

FAQ: Using AMCI Motion Add On Instructions with CIP Sync. Devices

Beginning in September 2024, with network firmware version 1.37, AMCI's networked integrated motor drivers now include the ability to use CIP Sync to more closely and quietly follow a master axis.

This document describes how to use the AMCI Motion Axis Add On Instructions with CIP Sync to follow a master axis. These Add On Instructions will work with the following AMCI integrated motion devices, including,

- SD4840E2
- SD17060E2
- SD31045E2
- SMD17E2
- SMD23E2
- SMD24E2
- SMD34E2
- SV160E2
- SV400E2

Step 1: Enabling the host controller for Time Synchronization

The first step in using CIP Sync is to Enable Time Synchronization in the host controller. Depending on the system being used, this may be located in the controller properties, in the network properties, or in the scanner module's properties.

As shown in the following image, select the Date/Time tab and then place a check mark in the Enable Time Synchronization field.

General Major Faults Minor Faults Date/Time Advanced SFC Execution The Date and Time displayed here is Controller local time, not workstation local time. Use these fields to configure Time attributes of the Controller. Set Date, Time and Zone from Workstation Image: 6/10/1998 7:22:36 PM Change Date and Time Image: 6/10/1998 7:22:36 PM Time Zone: (UTC+00:00) Image: 6/10/1998 7:22:36 PM Image: 6/10/1998 7:22:36 PM<	Project
The Date and Time displayed here is Controller local time, not workstation local time. Use these fields to configure Time attributes of the Controller. Set Date, Time and Zone from Workstation Set Date, Time and Zone from Workstation Change Date and Time	
Set Date, Time and Zone from Workstation Iate and Time: 6/10/1998 7:22:36 PM Change Date and Time ime Zone: (UTC+00:00) Adjust for Daylight Saving (+01:00)	
tate and Time: 6/10/1998 7:22:36 PM Change Date and Time	
ime Zone: (UTC+00:00) Adjust for Daylight Saving (+01:00)	
Adjust for Daylight Saving (+01:00)	
DANGER. If time synchronization is disabled	
Enable Time Synchronization online, active axes in any controller in this chassis, or any other synchronized device, may experience unexpected motion.	
Is a synchronized time slave	
Duplicate CST master detected	
CST Mastership disabled	



Step 2: Scanner Module Configuration

Perform this step only if a separate Ethernet scanner module, as opposed to a built in Ethernet Port, is being used.

On the General Tab of the Ethernet scanner module, click on the Change button.

onordi Conn	ection instructional module into internet Fit	otocor For connigulation Network	nine Sync
Type:	1756-EN2TR 1756 10/100 Mbps Ethemet Brid	dge, 2-Port, Twisted-Pair Media	Change Type +
/endor:	Rockwell Automation/Allen-Bradley		
^p arent:	Local	Ethernet Address	
Name:	EN2TR	O Private Network: 19	2.168.1.
Description:	~	(e) IP Address: 192 . 16	8.0.5
	~	O Host Name:	Î
Module Defin	nition	Clat:	
Revision:	Change	3i0t. 2 ∨	

Click on the down arrow next to Time Sync Connection and select Time Sync and Motion. Click on the OK button to accept this change.

to the hispe suffering share	ET MI, THINKET OF HOUSE	L hande lu
Module Definition		×
Revision:	10 ~ 001 🔹	
Electronic Keying:	Compatible Module	~
Connection:	None	~
Time Sync Connection:	None	~
	None	
	Time Sync and Motion	
-		
ОК	Cancel He	p

Back on the General tab, click on Apply.



Step 3: Create a Task

While not absolutely required, the AMCI motion device will more closely follow the master axis if the supporting logic, including the AMCI AOIs, is in an Event Driven Task, where the trigger for the task is Motion Group Execution.

To create an Event Driven Task, right click on the desired task in the project tree and select Properties.

