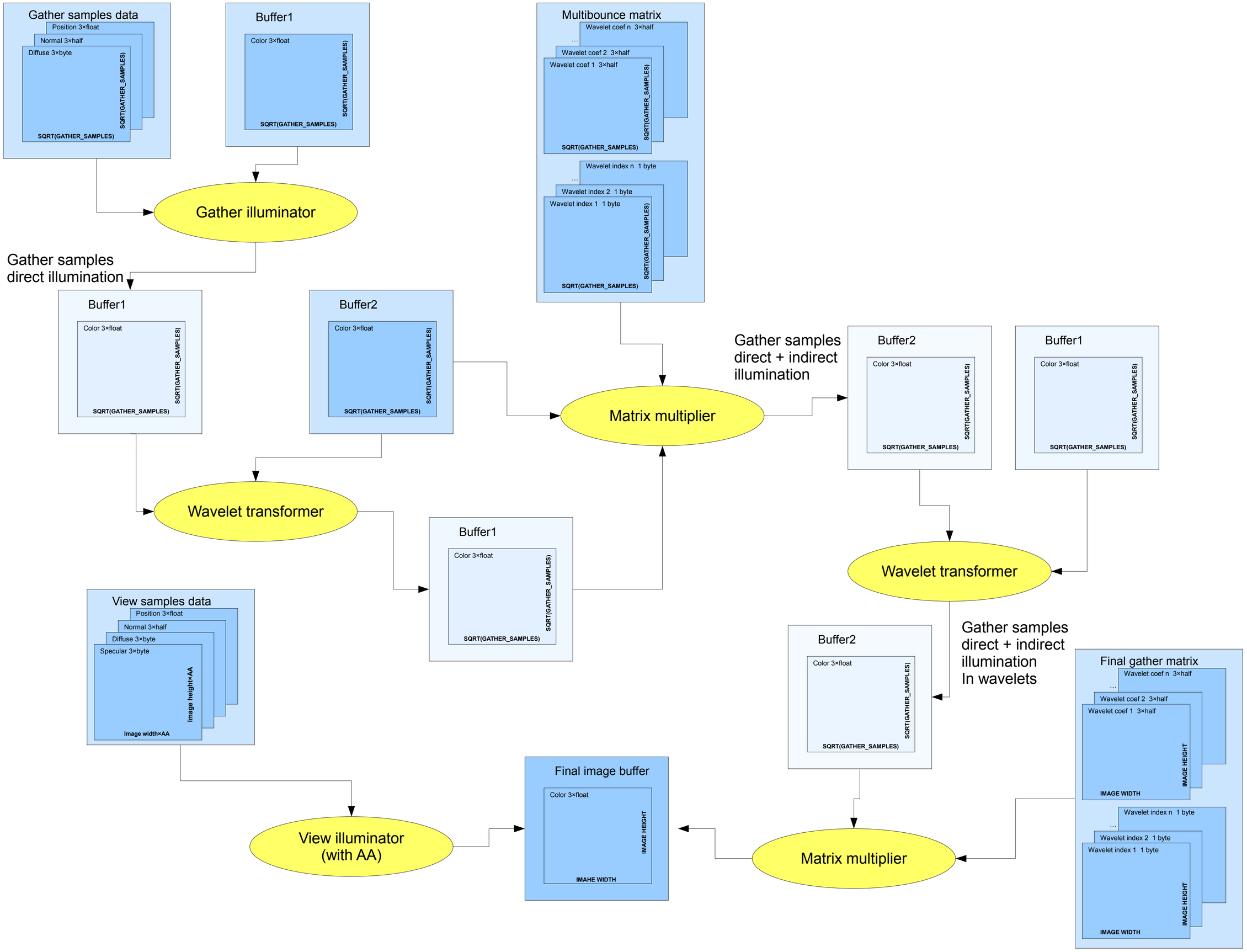
Gather samples data
Position 3×float
Normal 3×half
Diffuse 3×byte
SQRT(GATHER_SAMPLES)
SQRT(GATHER_SAMPLES)
Buffer1
Color 3×float
SQRT(GATHER_SAMPLES)
SQRT(GATHER_SAMPLES)
Multibounce matrix
Wavelet coef n 3×half
...
Wavelet coef 2 3×half
Wavelet coef 1 3×half
SQRT(GATHER_SAMPLES)
SQRT(GATHER_SAMPLES)
Wavelet index n 1 byte
...
Wavelet index 2 1 byte
Wavelet index 1 1 byte
SQRT(GATHER_SAMPLES)
SQRT(GATHER_SAMPLES)
Gather illuminator
Gather samples
direct illumination
Buffer1
Color 3×float
SQRT(GATHER_SAMPLES)
SQRT(GATHER_SAMPLES)
Buffer2
Color 3×float
SQRT(GATHER_SAMPLES)
SQRT(GATHER_SAMPLES)
Matrix multiplier
Gather samples
direct + indirect
illumination
Buffer2
Color 3×float
SQRT(GATHER_SAMPLES)
SQRT(GATHER_SAMPLES)
Buffer1
Color 3×float
SQRT(GATHER_SAMPLES)
SQRT(GATHER_SAMPLES)
Wavelet transformer
Wavelet transformer
Buffer1
Color 3×float
SQRT(GATHER_SAMPLES)
SQRT(GATHER_SAMPLES)
View samples data
Position 3×float
Normal 3×half
Diffuse 3×byte
Specular 3×byte
Image height×AA
Image width×AA
Buffer2
Color 3×float
SQRT(GATHER_SAMPLES)
SQRT(GATHER_SAMPLES)
Gather samples
direct + indirect
illumination
In wavelets
Final gather matrix
Wavelet coef n 3×half
...
Wavelet coef 2 3×half
Wavelet coef 1 3×half
IMAGE HEIGHT
IMAGE WIDTH
Wavelet index n 1 byte
...
Wavelet index 2 1 byte
Wavelet index 1 1 byte
IMAGE HEIGHT
IMAGE WIDTH
Final image buffer
Color 3×float
IMAGE HEIGHT
IMAHE WIDTH
View illuminator
(with AA)
Matrix multiplier