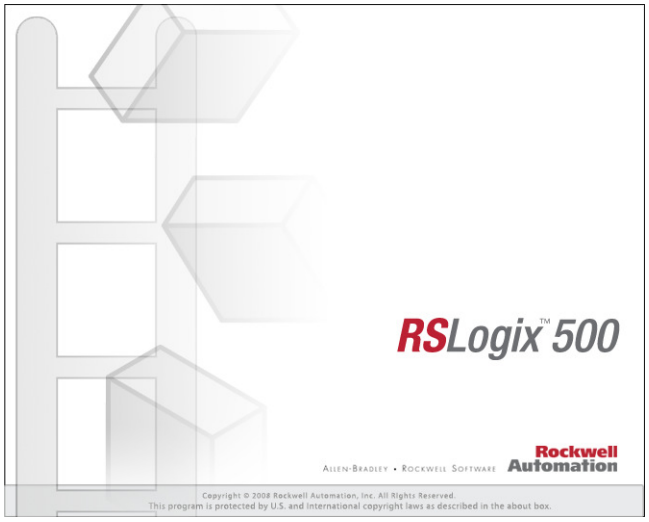
RSLogix Micro Project Report



Processor Information

Processor Type: Bul.1766 MicroLogix 1400 Series A

Processor Name: UNTITLED

Total Memory Used: 3712 Instruction Words Used - 7034 Data Table Words Used

Total Memory Left: 8722 Instruction Words Left

Program Files: 27

Data Files: 24

Program ID: 84fb

I/O Configuration

0	Bul.1766	MicroLogix 1400 Series A
1		
2		
3		
4		
5		
6		
7		

Channel Configuration

CHANNEL 0 (SYSTEM) - Driver: ASCII
   CHANNEL 0 (SYSTEM) - Driver: ASCII Edit Resource/Owner Timeout: 60
   CHANNEL 0 (SYSTEM) - Driver: ASCII Passthru Link ID: 1
   CHANNEL 0 (SYSTEM) - Driver: ASCII Write Protected: No
   CHANNEL 0 (SYSTEM) - Driver: ASCII Comms Servicing Selection: Yes
   CHANNEL 0 (SYSTEM) - Driver: ASCII Message Servicing Selection: Yes
   CHANNEL 0 (SYSTEM) - Driver: ASCII 1st AWA Append Character: \d
   CHANNEL 0 (SYSTEM) - Driver: ASCII 2nd AWA Append Character: \a

   Baud: 9600
   Parity: NONE
   Termination Character 1: \d
   Termination Character 2: \ff
   Control Line : No Handshaking (485 Network)
   Delete mode: Ignore
   Echo: No
   XON/XOFF: No
   RTS Off Delay(x20 ms): 0
   RTS Send Delay(x20 ms): 0

CHANNEL 1 (SYSTEM) - Driver: Ethernet
   CHANNEL 1 (SYSTEM) - Driver: Ethernet Edit Resource/Owner Timeout: 60
   CHANNEL 1 (SYSTEM) - Driver: Ethernet Passthru Link ID: 1
   CHANNEL 1 (SYSTEM) - Driver: Ethernet Write Protected: No
   CHANNEL 1 (SYSTEM) - Driver: Ethernet Comms Servicing Selection: Yes
   CHANNEL 1 (SYSTEM) - Driver: Ethernet Message Servicing Selection: Yes

   Hardware Address: 00:0F:73:FF:00:9E
   IP Address: 192.168.1.2
   Subnet Mask: 255.255.255.0
   Gateway Address: 0.0.0.0
   Msg Connection Timeout (x 1mS): 15000
   Msg Reply Timeout (x mS): 3000
   Inactivity Timeout (x Min): 30
   Bootp Enable: No
   Dhcp Enable No
   SMTP Enable: No
   SNMP Enable: Yes
   HTTP Enable: Yes
   Auto Negotiate Enable: Yes
   Port Speed Enable: 10/100 Mbps Full Duplex/Half Duplex
   Contact:
   Location:

CHANNEL 2 (SYSTEM) - Driver: DF1 Full Duplex
   CHANNEL 2 (SYSTEM) - Driver: DF1 Full Duplex Edit Resource/Owner Timeout: 60
   CHANNEL 2 (SYSTEM) - Driver: DF1 Full Duplex Passthru Link ID: 1
   CHANNEL 2 (SYSTEM) - Driver: DF1 Full Duplex Write Protected: No
   CHANNEL 2 (SYSTEM) - Driver: DF1 Full Duplex Comms Servicing Selection: Yes
   CHANNEL 2 (SYSTEM) - Driver: DF1 Full Duplex Message Servicing Selection: Yes
   CHANNEL 2 (SYSTEM) - Driver: DF1 Full Duplex 1st AWA Append Character: \d
   CHANNEL 2 (SYSTEM) - Driver: DF1 Full Duplex 2nd AWA Append Character: \a

   Source ID: 1 (decimal)
   Baud: 19200
   Parity: NONE
   Control Line : No Handshaking
   Error Detection: CRC
   Embedded Responses: Auto Detect
   Duplicate Packet Detect: Yes
   ACK Timeout(x20 ms): 50
   NAK Retries: 3
   ENQ Retries: 3

Program File List

Name	Number	Type	Rungs	Debug	Bytes
[SYSTEM]	0	SYS	0	No	0
	1	SYS	0	No	0
	2	LADDER	68	No	6076
CHANGE ADD	3	LADDER	5	No	318
CHG_ADD_1	4	LADDER	7	No	337
DATA_TRANS	5	LADDER	5	No	318
DATA_TXR_1	6	LADDER	7	No	337
DEFAULT	7	LADDER	5	No	318
DEFAULT_1	8	LADDER	7	No	316
VERSION	9	LADDER	6	No	475
VERSION_1	10	LADDER	7	No	316
SCAN	11	LADDER	9	No	558
SCAN_1	12	LADDER	6	No	371
SCAN_2	14	LADDER	6	No	371
CONFIG	15	LADDER	5	No	441
CONFIG_1	16	LADDER	7	No	316
TRANSFER	17	LADDER	6	No	475
TRANSFER_1	18	LADDER	9	No	4629
STORAGE	19	LADDER	5	No	318
STORAGE_1	20	LADDER	7	No	316
COLOR CHAN	21	LADDER	4	No	211
CLR CHAN_1	22	LADDER	6	No	316
KEY LOCK	23	LADDER	5	No	318
KEY LOCK_1	24	LADDER	7	No	337
PBR	25	LADDER	5	No	318
PBR_NODE_1	26	LADDER	8	No	4568
PBR_NODE_2	27	LADDER	8	No	4568

Data File List

Name	Number	Type	Scope	Debug	Words	Elements	Last
OUTPUT	0	O	Global	No	18	6	O:5
INPUT	1	I	Global	No	24	8	I:7
STATUS	2	S	Global	No	0	66	S:65
BINARY	3	B	Global	No	12	12	B3:11
TIMER	4	T	Global	No	105	35	T4:34
COUNTER	5	C	Global	No	18	6	C5:5
CONTROL	6	R	Global	No	75	25	R6:24
INTEGER	7	N	Global	No	101	101	N7:100
FLOAT	8	F	Global	No	2	1	F8:0
NODE ADD	9	ST	Global	No	252	6	ST9:5
CHANGE ADD	10	ST	Global	No	294	7	ST10:6
DATA TRANS	11	ST	Global	No	294	7	ST11:6
DEFAULT	12	ST	Global	No	252	6	ST12:5
SOFTWARE	13	ST	Global	No	462	11	ST13:10
START SCAN	14	ST	Global	No	378	9	ST14:8
END SCAN	16	ST	Global	No	252	6	ST16:5
CONFIG	17	ST	Global	No	672	16	ST17:15
TRANSFER	18	ST	Global	No	378	9	ST18:8
CHECKSUM	19	ST	Global	No	2394	57	ST19:56
STORAGE	20	ST	Global	No	252	6	ST20:5
COLOR CHAN	21	ST	Global	No	294	7	ST21:6
LOCK KEYS	22	ST	Global	No	294	7	ST22:6
PBR	23	ST	Global	No	210	5	ST23:4
	100	N	Global	No	1	1	N100:0

Clear Messages and States

ASCII meassages and states are cleared when the controller is power cycled or during the first scan of the program.

0000

First Pass
S:1
15

RESET COMS
B3:8
0

ACL
Ascii Clear Buffers
Channel 0
Receive Buffer Yes
Transmit Buffer Yes

CLR
Clear
Dest N100:0
0<

R6:0 RES

R6:1 RES

R6:2 RES

R6:3 RES

R6:4 RES

R6:5 RES

R6:6 RES

R6:7 RES

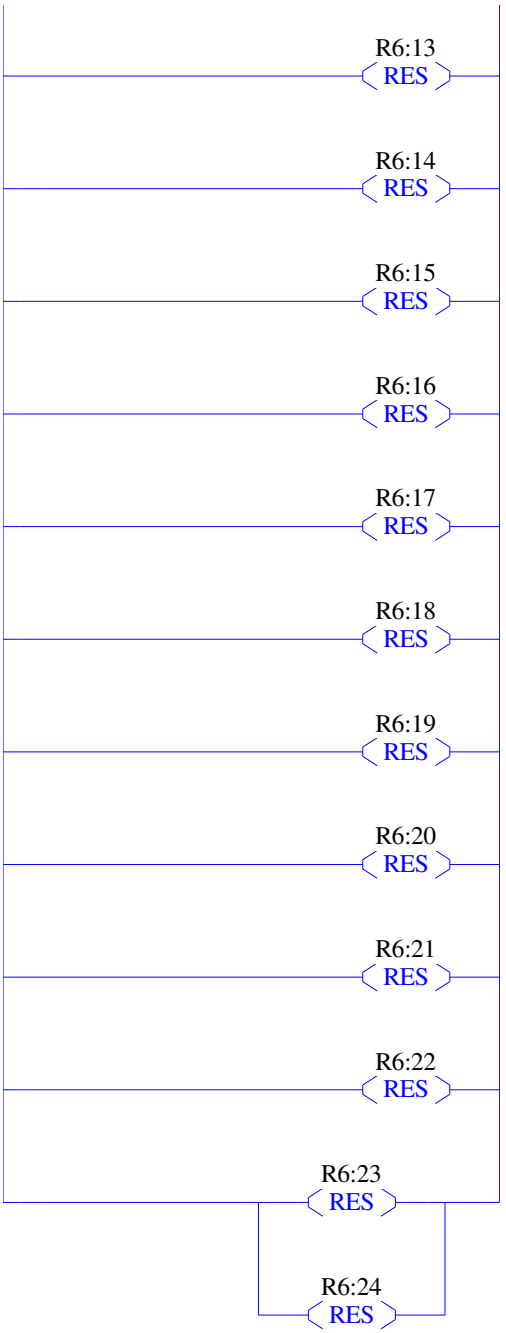
R6:8 RES

R6:9 RES

R6:10 RES

R6:11 RES

R6:12 RES

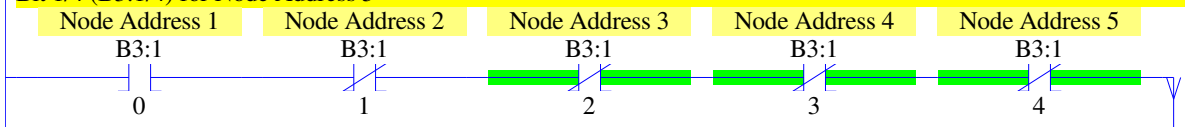

R6:13
RES
R6:14
RES
R6:15
RES
R6:16
RES
R6:17
RES
R6:18
RES
R6:19
RES
R6:20
RES
R6:21
RES
R6:22
RES
R6:23
RES
R6:24
RES

Node Address

Select the sensor address that will be commanded by activating/toggling Bits 1/0-1/4 for node addresses 1-5. For set-up configurations, toggle only one sensor and instruction command (Rungs 5-43). Multiple sensors can be addressed during operation after set-up.

Bit 1/0 (B3:1/0) for Node Address 1
Bit 1/1 (B3:1/1) for Node Address 2
Bit 1/2 (B3:1/2) for Node Address 3
Bit 1/3 (B3:1/3) for Node Address 4
Bit 1/4 (B3:1/4) for Node Address 5

0001



ACN
String Concatenate
Source A ST9:0
Source B ST10:0
Dest ST10:1

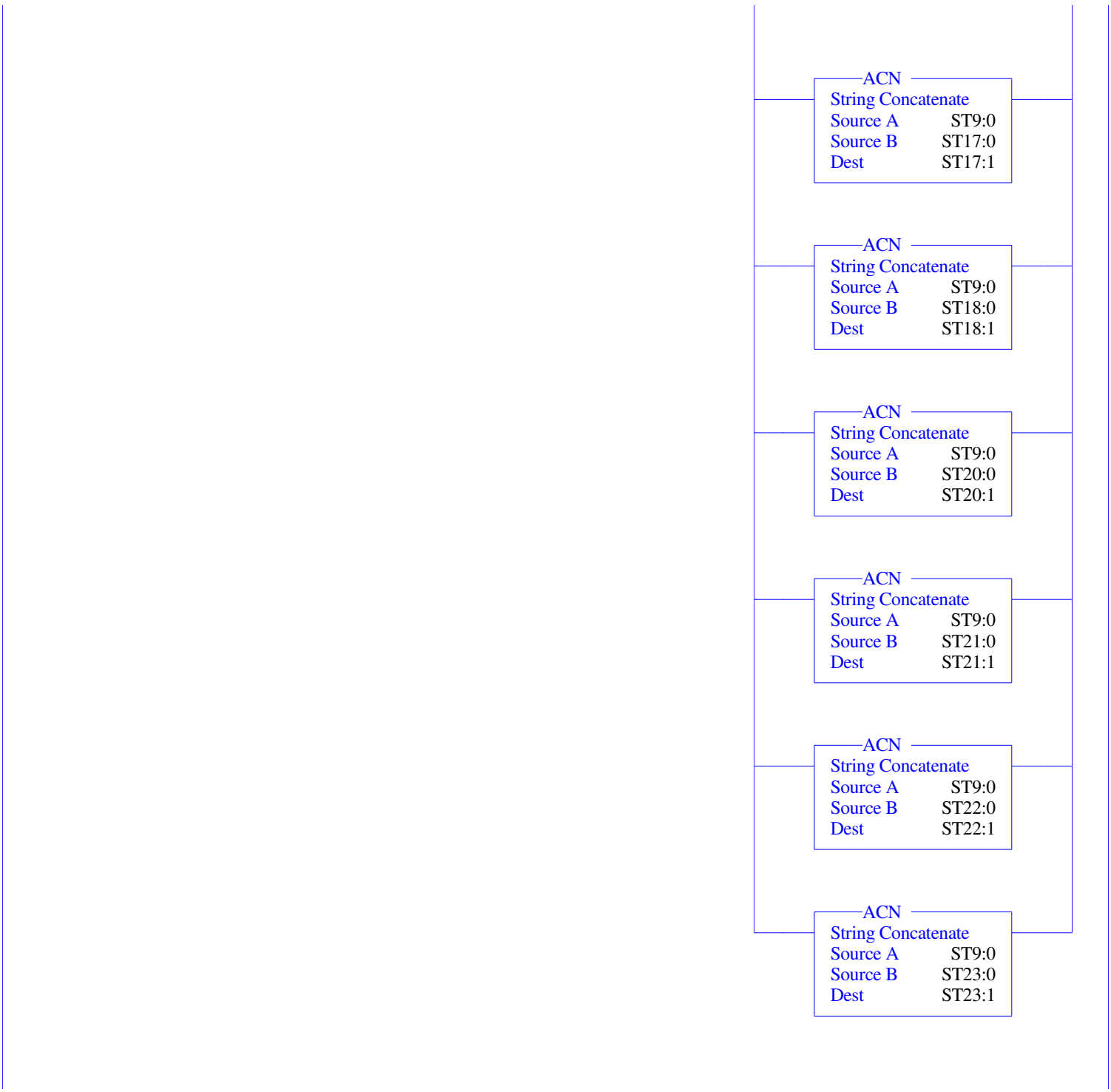
ACN
String Concatenate
Source A ST9:0
Source B ST11:0
Dest ST11:1

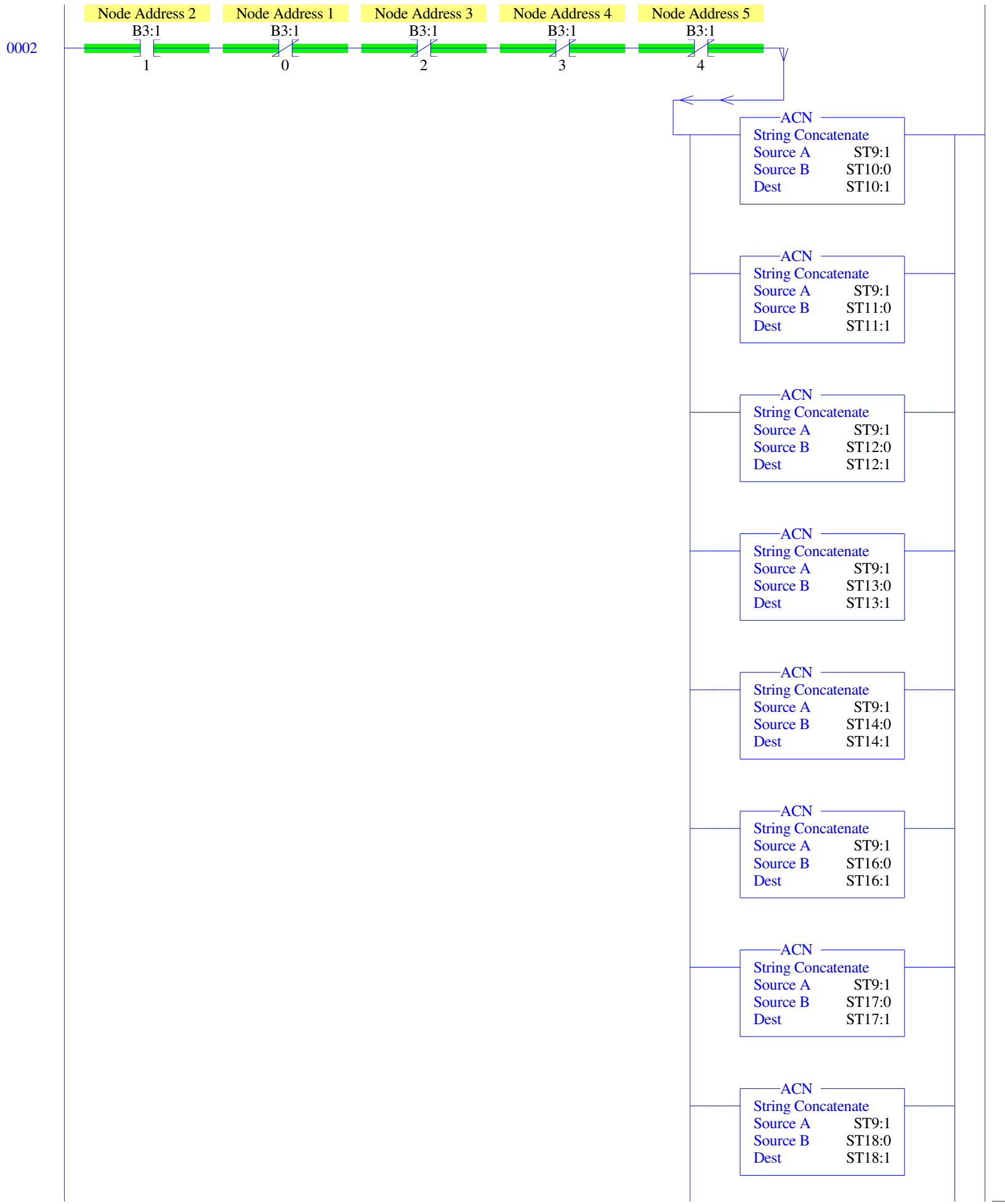
ACN
String Concatenate
Source A ST9:0
Source B ST12:0
Dest ST12:1

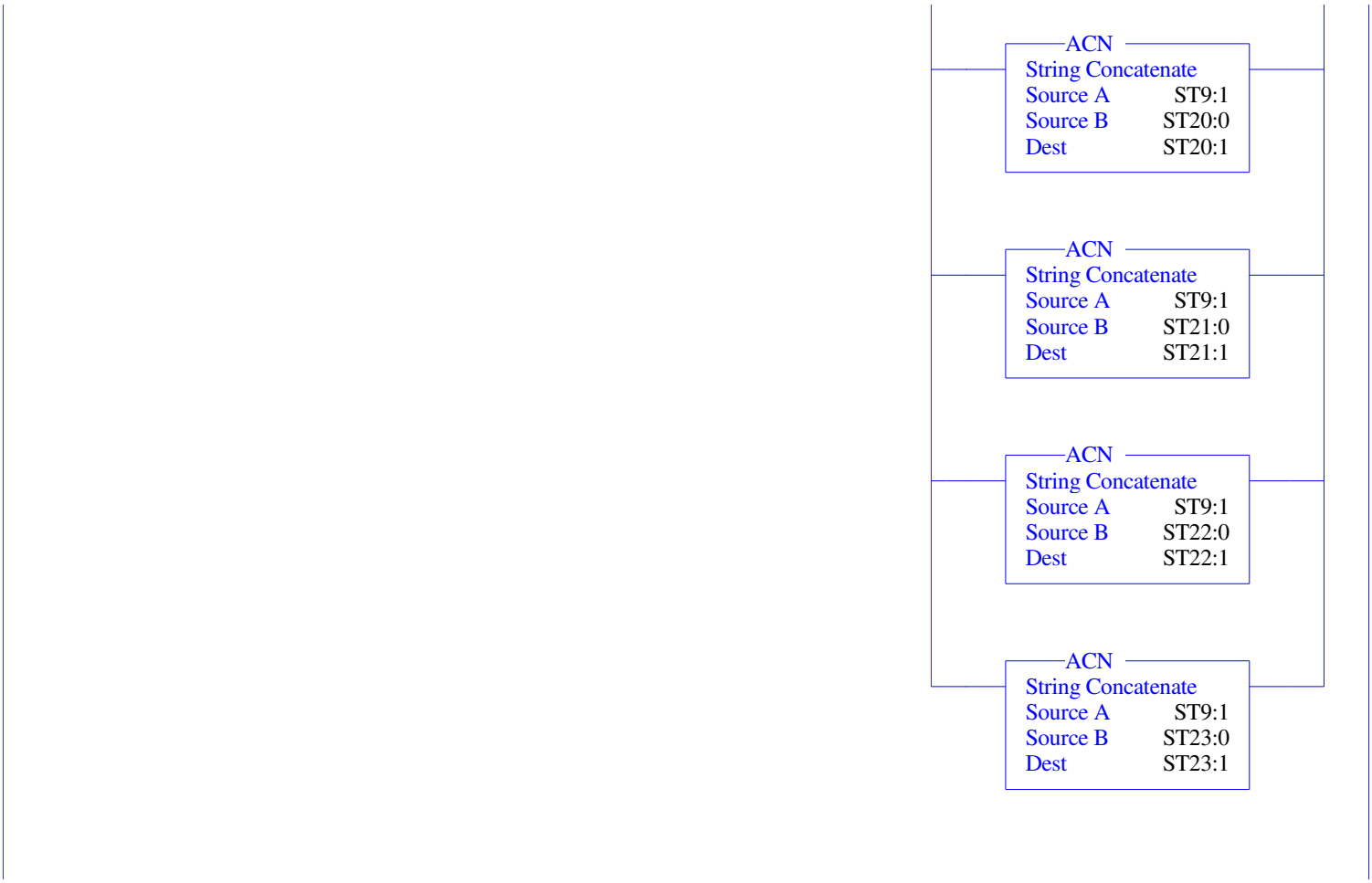
ACN
String Concatenate
Source A ST9:0
Source B ST13:0
Dest ST13:1

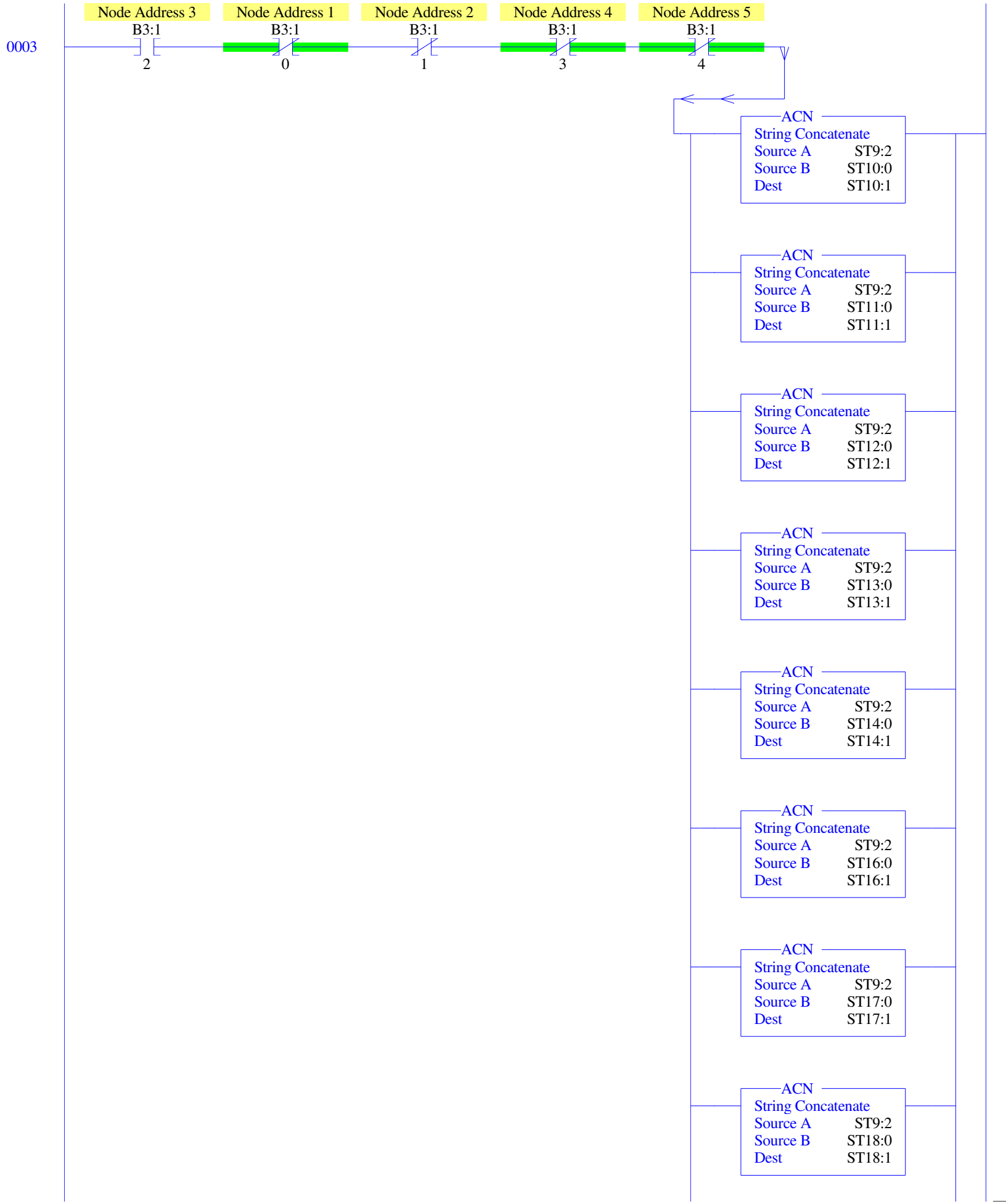
ACN
String Concatenate
Source A ST9:0
Source B ST14:0
Dest ST14:1

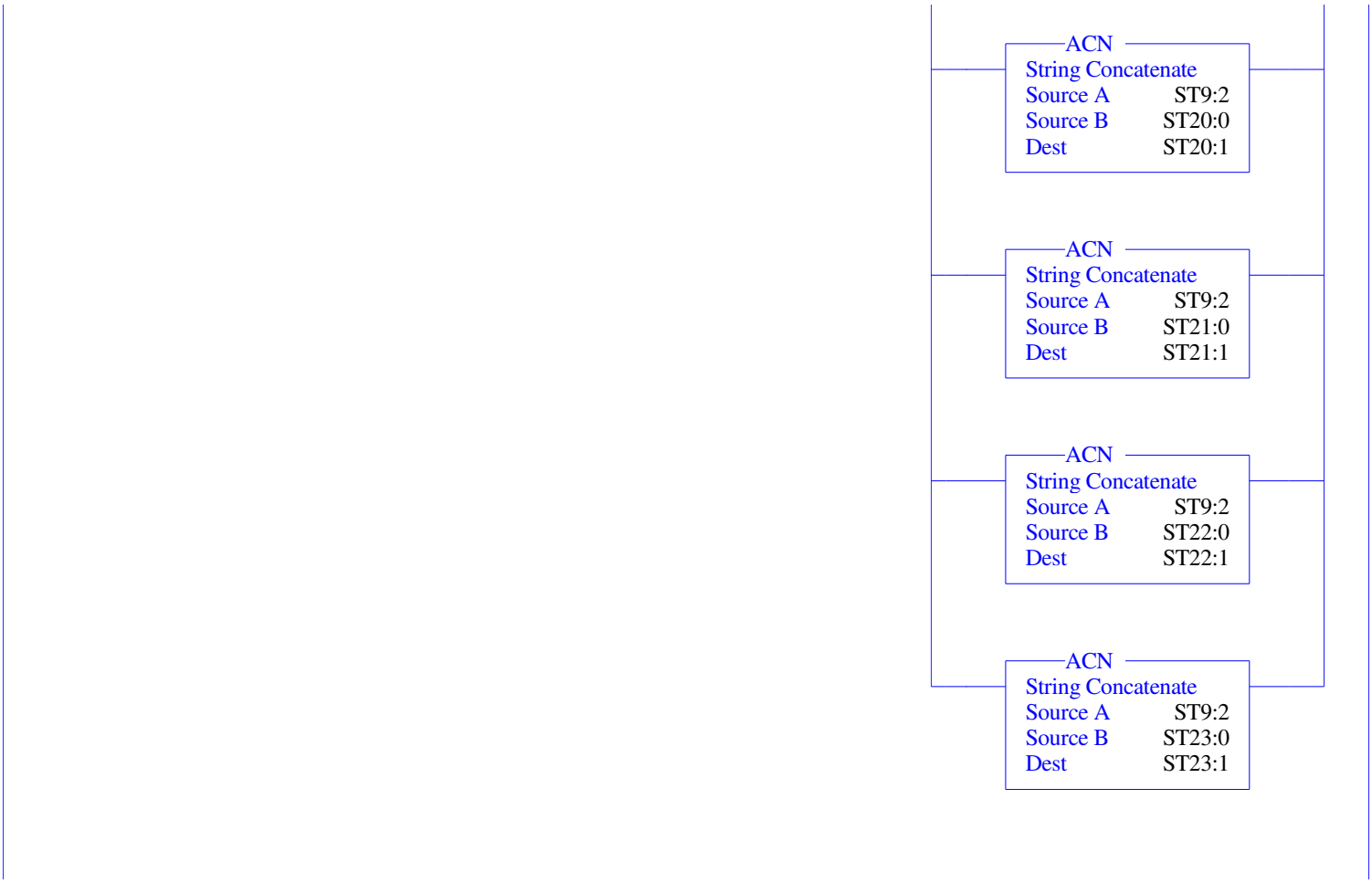
ACN
String Concatenate
Source A ST9:0
Source B ST16:0
Dest ST16:1

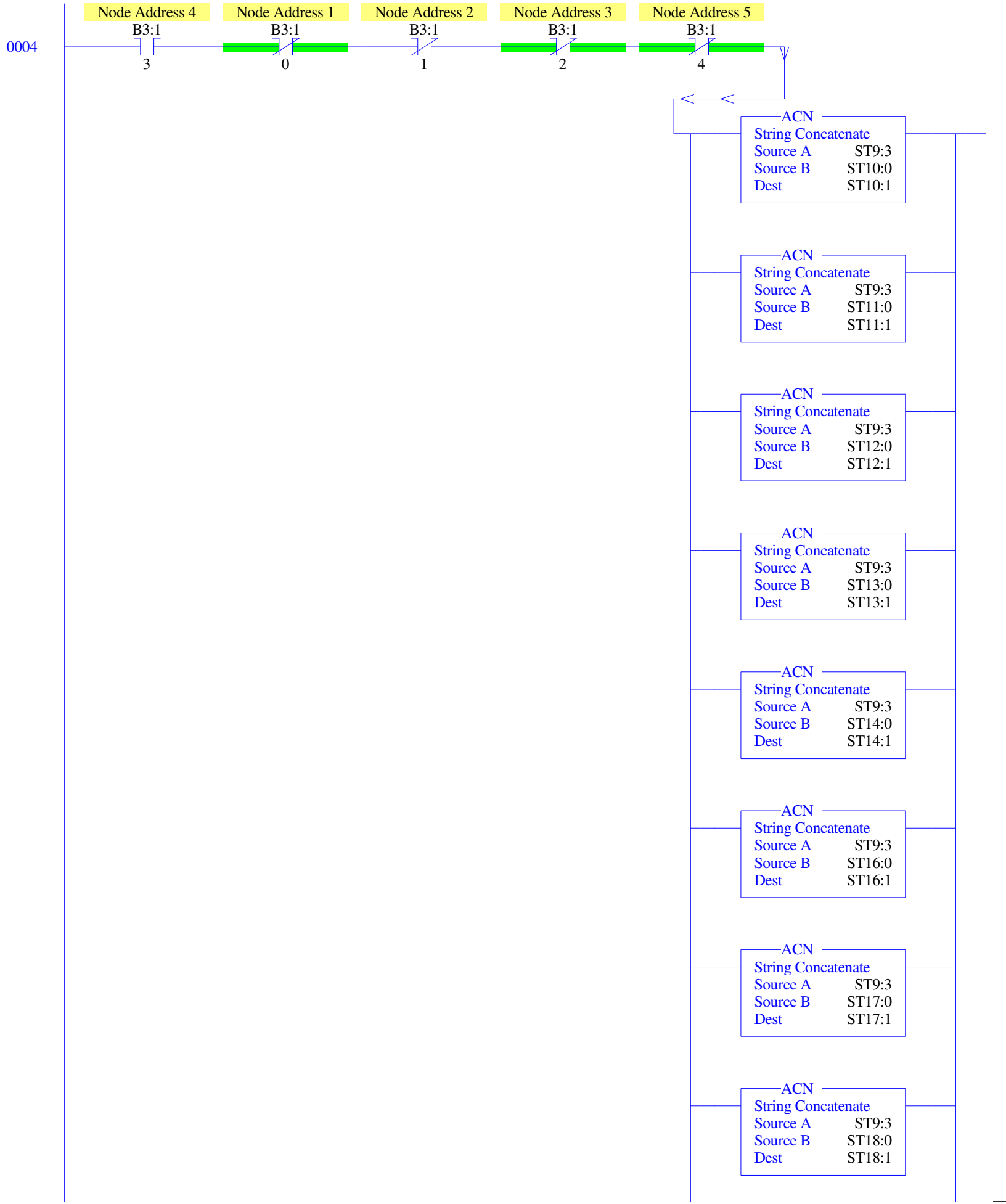

ACN
String Concatenate
Source A ST9:0
Source B ST17:0
Dest ST17:1
ACN
String Concatenate
Source A ST9:0
Source B ST18:0
Dest ST18:1
ACN
String Concatenate
Source A ST9:0
Source B ST20:0
Dest ST20:1
ACN
String Concatenate
Source A ST9:0
Source B ST21:0
Dest ST21:1
ACN
String Concatenate
Source A ST9:0
Source B ST22:0
Dest ST22:1
ACN
String Concatenate
Source A ST9:0
Source B ST23:0
Dest ST23:1

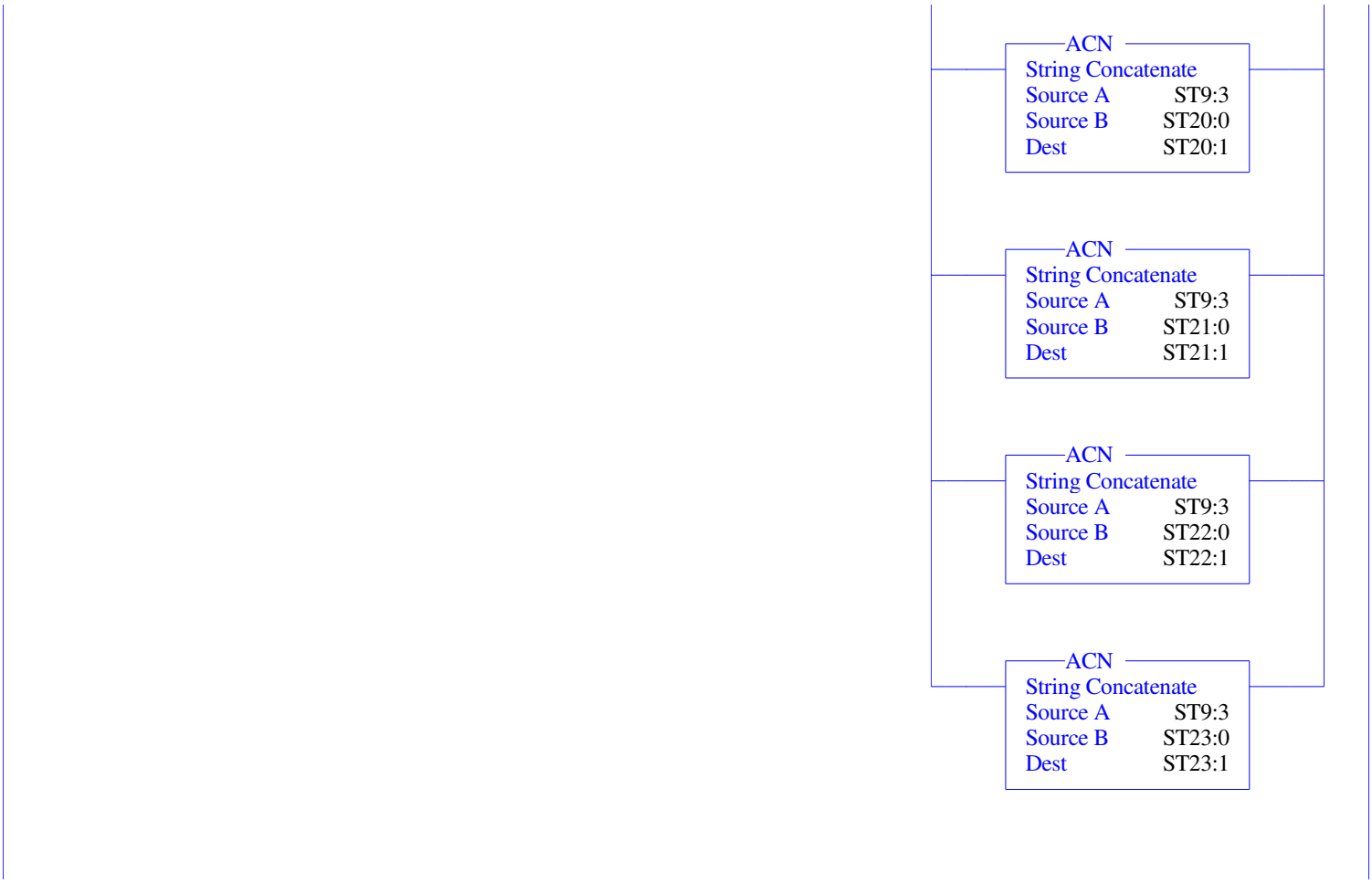

0002
Node Address 2
B3:1
1
Node Address 1
B3:1
0
Node Address 3
B3:1
2
Node Address 4
B3:1
3
Node Address 5
B3:1
4
ACN
String Concatenate
Source A ST9:1
Source B ST10:0
Dest ST10:1
ACN
String Concatenate
Source A ST9:1
Source B ST11:0
Dest ST11:1
ACN
String Concatenate
Source A ST9:1
Source B ST12:0
Dest ST12:1
ACN
String Concatenate
Source A ST9:1
Source B ST13:0
Dest ST13:1
ACN
String Concatenate
Source A ST9:1
Source B ST14:0
Dest ST14:1
ACN
String Concatenate
Source A ST9:1
Source B ST16:0
Dest ST16:1
ACN
String Concatenate
Source A ST9:1
Source B ST17:0
Dest ST17:1
ACN
String Concatenate
Source A ST9:1
Source B ST18:0
Dest ST18:1

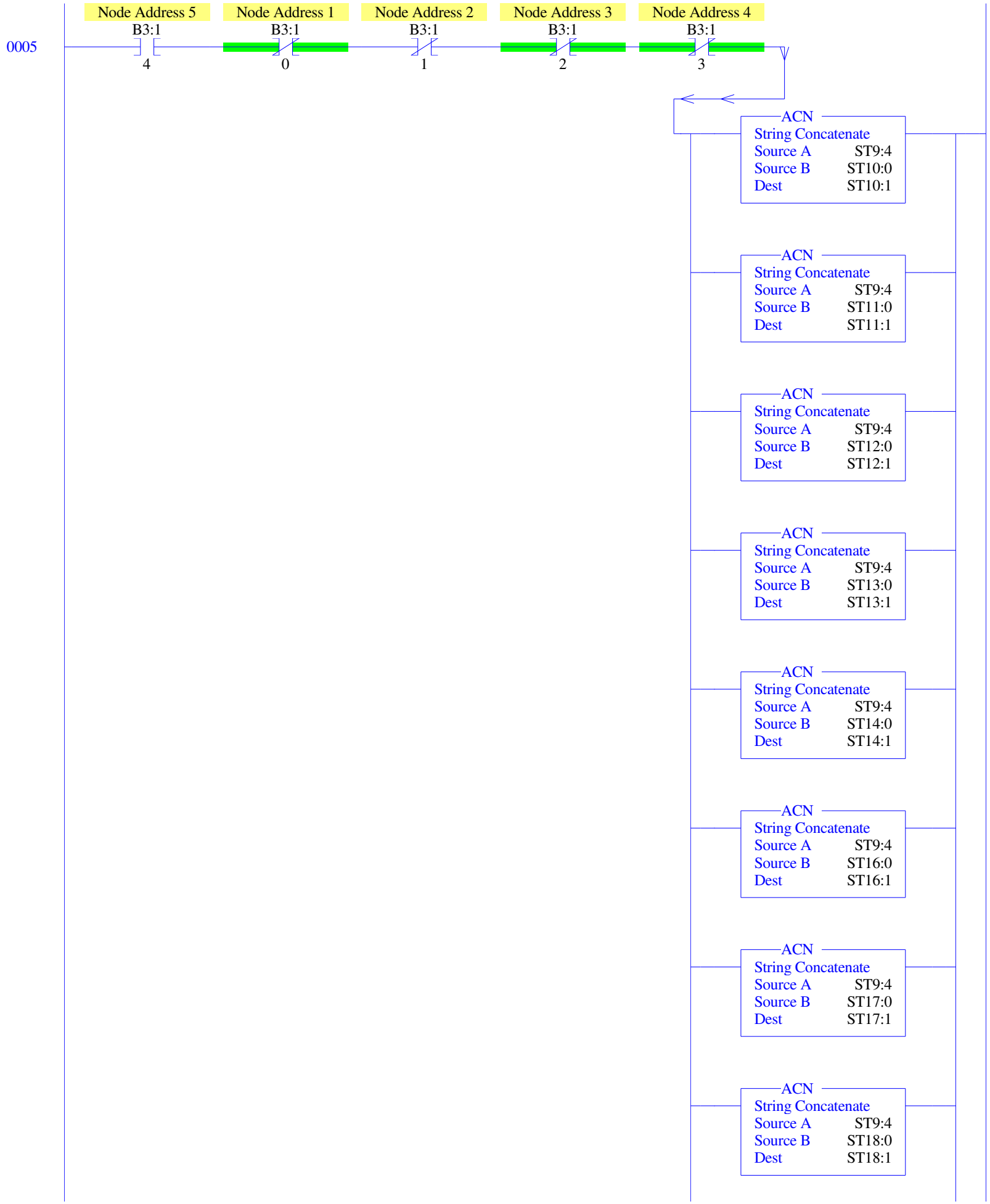

ACN
String Concatenate
Source A ST9:1
Source B ST20:0
Dest ST20:1
ACN
String Concatenate
Source A ST9:1
Source B ST21:0
Dest ST21:1
ACN
String Concatenate
Source A ST9:1
Source B ST22:0
Dest ST22:1
ACN
String Concatenate
Source A ST9:1
Source B ST23:0
Dest ST23:1

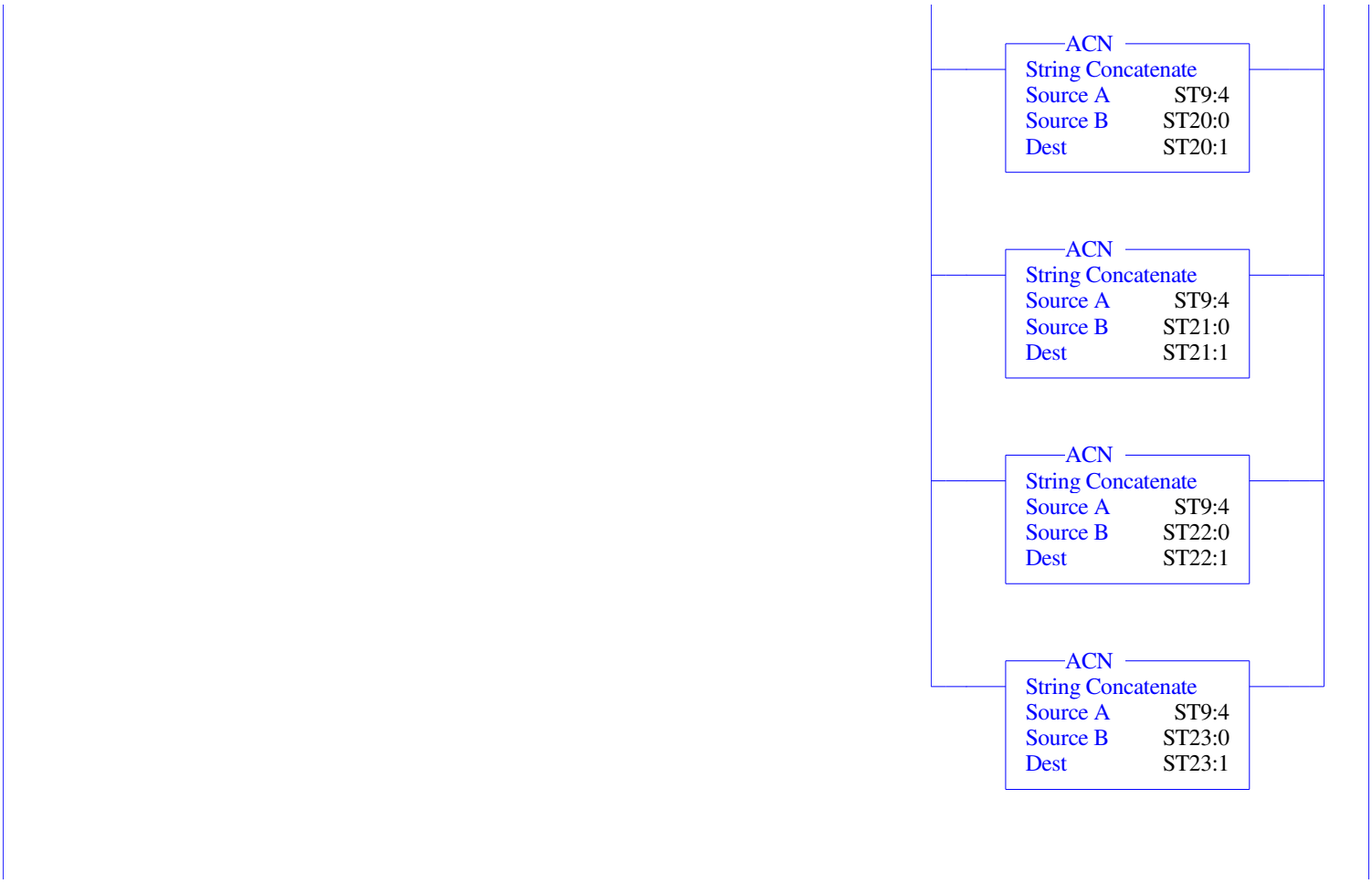

0003
Node Address 3
B3:1
2
Node Address 1
B3:1
0
Node Address 2
B3:1
1
Node Address 4
B3:1
3
Node Address 5
B3:1
4
ACN
String Concatenate
Source A ST9:2
Source B ST10:0
Dest ST10:1
ACN
String Concatenate
Source A ST9:2
Source B ST11:0
Dest ST11:1
ACN
String Concatenate
Source A ST9:2
Source B ST12:0
Dest ST12:1
ACN
String Concatenate
Source A ST9:2
Source B ST13:0
Dest ST13:1
ACN
String Concatenate
Source A ST9:2
Source B ST14:0
Dest ST14:1
ACN
String Concatenate
Source A ST9:2
Source B ST16:0
Dest ST16:1
ACN
String Concatenate
Source A ST9:2
Source B ST17:0
Dest ST17:1
ACN
String Concatenate
Source A ST9:2
Source B ST18:0
Dest ST18:1


ACN
String Concatenate
Source A ST9:2
Source B ST20:0
Dest ST20:1
ACN
String Concatenate
Source A ST9:2
Source B ST21:0
Dest ST21:1
ACN
String Concatenate
Source A ST9:2
Source B ST22:0
Dest ST22:1
ACN
String Concatenate
Source A ST9:2
Source B ST23:0
Dest ST23:1


Node Address 4
B3:1
3
Node Address 1
B3:1
0
Node Address 2
B3:1
1
Node Address 3
B3:1
2
Node Address 5
B3:1
4
0004
ACN
String Concatenate
Source A ST9:3
Source B ST10:0
Dest ST10:1
ACN
String Concatenate
Source A ST9:3
Source B ST11:0
Dest ST11:1
ACN
String Concatenate
Source A ST9:3
Source B ST12:0
Dest ST12:1
ACN
String Concatenate
Source A ST9:3
Source B ST13:0
Dest ST13:1
ACN
String Concatenate
Source A ST9:3
Source B ST14:0
Dest ST14:1
ACN
String Concatenate
Source A ST9:3
Source B ST16:0
Dest ST16:1
ACN
String Concatenate
Source A ST9:3
Source B ST17:0
Dest ST17:1
ACN
String Concatenate
Source A ST9:3
Source B ST18:0
Dest ST18:1


ACN
String Concatenate
Source A ST9:3
Source B ST20:0
Dest ST20:1
ACN
String Concatenate
Source A ST9:3
Source B ST21:0
Dest ST21:1
ACN
String Concatenate
Source A ST9:3
Source B ST22:0
Dest ST22:1
ACN
String Concatenate
Source A ST9:3
Source B ST23:0
Dest ST23:1


Node Address 5
B3:1
4
Node Address 1
B3:1
0
Node Address 2
B3:1
1
Node Address 3
B3:1
2
Node Address 4
B3:1
3
0005
ACN
String Concatenate
Source A ST9:4
Source B ST10:0
Dest ST10:1
ACN
String Concatenate
Source A ST9:4
Source B ST11:0
Dest ST11:1
ACN
String Concatenate
Source A ST9:4
Source B ST12:0
Dest ST12:1
ACN
String Concatenate
Source A ST9:4
Source B ST13:0
Dest ST13:1
ACN
String Concatenate
Source A ST9:4
Source B ST14:0
Dest ST14:1
ACN
String Concatenate
Source A ST9:4
Source B ST16:0
Dest ST16:1
ACN
String Concatenate
Source A ST9:4
Source B ST17:0
Dest ST17:1
ACN
String Concatenate
Source A ST9:4
Source B ST18:0
Dest ST18:1


ACN
String Concatenate
Source A ST9:4
Source B ST20:0
Dest ST20:1
ACN
String Concatenate
Source A ST9:4
Source B ST21:0
Dest ST21:1
ACN
String Concatenate
Source A ST9:4
Source B ST22:0
Dest ST22:1
ACN
String Concatenate
Source A ST9:4
Source B ST23:0
Dest ST23:1

Change the Sensor's Address

This command wites to the sensor, if another node address value needs to be selected. The default sensors are set to an address of 1. This command changes your sensor address from the default value of 1 to a user defined selection of 2-5. The new desired address needs to be manually entered into the Source field of N7:4 within the MOV command along Rung 0005. Leave address 1 open for additional sensors that will be added to the network for the first time.

