PLC_1 [CPU 1214C DC/DC/DC]

PLC_1			
Project information			
Name	PLC_1	**Author**	Mali
Comment		**Slot**	1
Rack	0		
Catalog information			
Short designation	CPU 1214C DC/DC/DC	**Description**	Work memory 75 KB; 24VDC power supply with DI14 x 24VDC SINK/ SOURCE, DQ10 x 24VDC and AI2 on board; 6 high-speed counters and 4 pulse outputs on board; signal board expands on-board I/O; up to 3 communication modules for serial communication; up to 8 signal modules for I/O expansion; 0.04 ms/1000 instructions; PROFINET interface for programming, HMI and PLC-to-PLC communication
Article number	6ES7 214-1AG40-0XB0	**Firmware version**	V4.0
Connection resources			
PG communication:	1	**OP communication:**	1
S7 basic communication:	0	**S7 communication:**	0
Maximum number of S7 connection resources:	38		
Overview of addresses\Overview of addresses\Overview of addresses			
Inputs	True	**Outputs**	True
Address gaps	False	**Slot**	True

Type	Addr. from	Addr. to	Module	PIP	Device name	Device number	Size	Master / IO system	Rack	Slot
I	0	1	DI 14/DQ 10_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 1
O	0	1	DI 14/DQ 10_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 1
I	64	67	AI 2_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 2
I	1000	1003	HSC_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 16
I	1004	1007	HSC_2	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 17
I	1008	1011	HSC_3	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 18
I	1012	1015	HSC_4	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 19
I	1016	1019	HSC_5	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 20
I	1020	1023	HSC_6	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 21
O	1000	1001	Pulse_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 32
O	1002	1003	Pulse_2	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 33
O	1004	1005	Pulse_3	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 34
O	1006	1007	Pulse_4	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 35
I	68	131	DI 64 bytes_1	Automatic update	RobotBasi-cIO [BASIC V1.4]	1	64 Bytes	PROFINET IO-System [100]	0	1
O	132	195	DO 64 bytes_1	Automatic update	RobotBasi-cIO [BASIC V1.4]	1	64 Bytes	PROFINET IO-System [100]	0	2

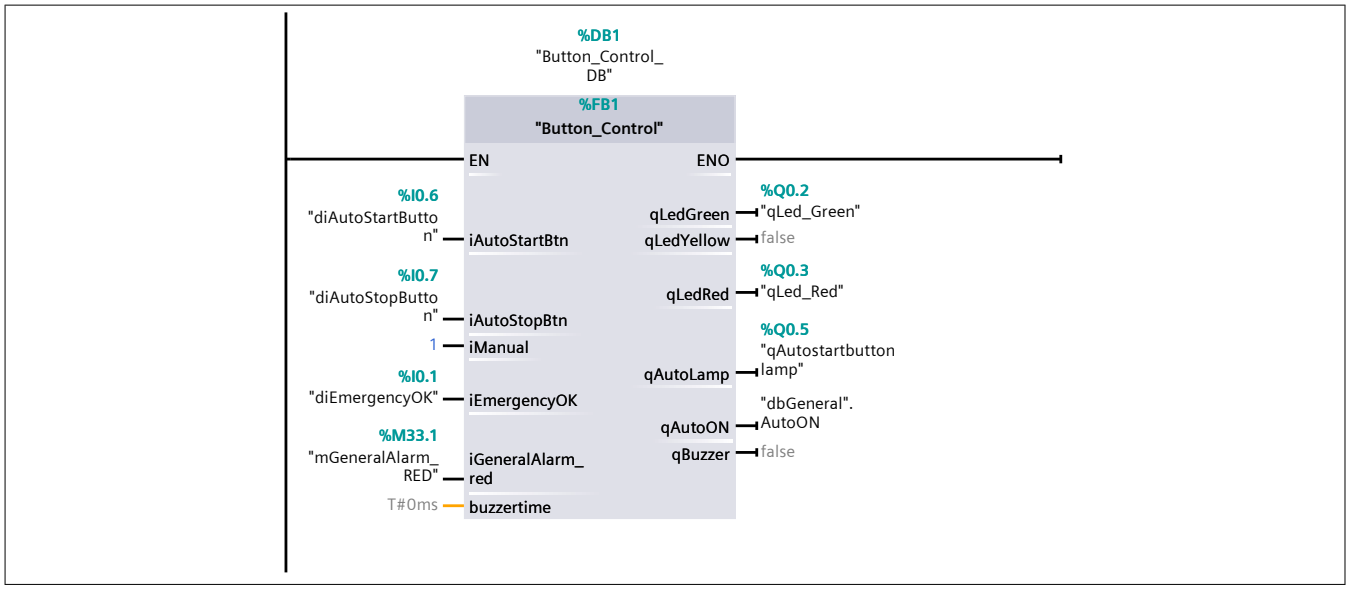
PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

Main [OB1]

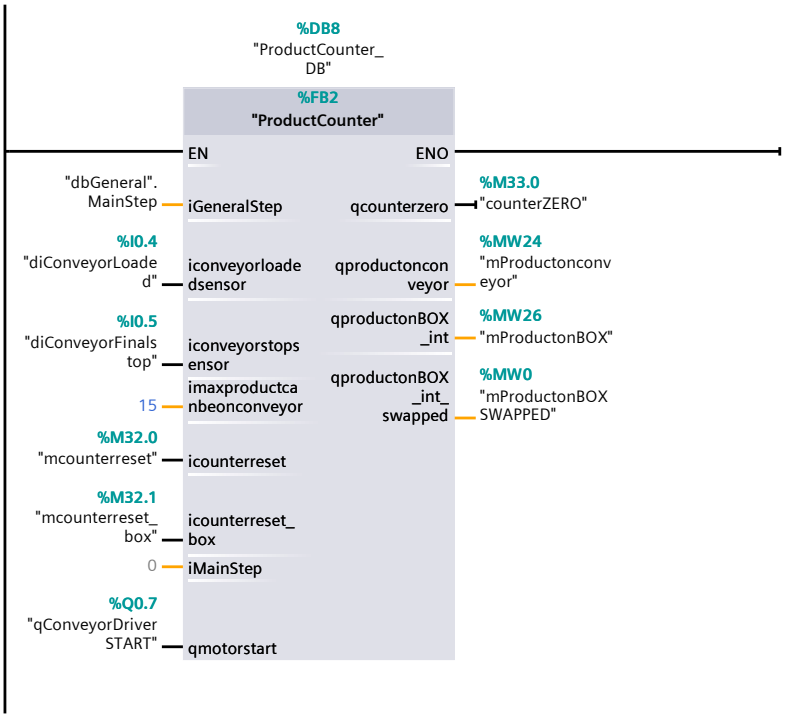
Main Properties					
General					
Name	Main	**Number**	1	**Type**	OB
Language	LAD	**Numbering**	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Default value
Input		
Initial_Call	Bool	
Remanence	Bool	
Temp		
Constant		

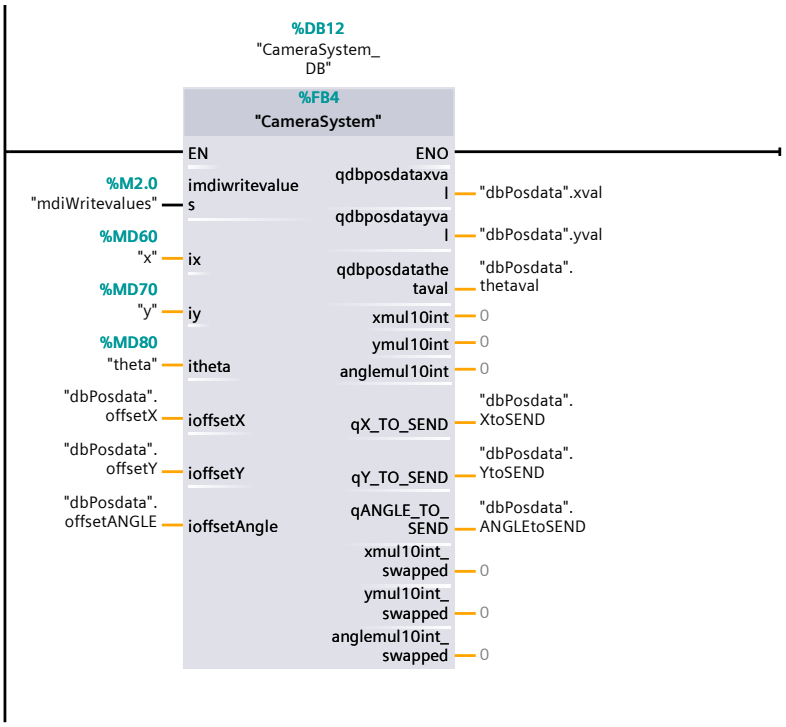
Network 1: BUTTON CONTROL



Network 2: PRODUCT ON CONVEYOR



Network 3: CAMERA SYSTEM

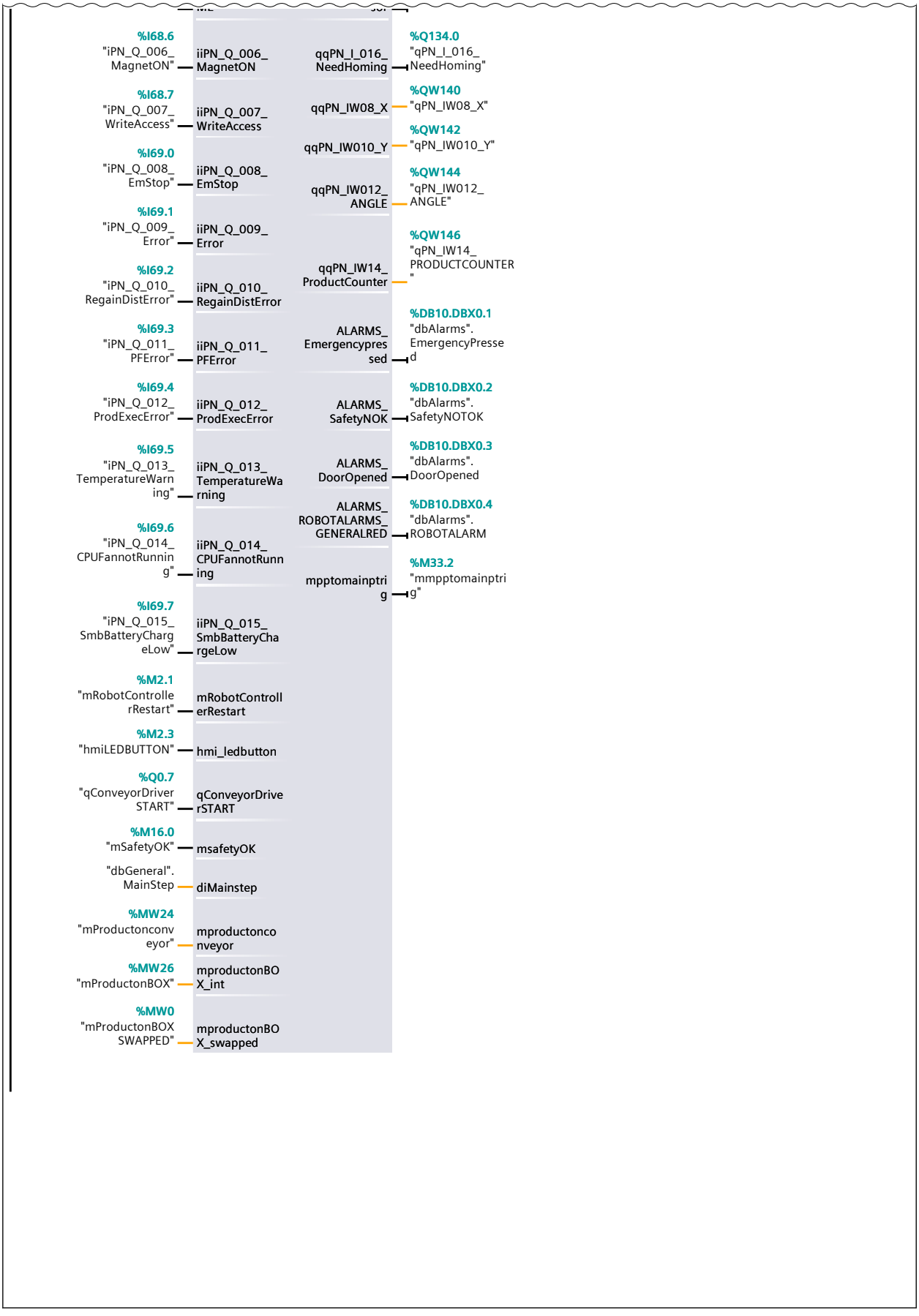


Network 4: MAIN SYSTEM

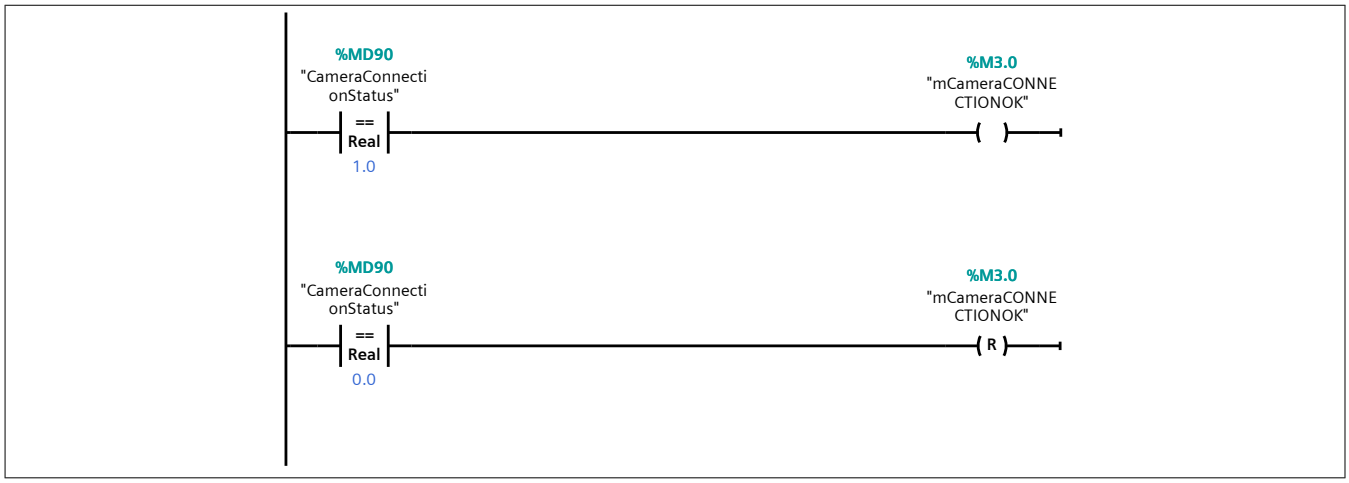
Network 4: MAIN SYSTEM (1.1 / 2.1)

Network 4: MAIN SYSTEM (2.1 / 2.1)

1.1 (Page2 - 3)



Network 5: bu


%MD90
"CameraConnecti
onStatus"
==
Real
1.0
%M3.0
"mCameraCONNE
CTIONOK"
%MD90
"CameraConnecti
onStatus"
==
Real
0.0
%M3.0
"mCameraCONNE
CTIONOK"
R

