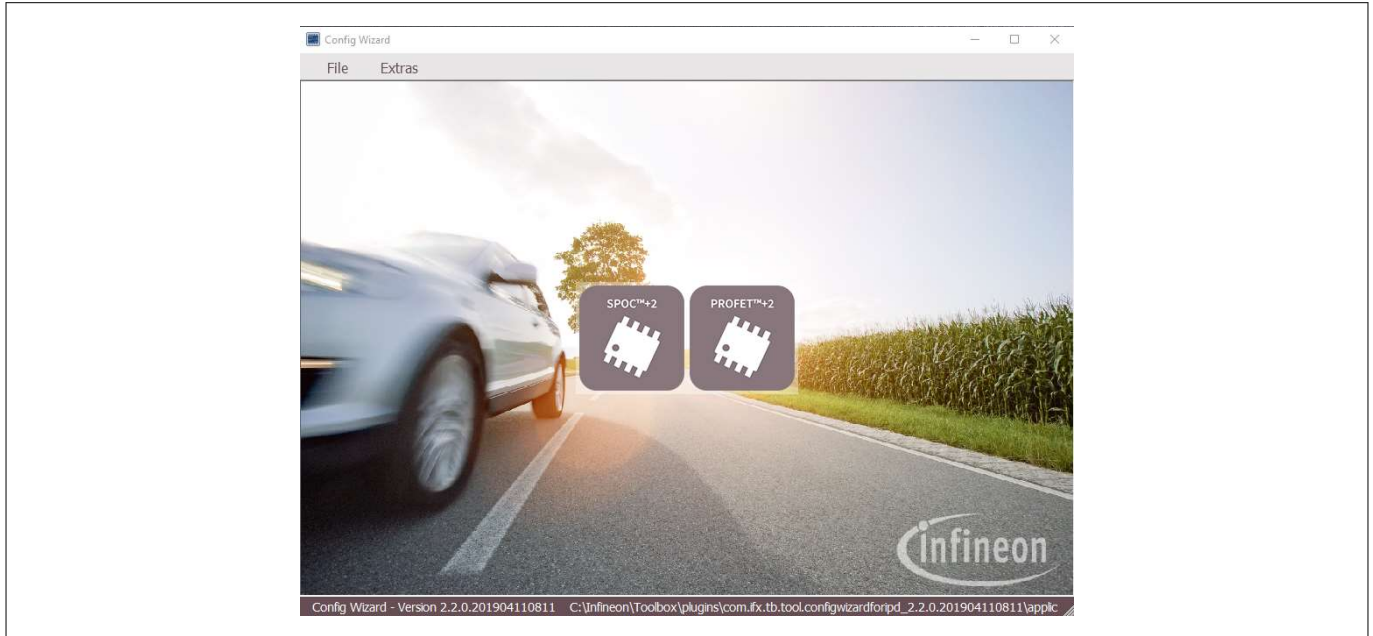


Figure 24 Config Wizard for IPD start screen

Note: The number of tiles shown to users can vary depending on product extensions such as for example new product families or types.

Clicking on the tile with the product family of choice leads to a rearrangement of the GUI, allowing users to select the required type of product. Figure 25 shows the type selection screen for the different product types (1-channel, 2-channel, 4-channel) of the PROFET™ +2 12V family. In the upper left corner a back button is available that enables going one step backwards.

