

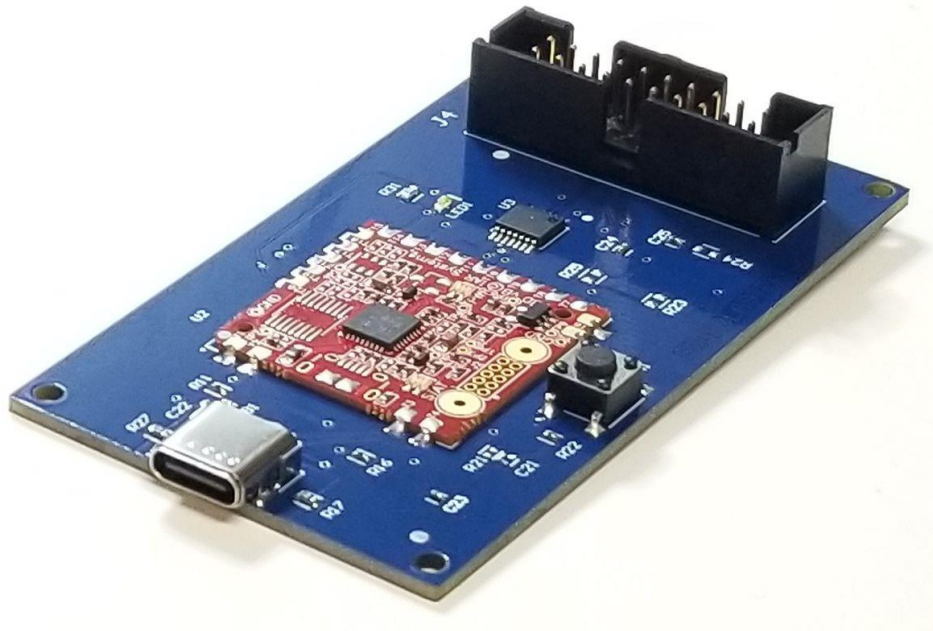


MCU Programmer Data Sheet

SWD BLASTER

MCU PROGRAMMER

Data Sheet



The SWD Blaster is a stand alone programmer for use with IAR Embedded Workbench and capable of debugging most ARM MCU's. It includes the I-Jet On Board Module from IAR. The SWD Blaster has a maximum speed of 8MHz. I-jet provides a fast debugging platform via JTAG and SWD/SWO with download speeds of up to 1.89 MByte/sec and support for SWO speeds of up to 60MHz.

The board is powered by USB and connects to target MCU's via the 20 pin 0.1 Inch header. The SWD Blaster does not require a license. The USB driver for the board is included in the IAR Embedded Workbench software. The board is plug and play and includes a reset pushbutton switch to reset the target.

