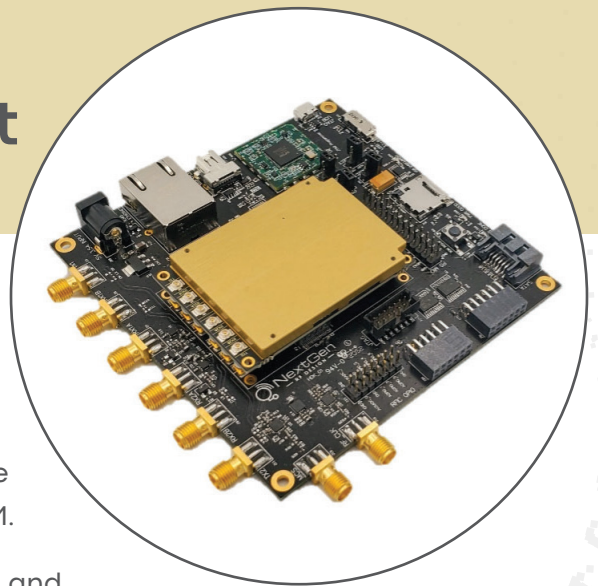# BytePipe x9002
Hardware Development Kit

The BytePipe SDR Development Kit consists of a Hardware Development Kit (HDK) main board combined with a Software Defined Radio (SDR) System on a Module (SOM) and supporting cables, power supply and software to enable testing and development with the NextGen RF BytePipe SOM.

The SOM Development Kit can be used as an evaluation tool and prototyping platform to aid in integration of the SOM into a full-scale product, or as a starting point to explore custom development of an SDR transceiver.

HIGHLIGHTS

FEATURES

- USB 2.0/3.0 Host/Device/OTG Connector
- 10/100/1000 Ethernet Connector
- Mini DisplayPort Connector
- SATA Interface Connector
- JTAG/UART Interface
- RF Device Clock & MCS
- Micro-SD Card Slot
- PMOD Connectors
- DC Power Regulators
- Square Form Factor - 4.25" x 4.25" (PCB Only)

PACKAGE CONTENTS

- Developer Kit Main Board
- BytePipe SDR SOM Module (Optional)
- 6 - SOM RF Interconnects
- SOM Heatsink & Fan
- AC / DC Power Supply
- USB & Ethernet Cables
- Micro-SD Card with Pre-Installed Software
- 6 Hours NextGen RF Engineering Support

A PRODUCT OF

NextGen
RF DESIGN

Hardware Overview

TX2   RX2B   RX2A   RX1A   RX1B   TX1

RX2A & RX1A LNA

MULTI-CHIP
SYNCHRONIZATION

SMPM - SOM
RF INTERFACE

EXTERNAL
RF CLOCK

ADRV900X
GPIO/ADC/DAC

FAN

J601 - SOM ANALOG/POWER

JTAG

PMOD - 16x
PROGRAMMABLE
LOGIC I/O

BASEBAND
PROCESSOR GPIO

SATA

RESET
PUSH BUTTON

MICRO SD
CARD

USB CONFIGURATION
HOST/DEVICE/OTG

USB3 MICRO AB

12V 24W
POWER INPUT

POWER
SWITCH

GIGABIT ETHERNET

MINI
DISPLAYPORT

J600 - SOM
DIGITAL INTERFACE

JTAG &
SERIAL PORT

NextGen
RF DESIGN