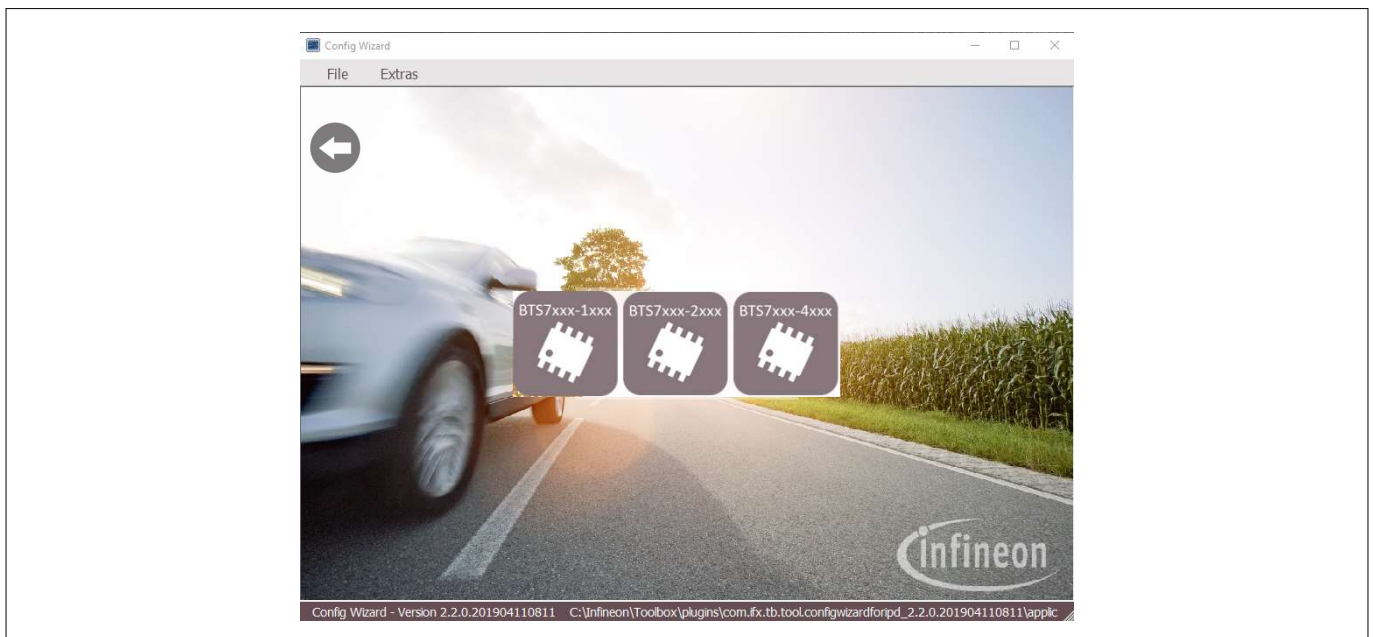


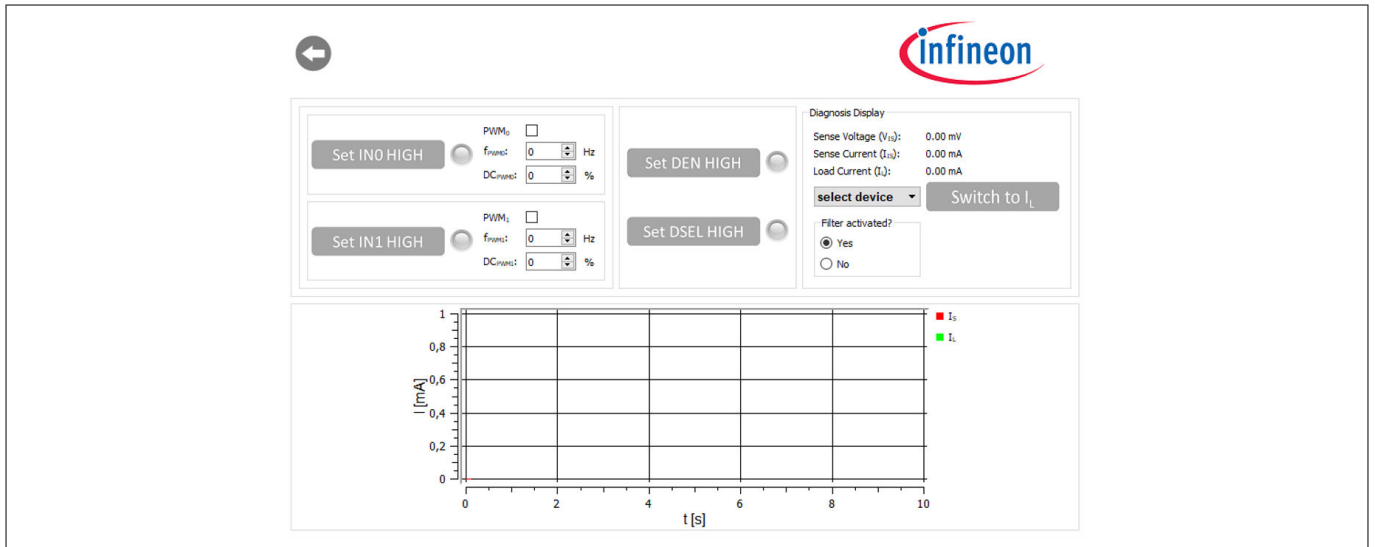
Figure 25 Config Wizard for IPD type-selection screen of PROFET™ +2 12V