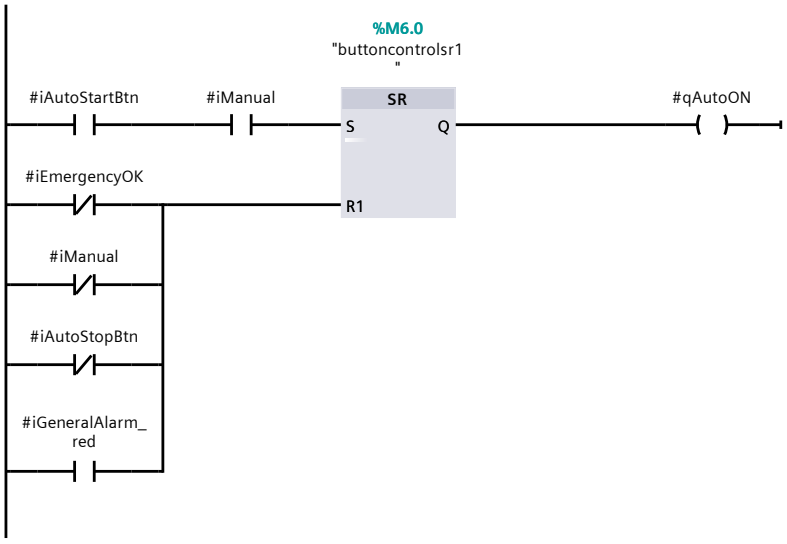
PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

Button_Control [FB1]

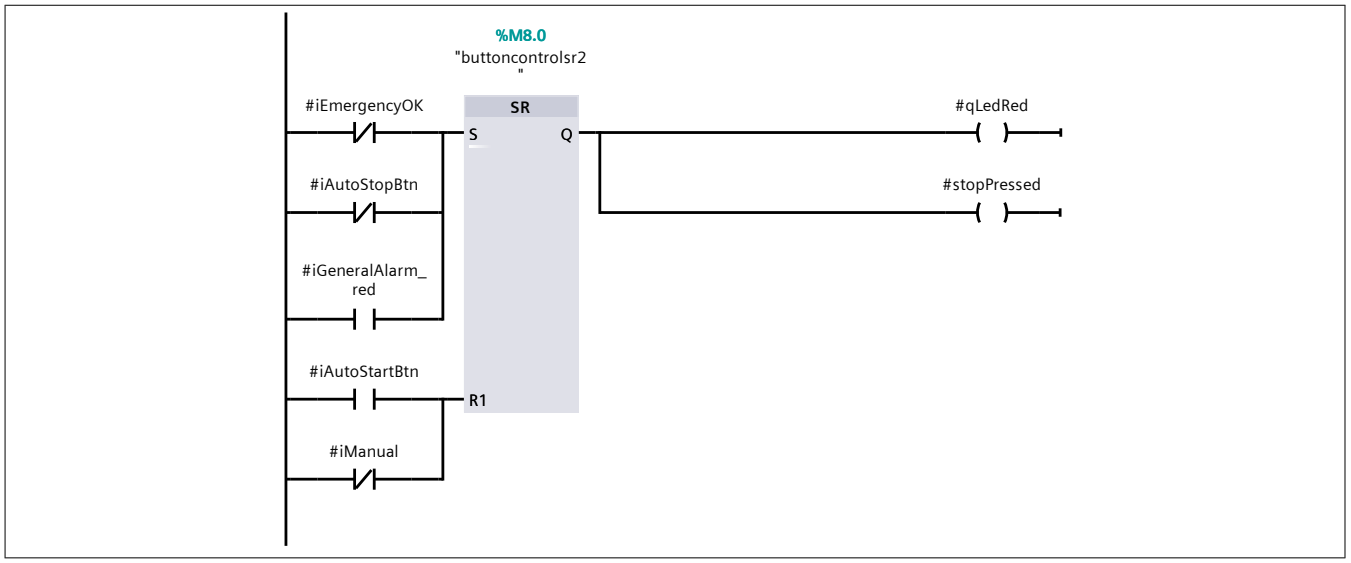
Button_Control Properties					
General					
Name	Button_Control	**Number**	1	**Type**	FB
Language	LAD	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Default value	Retain
▼ Input			
iAutoStartBtn	Bool	false	Non-retain
iAutoStopBtn	Bool	false	Non-retain
iManual	Bool	false	Non-retain
iEmergencyOK	Bool	false	Non-retain
iGeneralAlarm_red	Bool	false	Non-retain
buzzertime	Time	T#0ms	Non-retain
▼ Output			
qLedGreen	Bool	false	Non-retain
qLedYellow	Bool	false	Non-retain
qLedRed	Bool	false	Non-retain
qAutoLamp	Bool	false	Non-retain
qAutoON	Bool	false	Non-retain
qBuzzer	Bool	false	Non-retain
InOut			
▼ Static			
stopPressed	Bool	false	Non-retain
Temp			
Constant			

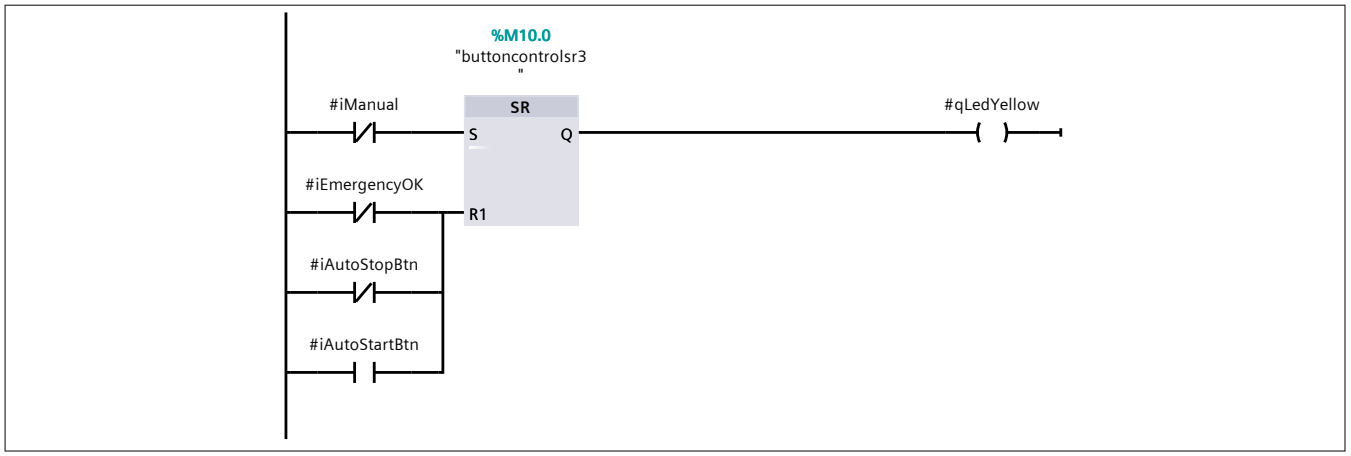
Network 1:



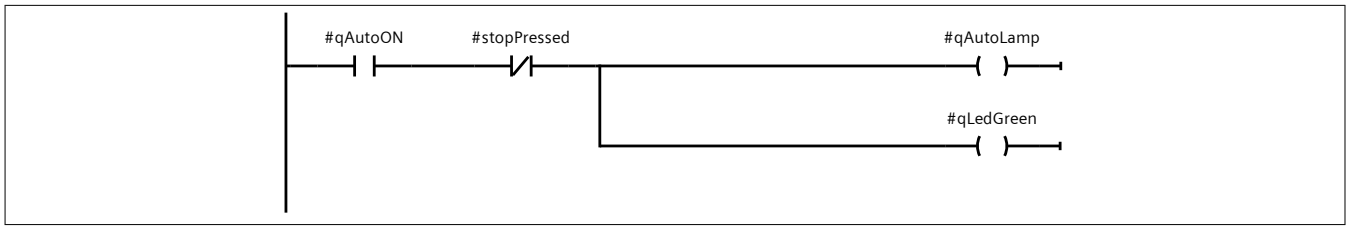
Network 2:



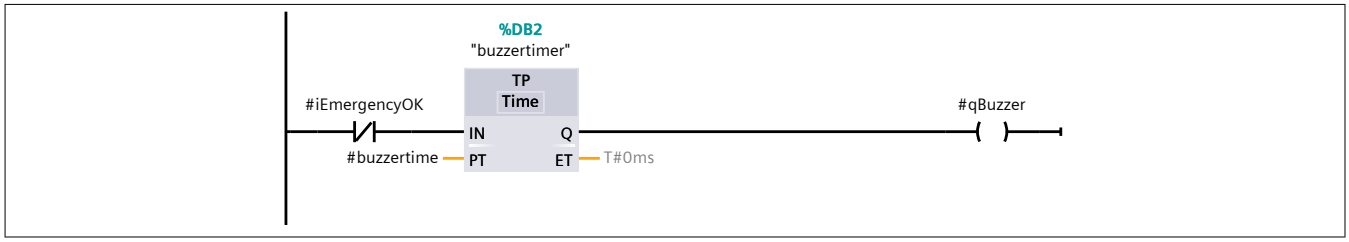
Network 3:



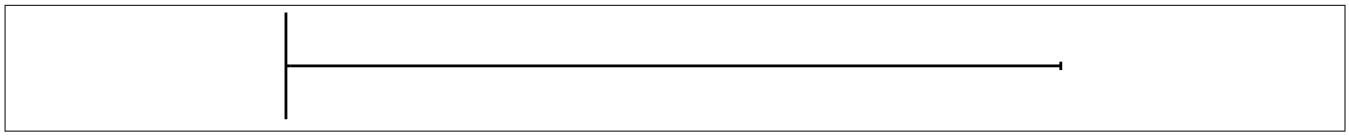
Network 4:



Network 5:


%DB2
"buzzertimer"
TP
Time
#iEmergencyOK
IN
Q
#buzzertime
PT
ET
T#0ms
#qBuzzer

Network 7:



PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

dbPosdata [DB3]

dbPosdata Properties					
General					
Name	dbPosdata	**Number**	3	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Start value	Retain
▼ Static			
xval	Real	0.0	False
yval	Real	0.0	False
thetaval	Real	0.0	False
offsetX	Real	0.0	False
offsetY	Real	0.0	False
offsetANGLE	Real	0.0	False
XtoSEND	Int	0	False
YtoSEND	Int	0	False
ANGLEtoSEND	Int	0	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

Button_Control_DB [DB1]

Button_Control_DB Properties					
General					
Name	Button_Control_DB	**Number**	1	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Start value	Retain
▼ Input			
iAutoStartBtn	Bool	false	False
iAutoStopBtn	Bool	false	False
iManual	Bool	false	False
iEmergencyOK	Bool	false	False
iGeneralAlarm_red	Bool	false	False
buzzertime	Time	T#0ms	False
▼ Output			
qLedGreen	Bool	false	False
qLedYellow	Bool	false	False
qLedRed	Bool	false	False
qAutoLamp	Bool	false	False
qAutoON	Bool	false	False
qBuzzer	Bool	false	False
InOut			
▼ Static			
stopPressed	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

dbGeneral [DB4]

dbGeneral Properties					
General					
Name	dbGeneral	**Number**	4	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Start value	Retain
▼ Static			
MainStep	Int	0	False
AutoON	Bool	false	False
Sendagaintime	Time	T#2S	False

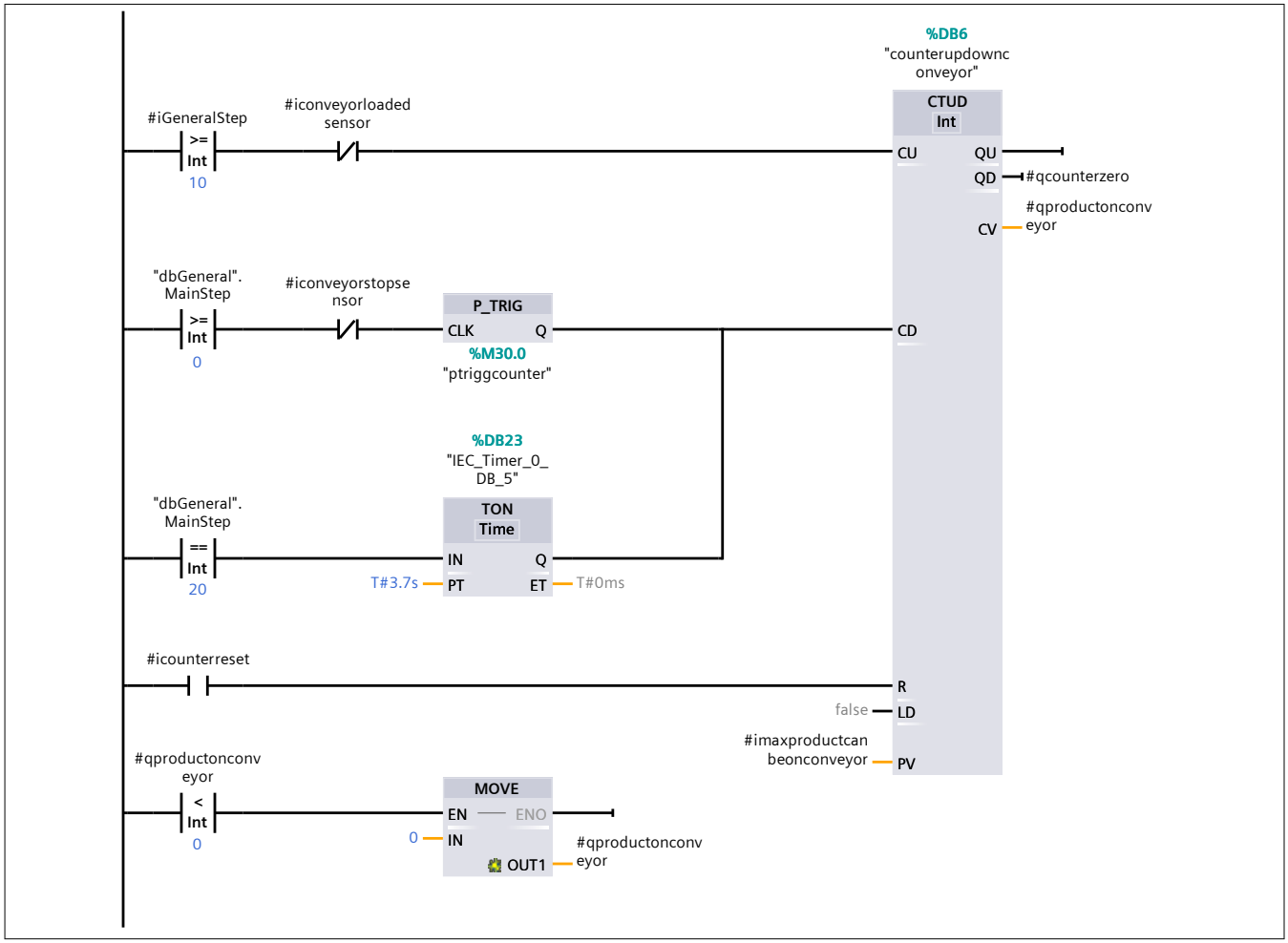
PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

ProductCounter [FB2]

ProductCounter Properties					
General					
Name	ProductCounter	**Number**	2	**Type**	FB
Language	LAD	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