When B3:0/0 is not activated by the user, the default node address of 1 is active for a sensor that has just been added to the network with the factory settings.

When N7:4 is 1, the selected sensor (B3:1/0-B3:1/4) will be given the new node address of 1, the default value.
When N7:4 is 2, the selected sensor (B3:1/0-B3:1/4) will be given the new node address of 2.
When N7:4 is 3, the selected sensor (B3:1/0-B3:1/4) will be given the new node address of 3.
When N7:4 is 4, the selected sensor (B3:1/0-B3:1/4) will be given the new node address of 4.
When N7:4 is 5, the selected sensor (B3:1/0-B3:1/4) will be given the new node address of 5.

Change the sensor's address

0006

B3:0 0 | B3:2 ONS 0 | B3:2 L 1

R6:0 RES

R6:1 RES

MOV
Move
Source 2
2<
Dest ST10:2.LEN
1<

New node address for currently selected sensor (default address is 1)

MOV
Move
Source N7:4
1<
Dest ST10:2.DATA[0]
^A^A<

AEX
String Extract
Source ST10:2
Index 2
Number 1
Dest ST10:2

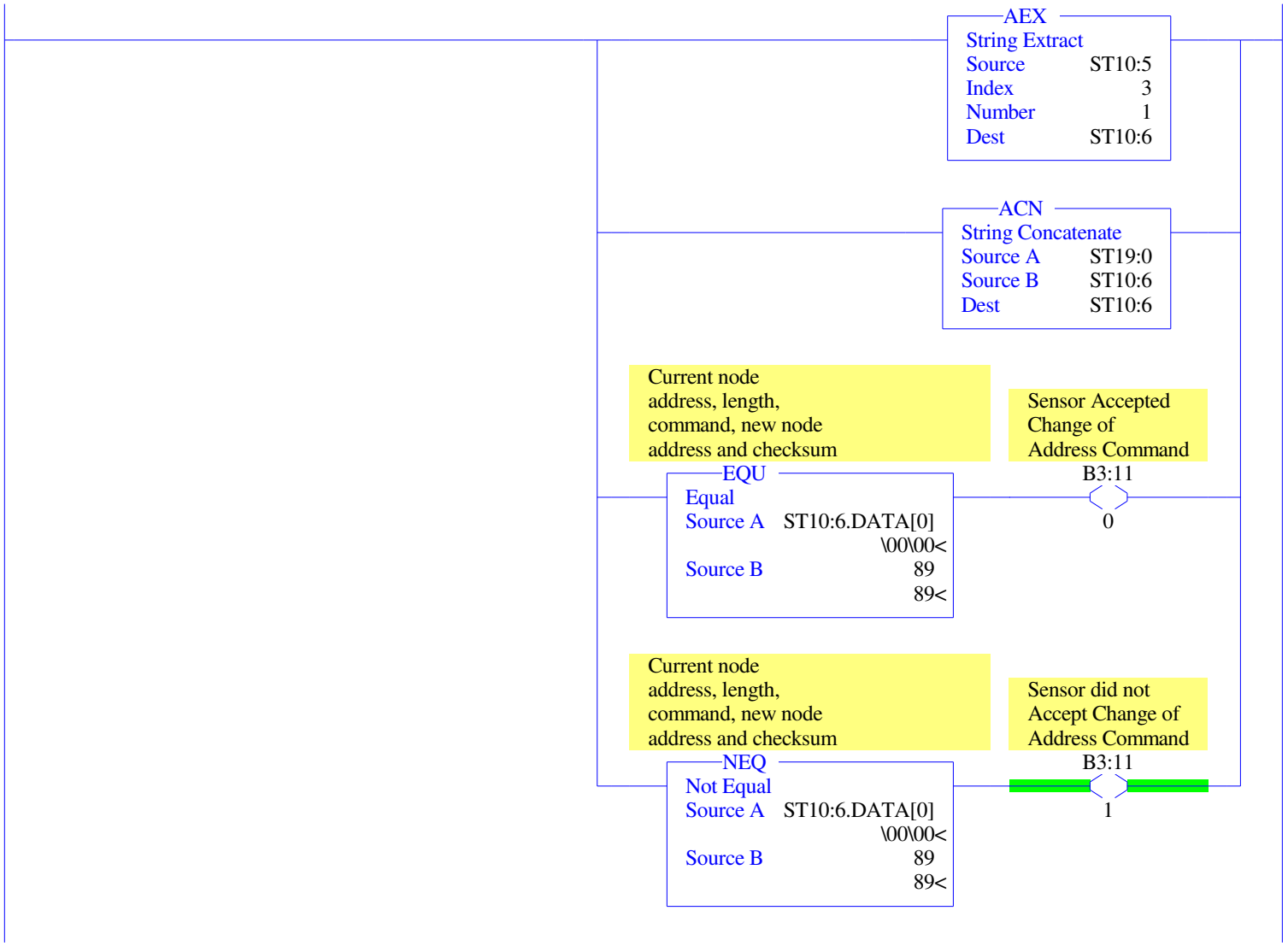
ACN
String Concatenate
Source A ST10:1
Source B ST10:2
Dest ST10:3

0007

B3:2 1

JSR
Jump To Subroutine
SBR File Number U:3

0008


AEX
String Extract
Source ST10:5
Index 3
Number 1
Dest ST10:6
ACN
String Concatenate
Source A ST19:0
Source B ST10:6
Dest ST10:6
Current node address, length, command, new node address and checksum
EQU
Equal
Source A ST10:6.DATA[0]
\00\00<
Source B 89
89<
Sensor Accepted Change of Address Command
B3:11
0
Current node address, length, command, new node address and checksum
NEQ
Not Equal
Source A ST10:6.DATA[0]
\00\00<
Source B 89
89<
Sensor did not Accept Change of Address Command
B3:11
1

Set Data Transfer Rate

This command wites to the sensor, if another data transfer rate (Baud rate) between the MicroLogix and individual sensor is desired. The default sensors are set to a Baud rate of 9600. This command changes your Baud rate from the default value of 9600 to a user defined selection of 4600, 19200 and 38400. Change the Baud rate by manually entering a value of 0-3 for N7:5 and toggling Bit 0/1 (B3:0/1).

When B3:0/1 is not activated by the user, the default data transfer rate of 9600 is active
When N7:5 is 0, the selected sensor (B3:0/1-B3:0/4) will be given the new data transfer rate of 4800
When N7:5 is 1, the selected sensor (B3:0/1-B3:0/4) will be given the new data transfer rate of 9600
When N7:5 is 2, the selected sensor (B3:0/1-B3:0/4) will be given the new data transfer rate of 19200
When N7:5 is 3, the selected sensor (B3:0/1-B3:0/4) will be given the new data transfer rate of 38400

Set data transfer rate

0009

B3:0 1 — B3:2 ONS 2 — B3:2 L 3

R6:2 RES

R6:3 RES

MOV
Move
Source 2
2<
Dest ST11:2.LEN
1<

New data transfer rate for currently selected sensor (default Baud rate is 9600)

MOV
Move
Source N7:5
1<
Dest ST11:2.DATA[0]
^A^A<

AEX
String Extract
Source ST11:2
Index 2
Number 1
Dest ST11:2

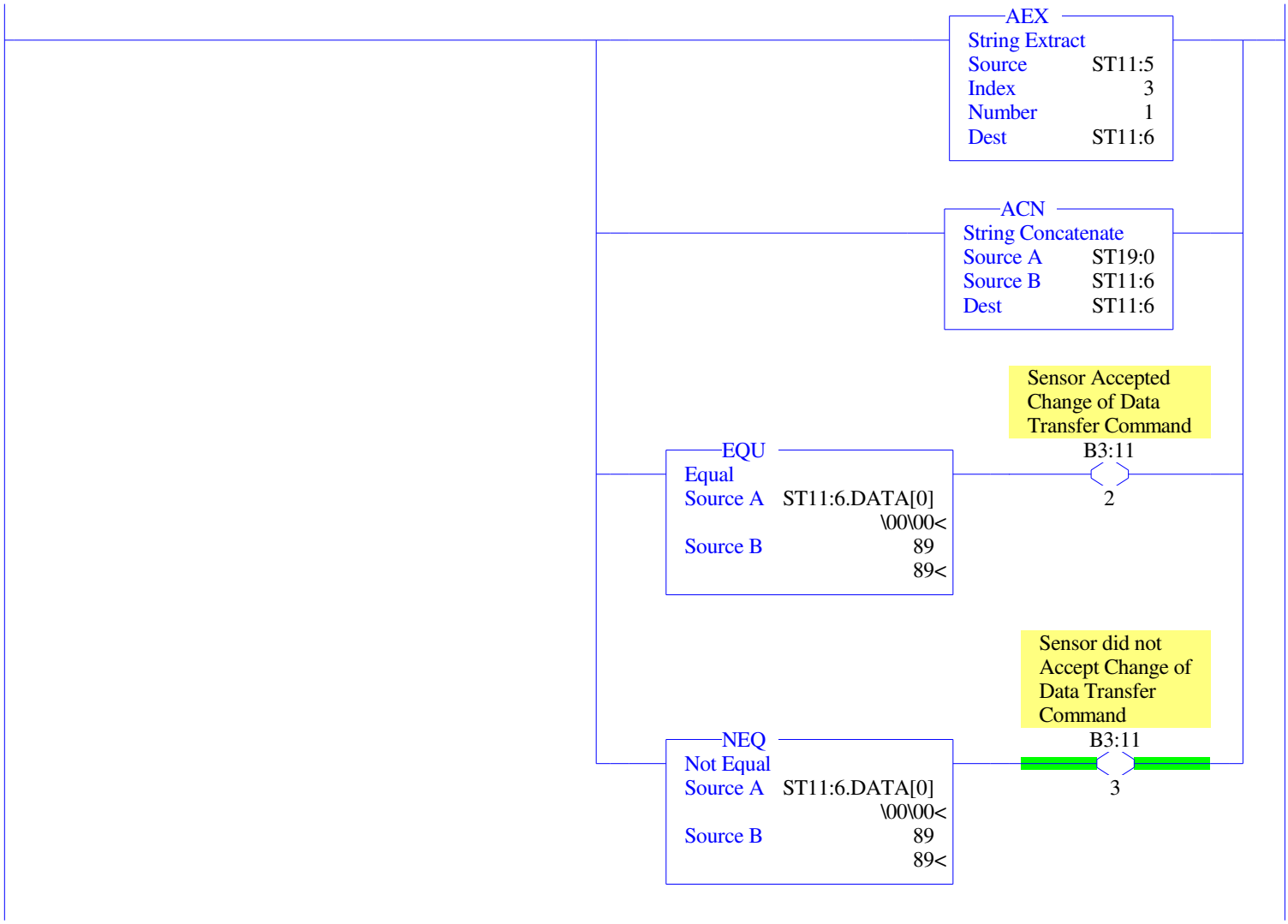
ACN
String Concatenate
Source A ST11:1
Source B ST11:2
Dest ST11:3

0010

B3:2 3

JSR
Jump To Subroutine
SBR File Number U:5

0011


AEX
String Extract
Source ST11:5
Index 3
Number 1
Dest ST11:6
ACN
String Concatenate
Source A ST19:0
Source B ST11:6
Dest ST11:6
Sensor Accepted Change of Data Transfer Command
B3:11
2
EQU
Equal
Source A ST11:6.DATA[0]
\00\00<
Source B 89
89<
Sensor did not Accept Change of Data Transfer Command
B3:11
3
NEQ
Not Equal
Source A ST11:6.DATA[0]
\00\00<
Source B 89
89<

Activate Factory Setting

This command, when activated by Bit 0/2 (B3:0/2), causes the sensor to return to its default settings (node address 1 and Baud rate of 9600 and all color channels reset).

0012

Activate factory setting

B3:0 2 | B3:2 ONS 4 | B3:2 L 5 | R6:4 RES | R6:5 RES

0013

B3:2 5 | JSR Jump To Subroutine, SBR File Number U:7

0014

AEX String Extract, Source ST12:4, Index 3, Number 1, Dest ST12:5

ACN String Concatenate, Source A ST19:0, Source B ST12:5, Dest ST12:5

Sensor Accepted Factory Settings Command B3:11 4

EQU Equal, Source A ST12:5.DATA[0] \00Y<, Source B 89 89<

Sensor did not Accept Factory Settings Command B3:11 5

NEQ Not Equal, Source A ST12:5.DATA[0] \00Y<, Source B 89 89<

Read Software Version

This command, when activated by Bit 0/3 (B3:0/3), causes the sensor to send the software version number. The Main version is displayed in N7:7 and the Secondary version is displayed in N7:8.

Read software version

0015

B3:0 3 | B3:2 ONS 6 | B3:2 L 7 | R6:6 RES | R6:7 RES

0016

B3:2 7 | JSR Jump To Subroutine SBR File Number U:9

Main version of software for selected sensor

0017

MOV Move Source ST13:10.DATA[0] \00^T< Dest N7:8 20<

Secondary version of software for selected sensor

MOV Move Source ST13:9.DATA[0] \00\00< Dest N7:7 0<

Lock and Unlock Keypad

When Bit 0/9 (B3:0/9) is activated this command causes the selected sensor in rungs 0000-00004 to either lock or unlock the key pad. This command deactivates the key pad when N7:80 is set to 1. Once the key pad is deactivated, the only way to reactivate the keypad is to set N7:80 to 0 and activate Bit 0/9 (B3:0/9).

The sensor is set from the factory with the key pad active.

Activate Key Pad Lock

0018

B3:0 9 | B3:3 ONS 2 | B3:3 L 3

R6:22 RES

R6:23 RES

MOV
Move
Source 2
2<
Dest ST22:2.LEN
1<

MOV
Move
Source N7:80
0<
Dest ST22:2.DATA[0]
\00\00<

AEX
String Extract
Source ST22:2
Index 2
Number 1
Dest ST22:2

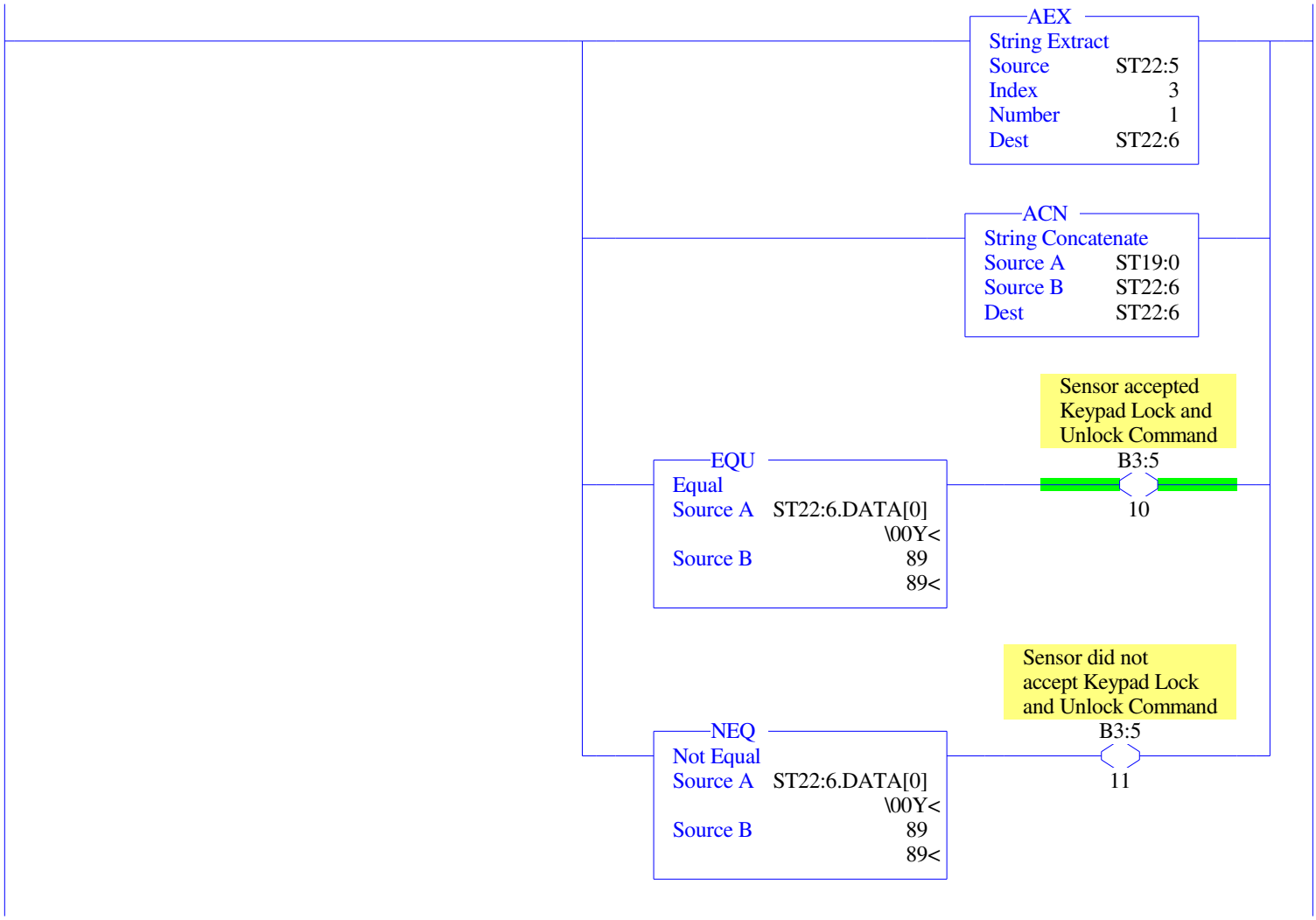
ACN
String Concatenate
Source A ST22:1
Source B ST22:2
Dest ST22:3

0019

B3:3 3

JSR
Jump To Subroutine
SBR File Number U:23

0020


AEX
String Extract
Source ST22:5
Index 3
Number 1
Dest ST22:6
ACN
String Concatenate
Source A ST19:0
Source B ST22:6
Dest ST22:6
Sensor accepted Keypad Lock and Unlock Command
B3:5
10
EQU
Equal
Source A ST22:6.DATA[0]
\00Y<
Source B 89
89<
Sensor did not accept Keypad Lock and Unlock Command
B3:5
11
NEQ
Not Equal
Source A ST22:6.DATA[0]
\00Y<
Source B 89
89<

Scan Color

This command, when activated by Bit 0/4 (B3:0/4), causes the sensor to be taught one color by scanning an objects color and intensity. The length of the scan time for an object can be adjusted by manually entering a positive integer value into N7:12. Once the scan time (N7:12) has elapsed the sensor will take the average color vector over the manually defined time period.

Five color channels can be taught by following the steps of Read All Sensor Configurations (B3:0/5) and Transfer Color Matrix (B3:0/6).

Start Scan-In

0021

B3:0 4 — B3:2 ONS 8 — B3:2 L 9

MOV
Move
Source N7:12 2<
Dest T4:10.PRE 2<

R6:8 RES

R6:9 RES

R6:10 RES

R6:11 RES

TON
Timer On Delay
Timer T4:20
Time Base 0.001
Preset 1000<
Accum 0<
EN
DN

0022

B3:2 9

JSR
Jump To Subroutine
SBR File Number U:11

Sensor accepted Start Scan-In Command

0023

T4:20 DN

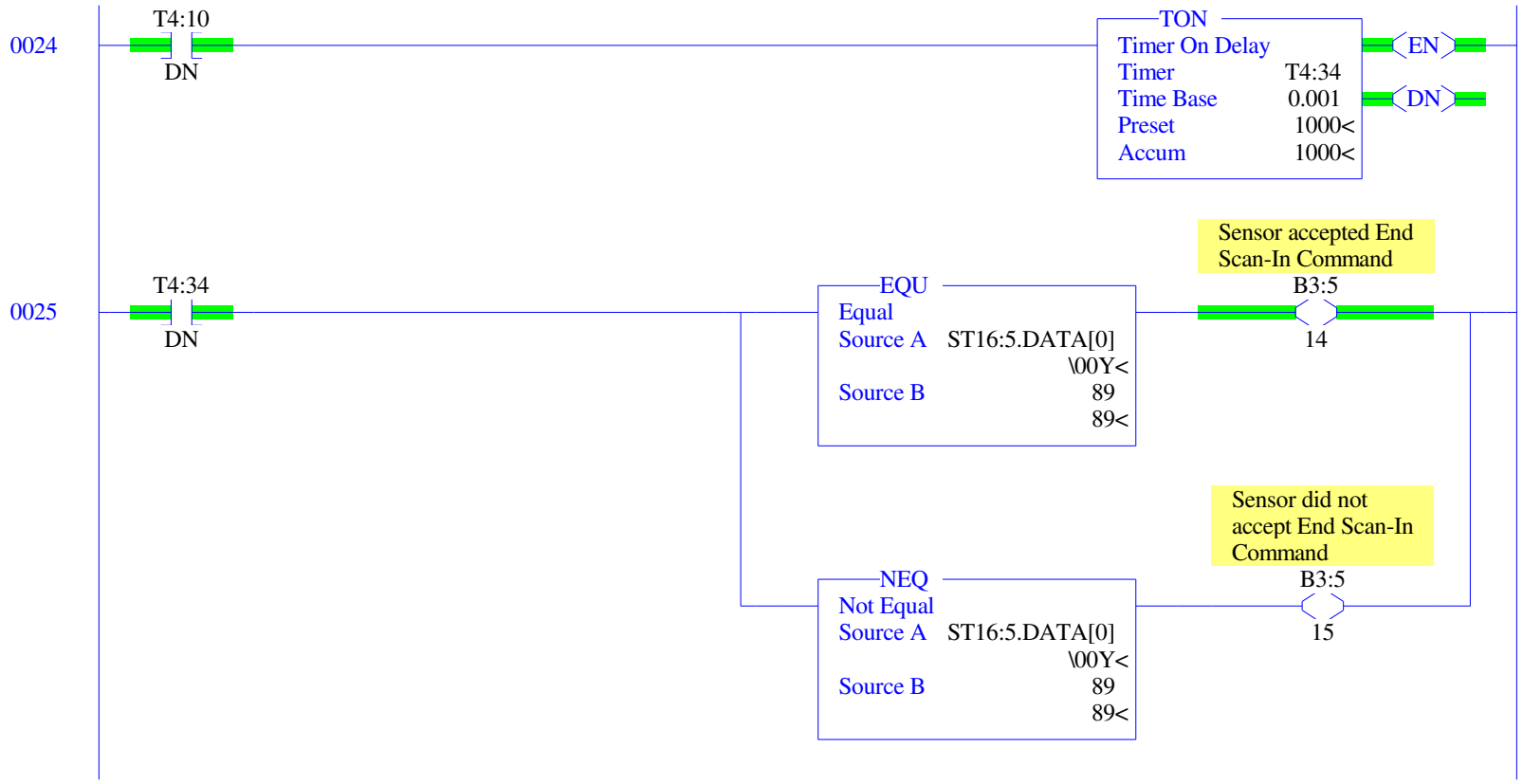
EQU
Equal
Source A ST14:5.DATA[0] \00Y<
Source B 89 89<

B3:5 12

Sensor did not accept Start Scan-In Command

NEQ
Not Equal
Source A ST14:5.DATA[0] \00Y<
Source B 89 89<

B3:5 13


0024
T4:10
DN
TON
Timer On Delay
Timer T4:34
Time Base 0.001
Preset 1000<
Accum 1000<
EN
DN
0025
T4:34
DN
EQU
Equal
Source A ST16:5.DATA[0]
\00Y<
Source B 89
89<
Sensor accepted End Scan-In Command
B3:5
14
NEQ
Not Equal
Source A ST16:5.DATA[0]
\00Y<
Source B 89
89<
Sensor did not accept End Scan-In Command
B3:5
15

Read All Sensor Configurations

This command (Read All Sensor Configurations) causes the sensor to transfer all configuration settings. Activate Bit 5 (B3:0/5) after the Scan-In Color command (B3:0/4) has been completed. Release this bit after selecting what channel (B3:5/0 through B3:5/4) the current color vector will be assigned to.

Read all sensor configurations

0026

B3:0 5 | B3:2 ONS 10 | B3:2 L 11

R6:14 RES

R6:15 RES

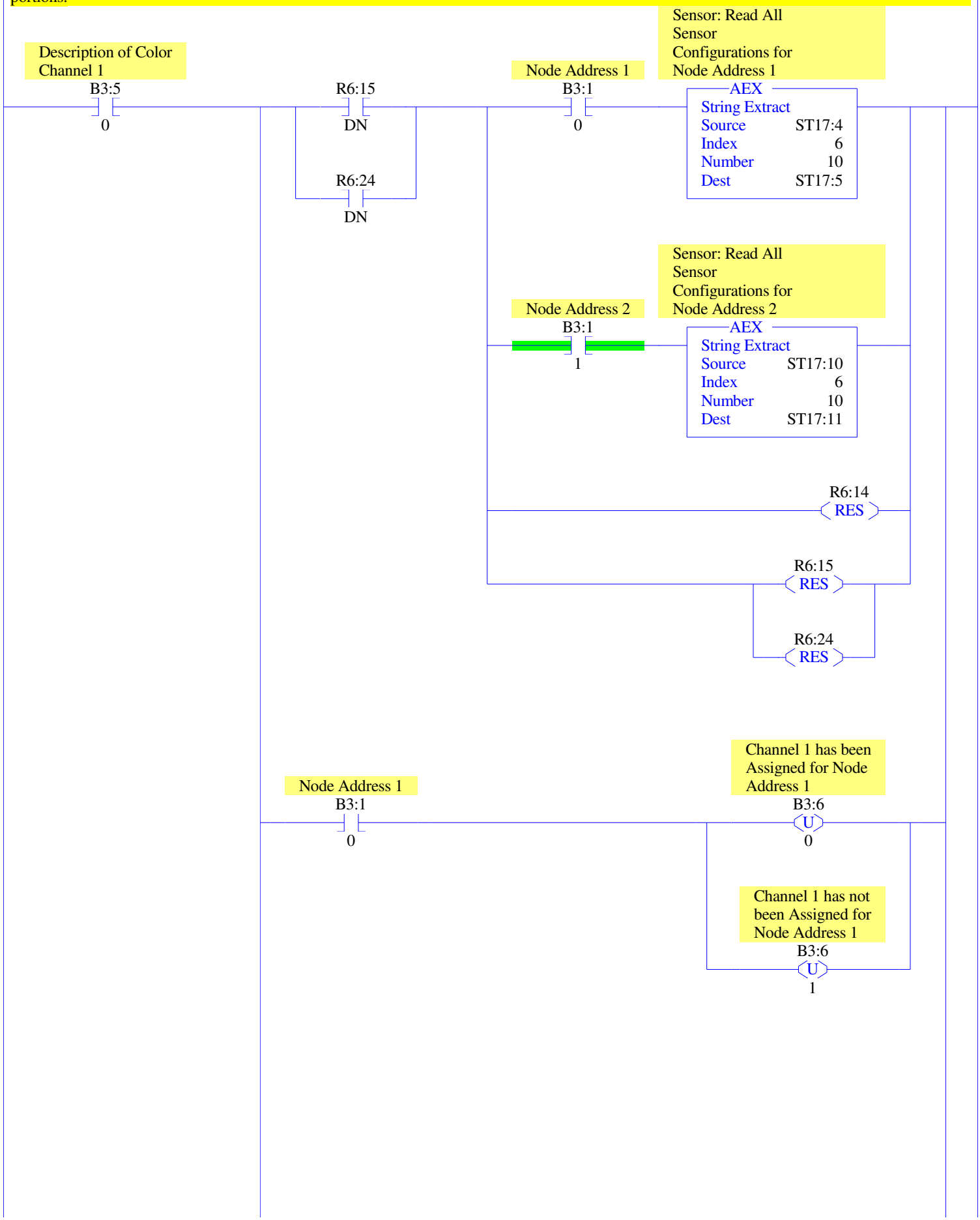
0027

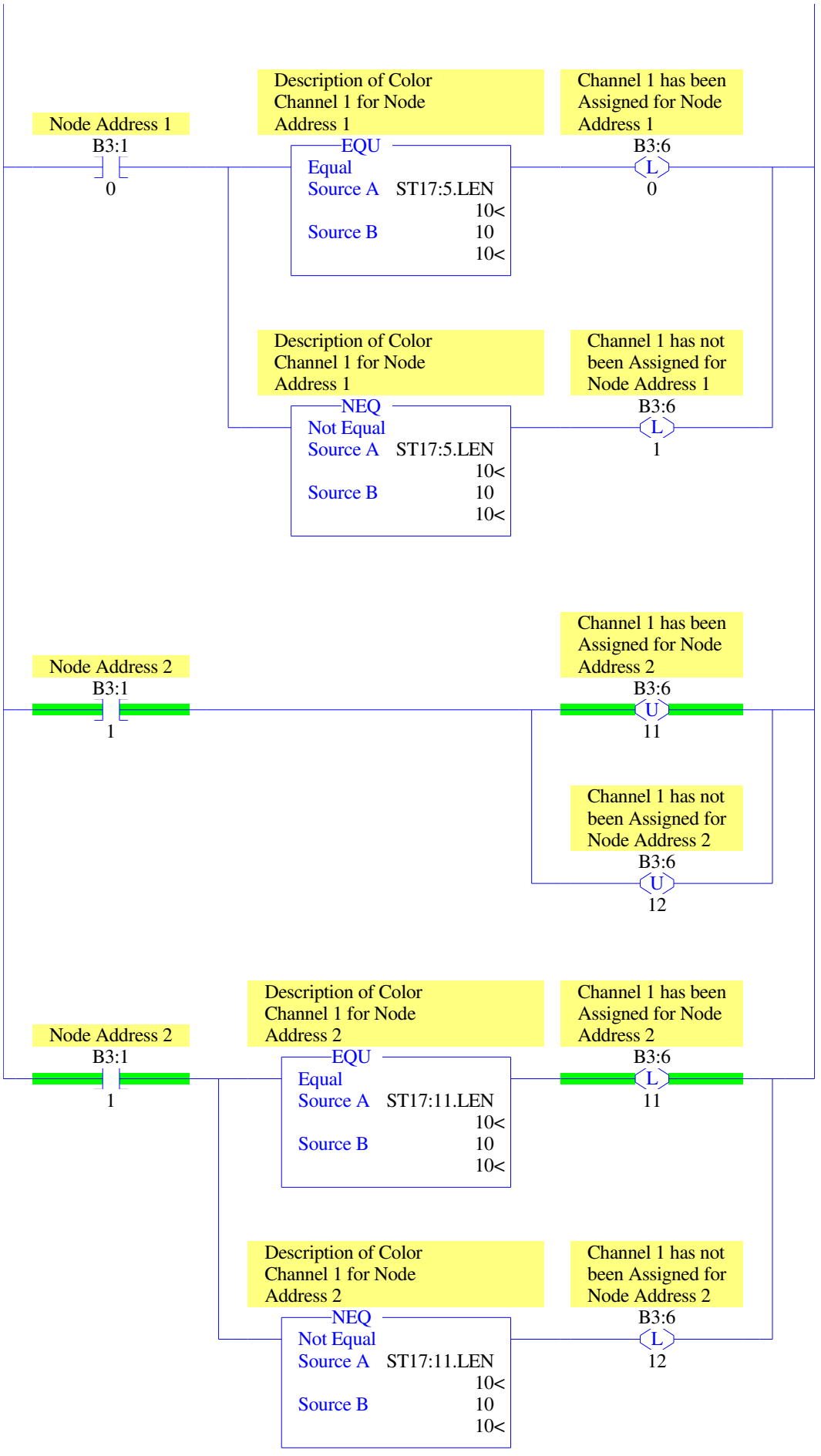
B3:2 11 |

JSR Jump To Subroutine SBR File Number U:15

Color Channel 1. To store information into Color Channel 1, bit B3:5/0 needs to be activated so that String Extraction can take place. The String Extraction is used to describe Color Channel 1, this will have information for the Red, Green, Intensity, Color Tolerance and Intensity Tolerance portions.

0028

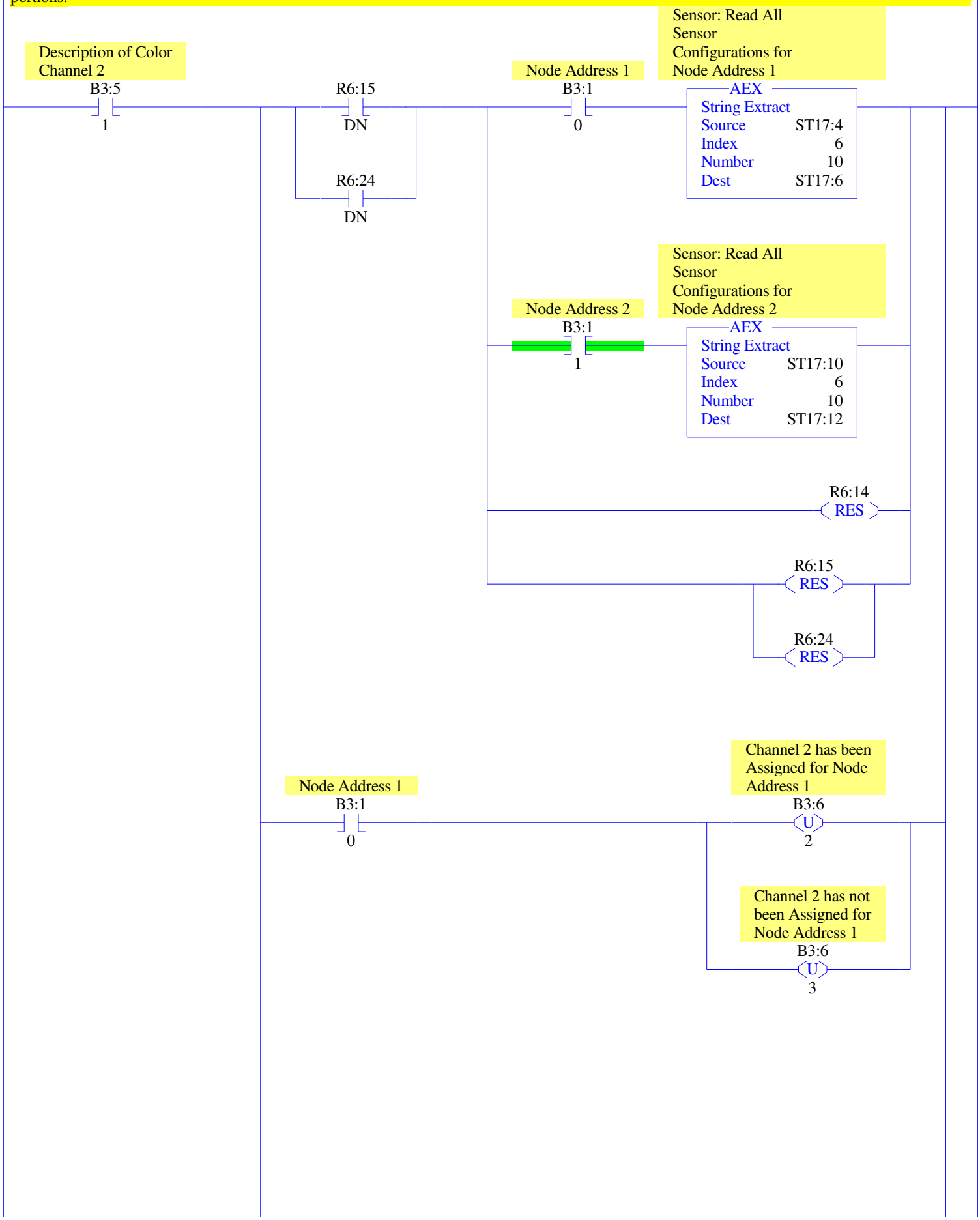


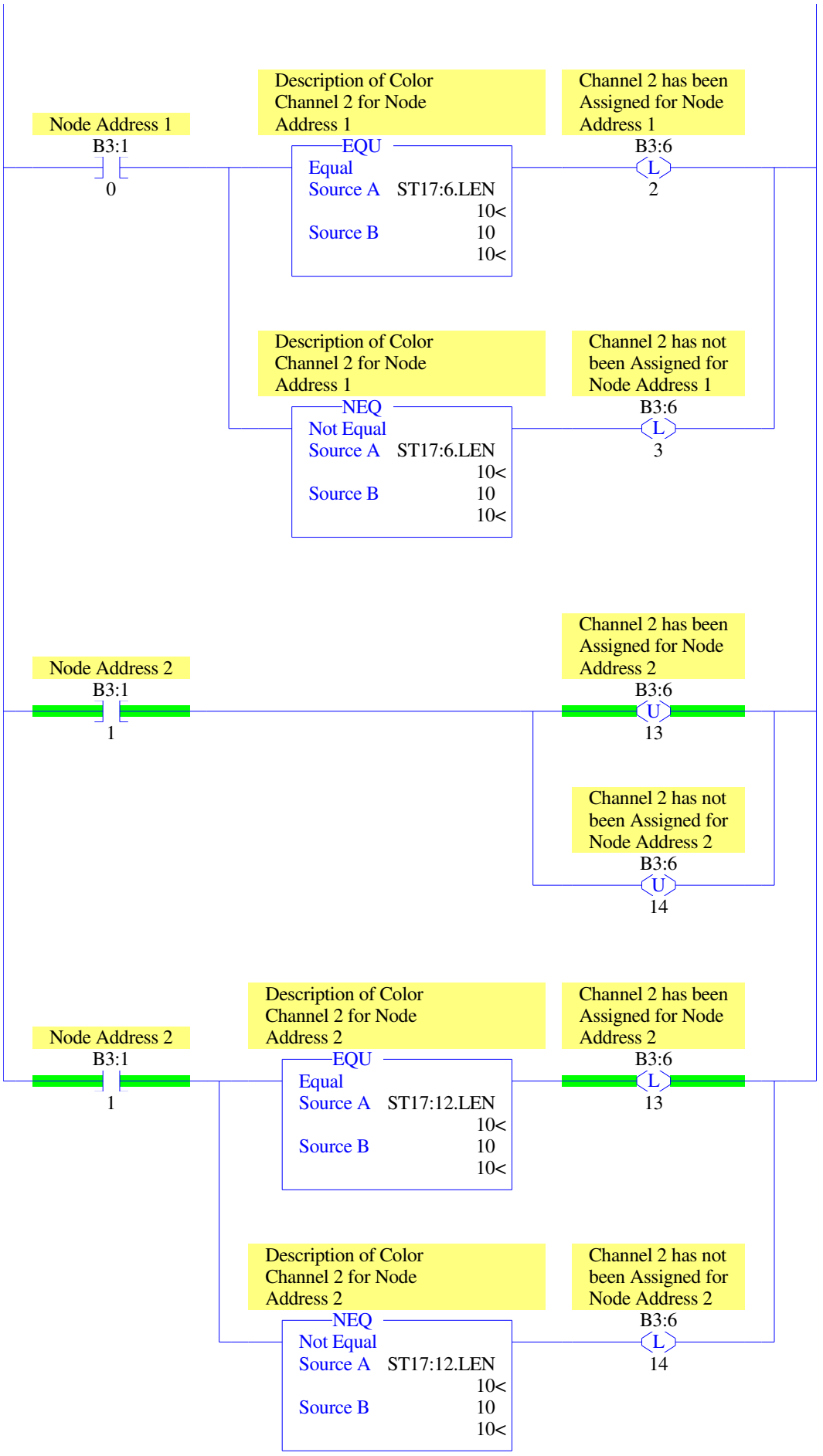

Node Address 1
B3:1
0
Description of Color Channel 1 for Node Address 1
EQU
Equal
Source A ST17:5.LEN
10<
Source B 10
10<
Channel 1 has been Assigned for Node Address 1
B3:6
L
0
Description of Color Channel 1 for Node Address 1
NEQ
Not Equal
Source A ST17:5.LEN
10<
Source B 10
10<
Channel 1 has not been Assigned for Node Address 1
B3:6
L
1
Node Address 2
B3:1
1
Channel 1 has been Assigned for Node Address 2
B3:6
U
11
Channel 1 has not been Assigned for Node Address 2
B3:6
U
12
Node Address 2
B3:1
1
Description of Color Channel 1 for Node Address 2
EQU
Equal
Source A ST17:11.LEN
10<
Source B 10
10<
Channel 1 has been Assigned for Node Address 2
B3:6
L
11
Description of Color Channel 1 for Node Address 2
NEQ
Not Equal
Source A ST17:11.LEN
10<
Source B 10
10<
Channel 1 has not been Assigned for Node Address 2
B3:6
L
12

LAD 2 - --- Total Rungs in File = 68

Color Channel 2. To store information into Color Channel 2, bit B3:5/1 needs to be activated so that String Extraction can take place. The String Extraction is used to describe Color Channel 2, this will have information for the Red, Green, Intensity, Color Tolerance and Intensity Tolerance portions.