**5 Software (optional)**

Clicking on the tile with the product type of choice leads again to a rearrangement of the GUI (see [Chapter 5.1.3](#)).

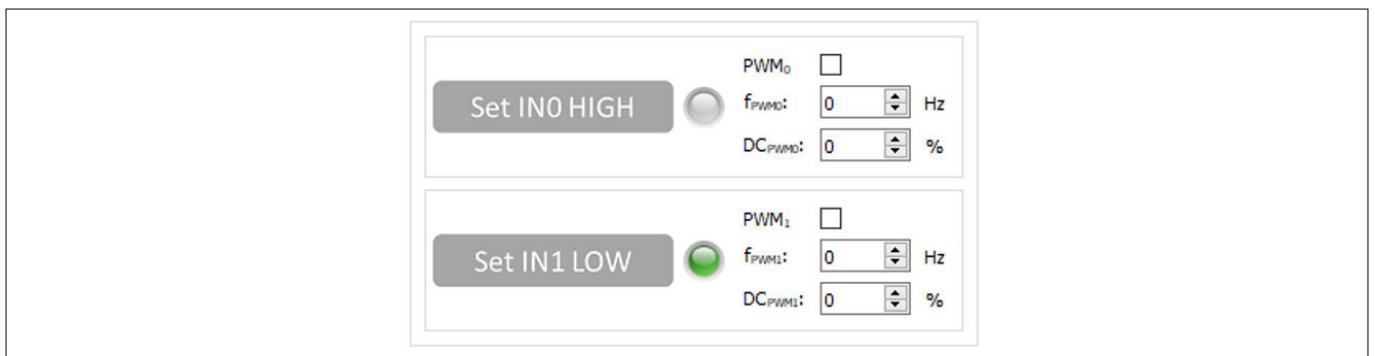
**5.1.3 PROFET™ +2 12V GUI**

The GUI for PROFET™ +2 12V provides buttons to control the GPIOs of the μIO-Stick. The GPIOs are connected to the pins of the device (as INx, DEN and DSELx). As such, the buttons control the logic state applied to the pins of the device. [Figure 26](#) shows the device screen of the PROFET™ +2 12V GUI for a 2-channel device.



**Figure 26 PROFET™ +2 12V device screen (2-channel)**

The state of the buttons is visualized by alternating icons and lamp elements. The names of the buttons reflect the actions they perform, such as *Set IN0 HIGH* or once a button has been clicked, *Set IN1 LOW*. In addition, as shown in [Figure 27](#), a lamp element indicates whether a button has been clicked or not. Once the lamp element is green, the corresponding pin is activated.



