

SunSDR2 PRO

SunSDR2 PRO transceiver - is an up-to-date system of the amateur radio communication in the HF and VHF frequency bands with the digital signal processing. This device is considered to work with the PC via Ethernet (LAN) without installing the drivers or via WLAN. Receiver is based on the direct conversion principle, transmitter - on the direct synthesis.

This transceiver has been worked out subject to the long-standing work of the company on the issue of SDR-technical equipment. It combines advantages of direct conversion and direct synthesis of radio signals, namely: high image rejection for reception and transmission, high blocking dynamic range. Interface for connecting to the PC – local network (Ethernet LAN) allows the remote work with the transceiver, using local network. For instance, transceiver can be located in the radio shack along with noisy kilowatt amplifiers and operator can carry out connections at the PC, sitting in a quiet flat tens meters far.

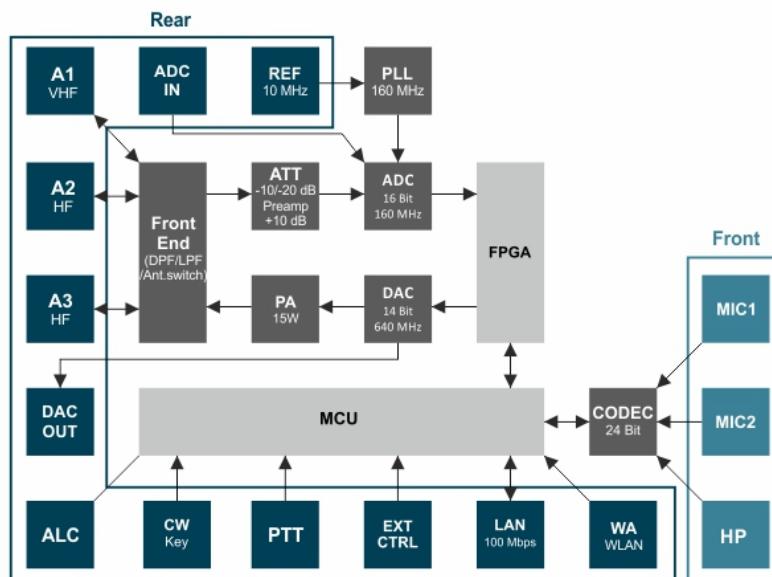
SPECIFICATION TRANSMITTER

HF Output Power	15W(max 20W)
VHF Output Power	8W
Frequency range	All Ham radio bands (160M..6M, 2M)
DAC converter	14 bit 640 MSPS
Carrier Rejection in SSB mode	> 70 dB
I/Q Image Rejection	> 90 dB
IMD3	30 dB
Dynamic microphone impedance	600 Ohm (Yaesu MH-31 compatible)

SPECIFICATION RECEIVER

Modes	AM/SAM/NFM/WFM/LSB/USB/DSB/CW
Frequency Range	10kHz ... 65MHz, 95 MHz ... 148MHz
Oversampling Frequency Range	10kHz ... 300MHz
Wide bandscope	20kHz ... 80
Output IQ Sample Rate	39, 78, 156, 312 kHz
Independed receiver channels	2
Blocking Dynamic Range	129 dB
IMD3 Dynamic Range	100 dB
I/Q Image Rejection	>110 dB
Sensitivity (Preamp on)	70 nV
ADC converter	160 Msps, 16 bit
Attenuators	-20, -10, 0, +10 dB
10 MHZ reference input	Optional
WLAN interface	100Mbps
LAN 100 Mbps protocols	UDP, ICMP, ARP
Onboard High Quality Audio DAC	24 bit
External Radio Control	8 programma transistor switches
Power supply	+5V, 0.7A
Dimensions	64x24x15

BLOCK DIAGRAM



KEY FEATURES

- DUC/DDC Architecture
- Quick hardware formed CW
- Two independend receiver channels
- I/Q stream up to 312 kHz
- Reception from 9 kHz
- Bandpass filters in the receiver front end
- LAN interface for connection to PC
- Optional WLAN interface
- External devices control
- CAT and VAC interfaces for connections to third-party software like loggers and digital modes software
- Reception of Broadcast FM stations
- Contest special functions
- Small size

