The Library SysLibTime.lib

If supported by the target system, the function blocks described below can be used to read the realtime clock of the local system. The processing is synchronous. The library is needed for displaying the task time evaluation in the Task Configuration editor in CoDeSys.

CurTime	provides the value of the realtime clock of the local system in milliseconds.
nd CurTimeEx	provides extended information on the current value of the realtime clock of the local system.
Used structures:	SystemTime, SysTime64

CurTime

This function block provides the realtime of the local system in microseconds; using the structure SysTime64.

VARINOUT Variable	Data type	Description
SystemTime	SysTime64	Realtime we are reading from the local system in microseconds, see structure SysTime64

CurTimeEx

This function block provides extended information on the realtime clock data of the local system.

VARINOUT Variable	Data type	Description
SystemTime	BOOL	Realtime we are reading from the local system in microseconds, see structure SysTime64
TimeDate	SystemTimeDate	Extended real time structure SystemTimeDate (see below) we are reading from the local system

Structure SystemTimeDate

This structure contains the following information on the realtime given by the local system clock. It is used by the function block CurTimeEx.

Component	Data type	Description
dwLowMSecs	DWORD	The realtime returned in microseconds, using a Low DWORD plus a High DWORD, see also structure SysTime64.
dwHighMsec	DWORD	
Year	UINT	Year, e.g. "2002"
Month	UINT	Month, e.g. "12"
Day	UINT	Day of month, e.g. "3"
Hour	UINT	Hour of the current day, e.g. "13"
Minute	UINT	Minutes of the current hour, e.g. "43"
Second	UINT	Seconds of the current minute, e.g. "15"
Milliseconds	UINT	Milliseconds of the current second, e.g. "649"
DayOfWeek	UINT	Day of the week, e.g. "2" (Sunday=0, Monday = 1…)

Structure SysTime64

This structure contains the realtime of the local system in microseconds. A Low- plus a High-DWORD are used for that purpose, thus 64 Bit are available. The structure is used by the function blocks CurTime and CurTimeEx.

Component	Data type	Description
ulLow	DWORD	Low DWORD of the realtime value (microseconds)
ulHigh	DWORD	High DWORD of the realtime value (microseconds)