AMCI_m	Properties	Alt+Enter
Unschec 🖉 Motion Grc	Print)
🗏 GS	Cross Reference	Ctrl+E
GS	Delete	Delete
	Paste Special	Delata
E M	1 Paste	Ctrl+V
🗸 Pa	The coby	CUITC
A 5 Main		Ctrl+C
MainTas	K Cut	Ctrl+X
▶ 5 routir	Add	1
-A cipeupe		

Click on the Configuration tab and select the Type to be "Event" and the Trigger to be "Motion Group Execution. The Tag field will be the motion axis that is being followed.

Туре:	Event	~
Trigger:	Motion Group Execution	~
Tag:	Virtual_Motion_Group	~
Execute T	ask If No Event Occurs Within 10.	000 ms rields Higher Priority)
Watchdog:	500.000 ms	
🗹 Disable Au	tomatic Output Processing To Redu	ce Task Overhead
Inhibit Tas	k	



Step 4: Add the GSV (Get System Value) instruction

The final step in using the AMCI motion devices with CIP Sync is to add a GSV instruction to your logic. As shown in the following image,

Class Name:	TimeSynchronize
Attribute Name:	CurrentTimeNanoseconds
Destination:	An array consisting of two DINT registers

The GSV instruction should be located in an unconditional rung should be in the Event Driven Task created in Step 2 above.

GSV	
Class Name TimeSynchronize Instance Name Attribute Name CurrentTimeNanoseconds Dest current_time_nanoseconds[0]	



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AMCI_MA_SD_SMD_Linear Follower with CIP SYNC AMCI_MA_SD_SMD_Circular_Follower with CIP SYNC

These AOIs will only work with the SD and SMD motion devices. The SV motion devices have their own follower AOIs.

AMCI_MA_SD_SMD_Linear_	Fo AMCi_timesync_Linear_follower
Axis_Input_Data	AMCI_SMD23E2_input_data
Axis_Output_Data	AMCI_SMD23E2_output_data
Current_System_Time	current_time_nanoseconds[0]
	0 ←
Master_Axis_Position	Virtual_Axis_1.CommandPosition
	0.0 +
Master_Axis_Velocity	Virtual_Axis_1.CommandVelocity
	0.0 +
Acceleration	2000
Deceleration	2000
Proportional_Coefficient	1
RPI time in ms	2

AMCI_MA_SD_SMD_Circula	r AMCI_timesync_circular_follower	-(EN)-
Axis_Input_Data	AMCI_SMD23E2_input_data	
Axis_Output_Data	AMCI_SMD23E2_output_data	(DN)
Current_System_Time	current_time_nanoseconds[0]	100000
and the second second second	0 ←	-(ER)-
Master_Axis_Position	Virtual_Axis_1.CommandPosition	
an entry and an entry	€ 0.0	K⊪≻
laster_Axis_Velocity	Virtual_Axis_1.CommandVelocity	
A second second second	0.0 +	
Acceleration	500	
Deceleration	500	
Proportional_Coefficient	1	
Conversion_Constant	1	
Position_Unwind	32768	
RPI Time in ms	2	



