Original State Variable Filter (no oversampling)

By Pete Johnston 2019
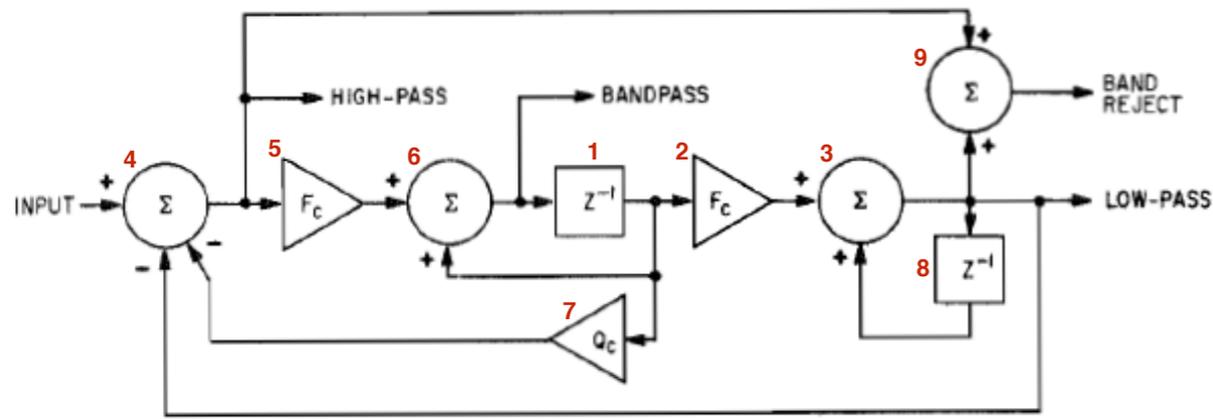
Identical State Variable Filter re-arranged in processing order (no oversampling) *input gets inverted*
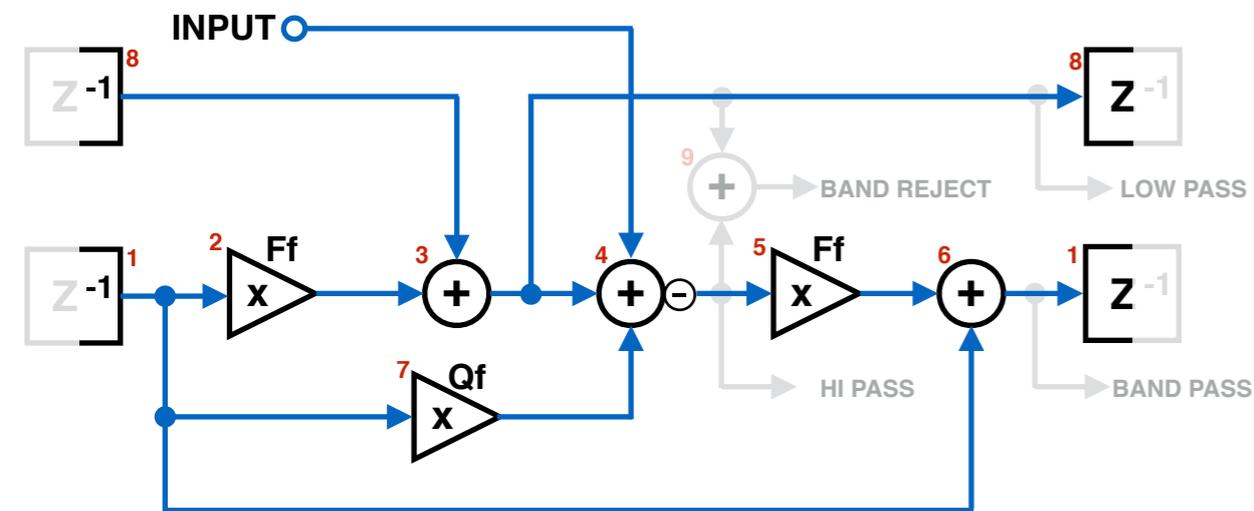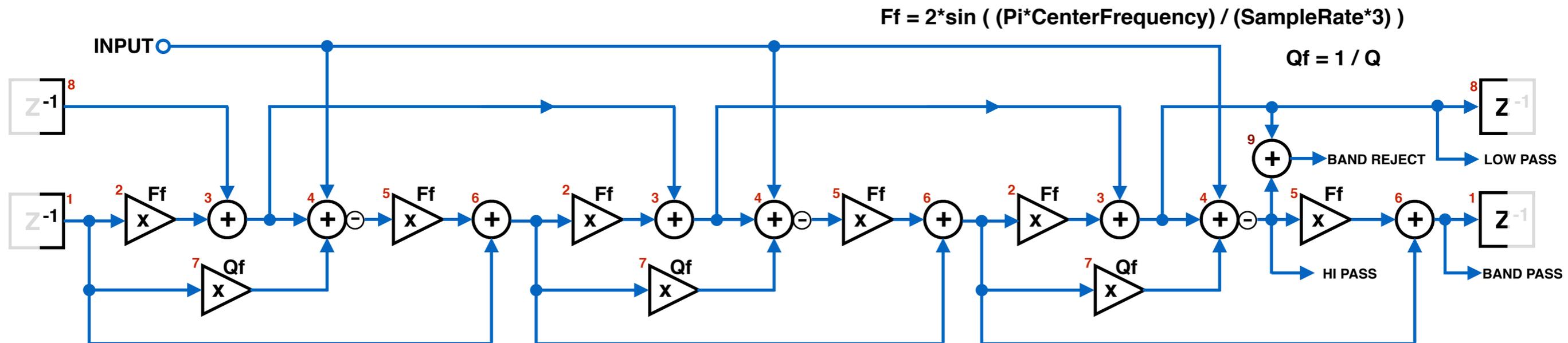

$$Ff = 2*sin((Pi*CenterFrequency) / SampleRate)$$

$$Qf = 1 / Q$$

This represents mixer with
0 -1 in output
(output inverted)

State Variable Filter with Three times oversampling *input gets inverted*

$$Ff = 2*sin((Pi*CenterFrequency) / (SampleRate*3))$$

$$Qf = 1 / Q$$