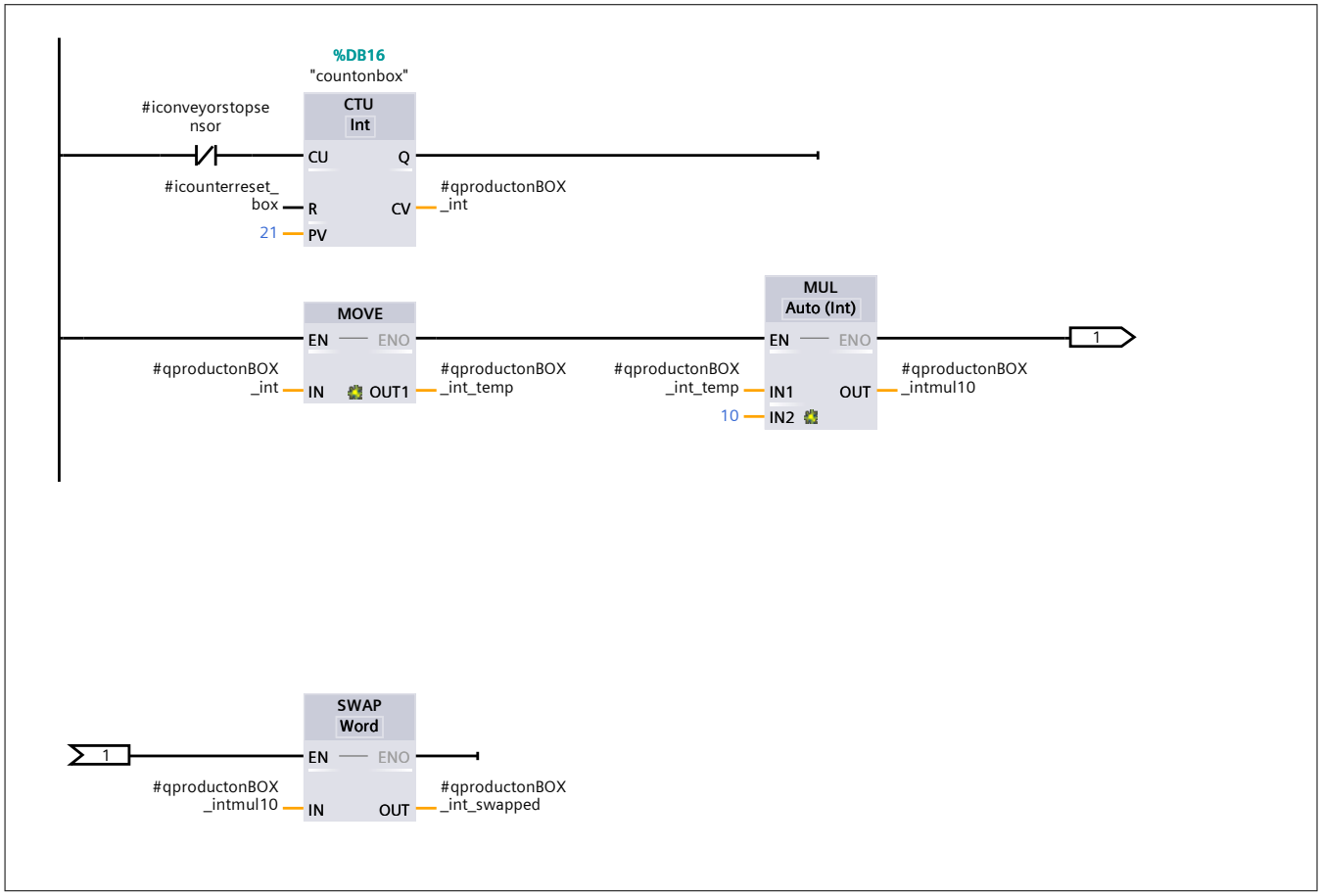
Name	Data type	Default value	Retain
▼ Input			
iGeneralStep	Int	0	Non-retain
iconveyorloadedsensor	Bool	false	Non-retain
iconveyorstopsensor	Bool	false	Non-retain
imaxproductcanbeonconveyor	Int	0	Non-retain
icounterreset	Bool	false	Non-retain
icounterreset_box	Bool	false	Non-retain
iMainStep	Int	0	Non-retain
▼ Output			
qcounterzero	Bool	false	Non-retain
qproductonconveyor	Int	0	Non-retain
qproductonBOX_int	Int	0	Non-retain
qproductonBOX_int_swapped	Int	0	Non-retain
▼ InOut			
qmotorstart	Bool	false	Non-retain
Static			
▼ Temp			
qproductonBOX_intmul10	Int		
qproductonBOX_int_temp	Int		
qproductonBOX_int_beforetemp	Int		
partsensed	Bool		
Constant			

Network 1:

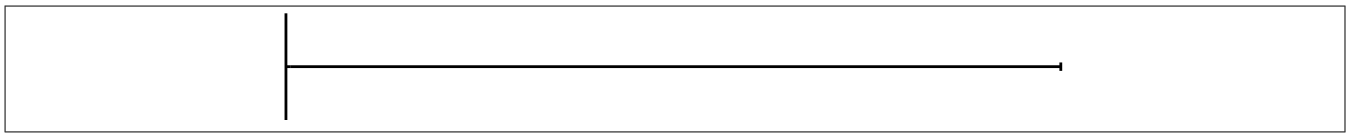

%DB6
"counterupdownc
onveyor"
CTUD
Int
#iGeneralStep
>=
Int
10
#iconveyorloaded
sensor
CU
QU
QD
#qcounterzero
CV
#qproductconv
eyor
"dbGeneral".
MainStep
>=
Int
0
#iconveyorstopse
nsor
P_TRIG
CLK
Q
%M30.0
"ptriggcounter"
CD
%DB23
"IEC_Timer_0_
DB_5"
"dbGeneral".
MainStep
==
Int
20
TON
Time
IN
Q
T#3.7s
PT
ET
T#0ms
#icounterreset
R
false
LD
#imaxproductcan
beonconveyor
PV
#qproductconv
eyor
<
Int
0
MOVE
EN
ENO
0
IN
OUT1
#qproductconv
eyor

Network 2:

Network 2:



Network 3:



PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

ProductCounter_DB [DB8]

ProductCounter_DB Properties					
General					
Name	ProductCounter_DB	**Number**	8	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Start value	Retain
▼ Input			
iGeneralStep	Int	0	False
iconveyorloadedsensor	Bool	false	False
iconveyorstopsensor	Bool	false	False
imaxproductcanbeonconveyor	Int	0	False
icounterreset	Bool	false	False
icounterreset_box	Bool	false	False
iMainStep	Int	0	False
▼ Output			
qcounterzero	Bool	false	False
qproductonconveyor	Int	0	False
qproductonBOX_int	Int	0	False
qproductonBOX_int_swapped	Int	0	False
▼ InOut			
qmotorstart	Bool	false	False
Static			

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

dbAlarms [DB10]

dbAlarms Properties					
General					
Name	dbAlarms	**Number**	10	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Start value	Retain
▼ Static			
CameraConnectionLOST	Bool	false	False
EmergencyPressed	Bool	false	False
SafetyNOTOK	Bool	false	False
DoorOpened	Bool	false	False
ROBOTALARM	Bool	false	False
rzv5	Bool	false	False
rzv6	Bool	false	False
rzv7	Bool	false	False
rzv8	Bool	false	False
rzv9	Bool	false	False
rzv10	Bool	false	False
rzv11	Bool	false	False
rzv12	Bool	false	False
rzv13	Bool	false	False
rzv14	Bool	false	False
rzv15	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

MainSystem [FB3]

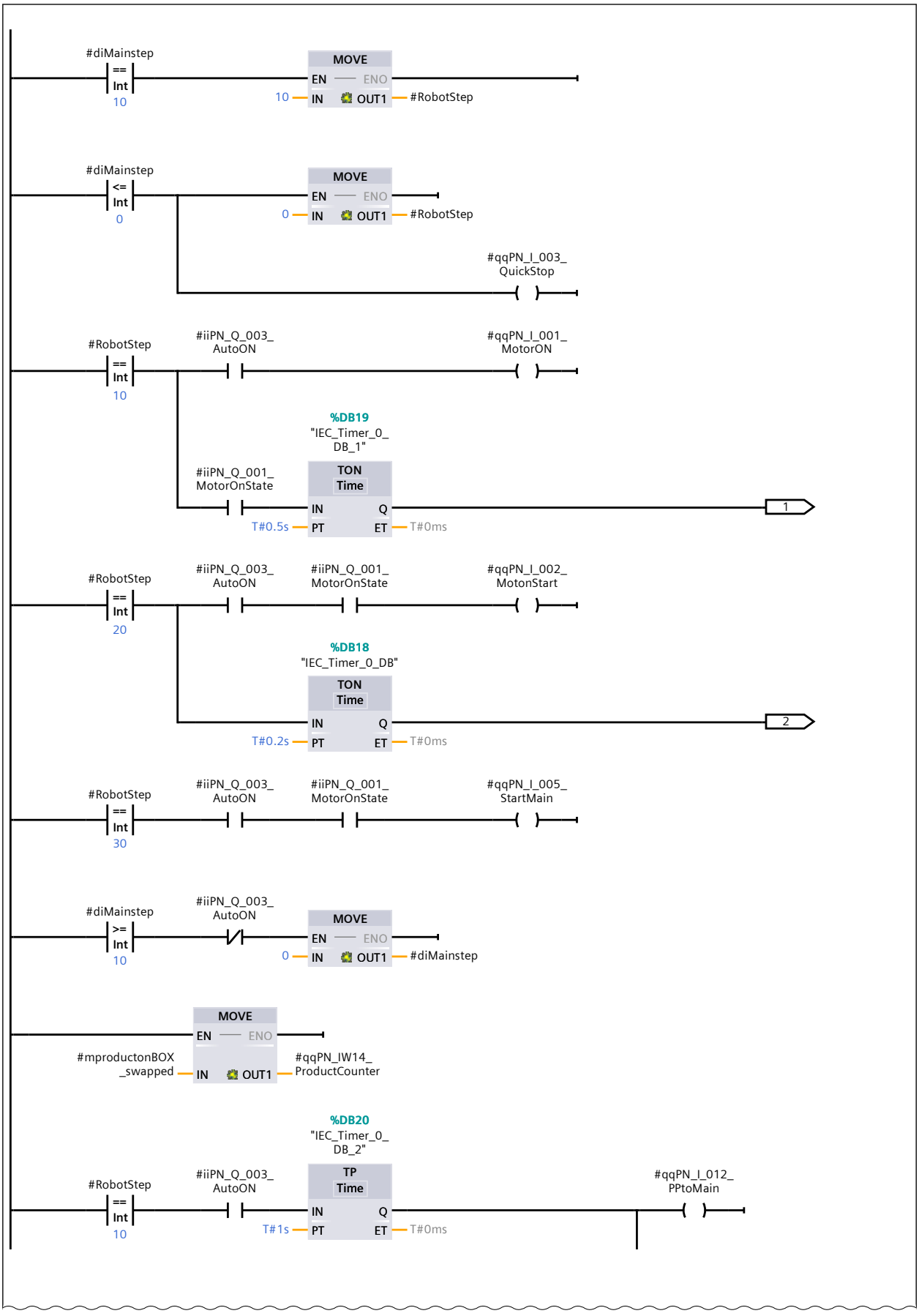
MainSystem Properties					
General					
Name	MainSystem	**Number**	3	**Type**	FB
Language	LAD	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Default value	Retain
▼ Input			
diConveyorDriverOK	Bool	false	Non-retain
mCameraconnectionOK	Bool	false	Non-retain
diEmergencyOK	Bool	false	Non-retain
diDoorSwitchOK	Bool	false	Non-retain
diRobothandPartsensor	Bool	false	Non-retain
diConveyorLoaded	Bool	false	Non-retain
diConveyorFinalstop	Bool	false	Non-retain
diAutoStartButton	Bool	false	Non-retain
diAutoStopButton	Bool	false	Non-retain
diResetButon	Bool	false	Non-retain
mHMIResetbutton	Bool	false	Non-retain
diXtoSEND	Int	0	Non-retain
diYtoSEND	Int	0	Non-retain
diANGLEtoSEND	Int	0	Non-retain
iHMİrobotgoHome	Bool	false	Non-retain
iiPN_Q_000_MotorOffState	Bool	false	Non-retain
iiPN_Q_001_MotorOnState	Bool	false	Non-retain
iiPN_Q_002_RunchainOk	Bool	false	Non-retain
iiPN_Q_003_AutoON	Bool	false	Non-retain
iiPN_Q_004_TaskExecuting	Bool	false	Non-retain
iiPN_Q_005_RobotReadyHOME	Bool	false	Non-retain
iiPN_Q_006_MagnetON	Bool	false	Non-retain
iiPN_Q_007_WriteAccess	Bool	false	Non-retain
iiPN_Q_008_EmStop	Bool	false	Non-retain
iiPN_Q_009_Error	Bool	false	Non-retain
iiPN_Q_010_RegainDistError	Bool	false	Non-retain
iiPN_Q_011_PFError	Bool	false	Non-retain
iiPN_Q_012_ProdExecError	Bool	false	Non-retain
iiPN_Q_013_TemperatureWarning	Bool	false	Non-retain
iiPN_Q_014_CPUFannotRunning	Bool	false	Non-retain
iiPN_Q_015_SmbBatteryChargeLow	Bool	false	Non-retain
mRobotControllerRestart	Bool	false	Non-retain
hmi_ledbutton	Bool	false	Non-retain
▼ Output			
qLightningLeds	Bool	false	Non-retain
qConveyorDriverRESET	Bool	false	Non-retain
qRobotMagnetSTART	Bool	false	Non-retain
qSenttocamerapermissionOK	Int	0	Non-retain

Name	Data type	Default value	Retain
qqPN_I_000_MotorOff	Bool	false	Non-retain
qqPN_I_001_MotorON	Bool	false	Non-retain
qqPN_I_002_MotonStart	Bool	false	Non-retain
qqPN_I_003_QuickStop	Bool	false	Non-retain
qqPN_I_004_Start	Bool	false	Non-retain
qqPN_I_005_StartMain	Bool	false	Non-retain
qqPN_I_006_Stop	Bool	false	Non-retain
qqPN_I_007_StopCycle	Bool	false	Non-retain
qqPN_I_008_ResetEstop	Bool	false	Non-retain
qqPN_I_009_ResetError	Bool	false	Non-retain
qqPN_I_010_SYSReset	Bool	false	Non-retain
qqPN_I_011_WriteAccess	Bool	false	Non-retain
qqPN_I_012_PPtoMain	Bool	false	Non-retain
qqPN_I_013_RobotCanStart	Bool	false	Non-retain
qqPN_I_014_Reset	Bool	false	Non-retain
qqPN_I_015_RobotHandSensor	Bool	false	Non-retain
qqPN_I_016_NeedHoming	Bool	false	Non-retain
qqPN_IW08_X	Int	0	Non-retain
qqPN_IW010_Y	Int	0	Non-retain
qqPN_IW012_ANGLE	Int	0	Non-retain
qqPN_IW14_ProductCounter	Int	0	Non-retain
ALARMS_Emergencypressed	Bool	false	Non-retain
ALARMS_SafetyNOK	Bool	false	Non-retain
ALARMS_DoorOpened	Bool	false	Non-retain
ALARMS_ROBOTALARMS_GENER-ALRED	Bool	false	Non-retain
mpptomainptrig	Bool	false	Non-retain
▼ InOut			
qConveyorDriverSTART	Bool	false	Non-retain
msafetyOK	Bool	false	Non-retain
diMainstep	Int	0	Non-retain
mproductonconveyor	Int	0	Non-retain
mproductonBOX_int	Int	0	Non-retain
mproductonBOX_swapped	Int	0	Non-retain
▼ Static			
RobotStep	Int	0	Non-retain
Temp			
Constant			