**Figure 27 PROFET™ +2 12V functional view – GPIO controlling toggle-buttons**

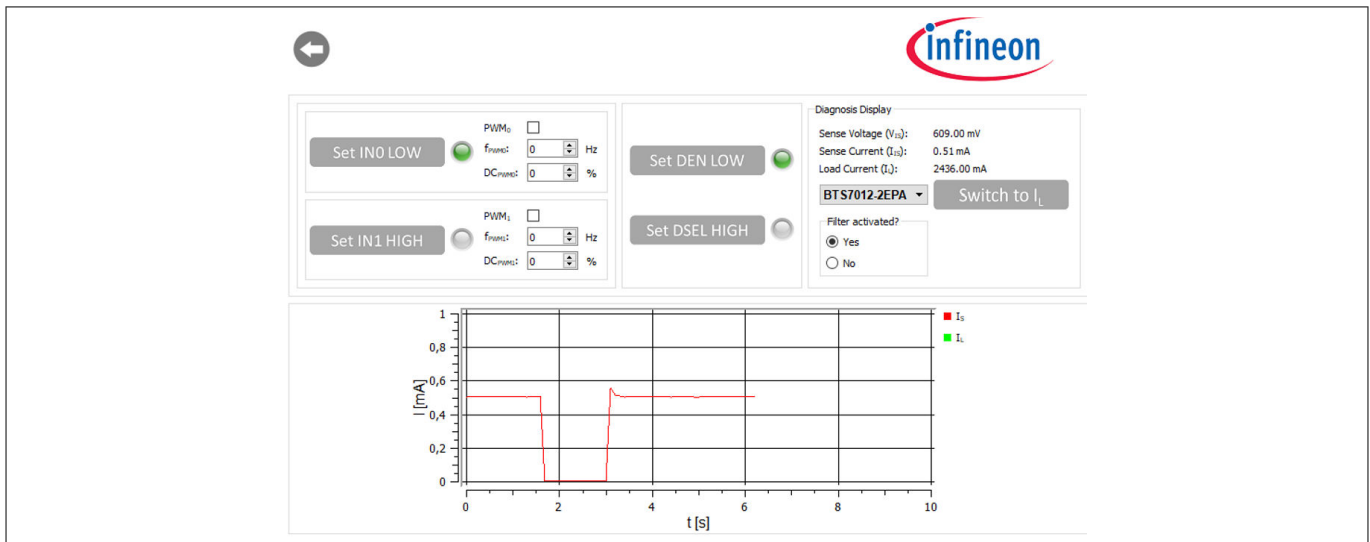
As seen in [Figure 27](#) and [Figure 28](#), also PWM functionality is given for channels 0 and 1. It can be activated by ticking the PWM checkbox. The button then adapts to *PWM1 ON* and the lamp-element will stay grey. PWM frequency and PWM duty-cycle can be set via the two spinboxes below the checkbox.

5 Software (optional)



**Figure 28 PROFET™ +2 12V functional view: – IN0 as logic input, IN1 as PWM input**

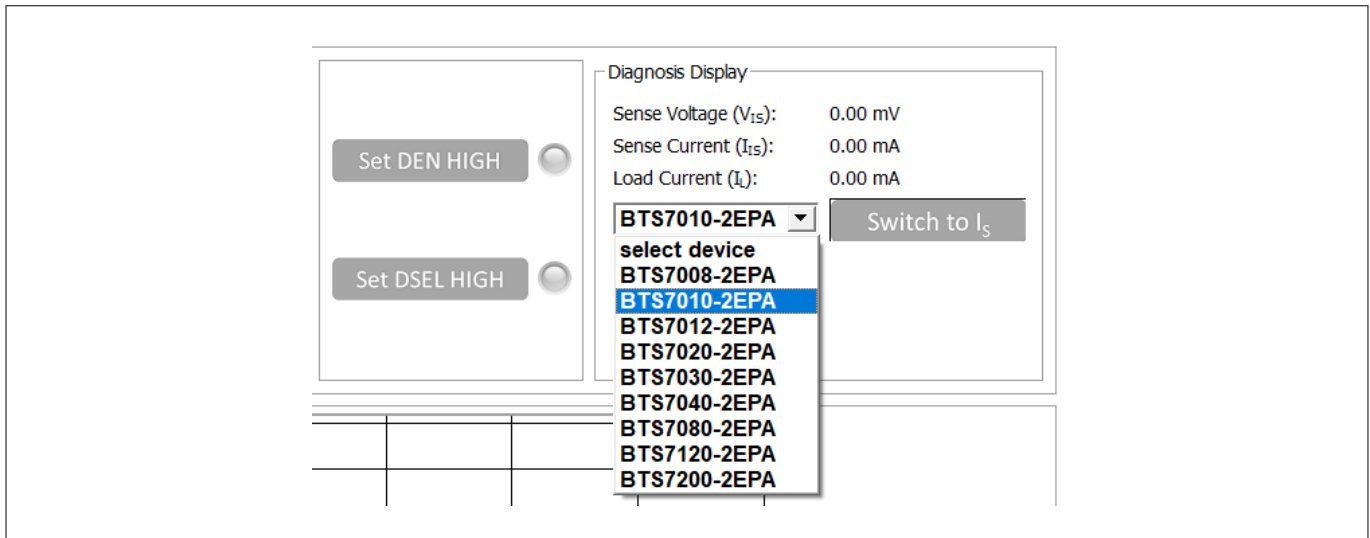
The possibility to display the sense current  $I_S$  is also given, it is converted into a measurable voltage via a resistor. This voltage is measured by an analog-to-digital converter (ADC) on the  $\mu$ IO-stick and visualized by the GUI. **Figure 28** displays the GUI plot of the digitalized data set imported. As shown in **Figure 29**, clicking the *Set DEN HIGH* button, displays the sense current automatically and the button changes to *Set DEN LOW* while the color of the lamp element turns green.



