

SA4041 (IXC2) Development Board

Application Brief

Features

- Development Board with Solantro's SA4041 (IXC2) advanced digital power processor
- Preinstalled "starter-code" firmware
- Interface ports for interacting with Solantro's Helios Test and Control Tool and PuTTY

Development capabilities

- Change register values and parameters on the SA4041 for testing, evaluation and development.
- Download, develop, and test firmware for the SA4041

Development kit

- SA4041 (IXC2) Development Board with installed firmware
- Helios Test and Control Tool

Description

The Solantro SA4041 (IXC2) Development Board is a PCB on which is mounted a SA4041 IC. A USB port powers the board and is used for communications between the SA4041 and a Windows PC. The communication is done with Solantro's Helios Test and Control Tool (Helios) and PuTTY. Helios is a Windows application that uses a COM port to communicate with the firmware running on the processor through the HDLC UART. The primary purpose of the Board is to observe and change SA4041 program variables and hardware registers as well as loading new firmware. Coupled with the Solantro Software Development Environment, the SA4041 Development Board provides a platform for developing firmware for the SA4041 to support custom applications.

A photograph of the SA4041 Development Board is shown in Figure 1.

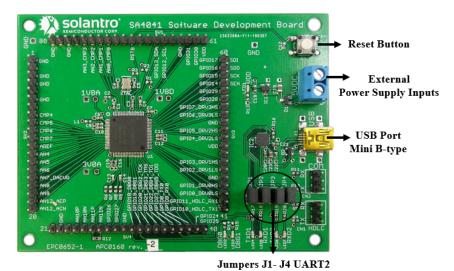


Figure 1 - SA4041 Development Board

PC requirements

- operating system Windows 7 or 10
- USB connection port

Powering the SA4041 Development Board

The SA4041 Development Board is powered via USB cable, from a PC to the Mini-B USB port on the Board.

Quick start of the SA4041 Development Board

- **Step 1** Connect the board to the PC USB port with the USB A to Mini-B Cable.
- **Step 2** Check that the four jumpers JP1 to JP4 are firmly seated.
- **Step 3** Install the Solantro Development Environment following DPD1167.
- Step 4 Read SA4041(IXC2) datasheet (DPD1110).
- Step 5 Follow the SA4041 (IXC2) technical reference guide (DPD1126) to perform examples and become familiar with SA4041.

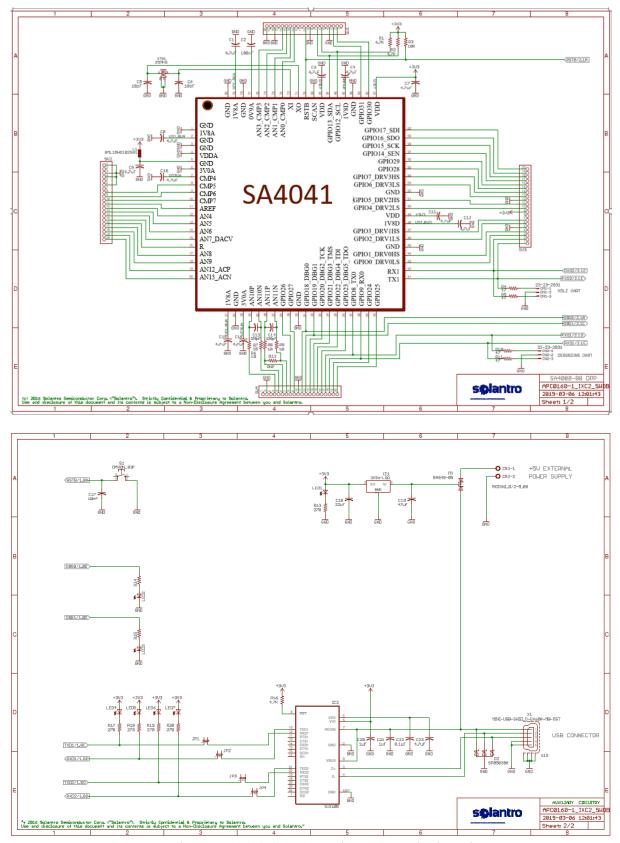


Figure 2 –SA4041(IXC2) Development Board Schematic