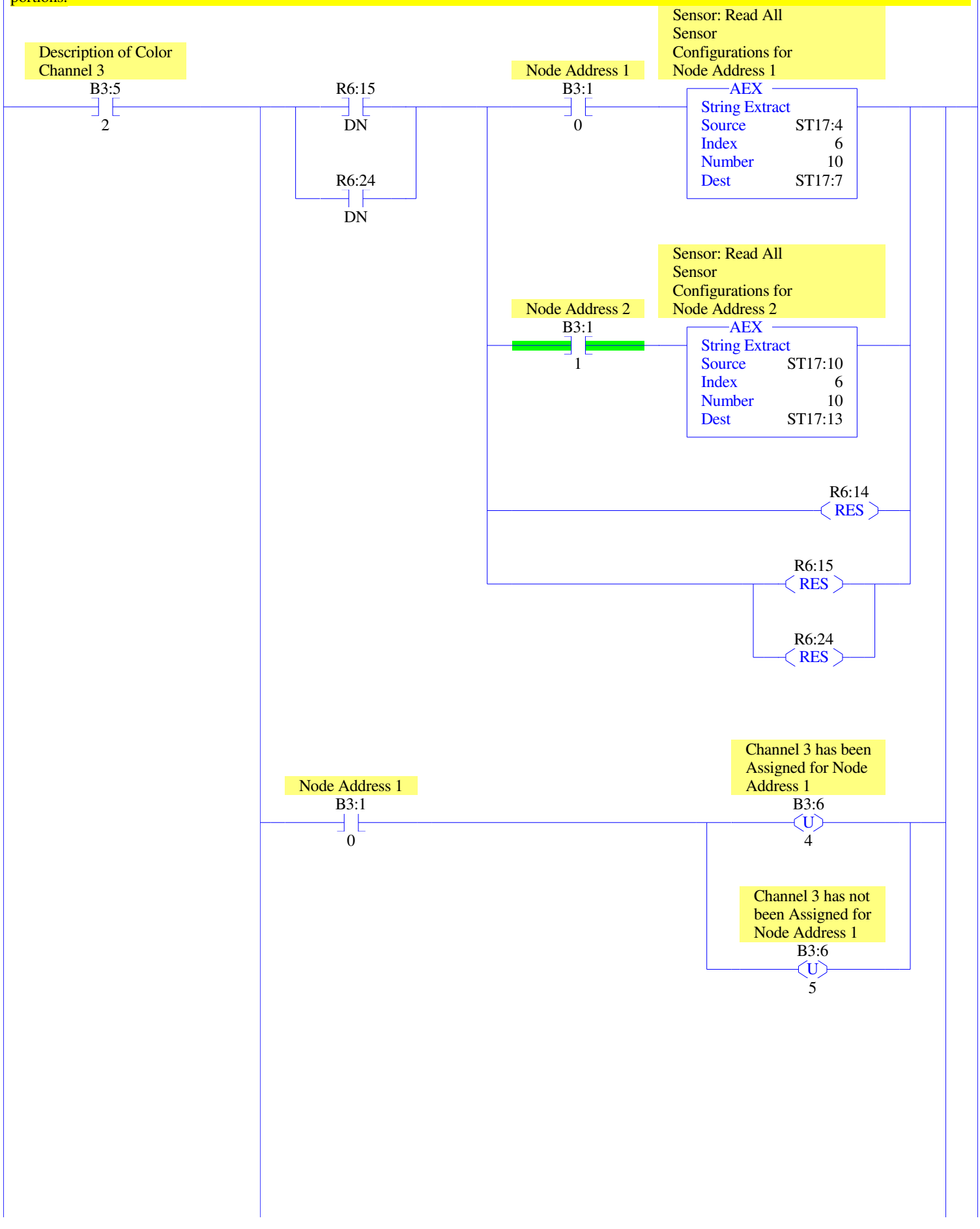
0029

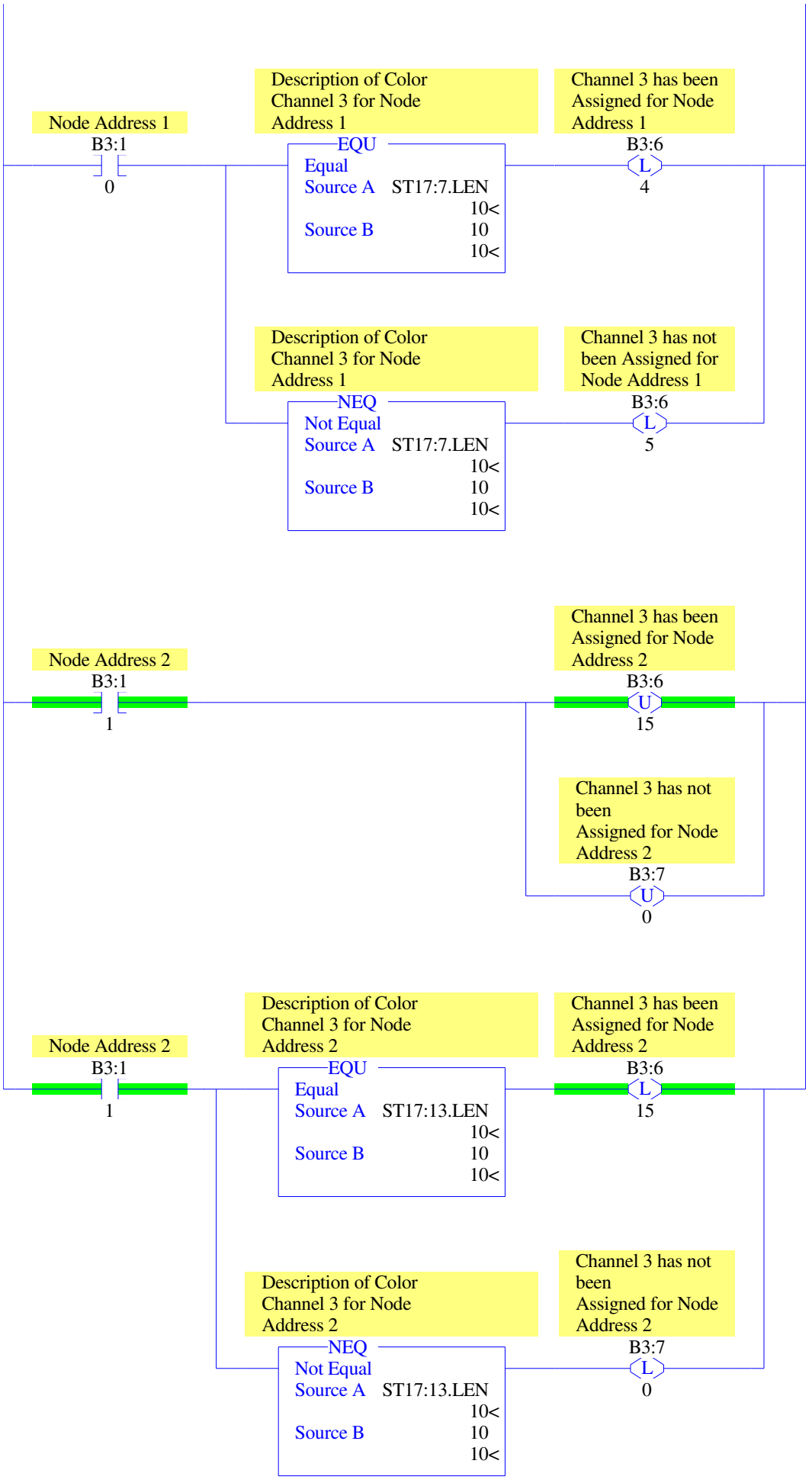



Node Address 1
B3:1
0
Description of Color Channel 2 for Node Address 1
EQU
Equal
Source A ST17:6.LEN
10<
Source B 10
10<
Channel 2 has been Assigned for Node Address 1
B3:6
L
2
Description of Color Channel 2 for Node Address 1
NEQ
Not Equal
Source A ST17:6.LEN
10<
Source B 10
10<
Channel 2 has not been Assigned for Node Address 1
B3:6
L
3
Node Address 2
B3:1
1
Channel 2 has been Assigned for Node Address 2
B3:6
U
13
Channel 2 has not been Assigned for Node Address 2
B3:6
U
14
Node Address 2
B3:1
1
Description of Color Channel 2 for Node Address 2
EQU
Equal
Source A ST17:12.LEN
10<
Source B 10
10<
Channel 2 has been Assigned for Node Address 2
B3:6
L
13
Description of Color Channel 2 for Node Address 2
NEQ
Not Equal
Source A ST17:12.LEN
10<
Source B 10
10<
Channel 2 has not been Assigned for Node Address 2
B3:6
L
14

Color Channel 3. To store information into Color Channel 3, bit B3:5/2 needs to be activated so that String Extraction can take place. The String Extraction is used to describe Color Channel 3, this will have information for the Red, Green, Intensity, Color Tolerance and Intensity Tolerance portions.

0030

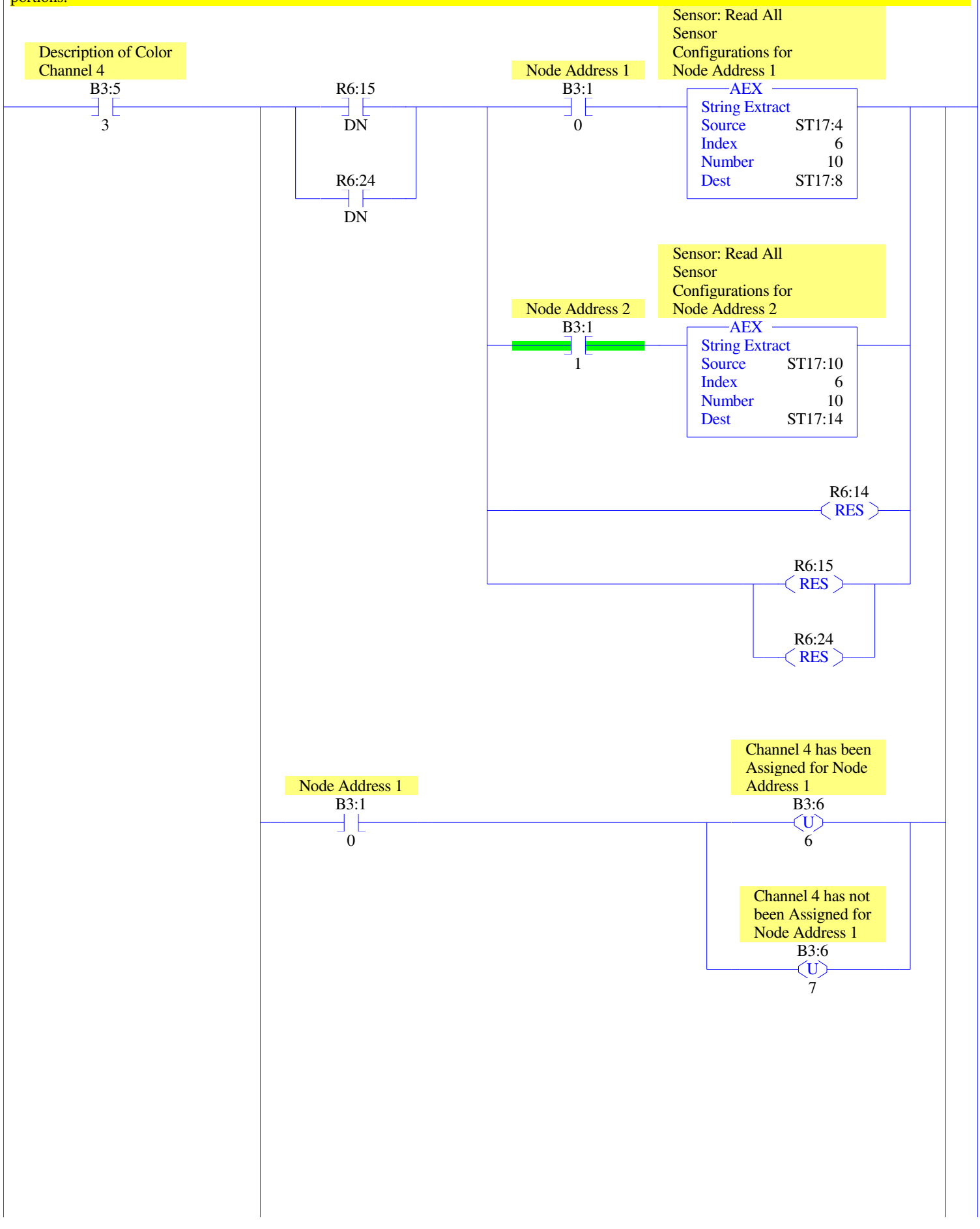


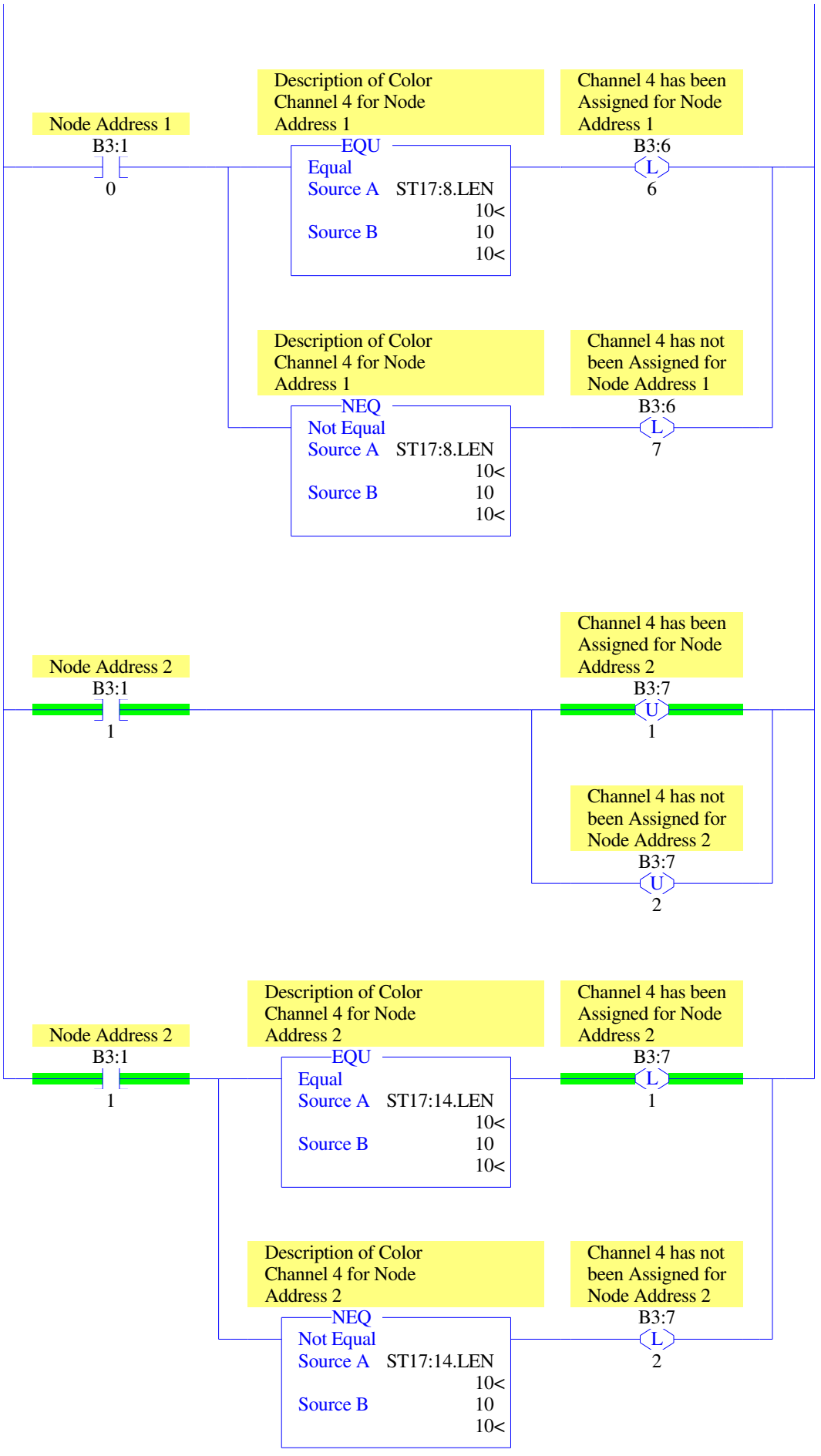

Node Address 1
B3:1
0
Description of Color Channel 3 for Node Address 1
EQU
Equal
Source A ST17:7.LEN
10<
Source B 10
10<
Channel 3 has been Assigned for Node Address 1
B3:6
L
4
Description of Color Channel 3 for Node Address 1
NEQ
Not Equal
Source A ST17:7.LEN
10<
Source B 10
10<
Channel 3 has not been Assigned for Node Address 1
B3:6
L
5
Node Address 2
B3:1
1
Channel 3 has been Assigned for Node Address 2
B3:6
U
15
Channel 3 has not been Assigned for Node Address 2
B3:7
U
0
Node Address 2
B3:1
1
Description of Color Channel 3 for Node Address 2
EQU
Equal
Source A ST17:13.LEN
10<
Source B 10
10<
Channel 3 has been Assigned for Node Address 2
B3:6
L
15
Description of Color Channel 3 for Node Address 2
NEQ
Not Equal
Source A ST17:13.LEN
10<
Source B 10
10<
Channel 3 has not been Assigned for Node Address 2
B3:7
L
0

LAD 2 - --- Total Rungs in File = 68

Color Channel 4. To store information into Color Channel 4, bit B3:5/3 needs to be activated so that String Extraction can take place. The String Extraction is used to describe Color Channel 4, this will have information for the Red, Green, Intensity, Color Tolerance and Intensity Tolerance portions.

0031

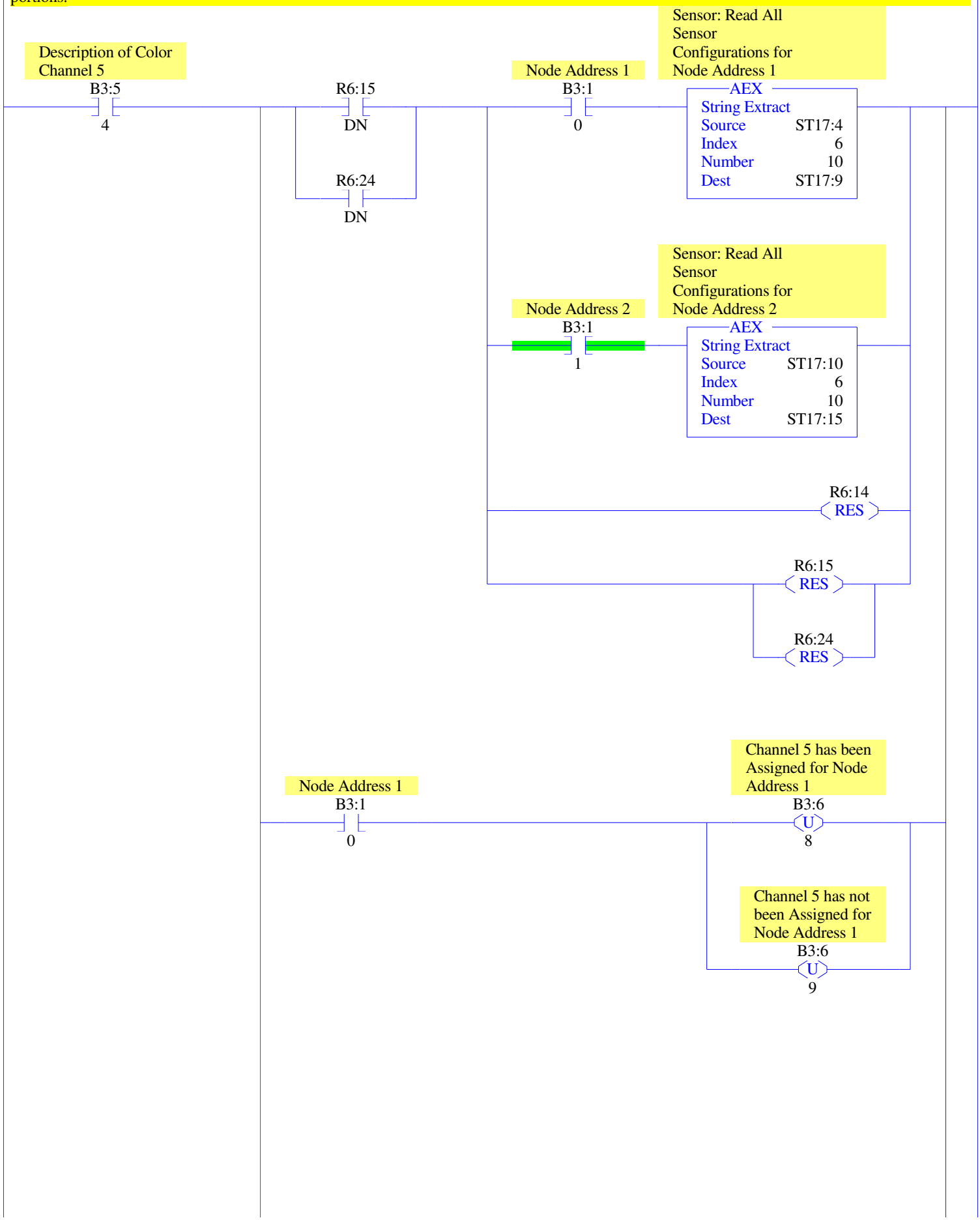


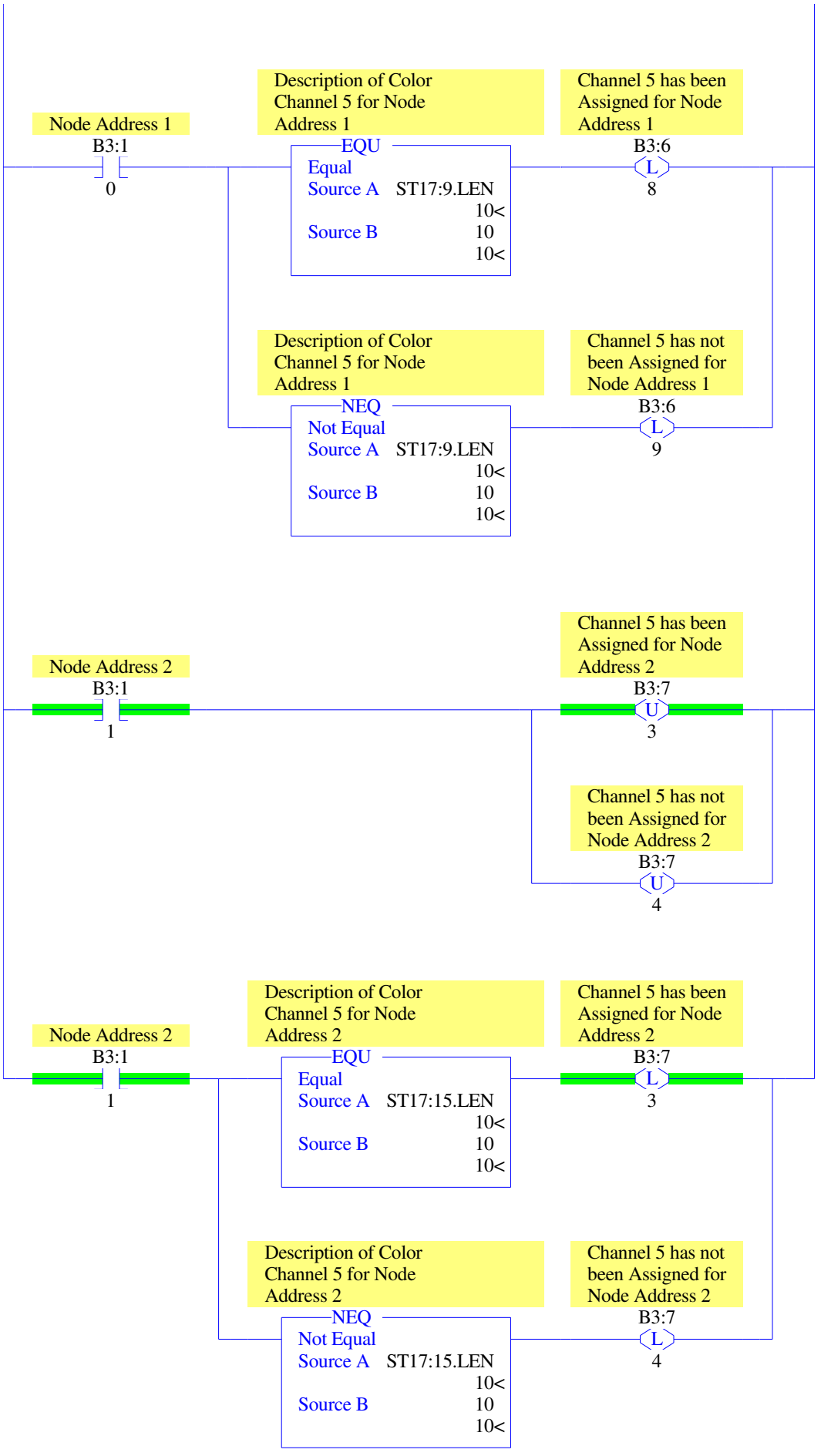

Node Address 1
B3:1
0
Description of Color Channel 4 for Node Address 1
EQU
Equal
Source A ST17:8.LEN
10<
Source B 10
10<
Channel 4 has been Assigned for Node Address 1
B3:6
L
6
Description of Color Channel 4 for Node Address 1
NEQ
Not Equal
Source A ST17:8.LEN
10<
Source B 10
10<
Channel 4 has not been Assigned for Node Address 1
B3:6
L
7
Node Address 2
B3:1
1
Channel 4 has been Assigned for Node Address 2
B3:7
U
1
Channel 4 has not been Assigned for Node Address 2
B3:7
U
2
Node Address 2
B3:1
1
Description of Color Channel 4 for Node Address 2
EQU
Equal
Source A ST17:14.LEN
10<
Source B 10
10<
Channel 4 has been Assigned for Node Address 2
B3:7
L
1
Description of Color Channel 4 for Node Address 2
NEQ
Not Equal
Source A ST17:14.LEN
10<
Source B 10
10<
Channel 4 has not been Assigned for Node Address 2
B3:7
L
2

LAD 2 - --- Total Rungs in File = 68

Color Channel 5. To store information into Color Channel 5, bit B3:5/4 needs to be activated so that String Extraction can take place. The String Extraction is used to describe Color Channel 5, this will have information for the Red, Green, Intensity, Color Tolerance and Intensity Tolerance portions.

0032




Node Address 1
B3:1
0
Description of Color Channel 5 for Node Address 1
EQU
Equal
Source A ST17:9.LEN
10<
Source B 10
10<
Channel 5 has been Assigned for Node Address 1
B3:6
L
8
Description of Color Channel 5 for Node Address 1
NEQ
Not Equal
Source A ST17:9.LEN
10<
Source B 10
10<
Channel 5 has not been Assigned for Node Address 1
B3:6
L
9
Node Address 2
B3:1
1
Channel 5 has been Assigned for Node Address 2
B3:7
U
3
Channel 5 has not been Assigned for Node Address 2
B3:7
U
4
Node Address 2
B3:1
1
Description of Color Channel 5 for Node Address 2
EQU
Equal
Source A ST17:15.LEN
10<
Source B 10
10<
Channel 5 has been Assigned for Node Address 2
B3:7
L
3
Description of Color Channel 5 for Node Address 2
NEQ
Not Equal
Source A ST17:15.LEN
10<
Source B 10
10<
Channel 5 has not been Assigned for Node Address 2
B3:7
L
4

Transfer Color Matrix

Once Bit 0/6 (B3:0/6) is toggled, this command (Transfer Color Matrix) takes the description of the five color channels that were selected by bits B3:5/0 through B3:5/4 and transfers all five color channels to the sensor that is addressed in Rungs 0000-0004. Use this command after all 5 color channels have been stored by using the Read All Sensor Configurations command (B3:0/5).

0033

Channel 1 has been Assigned for Node Address 1 — B3:6/0
Channel 2 has been Assigned for Node Address 1 — B3:6/2
Channel 3 has been Assigned for Node Address 1 — B3:6/4
Channel 4 has been Assigned for Node Address 1 — B3:6/6
Channel 5 has been Assigned for Node Address 1 — B3:6/8

All 5 Channels have been Assigned for Node Address 1, Allow Matrix Transfer — B3:6/10

0034

Channel 1 has been Assigned for Node Address 2 — B3:6/11
Channel 2 has been Assigned for Node Address 2 — B3:6/13
Channel 3 has been Assigned for Node Address 2 — B3:6/15
Channel 4 has been Assigned for Node Address 2 — B3:7/1
Channel 5 has been Assigned for Node Address 2 — B3:7/3

All 5 Channels have been Assigned for Node Address 2, Allow Matric Transfer — B3:7/5

0035

All 5 Channels have been Assigned for Node Address 1, Allow Matrix Transfer — B3:6/10
Transfer color matrix — B3:0/6
B3:2/12 ONS
B3:2/13 L

All 5 Channels have been Assigned for Node Address 2, Allow Matric Transfer — B3:7/5

Transfer color matrix — B3:0/6 U

0036

B3:2/13

JSR
Jump To Subroutine
SBR File Number U:17

Permanent Storage of Sensor Settings

When Bit 0/7 (B3:0/7) is toggled, this commands (Permanent Storage of Sensor Settings) the sensor to permanently store all of its current settings after power has been removed. The settings can be modified in the future when the sensor is addressed with a new configuration command.

Permanent storage of sensor settings

0037

B3:0 7 | B3:2 ONS 14 | B3:2 L 15

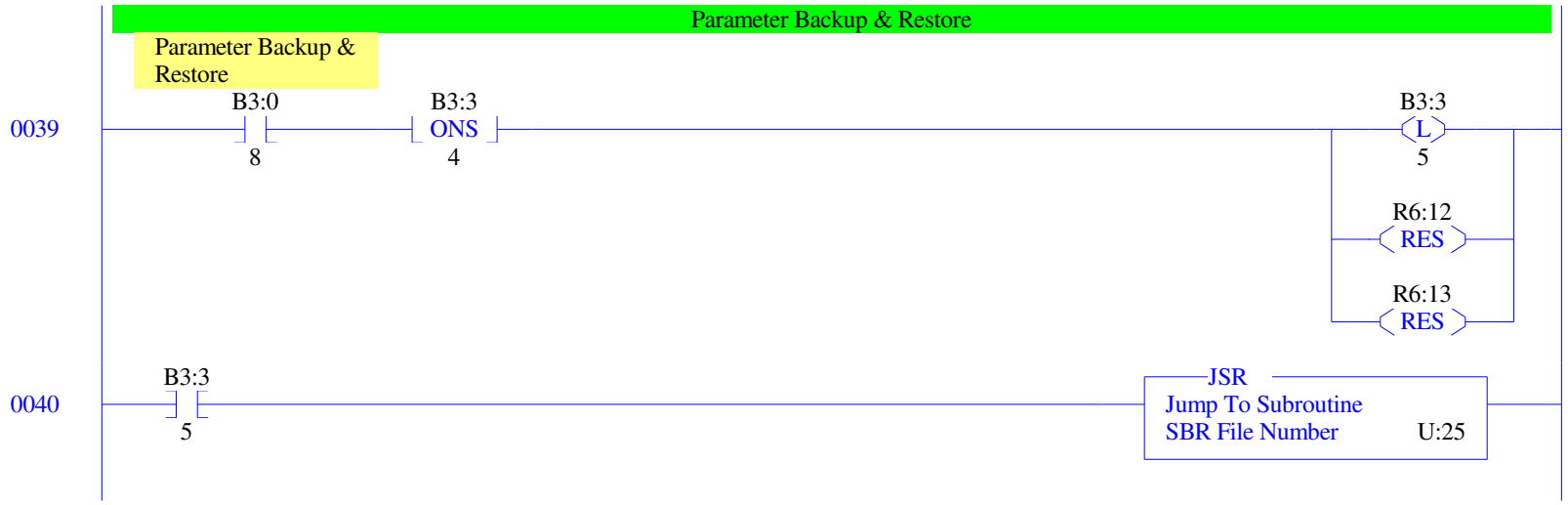
R6:18 RES

R6:19 RES

0038

B3:2 15 |

JSR Jump To Subroutine SBR File Number U:19


Parameter Backup & Restore
Parameter Backup & Restore
0039
B3:0
8
B3:3
ONS
4
B3:3
L
5
R6:12
RES
R6:13
RES
0040
B3:3
5
JSR
Jump To Subroutine
SBR File Number
U:25

Read Color Channel for Sensor 1

Once Input 0 (I:0/0) is activated this commands the sensor to read the object that is presently in front of the sensor. The color of the object gets compared to the color channels that are stored inside of the sensor. When the object matches one of the color channels, the sensor will send a reply back that will identify what color channel has been detected. Outputs 0-4 (O:0/0-O:0/4) are activated when only one of the color channels has been detected. Each color channel that is stored needs to be distinct and not overlap the other channels.

0041

Start Scan-In B3:0 4

EQU Equal Source A N100:0 0< Source B 0 0<

Run Mode B3:3 15

I:0 0 Bul.1766

B3:3 ONS 0

B3:3 L 1

I:0 0 Bul.1766

I:0 0 Bul.1766

MOV Move Source 10 10< Dest N100:0 0<

0042

B3:3 1

MOV Move Source 1 1< Dest N7:1 2<

ACN String Concatenate Source A ST9:0 Source B ST21:0 Dest ST21:1

JSR Jump To Subroutine SBR File Number U:22

B3:4 10

JSR Jump To Subroutine SBR File Number U:21

Rungs 30-31 relate to the detection of Color Channel 1 that is determined internally by the sensor.

0043

R6:21
DN

EQU
Equal
Source A N7:79
0<
Source B 1
1<

TOF
Timer Off Delay
Timer T4:22
Time Base 0.001
Preset 5000<
Accum 5000<
EN
DN

CHANNEL #

MOV
Move
Source 1
1<
Dest N7:90
0<

CLR
Clear
Dest N7:79
0<

Color Channel 1 Output

0044

T4:22
DN

O:0
0
Bul.1766

MOV
Move
Source 10
10<
Dest N100:0
0<

Rungs 32-33 relate to the detection of Color Channel 2 that is determined internally by the sensor.

0045

R6:21
DN

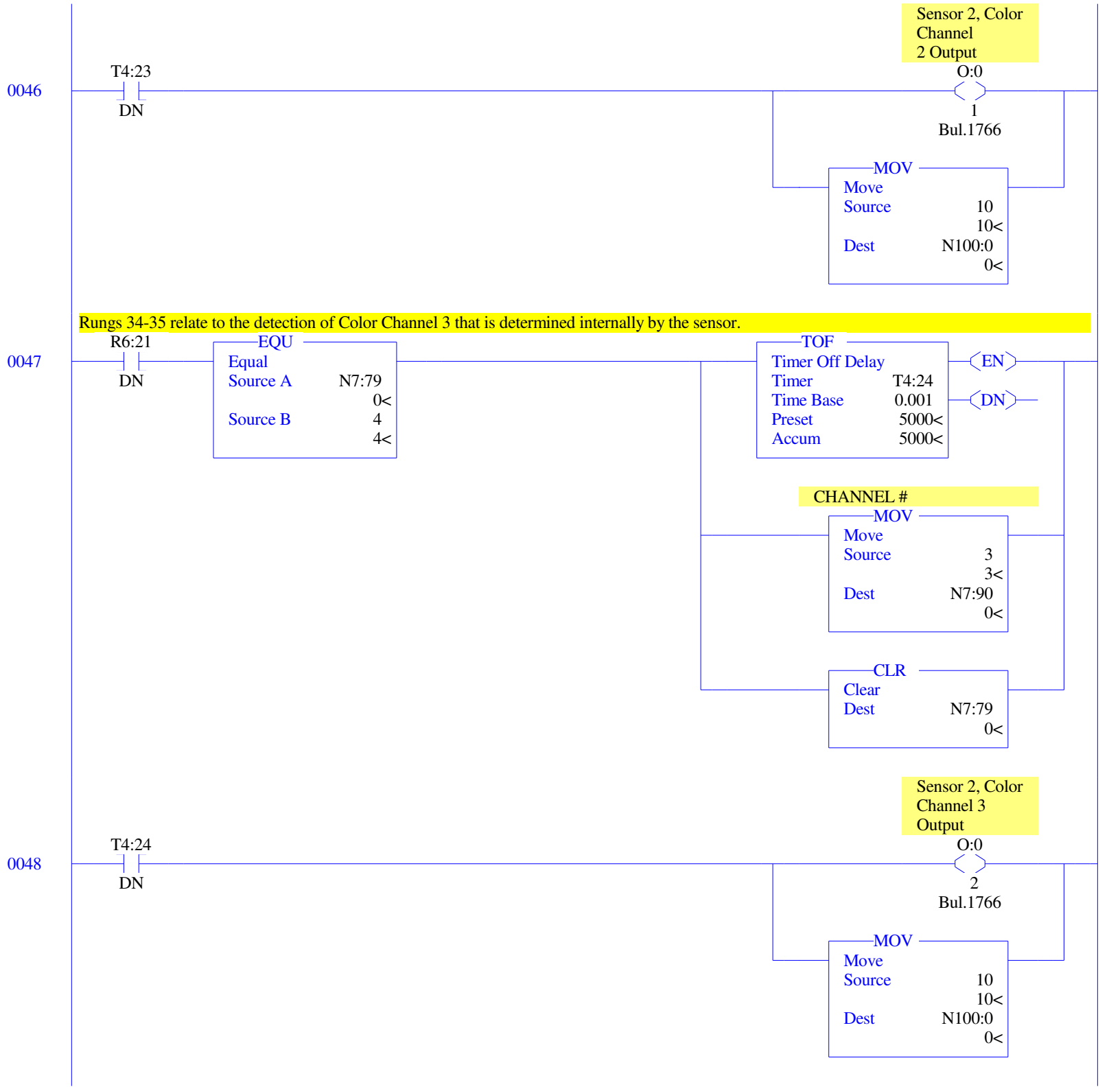
EQU
Equal
Source A N7:79
0<
Source B 2
2<

TOF
Timer Off Delay
Timer T4:23
Time Base 0.001
Preset 5000<
Accum 5000<
EN
DN

CHANNEL #

MOV
Move
Source 2
2<
Dest N7:90
0<

CLR
Clear
Dest N7:79
0<


Sensor 2, Color Channel 2 Output
0046
T4:23
DN
O:0
1
Bul.1766
MOV
Move
Source 10
10<
Dest N100:0
0<
Rungs 34-35 relate to the detection of Color Channel 3 that is determined internally by the sensor.
0047
R6:21
DN
EQU
Equal
Source A N7:79
0<
Source B 4
4<
TOF
Timer Off Delay
Timer T4:24
Time Base 0.001
Preset 5000<
Accum 5000<
EN
DN
CHANNEL #
MOV
Move
Source 3
3<
Dest N7:90
0<
CLR
Clear
Dest N7:79
0<
Sensor 2, Color Channel 3 Output
0048
T4:24
DN
O:0
2
Bul.1766
MOV
Move
Source 10
10<
Dest N100:0
0<

Rungs 36-37 relate to the detection of Color Channel 4 that is determined internally by the sensor.

0049

R6:21
DN

EQU
Equal
Source A N7:79
0<
Source B 8
8<

TOF
Timer Off Delay
Timer T4:25
Time Base 0.001
Preset 5000<
Accum 5000<
EN
DN

CHANNEL #

MOV
Move
Source 4
4<
Dest N7:90
0<

CLR
Clear
Dest N7:79
0<

Sensor 2, Color Channel 4 Output

0050

T4:25
DN

O:0
3
Bul.1766

MOV
Move
Source 10
10<
Dest N100:0
0<

Rungs 38-39 relate to the detection of Color Channel 5 that is determined internally by the sensor.

0051

R6:21
DN

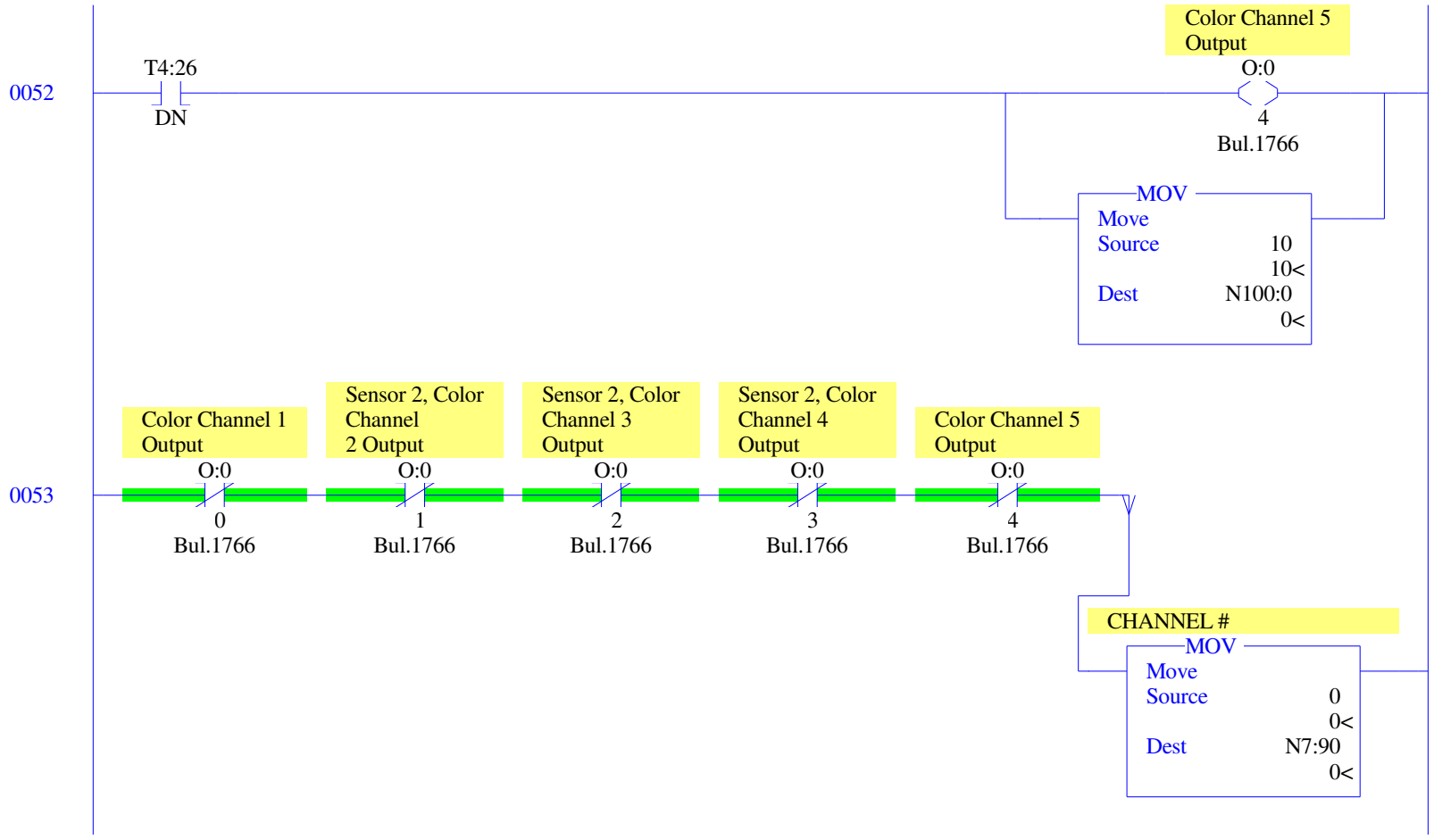
EQU
Equal
Source A N7:79
0<
Source B 16
16<

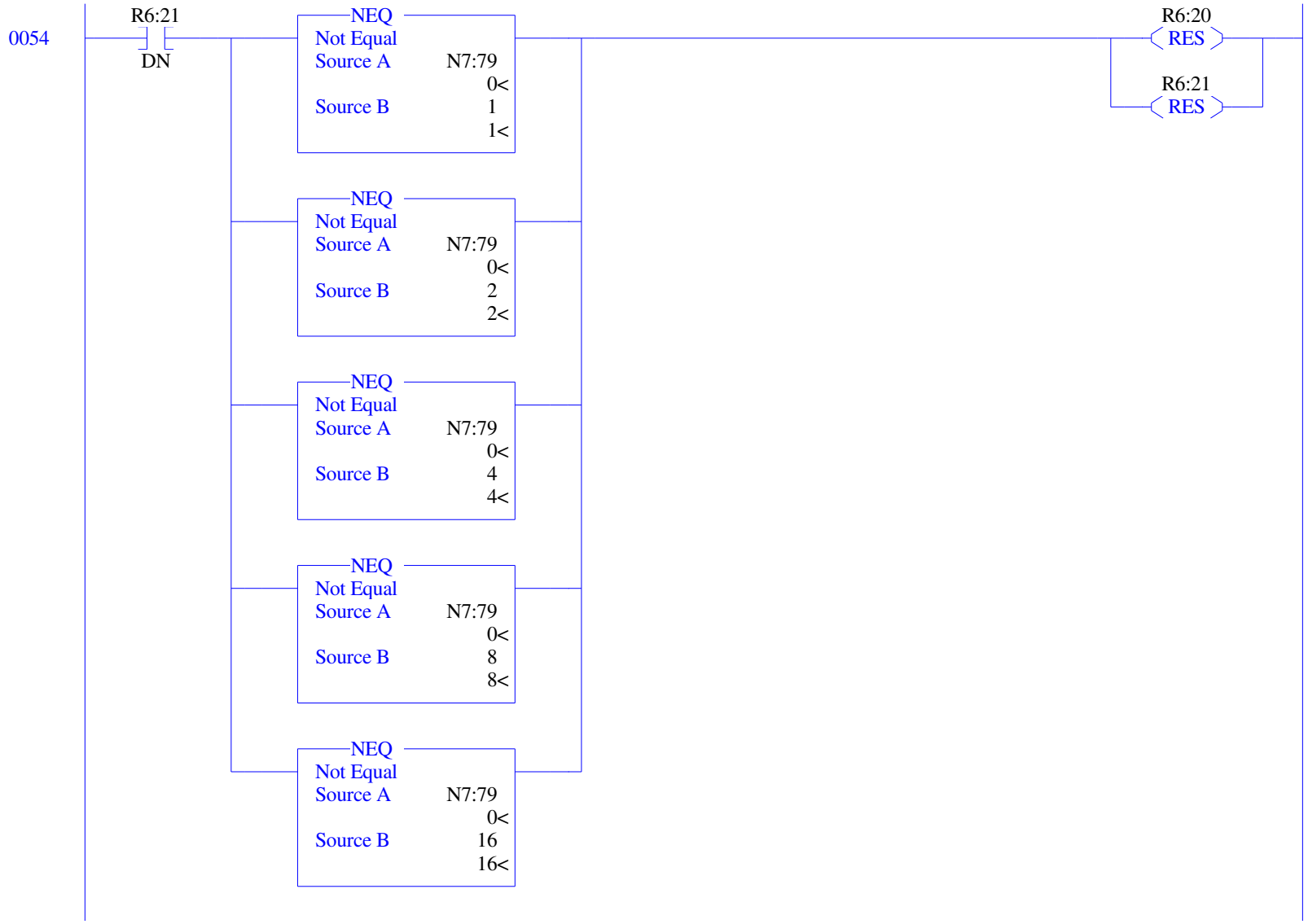
TOF
Timer Off Delay
Timer T4:26
Time Base 0.001
Preset 5000<
Accum 5000<
EN
DN

CHANNEL #

MOV
Move
Source 5
5<
Dest N7:90
0<

CLR
Clear
Dest N7:79
0<


0052
T4:26
DN
Color Channel 5 Output
O:0
4
Bul.1766
MOV
Move
Source
10
10<
Dest
N100:0
0<
0053
Color Channel 1 Output
O:0
0
Bul.1766
Sensor 2, Color Channel 2 Output
O:0
1
Bul.1766
Sensor 2, Color Channel 3 Output
O:0
2
Bul.1766
Sensor 2, Color Channel 4 Output
O:0
3
Bul.1766
Color Channel 5 Output
O:0
4
Bul.1766
CHANNEL #
MOV
Move
Source
0
0<
Dest
N7:90
0<


0054
R6:21
DN
NEQ
Not Equal
Source A N7:79
Source B 0<
1
1<
NEQ
Not Equal
Source A N7:79
Source B 0<
2
2<
NEQ
Not Equal
Source A N7:79
Source B 0<
4
4<
NEQ
Not Equal
Source A N7:79
Source B 0<
8
8<
NEQ
Not Equal
Source A N7:79
Source B 0<
16
16<
R6:20
RES
R6:21
RES

Read Color Channel for Sensor 2

Once Input 1 (I:0/1) is activated this commands the sensor to read the object that is presently in front of the sensor. The color of the object gets compared to the color channels that are stored inside of the sensor. When the object matches one of the color channels, the sensor will send a reply back that will identify what color channel has been detected. Outputs 5-9 (O:0/5-O:0/9) are activated when only one of the color channels has been detected. Each color channel that is stored needs to be distinct and not overlap the other channels.

