

B-SMART Industrial



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Software Setup

B-SMART Industrial is provided with a friendly and intuitive Graphical User Interface, which guides you in creating a working project in a few mouse clicks, detecting possible mismatches between target device and firmware. Enjoy the advanced Bluetooth wireless connection to interface the B-SMART Industrial programming system with all your devices (PC, tablets, and smartphones). B-SMART Industrial App for Smartphone and Tablet allows you to efficiently manage the system and to monitor the running tasks from a remote control.

Great Power In Your Hands

The system power conversion section allows high configurability on output voltages and a significant current supply to the target devices. B-SMART Industrial is a standalone programmer, completely independent and reliable solution.

Overview



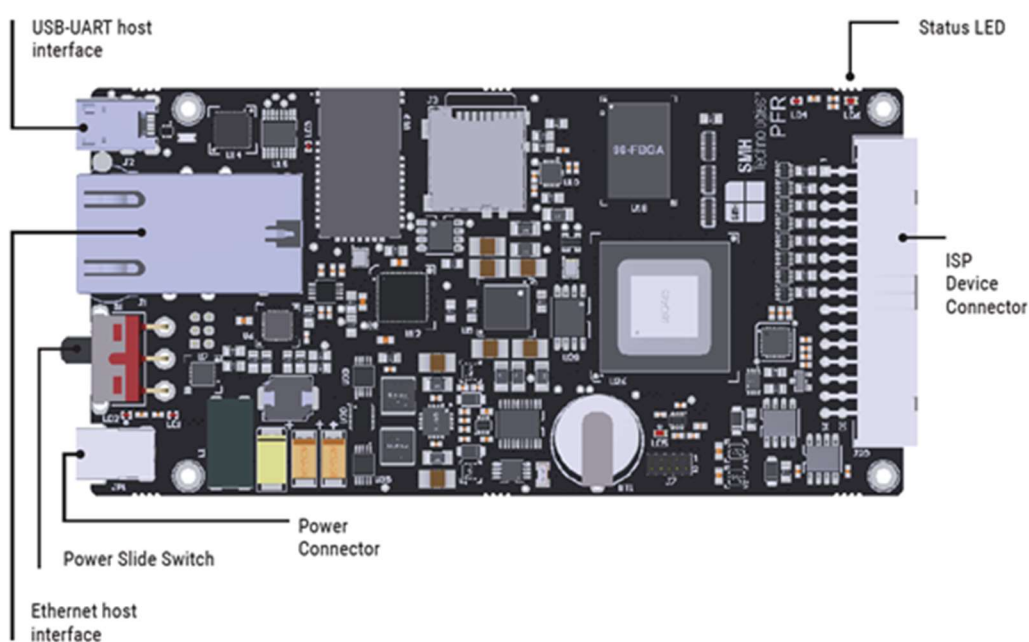
The need of an easy and efficient way to interface a silicon device out of the traditional In-System Programming process has been a matter for a long time. A true-portable solution to operating on a target device already mounted on a final product during the post-production and post-sales process would be an extremely helpful outcome.

Why B-SMART Industrial

B-SMART Industrial is a brand-new interfacing system that allows you to operate on a silicon device whenever and wherever you need. B-SMART Industrial is easily managed by a host PC through Ethernet LAN connection and USB-UART connection or by B-SMART Industrial App for Tablet and Smartphone via Bluetooth connection. B-SMART Industrial is able to interface microprocessors, serial memories, and many other silicon devices directly through the common communication. B-SMART Industrial combines compactness, configurability, and high performance in a truly all-around system.

Hardware Features

- Small form factor to foster easy handling
- Isolated Ethernet LAN 10/100/1000 communication interface
- Isolated USB-UART communication interface
- Bluetooth Low Energy communication interface
- Supplied through a 15V power adapter
- Highly configurable Digital Input Output (DIOs) lines to support interfacing to microprocessors and serial memories
- DIOs programmable voltage and additional programmable voltage provided to the target device
- Continuous monitoring of output power rail voltages and currents
- Most employed ISP communication protocols supported (JTAG, SPI, QSPI, UART, SWD, BDM, CSI, I2C, C2I, MDI, ICSP, EICSP, USART and many others)
- Intel SOC FPGA with 800MHz ARM Cortex-A9 Hard Processor System
- 512 MB onboard RAM DDR3 memory
- Micro SD Card reader (up to 256 GB)
- On-board timekeeper and calendar for timestamped log file

