Common scheduling categories in control systems:

- **communication timing**
- **control timing**

Under special requirements, **oversampling timing** is also included for high-frequency signal acquisition, filtering, and detection.

In DL PEL-HIL development, we follow the following principles:

category	speed	Typically driven by	Note
communication timing	low	SCI RX interrupt	
control timing	normal	ePWM event + ADC interrupt	triangular carrier wave; sample the current at the carrier peak
oversampling timing (CPU highly loaded)	high	ePWM event + ADC interrupt	The sampling frequency must be an integer multiple of the control frequency

Hardware interrupts are used to ensure synchronization.

e.g. Speed-current dual-loop motor control