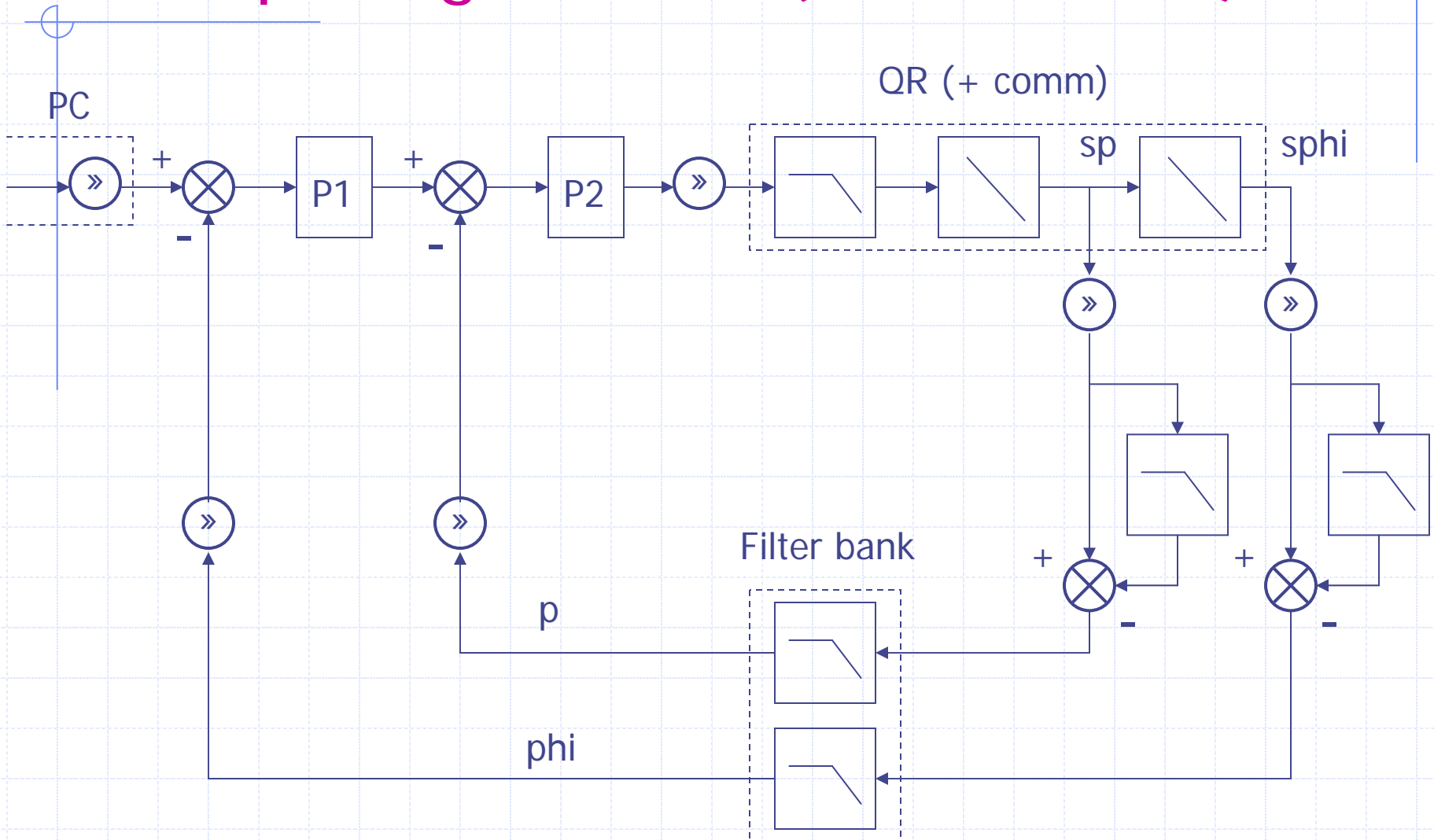


In4073
Embedded Real-Time Systems

System Integration

Example Signal Flow (Classic Filter)



Notes on Filtering

- ◆ Integer multiplication is fine on X32
- ◆ Classic filtering: trade-off noise vs. phase lag
- ◆ Kalman filter instead of filter bank
- ◆ Sufficient resolution, especially for gyro bias (b)
- ◆ Non-zero angle bias at standstill
- ◆ Timing: angle loop is target

Example Signal Flow (Kalman Filter)