Axis_Input_DataInput data from AMCI motion device. Uses the AMCI_Motion_Axis_Input_Data User Defined Data Type.Axis_Output_DataOutput data from the AOI to the AMCI motion device. Uses the AMCI_Motion_Axis_Output_Data User Defined Data Type.Current_System_TimeThe first word of the two DINT word array of the current time in nanoseconds read by a GSV instruction.Master_Axis_PositionREAL DATA TYPE position directly from the motion axis.Master_Axis_VelocityREAL DATA TYPE velocity directly from the motion axis.Acceleration & DecelerationAn actual value or an INT DATA TYPE. Larger acceleration and deceleration values will cause the motion device to more quickly react changes in the source position and velocity values.	Parameter	
Axis_Input_DataAMCI_Motion_Axis_Input_Data User Defined Data Type.Axis_Output_DataOutput data from the AOI to the AMCI motion device. Uses the AMCI_Motion_Axis_Output_Data User Defined Data Type.Current_System_TimeThe first word of the two DINT word array of the current time in nanoseconds read by a GSV instruction.Master_Axis_PositionREAL DATA TYPE position directly from the motion axis.Master_Axis_VelocityREAL DATA TYPE velocity directly from the motion axis.Acceleration & DecelerationAn actual value or an INT DATA TYPE. Larger acceleration and deceleration values will cause the motion device to more quickly react changes in the source position and velocity values.		Input data from AMCI motion device. Uses the
Axis_Output_DataOutput data from the AOI to the AMCI motion device. Uses the AMCI Motion Axis Output Data User Defined Data Type.Current_System_TimeThe first word of the two DINT word array of the current time in nanoseconds read by a GSV instruction.Master_Axis_PositionREAL DATA TYPE position directly from the motion axis.Master_Axis_VelocityREAL DATA TYPE velocity directly from the motion axis.An actual value or an INT DATA TYPE. Larger acceleration and deceleration values will cause the motion device to more quickly react changes in the source position and velocity values.	Ax1s_Input_Data	AMCI Motion Axis Input Data User Defined Data Type.
Axis_Output_DataAMCI_Motion_Axis_Output_Data User Defined Data Type.Current_System_TimeThe first word of the two DINT word array of the current time in nanoseconds read by a GSV instruction.Master_Axis_PositionREAL DATA TYPE position directly from the motion axis.Master_Axis_VelocityREAL DATA TYPE velocity directly from the motion axis.An actual value or an INT DATA TYPE. Larger acceleration and deceleration values will cause the motion device to more quickly react changes in the source position and velocity values.	Arris Orderet Date	Output data from the AOI to the AMCI motion device. Uses the
Current_System_TimeThe first word of the two DINT word array of the current time in nanoseconds read by a GSV instruction.Master Axis PositionREAL DATA TYPE position directly from the motion axis.Master Axis VelocityREAL DATA TYPE velocity directly from the motion axis.Acceleration & DecelerationAn actual value or an INT DATA TYPE. Larger acceleration and deceleration values will cause the motion device to more quickly react changes in the source position and velocity values.	Axis_Output_Data	AMCI_Motion_Axis_Output_Data User Defined Data Type.
Current_System_Timenanoseconds read by a GSV instruction.Master_Axis_PositionREAL DATA TYPE position directly from the motion axis.Master_Axis_VelocityREAL DATA TYPE velocity directly from the motion axis.Acceleration & DecelerationAn actual value or an INT DATA TYPE. Larger acceleration and deceleration values will cause the motion device to more quickly react changes in the source position and velocity values.	Current System Time	The first word of the two DINT word array of the current time in