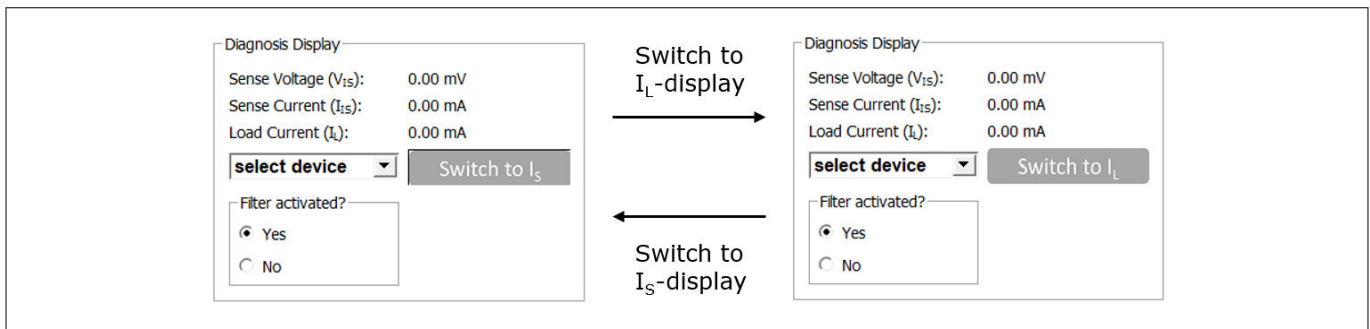
**Figure 29 PROFET™ +2 12V functional view – Sense current display for OUT0**

It is also possible to switch between the sense and load current display. As shown in **Figure 30**, by selecting a device in the display section, the corresponding factor  $k_{I_{LIS}}$  is mapped and the load current is calculated with the defaults of the PROFET™ +2 12V MB. Next to the device selection is the *Switch to  $I_L$*  button, which can be used to switch between sense and load current. After clicking this button, *Switch to  $I_S$*  is displayed. **Figure 29** illustrates this.

**5 Software (optional)**

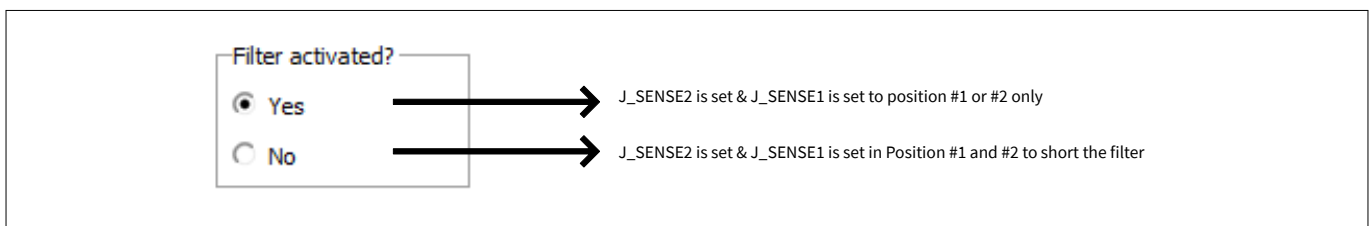


**Figure 30 PROFET™ +2 12V functional view – Device selection**



**Figure 31 PROFET™ +2 12V functional view – Switching from I<sub>S</sub> to I<sub>L</sub>**

**Figure 32** shows the small box titled *Filter activated?* included in the diagnosis display section. It is used to specify whether sense filtering on the MB is activated (see [Chapter 2.1](#) for further information). This setting serves to display the sense/load current and the sense voltage correctly.



