Mixer
BB AMP
BB LPF
ADC
Matching network
RF BPF
RF LNA
$\pi/2$
LO
ADC
Digital BB processing
Tone energy computation
LPF
$G(f_{m=1})$
$|\ |^2$
$G(f_{m=2})$
$|\ |^2$
+
Detection Metric Computation
Detection Results
Rx En. Computation