

Disadvantages of the *Super-Loop Concept*

Time-critical operations must be processed **within interrupts (ISR)**

ISR functions become complex and require long execution times

ISR nesting may create **unpredictable** execution time and stack requirements

Data exchange between *Super-Loop* and *ISR* is via ***global shared variables***

Application programmer must ensure data consistency

A Super-Loop can be easily synchronized with the System timer, but:

If a system requires several **different cycle times**, it is hard to implement

Split of time-consuming functions that exceed *Super-Loop cycle*

Creates software overhead and application program is **hard to understand**

Super-Loop applications become complex and therefore hard to extend

A **simple change may have unpredictable side effects**; such side effects are time consuming to analyze.