

# Lab4: Wideband Transmission(Warm-up)

NTU Communication Laboratory

# Outline

- Subcarriers Allocation
- Channel Estimation

# Subcarriers Allocation

□ FFT size=256, message subcarriers=120, pilot subcarriers=32

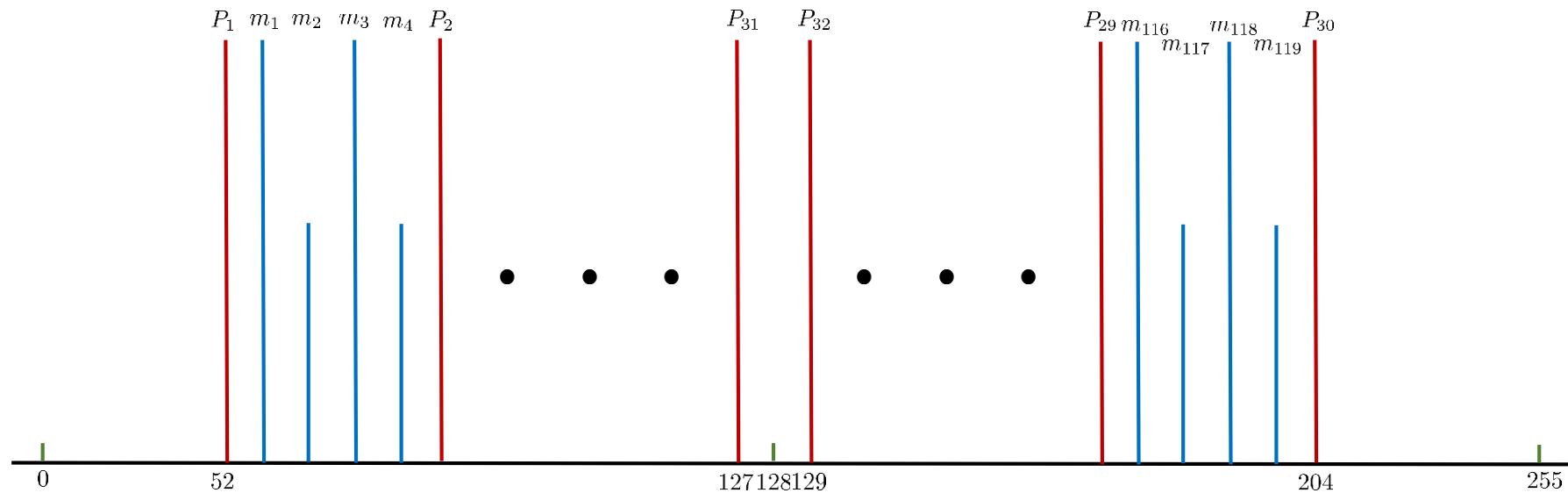
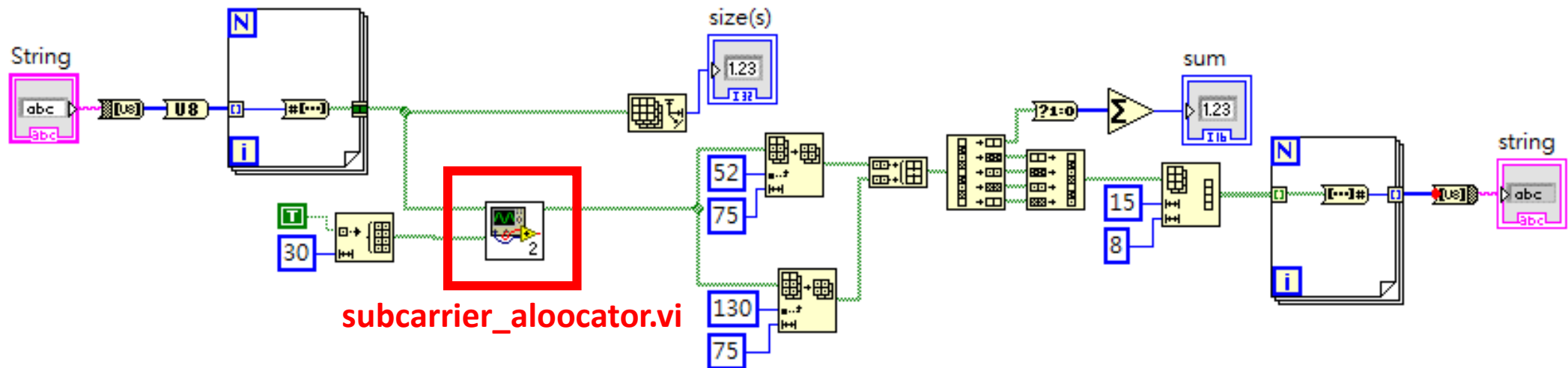


Figure1

# Subcarriers Allocation

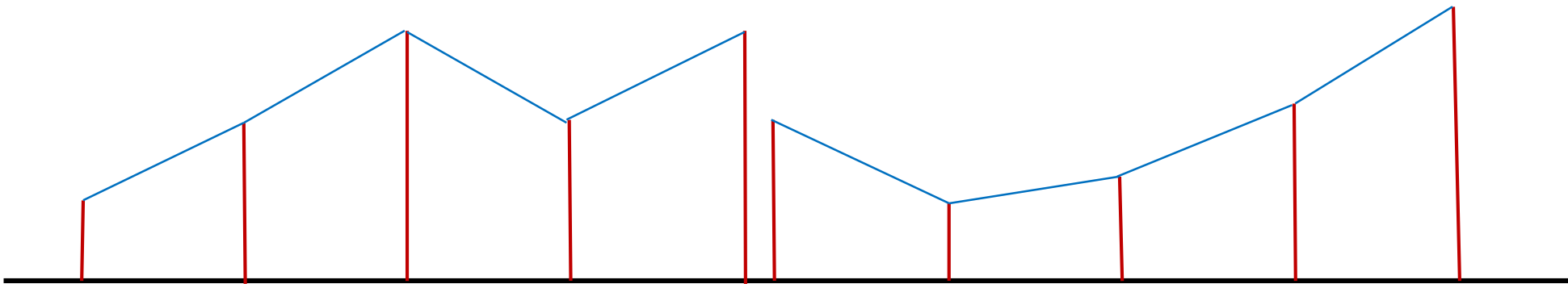
## □ Exercise 1

- ✓ Complete the subcarrier\_allocation.vi of which the output array has the same pattern of the Figure 1.



# Channel Estimation

□ FFT size=256, message subcarriers=120, pilot subcarriers=32



# Channel Estimation

## □ Exercise2

- ✓ Complete the Exercise2.vi to output the interpolated channel estimation of the message pilot.