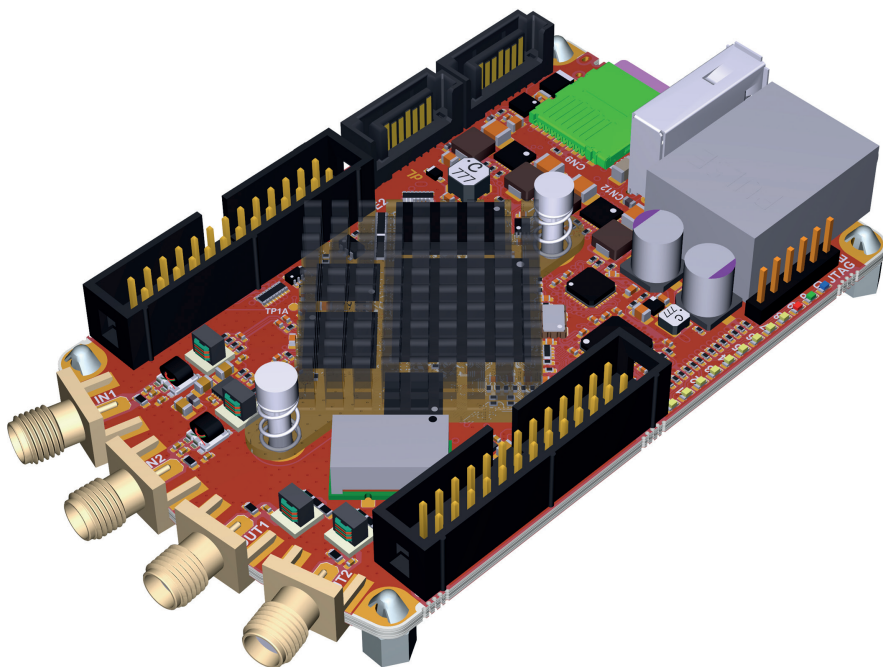


NEW!



STEM^{lab} 122-16



- Tailored for HF+50MHz SDR; RF applications
- Comes with two 16 bit ADCs 50 ohm inputs & 14 bit DACs 50 ohm outputs
- Three times bigger dual core ARM Cortex A9 + Xilinx Zynq 7020 FPGA
- Bigger FPGA provides more real-time processing capabilities
- Hardware compatible with HPSDR
- Improved distortions, dynamic range, sensitivity, noise & crosstalk

TECHNICAL SPECIFICATIONS

■ BASIC

Processor	DUAL CORE ARM CORTEX A9
FPGA	Xilinx Zynq 7020 SOC
RAM	512 MB (4 GB)

■ CONNECTIVITY

Ethernet	1 Gbit
USB	USB 2.0
WIFI	With Wi-Fi dongle
Synchronisation	With dasy chain connectors

■ RF INPUTS

Channels	2
Sample rate	122.88 MS/s
ADC resolution	16 bit
Full scale voltage range	0.5 Vpp /-2 dBm
Absolute Max. Input volt range	DC max 50V (AC-coupled), 1 Vpp for RF
Input protection	RF transformer & AC-coupled
Overload protection	DC voltage protection

■ RF OUTPUTS

Channels	2
Sample rate	122.88 MS/s
DAC resolution	14 bit
Voltage range	1 Vpp / +4 dBm
Load Impedance	50 ohm
Output slew rate	N/A
Short circuit protection	Yes

■ EXTENSION CONNECTOR

Digital IOs	16
Analog inputs	4
Analog inputs voltage range	7 V
Sample rate	100 kS/s
Resolution	12 bit
Analog outputs	4
Analog outputs voltage range	0-1,8 V
Communication interfaces	I2C, UART, SPI
Available voltages	+5 V, + 3,3 V, -4 V

With STEMLab 122-16 we will be able to build SDR transceivers that will compete with state of the art products on market available today.

Edwin RICHTER, DC9OE, Germany

