

Multi State Advanced Manufacturing Consortium US DOL SPONSORED TAACCCT GRANT: TC23767

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PRIMARY DEVELOPER: Glenn Wisniewski – Henry Ford College

PLC to Robot Interface Exercise - Worksheet - Instructor Copy

Student Name:

PLC Outputs (Tags)	Descriptor	Robot inputs - DI	Description	Maintained or strobed?	Functional Description
Robot:O.Data[0].0	ROBOT_HOLD_INTLK	UI[2]	HOLD	Maintained	
Robot:O.Data[0].1	ROBOT_RESET_INTLK	UI[5]	FAULT RESET	Maintained	
Robot:O.Data[0].2	ROBOT_START_INTLK	UI[6]	START	STROBED	
Robot:O.Data[0].3	ROBOT_ENABLE_INTLK	UI[8]	ENABLE	Maintained	
Robot:O.Data[0].4	ROBOT_PGM_1_INTLK	UI[9]	RSR1/PNS1/STYLE1	STROBED	
Robot:O.Data[0].5	ROBOT_PRG_2_INTLK	UI[10]	RSR2/PNS2/STYLE2	STROBED	
Robot:O.Data[0].6	ROBOT_PRG_3_INTLK	UI[11]	RSR3/PNS3/STYLE3	STROBED	
Robot:O.Data[0].7	ROBOT_PROG_4_INTLK	UI[12]	RSR4/PNS4/STYLE4	STROBED	
Robot:O.Data[1].0	ROBOT_OK_TO_PICK_INTLK	DI[101]	ROBOT OK TO PICK UP	Maintained	
Robot:O.Data[1].1	ROBOT_PUCK_PRES_PICKUP_INTLK	DI[102]	ROBOT PART PRES	Maintained	
Robot:O.Data[1].2	ROBOT_OK_TO_ULOAD_INTLK	DI[103]	ROBOT CLEAR TO UNLOAD	Maintained	
Robot:O.Data[1].3	ROBOT_GO_TO_HOME_POS_INTLK	DI[104]	ROBOT GO HOME	STROBED	

Robot -> PLC

Robot Outputs - DO	Description	PLC Inputs - Tags	Descriptor	Maintained or strobed?	Functional Description
UO[1]	CMD ENABLE	Robot:I.Data[0].0	ROBOT_CMD_ENABLE_INTLK	Maintained	
UO[6]	FAULT	Robot:I.Data[0].1	ROBOT_FAULT_INTLK	Maintained	
UO[9]	BATT ALARM	Robot:I.Data[0].2	ROBOT_BATTERY_ALARM_INTLK	Maintained	
UO[10]	BUSY	Robot:I.Data[0].3	ROBOT_BUSY_INTLK	Maintained	
DO[101]	ROBOT CLEAR OF LOAD	Robot:I.Data[1].0	ROBOT_CLR_OF_LD_INTLK	Maintained	
DO[102]	ROBOT CLEAR OF UNLOAD	Robot:I.Data[1].1	ROBOT_CLR_OF_UNLD_INTLK	Maintained	
DO[103]	ROBOT @ HOME POS	Robot:I.Data[1].2	ROBOT_HOME_POS_INTLK	Maintained	
DO[104]	ROBOT CYCLE COMP	Robot:I.Data[1].3	ROBOT_CYCLE_COMP_INTLK	STROBED	
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