0055

EQU
Equal
Source A N100:0
0<
Source B 10
10<

I:0
1
Bul.1766

B3:10
ONS
0

B3:10
L
1

I:0
1
Bul.1766

MOV
Move
Source 0
0<
Dest N100:0
0<

0056

B3:10
1

MOV
Move
Source 2
2<
Dest N7:1
2<

ACN
String Concatenate
Source A ST9:1
Source B ST21:0
Dest ST21:1

JSR
Jump To Subroutine
SBR File Number U:22

B3:4
10

JSR
Jump To Subroutine
SBR File Number U:21

Rungs 43-44 relate to the detection of Sensor 2, Color Channel 1 that is determined internally by the sensor.

0057

R6:21
DN

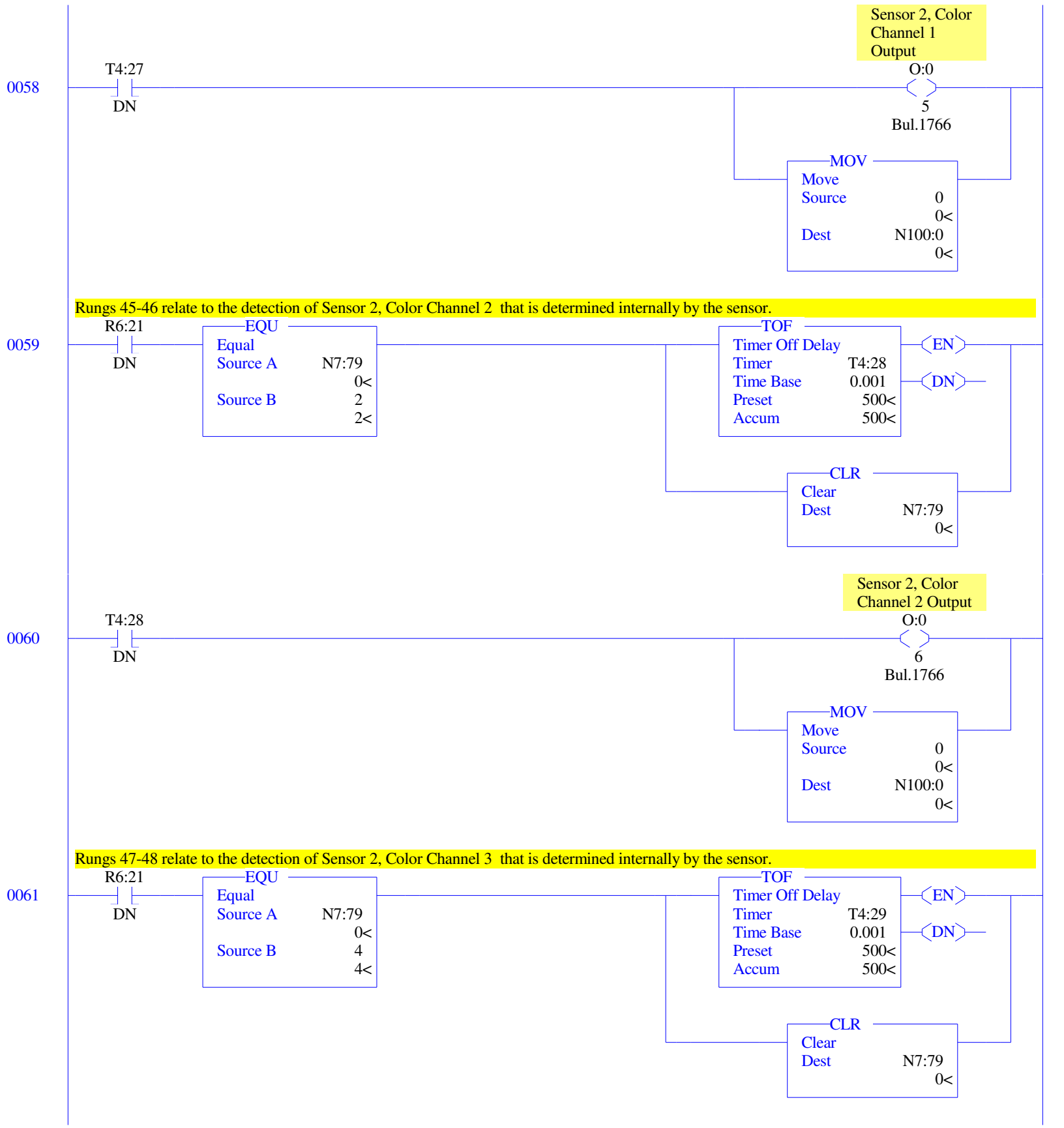
EQU
Equal
Source A N7:79
0<
Source B 1
1<

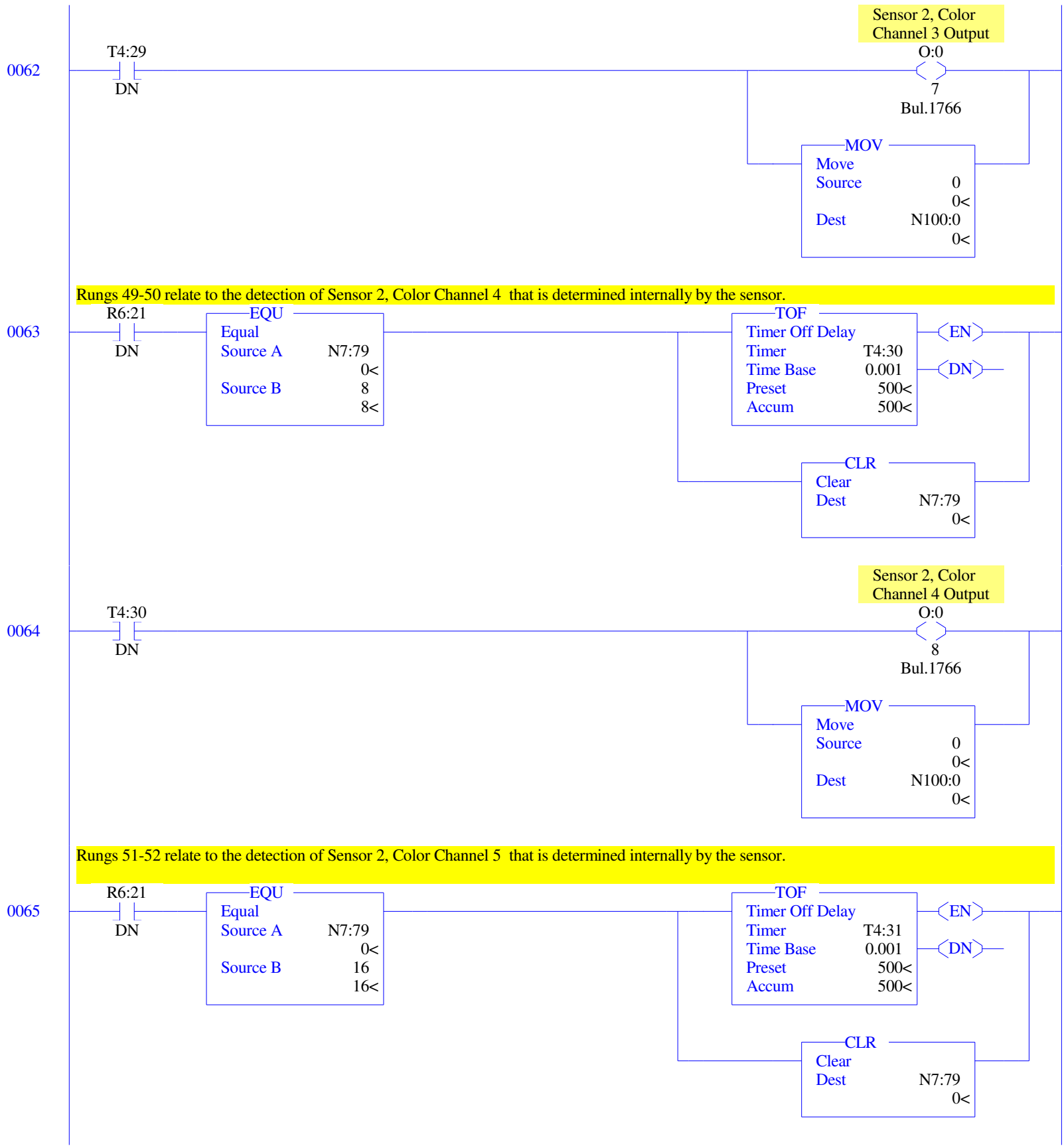
TOF
Timer Off Delay
Timer T4:27
Time Base 0.001
Preset 500<
Accum 500<

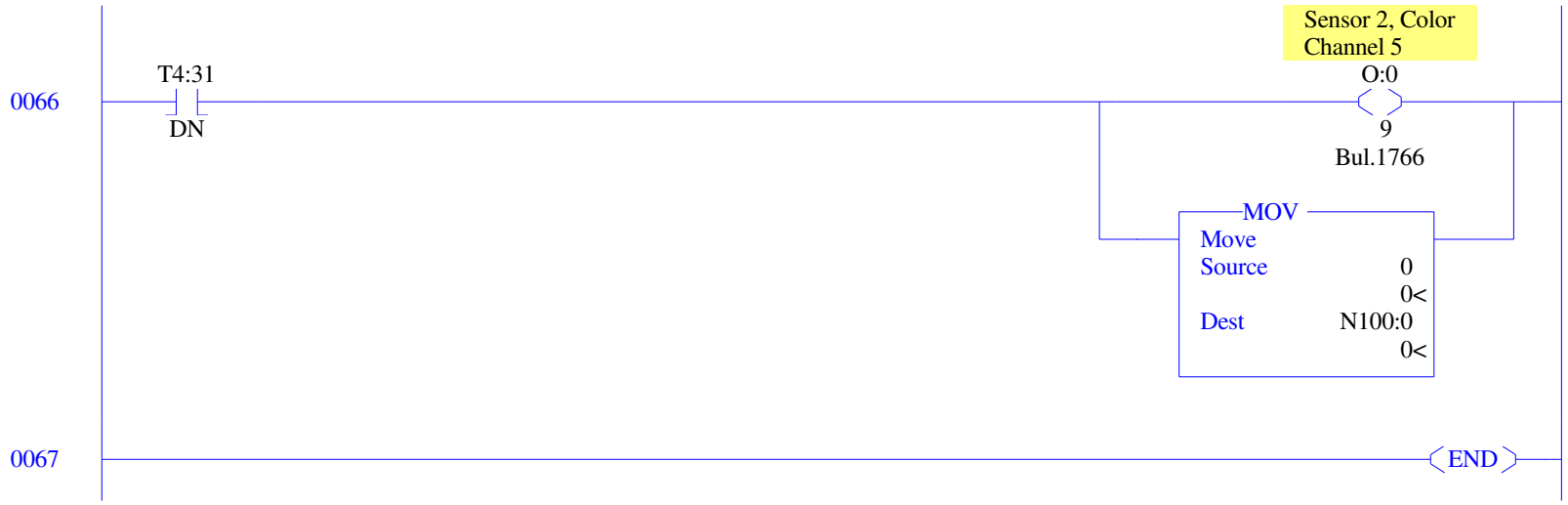
EN

DN

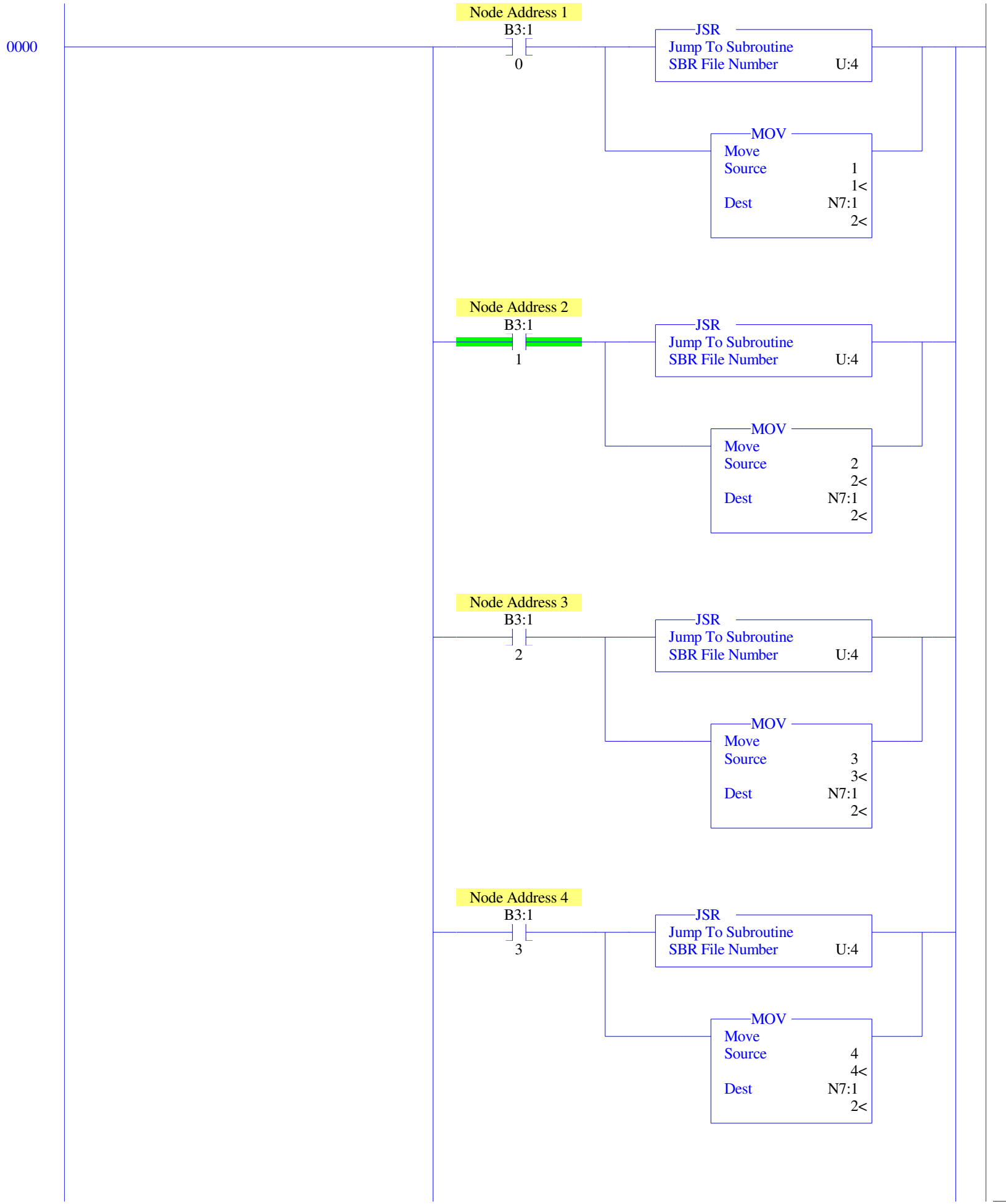
CLR
Clear
Dest N7:79
0<

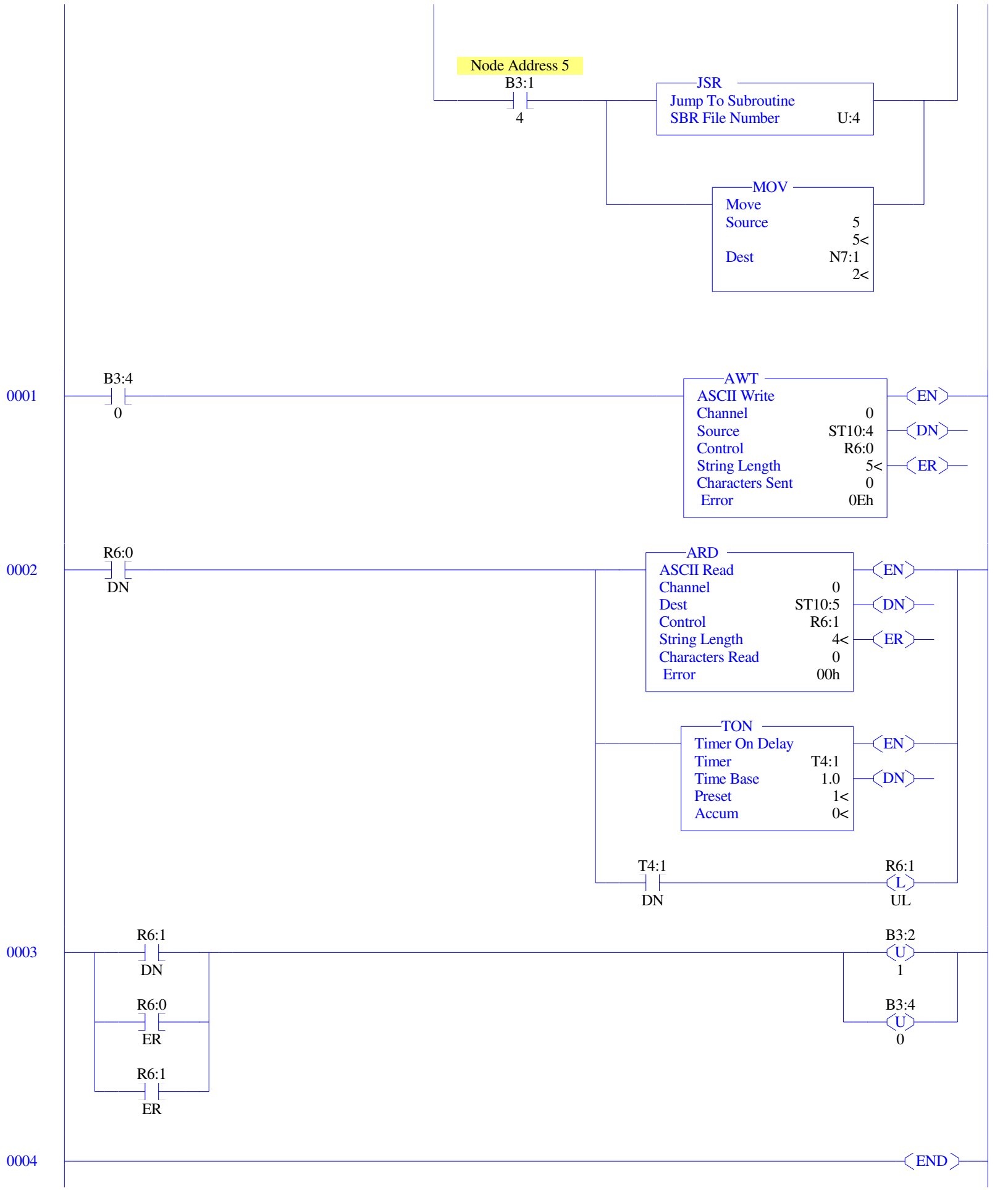

Sensor 2, Color Channel 1 Output
0058
T4:27
DN
O:0
5
Bul.1766
MOV
Move
Source 0
0<
Dest N100:0
0<
Rungs 45-46 relate to the detection of Sensor 2, Color Channel 2 that is determined internally by the sensor.
0059
R6:21
DN
EQU
Equal
Source A N7:79
0<
Source B 2
2<
TOF
Timer Off Delay
Timer T4:28
Time Base 0.001
Preset 500<
Accum 500<
EN
DN
CLR
Clear
Dest N7:79
0<
Sensor 2, Color Channel 2 Output
0060
T4:28
DN
O:0
6
Bul.1766
MOV
Move
Source 0
0<
Dest N100:0
0<
Rungs 47-48 relate to the detection of Sensor 2, Color Channel 3 that is determined internally by the sensor.
0061
R6:21
DN
EQU
Equal
Source A N7:79
0<
Source B 4
4<
TOF
Timer Off Delay
Timer T4:29
Time Base 0.001
Preset 500<
Accum 500<
EN
DN
CLR
Clear
Dest N7:79
0<


Sensor 2, Color Channel 3 Output
0062
T4:29
DN
O:0
7
Bul.1766
MOV
Move
Source 0
0<
Dest N100:0
0<
Rungs 49-50 relate to the detection of Sensor 2, Color Channel 4 that is determined internally by the sensor.
0063
R6:21
DN
EQU
Equal
Source A N7:79
0<
Source B 8
8<
TOF
Timer Off Delay
Timer T4:30
Time Base 0.001
Preset 500<
Accum 500<
EN
DN
CLR
Clear
Dest N7:79
0<
Sensor 2, Color Channel 4 Output
0064
T4:30
DN
O:0
8
Bul.1766
MOV
Move
Source 0
0<
Dest N100:0
0<
Rungs 51-52 relate to the detection of Sensor 2, Color Channel 5 that is determined internally by the sensor.
0065
R6:21
DN
EQU
Equal
Source A N7:79
0<
Source B 16
16<
TOF
Timer Off Delay
Timer T4:31
Time Base 0.001
Preset 500<
Accum 500<
EN
DN
CLR
Clear
Dest N7:79
0<

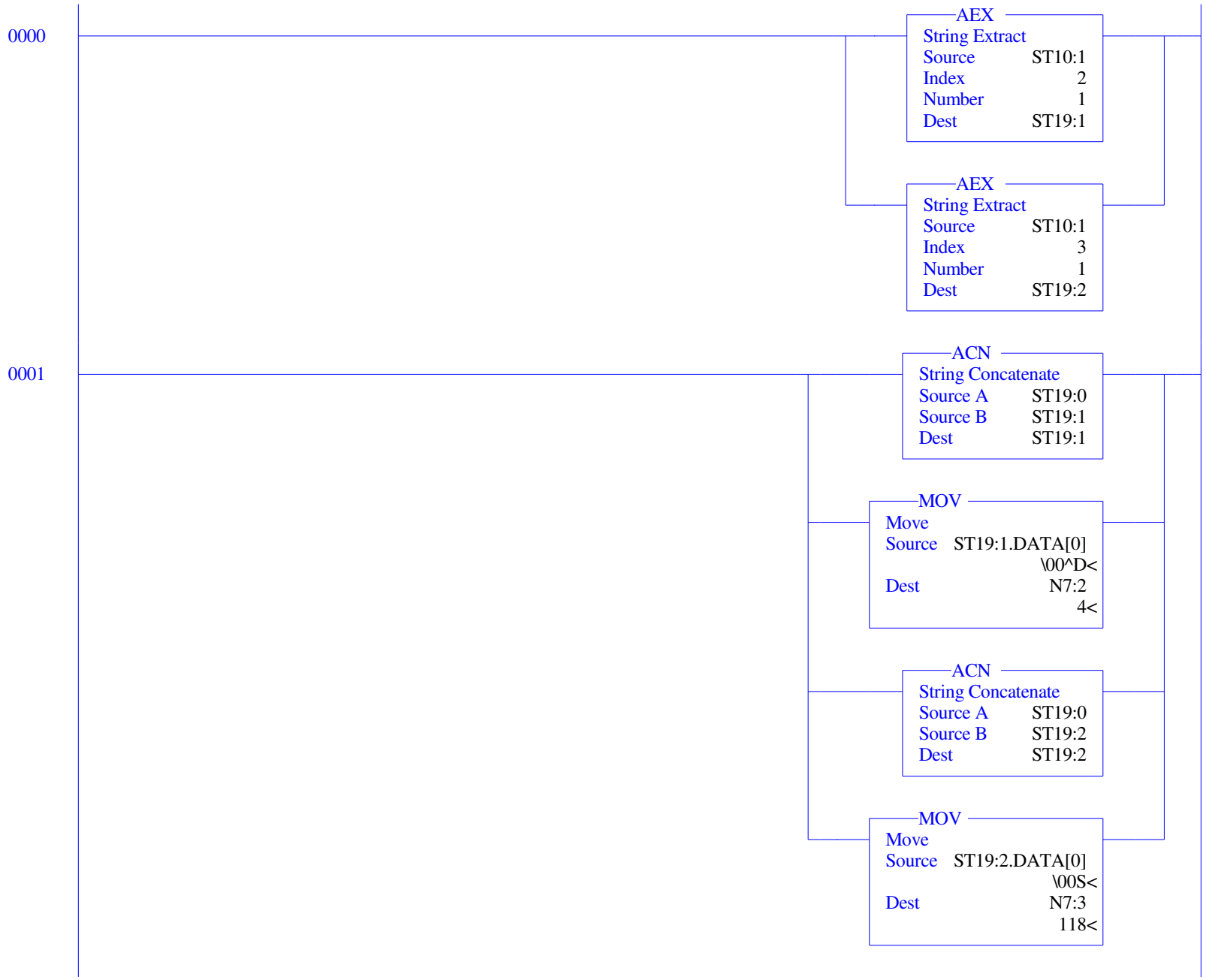

Sensor 2, Color Channel 5
0066
T4:31
DN
O:0
9
Bul.1766
MOV
Move
Source
0
0<
Dest
N100:0
0<
0067
END

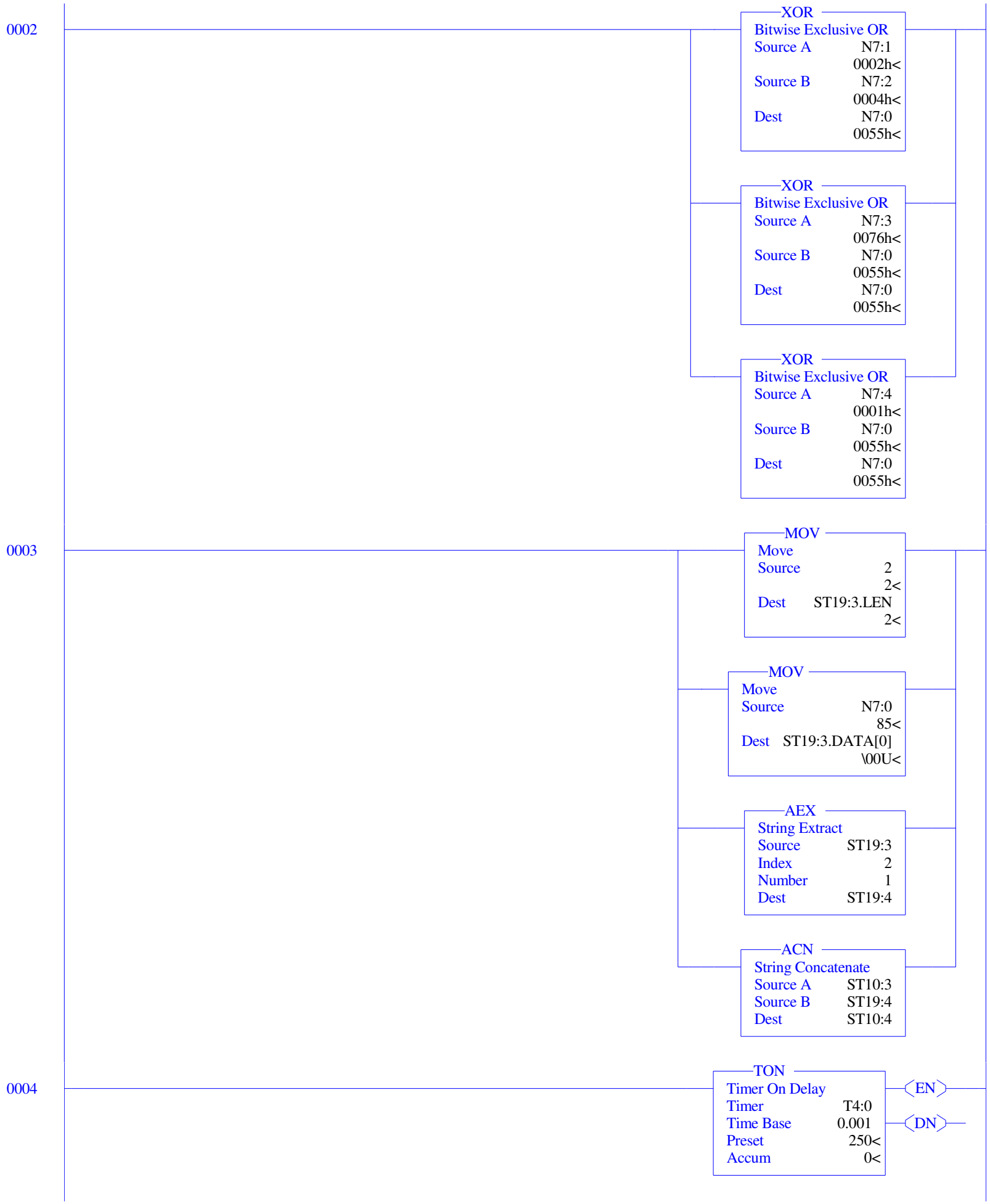
LAD 3 - CHANGE ADD - Change Sensor's Address --- Total Rungs in File = 5



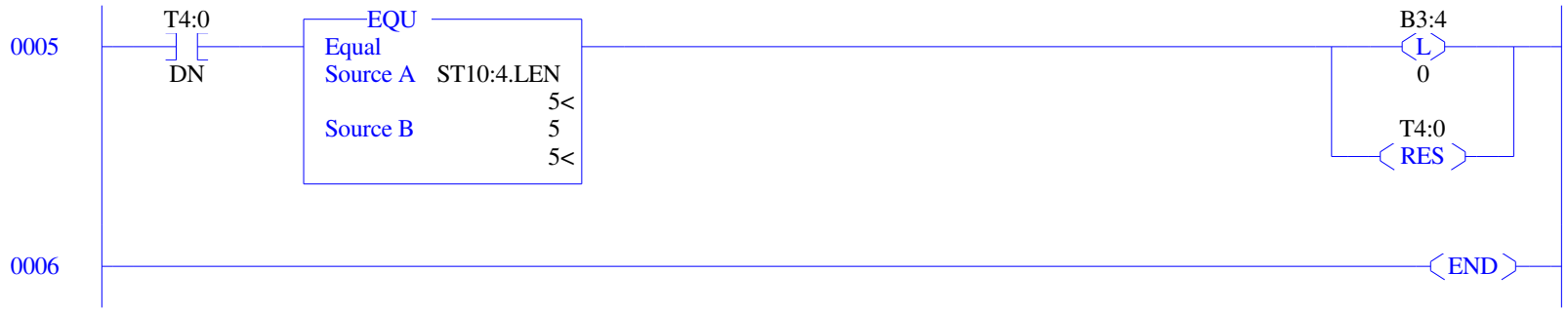

Node Address 5
B3:1
4
JSR
Jump To Subroutine
SBR File Number U:4
MOV
Move
Source 5
5<
Dest N7:1
2<
0001
B3:4
0
AWT
ASCII Write
Channel 0
Source ST10:4
Control R6:0
String Length 5<
Characters Sent 0
Error 0Eh
EN
DN
ER
0002
R6:0
DN
ARD
ASCII Read
Channel 0
Dest ST10:5
Control R6:1
String Length 4<
Characters Read 0
Error 00h
TON
Timer On Delay
Timer T4:1
Time Base 1.0
Preset 1<
Accum 0<
T4:1
DN
R6:1
L
UL
0003
R6:1
DN
R6:0
ER
R6:1
ER
B3:2
U
1
B3:4
U
0
0004
END

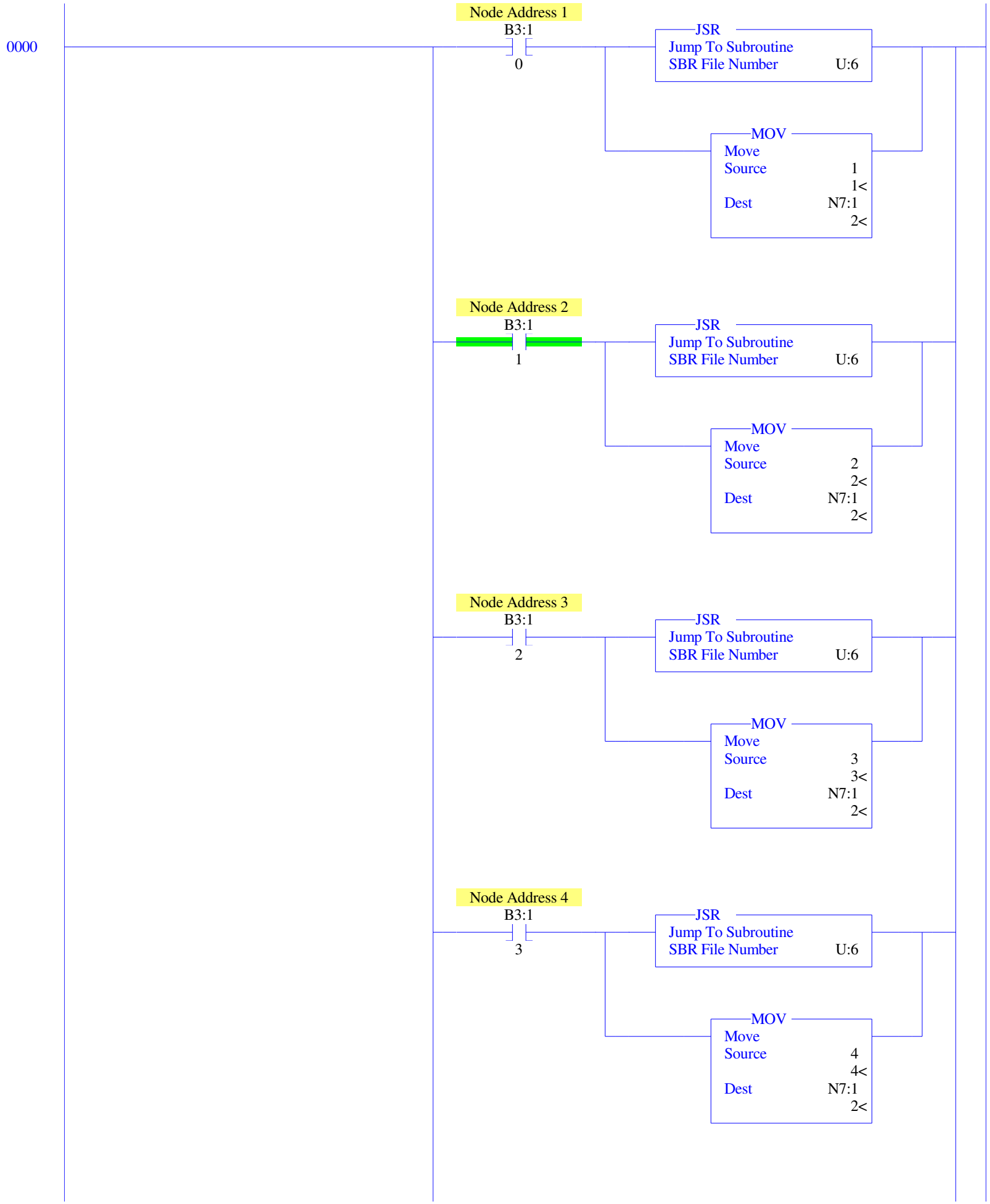
LAD 4 - CHG_ADD_1 - Change Address for Sensor --- Total Rungs in File = 7

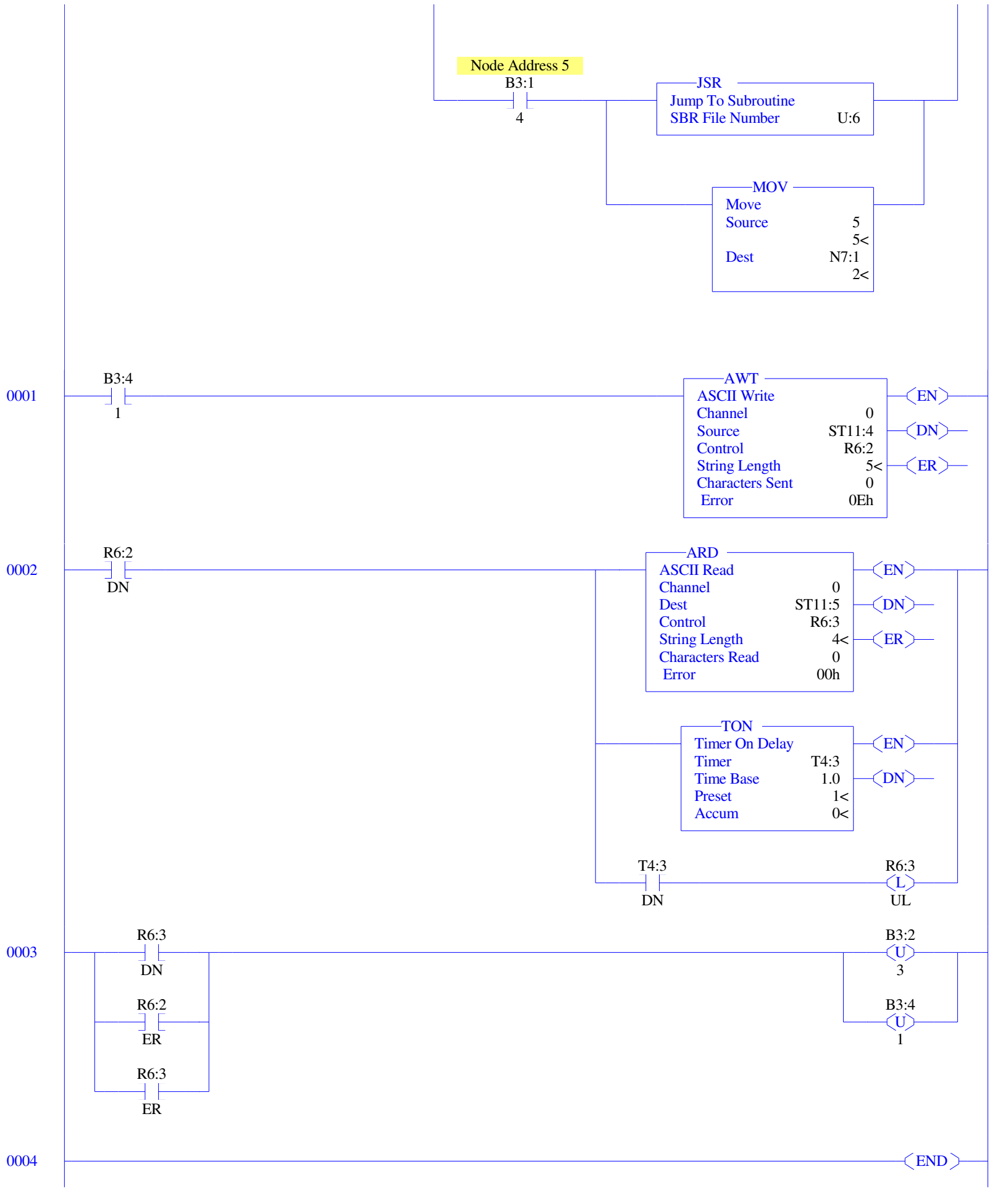



0002
XOR
Bitwise Exclusive OR
Source A N7:1
0002h<
Source B N7:2
0004h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:3
0076h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:4
0001h<
Source B N7:0
0055h<
Dest N7:0
0055h<
0003
MOV
Move
Source 2
2<
Dest ST19:3.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:3.DATA[0]
\00U<
AEX
String Extract
Source ST19:3
Index 2
Number 1
Dest ST19:4
ACN
String Concatenate
Source A ST10:3
Source B ST19:4
Dest ST10:4
0004
TON
Timer On Delay
Timer T4:0
Time Base 0.001
Preset 250<
Accum 0<
EN
DN

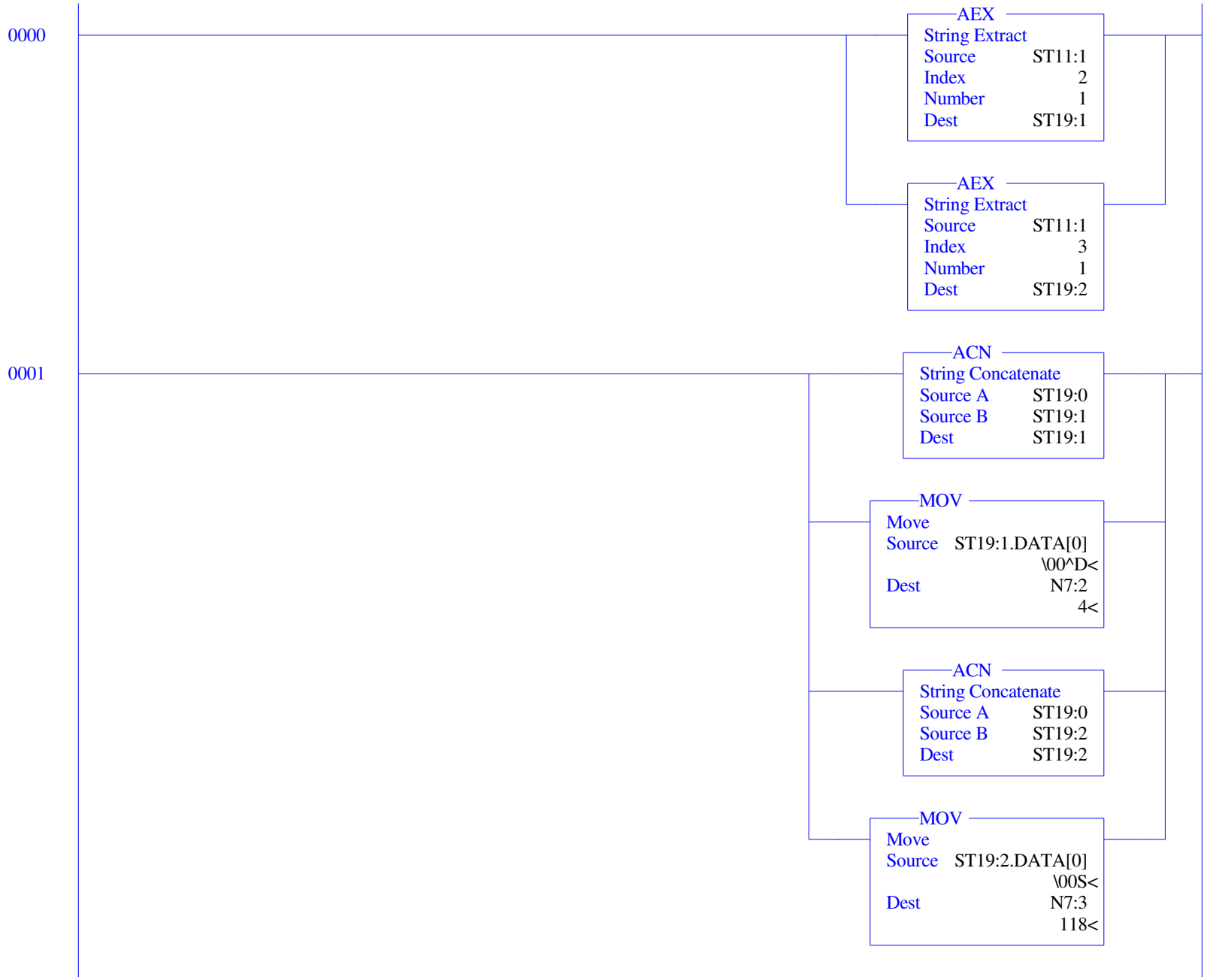
LAD 4 - CHG_ADD_1 - Change Address for Sensor --- Total Rungs in File = 7

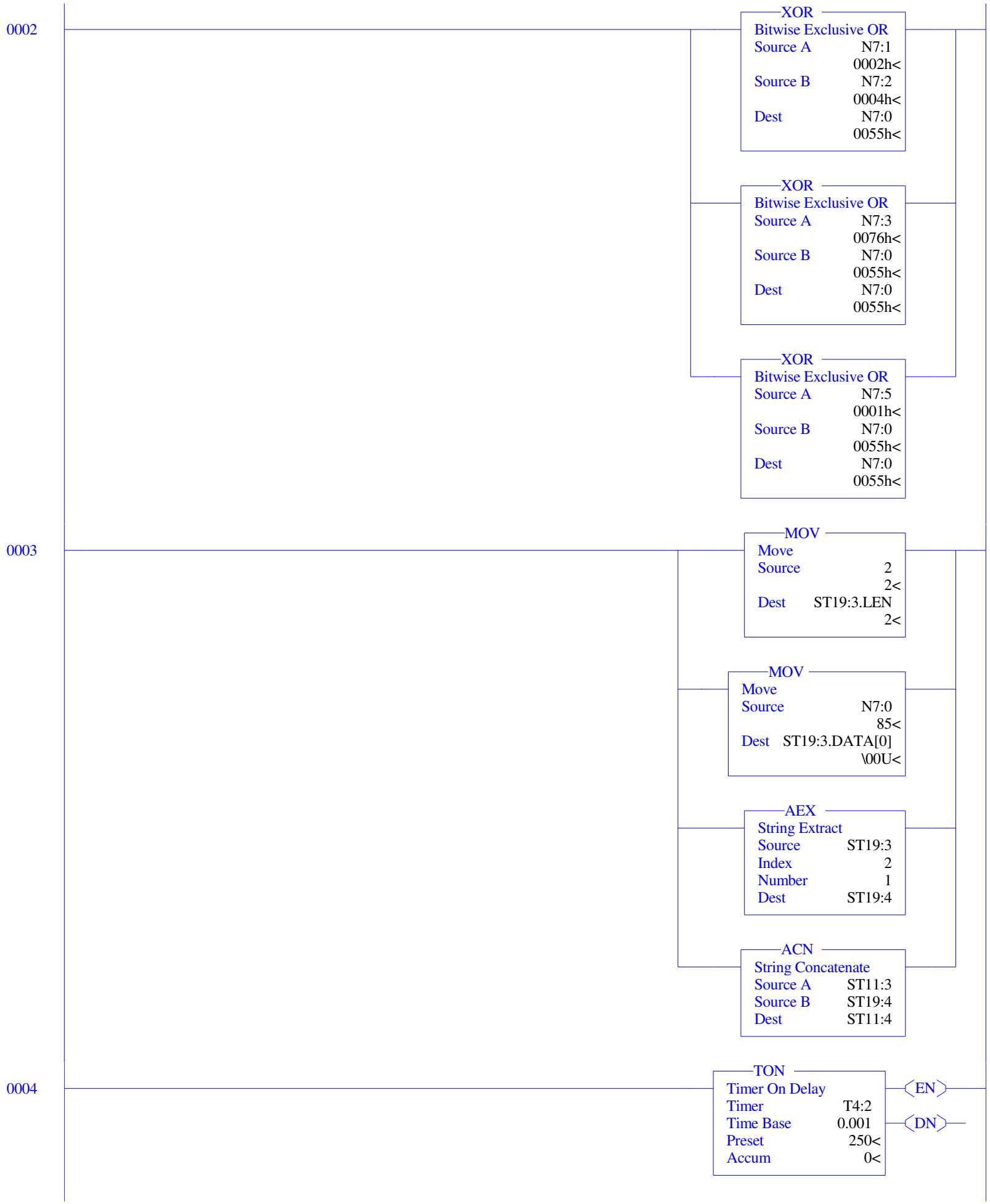



0000
Node Address 1
B3:1
0
JSR
Jump To Subroutine
SBR File Number U:6
MOV
Move
Source 1
1<
Dest N7:1
2<
Node Address 2
B3:1
1
JSR
Jump To Subroutine
SBR File Number U:6
MOV
Move
Source 2
2<
Dest N7:1
2<
Node Address 3
B3:1
2
JSR
Jump To Subroutine
SBR File Number U:6
MOV
Move
Source 3
3<
Dest N7:1
2<
Node Address 4
B3:1
3
JSR
Jump To Subroutine
SBR File Number U:6
MOV
Move
Source 4
4<
Dest N7:1
2<

