

A tiny M.2 single-side components SDR with 2 RX/TRX channels

xSDR is an M.2 embedded software-defined radio (SDR) card ready for integration into systems that support either M.2 or Mini PCIe (with adapter) form factors and features an RF tuning range of 30 MHz to 3.8 GHz. Leveraging the applications of web platform wsdr.io and different host devices (laptops, tablets, smartphones, embedded computers, etc.), you can immediately build an RF device for any kind of needs and share or stream data worldwide.

FPGA

AMD XILINX XC7A35T

POWER CONSUMPTION

1.9W Typical
3W Max

EXTENDED POWER SUPPLY RANGE

2.85 - 5.5 V

ADAPTERS

Development board
Mini PCIe
M.2 B+M Key
USB

HOST INTERFACE

M.2 2230 A+E key (USB 2.0 & PCIe 2.0 x2)

GPIO

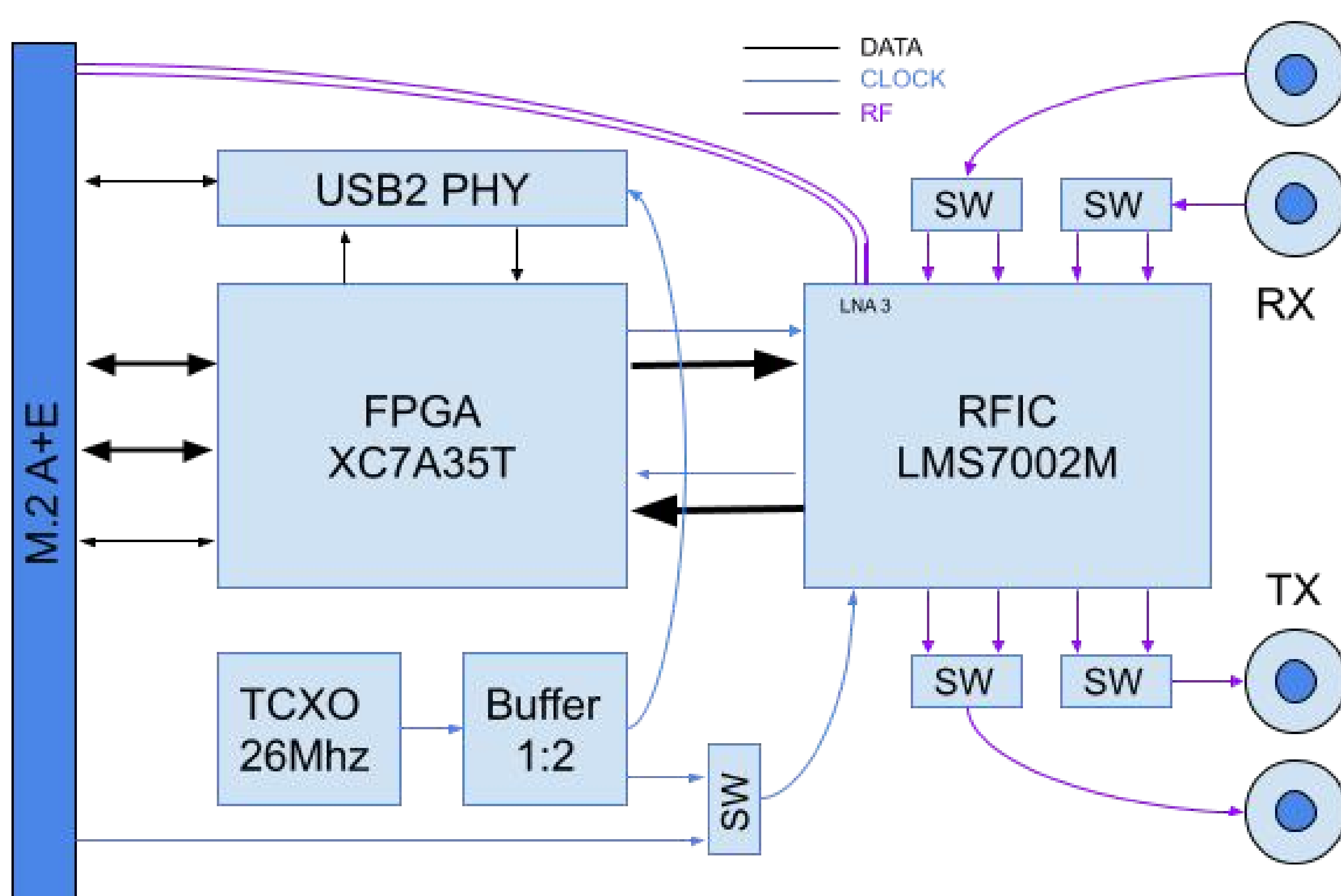
14 GPIO 1.8V on reserved M.2 pins

EXTERNAL CLOCK SYNCHRONIZATION

Synchronize multiple boards for a multi-channel array.

