

Outline of converting data transferred from one piece of electronics to a PLC using Studio 5000 EthernetIP module with CIP protocol.

The screenshot shows three 'Copy File' COP blocks in a ladder logic diagram. Each block has the following properties:

- Block 1:** Source: BarcodeCognex:1.InspectionResults[0], Dest: MyBarcode.DATA[0], Length: 4. Type: DINT, Style: Hex. Below it is a table for MyBarcode.DATA[0-3] with values '2', '1', '7', 'M'.
- Block 2:** Source: BarcodeCognex:1.InspectionResults[1], Dest: MyBarcode.DATA[4], Length: 4. Type: DINT, Style: Hex. Below it is a table for MyBarcode.DATA[4-7] with values '8', 'D', 'K', '2'.
- Block 3:** Source: BarcodeCognex:1.InspectionResults[2], Dest: MyBarcode.DATA[8], Length: 2. Type: DINT, Style: Hex. Below it is a table for MyBarcode.DATA[8-9] with values 'V', 'W'.

Below the COP blocks are three data tables:

- 16#M7_12:**

Addr	Cognex
00/01	32 31
02/03	37 4d
- 16#2K_D8:**

Addr	Cognex	PLC
03/02	4d	37
01/00	31	32
- 16#00_WV:**

Addr	Cognex	PLC
08/09	56 57	
10/11	00 00	
09/08	57 56	

At the bottom are two more tables:

- | Addr | Cognex | PLC |
|-------|--------|-----|
| 04/05 | 38 44 | |
| 06/07 | 4b 32 | |
- | Addr | Cognex | PLC |
|-------|--------|-----|
| 07/06 | 32 4b | |
| 05/04 | 44 38 | |

The graphic below indicates the data as it appears (in hex) on both the PLC and camera side.

BarcodeCognex:1.InspectionResults	{...}	{...}	Decimal	DINT[8]
+ BarcodeCognex:1.InspectionResults[0]	16#4d37_3132		Hex	DINT
+ BarcodeCognex:1.InspectionResults[1]	16#324b_4438		Hex	DINT
+ BarcodeCognex:1.InspectionResults[2]	16#0000_5756		Hex	DINT
+ BarcodeCognex:1.InspectionResults[3]	00 32 31 37 4d 38 44 4b 32	217M8DK2		DINT
+ BarcodeCognex:1.InspectionResults[4]	08 56 57	VW		DINT
+ BarcodeCognex:1.InspectionResults[5]				DINT
+ BarcodeCognex:1.InspectionResults[6]				DINT
+ BarcodeCognex:1.InspectionResults[7]	0		Decimal	DINT

Data as it appears on Cognex side.

Addr	Cognex
00/01	32 31
02/03	37 4d
04/05	38 44
06/07	4b 32
08/09	56 57
10/11	00 00

Addr	PLC
03/02	4d 37
01/00	31 32
07/06	32 4b
05/04	44 38
10/11	00 00
09/08	57 56