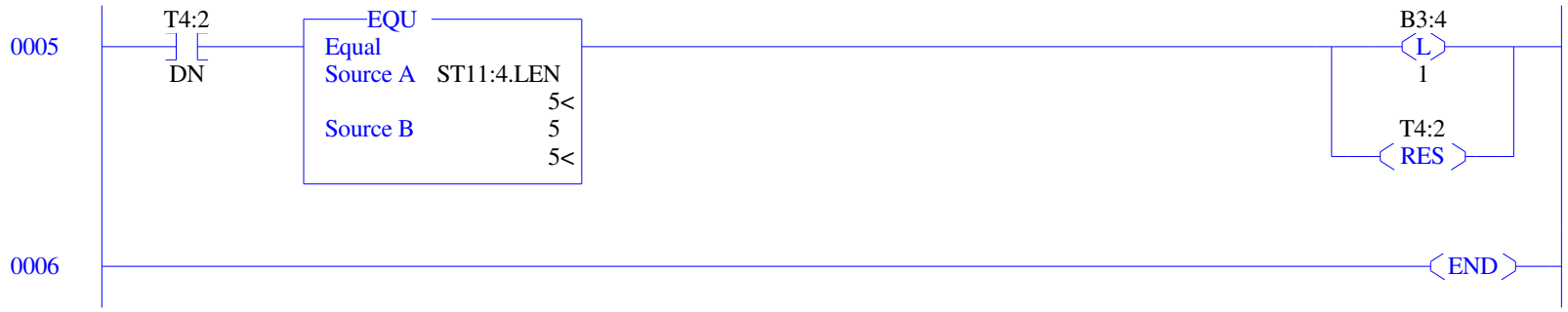

Node Address 5
B3:1
4
JSR
Jump To Subroutine
SBR File Number U:6
MOV
Move
Source 5
5<
Dest N7:1
2<
0001
B3:4
1
AWT
ASCII Write
Channel 0
Source ST11:4
Control R6:2
String Length 5<
Characters Sent 0
Error 0Eh
EN
DN
ER
0002
R6:2
DN
ARD
ASCII Read
Channel 0
Dest ST11:5
Control R6:3
String Length 4<
Characters Read 0
Error 00h
TON
Timer On Delay
Timer T4:3
Time Base 1.0
Preset 1<
Accum 0<
T4:3
DN
R6:3
L
UL
0003
R6:3
DN
R6:2
ER
R6:3
ER
B3:2
U
3
B3:4
U
1
0004
END

LAD 6 - DATA_TXR_1 - Set Data Transfer Rate for Sensor --- Total Rungs in File = 7

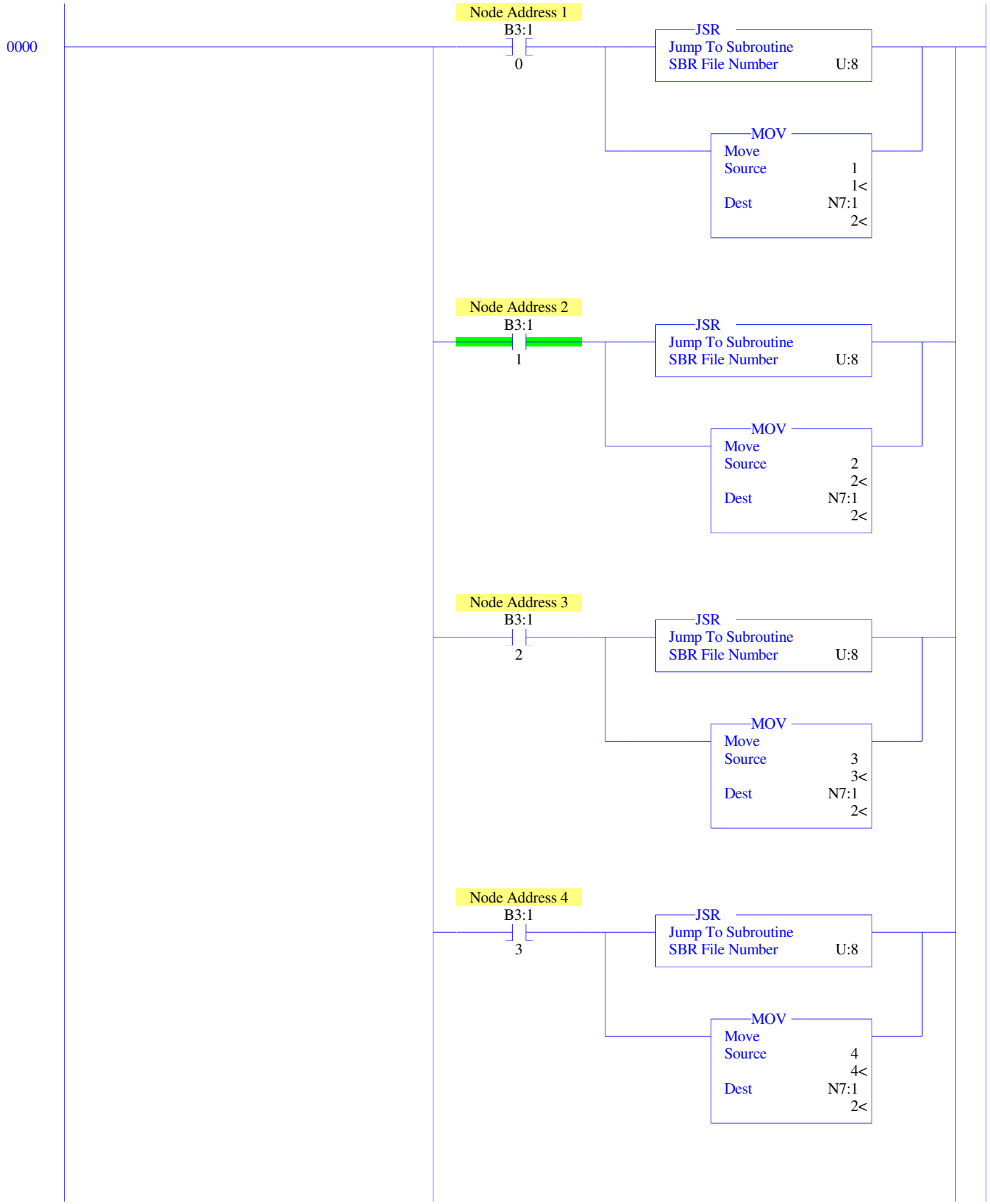


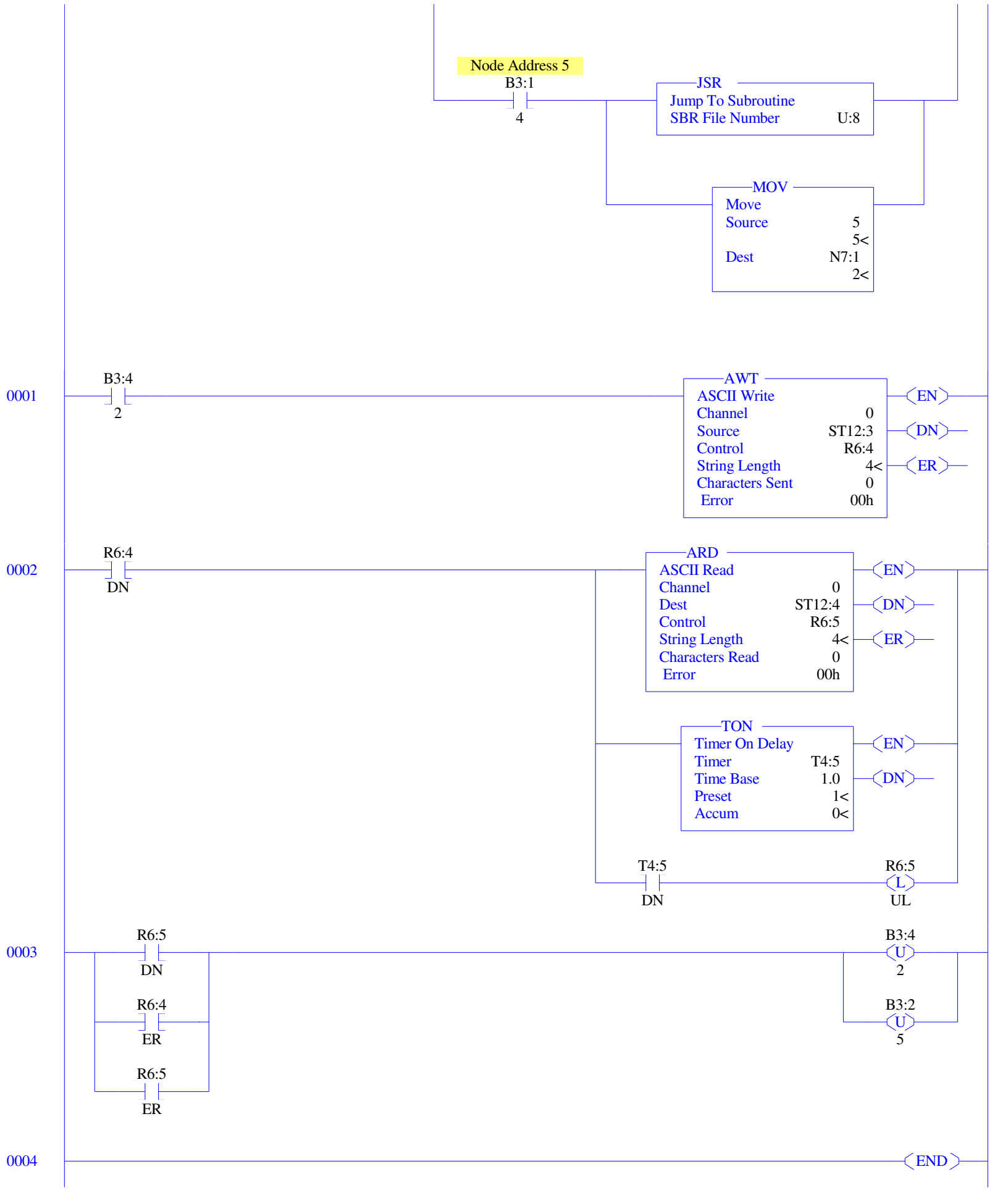

0002
XOR
Bitwise Exclusive OR
Source A N7:1
0002h<
Source B N7:2
0004h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:3
0076h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:5
0001h<
Source B N7:0
0055h<
Dest N7:0
0055h<
0003
MOV
Move
Source 2
2<
Dest ST19:3.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:3.DATA[0]
\00U<
AEX
String Extract
Source ST19:3
Index 2
Number 1
Dest ST19:4
ACN
String Concatenate
Source A ST11:3
Source B ST19:4
Dest ST11:4
0004
TON
Timer On Delay
Timer T4:2
Time Base 0.001
Preset 250<
Accum 0<
EN
DN

LAD 6 - DATA_TXR_1 - Set Data Transfer Rate for Sensor --- Total Rungs in File = 7

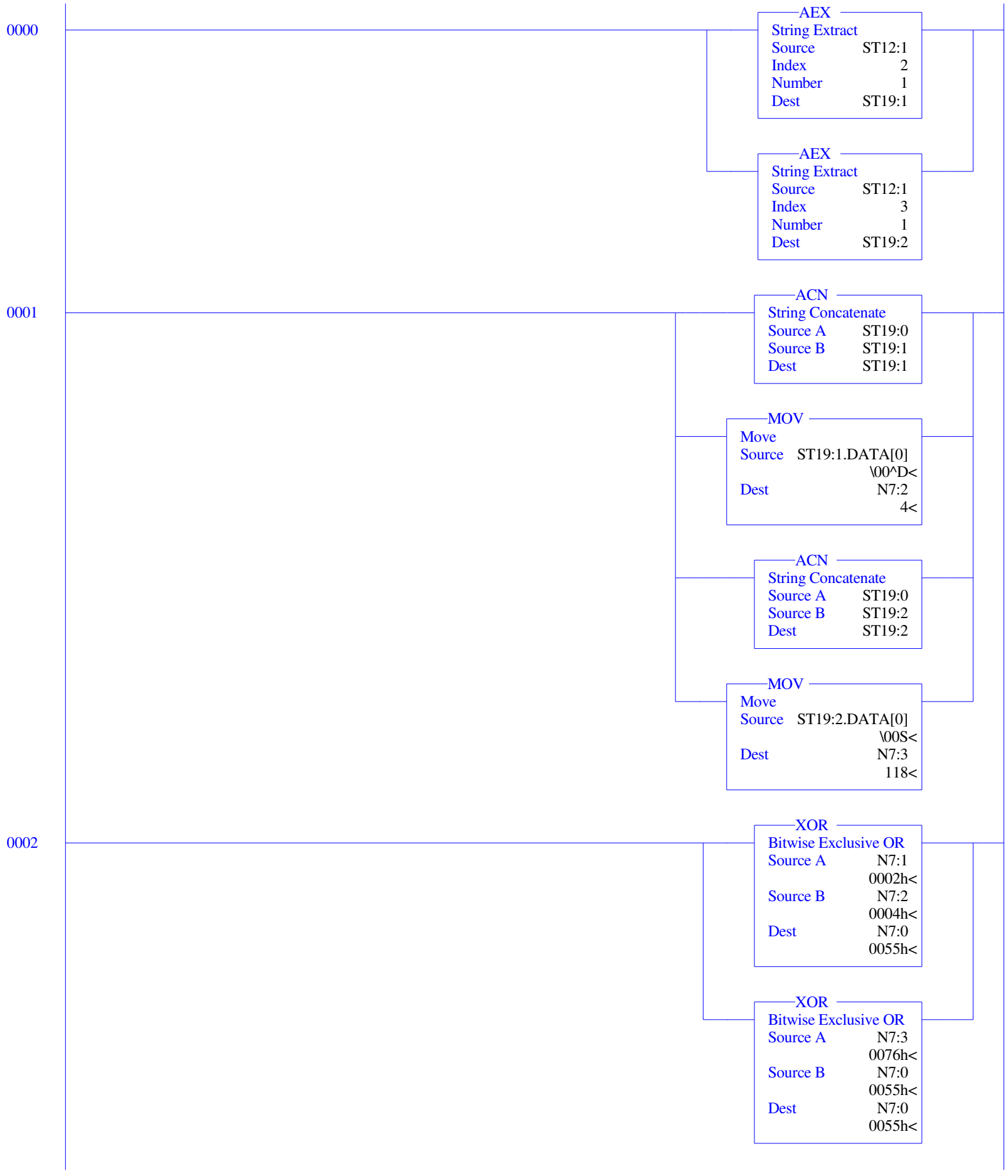


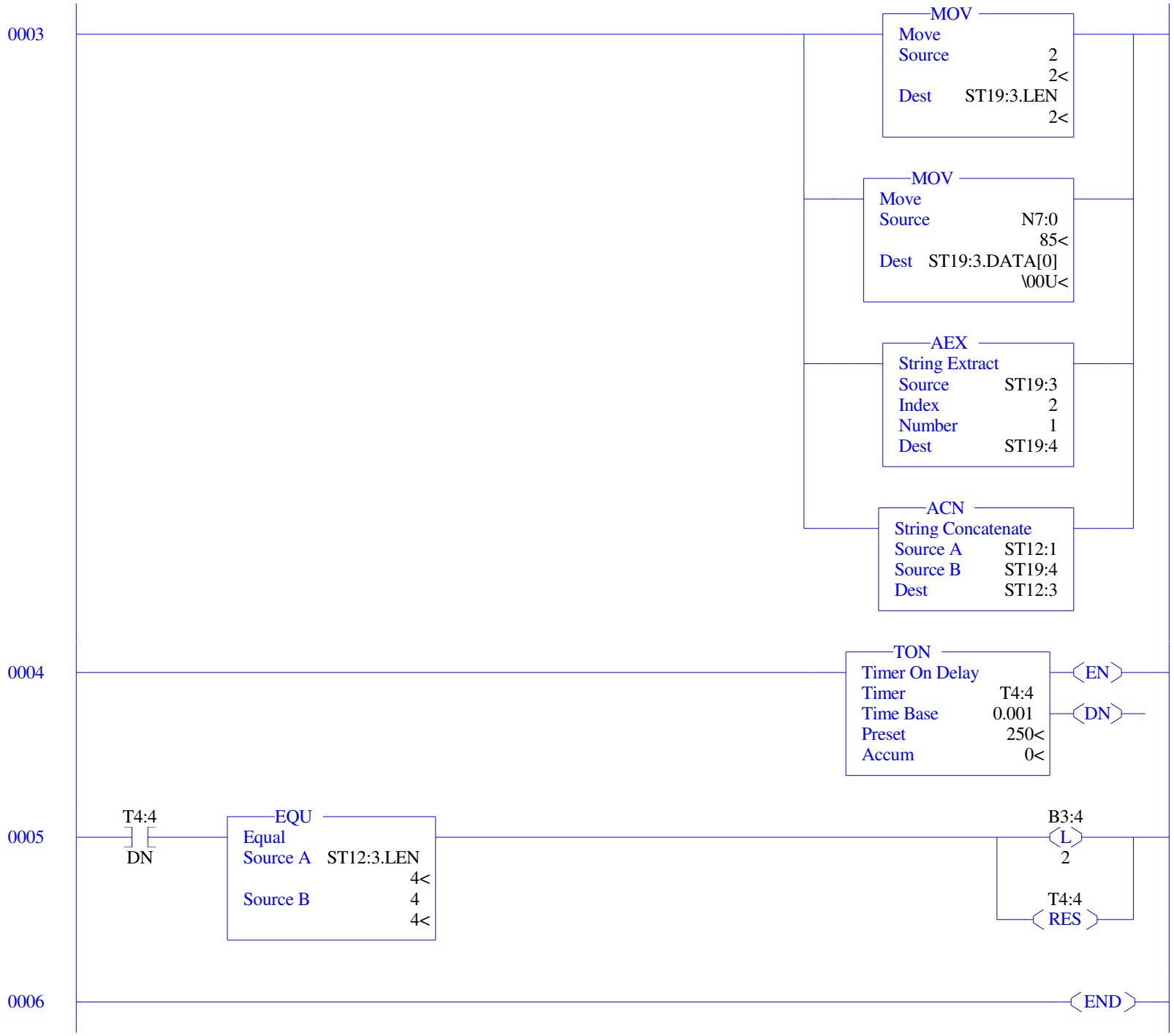
LAD 7 - DEFAULT - Activate Factor Setting --- Total Rungs in File = 5



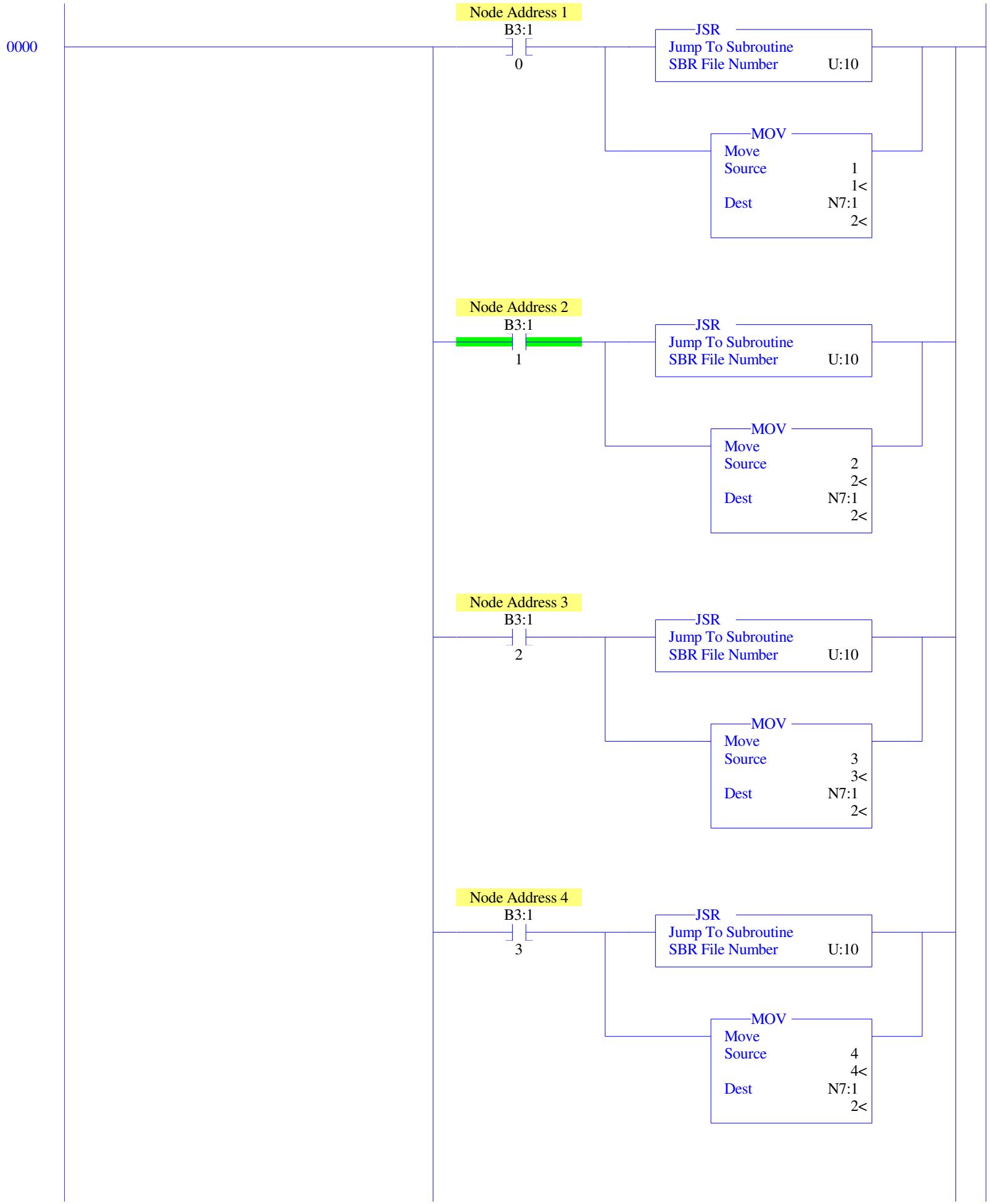

Node Address 5
B3:1
4
JSR
Jump To Subroutine
SBR File Number U:8
MOV
Move
Source 5
5<
Dest N7:1
2<
0001
B3:4
2
AWT
ASCII Write
Channel 0
Source ST12:3
Control R6:4
String Length 4<
Characters Sent 0
Error 00h
EN
DN
ER
0002
R6:4
DN
ARD
ASCII Read
Channel 0
Dest ST12:4
Control R6:5
String Length 4<
Characters Read 0
Error 00h
TON
Timer On Delay
Timer T4:5
Time Base 1.0
Preset 1<
Accum 0<
T4:5
DN
R6:5
L
UL
0003
R6:5
DN
R6:4
ER
R6:5
ER
B3:4
U
2
B3:2
U
5
0004
END

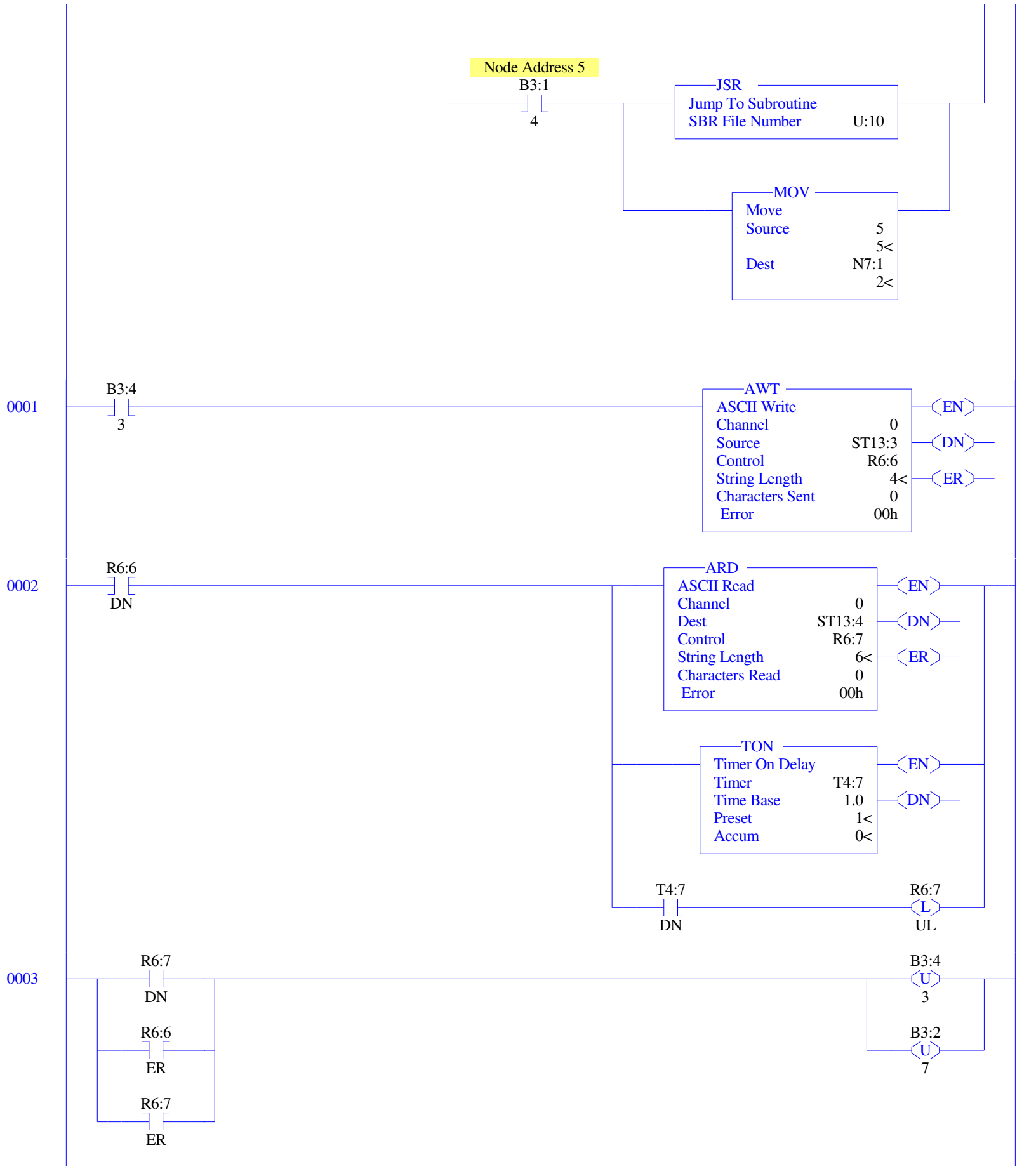
LAD 8 - DEFAULT_1 - Activate Factory Settings for Sensor --- Total Rungs in File = 7




0003
MOV
Move
Source 2
2<
Dest ST19:3.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:3.DATA[0]
\00U<
AEX
String Extract
Source ST19:3
Index 2
Number 1
Dest ST19:4
ACN
String Concatenate
Source A ST12:1
Source B ST19:4
Dest ST12:3
0004
TON
Timer On Delay
Timer T4:4
Time Base 0.001
Preset 250<
Accum 0<
EN
DN
0005
T4:4
DN
EQU
Equal
Source A ST12:3.LEN
4<
Source B 4
4<
B3:4
L
2
T4:4
RES
0006
END

LAD 9 - VERSION - Read Software Version --- Total Rungs in File = 6




Node Address 5
B3:1
4
JSR
Jump To Subroutine
SBR File Number U:10
MOV
Move
Source 5
5<
Dest N7:1
2<
0001
B3:4
3
AWT
ASCII Write
Channel 0
Source ST13:3
Control R6:6
String Length 4<
Characters Sent 0
Error 00h
EN
DN
ER
0002
R6:6
DN
ARD
ASCII Read
Channel 0
Dest ST13:4
Control R6:7
String Length 6<
Characters Read 0
Error 00h
TON
Timer On Delay
Timer T4:7
Time Base 1.0
Preset 1<
Accum 0<
T4:7
DN
R6:7
L
UL
0003
R6:7
DN
R6:6
ER
R6:7
ER
B3:4
U
3
B3:2
U
7

0004

MOV
Move
Source 2
2<
Dest ST13:5.LEN
2<

MOV
Move
Source N7:6
0<
Dest ST13:5.DATA[0]
\00\00<

AEX
String Extract
Source ST13:5
Index 2
Number 1
Dest ST13:6

AEX
String Extract
Source ST13:4
Index 5
Number 1
Dest ST13:8

AEX
String Extract
Source ST13:4
Index 4
Number 1
Dest ST13:7

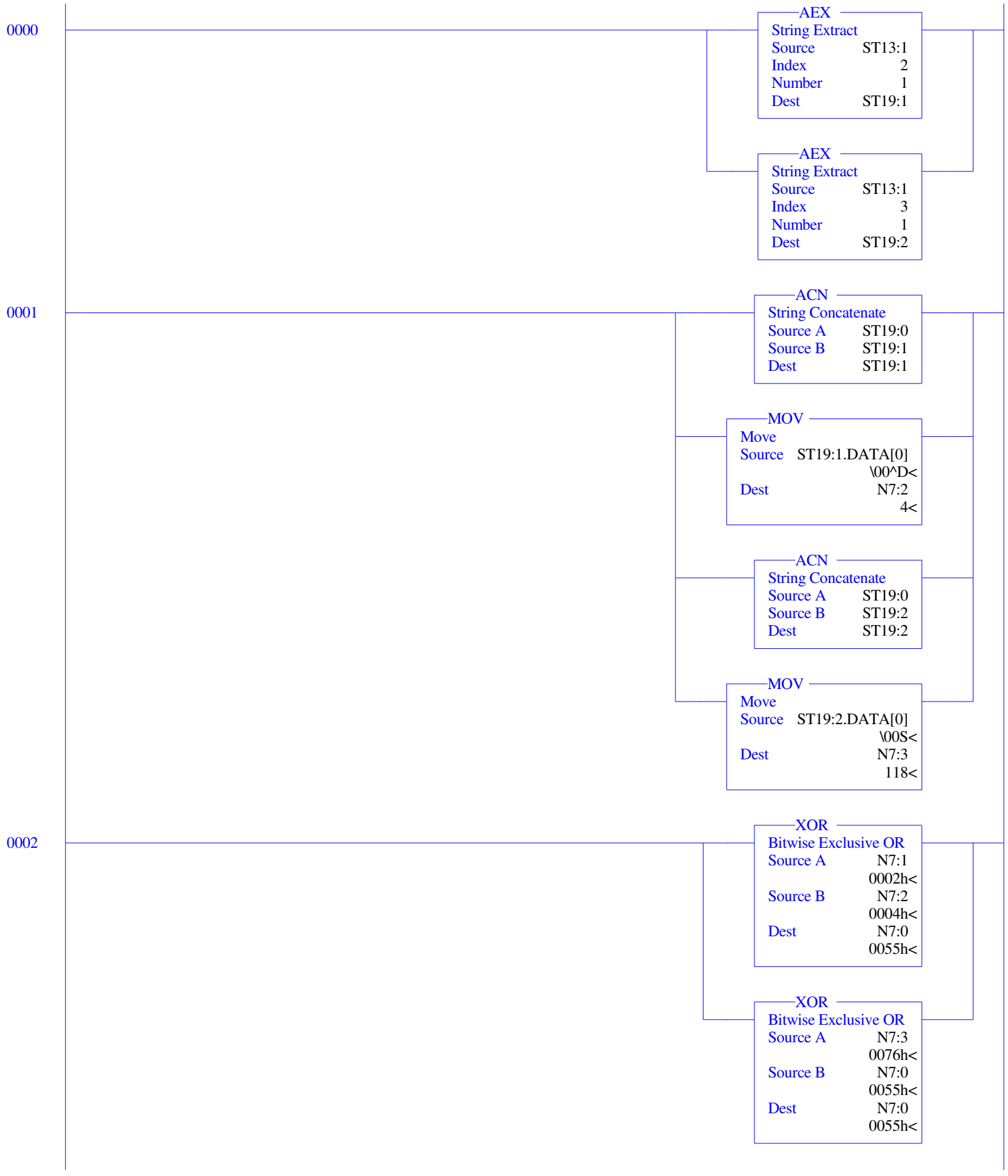
ACN
String Concatenate
Source A ST13:6
Source B ST13:7
Dest ST13:9

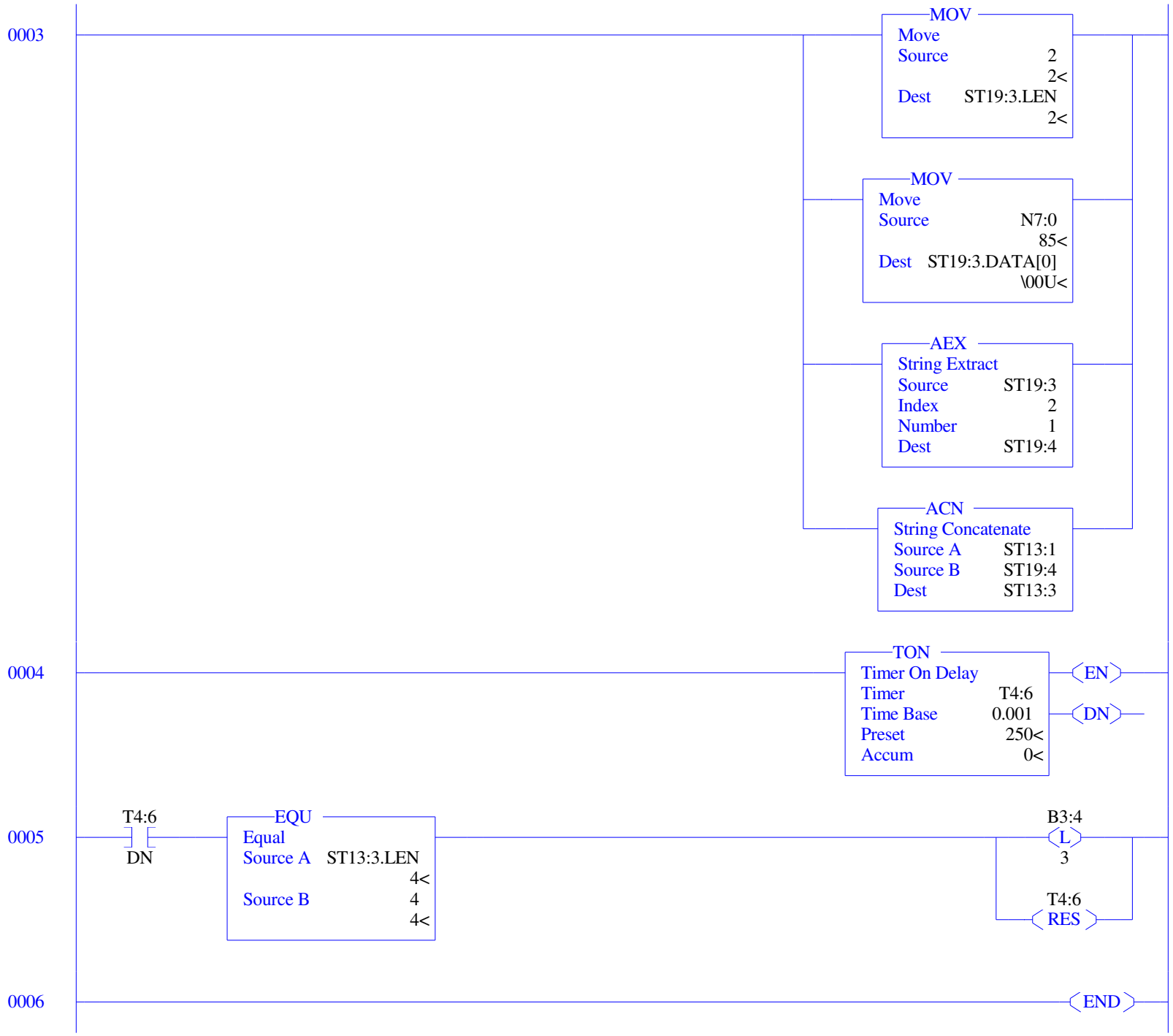
ACN
String Concatenate
Source A ST13:6
Source B ST13:8
Dest ST13:10

0005

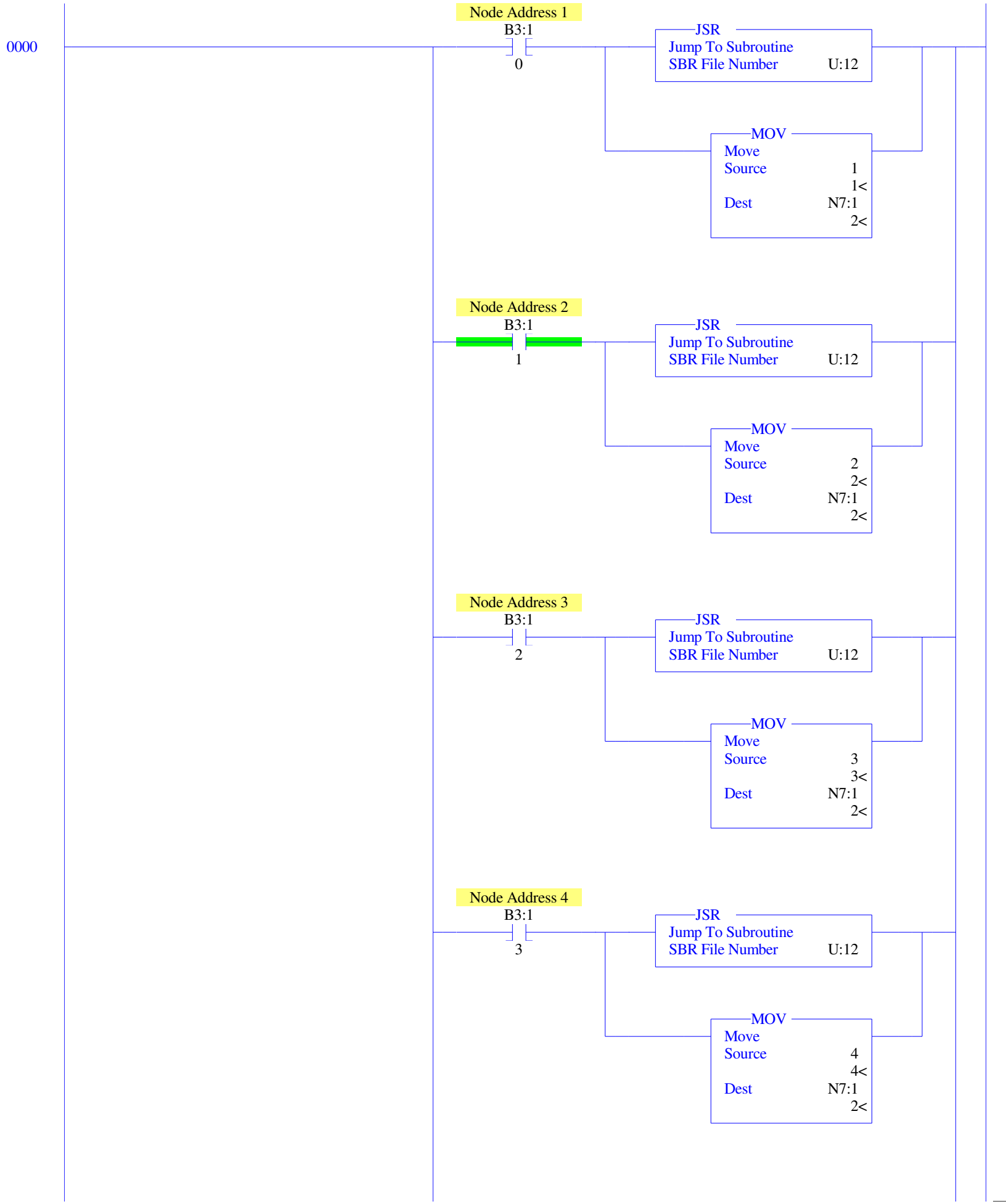
END

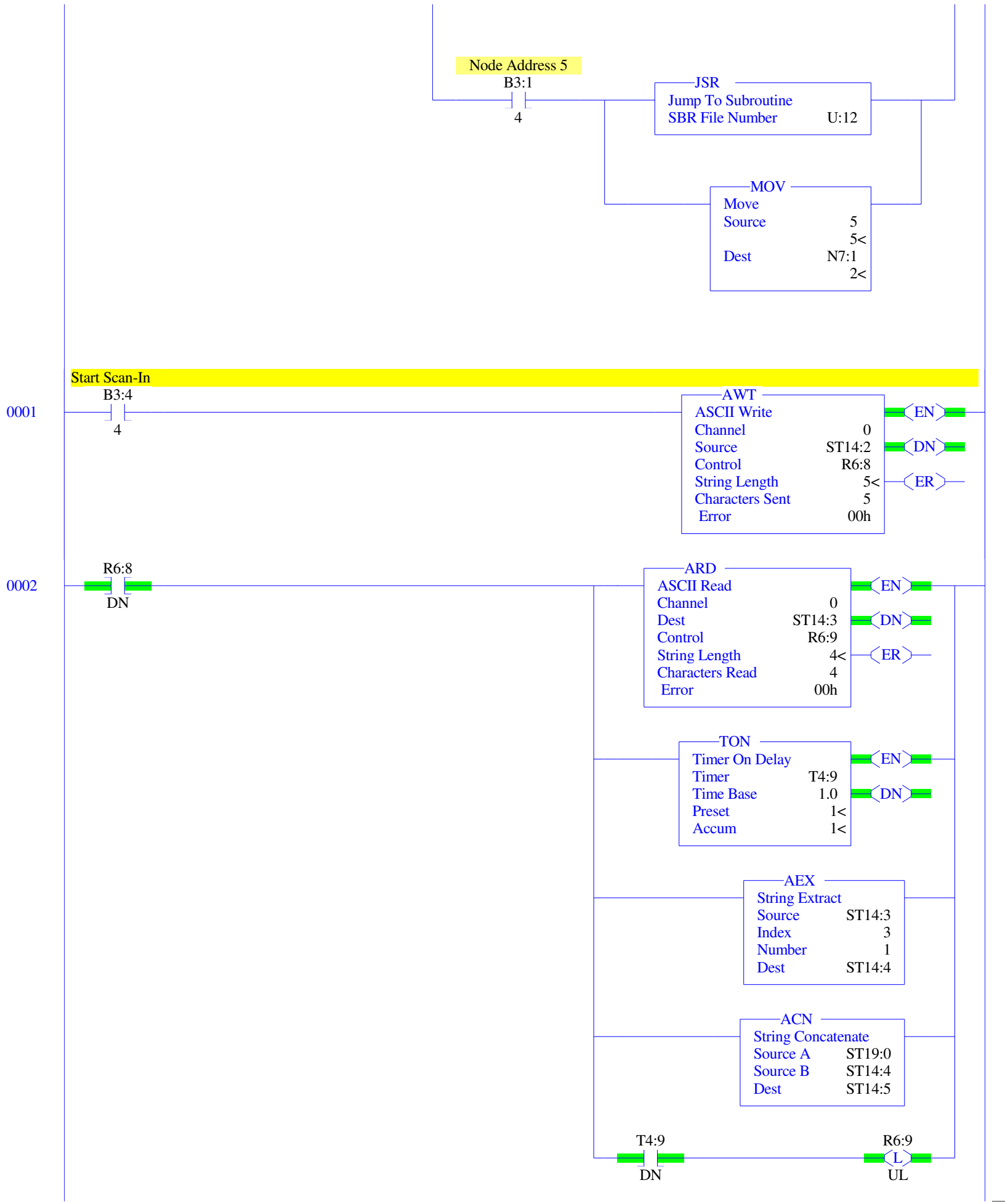
LAD 10 - VERSION_1 - Read Software Version for Sensor --- Total Rungs in File = 7




0003
MOV
Move
Source 2
2<
Dest ST19:3.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:3.DATA[0]
\00U<
AEX
String Extract
Source ST19:3
Index 2
Number 1
Dest ST19:4
ACN
String Concatenate
Source A ST13:1
Source B ST19:4
Dest ST13:3
0004
TON
Timer On Delay
Timer T4:6
Time Base 0.001
Preset 250<
Accum 0<
EN
DN
0005
T4:6
DN
EQU
Equal
Source A ST13:3.LEN
4<
Source B 4
4<
B3:4
L
3
T4:6
RES
0006
END

LAD 11 - SCAN - Teach Colors to the Five Channels --- Total Rungs in File = 9




Node Address 5
B3:1
4
JSR
Jump To Subroutine
SBR File Number U:12
MOV
Move
Source 5
5<
Dest N7:1
2<
Start Scan-In
0001
B3:4
4
AWT
ASCII Write
Channel 0
Source ST14:2
Control R6:8
String Length 5<
Characters Sent 5
Error 00h
EN
DN
ER
0002
R6:8
DN
ARD
ASCII Read
Channel 0
Dest ST14:3
Control R6:9
String Length 4<
Characters Read 4
Error 00h
TON
Timer On Delay
Timer T4:9
Time Base 1.0
Preset 1<
Accum 1<
AEX
String Extract
Source ST14:3
Index 3
Number 1
Dest ST14:4
ACN
String Concatenate
Source A ST19:0
Source B ST14:4
Dest ST14:5
T4:9
DN
R6:9
L
UL

End Teach-In

0003

R6:9
DN

TON
Timer On Delay
Timer T4:10
Time Base 1.0
Preset 2<
Accum 2<
EN
DN

0004

T4:10
DN

JSR
Jump To Subroutine
SBR File Number U:14

0005

B3:4
5

AWT
ASCII Write
Channel 0
Source ST16:2
Control R6:10
String Length 5<
Characters Sent 5
Error 00h
EN
DN
ER

0006

R6:10
DN

ARD
ASCII Read
Channel 0
Dest ST16:3
Control R6:11
String Length 4<
Characters Read 4
Error 00h
EN
DN
ER

