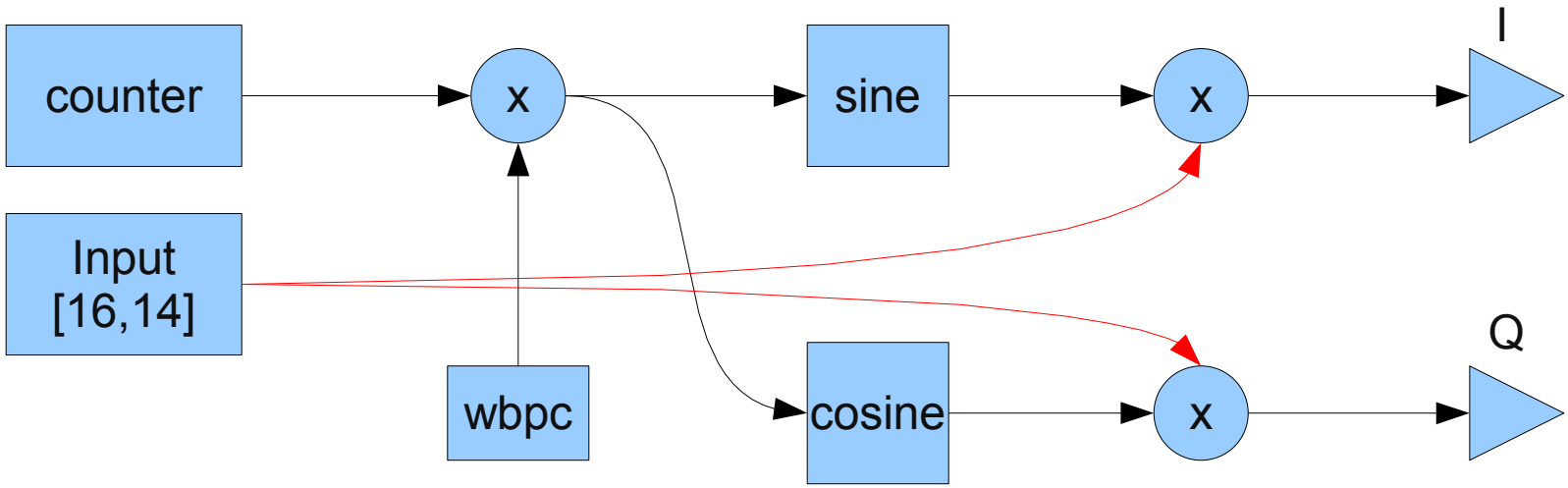
Quadrature Modulation Baseline

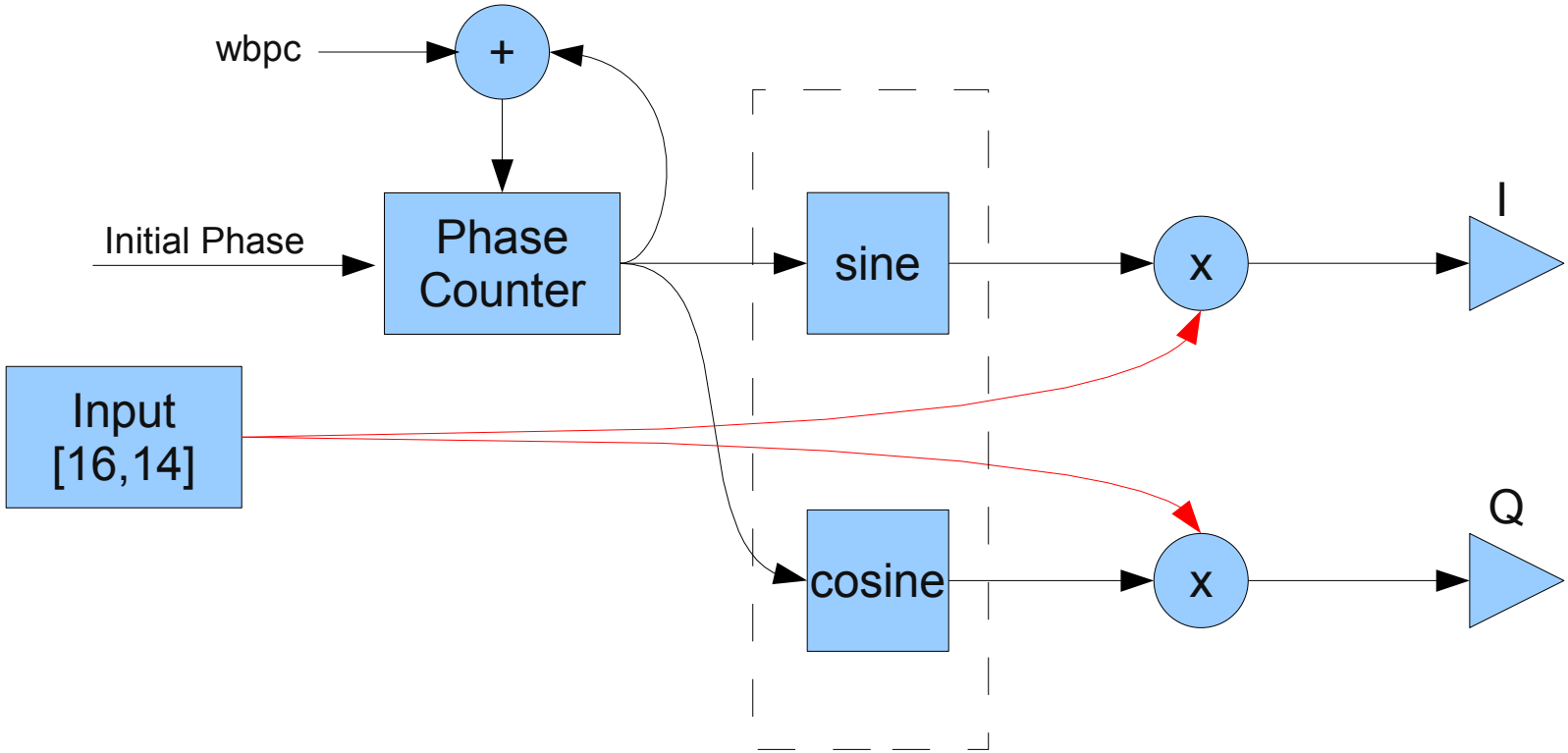
```
xbsr=xov.*cos(wbpc*(0:N0-1))
xbsi=xov.*sin(wbpc*(0:N0-1))
```



1. What should be counter's initial value in the real design?
2. What happens if counter overflows?
3. Can we do with 1 less multiplier?

Quadrature Modulation w/ Phase Counting

```
phase=init+wbpc*(0:N0-1)
xbsr=xov.*cos(phase)
xbsi=xov.*sin(phase)
```



1. 2 multipliers vs. 3 multipliers
2. What happens if counter overflows?
3. Sine and Cosine are generated from a single Cordic Core.

Phase Counter (3-bit Integer, x-bit decimal)