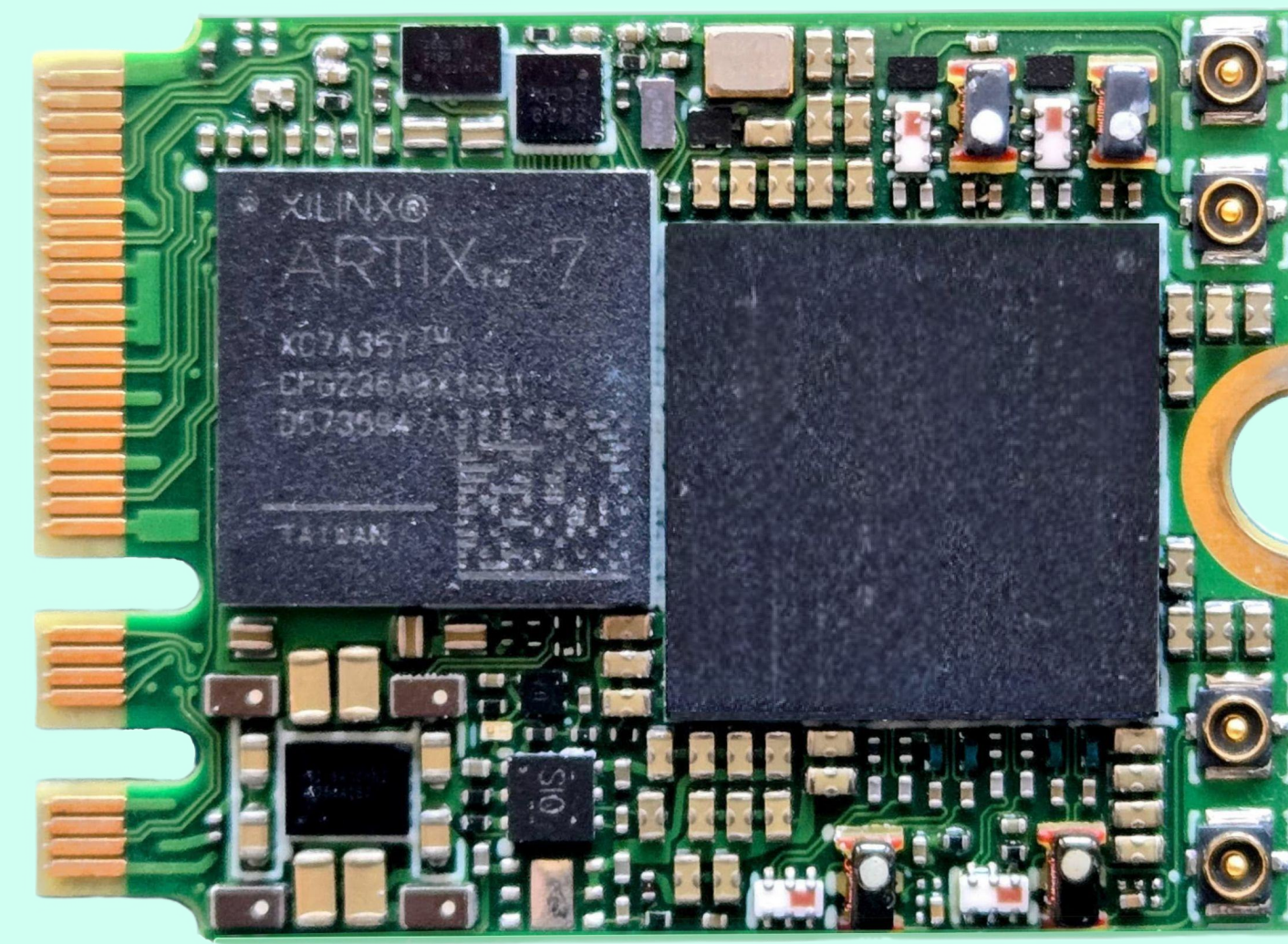
WEB UX

Web platform **wsdr.io** with ready to use apps (USB only)



x.SDR

extensible



TARGET APPLICATIONS

CELLULAR COMMUNICATION

Establish dedicated wireless networks by implementing BTS, eNodeB, or gNodeB systems via open-source solutions like srsRAN or OsmoBTS.

EMBEDDED

Develop compact and high-performance frequency analysis devices

DATA LINK

Build a communication channel between points worldwide via a web platform

LEGACY SOFTWARE

GNU Radio, srsRAN and many more through SoapySDR

RF SPECIFICATION

RFIC

LMS7002M

FREQUENCY RANGE

30 MHz to 3.8 GHz

SAMPLE RATE

0.1MSps - 100 MSps

CHANNEL BANDWIDTH

0.5Mhz - 90 MHz

Two receiver + two transmitter channels (2x2 MIMO)