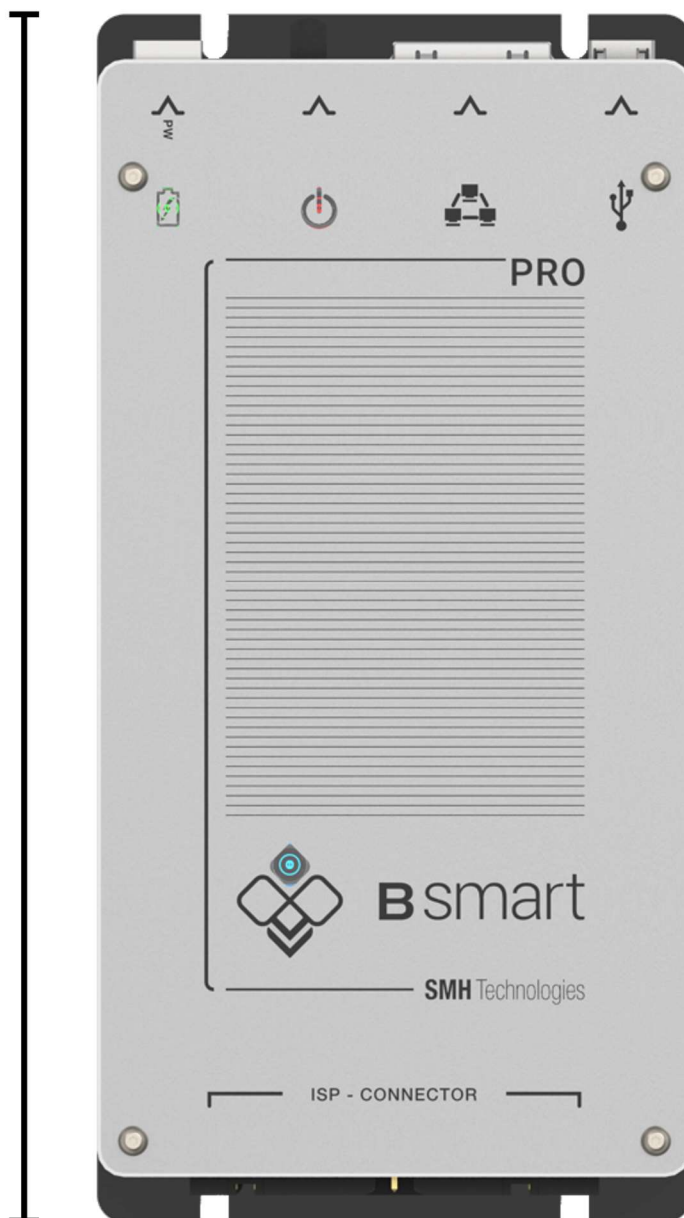


Product Dimensions

21,39mm



134,00mm



66,00mm

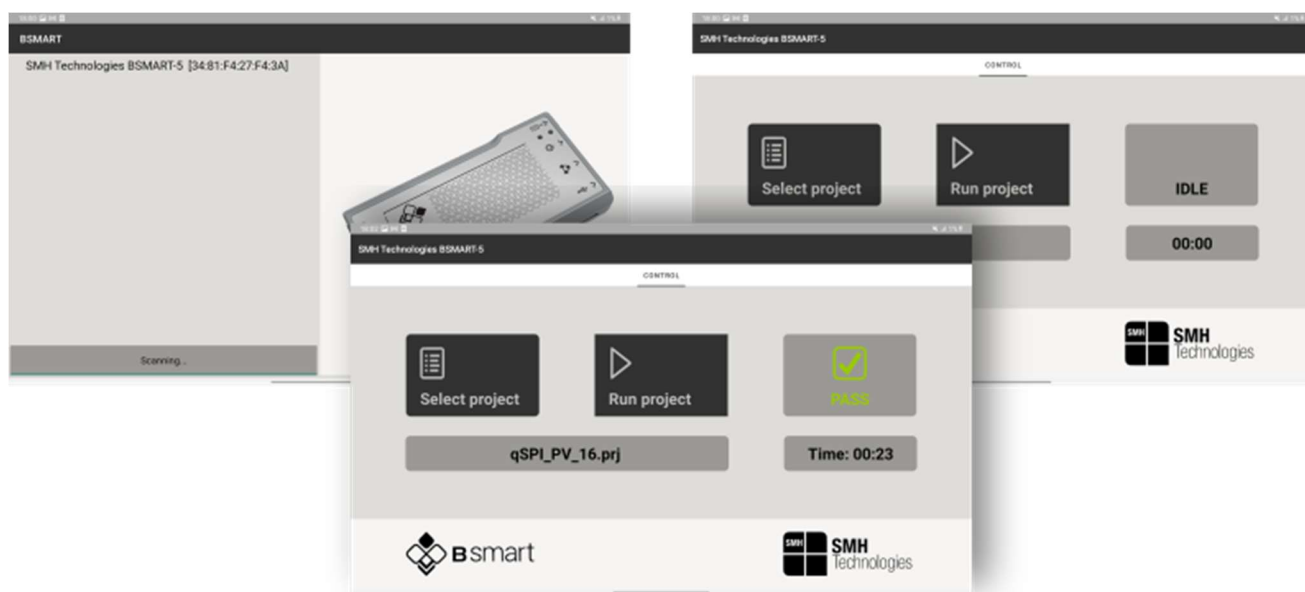
ISP Device Connector

The ISP Device Connector is a Shrouded Header (4 Sides) HDR 30 POS 2.54mm Solder RA Thru-Hole Box (**N2530-5002-RB**). Signals are provided as follows:

PIN	Signal Name	
1	DIO0	
2	DIO_GND_0	
3	DIO1	
4	DIO_GND_1	
5	DIO2	
6	DIO_GND_2	
7	DIO3	
8	DIO_GND_3	
9	DIO4	
10	DIO_GND_4	
11	DIO5	
12	DIO_GND_5	
13	DIO6	
14	DIO_GND_6	
15	DIO7	
16	DIO_GND_7	
17	VPROG0	
18	GND	
19	VPROG1	
20	GND	
21	AUX_IO_0	Configurable
22	AUX_IO_1	
23	AUX_IO_2	
24	AUX_IO_3	
25	CANH	Available only for CAN or LIN Models
26	CANL	
27	GND	
28	GND	
29	LIN	
30	GND	

Software Features

- Host PC management through B-SMART WorkBench (user-friendly Graphical User Interface Windows and Linux compatible)
- Smartphone and Tablet management through B-SMART App
- Based on Embedded Linux operating system
- Optional customer binary file cryptography to ensure antipiracy protection
- Memory dump and compare functions
- Log file and Data Log Report file
- Interface Library to control the system directly from the user's test applications
- Easy integration with C/C++ DLL interface libraries
- ASCII-based commands





CONTROL

- Control Report
- FRB Conversion Report
- Voltage Monitor
- Production batch counter
- Programming cycle time