TON
Timer On Delay
Timer T4:11
Time Base 1.0
Preset 1<
Accum 0<
EN
DN

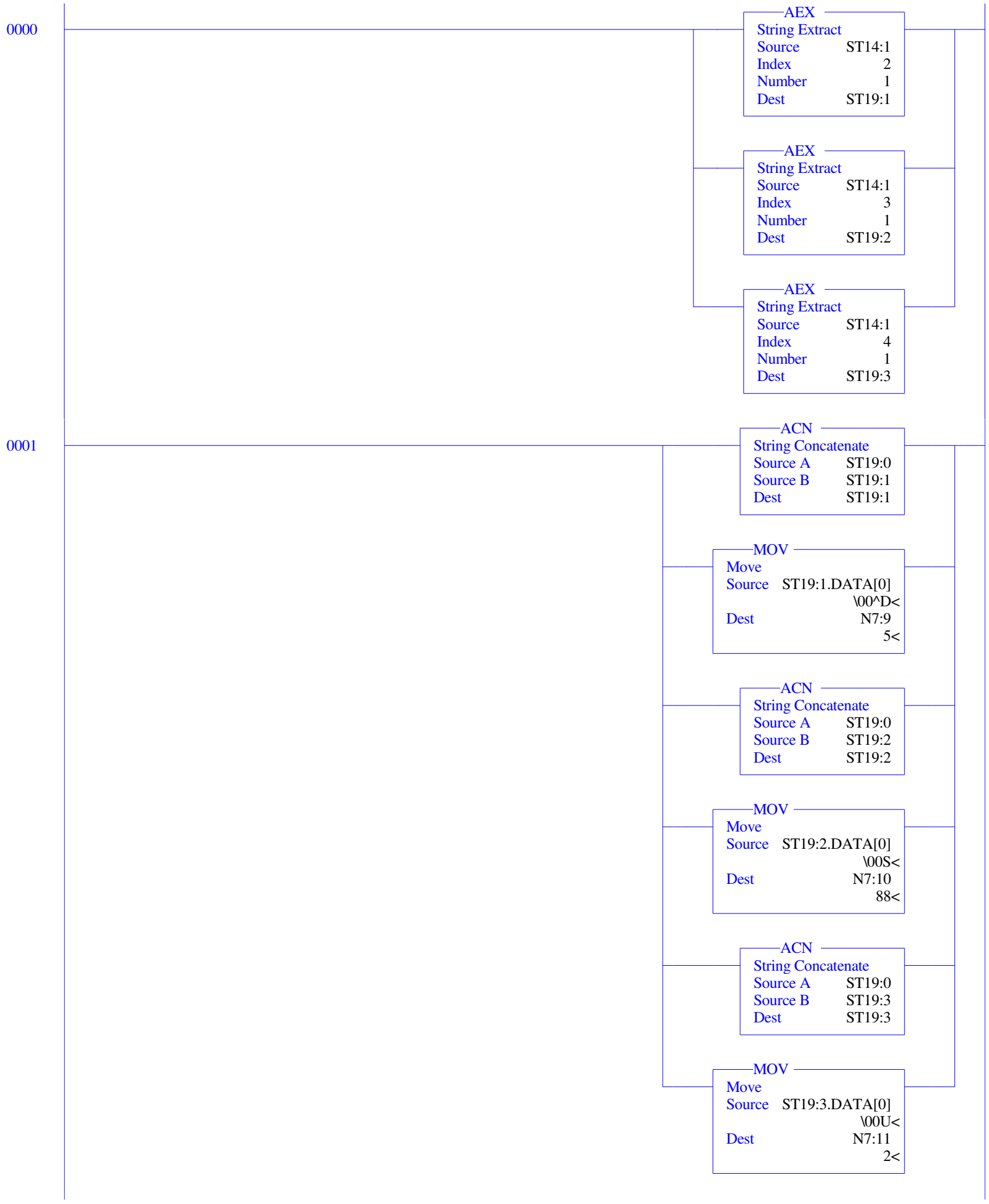
AEX
String Extract
Source ST16:3
Index 3
Number 1
Dest ST16:4

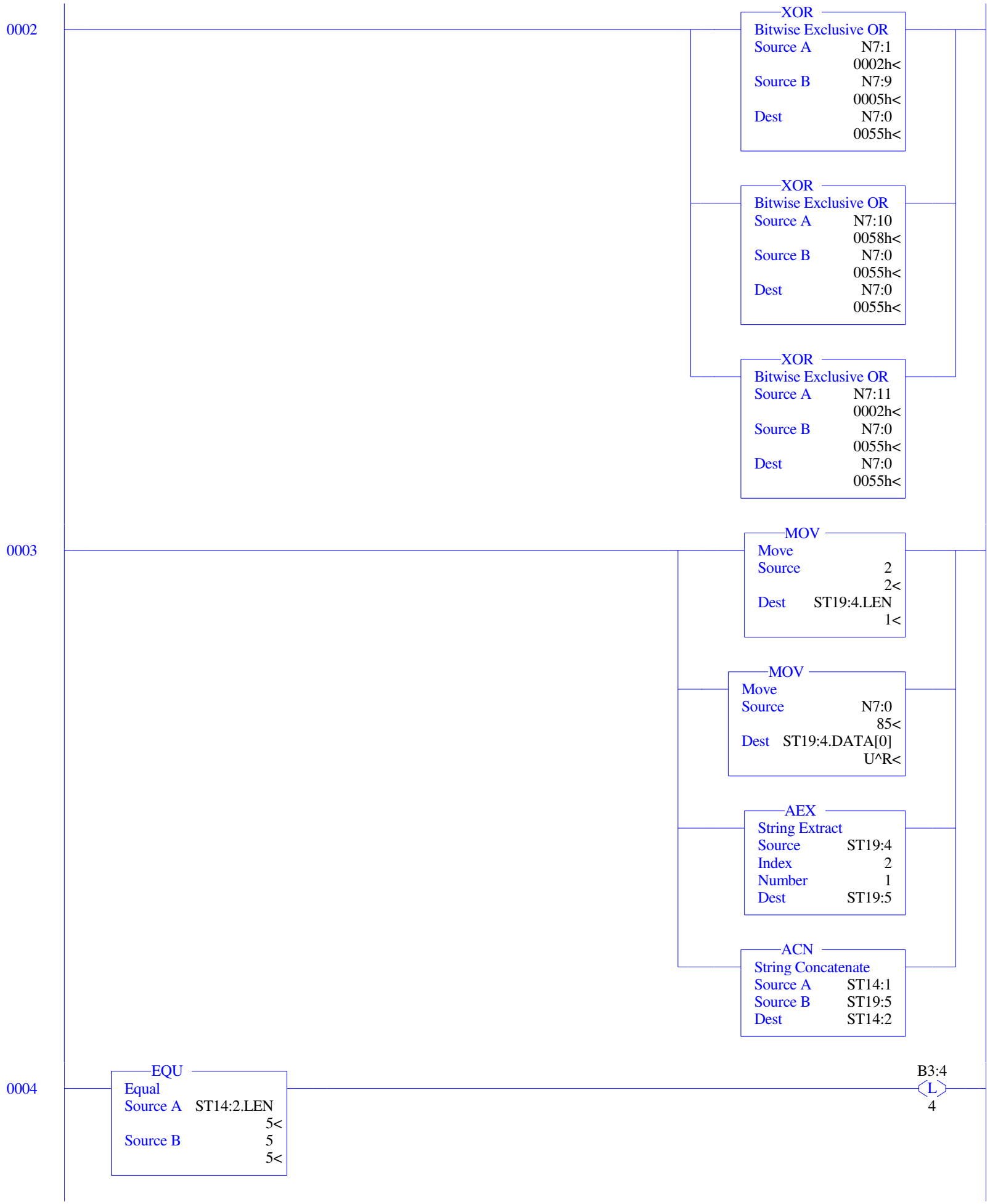
ACN
String Concatenate
Source A ST19:0
Source B ST16:4
Dest ST16:5

T4:11
DN

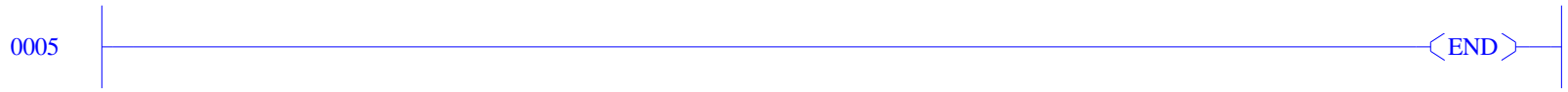
R6:11
L
UL

LAD 11 - SCAN - Teach Colors to the Five Channels --- Total Rungs in File = 9


0000
AEX
String Extract
Source ST14:1
Index 2
Number 1
Dest ST19:1
AEX
String Extract
Source ST14:1
Index 3
Number 1
Dest ST19:2
AEX
String Extract
Source ST14:1
Index 4
Number 1
Dest ST19:3
0001
ACN
String Concatenate
Source A ST19:0
Source B ST19:1
Dest ST19:1
MOV
Move
Source ST19:1.DATA[0]
\00^D<
Dest N7:9
5<
ACN
String Concatenate
Source A ST19:0
Source B ST19:2
Dest ST19:2
MOV
Move
Source ST19:2.DATA[0]
\00S<
Dest N7:10
88<
ACN
String Concatenate
Source A ST19:0
Source B ST19:3
Dest ST19:3
MOV
Move
Source ST19:3.DATA[0]
\00U<
Dest N7:11
2<


0002
XOR
Bitwise Exclusive OR
Source A N7:1
0002h<
Source B N7:9
0005h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:10
0058h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:11
0002h<
Source B N7:0
0055h<
Dest N7:0
0055h<
0003
MOV
Move
Source 2
2<
Dest ST19:4.LEN
1<
MOV
Move
Source N7:0
85<
Dest ST19:4.DATA[0]
U^R<
AEX
String Extract
Source ST19:4
Index 2
Number 1
Dest ST19:5
ACN
String Concatenate
Source A ST14:1
Source B ST19:5
Dest ST14:2
0004
EQU
Equal
Source A ST14:2.LEN
5<
Source B 5
5<
B3:4
L
4

LAD 12 - SCAN_1 - Set Teach-In for the Colors to the Five Channels --- Total Rungs in File = 6



0000

AEX
String Extract
Source ST16:1
Index 2
Number 1
Dest ST19:1

AEX
String Extract
Source ST16:1
Index 3
Number 1
Dest ST19:2

AEX
String Extract
Source ST16:1
Index 4
Number 1
Dest ST19:3

0001

ACN
String Concatenate
Source A ST19:0
Source B ST19:1
Dest ST19:1

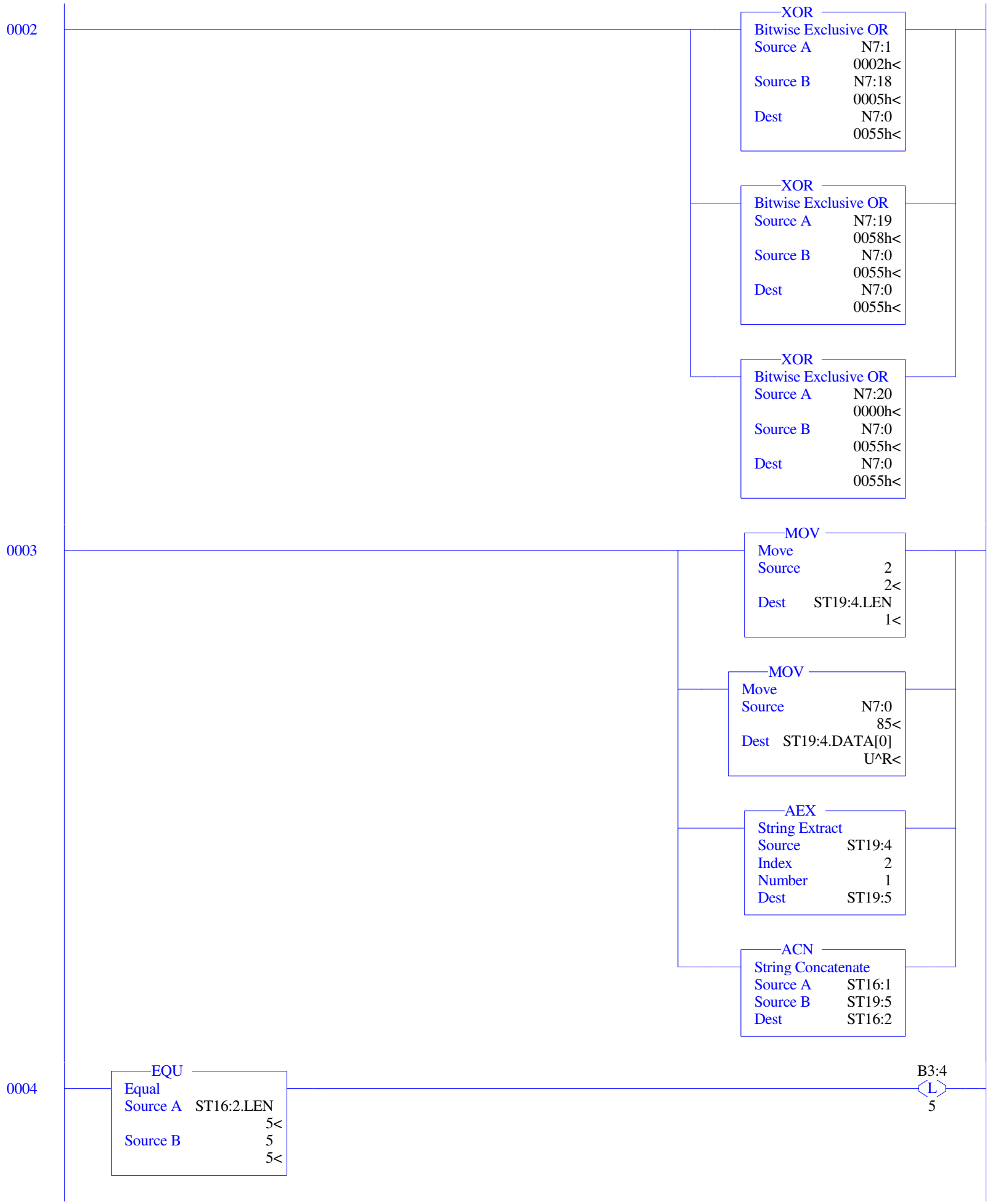
MOV
Move
Source ST19:1.DATA[0]
\00^D<
Dest N7:18
5<

ACN
String Concatenate
Source A ST19:0
Source B ST19:2
Dest ST19:2

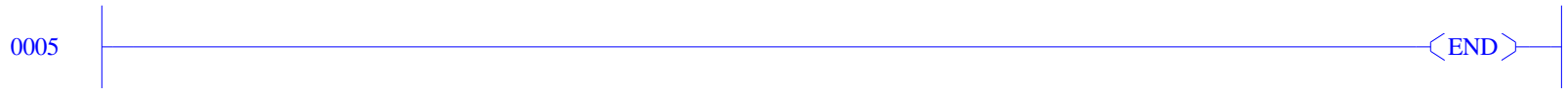
MOV
Move
Source ST19:2.DATA[0]
\00S<
Dest N7:19
88<

ACN
String Concatenate
Source A ST19:0
Source B ST19:3
Dest ST19:3

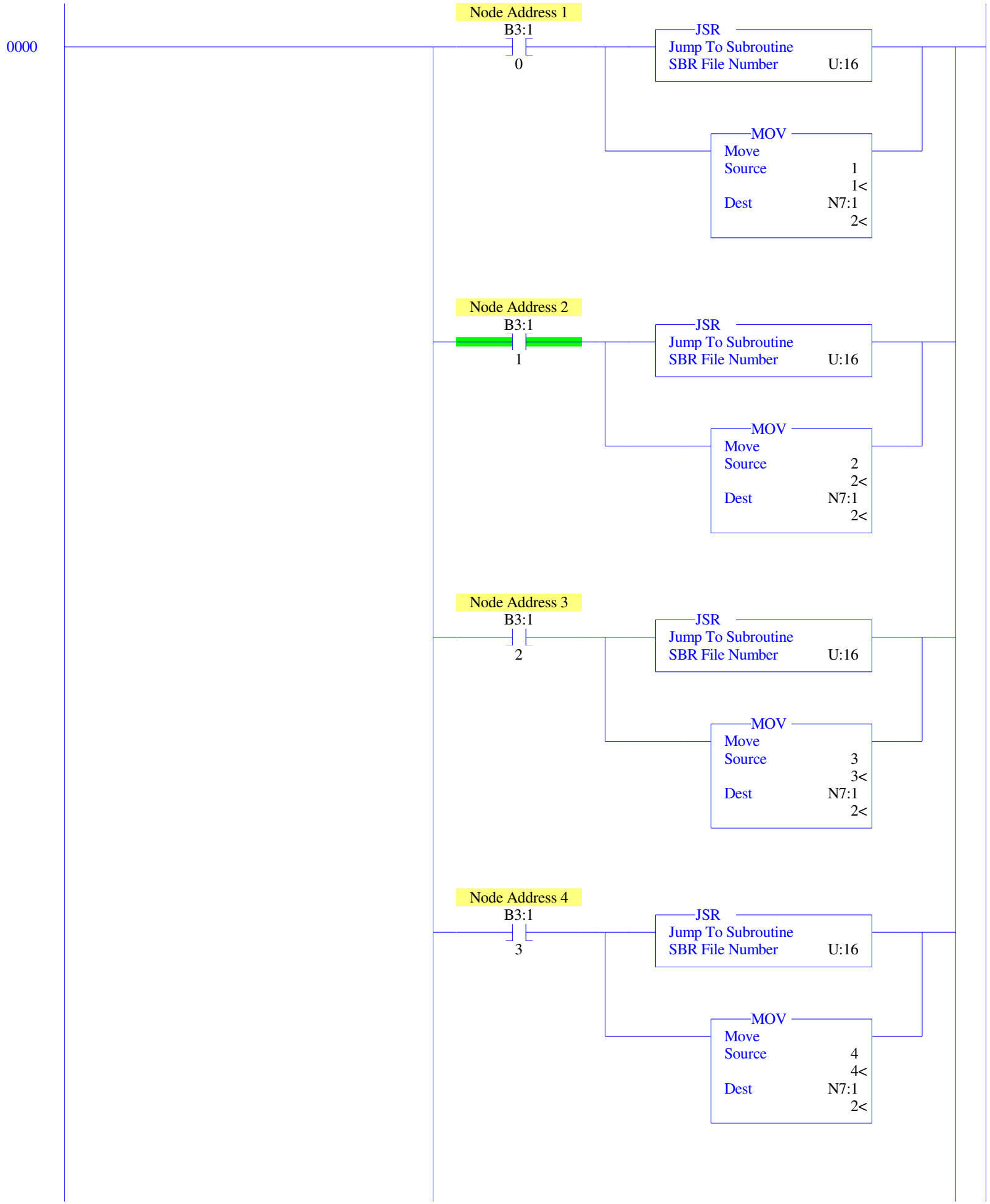
MOV
Move
Source ST19:3.DATA[0]
\00U<
Dest N7:20
0<

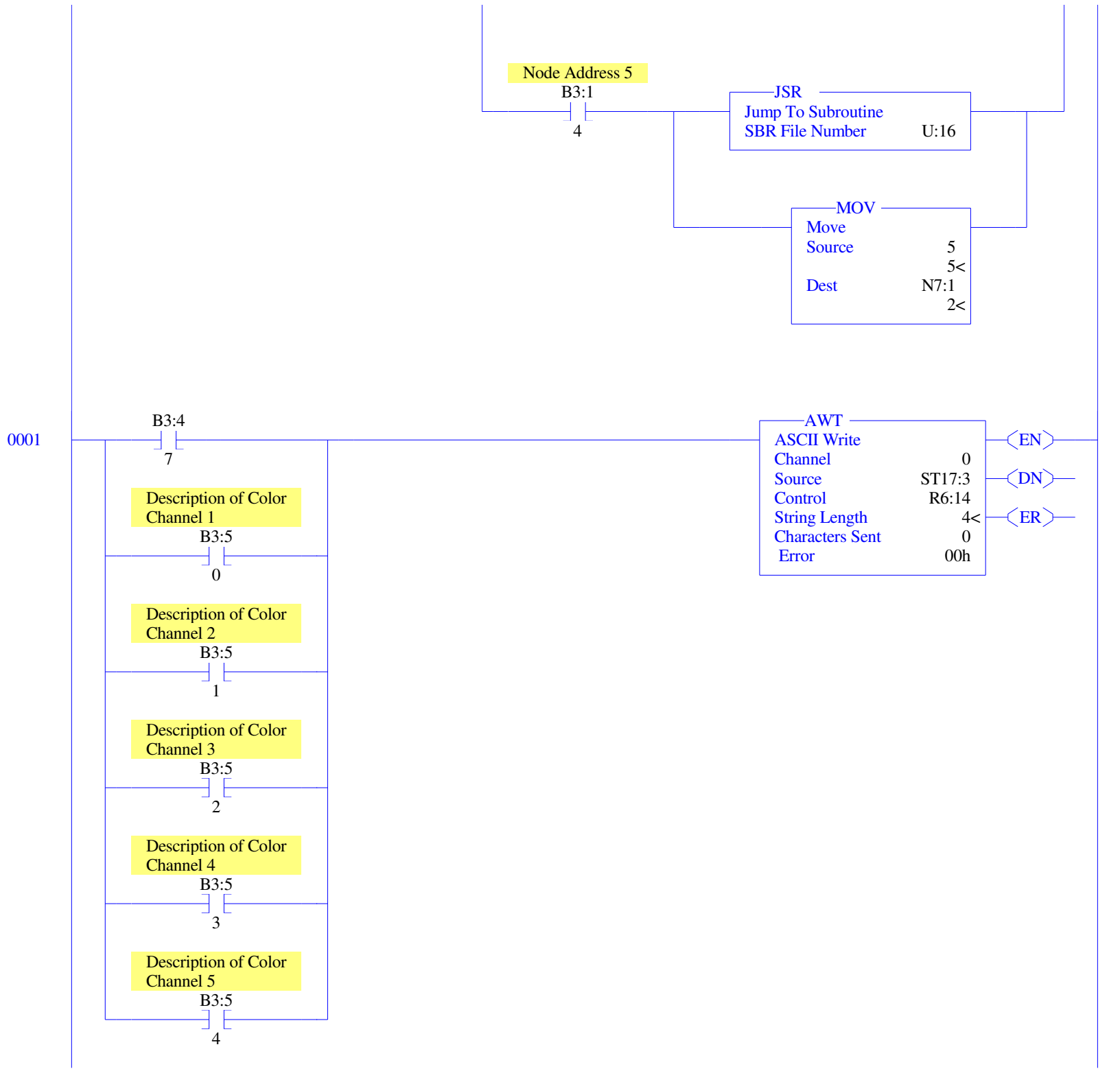

0002
XOR
Bitwise Exclusive OR
Source A N7:1
0002h<
Source B N7:18
0005h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:19
0058h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:20
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
0003
MOV
Move
Source 2
2<
Dest ST19:4.LEN
1<
MOV
Move
Source N7:0
85<
Dest ST19:4.DATA[0]
U^R<
AEX
String Extract
Source ST19:4
Index 2
Number 1
Dest ST19:5
ACN
String Concatenate
Source A ST16:1
Source B ST19:5
Dest ST16:2
0004
EQU
Equal
Source A ST16:2.LEN
5<
Source B 5
5<
B3:4
L
5

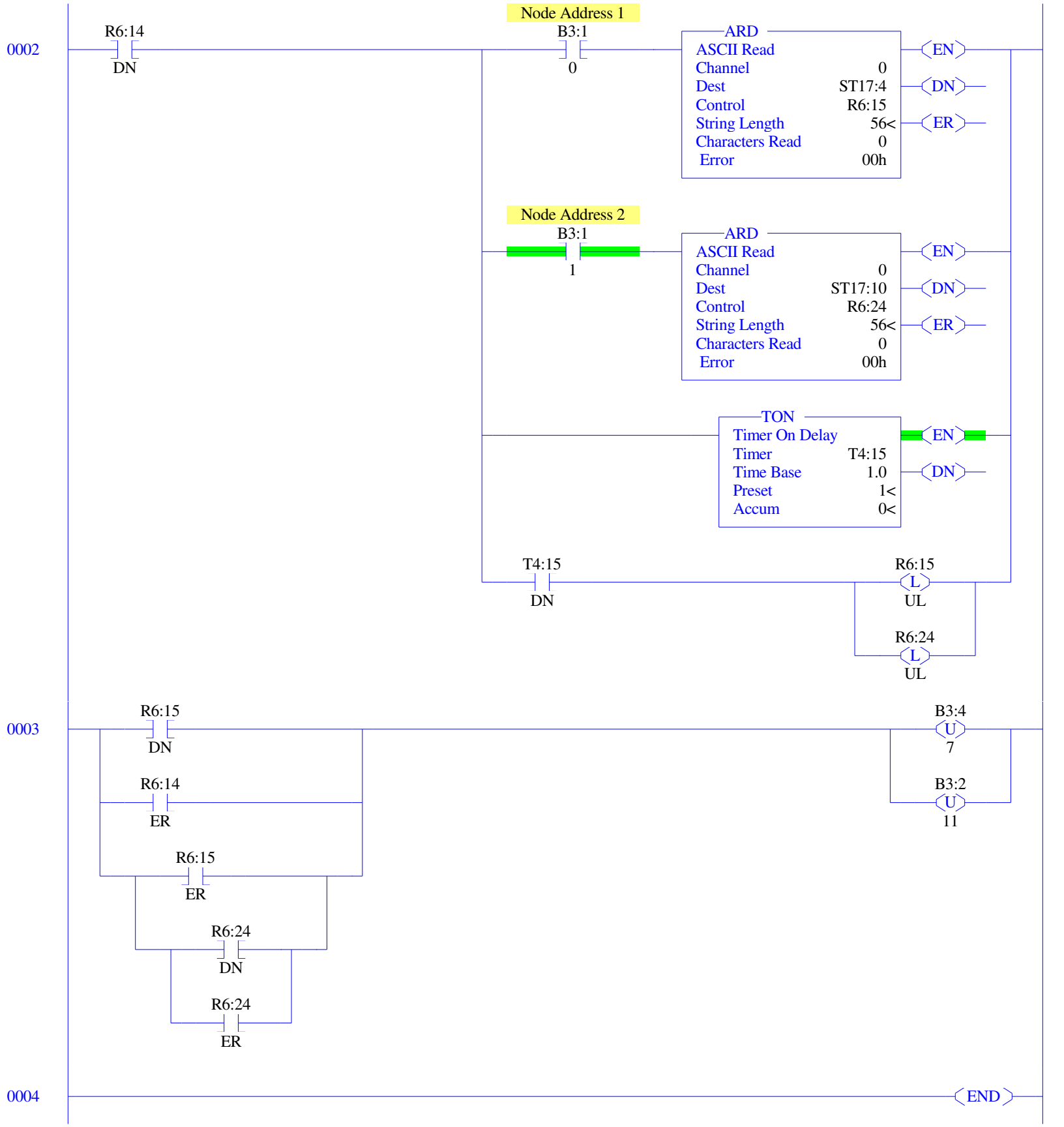
LAD 14 - SCAN_2 - End Teach-In for the Colors to the Five Channels --- Total Rungs in File = 6

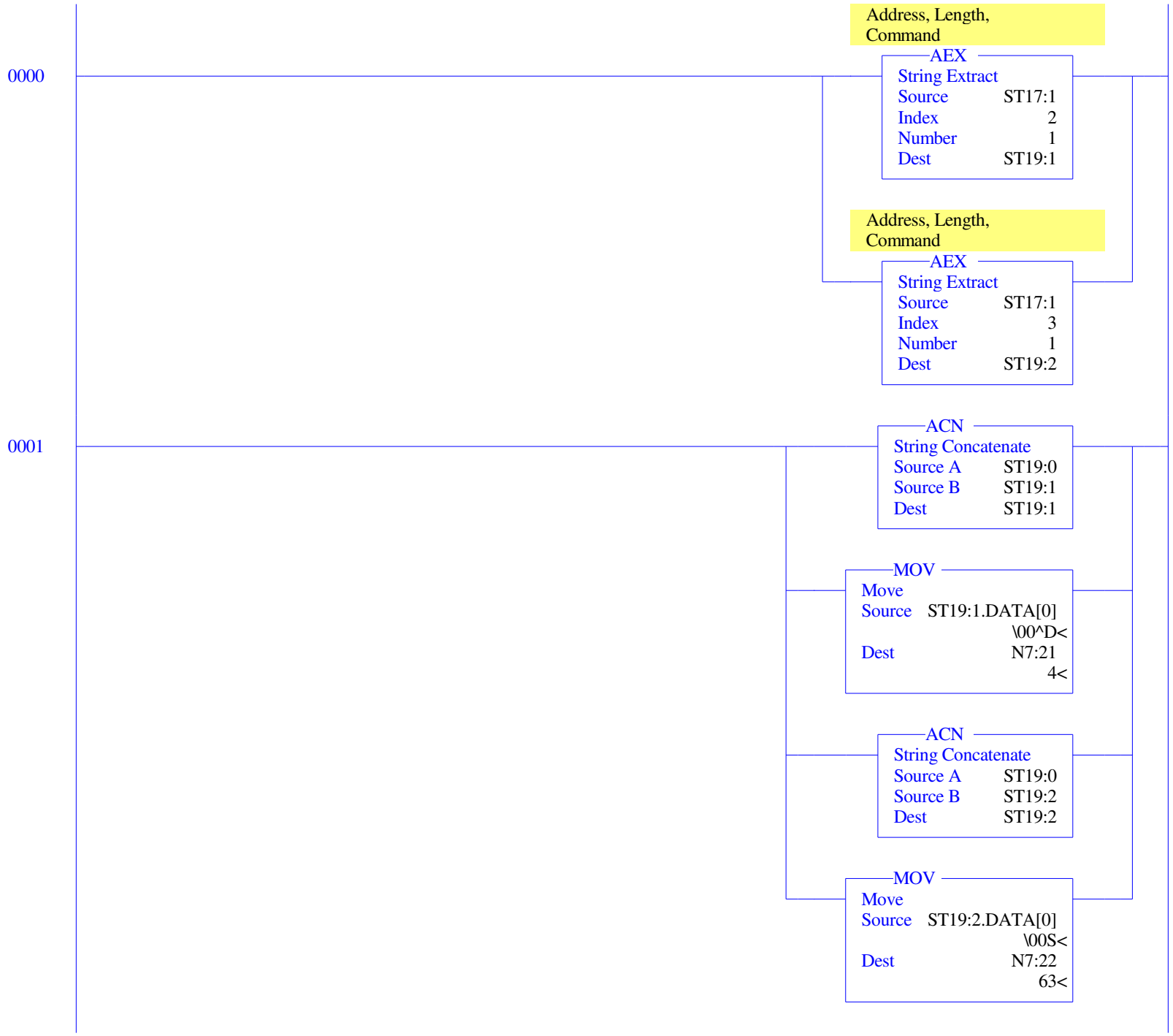


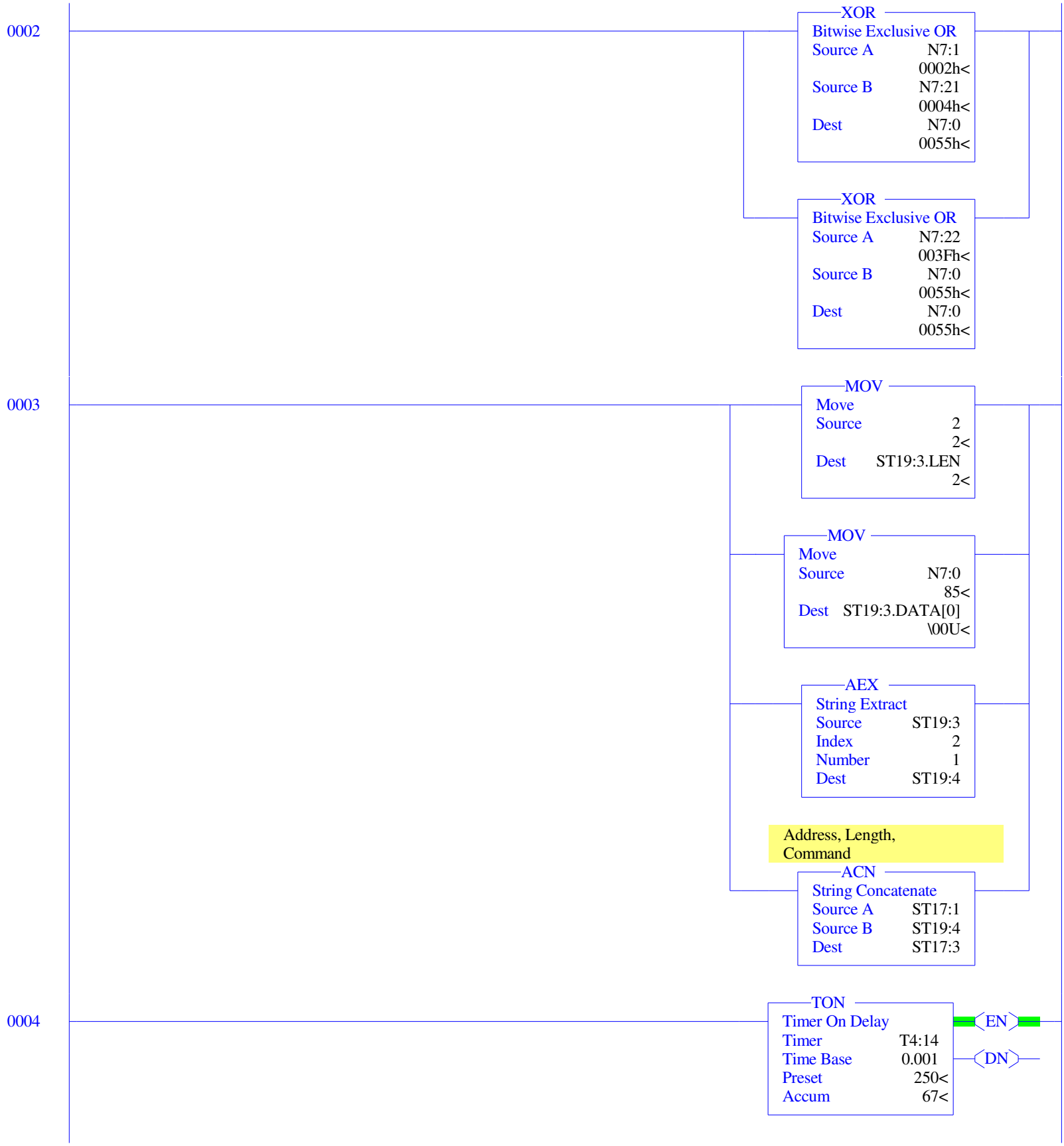
LAD 15 - CONFIG - Read All Sensor Configurations --- Total Rungs in File = 5

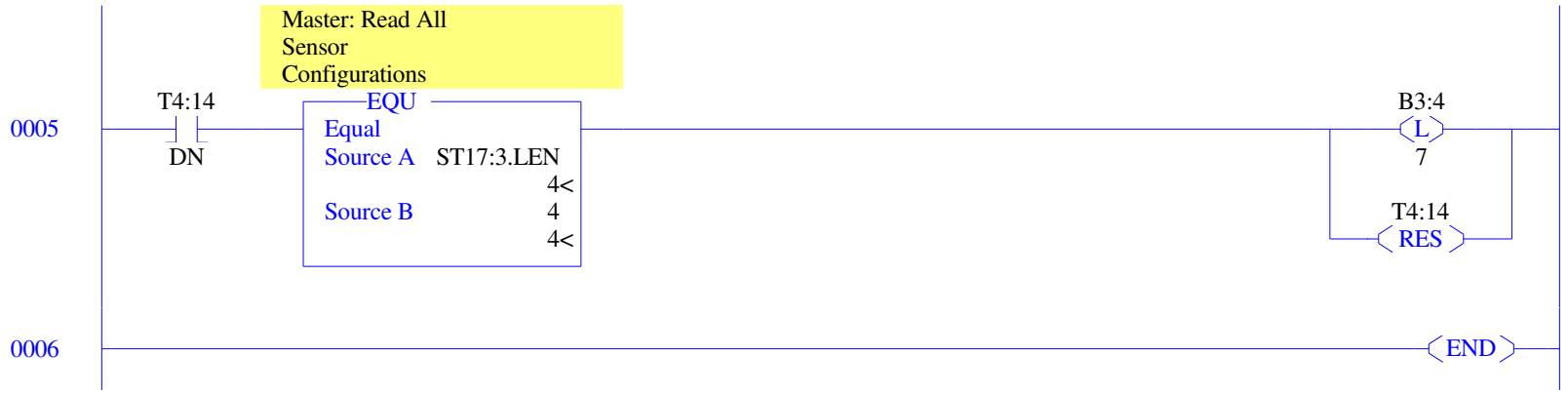



Node Address 5
B3:1
4
JSR
Jump To Subroutine
SBR File Number U:16
MOV
Move
Source 5
5<
Dest N7:1
2<
0001
B3:4
7
AWT
ASCII Write
Channel 0
Source ST17:3
Control R6:14
String Length 4<
Characters Sent 0
Error 00h
EN
DN
ER
Description of Color Channel 1
B3:5
0
Description of Color Channel 2
B3:5
1
Description of Color Channel 3
B3:5
2
Description of Color Channel 4
B3:5
3
Description of Color Channel 5
B3:5
4

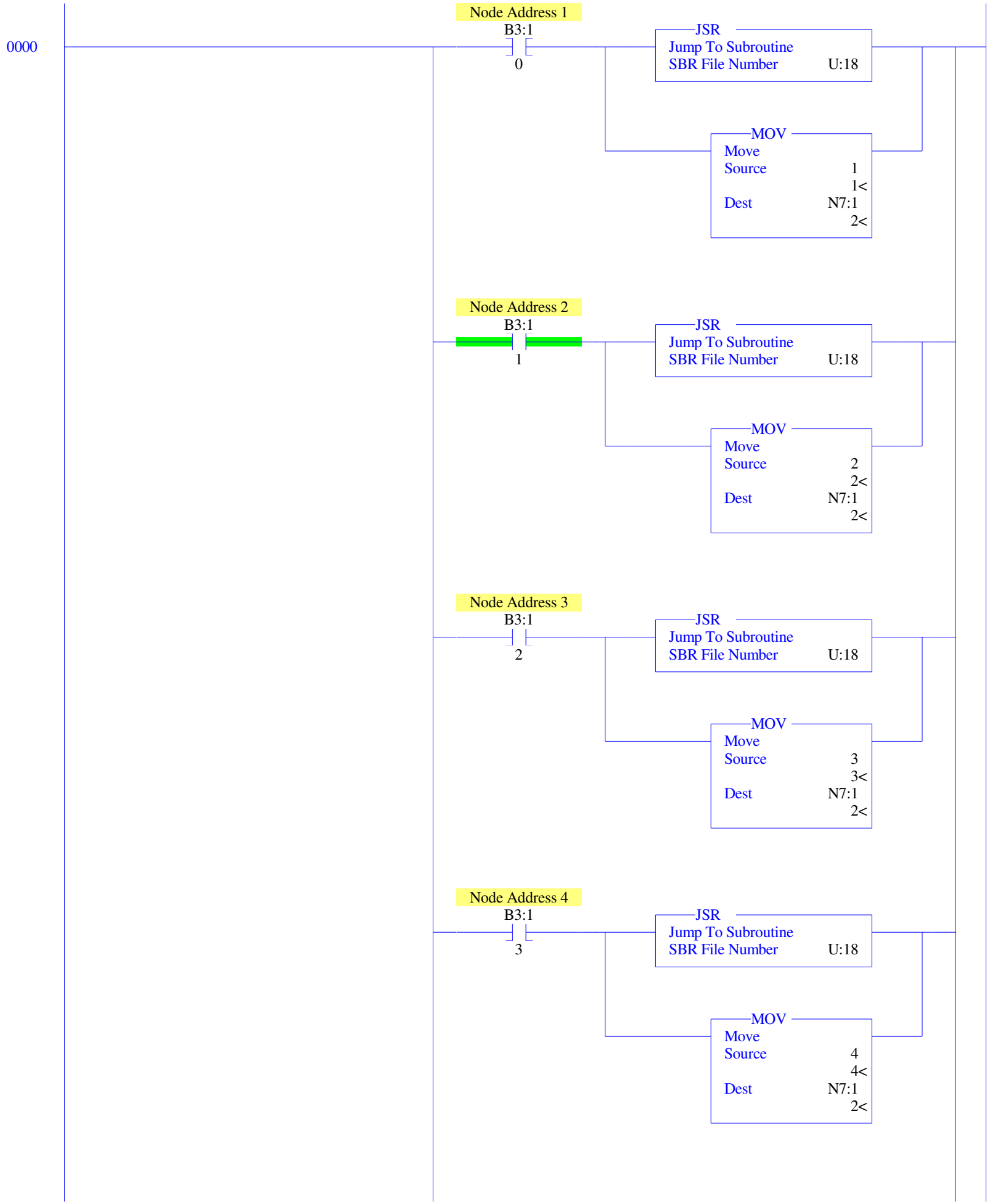

0002
R6:14
DN
Node Address 1
B3:1
0
ARD
ASCII Read
Channel 0
Dest ST17:4
Control R6:15
String Length 56<
Characters Read 0
Error 00h
EN
DN
ER
Node Address 2
B3:1
1
ARD
ASCII Read
Channel 0
Dest ST17:10
Control R6:24
String Length 56<
Characters Read 0
Error 00h
EN
DN
ER
TON
Timer On Delay
Timer T4:15
Time Base 1.0
Preset 1<
Accum 0<
EN
DN
T4:15
DN
R6:15
L
UL
R6:24
L
UL
0003
R6:15
DN
R6:14
ER
R6:15
ER
R6:24
DN
R6:24
ER
B3:4
U
7
B3:2
U
11
0004
END

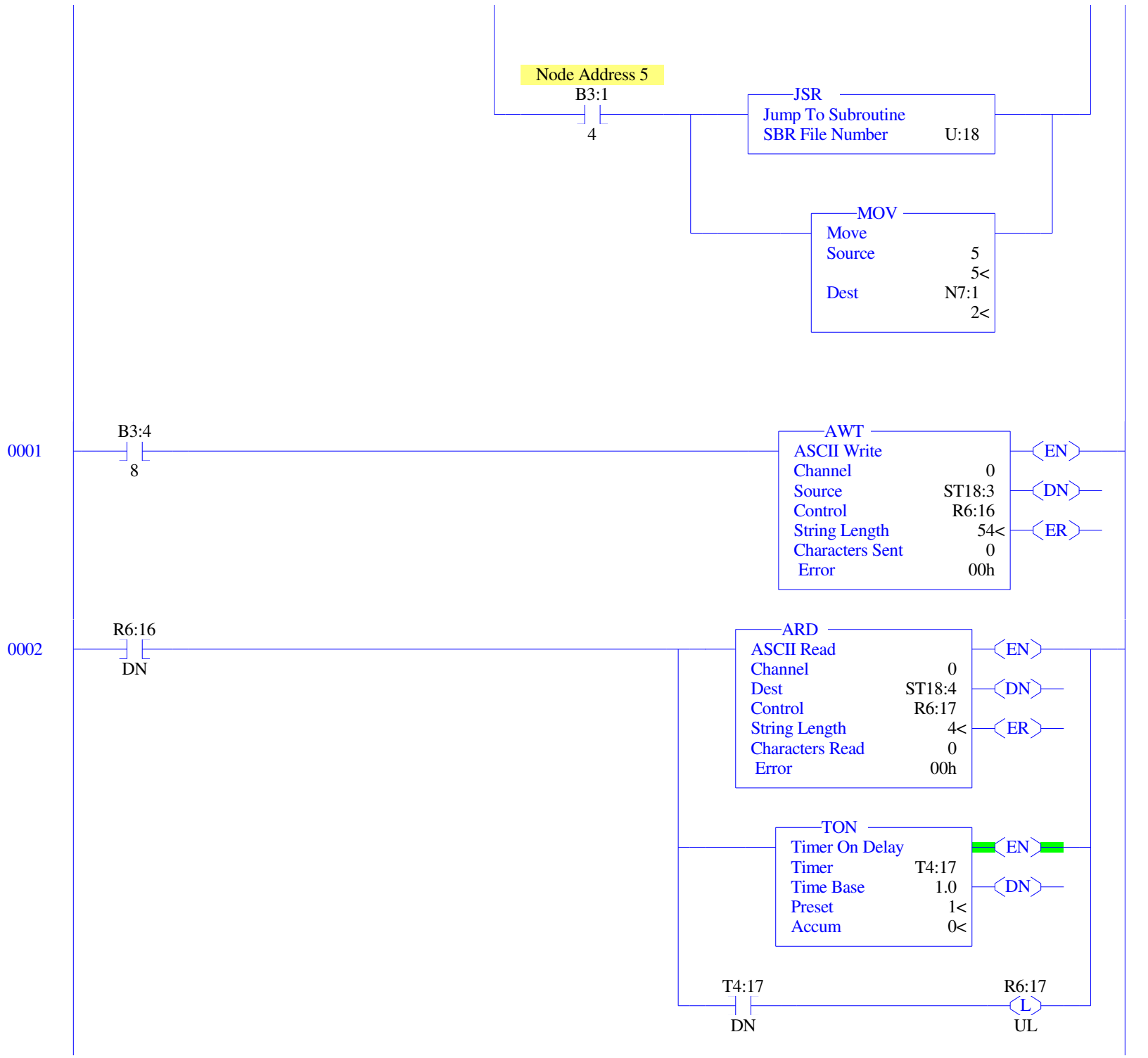

0000
Address, Length, Command
AEX
String Extract
Source ST17:1
Index 2
Number 1
Dest ST19:1
Address, Length, Command
AEX
String Extract
Source ST17:1
Index 3
Number 1
Dest ST19:2
0001
ACN
String Concatenate
Source A ST19:0
Source B ST19:1
Dest ST19:1
MOV
Move
Source ST19:1.DATA[0]
\00^D<
Dest N7:21
4<
ACN
String Concatenate
Source A ST19:0
Source B ST19:2
Dest ST19:2
MOV
Move
Source ST19:2.DATA[0]
\00S<
Dest N7:22
63<

