

FPGA SoM Module: BitFlex-SPB-A7



The BitFlex-SPB-A7, an advanced hardware design platform centered around the powerful Xilinx Artix-7 FPGA. This cutting-edge board boasts highperformance capabilities and a comprehensive set of peripherals, including Ethernet, RS422/RS485, and high-speed DDR3 memory.

Designed for versatility, the BitFlex-SPB-A7 goes beyond the ordinary with diagnostic features such as voltage/current and temperature monitoring, along with a supervisory circuit. These advanced functionalities make it an ideal choice for a broad spectrum of applications, particularly in signal processing.

Unlock the potential of your projects with the BitFlex-SPB-A7 - a reliable and feature - rich solution that brings together the best in FPGA technology.















Features

- Dimension of 120mm x 120mm x **37mm**
- Wide Input range from 14VDC to **160VDC**
- Compatible for EN 50155: 2017 Class 1
- Commercial operating temperature from -40°C to +70°C
- · Surge protection and reverse input protection
- Included EMI filter
- ARTIX 7 XC7A100T-2FGG484I and pin-to-pin compatible FPGAs
- 1GB DDR3 RAM
- 256Mb QSPI FLASH

- Supports RF board interface
- 16bit 4MSPS SPI controlled ADC with analog filter
- SPI based accelerometer
- Voltage and Current monitoring over I2C
- Temperature Sensor input over
- Voltage supervisor circuitry
- 1Gbps ETHERNET interface
- Full Duplex isolated RS422/RS485 interface
- JTAG interface
- Customizable Graphical User Interface

BLOCK DIAGRAM

















