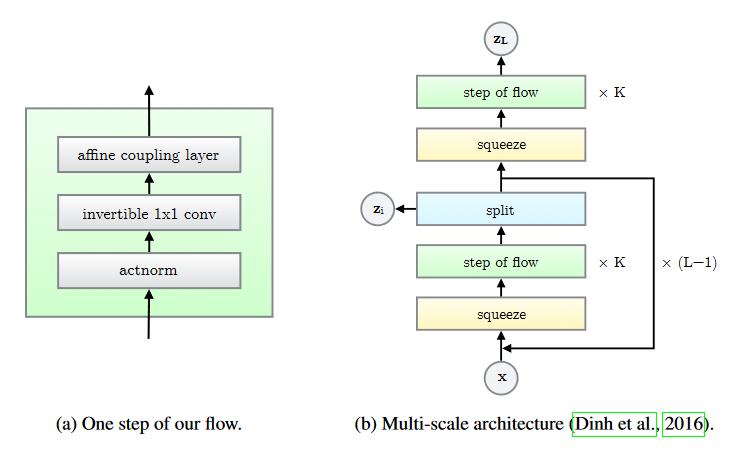
# Mapping x to z (General)

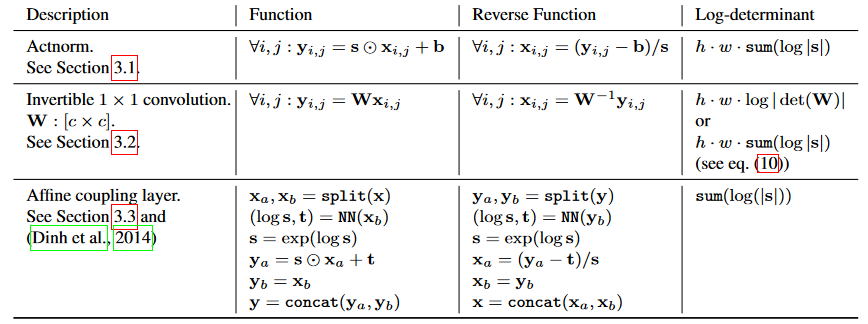
The z is latent variable, sample from probability distribution, normally normal distribution. is transformative function, invertible (or *bijective*)

After *change of variables*, probability density function (pdf) given a data-point will be:

Jacobian matrix is a triangular matrix

# GLOW





# Loss (Bits per dimension)

n\_pixel = *image\_size* \* *image\_size* \* 3

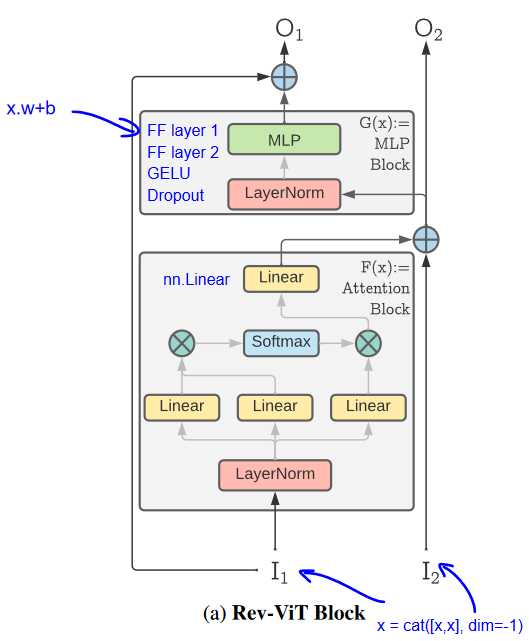
    loss = -log(*n\_bins*) \* n\_pixel *# loss considering noise inputted.*

    loss = loss + *logdet* + *log\_p*

loss = (-loss / (log(2) \* n\_pixel)).mean()