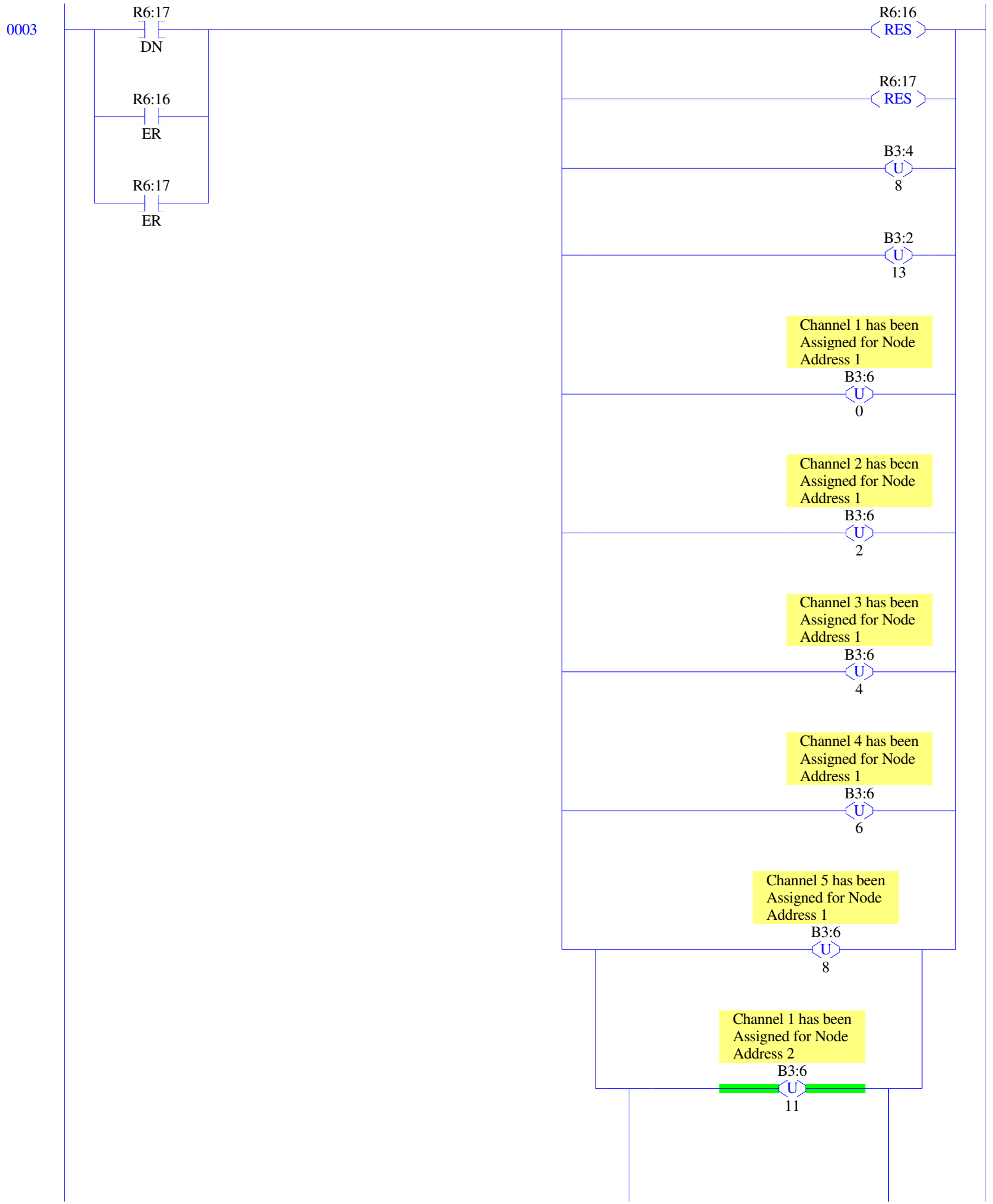

0002
XOR
Bitwise Exclusive OR
Source A N7:1
0002h<
Source B N7:21
0004h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:22
003Fh<
Source B N7:0
0055h<
Dest N7:0
0055h<
0003
MOV
Move
Source 2
2<
Dest ST19:3.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:3.DATA[0]
\00U<
AEX
String Extract
Source ST19:3
Index 2
Number 1
Dest ST19:4
Address, Length, Command
ACN
String Concatenate
Source A ST17:1
Source B ST19:4
Dest ST17:3
0004
TON
Timer On Delay
Timer T4:14
Time Base 0.001
Preset 250<
Accum 67<
EN
DN

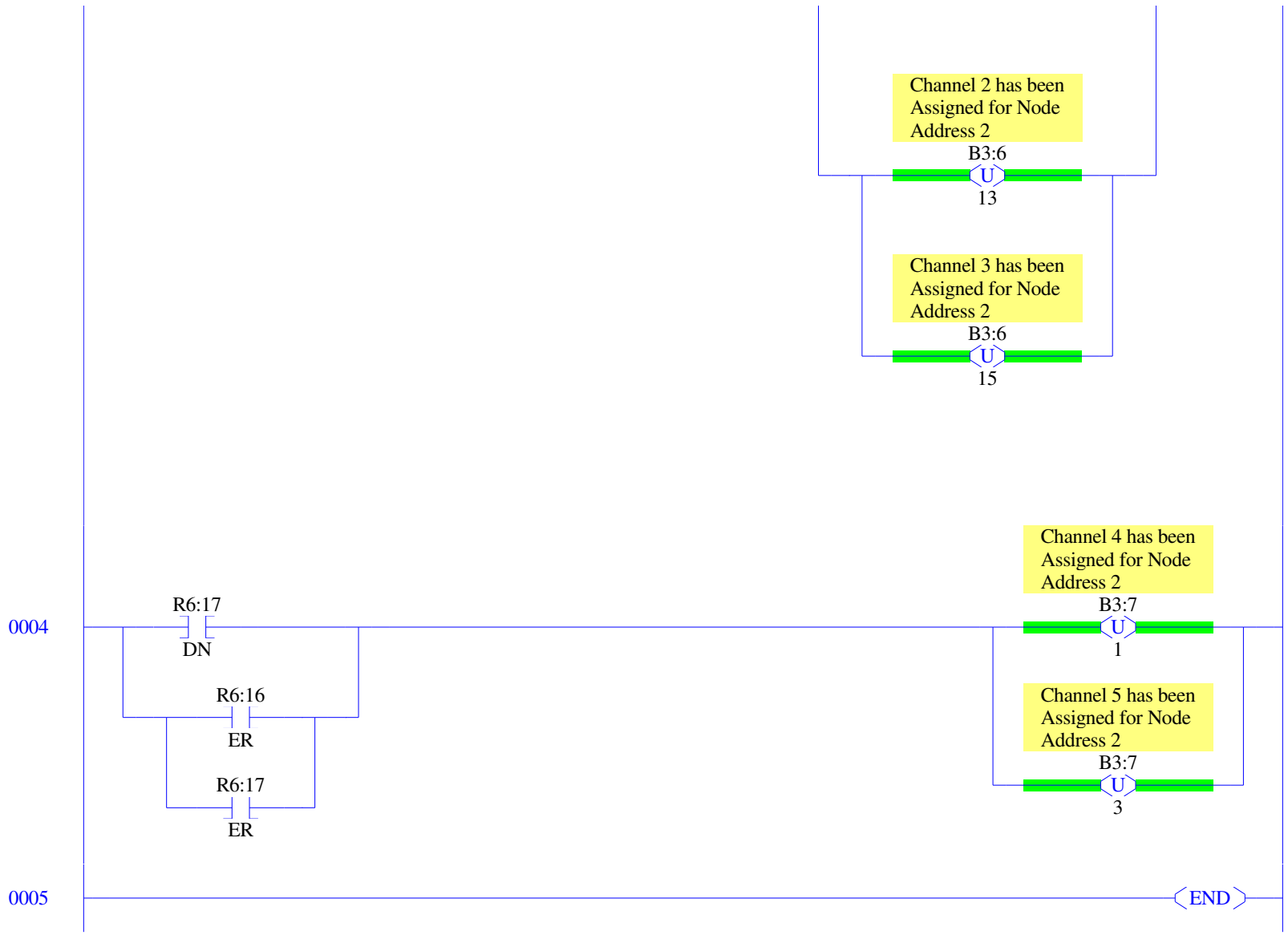

Master: Read All Sensor Configurations
0005
T4:14
DN
EQU
Equal
Source A
ST17:3.LEN
4<
Source B
4
4<
B3:4
L
7
T4:14
RES
0006
END

LAD 17 - TRANSFER - Transfer Color Matrix --- Total Rungs in File = 6




Node Address 5
B3:1
4
JSR
Jump To Subroutine
SBR File Number U:18
MOV
Move
Source 5
5<
Dest N7:1
2<
0001
B3:4
8
AWT
ASCII Write
Channel 0
Source ST18:3
Control R6:16
String Length 54<
Characters Sent 0
Error 00h
EN
DN
ER
0002
R6:16
DN
ARD
ASCII Read
Channel 0
Dest ST18:4
Control R6:17
String Length 4<
Characters Read 0
Error 00h
TON
Timer On Delay
Timer T4:17
Time Base 1.0
Preset 1<
Accum 0<
T4:17
DN
R6:17
L
UL


0003
R6:17
DN
R6:16
ER
R6:17
ER
R6:16
RES
R6:17
RES
B3:4
U
8
B3:2
U
13
Channel 1 has been Assigned for Node Address 1
B3:6
U
0
Channel 2 has been Assigned for Node Address 1
B3:6
U
2
Channel 3 has been Assigned for Node Address 1
B3:6
U
4
Channel 4 has been Assigned for Node Address 1
B3:6
U
6
Channel 5 has been Assigned for Node Address 1
B3:6
U
8
Channel 1 has been Assigned for Node Address 2
B3:6
U
11


Channel 2 has been Assigned for Node Address 2
B3:6
U
13
Channel 3 has been Assigned for Node Address 2
B3:6
U
15
Channel 4 has been Assigned for Node Address 2
B3:7
U
1
Channel 5 has been Assigned for Node Address 2
B3:7
U
3
0004
R6:17
DN
R6:16
ER
R6:17
ER
0005
END

Description of Color Channel 1 for Node Address 1

0000

ACN
String Concatenate
Source A ST17:5
Source B ST17:6
Dest ST18:2

ACN
String Concatenate
Source A ST18:2
Source B ST17:7
Dest ST18:2

ACN
String Concatenate
Source A ST18:2
Source B ST17:8
Dest ST18:2

ACN
String Concatenate
Source A ST18:2
Source B ST17:9
Dest ST18:2

0001

Address, Length,
Command of Transfer
Color Matrix

AEX
String Extract
Source ST18:1
Index 2
Number 1
Dest ST19:1

Address, Length,
Command of Transfer
Color Matrix

AEX
String Extract
Source ST18:1
Index 3
Number 1
Dest ST19:2

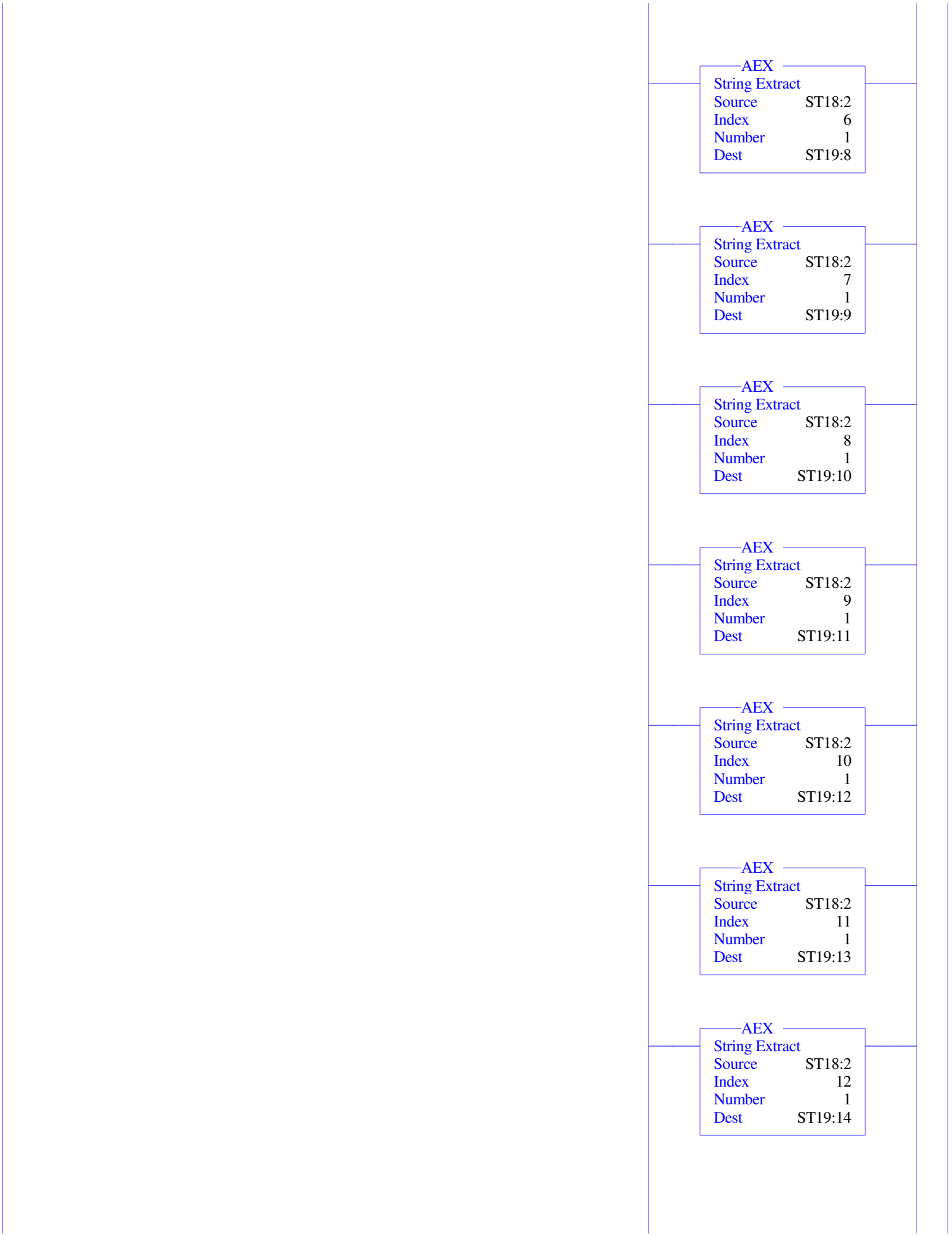
AEX
String Extract
Source ST18:2
Index 1
Number 1
Dest ST19:3

AEX
String Extract
Source ST18:2
Index 2
Number 1
Dest ST19:4

AEX
String Extract
Source ST18:2
Index 3
Number 1
Dest ST19:5

AEX
String Extract
Source ST18:2
Index 4
Number 1
Dest ST19:6

AEX
String Extract
Source ST18:2
Index 5
Number 1
Dest ST19:7


AEX
String Extract
Source ST18:2
Index 6
Number 1
Dest ST19:8
AEX
String Extract
Source ST18:2
Index 7
Number 1
Dest ST19:9
AEX
String Extract
Source ST18:2
Index 8
Number 1
Dest ST19:10
AEX
String Extract
Source ST18:2
Index 9
Number 1
Dest ST19:11
AEX
String Extract
Source ST18:2
Index 10
Number 1
Dest ST19:12
AEX
String Extract
Source ST18:2
Index 11
Number 1
Dest ST19:13
AEX
String Extract
Source ST18:2
Index 12
Number 1
Dest ST19:14

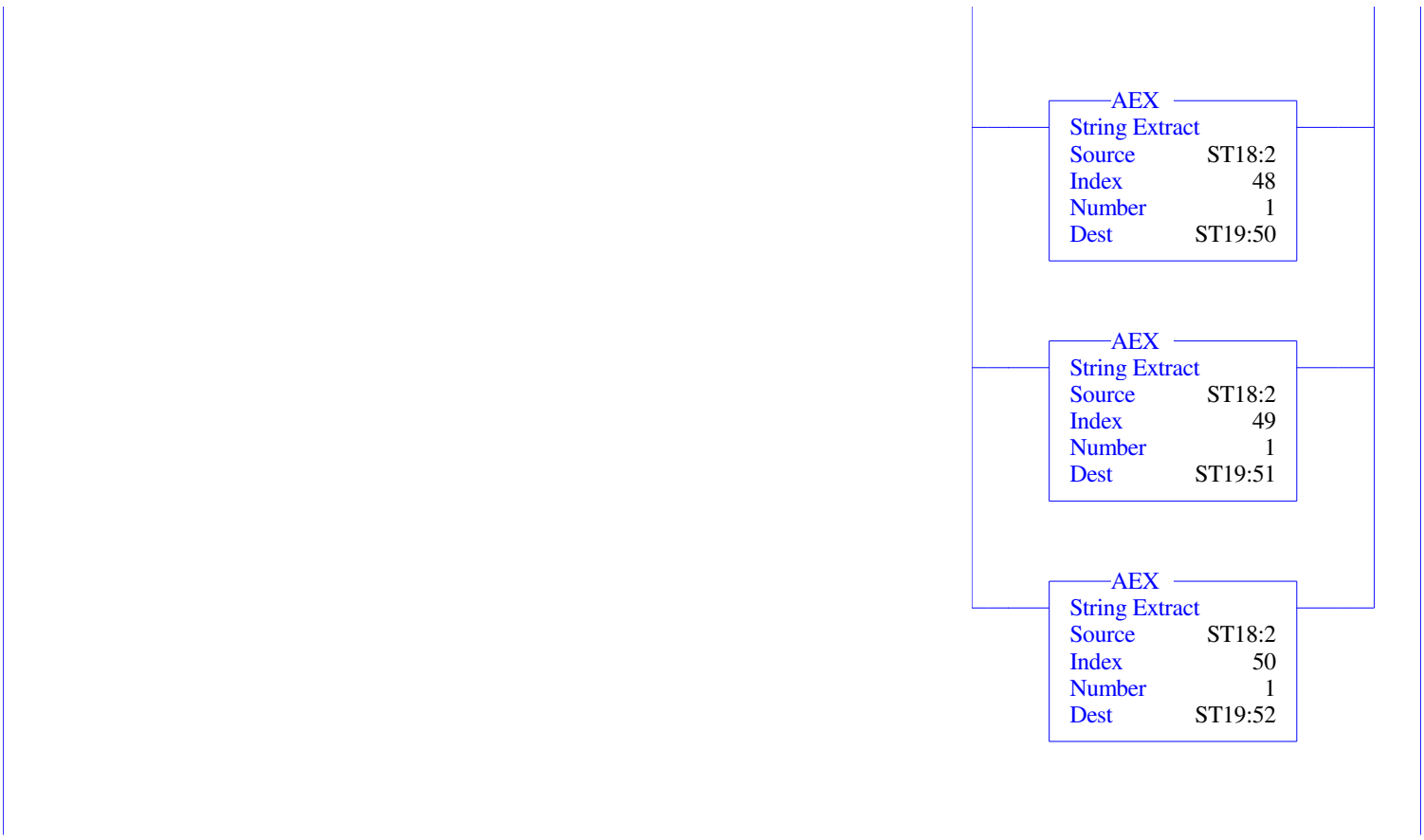

AEX
String Extract
Source ST18:2
Index 13
Number 1
Dest ST19:15
AEX
String Extract
Source ST18:2
Index 14
Number 1
Dest ST19:16
AEX
String Extract
Source ST18:2
Index 15
Number 1
Dest ST19:17
AEX
String Extract
Source ST18:2
Index 16
Number 1
Dest ST19:18
AEX
String Extract
Source ST18:2
Index 17
Number 1
Dest ST19:19
AEX
String Extract
Source ST18:2
Index 18
Number 1
Dest ST19:20
AEX
String Extract
Source ST18:2
Index 19
Number 1
Dest ST19:21


AEX
String Extract
Source ST18:2
Index 20
Number 1
Dest ST19:22
AEX
String Extract
Source ST18:2
Index 21
Number 1
Dest ST19:23
AEX
String Extract
Source ST18:2
Index 22
Number 1
Dest ST19:24
AEX
String Extract
Source ST18:2
Index 23
Number 1
Dest ST19:25
AEX
String Extract
Source ST18:2
Index 24
Number 1
Dest ST19:26
AEX
String Extract
Source ST18:2
Index 25
Number 1
Dest ST19:27
AEX
String Extract
Source ST18:2
Index 26
Number 1
Dest ST19:28


AEX
String Extract
Source ST18:2
Index 27
Number 1
Dest ST19:29
AEX
String Extract
Source ST18:2
Index 28
Number 1
Dest ST19:30
AEX
String Extract
Source ST18:2
Index 29
Number 1
Dest ST19:31
AEX
String Extract
Source ST18:2
Index 30
Number 1
Dest ST19:32
AEX
String Extract
Source ST18:2
Index 31
Number 1
Dest ST19:33
AEX
String Extract
Source ST18:2
Index 32
Number 1
Dest ST19:34
AEX
String Extract
Source ST18:2
Index 33
Number 1
Dest ST19:35


AEX
String Extract
Source ST18:2
Index 34
Number 1
Dest ST19:36
AEX
String Extract
Source ST18:2
Index 35
Number 1
Dest ST19:37
AEX
String Extract
Source ST18:2
Index 36
Number 1
Dest ST19:38
AEX
String Extract
Source ST18:2
Index 37
Number 1
Dest ST19:39
AEX
String Extract
Source ST18:2
Index 38
Number 1
Dest ST19:40
AEX
String Extract
Source ST18:2
Index 39
Number 1
Dest ST19:41
AEX
String Extract
Source ST18:2
Index 40
Number 1
Dest ST19:42


AEX
String Extract
Source ST18:2
Index 41
Number 1
Dest ST19:43
AEX
String Extract
Source ST18:2
Index 42
Number 1
Dest ST19:44
AEX
String Extract
Source ST18:2
Index 43
Number 1
Dest ST19:45
AEX
String Extract
Source ST18:2
Index 44
Number 1
Dest ST19:46
AEX
String Extract
Source ST18:2
Index 45
Number 1
Dest ST19:47
AEX
String Extract
Source ST18:2
Index 46
Number 1
Dest ST19:48
AEX
String Extract
Source ST18:2
Index 47
Number 1
Dest ST19:49


AEX
String Extract
Source ST18:2
Index 48
Number 1
Dest ST19:50
AEX
String Extract
Source ST18:2
Index 49
Number 1
Dest ST19:51
AEX
String Extract
Source ST18:2
Index 50
Number 1
Dest ST19:52

0002

ACN
String Concatenate
Source A ST19:0
Source B ST19:1
Dest ST19:1

ACN
String Concatenate
Source A ST19:0
Source B ST19:2
Dest ST19:2

ACN
String Concatenate
Source A ST19:0
Source B ST19:3
Dest ST19:3

ACN
String Concatenate
Source A ST19:0
Source B ST19:4
Dest ST19:4

ACN
String Concatenate
Source A ST19:0
Source B ST19:5
Dest ST19:5

ACN
String Concatenate
Source A ST19:0
Source B ST19:6
Dest ST19:6

ACN
String Concatenate
Source A ST19:0
Source B ST19:7
Dest ST19:7

ACN
String Concatenate
Source A ST19:0
Source B ST19:8
Dest ST19:8

ACN
String Concatenate
Source A ST19:0
Source B ST19:9
Dest ST19:9

ACN
String Concatenate
Source A ST19:0
Source B ST19:10
Dest ST19:10

ACN
String Concatenate
Source A ST19:0
Source B ST19:11
Dest ST19:11

ACN
String Concatenate
Source A ST19:0
Source B ST19:12
Dest ST19:12

ACN
String Concatenate
Source A ST19:0
Source B ST19:13
Dest ST19:13

ACN
String Concatenate
Source A ST19:0
Source B ST19:14
Dest ST19:14

ACN
String Concatenate
Source A ST19:0
Source B ST19:15
Dest ST19:15

ACN
String Concatenate
Source A ST19:0
Source B ST19:16
Dest ST19:16

ACN
String Concatenate
Source A ST19:0
Source B ST19:17
Dest ST19:17

ACN
String Concatenate
Source A ST19:0
Source B ST19:18
Dest ST19:18

ACN
String Concatenate
Source A ST19:0
Source B ST19:19
Dest ST19:19

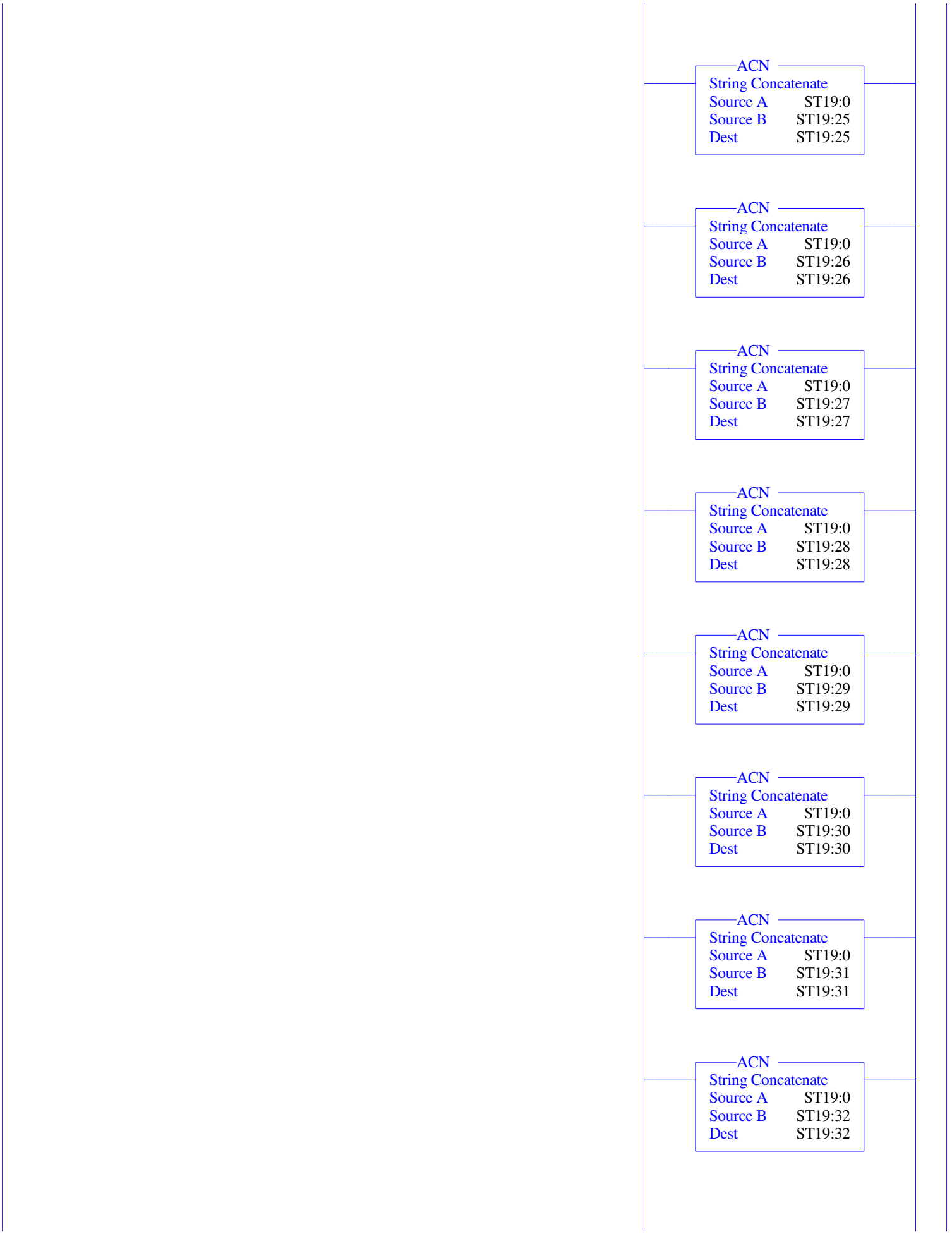
ACN
String Concatenate
Source A ST19:0
Source B ST19:20
Dest ST19:20

ACN
String Concatenate
Source A ST19:0
Source B ST19:21
Dest ST19:21

ACN
String Concatenate
Source A ST19:0
Source B ST19:22
Dest ST19:22

ACN
String Concatenate
Source A ST19:0
Source B ST19:23
Dest ST19:23

ACN
String Concatenate
Source A ST19:0
Source B ST19:24
Dest ST19:24


ACN
String Concatenate
Source A ST19:0
Source B ST19:25
Dest ST19:25
ACN
String Concatenate
Source A ST19:0
Source B ST19:26
Dest ST19:26
ACN
String Concatenate
Source A ST19:0
Source B ST19:27
Dest ST19:27
ACN
String Concatenate
Source A ST19:0
Source B ST19:28
Dest ST19:28
ACN
String Concatenate
Source A ST19:0
Source B ST19:29
Dest ST19:29
ACN
String Concatenate
Source A ST19:0
Source B ST19:30
Dest ST19:30
ACN
String Concatenate
Source A ST19:0
Source B ST19:31
Dest ST19:31
ACN
String Concatenate
Source A ST19:0
Source B ST19:32
Dest ST19:32

ACN
String Concatenate
Source A ST19:0
Source B ST19:33
Dest ST19:33

ACN
String Concatenate
Source A ST19:0
Source B ST19:34
Dest ST19:34

ACN
String Concatenate
Source A ST19:0
Source B ST19:35
Dest ST19:35

ACN
String Concatenate
Source A ST19:0
Source B ST19:36
Dest ST19:36

ACN
String Concatenate
Source A ST19:0
Source B ST19:37
Dest ST19:37

ACN
String Concatenate
Source A ST19:0
Source B ST19:38
Dest ST19:38

ACN
String Concatenate
Source A ST19:0
Source B ST19:39
Dest ST19:39

ACN
String Concatenate
Source A ST19:0
Source B ST19:40
Dest ST19:40

ACN
String Concatenate
Source A ST19:0
Source B ST19:41
Dest ST19:41

ACN
String Concatenate
Source A ST19:0
Source B ST19:42
Dest ST19:42

ACN
String Concatenate
Source A ST19:0
Source B ST19:43
Dest ST19:43

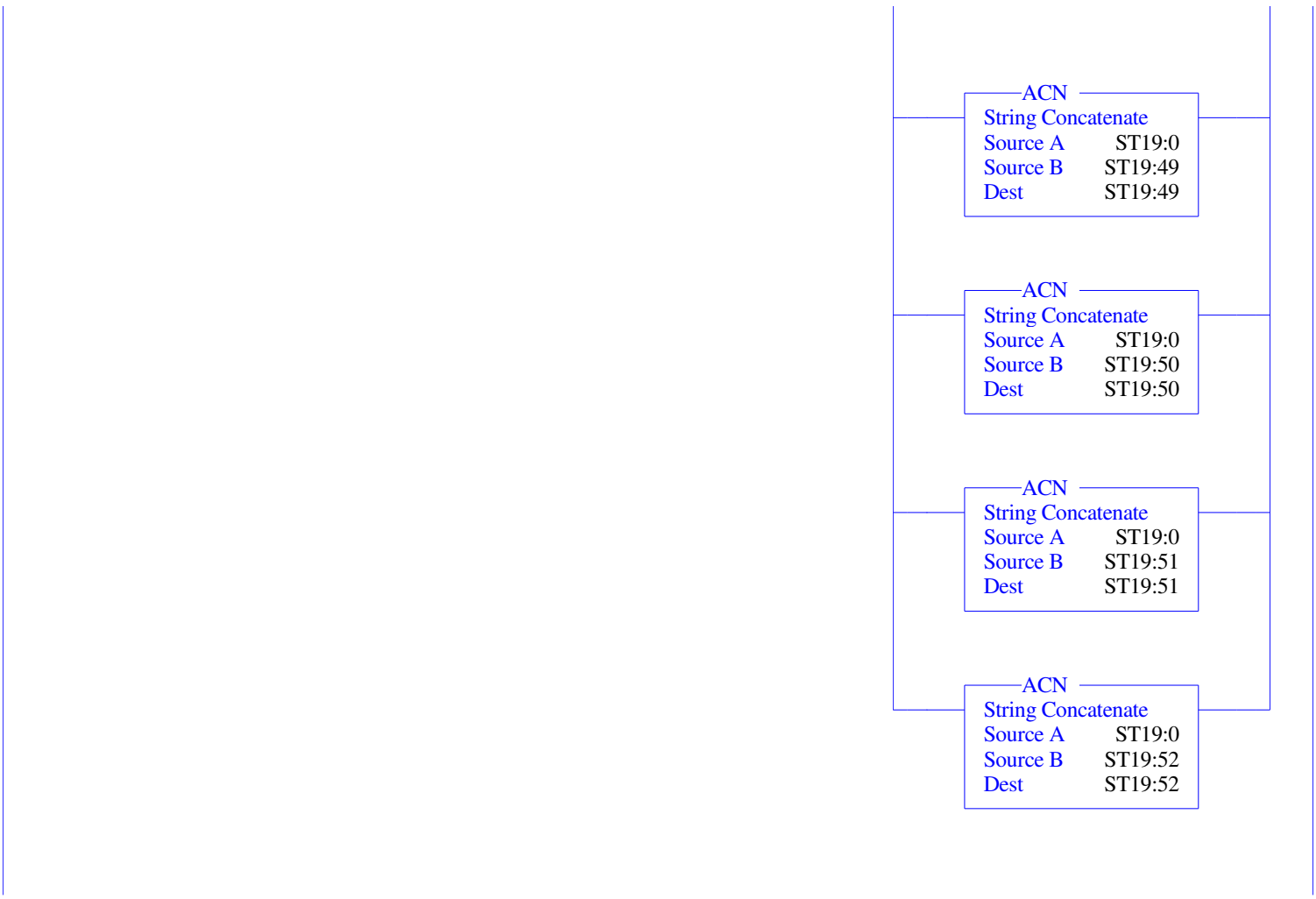
ACN
String Concatenate
Source A ST19:0
Source B ST19:44
Dest ST19:44

ACN
String Concatenate
Source A ST19:0
Source B ST19:45
Dest ST19:45

ACN
String Concatenate
Source A ST19:0
Source B ST19:46
Dest ST19:46

ACN
String Concatenate
Source A ST19:0
Source B ST19:47
Dest ST19:47

ACN
String Concatenate
Source A ST19:0
Source B ST19:48
Dest ST19:48


ACN
String Concatenate
Source A ST19:0
Source B ST19:49
Dest ST19:49
ACN
String Concatenate
Source A ST19:0
Source B ST19:50
Dest ST19:50
ACN
String Concatenate
Source A ST19:0
Source B ST19:51
Dest ST19:51
ACN
String Concatenate
Source A ST19:0
Source B ST19:52
Dest ST19:52

0003

MOV
Move
Source ST19:1.DATA[0]
\00^D<
Dest N7:23
54<

MOV
Move
Source ST19:2.DATA[0]
\00S<
Dest N7:24
105<

MOV
Move
Source ST19:3.DATA[0]
\00U<
Dest N7:25
5<

MOV
Move
Source ST19:4.DATA[0]
U^R<
Dest N7:26
18<

MOV
Move
Source ST19:5.DATA[0]
\00^E<
Dest N7:27
5<

MOV
Move
Source ST19:6.DATA[0]
\00^A<
Dest N7:28
1<

MOV
Move
Source ST19:7.DATA[0]
\00\00<
Dest N7:29
0<

MOV
Move
Source ST19:8.DATA[0]
\00;<
Dest N7:30
59<

MOV
Move
Source ST19:9.DATA[0]
\00\00<
Dest N7:31
0<

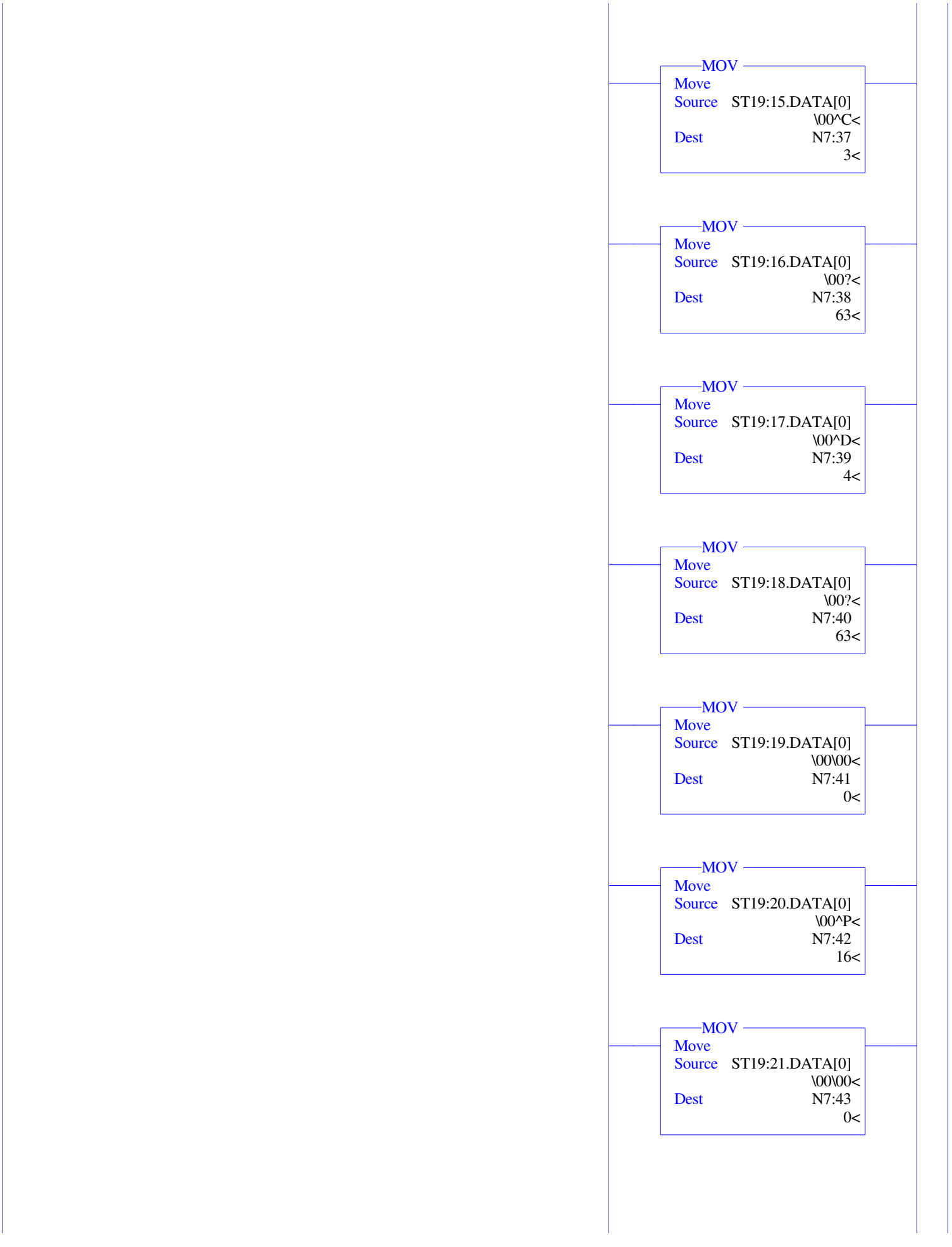
MOV
Move
Source ST19:10.DATA[0]
\00\1B<
Dest N7:32
27<

MOV
Move
Source ST19:11.DATA[0]
\00\00<
Dest N7:33
0<

MOV
Move
Source ST19:12.DATA[0]
\00^Y<
Dest N7:34
25<

MOV
Move
Source ST19:13.DATA[0]
\00^C<
Dest N7:35
3<

MOV
Move
Source ST19:14.DATA[0]
\00^S<
Dest N7:36
19<


MOV
Move
Source ST19:15.DATA[0]
\00^C<
Dest N7:37
3<
MOV
Move
Source ST19:16.DATA[0]
\00?<
Dest N7:38
63<
MOV
Move
Source ST19:17.DATA[0]
\00^D<
Dest N7:39
4<
MOV
Move
Source ST19:18.DATA[0]
\00?<
Dest N7:40
63<
MOV
Move
Source ST19:19.DATA[0]
\00\00<
Dest N7:41
0<
MOV
Move
Source ST19:20.DATA[0]
\00^P<
Dest N7:42
16<
MOV
Move
Source ST19:21.DATA[0]
\00\00<
Dest N7:43
0<

MOV
Move
Source ST19:22.DATA[0]
\00^Y<
Dest N7:44
25<

MOV
Move
Source ST19:23.DATA[0]
\00^D<
Dest N7:45
4<

MOV
Move
Source ST19:24.DATA[0]
\003<
Dest N7:46
51<

MOV
Move
Source ST19:25.DATA[0]
\00^E<
Dest N7:47
5<

MOV
Move
Source ST19:26.DATA[0]
\00^V<
Dest N7:48
22<

MOV
Move
Source ST19:27.DATA[0]
\00^B<
Dest N7:49
2<

MOV
Move
Source ST19:28.DATA[0]
\003<
Dest N7:50
51<

MOV
Move
Source ST19:29.DATA[0]
\00\00<
Dest N7:51
0<

MOV
Move
Source ST19:30.DATA[0]
\00^P<
Dest N7:52
16<

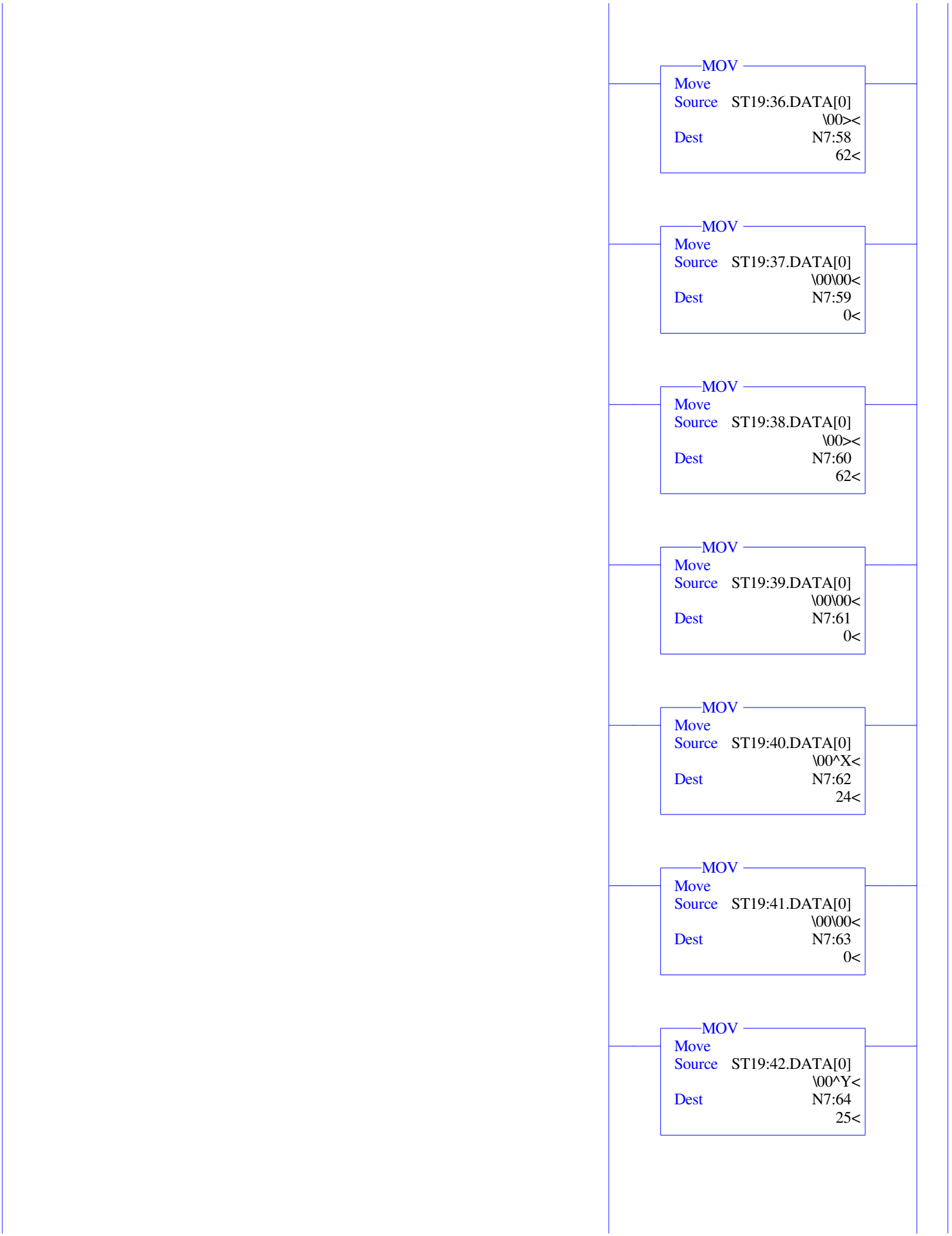
MOV
Move
Source ST19:31.DATA[0]
\00\00<
Dest N7:53
0<

MOV
Move
Source ST19:32.DATA[0]
\00^Y<
Dest N7:54
25<

MOV
Move
Source ST19:33.DATA[0]
\00^E<
Dest N7:55
5<

MOV
Move
Source ST19:34.DATA[0]
\00^U<
Dest N7:56
21<

MOV
Move
Source ST19:35.DATA[0]
\00^D<
Dest N7:57
4<


MOV
Move
Source ST19:36.DATA[0]
\00><
Dest N7:58
62<
MOV
Move
Source ST19:37.DATA[0]
\00\00<
Dest N7:59
0<
MOV
Move
Source ST19:38.DATA[0]
\00><
Dest N7:60
62<
MOV
Move
Source ST19:39.DATA[0]
\00\00<
Dest N7:61
0<
MOV
Move
Source ST19:40.DATA[0]
\00^X<
Dest N7:62
24<
MOV
Move
Source ST19:41.DATA[0]
\00\00<
Dest N7:63
0<
MOV
Move
Source ST19:42.DATA[0]
\00^Y<
Dest N7:64
25<

MOV
Move
Source ST19:43.DATA[0]
\00^F<
Dest N7:65
6<

MOV
Move
Source ST19:44.DATA[0]
\00^O<
Dest N7:66
15<

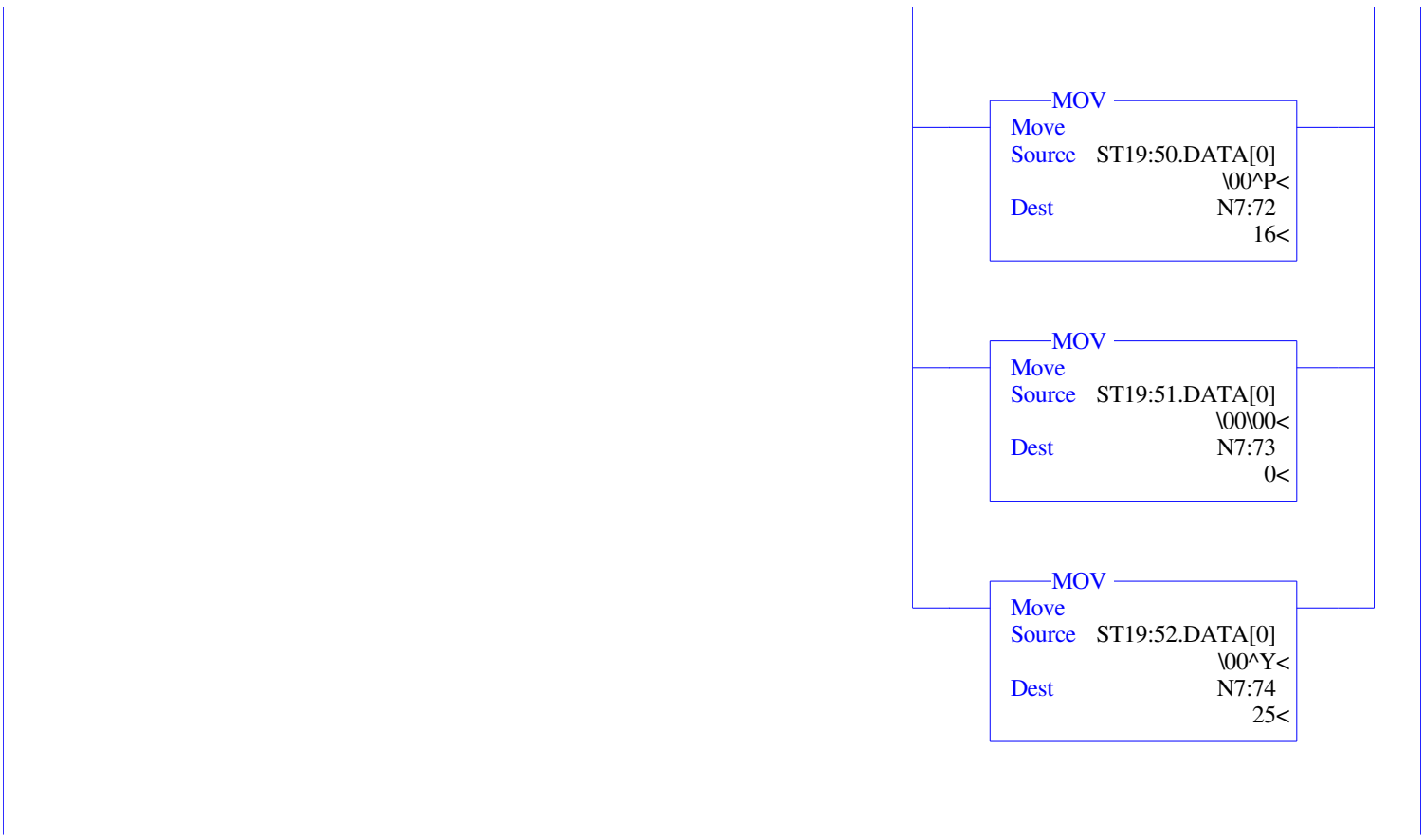
MOV
Move
Source ST19:45.DATA[0]
\00^E<
Dest N7:67
5<