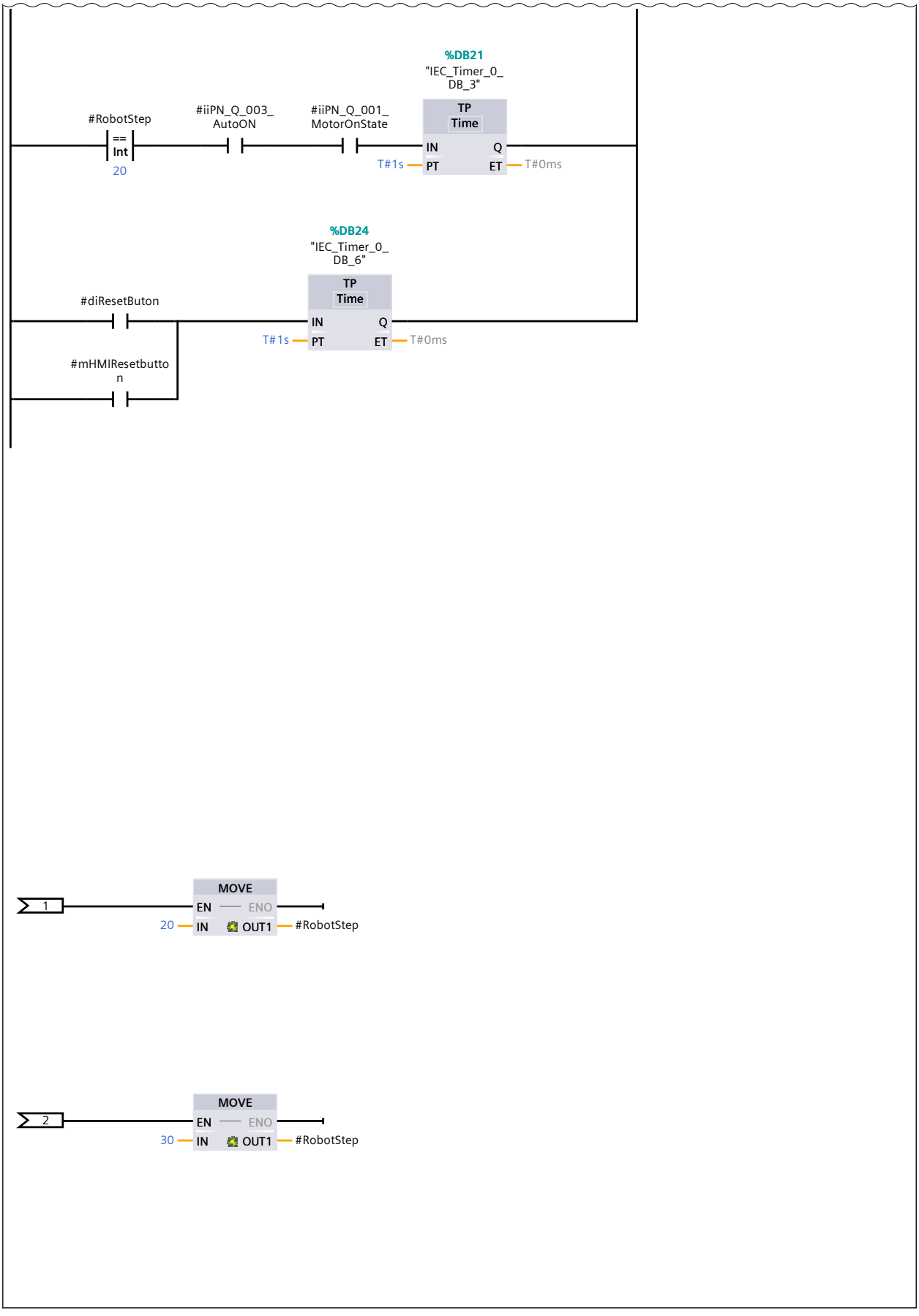
Network 1: ROBOT

Network 1: ROBOT (1.1 / 2.1)

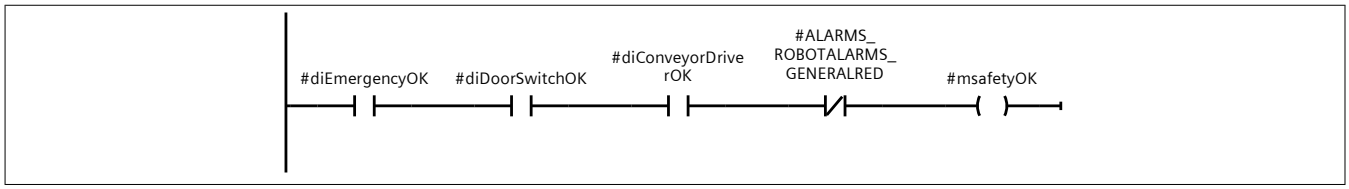


Network 1: ROBOT (2.1 / 2.1)

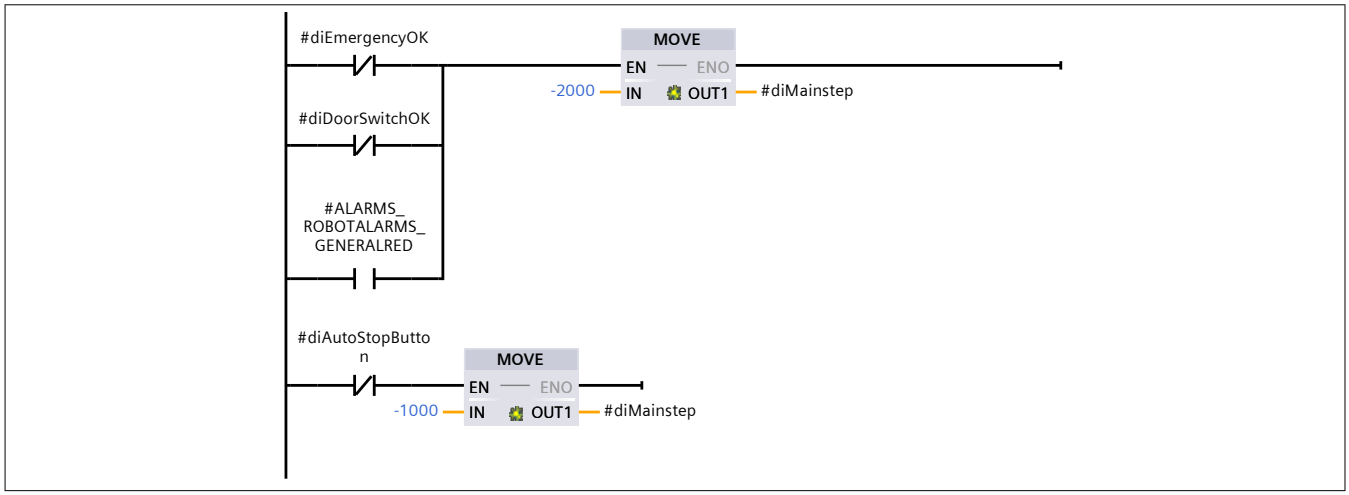
1.1 (Page10 - 3)



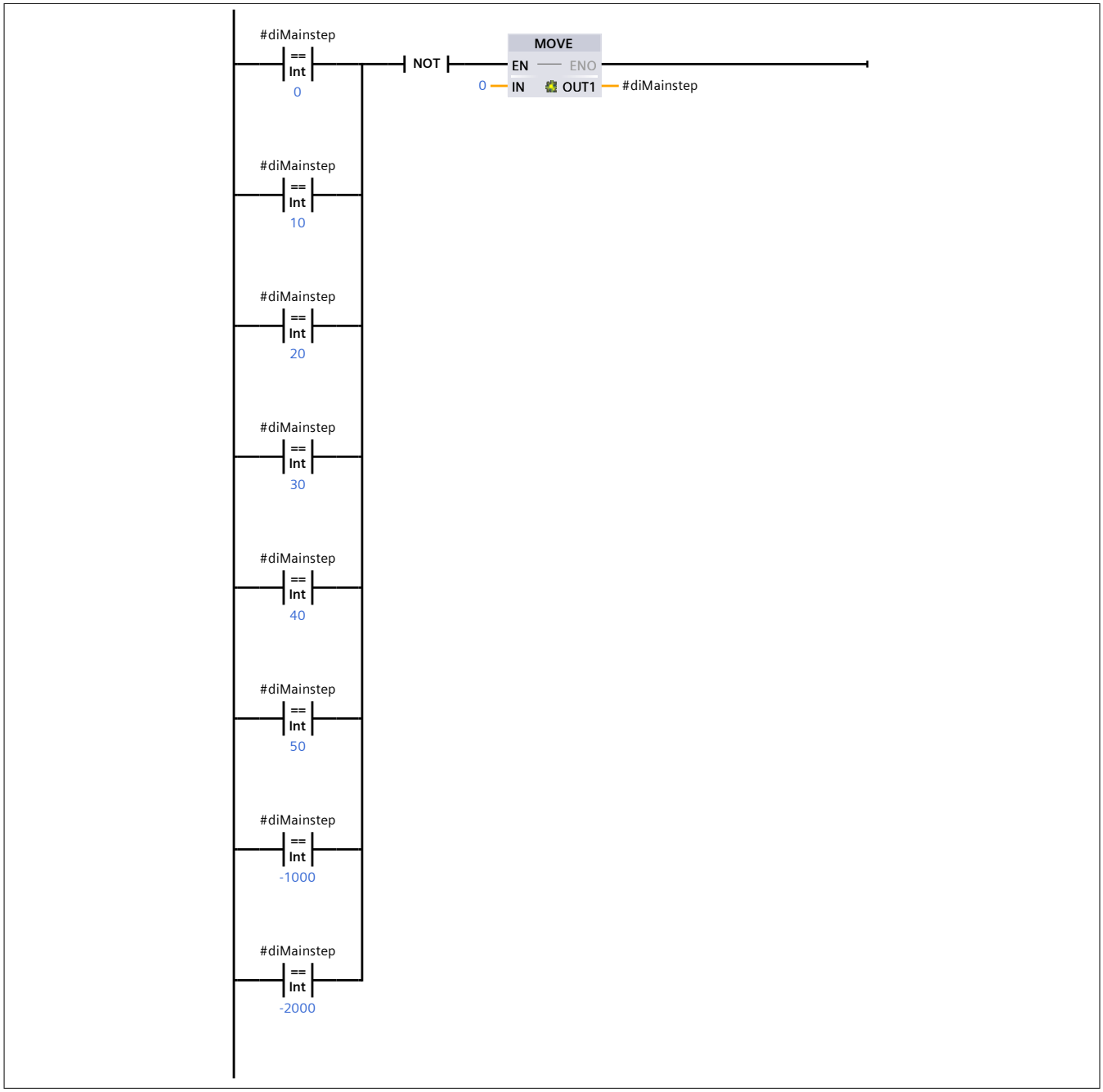
Network 2:



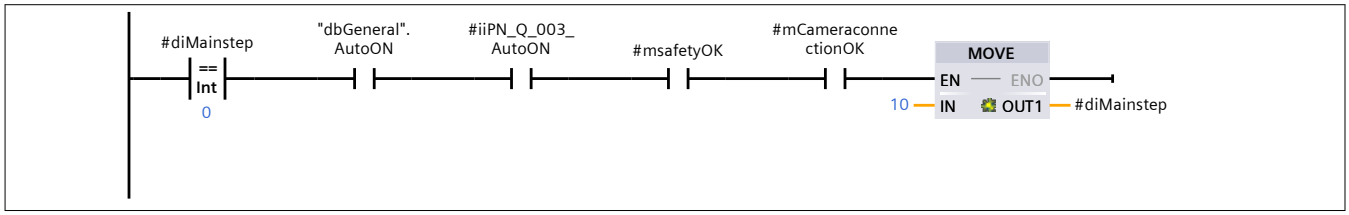
Network 3:



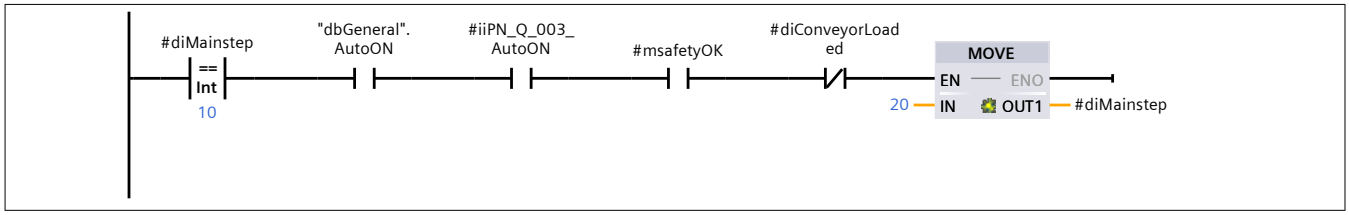
Network 4:



