

Options  
Output Language: Python  
Generate Options: QT GUI

Variable  
ID: out\_buf\_size  
Value: 96k

QT GUI Range  
ID: pdu\_length  
Default Value: 500  
Start: 0  
Stop: 1.5k  
Step: 1

QT GUI Range  
ID: interval  
Default Value: 300  
Start: 10  
Stop: 1k  
Step: 1

QT GUI Chooser  
ID: freq  
Num Options: List  
Options: [2412000000.0, 24...  
Labels: [' 1 | 2412.0 | 1...  
Default option: 2.412G

QT GUI Chooser  
ID: samp\_rate  
Num Options: List  
Options: 5M, 10M, 20M  
Labels: 5 MHz, 10 MHz, 20 MHz  
Default option: 10M

QT GUI Chooser  
ID: lo\_offset  
Num Options: 3  
Default option: 0  
Option 0: 0  
Option 1: 6M  
Option 2: 11M

QT GUI Range  
ID: tx\_gain  
Default Value: 500m  
Start: 0  
Stop: 5  
Step: 100m

QT GUI Chooser  
ID: encoding  
Num Options: List  
Options: 0, 1, 2...4, 5, 6, 7  
Labels: BPSK 1/..., 64QAM 3/4  
Default option: 0

```
graph TD
    MS[Message Strobe] -- set_msg --> SP[Socket PDU]
    SP -- pdus --> WM[WiFi MAC]
    WM -- app in --> WM
    WM -- phy in --> WM
    WM -- app out --> WM
    WM -- phy out --> VV[Vector Source]
    VV -- out --> WM
    VV -- mac in --> WM
    WM -- samp out --> MC1[Multiply Const]
    MC1 -- in --> MC1
    MC1 -- out --> PP2[Packet Pad2]
    PP2 -- in --> PP2
    PP2 -- out --> MC2[Multiply Const]
    MC2 -- in --> MC2
    MC2 -- out --> SLS[Soapy LimeSDR Sink]
    SLS -- cmd --> SLS
    SLS -- in --> USRP[UHD: USRP Sink]
    USRP -- command --> SLS
    USRP -- async_msgs --> USRP
```

**Message Strobe**  
Message PMT: pmt.i...length)))  
Period (ms): 300

**XMLRPC Server**  
Address: 127.0.0.1  
Port: 3k

**Variable**  
ID: freq  
Value: 915M

**Variable**  
ID: encoding  
Value: 0

**QT GUI Range**  
ID: pdu\_length  
Default Value: 500  
Start: 0  
Stop: 1.5k  
Step: 1

**QT GUI Range**  
ID: interval  
Default Value: 300  
Start: 10  
Stop: 1k  
Step: 1

**QT GUI Chooser**  
ID: freq  
Num Options: List  
Options: [2412000000.0, 24...  
Labels: [' 1 | 2412.0 | 1...  
Default option: 2.412G

**QT GUI Chooser**  
ID: samp\_rate  
Num Options: List  
Options: 5M, 10M, 20M  
Labels: 5 MHz, 10 MHz, 20 MHz  
Default option: 10M

**QT GUI Chooser**  
ID: lo\_offset  
Num Options: 3  
Default option: 0  
Option 0: 0  
Option 1: 6M  
Option 2: 11M

**QT GUI Range**  
ID: tx\_gain  
Default Value: 500m  
Start: 0  
Stop: 5  
Step: 100m

**QT GUI Chooser**  
ID: encoding  
Num Options: List  
Options: 0, 1, 2...4, 5, 6, 7  
Labels: BPSK 1/..., 64QAM 3/4  
Default option: 0

**Socket PDU**  
Type: TCP Server  
Host: 127.0.0.1  
Port: 2000  
MTU: 1.5k

**WiFi MAC**  
SRC MAC: 35, 35,...35, 35, 35  
DST MAC: 66, 66,...66, 66, 66  
BSS MAC: 255, 25..., 255, 255

**WiFi PHY Hier**  
bandwidth: 10M  
chan\_est: Equalizer.LS  
encoding: Encoding.BPSK\_1\_2  
frequency: 915M  
sensitivity: 560m

**Vector Source**  
Vector: 0  
Tags:  
Repeat: No

**Multiply Const**  
Constant: 600m

**Packet Pad2**  
Debug: Disable  
Delay: Disable  
Delay Sec: 10m  
Pad Front: 100  
Pad Tail: 1k

**Multiply Const**  
Constant: 500m

**Soapy LimeSDR Sink**  
Sample Rate: 10M  
Center Freq (Hz): 915M

**UHD: USRP Sink**  
Sync: PC Clock  
Samp rate (Sps): 10M  
Ch0: Center Freq (Hz): ...AL)  
Ch0: Gain Value: 500m  
Ch0: Gain Type: Normalized  
TSB tag name: packet\_len