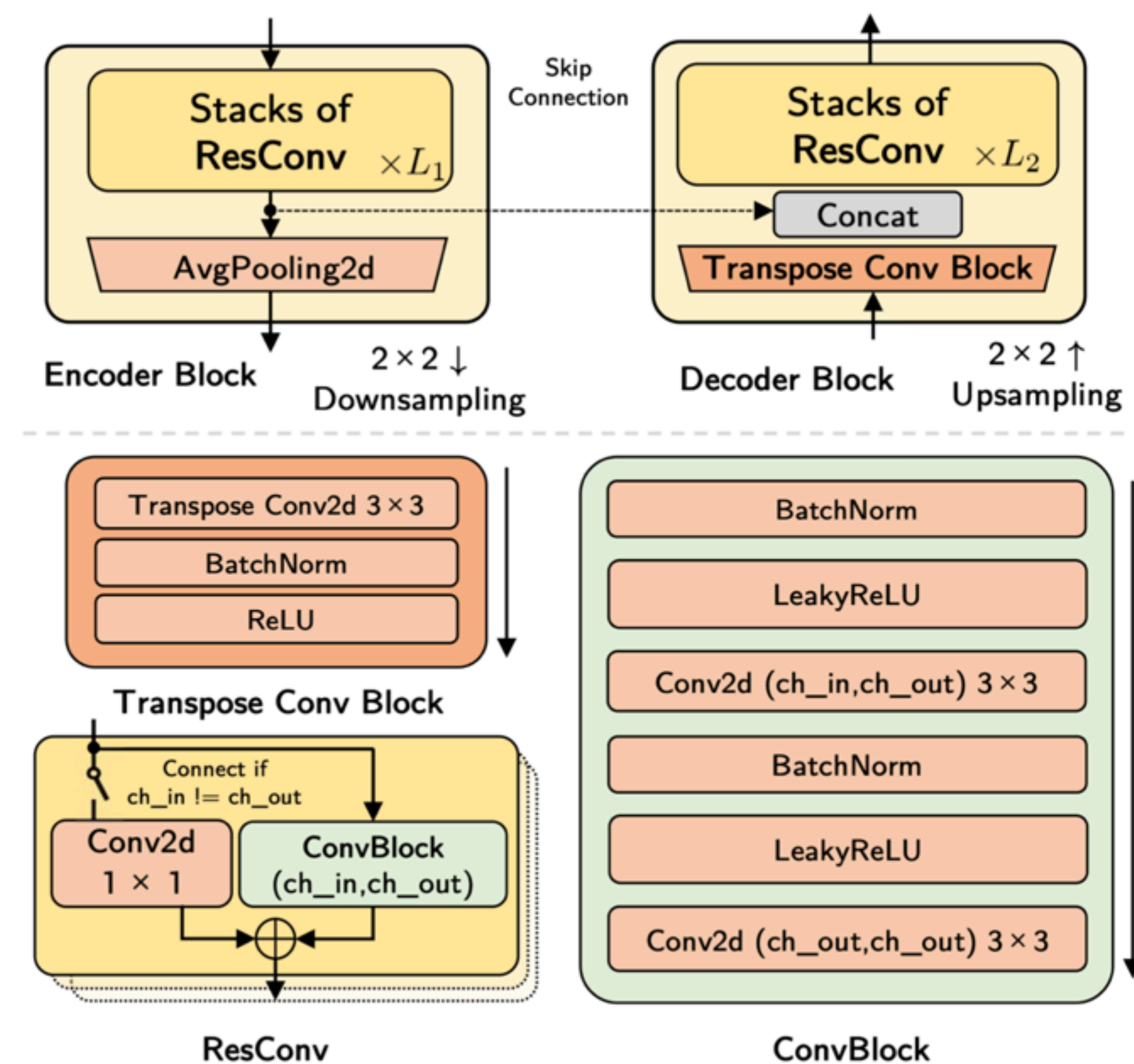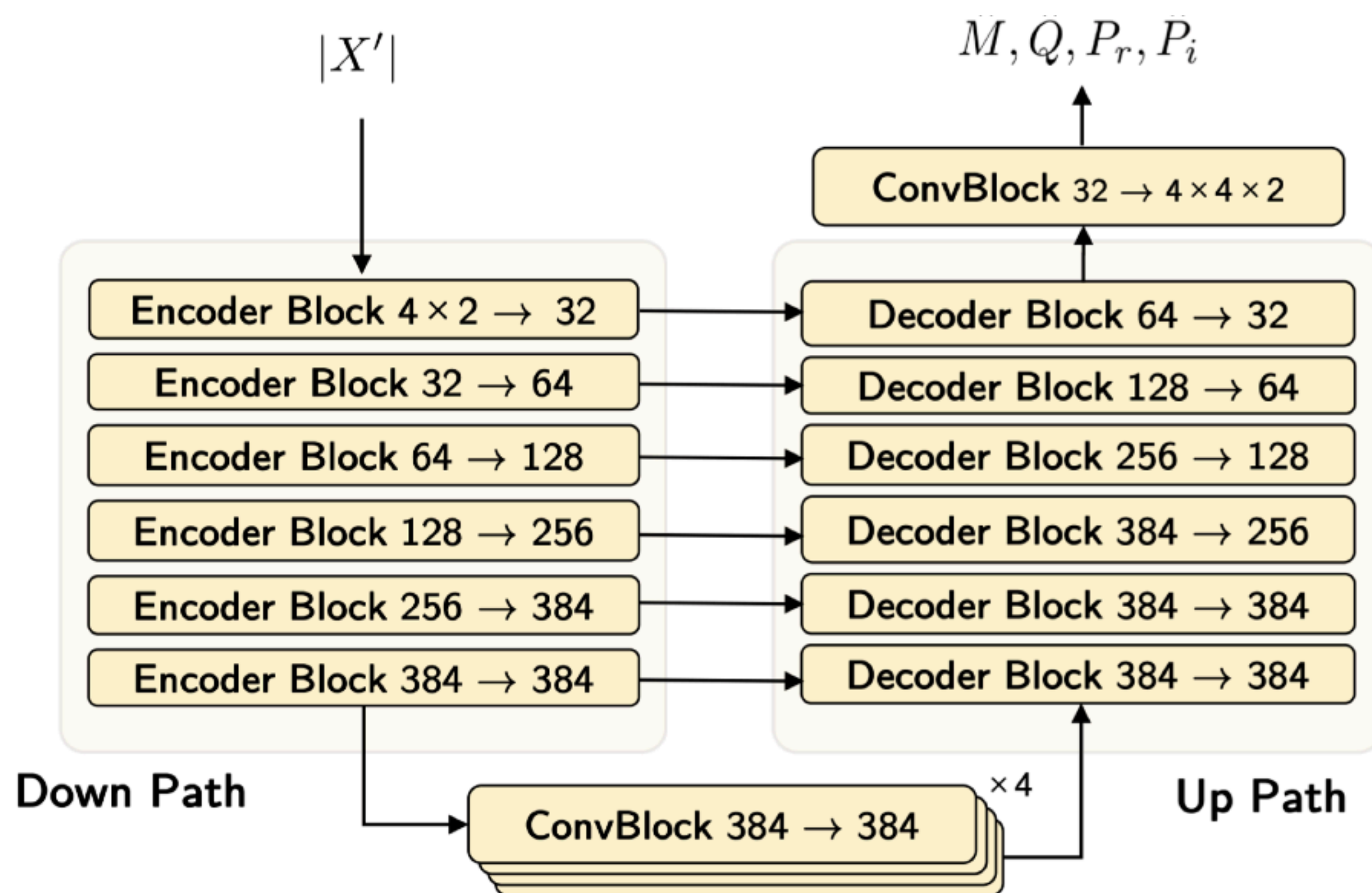# CWS-PResUNet

Step2: Phase-aware ResUNet

CWS-PResUNet

Step3: subband signal reconstruction

- Input:

  - Subband magnitude spectrogram: $|X'|_{8 \times T \times \frac{F}{4}}$

- Estimate:

  - Subband phase variation: $\hat{P}_i, \hat{P}_j$

  - Subband IRM: $sigmoid(\hat{M})$

  - Subband magnitude residual: $\hat{Q}$

- Operation:

  - $cos\angle\hat{\theta} = \hat{P}_r/(\sqrt{\hat{P}_r^2 + \hat{P}_i^2}), \ sin\angle\hat{\theta} = \hat{P}_i/(\sqrt{\hat{P}_r^2 + \hat{P}_i^2})$

  - $\hat{S}' = \text{relu}(|X'| \odot \text{sigmoid}(\hat{M}) + \hat{Q})\exp^{j(\angle X' + \angle\hat{\theta})}$