Master Axis PositionREAL DATA TYPE position directly from the motion axis.Master Axis VelocityREAL DATA TYPE velocity directly from the motion axis.An actual value or an INT DATA TYPE. Larger acceleration and deceleration values will cause the motion device to more quickly react changes in the source position and velocity values.	Current_System_Time	nanoseconds read by a GSV instruction.
Master_Axis_VelocityREAL DATA TYPE velocity directly from the motion axis.An actual value or an INT DATA TYPE. Larger acceleration and deceleration values will cause the motion device to more quickly react changes in the source position and velocity values.	Master_Axis_Position	REAL DATA TYPE position directly from the motion axis.
Acceleration & DecelerationAn actual value or an INT DATA TYPE. Larger acceleration and deceleration values will cause the motion device to more quickly react changes in the source position and velocity values.	Master_Axis_Velocity	REAL DATA TYPE velocity directly from the motion axis.
Acceleration & Deceleration deceleration values will cause the motion device to more quickly react changes in the source position and velocity values.		An actual value or an INT DATA TYPE. Larger acceleration and
react changes in the source position and velocity values.	Acceleration & Deceleration	deceleration values will cause the motion device to more quickly
		react changes in the source position and velocity values.
Proportional_Coefficient A value of 1 or 2 is recommended.	Proportional_Coefficient	A value of 1 or 2 is recommended.
The data from a circular motion axis has units of revolutions and		The data from a circular motion axis has units of revolutions and
revolutions / second. However, the AMCI Motion Device requires		revolutions / second. However, the AMCI Motion Device requires
that the position and velocity have units of counts and counts / sec.		that the position and velocity have units of counts and counts / sec.
The AOI performs this conversion by multiplying both the position		The AOI performs this conversion by multiplying both the position
Conversion_Constant and velocity from the motion axis by Conversion Constant	Conversion_Constant	and velocity from the motion axis by Conversion Constant
(Circular Follower Only) parameter before sending them to the AMCI Motion Controller.	(Circular Follower Only)	parameter before sending them to the AMCI Motion Controller.
This field is typically, but does not have to be, set to the master		This field is typically, but does not have to be, set to the master
axis' Conversion Constant. The Conversion Constant can be a		axis' Conversion Constant. The Conversion Constant can be a
fractional number. A negative Conversion Constant will cause the		fractional number. A negative Conversion Constant will cause the
motor to turn in the opposite direction from the master axis		motor to turn in the opposite direction from the master axis
Must be set to the Unwind Value of the motion axis and defines the		Must be set to the Unwind Value of the motion axis and defines the
Position_Unwind point at which the position data will transition from its maximum to	Position_Unwind	point at which the position data will transition from its maximum to
(Circular Follower Only) its minimum value. The Position Unwind Value MUST BE IN	(Circular Follower Only)	its minimum value. The Position Unwind Value MUST BE IN
THE RANGE OF 21 TO 65535.		THE RANGE OF 21 TO 65535.
The RPI time used when the AMCI Motion Device was added to		The RPI time used when the AMCI Motion Device was added to
the network. Used by the AOI to control how long the Preset		the network. Used by the AOI to control how long the Preset
RPI_Time_in_ms Command is sent to the Motion Device before motion begins. A	RPI_Time_in_ms	Command is sent to the Motion Device before motion begins. A
value of zero will cause the AOI to assume that the default RPI of		value of zero will cause the AOI to assume that the default RPI of
8ms is being used.		8ms is being used.

