

The CAS Exchange Loop

```
struct BiquadCoefficients { float b0, b1, b2, a1, a2; };  
BiquadCoefficients coeffs;  
  
BiquadCoefficients calculateLowPassCoefficients (float freq);  
  
void audioThread (const float* src, float* dst, size_t n)  
{  
    processBiquad (src, dst, n, coeffs);  
}  
  
void updateFrequencyParameter (float newValue)  
{  
    coeffs = calculateLowPassCoefficients (newValue);  
}
```

The CAS Exchange Loop

```
struct BiquadCoefficients { float b0, b1, b2, a1, a2; };  
std::atomic<BiquadCoefficients*> coeffs;
```

```
BiquadCoefficients calculateLowPassCoefficients (float freq);
```

```
void audioThread (const float* src, float* dst, size_t n)  
{  
    auto* coeffsCopy = coeffs.load();  
    processBiquad (src, dst, n, coeffsCopy);  
}
```

```
void updateFrequencyParameter (float newValue)  
{  
    coeffs = new BiquadCoefficients (calculateLowPassCoefficients (newValue));  
}
```