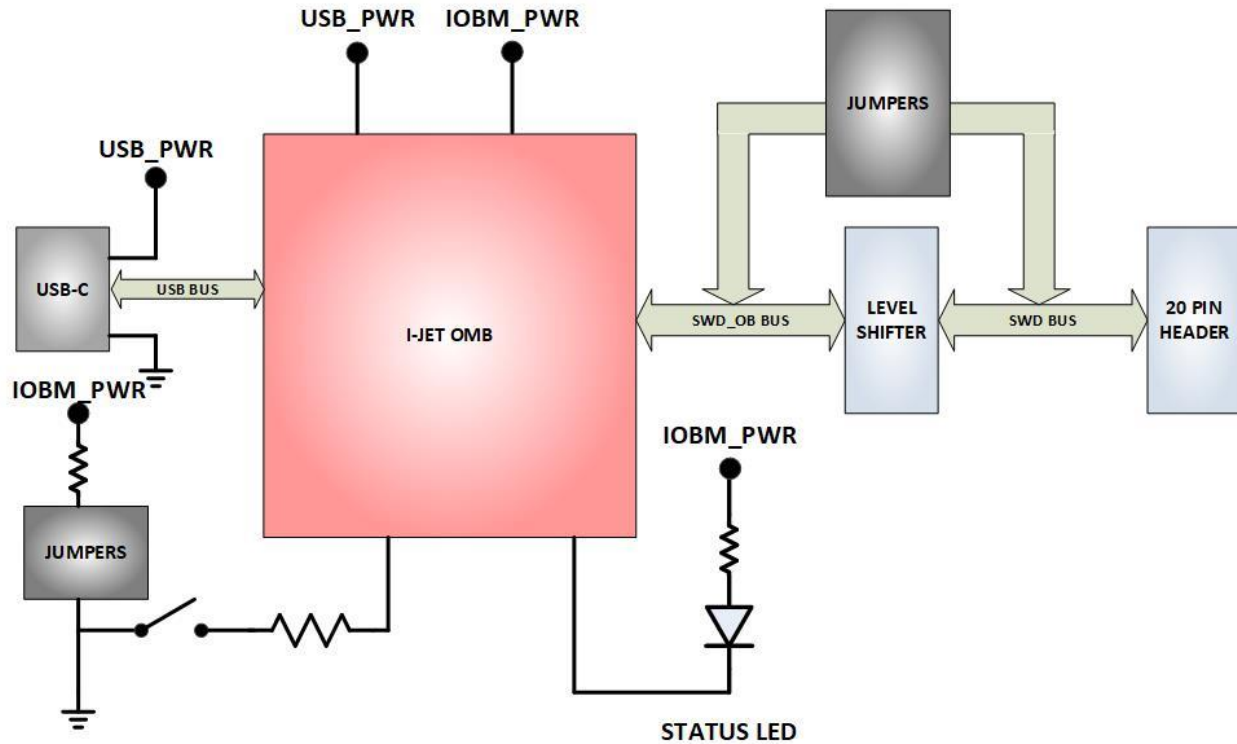


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The board also includes the following parts.

- I-Jet OB Module from IAR (No License Needed)
- USB-C connection
- 20 Pin 0.1 Inch Header for connection to target MCU
- Reset Pushbutton for target MCU
- Connection and Status LEDs
- Fast Debugging, 8MHz via SWD/SWO
- Download Speeds of 1.89 Mbyte/Sec
- Supported by full IAR Embedded Workbench Debug Software
- Supports all ARM Cortex A/R/M MCU's from most vendors

1 Block Diagram

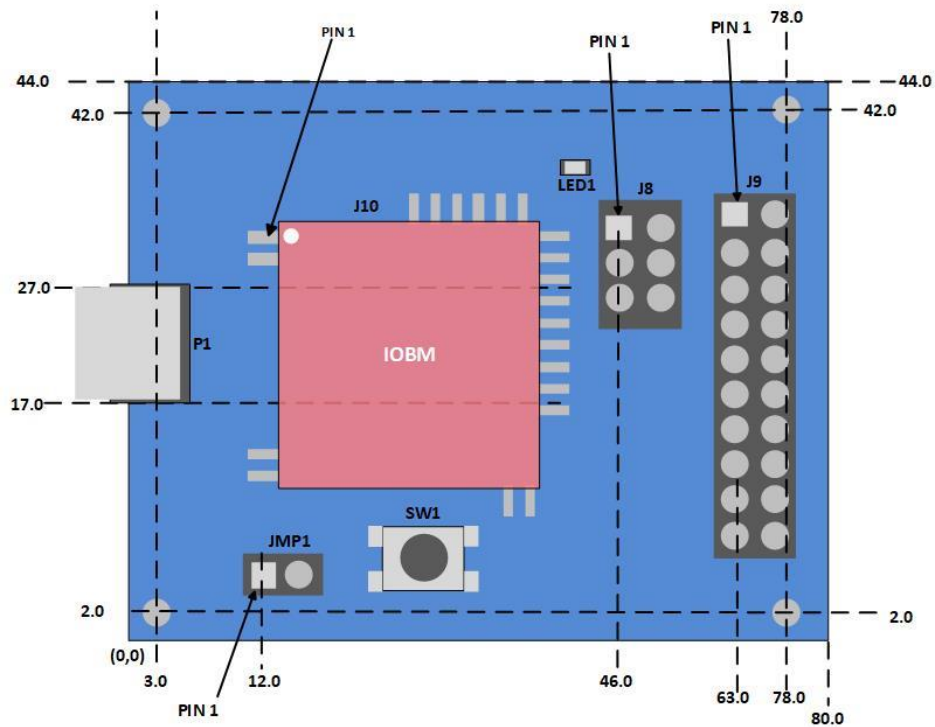




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2 Mechanical Dimensions

SWD BLASTER PCB DIMENSIONS



All dimensions in mm

3 Pin Mapping

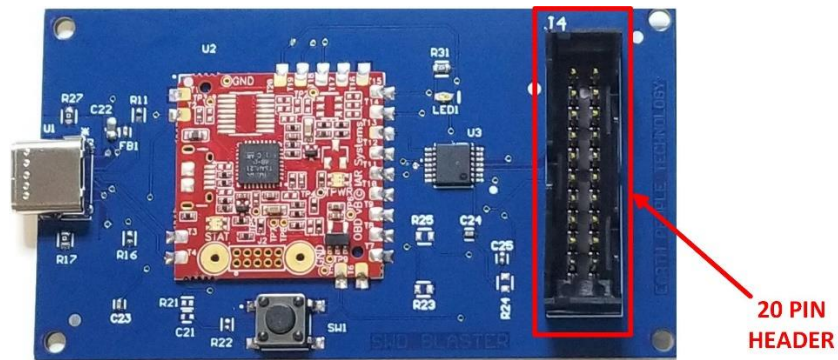
The SWD Blaster includes a 20 Pin 0.1 Inch Dual Row Shrouded Header.