Enumerations	Set When	Reset When
EN (Enable)	Rung is true	Rung is false
DN (Done)	Command is sent to the motion device	Rung is false
ER (Error)	There is an Input, Command, or Configuration Error	Rung is false
IP (In Process)	The follower command is active, even if the master motion axis position and velocity are not changing.	Rung goes false



AMCI_MA_SV_Linear Follower with CIP SYNC AMCI_MA_SV_Circular_Follower with CIP SYNC

These AOIs will only work with the SVXXXE2 motion devices. The SD and SMD motion devices have their own follower AOIs.



AMCI_MA_SV	Circular_Follower_CIPSync-	-
Only for SVXXXE2 motion d	evices.	
AMCI_MA_SV_Circular_Foll Axis_Input_Data	SV160E2_circular_follower_cipsync AMCI_SV160E2_input_data	-(EN)-
Axis_Output_Data current system time	AMCI_SV160E2_output_data current time_nanoseconds[0]	-(ER)-
	÷0	-(DN)-
Master_Axis_Position	Virtual_Axis_1.CommandPosition	1 i
	0.0 ←	
Master_Axis_Velocity	Virtual_Axis_1.CommandVelocity	10 06 1
Master_Axis_Acceleration	0.0 ← Virtual_Axis_1.CommandAcceleration 0.0 ←	
Ramp_Acceleration	1500	
Deceleration	2200	
Conversion_Constant	1	
Position_Unwind	65536	