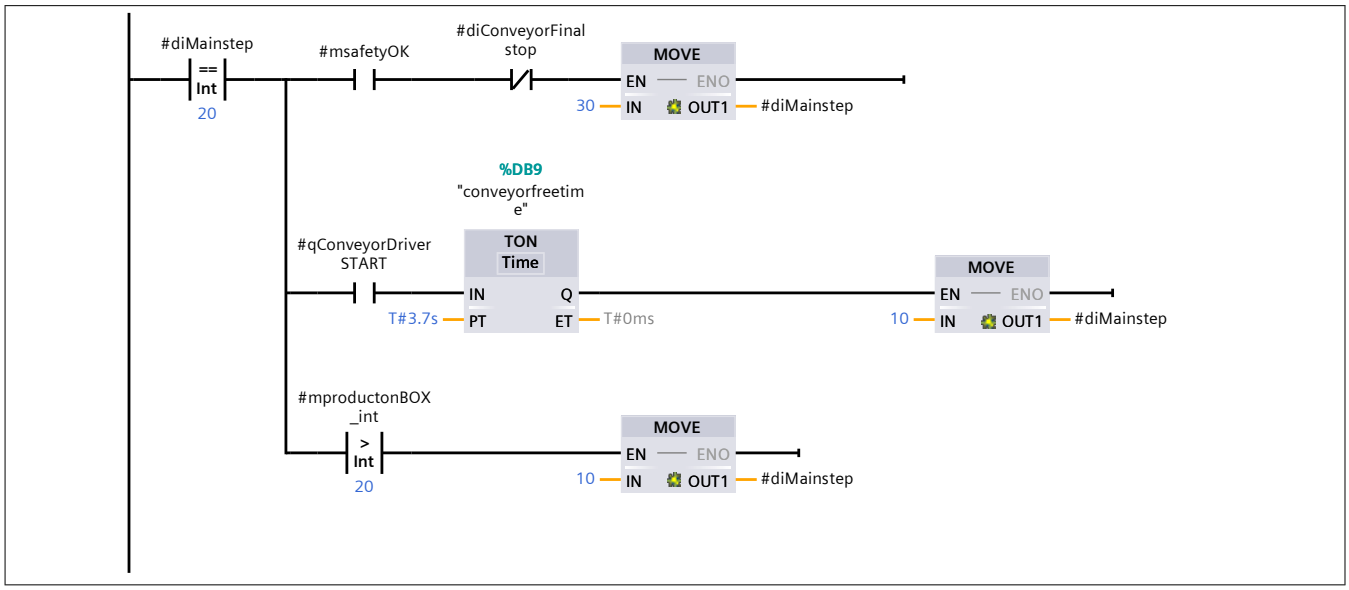
Network 5: oto basılınca 10 a geç



Network 6: ürün gelince 20 ye geç

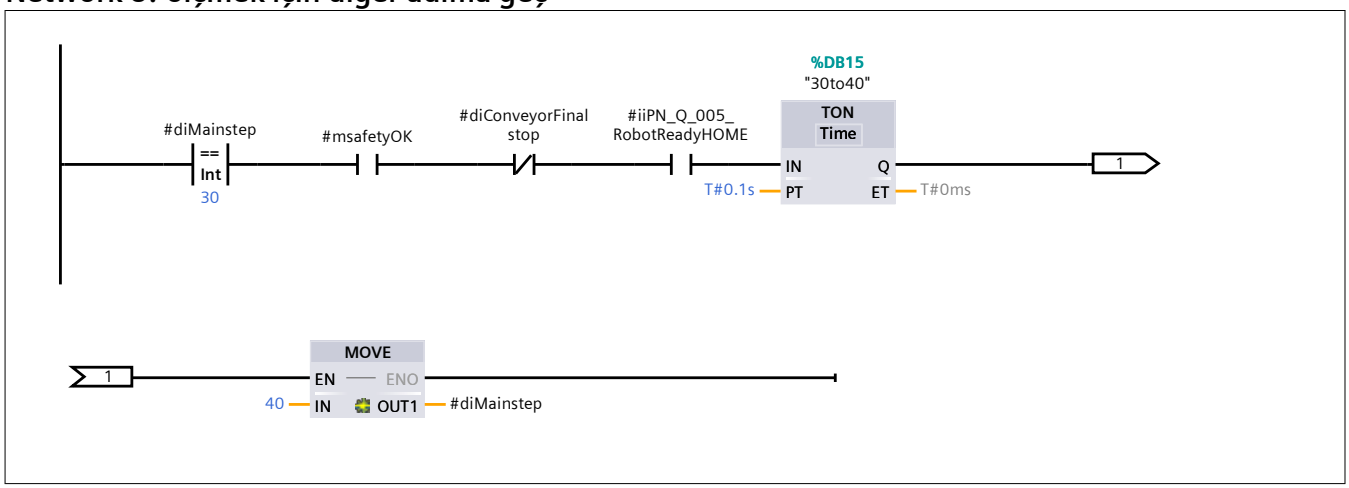


Network 7: robotun oraya ürün gelince 30 a geç

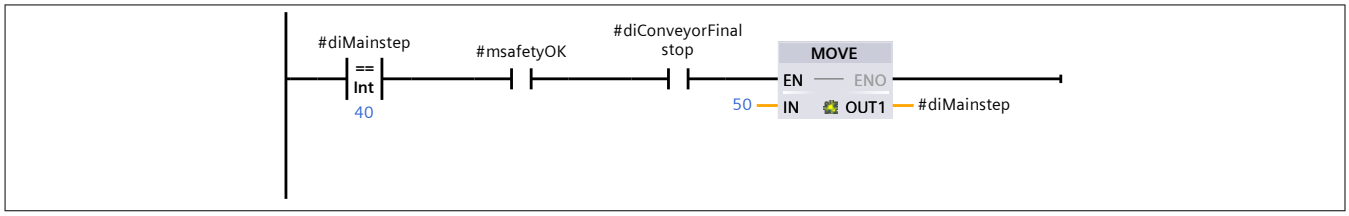


Network 8: ölçmek için diğer adıma geç

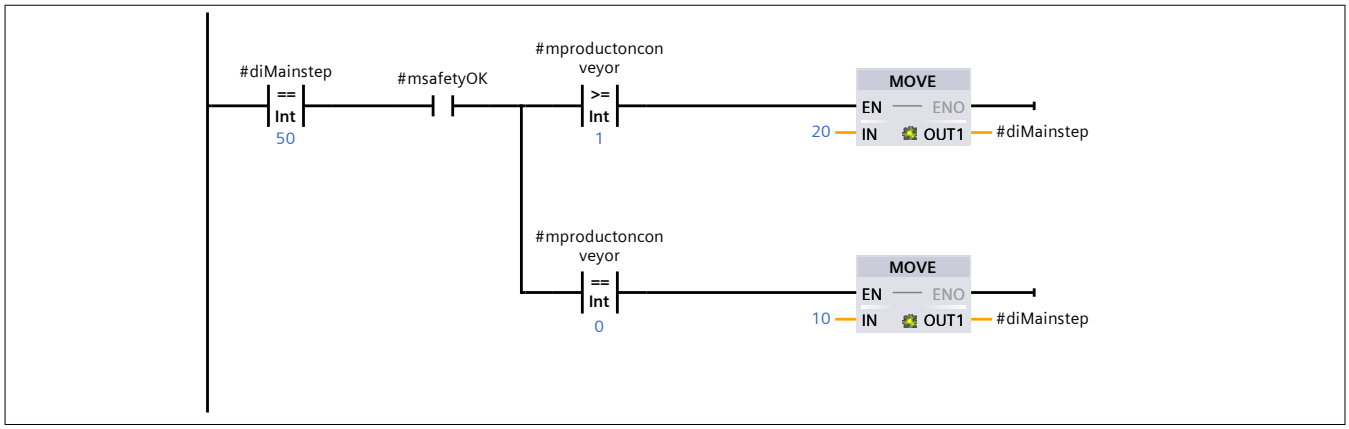
Network 8: ölçmek için diğer adıma geç



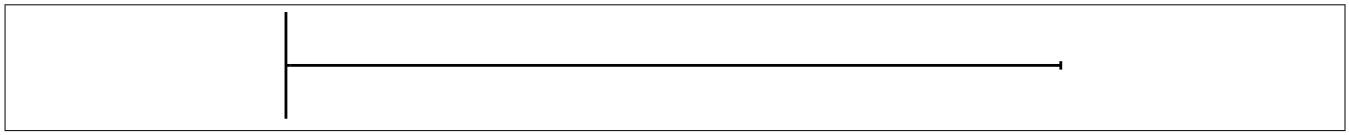
Network 9: değerler gonderildi ve sensor tekrar gördü ürün gitti



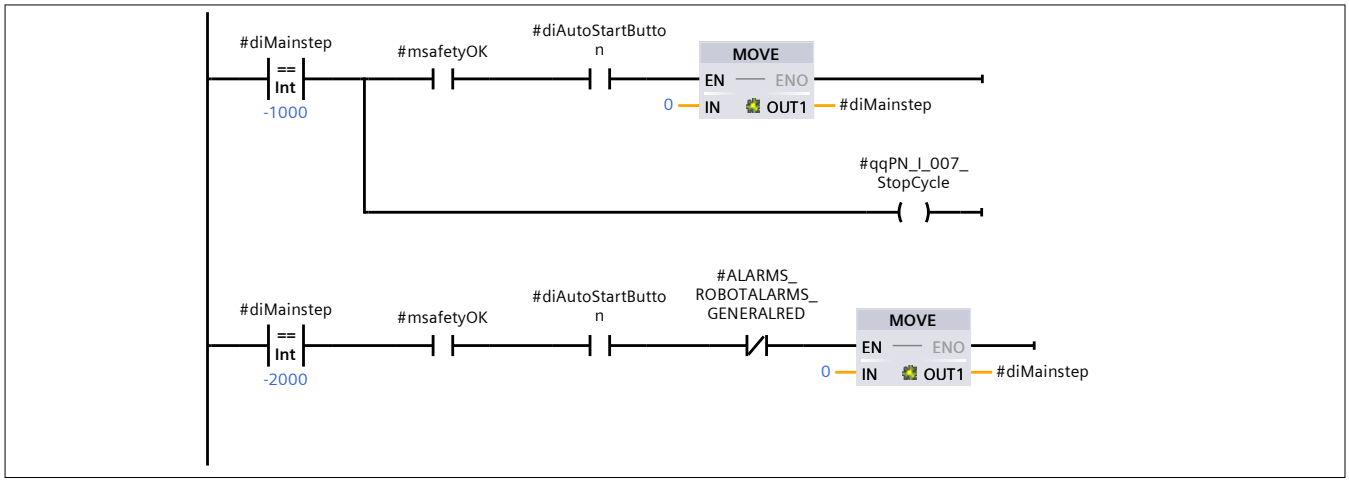
Network 10:



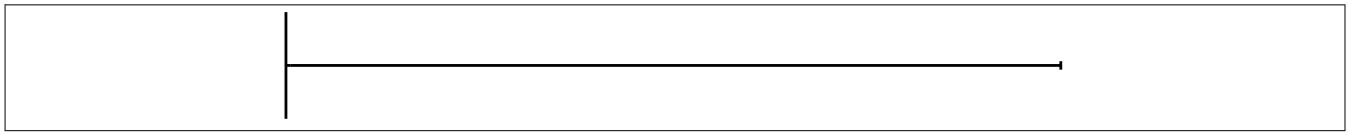
Network 11:



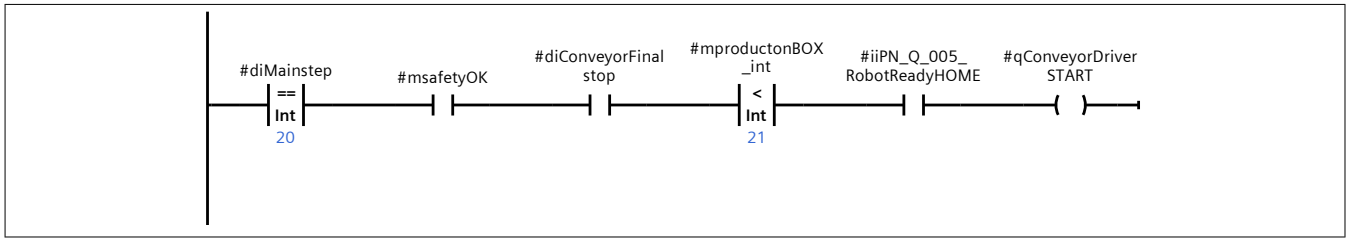
Network 12: ACİL VE STOP



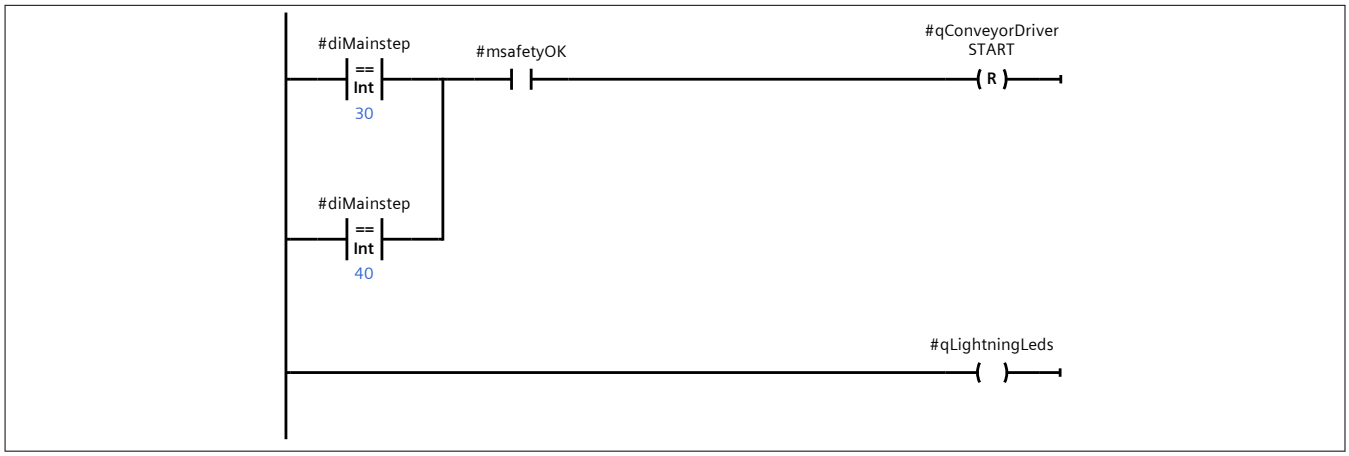
Network 13:



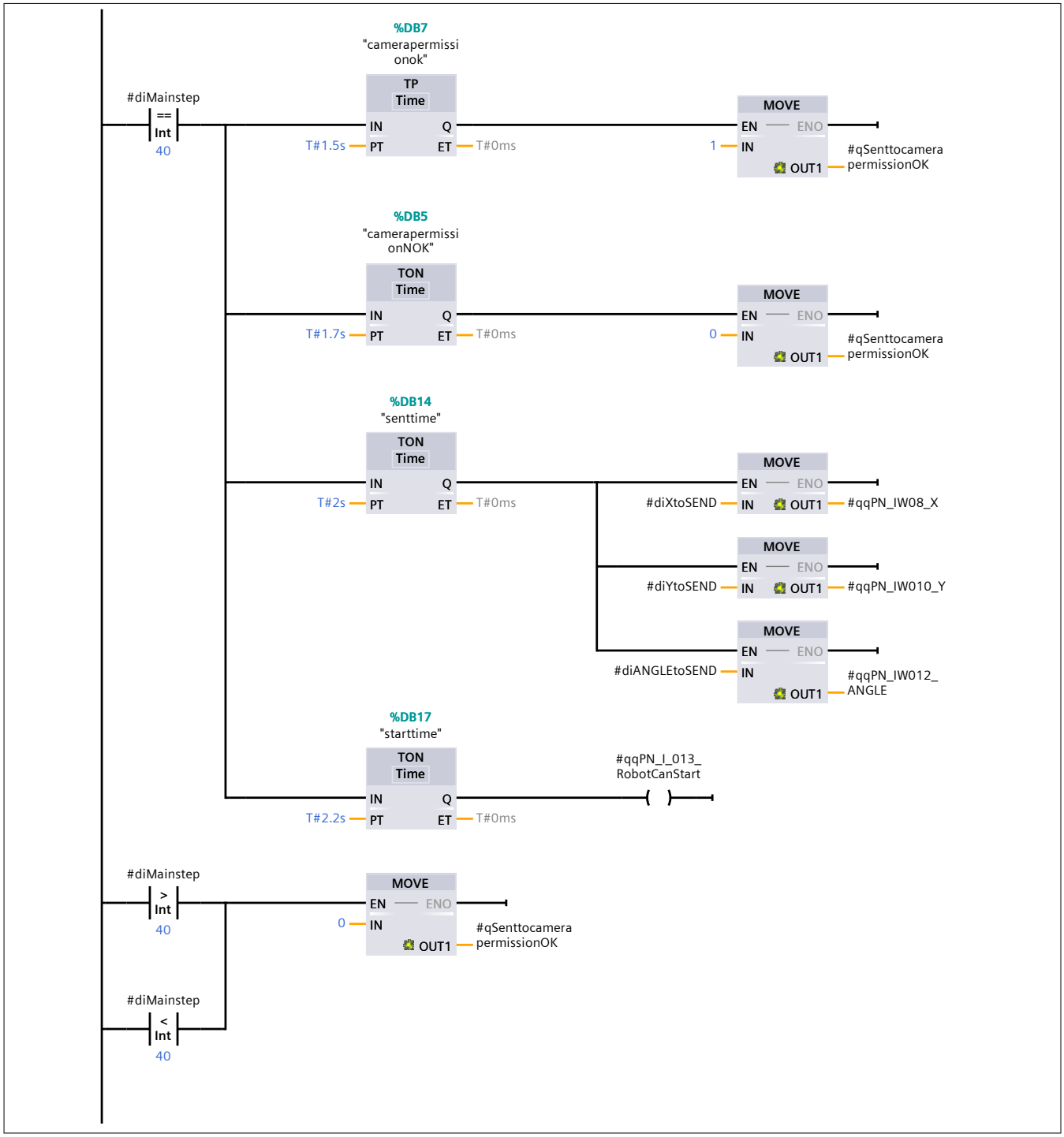
Network 14: yüklendiğinde konveyör çalışsın