- Easy wire-wrapping with pinout manager
- DIO shuffling
- Log file Production



COMMAND

- Graphical User Interface
- File transfer Management
- One-click driver updates
- Windows and Linux compatible
- GUI software Interface
- DLL interface libraries for C/C++/C#/Labview/Teststand
- Command-line tools



SECURITY

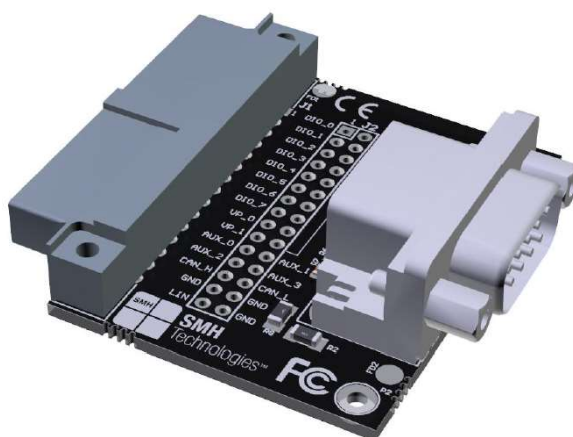
- Encrypted FRB files to avoid binary hacking
- Dump and Compare features of all channels
- User Permission Management
- NDA device management
- FRB integrity check through CRC calculation

Supported Device List

Our supported device list is updated daily and counts more than 15.000+ items. You can find the largest Device List in the dedicated area on our website, searching for the device code you need to flash in the editable "research" field, or downloading the complete list as a PDF file.

Interface Board

The B-Smart delivery package includes an interface board with 2.54mm pin-strip predisposition that allows you to interface with your target via wire-wrapping.



Accessories

Included tools and services

- Bluetooth
- Interface Board
- LAN Cable
- USB Cable
- 1 ticket technical support: support@smh-tech.com
- Mass market licenses supported as per SMH Technologies device list: <https://smh-tech.com/devicelist/>

Optional

- Cybersecurity features
- Power supply
- Extension cable Bsmart