	1	
Parameter		
Avia Input Data	Input data from AMCI motion device. Uses the	
Axis_input_Data	AMCI_Motion_Axis_Input_Data User Defined Data Type.	
Axia Output Data	Output data from the AOI to the AMCI motion device. Uses the	
Axis_Output_Data	AMCI_Motion_Axis_Output_Data User Defined Data Type.	
Current System Time	The first word of the two DINT word array of the current time in	
Current_System_Time	nanoseconds read by a GSV instruction.	
Master_Axis_Position	REAL DATA TYPE position directly from the motion axis.	
Master_Axis_Velocity	REAL DATA TYPE velocity directly from the motion axis.	
Master_Axis_Acceleration	REAL DATA TYPE acceleration directly from the motion axis.	
	An actual value or INT value used to transition from no motion to	
Ramp Acceleration	motion. Once motion is occurring, the follower acceleration will	
•	be used. Range of 0 to 15,999.	
Deceleration	An actual value or INT value used to transition from motion to no	
Deceleration	motion. Range of 0 to 15,999.	
	An actual value or a REAL data type register. The value in this	
	field is multiplied by the Position, Velocity, and Acceleration from	
Conversion Constant	the master axis before being sent to the servo and scales the	
(Circular Follower Only)	supplied data to the servo motor counts per turn. This field is	
	typically, but does not have to be, set to the master axis'	
	Conversion Constant.	
	An actual value or a DINT TYPE register. This parameter defines	
Position_Unwind	the point at which the position data will transition from its	
(Circular Follower Only)	maximum to its minimum value.	

Enumerations	Set When	Reset When
EN (Enable)	Rung is true	Rung is false
DN (Done)	Command is sent to the motion device	Rung is false
ER (Error)	There is an Input, Command, or Configuration Error	Rung is false
IP (In Process)	Motion is occurring	Motion stops or the rung goes false



The following logic shows all of the elements required to use an AMCI motion device in a follower system with CIP Sync.

		GSV	
		Get System Value	
		Class Name TimeSynchron	
		Instance Name	
		Attribute Name CurrentTimeNanoseconds	
		Dest current_time_nanoseconds	
At the top of your program, BEFORE ALL OF THE ADD O array that was created using the AMCI_Motion_Axis_Inp	N INSTRUCTIONS, use a CPS instruction to ut_Data User Defined Data Type.	to copy the input data from the AMCI motion device	
The input data in this tag array is made up of named tags used in place of the input data directly from the AMCI mo	and will also be used as the buffered da tion device.	ata in your program. It is this buffered data that mu	
		CPS-	
		Synchronous Copy File	
		Source AMCI_SMD23E2:LSTATUS_WORE	
		Length AMCI_SMD23E2_input_d	
		Length	
Circular Axis Follower			
Run_AMCI_SMD23_24E2.7	AMCI_MA_SD	SMD_Circular_Follower_CIPSYNC	
	Circular Axis Follower fo	or SD and SMD devices. Will not work with SV	
	AMCI_MA_SD_SMD_Circ	cular AMCI_timesync_circular_follower	
	Axis_Input_Data	AMCI_SMD23E2_input_data	
	Axis_Output_Data	AMCI_SMD23E2_output_data	
	Current Suptom Time	ourrent time nanonaconde[0]	
	Current_System_Time	current_time_nanoseconds[0]	
	Current_System_Time	current_time_nanoseconds[0] 0 ← - Sample Motion Axis CommandPosition	
	Current_System_Time Master_Axis_Position	current_time_nanoseconds[0] 0 ← - Sample_Motion_Axis.CommandPosition 0.0 ← -	
	Current_System_Time Master_Axis_Position Master_Axis_Velocity	current_time_nanoseconds[0] 0 ← Sample_Motion_Axis.CommandPosition 0.0 ← Sample_Motion_Axis.CommandVelocity	
	Current_System_Time Master_Axis_Position Master_Axis_Velocity	current_time_nanoseconds[0] 0 ← Sample_Motion_Axis.CommandPosition 0.0 ← Sample_Motion_Axis.CommandVelocty 0.0 ←	
	Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration	current_time_nanoseconds[0] 0 ← - Sample_Motion_Axis.CommandPosition 0.0 ← Sample_Motion_Axis.CommandVelocity 0.0 ← 500	
	Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration	current_time_nanoseconds[0] 0 ← Sample_Motion_Axis.CommandPosition 0.0 ← Sample_Motion_Axis.CommandVelocty 0.0 ← 500	
	Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration Proportional_Coefficient	current_time_nanoseconds[0] 0 ← Sample_Motion_Axis.CommandPosition 0.0 ← Sample_Motion_Axis.CommandVelocity 0.0 ← 500 500	
	Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration Proportional_Coefficient Conversion_Constant	current_time_nanoseconds[0] 0 ← Sample_Motion_Axis.CommandPosition 0.0 ← Sample_Motion_Axis.CommandVelocity 0.0 ← 500 500 1	
	Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration Proportional_Coefficient Conversion_Constant Position_Unwind	current_time_nanoseconds[0] 0 ← Sample_Motion_Axis.CommandPosition 0.0 ← Sample_Motion_Axis.CommandVelocity 0.0 ← 500 1 1 16384	
	Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration Proportional_Coefficient Conversion_Constant Position_Unwind RPI Time in ms	current_time_nanoseconds[0] 0 ← Sample_Motion_Axis.CommandPosition 0.0 ← Sample_Motion_Axis.CommandVelocity 0.0 ← 500 1 1 16384 BPI time	
	Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration Proportional_Coefficient Conversion_Constant Position_Unwind RPL_Time_in_ms	current_time_nanoseconds[0] 0 ← Sample_Motion_Axis.CommandPosition 0.0 ← Sample_Motion_Axis.CommandVelocity 0.0 ← 500 500 1 1 16384 RPI_time 2 ←	