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MCU Programmer Data Sheet



This header is used to connect the

- SWDIO
- SWDCLK
- TARGET POWER
- SWO
- GROUND
- TRESET

Signals to the target MCU. The header pinout follows the MIPI-20 scheme.

| | | | |
|------------|----|----|------------|
| VTREF | 1 | 2 | SWDIO/TMS |
| GROUND | 3 | 4 | SWCLK/TCK |
| GROUND | 5 | 6 | SWO/TDO |
| NO CONNECT | 7 | 8 | TDI |
| NO CONNECT | 9 | 10 | TGT_RESET |
| NO CONNECT | 11 | 12 | NO CONNECT |
| NO CONNECT | 13 | 14 | NO CONNECT |
| GROUND | 15 | 16 | NO CONNECT |
| GROUND | 17 | 18 | NO CONNECT |
| GROUND | 19 | 20 | NO CONNECT |

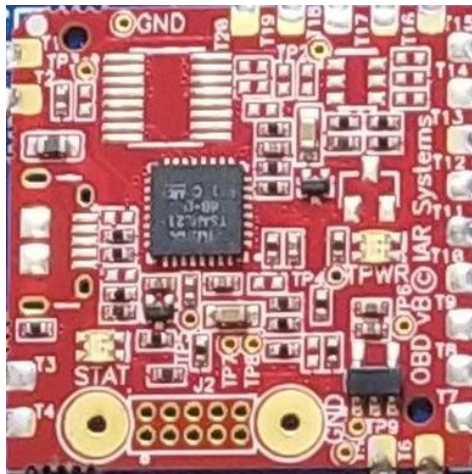
MCU Programmer Data Sheet

The VTREF signal is power applied from the Target Device. It is used to power the output sample circuit of the IOBM. It must have the capability of supplying:

20mA

4 I-Jet OB Module

The I-Jet On Board Module is sourced from IAR so it is officially licensed by the company.



5 Reset Pushbutton

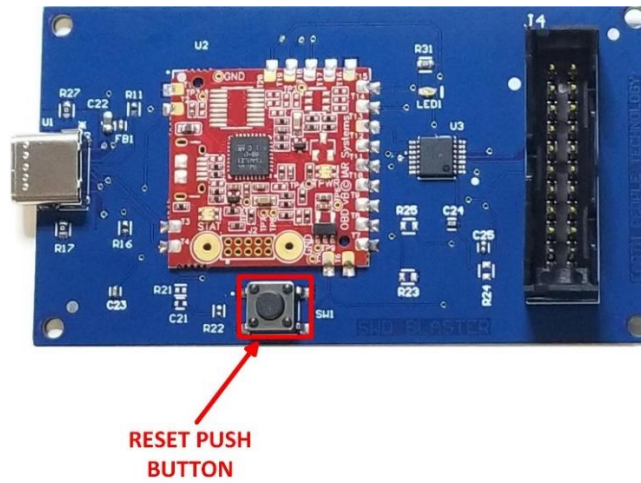
The Reset Push Button is used to manually reset the target MCU.



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6 USB-C Connection

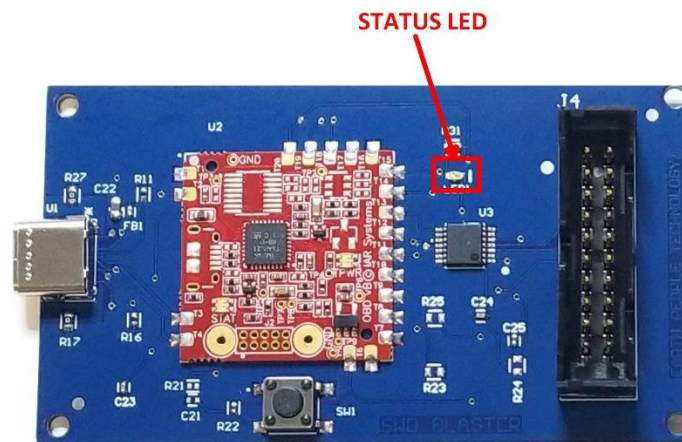
The SWD Blaster communicates with a PC via the USB-C connector. Connect the cable to any USB 2.0 or higher compliant port.



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7 Connection and Status LEDs

The STATUS LED is used to indicate that the SWD Blaster has been appropriately powered from the Host USB. It will light up green. It is connected to pin 11 of the IOBM and driven with sink from the module.



8 SWD Blaster Power

The SWD Blaster is powered from the USB bus of a Host/PC. The USB supplies a maximum of +5V @ 500mA's.

8.1 Core Board Power Budget

TBD