SOT-EVA-S1 Rev. 1.1

SPI-to-Serial, Parallel-to-Serial Interface Adapter

Description:

SOT-EVA-S1 is an adapter used for converting a computer's USB interface to the parallel interface, or to a serial parallel interface (SPI). This board is based on the Altera Cyclone III FPGA chip. There are three connectors on board, i.e., USB female connector to the host computer, micro-D connector to the device with SPI, D-Sub Micro-D connector to the device with parallel interface. The adapter is offered with specific GUIs to digitally control the ERAVANT low phase noise frequency synthesizer modules, e.g., SOT-02215300200-SF-E6 with SPI, SOT-01210313003-SF-B6, SOT-02220313003-SF-B6 and SOT-01320313001-SF-B6 with parallel interface.

Features:

- SPI-to-Serial Interface Adapter
- Parallel-to-Serial Interface Adapter

Applications:

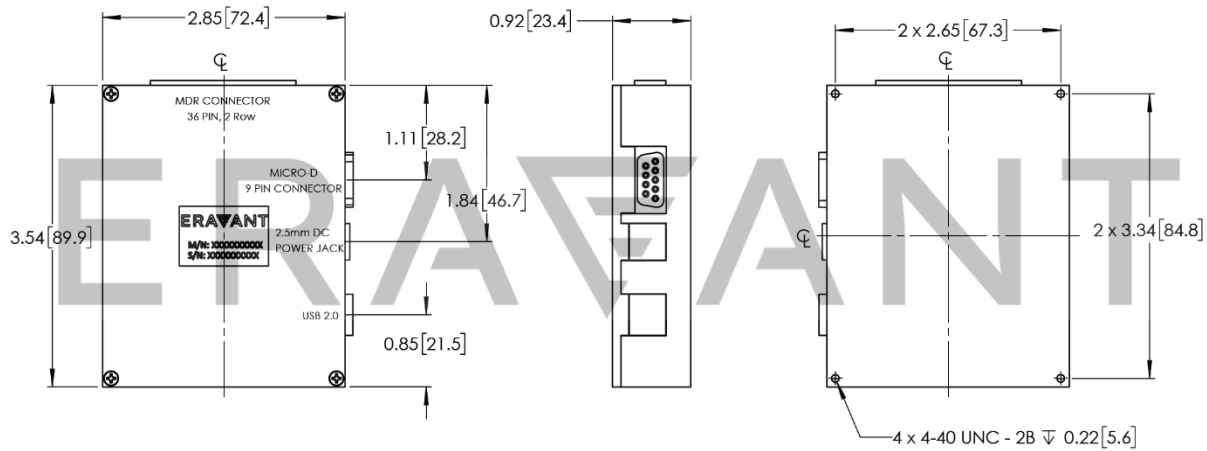- Correspondence with Eravant SOT Models

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Supply Voltage	+10.8 V$_{DC}$	+12 V$_{DC}$	+13.2 V$_{DC}$
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+70 °C

Mechanical Specifications:

Parameter	Connector
Serial Port	USB 2.0 (Type A)
SPI Port	Micro-D Socket, 9 Positions, 2 Rows
Parallel Port	Mini Delta Ribbon (MDR) Socket, 36 Positions, 2 Rows
Body Material	Aluminum
Finish	Chem Film
Weight	3.2 Oz
Dimension	3.54" (L) X 2.85" (W) X 0.92" (H)
Outline	OT-BC-EVA

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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)

Note:

- The adapter is specific designed and manufactured for Eravant synthesizers with the following model numbers, **SOT-02215300200-SF-E6** with SPI, **SOT-01210313003-SF-B6**, **SOT-02220313003-SF-B6** and **SOT-01320313001-SF-B6** with parallel interface.
- The evaluation kit includes USB 2.0 cable and a power supply cable to offer a complete system integration.

Item	Model Number	Quantity
DC Plug to 4 mm Banana Plugs	SOT-CC-4BM5DM-S1	1
USB 2.0 (Type A to Type B) Cable	SOT-CC-UBUBB-S1	1

- Other models may need different adapter boards.
- Eravant reserves the right to change the information presented without notice.

Caution:

- The device is static sensitive. Always follow ESD rules when working with the device.
- Wrong bias or reverse bias the synthesizer will damage the device.
- Exceeding absolute maximum ratings shown will damage the device.