CPS Synchronous Copy File Source AMCL_SMD23E2_output_data Dest_AMCL_SMD23E2:0.COMMAND_WORD_0 Length 10
Lengin



The logic on this and the following page shows how a single master axis can be used to control multiple AMCI motion devices.

ine teng meet net net o uny	input conditions			
	input contaitorio.		GSV	
			Get System Value	
			Class Name TimeSynchro Instance Name	onize
			Attribute Name CurrentTimeNanosecond Dest current_time_nanoseconds[0	
t the top of your program, BEI a tag array that was created	FORE ALL OF THE ADD ON I using the AMCI_Motion_Ax	INSTRUCTIONS, use a CPS instruction is_Input_Data User Defined Data	ction to copy the input data from the AMCI mot Type.	ion dev
he input data in this tag array	is made up of named tags a	nd will also be used as the buffe	red data in your program. It is this buffered d	ata that
ust be used in place of the inj	put data directly from the All	ICI motion device.	005	
	Synchronous Conv	File	Synchronous Copy File	
	Source AMCI SME	23E2:LSTATUS WORD 0	Source AMCI SMD34E2:LSTATUS WOR	RD 0
	Dest A	MCI SMD23E2 input data	Dest AMCI SMD34E2 input data	
	Length	10	Length	10
			10 67 - 1	
SMD23E2 follow a master axis				
Run AMCI SMD23 24E2.7		AMCI MA SD S	MD Circular Follower CIPSYNC-	-
		Circular Axis Follower for S	SD and SMD devices. Will not work with SV	
5.0		AMCI MA SD SMD Circular AMCI timesvnc circular follower		-CEN'
		Axis Input Data	AMCI SMD23E2 input data	
		Axis Output Data	AMCI_SMD23E2_output_data	CON
				HOW
		Current_System_Time	current_time_nanoseconds[0]	-CDN
		Current_System_Time	current_time_nanoseconds[0] 0	-(ER
		Current_System_Time Master_Axis_Position	current_time_nanoseconds[0] 0 ← Virtual_Axis_1.CommandPosition	-(ER)
		Current_System_Time Master_Axis_Position	current_time_nanoseconds[0] 0 ← Virtual_Axis_1.CommandPosition 0.0 ←	-(ER)
		Current_System_Time Master_Axis_Position Master_Axis_Velocity	current_time_nanoseconds[0] 0 ← Virtual_Axis_1.CommandPosition 0.0 ← Virtual_Axis_1.CommandVelocity	-(ER) -(IP)
		Current_System_Time Master_Axis_Position Master_Axis_Velocity	current_time_nanoseconds[0] 0 ← Virtual_Axis_1.CommandPosition 0.0 ← Virtual_Axis_1.CommandVelocity 0.0 ←	-(ER -(IP)
		Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration	current_time_nanoseconds[0] 0 ← Virtual_Axis_1.CommandPosition 0.0 ← Virtual_Axis_1.CommandVelocity 0.0 ← 500	-(ER) -(IP)
		Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration	current_time_nanoseconds[0] 0 ← Virtual_Axis_1.CommandPosition 0.0 ← Virtual_Axis_1.CommandVelocity 0.0 ← 500	-(ER) -(IP)
		Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration Proportional_Coefficient	current_time_nanoseconds[0] 0 ← Virtual_Axis_1.CommandPosition 0.0 ← Virtual_Axis_1.CommandVelocity 0.0 ← 500 500	-(ER) -(ER)
		Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration Proportional_Coefficient Conversion_Constant	current_time_nanoseconds[0] 0 ← Virtual_Axis_1.CommandPosition 0.0 ← Virtual_Axis_1.CommandVelocity 0.0 ← 500 500 1	-(ER)
		Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration Proportional_Coefficient Conversion_Constant Position_Unwind	current_time_nanoseconds[0] 0 ← Virtual_Axis_1.CommandPosition 0.0 ← Virtual_Axis_1.CommandVelocity 0.0 ← 500 1 1 1 16384	-(ER
		Current_System_Time Master_Axis_Position Master_Axis_Velocity Acceleration Deceleration Proportional_Coefficient Conversion_Constant Position_Unwind RPI_Time_in_ms	current_time_nanoseconds[0] 0 ← Virtual_Axis_1.CommandPosition 0.0 ← Virtual_Axis_1.CommandVelocity 0.0 ← 500 1 1 16384 RPI_time 2 -	-(ER -(IP)



Frequently Asked Questions

run_smd34e2		AMCI_MA_SD_	SMD_Circular_Follower_CIPSYNC	
JL		AMCL MA SD SMD Circu	SD and SMD devices. Will not work with SV I. lar AMCI SMD34F2 circular follower	(EN)-
		Axis Input Data	AMCI SMD34E2 input data	Cruz .
		Axis Output Data	AMCI SMD34E2 output data	(DN)-
		Current_System_Time	current_time_nanoseconds[0]	1.1
			0 ←	-(ER)-
		Master_Axis_Position	Virtual_Axis_1.CommandPosition	
		A provide the second seco	0.0 ←	-(P)
		Master_Axis_Velocity	Virtual_Axis_1.CommandVelocity	1 × 1 /
			0.0 ←	
		Acceleration	500	
		Deceleration	500	
		Proportional_Coefficient	1	
		Conversion_Constant	1	
		Position_Unwind	16384	
		RPI_Time_in_ms	2	
At the bottom of your pro AMCI motion device.	ogram, after all of the Add On Instr	uctions, use a CPS instruction to	o copy the data from the AOIs to the output reg	isters of th
The source tag array the	at was created using the AMCI_Mo	tion_Axis_Output_Data User De	fined Data Type.	
	Synchronous Conv Fi	le le	Synchronous Conv File	
	Source AM	SMD23E2 output data	Source AMCL SMD34F2 output	data
	Dest AMCI SMD23F2	O COMMAND WORD 0	Dest AMCI SMD34F2:0 COMMAND WO	RD 0
	DOGL FINDLOLD			1 1 M

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