VARIABLEN:

```
PROGRAM SerielleSchnittstelle

VAR
	xStartFunction : BOOL:= TRUE;
	iState : INT:=0;
	xTestDone : BOOL;(* True, when the test was done succesfully *)

	(* Settings to communicate with the COM Port *)
	aCom1Params : ARRAY [1..7] OF COM.PARAMETER;


	como1 : COM.Open;
	comc1 : COM.Close;
	comw1 : COM.Write;


	sWrite : STRING := 'r81';
	sRead : STRING(25);
	szRead : CAA.SIZE;

	xCom1OpenError : BOOL;
	xCom1CloseError : BOOL;
	xCom1WriteError : BOOL;

END_VAR




//This example shows the communication of two COM Ports with each other.
//The first one writes a string of characters, which is read by the second one.
//After successful execution, the two COM Ports are closed and the test is done.

IF xStartFunction THEN

	CASE iState OF
		0:	//The parameters are set for the COM Port
			aCom1Params[1].udiParameterId :=
COM.CAA_Parameter_Constants.udiPort;
			aCom1Params[1].udiValue := 1; // the correct Port should be adapted
			aCom1Params[2].udiParameterId :=
COM.CAA_Parameter_Constants.udiBaudrate;
			aCom1Params[2].udiValue := 19200;
			aCom1Params[3].udiParameterId :=
COM.CAA_Parameter_Constants.udiParity;
			aCom1Params[3].udiValue := INT_TO_UDINT(COM.PARITY.NONE);
			aCom1Params[4].udiParameterId :=
COM.CAA_Parameter_Constants.udiStopBits;
			aCom1Params[4].udiValue :=
INT_TO_UDINT(COM.STOPBIT.ONESTOPBIT);
```

```
                    aCom1Params[5].udiParameterId :=
COM.CAA_Parameter_Constants.udiTimeout;
                    aCom1Params[5].udiValue := 0;
                    aCom1Params[6].udiParameterId :=
COM.CAA_Parameter_Constants.udiByteSize;
                    aCom1Params[6].udiValue := 8;
                    aCom1Params[7].udiParameterId :=
COM.CAA_Parameter_Constants.udiBinary;
                    aCom1Params[7].udiValue := 0;

                    //The first Port is opened with the given parameters
                    como1(xExecute := TRUE,
usiListLength:=SIZEOF(aCom1Params)/SIZEOF(COM.PARAMETER),pParameterList:=
ADR(aCom1Params));

                    iState := 10;




            10: // the write process is started for the first port
                comw1(xExecute := TRUE,hCom:= como1.hCom,pBuffer:=
ADR(sWrite),szSize:= SIZEOF(sWrite));

                    iState := 25;




            25: // The first port is closed and the used handle released
                    comc1(xExecute := TRUE, hCom:= como1.hCom);


                    iState := 0;


        ELSE
                iState := 0;
        END_CASE

END_IF
```

CODESYSControl.cfg

```
pi@Hezi20: ~
Datei  Bearbeiten  Reiter  Hilfe
 GNU nano 2.2.6                                  Datei: /etc/CODESYSControl.cfg

[SysFile]
FilePath.1=/etc/, 3S.dat
PlcLogicPrefix=1

[CmpLog]
Logger.0.Name=/tmp/codesyscontrol.log
Logger.0.Filter=0x0000000F
Logger.0.Enable=1
Logger.0.MaxEntries=1000
Logger.0.MaxFileSize=1000000
Logger.0.MaxFiles=1
Logger.0.Backend.0.ClassId=0x00000104 ;writes logger messages in a file
Logger.0.Type=0x314 ;Set the timestamp to RTC

[CmpSettings]
FileReference.0=SysFileMap.cfg, SysFileMap
FileReference.1=/etc/CODESYSControl_User.cfg

[SysExcept]
Linux.DisableFpuOverflowException=1
Linux.DisableFpuUnderflowException=1
Linux.DisableFpuInvalidOperationException=1

[CmpBACnet]
IniFile=bacstacd.ini

[CmpWebServer]
ConnectionType=0

[CmpOpenSSL]
WebServer.Cert=server.cer
WebServer.PrivateKey=server.key
WebServer.CipherList=HIGH

[SysMem]
Linux.Memlock=0

[CmpCodeMeter]
InitLicenseFile.0=3SLicense.wbb

[SysEthernet]
Linux.ProtocolFilter=3

[CmpSchedule]
ProcessorLoad.Enable=1
ProcessorLoad.Maximum=95
ProcessorLoad.Interval=5000
DisableOmittedCycleWatchdog=1

##BJ: 07.08.2018 : USB nach Serielle Schnittstelle in CodeSys einbinden
[SysCom]
;Linux.Devicefile=/dev/ttyACM
;portnum:=COM.SysCom.SYS_COMPORT1
```

Unter Linux kann ich die Relais schon steuern!

```
Datei  Bearbeiten  Reiter  Hilfe
pi@Hezi20:~ $ stty -F /dev/ttyACM0
speed 9600 baud; line = 0;
-brkint -imaxbel
pi@Hezi20:~ $ stty -F /dev/ttyACM0 19200
pi@Hezi20:~ $ echo "r81" > /dev/ttyACM0
pi@Hezi20:~ $ echo "r80" > /dev/ttyACM0
pi@Hezi20:~ $
```

Mit:echo „r81“ > /dev/ttyACM0
schaltet das Relay8!!