# Reversible ViT

Mangalam\_Reversible\_Vision\_Transformers\_CVPR\_2022\_paper

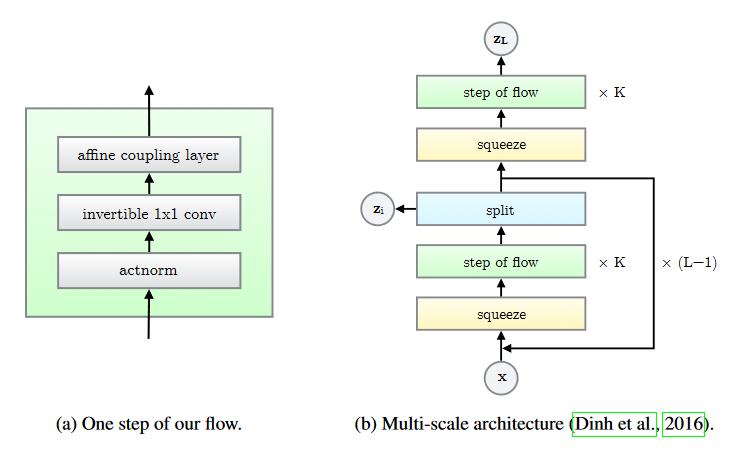


# Idea

Image to image:

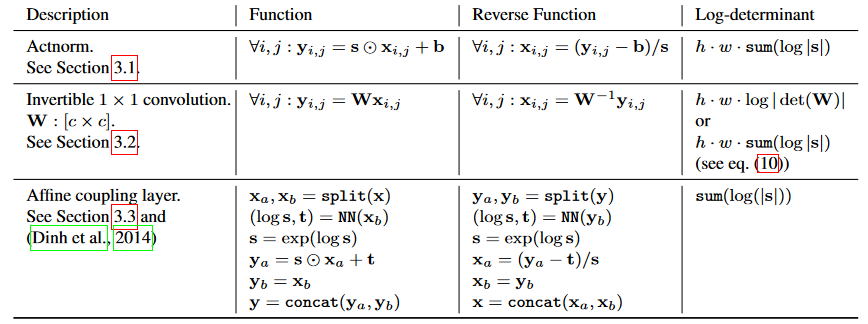
Image to audio:

Structure change:

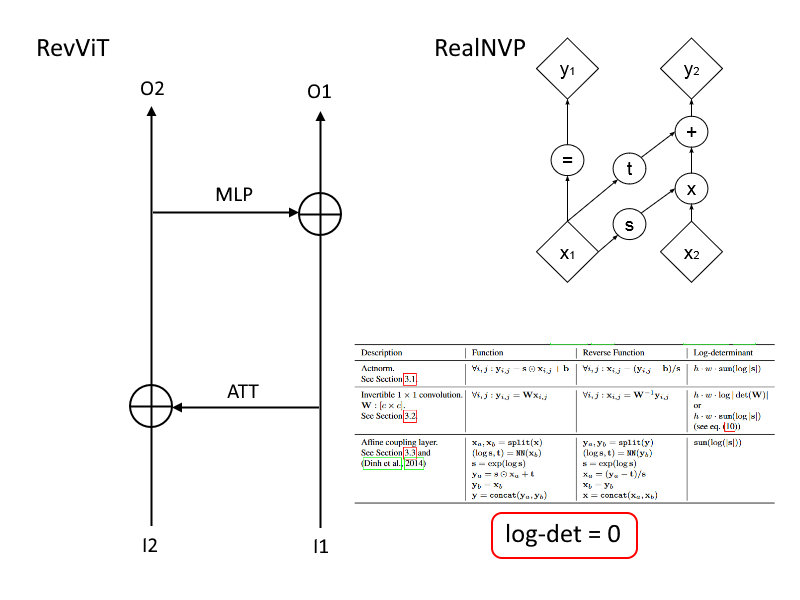


Rev ViT Block

Problem:



~~No way to calculate~~



An additive coupling layer is a special case with s = 1 and a log-determinant of 0