**Figure 32 “Filter activated?”- box in diagnosis display section – Meaning of “Yes”/”No”**



**6 Appendix**

**6 Appendix**

**Table 11 Available demoboards: PROFET™ +2 12V**

Product	ISaR name	Internet link
PROFET™ +2 12V motherboard V2	PROFET™ PLUS2 MOTH BRD	<a href="https://www.infineon.com/profet-plus2-moth-brd">https://www.infineon.com/profet-plus2-moth-brd</a>
BTS7008-1EPA	BTS7008-1EPA DAUGH BRD	<a href="https://www.infineon.com/bts7008-1epa-daugh-brd">https://www.infineon.com/bts7008-1epa-daugh-brd</a>
BTS7010-1EPA	BTS7010-1EPA DAUGH BRD	<a href="https://www.infineon.com/bts7010-1epa-daugh-brd">https://www.infineon.com/bts7010-1epa-daugh-brd</a>
BTS7012-1EPA	BTS7012-1EPA DAUGH BRD	<a href="https://www.infineon.com/bts7012-1epa-daugh-brd">https://www.infineon.com/bts7012-1epa-daugh-brd</a>
BTS7040-1EPA	BTS7040-1EPA DAUGH BRD	<a href="https://www.infineon.com/bts7040-1epa-daugh-brd">https://www.infineon.com/bts7040-1epa-daugh-brd</a>
BTS7008-2EPA	BTS7008-2EPA DAUGH BRD	<a href="https://www.infineon.com/bts7008-2epa-daugh-brd">https://www.infineon.com/bts7008-2epa-daugh-brd</a>
BTS7010-2EPA	BTS7010-2EPA DAUGH BRD	<a href="https://www.infineon.com/bts7010-2epa-daugh-brd">https://www.infineon.com/bts7010-2epa-daugh-brd</a>
BTS7012-2EPA	BTS7012-2EPA DAUGH BRD	<a href="https://www.infineon.com/bts7012-2epa-daugh-brd">https://www.infineon.com/bts7012-2epa-daugh-brd</a>
BTS7020-2EPA	BTS7020-2EPA DAUGH BRD	<a href="https://www.infineon.com/bts7020-2epa-daugh-brd">https://www.infineon.com/bts7020-2epa-daugh-brd</a>
BTS7030-2EPA	BTS7030-2EPA DAUGH BRD	<a href="https://www.infineon.com/bts7030-2epa-daugh-brd">https://www.infineon.com/bts7030-2epa-daugh-brd</a>
BTS7040-2EPA	BTS7040-2EPA DAUGH BRD	<a href="https://www.infineon.com/bts7040-2epa-daugh-brd">https://www.infineon.com/bts7040-2epa-daugh-brd</a>
BTS7080-2EPA	BTS7080-2EPA DAUGH BRD	<a href="https://www.infineon.com/bts7080-2epa-daugh-brd">https://www.infineon.com/bts7080-2epa-daugh-brd</a>
BTS7120-2EPA	BTS7120-2EPA DAUGH BRD	<a href="https://www.infineon.com/bts7120-2epa-daugh-brd">https://www.infineon.com/bts7120-2epa-daugh-brd</a>
BTS7200-2EPA	BTS7200-2EPA DAUGH BRD	<a href="https://www.infineon.com/bts7200-2epa-daugh-brd">https://www.infineon.com/bts7200-2epa-daugh-brd</a>
BTS7200-4EPA	BTS7200-4EPA DAUGH BRD	<a href="https://www.infineon.com/bts7200-4epa-daugh-brd">https://www.infineon.com/bts7200-4epa-daugh-brd</a>
BTS7200-2EPC	BTS7200-2EPC DAUGH BRD	<a href="https://www.infineon.com/bts7200-2epc-daugh-brd">https://www.infineon.com/bts7200-2epc-daugh-brd</a>
µIO-Stick	DAP-miniWiggler V3 (hitex name)	<a href="https://www.ehitex.de/en/">https://www.ehitex.de/en/</a>

**7 Revision history**

Document version	Date of release	Description of changes
1.00	2021-05-19	PROFET™ customer evaluation kit description available

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