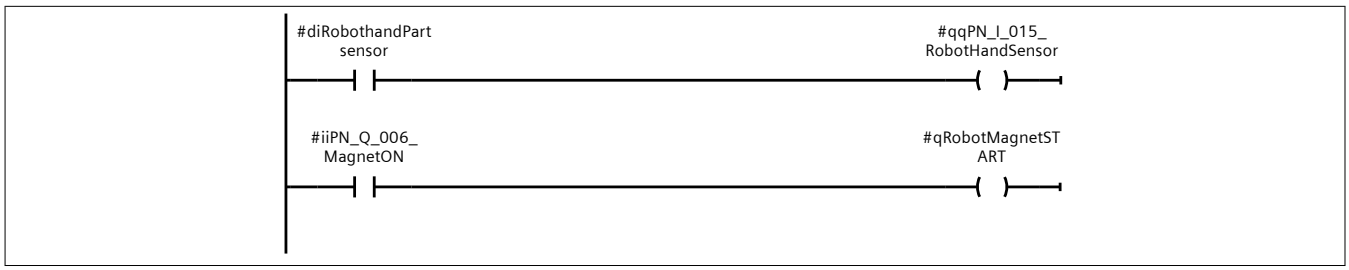
Network 15: konveyör dur



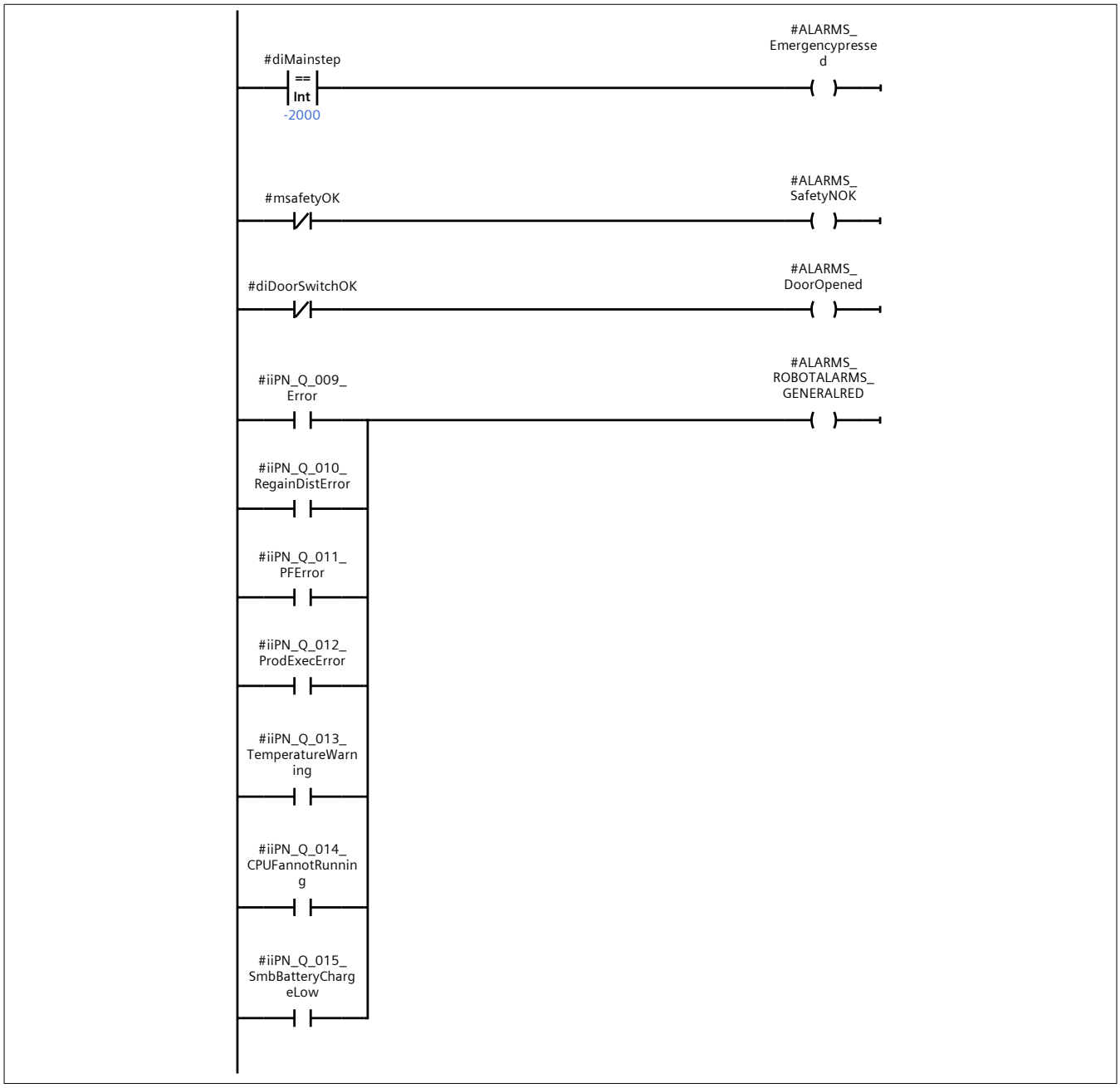
Network 16: ölç ve değerleri gönder


%DB7
"camerapermissionok"
TP
Time
IN
PT
Q
ET
T#1.5s
T#0ms
#diMainstep
==
Int
40
MOVE
EN
ENO
IN
OUT1
1
#qSenttocamera permissionOK
%DB5
"camerapermissionNOK"
TON
Time
T#1.7s
0
%DB14
"senttime"
T#2s
#diXtoSEND
#qqPN_IW08_X
#diYtoSEND
#qqPN_IW010_Y
#diANGLEtoSEND
#qqPN_IW012_ANGLE
%DB17
"starttime"
T#2.2s
#qqPN_I_013_RobotCanStart
>
Int
<
Int

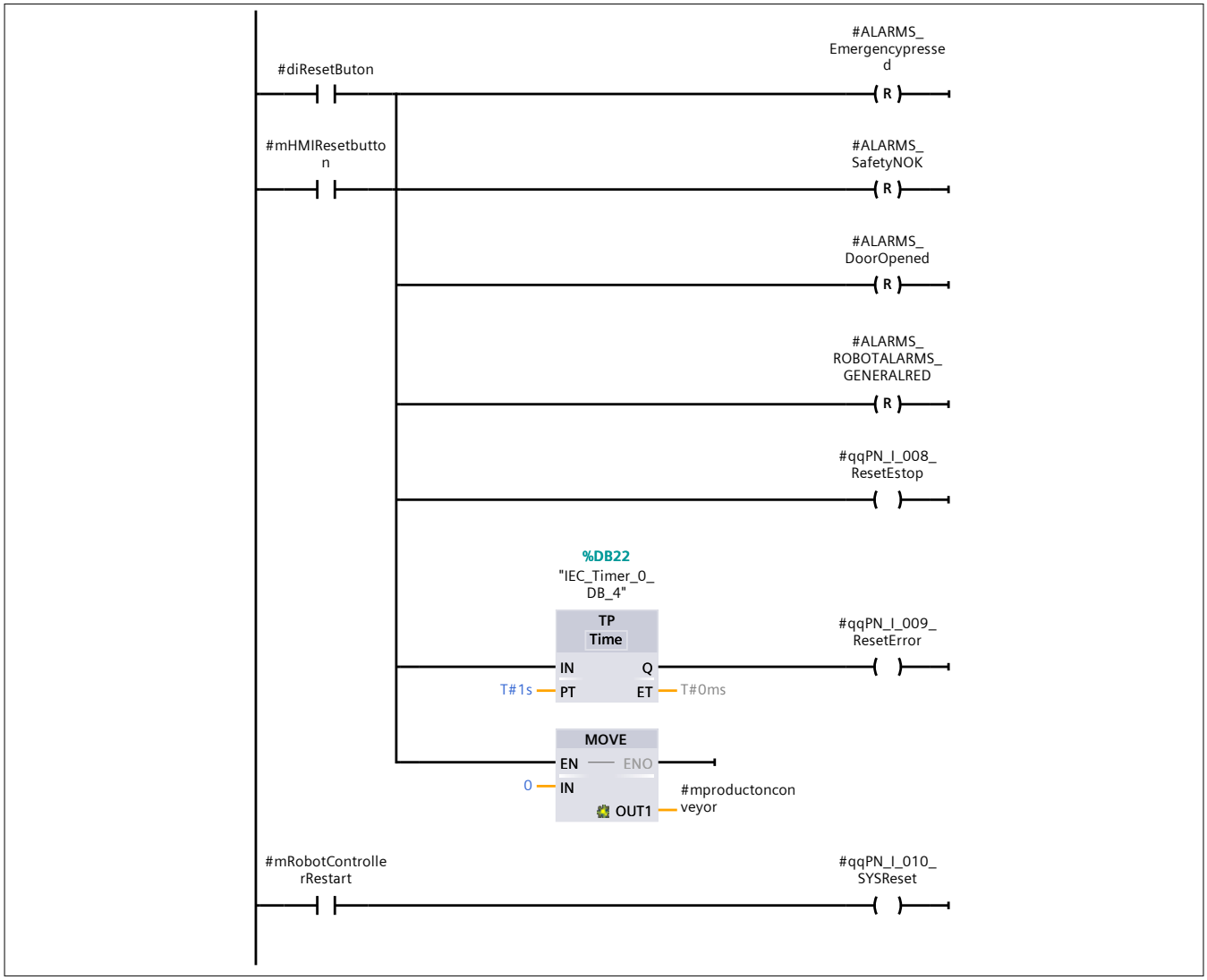
Network 17:


#diRobothandPart sensor
#qqPN_I_015_RobotHandSensor
#iiPN_Q_006_MagnetON
#qRobotMagnetSTART

Network 18: ALARMS



Network 19: RESETPressed


#diResetButon
#ALARMS_
Emergencypresse
d
R
#mHMIResetbutto
n
#ALARMS_
SafetyNOK
R
#ALARMS_
DoorOpened
R
#ALARMS_
ROBOTALARMS_
GENERALRED
R
#qqPN_I_008_
ResetEstop
%DB22
"IEC_Timer_0_
DB_4"
TP
Time
IN
Q
T#1s
PT
ET
T#0ms
#qqPN_I_009_
ResetError
MOVE
EN
ENO
0
IN
OUT1
#mproductoncon
veyor
#mRobotControlle
rRestart
#qqPN_I_010_
SYSReset

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

MainSystem_DB [DB11]

MainSystem_DB Properties					
General					
Name	MainSystem_DB	**Number**	11	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Start value	Retain
▼ Input			
diConveyorDriverOK	Bool	false	False
mCameraconnectionOK	Bool	false	False
diEmergencyOK	Bool	false	False
diDoorSwitchOK	Bool	false	False
diRobothandPartsensor	Bool	false	False
diConveyorLoaded	Bool	false	False
diConveyorFinalstop	Bool	false	False
diAutoStartButton	Bool	false	False
diAutoStopButton	Bool	false	False
diResetButon	Bool	false	False
mHMIResetbutton	Bool	false	False
diXtoSEND	Int	0	False
diYtoSEND	Int	0	False
diANGLEtoSEND	Int	0	False
iHMİrobotgoHome	Bool	false	False
iiPN_Q_000_MotorOffState	Bool	false	False
iiPN_Q_001_MotorOnState	Bool	false	False
iiPN_Q_002_RunchainOk	Bool	false	False
iiPN_Q_003_AutoON	Bool	false	False
iiPN_Q_004_TaskExecuting	Bool	false	False
iiPN_Q_005_RobotReadyHOME	Bool	false	False
iiPN_Q_006_MagnetON	Bool	false	False
iiPN_Q_007_WriteAccess	Bool	false	False
iiPN_Q_008_EmStop	Bool	false	False
iiPN_Q_009_Error	Bool	false	False
iiPN_Q_010_RegainDistError	Bool	false	False
iiPN_Q_011_PFError	Bool	false	False
iiPN_Q_012_ProdExecError	Bool	false	False
iiPN_Q_013_TemperatureWarning	Bool	false	False
iiPN_Q_014_CPUFannotRunning	Bool	false	False
iiPN_Q_015_SmbBatteryChargeLow	Bool	false	False
mRobotControllerRestart	Bool	false	False
hmi_ledbutton	Bool	false	False
▼ Output			
qLightningLeds	Bool	false	False
qConveyorDriverRESET	Bool	false	False
qRobotMagnetSTART	Bool	false	False
qSenttocamerapermissionOK	Int	0	False

Name	Data type	Start value	Retain
qqPN_I_000_MotorOff	Bool	false	False
qqPN_I_001_MotorON	Bool	false	False
qqPN_I_002_MotonStart	Bool	false	False
qqPN_I_003_QuickStop	Bool	false	False
qqPN_I_004_Start	Bool	false	False
qqPN_I_005_StartMain	Bool	false	False
qqPN_I_006_Stop	Bool	false	False
qqPN_I_007_StopCycle	Bool	false	False
qqPN_I_008_ResetEstop	Bool	false	False
qqPN_I_009_ResetError	Bool	false	False
qqPN_I_010_SYSReset	Bool	false	False
qqPN_I_011_WriteAccess	Bool	false	False
qqPN_I_012_PPtoMain	Bool	false	False
qqPN_I_013_RobotCanStart	Bool	false	False
qqPN_I_014_Reset	Bool	false	False
qqPN_I_015_RobotHandSensor	Bool	false	False
qqPN_I_016_NeedHoming	Bool	false	False
qqPN_IW08_X	Int	0	False
qqPN_IW010_Y	Int	0	False
qqPN_IW012_ANGLE	Int	0	False
qqPN_IW14_ProductCounter	Int	0	False
ALARMS_Emergencypressed	Bool	false	False
ALARMS_SafetyNOK	Bool	false	False
ALARMS_DoorOpened	Bool	false	False
ALARMS_ROBOTALARMS_GENERALRED	Bool	false	False
mpptomainptrig	Bool	false	False
▼ InOut			
qConveyorDriverSTART	Bool	false	False
msafetyOK	Bool	false	False
diMainstep	Int	0	False
mproductonconveyor	Int	0	False
mproductonBOX_int	Int	0	False
mproductonBOX_swapped	Int	0	False
▼ Static			
RobotStep	Int	0	False

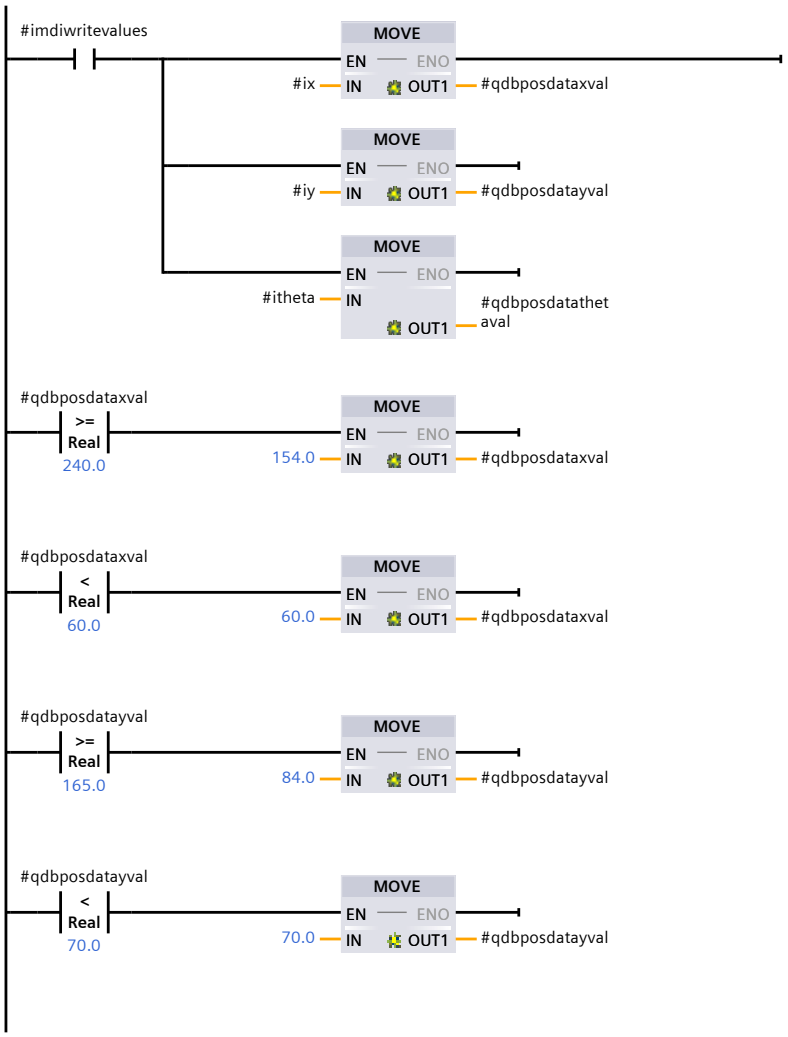
PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

CameraSystem [FB4]

CameraSystem Properties					
General					
Name	CameraSystem	**Number**	4	**Type**	FB
Language	LAD	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

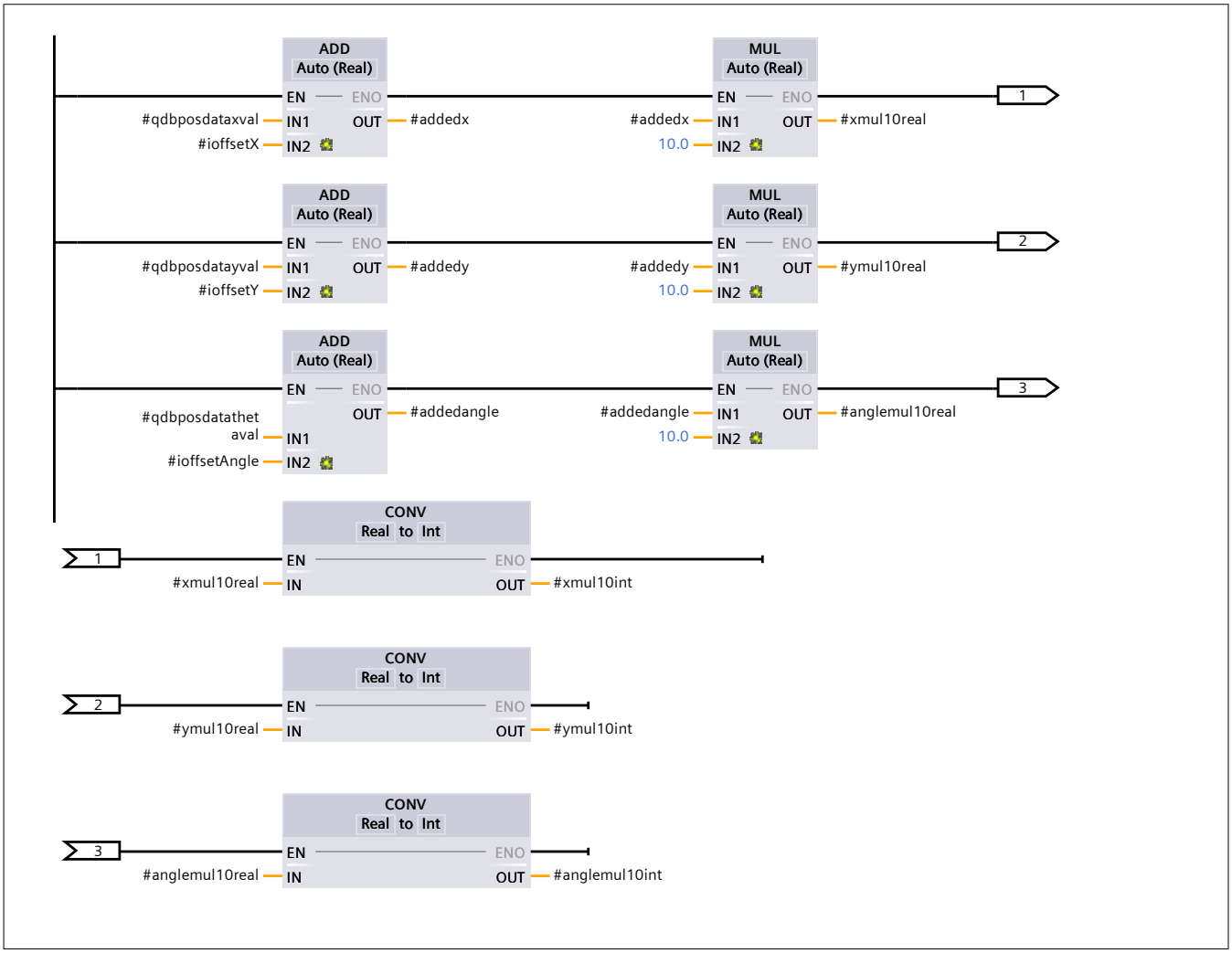
Name	Data type	Default value	Retain
▼ Input			
imdiwritevalues	Bool	false	Non-retain
ix	Real	0.0	Non-retain
iy	Real	0.0	Non-retain
itheta	Real	0.0	Non-retain
ioffsetX	Real	0.0	Non-retain
ioffsetY	Real	0.0	Non-retain
ioffsetAngle	Real	0.0	Non-retain
▼ Output			
qdbposdataxval	Real	0.0	Non-retain
qdbposdatayval	Real	0.0	Non-retain
qdbposdatathetaval	Real	0.0	Non-retain
xmul10int	Int	0	Non-retain
ymul10int	Int	0	Non-retain
anglemul10int	Int	0	Non-retain
qX_TO_SEND	Int	0	Non-retain
qY_TO_SEND	Int	0	Non-retain
qANGLE_TO_SEND	Int	0	Non-retain
xmul10int_swapped	Int	0	Non-retain
ymul10int_swapped	Int	0	Non-retain
anglemul10int_swapped	Int	0	Non-retain
InOut			
Static			
▼ Temp			
xmul10real	Real		
ymul10real	Real		
anglemul10real	Real		
addedx	Real		
addedy	Real		
addedangle	Real		
Constant			

Network 1:

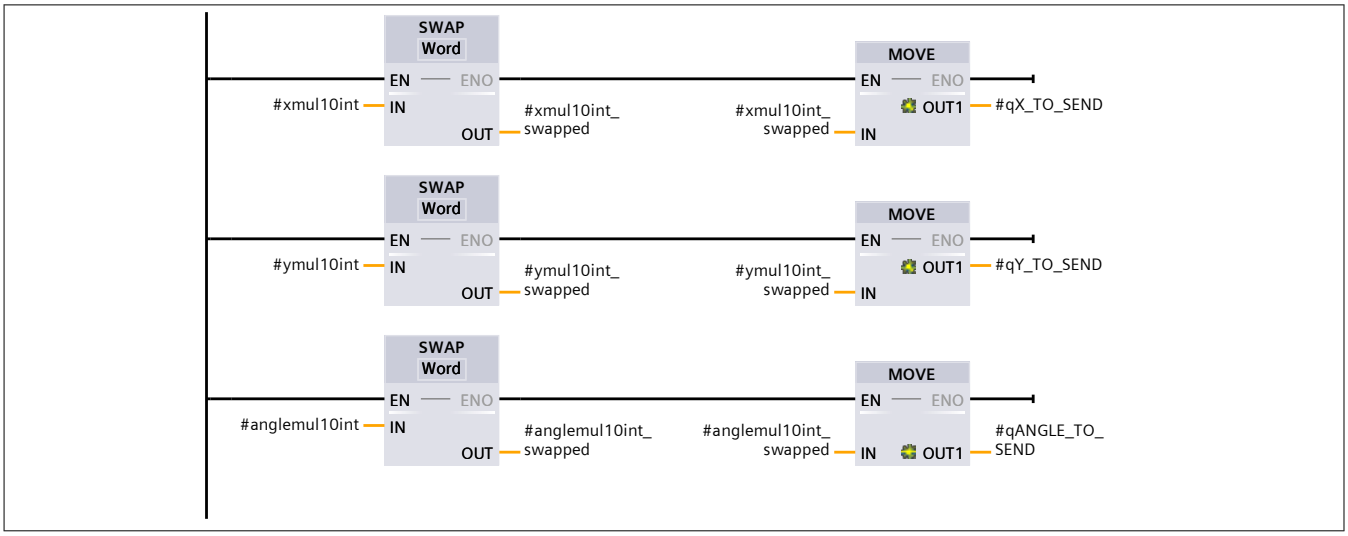

#imdiwritevalues
MOVE
EN
ENO
#ix
IN
OUT1
#qdbposdataxval
MOVE
EN
ENO
#iy
IN
OUT1
#qdbposdatayval
MOVE
EN
ENO
#itheta
IN
OUT1
#qdbposdatathetaval
#qdbposdataxval
>=
Real
240.0
MOVE
EN
ENO
154.0
IN
OUT1
#qdbposdataxval
#qdbposdataxval
<
Real
60.0
MOVE
EN
ENO
60.0
IN
OUT1
#qdbposdataxval
#qdbposdatayval
>=
Real
165.0
MOVE
EN
ENO
84.0
IN
OUT1
#qdbposdatayval
#qdbposdatayval
<
Real
70.0
MOVE
EN
ENO
70.0
IN
OUT1
#qdbposdatayval

Network 2:

Network 2:



Network 3:



PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

CameraSystem_DB [DB12]

CameraSystem_DB Properties					
General					
Name	CameraSystem_DB	**Number**	12	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Start value	Retain
▼ Input			
imdiwritevalues	Bool	false	False
ix	Real	0.0	False
iy	Real	0.0	False
itheta	Real	0.0	False
ioffsetX	Real	0.0	False
ioffsetY	Real	0.0	False
ioffsetAngle	Real	0.0	False
▼ Output			
qdbposdataxval	Real	0.0	False
qdbposdatayval	Real	0.0	False
qdbposdatathetaval	Real	0.0	False
xmul10int	Int	0	False
ymul10int	Int	0	False
anglemul10int	Int	0	False
qX_TO_SEND	Int	0	False
qY_TO_SEND	Int	0	False
qANGLE_TO_SEND	Int	0	False
xmul10int_swapped	Int	0	False
ymul10int_swapped	Int	0	False
anglemul10int_swapped	Int	0	False
InOut			
Static			

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks

dbRobot [DB13]

dbRobot Properties					
General					
Name	dbRobot	**Number**	13	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**		**Comment**	
Family		**Version**	0.1	**User-defined ID**	

Name	Data type	Start value	Retain
▼ Static			
RECIEVE	Struct		False
RECIEVE_SPARE	Array[64..199] of Bool		False
SEND	Struct		False
SEND_SPARE	Array[64..199] of Bool		False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

buzzertimer [DB2]

buzzertimer Properties					
General					
Name	buzzertimer	**Number**	2	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

counterupdownconveyor [DB6]

counterupdownconveyor Properties					
General					
Name	counterupdownconveyor	**Number**	6	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	CNTR

Name	Data type	Start value	Retain
▼ Static			
CU	Bool	false	True
CD	Bool	false	True
R	Bool	false	True
LD	Bool	false	True
QU	Bool	false	True
QD	Bool	false	True
PV	Int	0	True
CV	Int	0	True

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

camerapermissionok [DB7]

camerapermissionok Properties					
General					
Name	camerapermissionok	**Number**	7	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

camerapermissionNOK [DB5]

camerapermissionNOK Properties					
General					
Name	camerapermissionNOK	**Number**	5	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

conveyorfreetime [DB9]

conveyorfreetime Properties					
General					
Name	conveyorfreetime	**Number**	9	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

senttime [DB14]

senttime Properties					
General					
Name	senttime	**Number**	14	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

30to40 [DB15]

30to40 Properties					
General					
Name	30to40	**Number**	15	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

countonbox [DB16]

countonbox Properties					
General					
Name	countonbox	**Number**	16	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	CNTR

Name	Data type	Start value	Retain
▼ Static			
CU	Bool	false	True
CD	Bool	false	True
R	Bool	false	True
LD	Bool	false	True
QU	Bool	false	True
QD	Bool	false	True
PV	Int	0	True
CV	Int	0	True

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

starttime [DB17]

starttime Properties					
General					
Name	starttime	**Number**	17	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

IEC_Timer_0_DB [DB18]

IEC_Timer_0_DB Properties					
General					
Name	IEC_Timer_0_DB	**Number**	18	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

IEC_Timer_0_DB_1 [DB19]

IEC_Timer_0_DB_1 Properties					
General					
Name	IEC_Timer_0_DB_1	**Number**	19	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

IEC_Timer_0_DB_2 [DB20]

IEC_Timer_0_DB_2 Properties					
General					
Name	IEC_Timer_0_DB_2	**Number**	20	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

IEC_Timer_0_DB_3 [DB21]

IEC_Timer_0_DB_3 Properties					
General					
Name	IEC_Timer_0_DB_3	**Number**	21	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

IEC_Timer_0_DB_4 [DB22]

IEC_Timer_0_DB_4 Properties					
General					
Name	IEC_Timer_0_DB_4	**Number**	22	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

IEC_Timer_0_DB_5 [DB23]

IEC_Timer_0_DB_5 Properties					
General					
Name	IEC_Timer_0_DB_5	**Number**	23	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC] / Program blocks / System blocks / Program resources

IEC_Timer_0_DB_6 [DB24]

IEC_Timer_0_DB_6 Properties					
General					
Name	IEC_Timer_0_DB_6	**Number**	24	**Type**	DB
Language	DB	**Numbering**	Automatic		
Information					
Title		**Author**	Simatic	**Comment**	
Family	IEC	**Version**	1.0	**User-defined ID**	IEC_TMR

Name	Data type	Start value	Retain
▼ Static			
PT	Time	T#0ms	False
ET	Time	T#0ms	False
IN	Bool	false	False
Q	Bool	false	False

PLC_1 [CPU 1214C DC/DC/DC]

Technology objects

This folder is empty.

PLC_1 [CPU 1214C DC/DC/DC] / PLC tags / Default tag table [86]

PLC tags

PLC tags				
	Name	Data type	Address	Retain
	mdiWritevalues	Bool	%M2.0	False
	qsenttocamerapermissionOK	Int	%MW10	False
	x	DWord	%MD60	False
	y	DWord	%MD70	False
	theta	DWord	%MD80	False
	aiRZVanalog1	Word	%IW100	False
	aiRZVanalog2	Word	%IW102	False
	diConveyorDriverOK	Bool	%I0.0	False
	diEmergencyOK	Bool	%I0.1	False
	diDoorSwitchOK	Bool	%I0.2	False
	diRobothandPartsensor	Bool	%I0.3	False
	diConveyorLoaded	Bool	%I0.4	False
	diConveyorFinalstop	Bool	%I0.5	False
	diAutoStartButton	Bool	%I0.6	False
	diAutoStopButton	Bool	%I0.7	False
	diResetButon	Bool	%I1.0	False
	diRZV1	Bool	%I1.1	False
	diRZV2	Bool	%I1.2	False
	diRZV3	Bool	%I1.3	False
	diRZV4	Bool	%I1.4	False
	diRZV5	Bool	%I1.5	False
	qLightningLeds	Bool	%Q0.0	False
	q220vAC_RZV_RELAY	Bool	%Q0.1	False
	qLed_Green	Bool	%Q0.2	False
	qLed_Red	Bool	%Q0.3	False
	qConveyorDriverRESET	Bool	%Q0.4	False
	qAutostartbuttonlamp	Bool	%Q0.5	False
	qRZV1	Bool	%Q0.6	False
	qConveyorDriverSTART	Bool	%Q0.7	False
	qRZV2	Bool	%Q1.0	False
	qRobotMagnetSTART	Bool	%Q1.1	False
	buttoncontrolsr1	Bool	%M6.0	False
	buttoncontrolsr2	Bool	%M8.0	False
	buttoncontrolsr3	Bool	%M10.0	False
	mSafetyOK	Bool	%M16.0	False
	Tag_4	Bool	%M20.0	False
	diCameraConnectionStatus	Bool	%M24.0	False

	Name	Data type	Address	Retain
	mProductonconveyor	Int	%MW24	False
	ptriggcounter	Bool	%M30.0	False
	mcounterreset	Bool	%M32.0	False
	counterZERO	Bool	%M33.0	False
	mGeneralAlarm_RED	Bool	%M33.1	False
	mmpptomainptrig	Bool	%M33.2	False
	mHMIRobotGOhome	Bool	%M33.3	False
	mProductonBOX	Int	%MW26	False
	mcounterreset_box	Bool	%M32.1	False
	mHMIResetButton	Bool	%M2.5	False
	mProductonBOXSWAPPED	Int	%MW0	False
	mRobotControllerRestart	Bool	%M2.1	False
	CameraConnectionStatus	DWord	%MD90	False
	mCameraCONNECTIONOK	Bool	%M3.0	False
	hmiLEDBUTTON	Bool	%M2.3	False

PLC_1 [CPU 1214C DC/DC/DC] / PLC tags / Default tag table [86]

User constants

User constants			
	Name	Data type	Value

PLC_1 [CPU 1214C DC/DC/DC] / PLC tags / iRobot2PLC [16]

PLC tags

PLC tags				
	Name	Data type	Address	Retain
	iPN_Q_000_MotorOffState	Bool	%I68.0	False
	iPN_Q_001_MotorOnState	Bool	%I68.1	False
	iPN_Q_002_RunchainOk	Bool	%I68.2	False
	iPN_Q_003_AutoON	Bool	%I68.3	False
	iPN_Q_004_TaskExecuting	Bool	%I68.4	False
	iPN_Q_005_RobotReadyHOME	Bool	%I68.5	False
	iPN_Q_006_MagnetON	Bool	%I68.6	False
	iPN_Q_007_WriteAccess	Bool	%I68.7	False
	iPN_Q_008_EmStop	Bool	%I69.0	False
	iPN_Q_009_Error	Bool	%I69.1	False
	iPN_Q_010_RegainDistError	Bool	%I69.2	False
	iPN_Q_011_PFError	Bool	%I69.3	False
	iPN_Q_012_ProdExecError	Bool	%I69.4	False
	iPN_Q_013_TemperatureWarning	Bool	%I69.5	False
	iPN_Q_014_CPUFannotRunning	Bool	%I69.6	False
	iPN_Q_015_SmbBatteryChargeLow	Bool	%I69.7	False

PLC_1 [CPU 1214C DC/DC/DC] / PLC tags / iRobot2PLC [16]

User constants

User constants			
	Name	Data type	Value

PLC_1 [CPU 1214C DC/DC/DC] / PLC tags / qPLC2Robot [68]

PLC tags

PLC tags				
	Name	Data type	Address	Retain
	qPN_I_000_MotorOff	Bool	%Q132.0	False
	qPN_I_001_MotorON	Bool	%Q132.1	False
	qPN_I_002_MotonStart	Bool	%Q132.2	False
	qPN_I_003_QuickStop	Bool	%Q132.3	False
	qPN_I_004_Start	Bool	%Q132.4	False
	qPN_I_005_StartMain	Bool	%Q132.5	False
	qPN_I_006_Stop	Bool	%Q132.6	False
	qPN_I_007_StopCycle	Bool	%Q132.7	False
	qPN_I_008_ResetEstop	Bool	%Q133.0	False
	qPN_I_009_ResetError	Bool	%Q133.1	False
	qPN_I_010_SYSReset	Bool	%Q133.2	False
	qPN_I_011_WriteAccess	Bool	%Q133.3	False
	qPN_I_012_PPtoMain	Bool	%Q133.4	False
	qPN_I_013_RobotCanStart	Bool	%Q133.5	False
	qPN_I_014_Reset_Counter	Bool	%Q133.6	False
	qPN_I_015_RobotHandSensor	Bool	%Q133.7	False
	qPN_I_016_NeedHoming	Bool	%Q134.0	False
	17	Bool	%Q134.1	False
	18	Bool	%Q134.2	False
	19	Bool	%Q134.3	False
	20	Bool	%Q134.4	False
	21	Bool	%Q134.5	False
	22	Bool	%Q134.6	False
	23	Bool	%Q134.7	False
	24	Bool	%Q135.0	False
	25	Bool	%Q135.1	False
	26	Bool	%Q135.2	False
	27	Bool	%Q135.3	False
	28	Bool	%Q135.4	False
	29	Bool	%Q135.5	False
	30	Bool	%Q135.6	False
	31	Bool	%Q135.7	False
	32	Bool	%Q136.0	False
	33	Bool	%Q136.1	False
	34	Bool	%Q136.2	False
	35	Bool	%Q136.3	False
	36	Bool	%Q136.4	False

	Name	Data type	Address	Retain
	37	Bool	%Q136.5	False
	38	Bool	%Q136.6	False
	39	Bool	%Q136.7	False
	40	Bool	%Q137.0	False
	41	Bool	%Q137.1	False
	42	Bool	%Q137.2	False
	43	Bool	%Q137.3	False
	44	Bool	%Q137.4	False
	45	Bool	%Q137.5	False
	46	Bool	%Q137.6	False
	47	Bool	%Q137.7	False
	48	Bool	%Q138.0	False
	49	Bool	%Q138.1	False
	50	Bool	%Q138.2	False
	51	Bool	%Q138.3	False
	52	Bool	%Q138.4	False
	53	Bool	%Q138.5	False
	54	Bool	%Q138.6	False
	55	Bool	%Q138.7	False
	56	Bool	%Q139.0	False
	57	Bool	%Q139.1	False
	58	Bool	%Q139.2	False
	59	Bool	%Q139.3	False
	60	Bool	%Q139.4	False
	61	Bool	%Q139.5	False
	62	Bool	%Q139.6	False
	63	Bool	%Q139.7	False
	qPN_IW08_X	Int	%QW140	False
	qPN_IW010_Y	Int	%QW142	False
	qPN_IW012_ANGLE	Int	%QW144	False
	qPN_IW14_PRODUCTCOUNTER	Int	%QW146	False

PLC_1 [CPU 1214C DC/DC/DC] / PLC tags / qPLC2Robot [68]

User constants

User constants			
	Name	Data type	Value

PLC_1 [CPU 1214C DC/DC/DC] / PLC data types

System data types

This folder is empty.

PLC_1 [CPU 1214C DC/DC/DC] / Watch and force tables

Force table

Name	Address	Display format	Force value
"qsenttocamerapermissionOK"	%MW10	DEC+/-	1
"qRobotMagnetSTART":P	%Q1.1:P	Bool	

PLC_1 [CPU 1214C DC/DC/DC] / Watch and force tables

Watch table_1

Name	Address	Display format	Modify value
"diAutoStopButton"	%I0.7	Bool	
"diEmergencyOK"	%I0.1	Bool	
"diDoorSwitchOK"	%I0.2	Bool	
"diRobothandPartsensor"	%I0.3	Bool	
"diConveyorLoaded"	%I0.4	Bool	
"diConveyorFinalstop"	%I0.5	Bool	
"diAutoStartButton"	%I0.6	Bool	
"diAutoStopButton"	%I0.7	Bool	
"diResetButon"	%I1.0	Bool	
"diRZV1"	%I1.1	Bool	
"diRZV2"	%I1.2	Bool	
"diRZV3"	%I1.3	Bool	
"diRZV4"	%I1.4	Bool	
"diRZV5"	%I1.5	Bool	
"qConveyorDriverSTART"	%Q0.7	Bool	TRUE
"diCameraConnectionStatus"	%M24.0	Bool	
"qRobotMagnetSTART"	%Q1.1	Bool	TRUE

PLC_1 [CPU 1214C DC/DC/DC]

Traces

Name

PLC_1 [CPU 1214C DC/DC/DC] / Traces

Measurements

This folder is empty.

PLC_1 [CPU 1214C DC/DC/DC] / Traces

Combined measurements

Name

PLC_1 [CPU 1214C DC/DC/DC]

PLC alarm text lists

This folder is empty.

PLC_1 [CPU 1214C DC/DC/DC] / Local modules

PLC_1 [CPU 1214C DC/DC/DC]

PLC_1			
Project information			
Name	PLC_1	**Author**	Mali
Comment		**Slot**	1
Rack	0		
Catalog information			
Short designation	CPU 1214C DC/DC/DC	**Description**	Work memory 75 KB; 24VDC power supply with DI14 x 24VDC SINK/ SOURCE, DQ10 x 24VDC and AI2 on board; 6 high-speed counters and 4 pulse outputs on board; signal board expands on-board I/O; up to 3 communication modules for serial communication; up to 8 signal modules for I/O expansion; 0.04 ms/1000 instructions; PROFINET interface for programming, HMI and PLC-to-PLC communication
Article number	6ES7 214-1AG40-0XB0	**Firmware version**	V4.0
Connection resources			
PG communication:	1	**OP communication:**	1
S7 basic communication:	0	**S7 communication:**	0
Maximum number of S7 connection resources:	38		
Overview of addresses\Overview of addresses\Overview of addresses			
Inputs	True	**Outputs**	True
Address gaps	False	**Slot**	True

Type	Addr. from	Addr. to	Module	PIP	Device name	Device number	Size	Master / IO system	Rack	Slot
I	0	1	DI 14/DQ 10_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 1
O	0	1	DI 14/DQ 10_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 1
I	64	67	AI 2_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 2
I	1000	1003	HSC_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 16
I	1004	1007	HSC_2	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 17
I	1008	1011	HSC_3	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 18
I	1012	1015	HSC_4	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 19
I	1016	1019	HSC_5	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 20
I	1020	1023	HSC_6	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 21
O	1000	1001	Pulse_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 32
O	1002	1003	Pulse_2	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 33
O	1004	1005	Pulse_3	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 34
O	1006	1007	Pulse_4	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 35
I	68	131	DI 64 bytes_1	Automatic update	RobotBasi-cIO [BASIC V1.4]	1	64 Bytes	PROFINET IO-System [100]	0	1
O	132	195	DO 64 bytes_1	Automatic update	RobotBasi-cIO [BASIC V1.4]	1	64 Bytes	PROFINET IO-System [100]	0	2

PLC_1 [CPU 1214C DC/DC/DC] / Distributed I/O

PROFINET IO-System (100): PN/IE_1

PROFINET IO-System			
General			
IO controller:	PLC_1	**Name:**	PROFINET IO-System
Number:	100	**Use name as extension for the PROFINET device name.**	False
Hardware identifier			
Hardware identifier	269		
Overview of addresses\Overview of addresses\Overview of addresses			
Inputs	True	**Outputs**	True
Address gaps	False	**Slot**	True

Type	Addr. from	Addr. to	Module	PIP	Device name	Device number	Size	Master / IO system	Rack	Slot
I	0	1	DI 14/DQ 10_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 1
O	0	1	DI 14/DQ 10_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 1
I	64	67	AI 2_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 2
I	1000	1003	HSC_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 16
I	1004	1007	HSC_2	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 17
I	1008	1011	HSC_3	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 18
I	1012	1015	HSC_4	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 19
I	1016	1019	HSC_5	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 20
I	1020	1023	HSC_6	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	4 Bytes	-	0	1 21
O	1000	1001	Pulse_1	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 32
O	1002	1003	Pulse_2	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 33
O	1004	1005	Pulse_3	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 34
O	1006	1007	Pulse_4	Automatic update	PLC_1 [CPU 1214C DC/DC/DC]	-	2 Bytes	-	0	1 35
I	68	131	DI 64 bytes_1	Automatic update	RobotBasi-cIO [BASIC V1.4]	1	64 Bytes	PROFINET IO-System [100]	0	1
O	132	195	DO 64 bytes_1	Automatic update	RobotBasi-cIO [BASIC V1.4]	1	64 Bytes	PROFINET IO-System [100]	0	2

PLC_1 [CPU 1214C DC/DC/DC] / Distributed I/O / PROFINET IO-System (100): PN/IE_1

RobotBasicIO [BASIC V1.4]

RobotBasicIO			
General			
Name	RobotBasicIO	**Author**	Mali
Comment		**Rack**	0
Slot	0		
General\Catalog information			
Short designation	BASIC V1.4	**Description**	The robot controller's internal PROFINET IO device.
Article number	888-3	**Firmware version**	V1.4
HwVersion	1	**GSD file**	gsdml-v2.33-abb-robotics-robot-device-20180814.xml
PROFINET interface [X1]\General			
Name	PROFINET Interface	**Comment**	
PROFINET interface [X1]\Network Port [X1 P1]\General			
PositionNumber	1	**Name**	Network Port
Comment			