MOV
Move
Source ST19:46.DATA[0]
\002<
Dest N7:68
50<

MOV
Move
Source ST19:47.DATA[0]
\00^H<
Dest N7:69
8<

MOV
Move
Source ST19:48.DATA[0]
\00^H<
Dest N7:70
8<

MOV
Move
Source ST19:49.DATA[0]
\00\00<
Dest N7:71
0<


MOV
Move
Source ST19:50.DATA[0]
\00^P<
Dest N7:72
16<
MOV
Move
Source ST19:51.DATA[0]
\00\00<
Dest N7:73
0<
MOV
Move
Source ST19:52.DATA[0]
\00^Y<
Dest N7:74
25<

0004

XOR
Bitwise Exclusive OR
Source A N7:1 0002h<
Source B N7:23 0036h<
Dest N7:0 0055h<

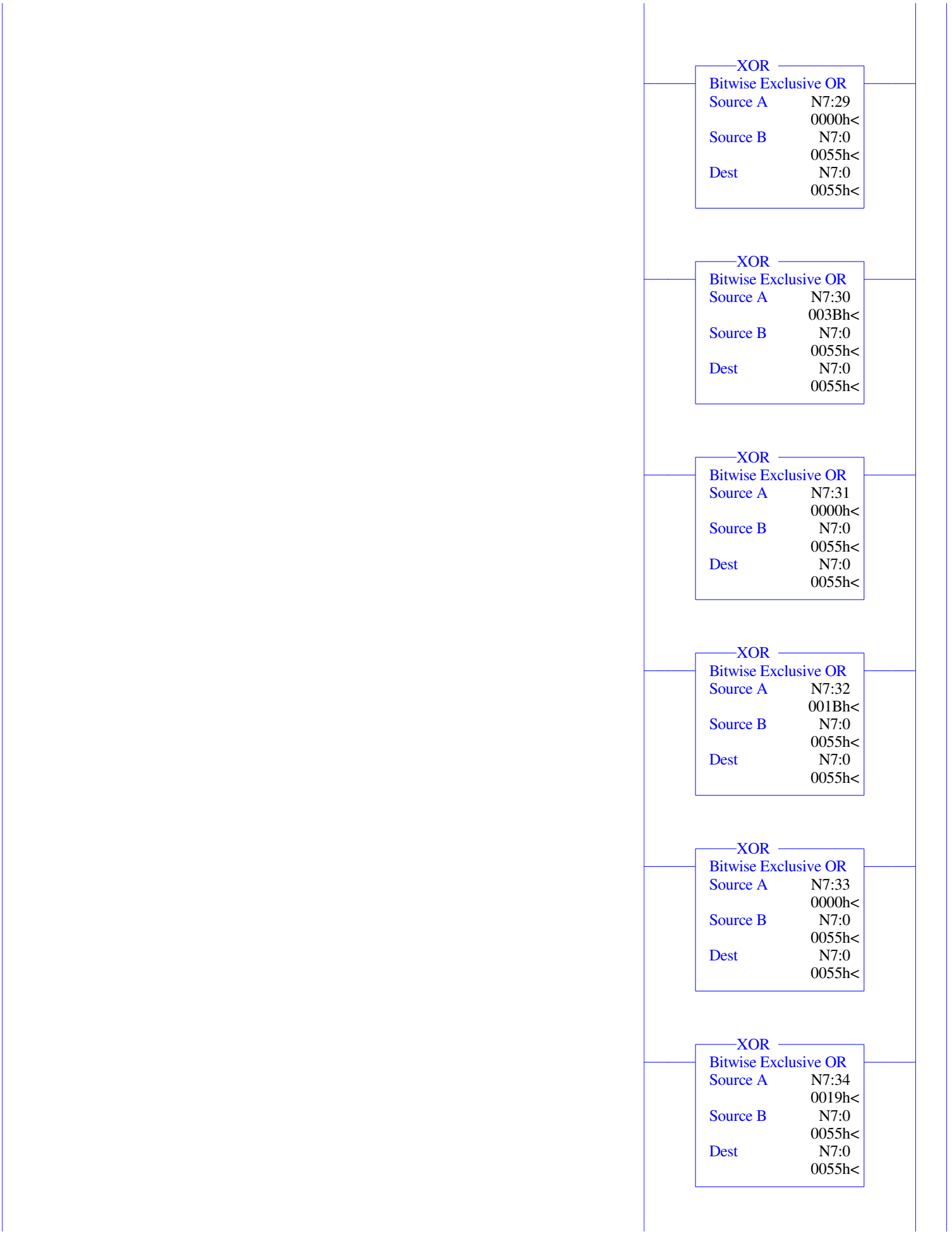
XOR
Bitwise Exclusive OR
Source A N7:24 0069h<
Source B N7:0 0055h<
Dest N7:0 0055h<

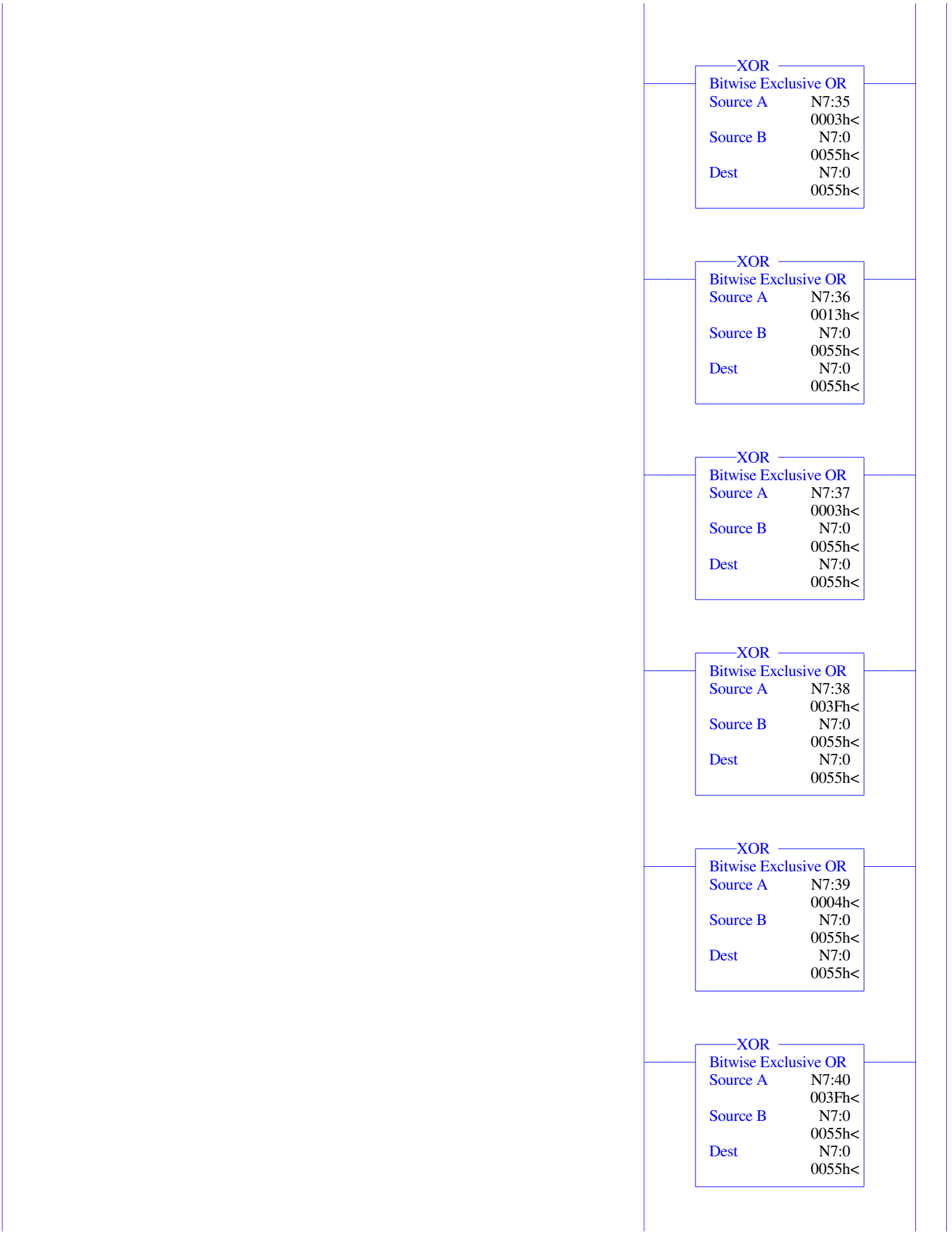
XOR
Bitwise Exclusive OR
Source A N7:25 0005h<
Source B N7:0 0055h<
Dest N7:0 0055h<

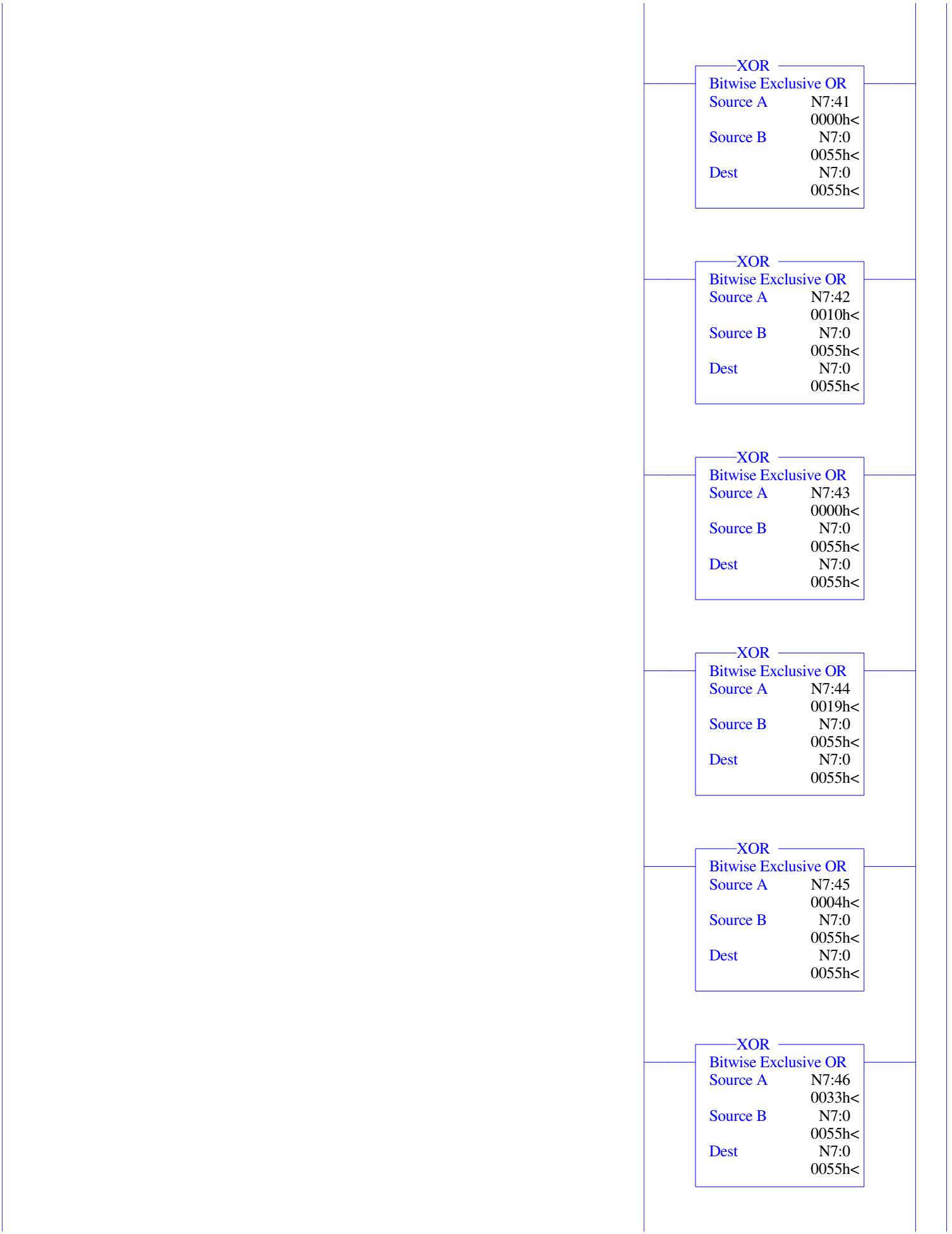
XOR
Bitwise Exclusive OR
Source A N7:26 0012h<
Source B N7:0 0055h<
Dest N7:0 0055h<

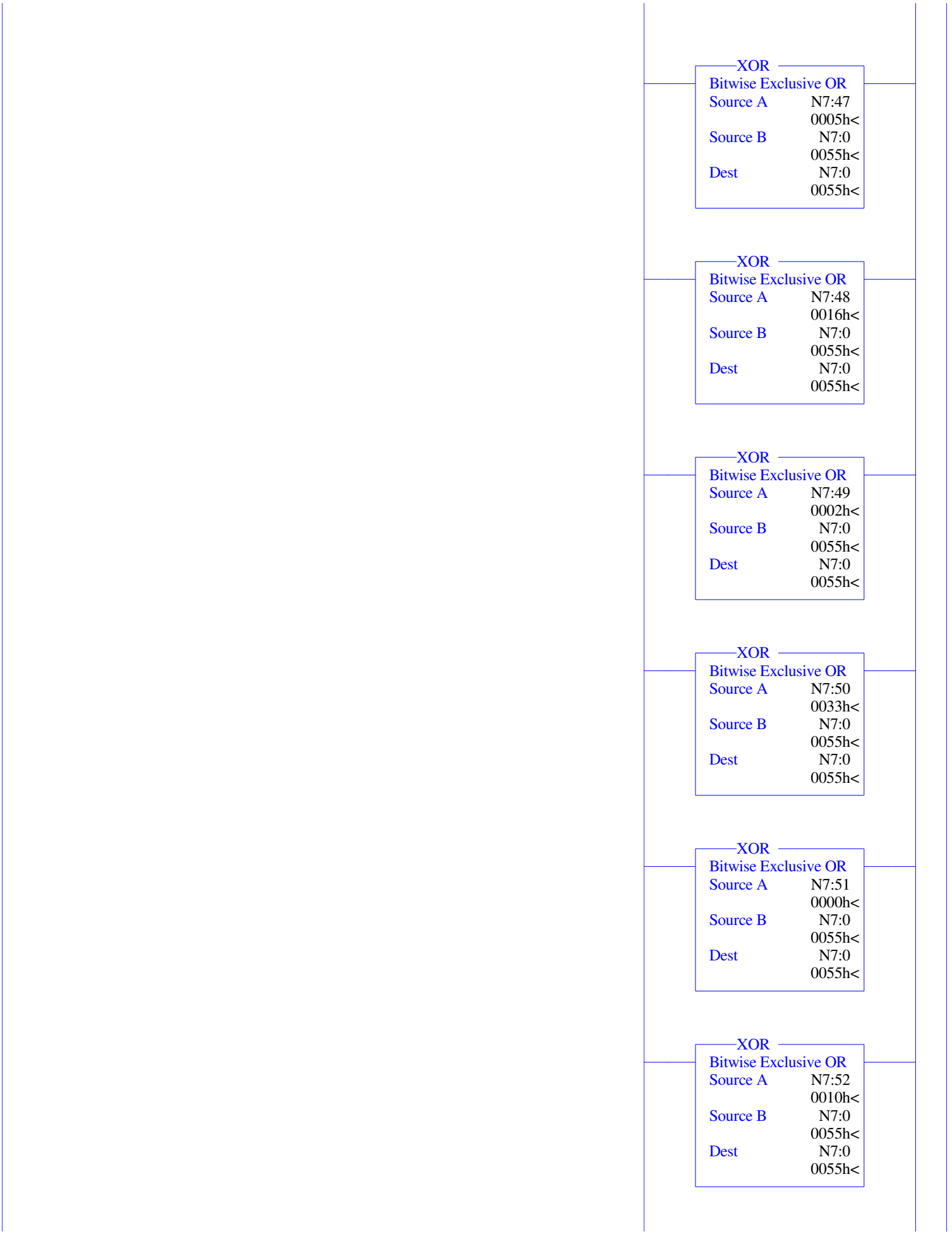
XOR
Bitwise Exclusive OR
Source A N7:27 0005h<
Source B N7:0 0055h<
Dest N7:0 0055h<

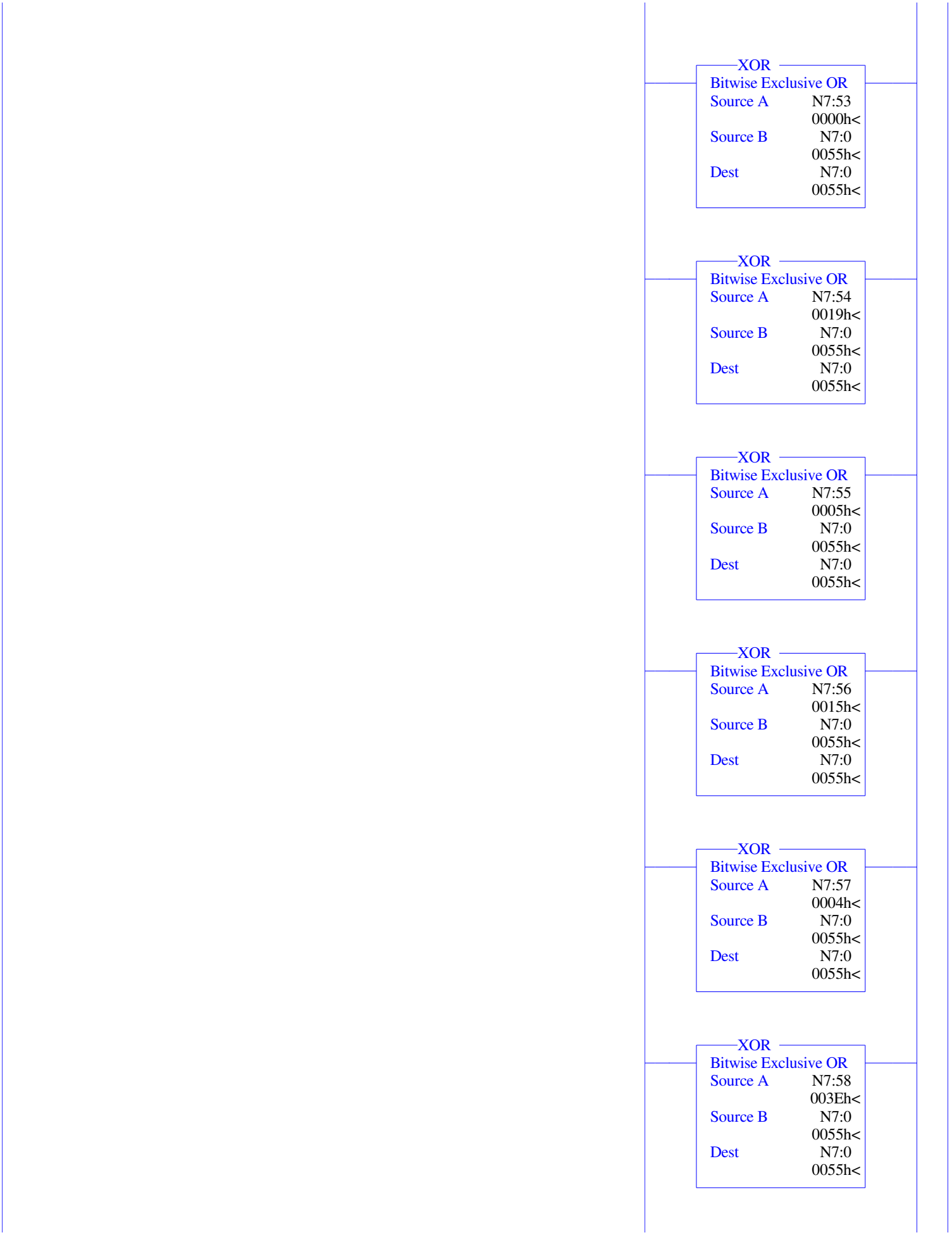
XOR
Bitwise Exclusive OR
Source A N7:28 0001h<
Source B N7:0 0055h<
Dest N7:0 0055h<

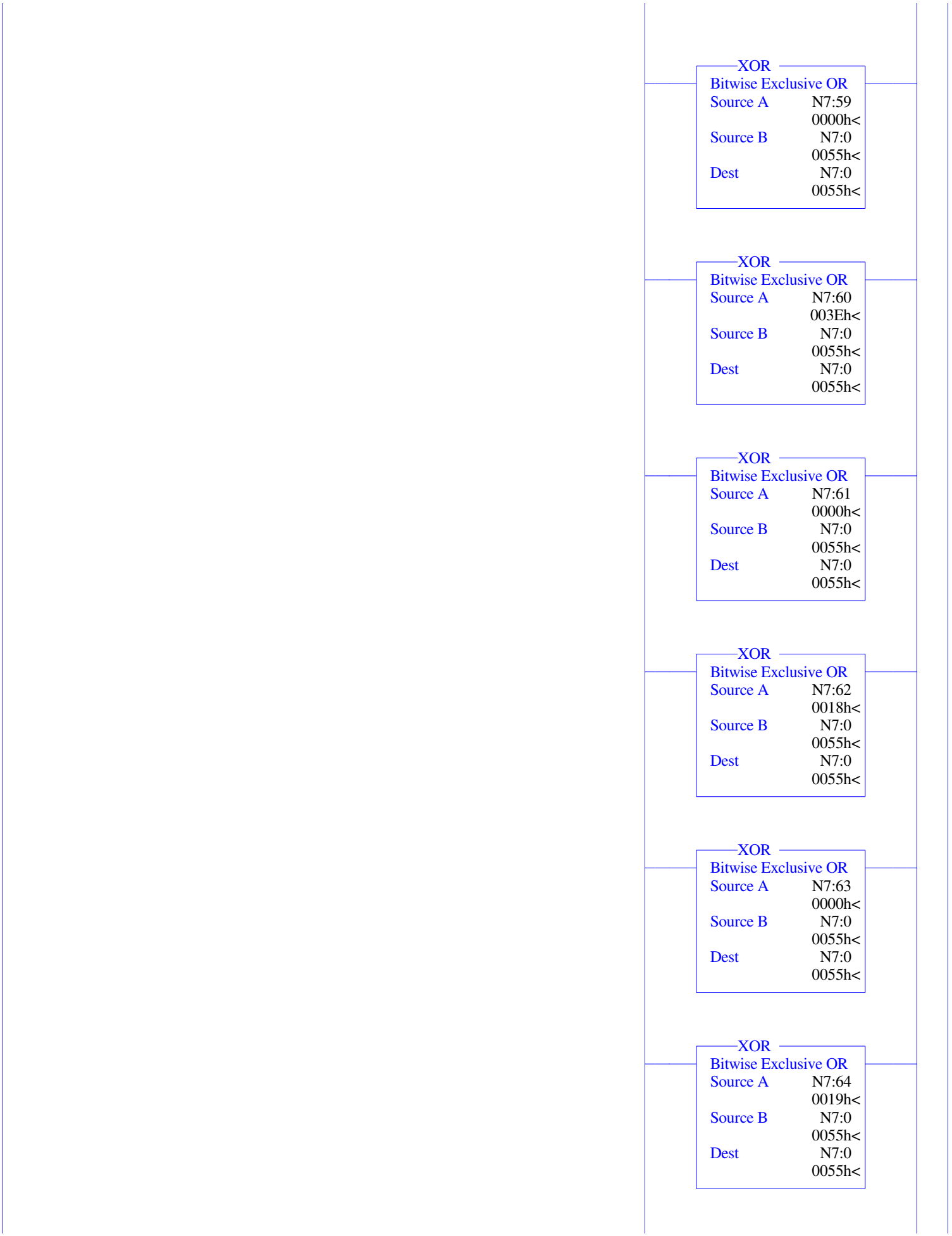

XOR
Bitwise Exclusive OR
Source A N7:29
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:30
003Bh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:31
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:32
001Bh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:33
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:34
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<

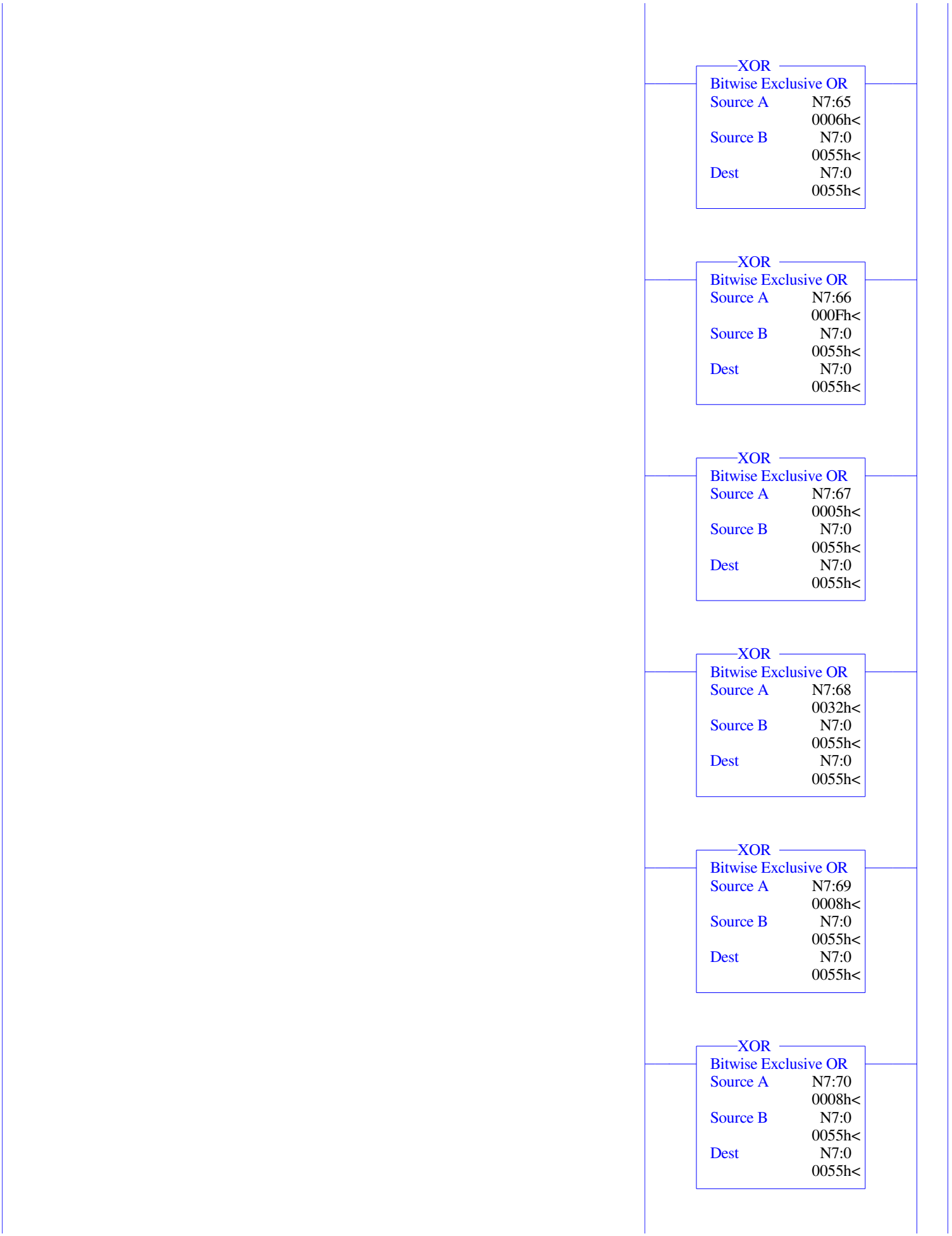

XOR
Bitwise Exclusive OR
Source A N7:35
0003h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:36
0013h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:37
0003h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:38
003Fh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:39
0004h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:40
003Fh<
Source B N7:0
0055h<
Dest N7:0
0055h<

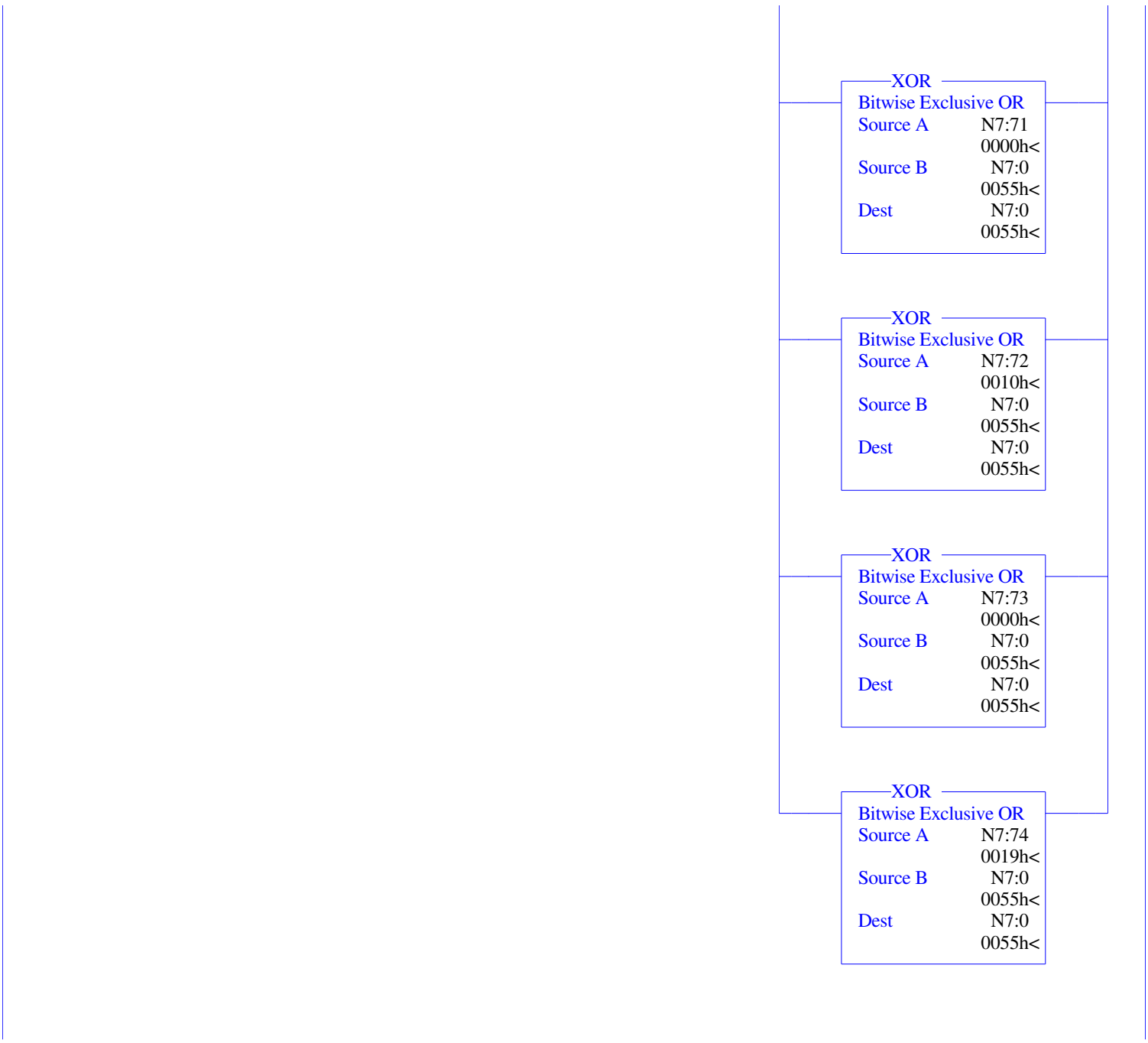

XOR
Bitwise Exclusive OR
Source A N7:41
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:42
0010h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:43
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:44
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:45
0004h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:46
0033h<
Source B N7:0
0055h<
Dest N7:0
0055h<

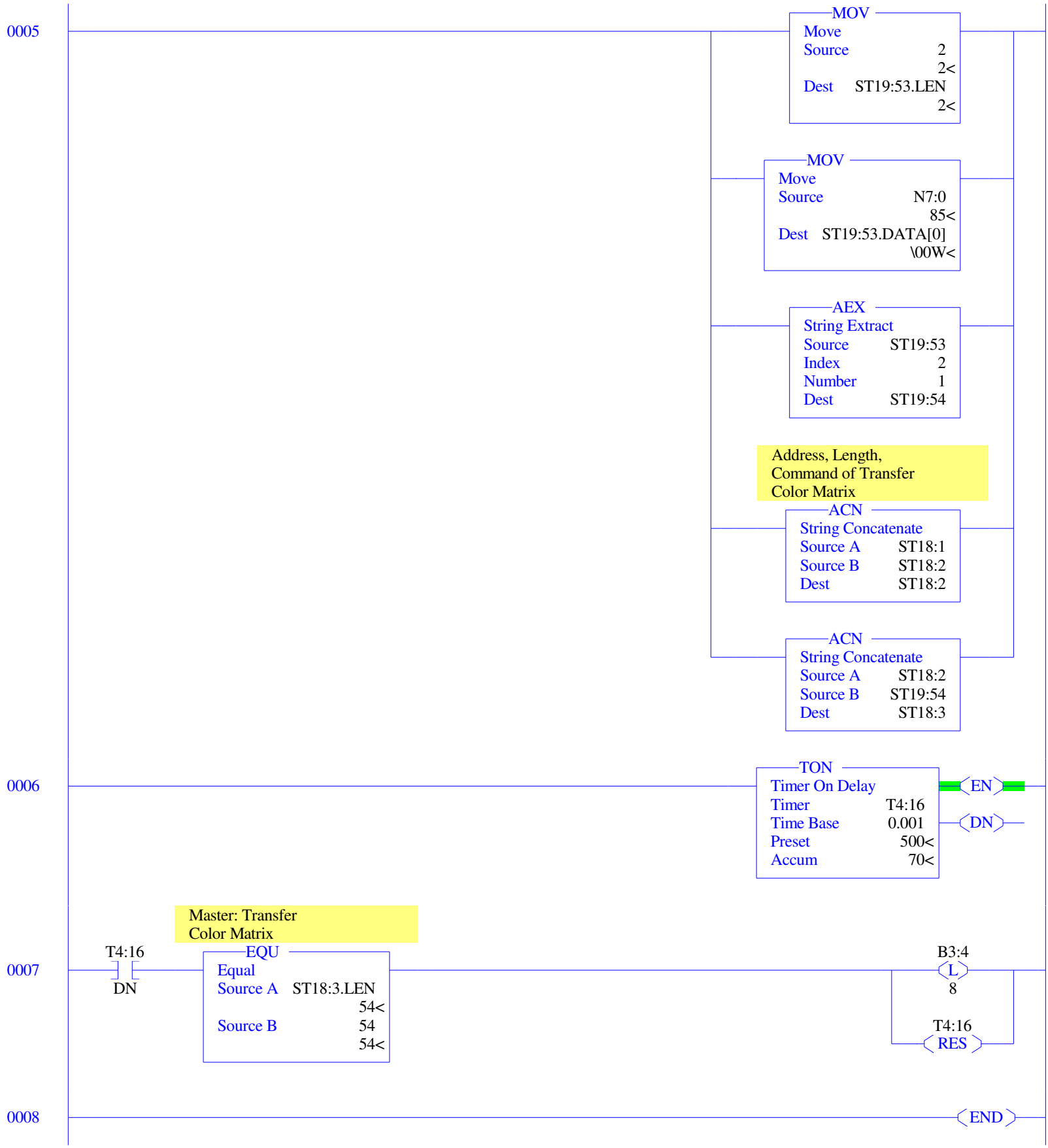

XOR
Bitwise Exclusive OR
Source A N7:47
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:48
0016h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:49
0002h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:50
0033h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:51
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:52
0010h<
Source B N7:0
0055h<
Dest N7:0
0055h<


XOR
Bitwise Exclusive OR
Source A N7:53
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:54
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:55
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:56
0015h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:57
0004h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:58
003Eh<
Source B N7:0
0055h<
Dest N7:0
0055h<

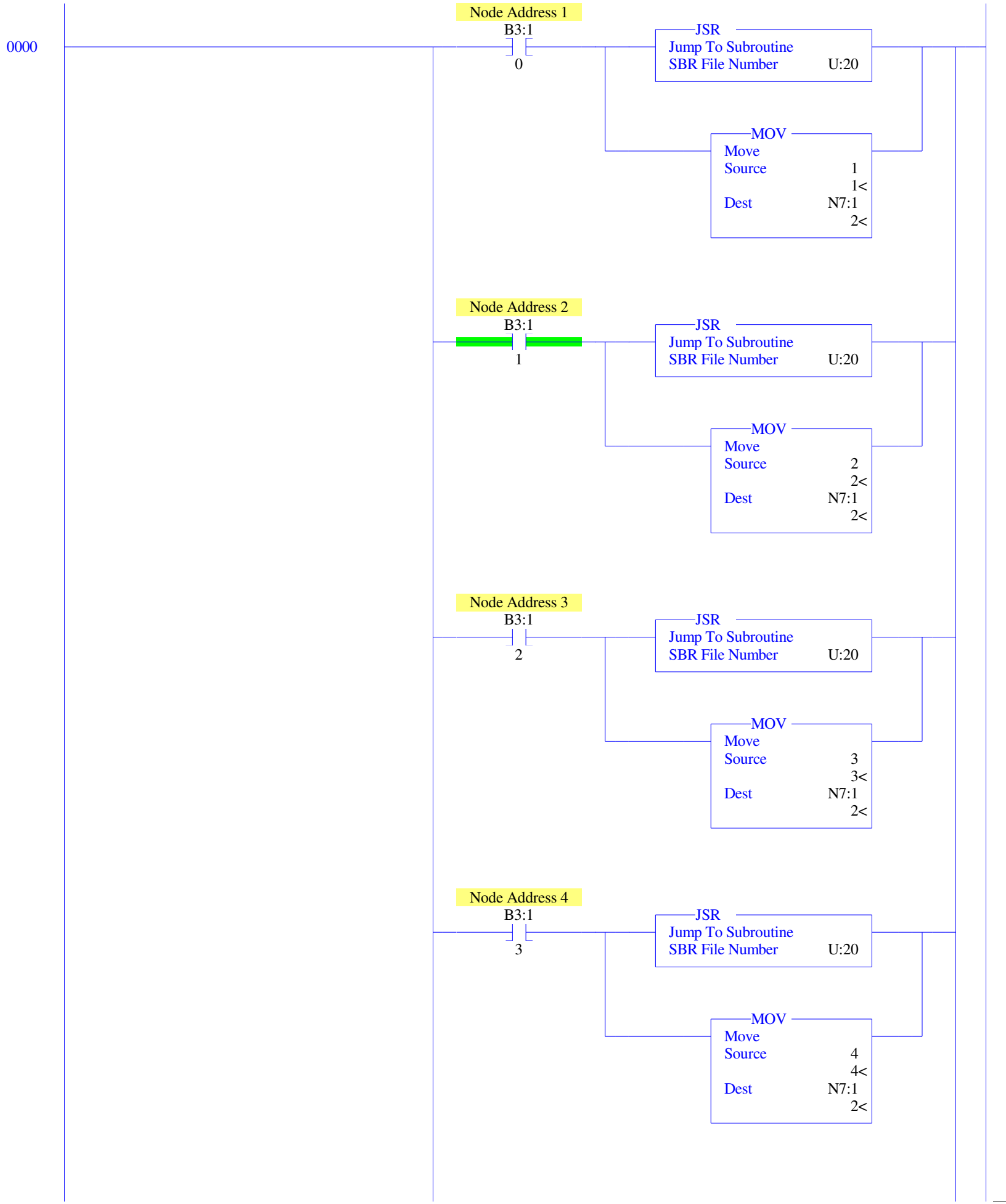

XOR
Bitwise Exclusive OR
Source A N7:59
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:60
003Eh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:61
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:62
0018h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:63
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:64
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<

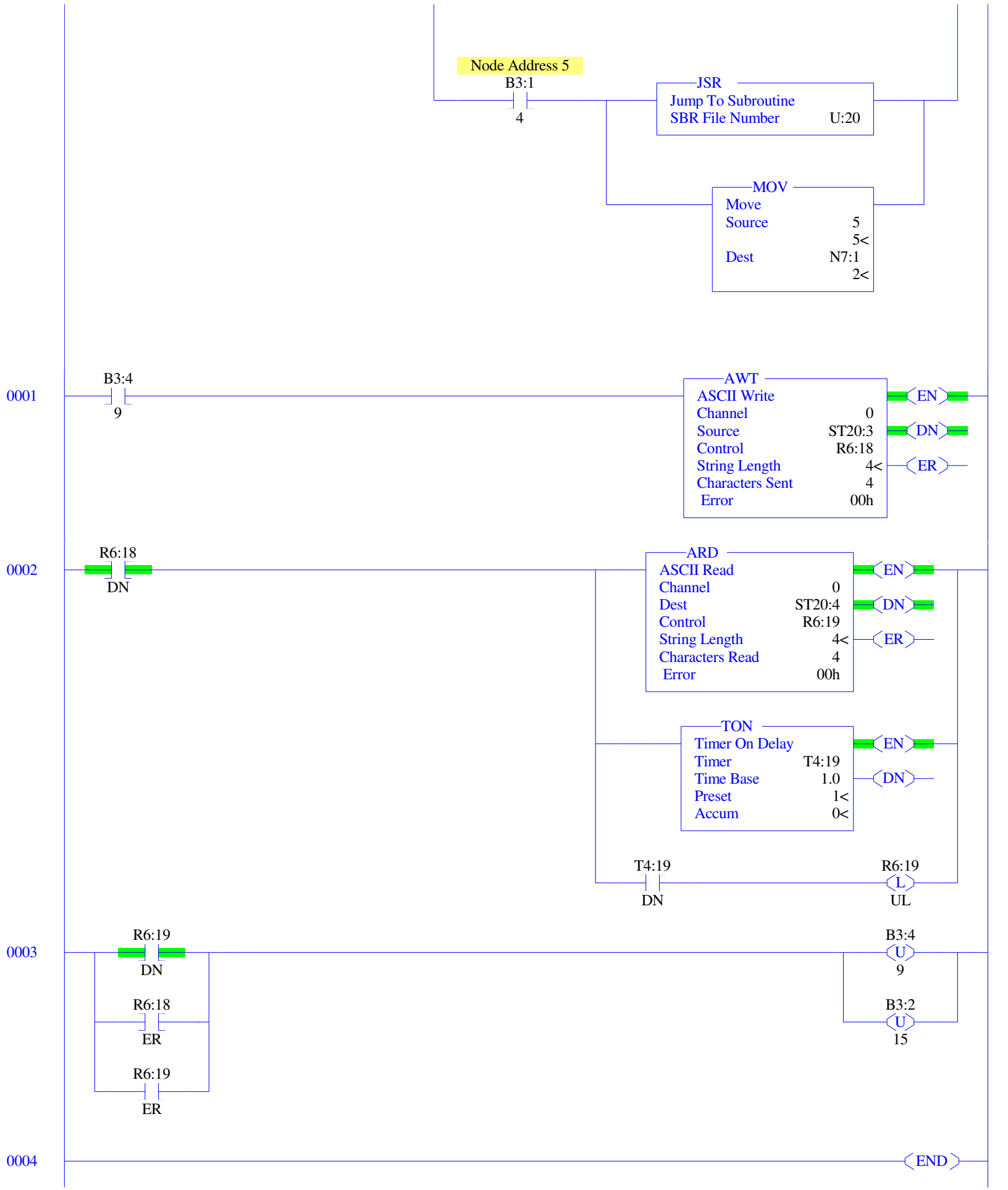

XOR
Bitwise Exclusive OR
Source A N7:65
0006h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:66
000Fh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:67
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:68
0032h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:69
0008h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:70
0008h<
Source B N7:0
0055h<
Dest N7:0
0055h<


XOR
Bitwise Exclusive OR
Source A N7:71
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:72
0010h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:73
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:74
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<


0005
MOV
Move
Source 2
2<
Dest ST19:53.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:53.DATA[0]
\00W<
AEX
String Extract
Source ST19:53
Index 2
Number 1
Dest ST19:54
Address, Length,
Command of Transfer
Color Matrix
ACN
String Concatenate
Source A ST18:1
Source B ST18:2
Dest ST18:2
ACN
String Concatenate
Source A ST18:2
Source B ST19:54
Dest ST18:3
0006
TON
Timer On Delay
Timer T4:16
Time Base 0.001
Preset 500<
Accum 70<
EN
DN
Master: Transfer
Color Matrix
0007
T4:16
DN
EQU
Equal
Source A ST18:3.LEN
54<
Source B 54
54<
B3:4
L
8
T4:16
RES
0008
END

LAD 19 - STORAGE - Permanent Storage of Sensor Settings --- Total Rungs in File = 5




Node Address 5
B3:1
4
JSR
Jump To Subroutine
SBR File Number U:20
MOV
Move
Source 5
5<
Dest N7:1
2<
0001
B3:4
9
AWT
ASCII Write
Channel 0
Source ST20:3
Control R6:18
String Length 4<
Characters Sent 4
Error 00h
EN
DN
ER
0002
R6:18
DN
ARD
ASCII Read
Channel 0
Dest ST20:4
Control R6:19
String Length 4<
Characters Read 4
Error 00h
TON
Timer On Delay
Timer T4:19
Time Base 1.0
Preset 1<
Accum 0<
T4:19
DN
R6:19
L
UL
0003
R6:19
DN
R6:18
ER
R6:19
ER
B3:4
U
9
B3:2
U
15
0004
END

LAD 20 - STORAGE_1 - Permanent Storage of Sensor Settings_1 --- Total Rungs in File = 7

0000

AEX
String Extract
Source ST20:1
Index 2
Number 1
Dest ST19:1

AEX
String Extract
Source ST20:1
Index 3
Number 1
Dest ST19:2

0001

ACN
String Concatenate
Source A ST19:0
Source B ST19:1
Dest ST19:1

MOV
Move
Source ST19:1.DATA[0]
\00^D<
Dest N7:75
4<

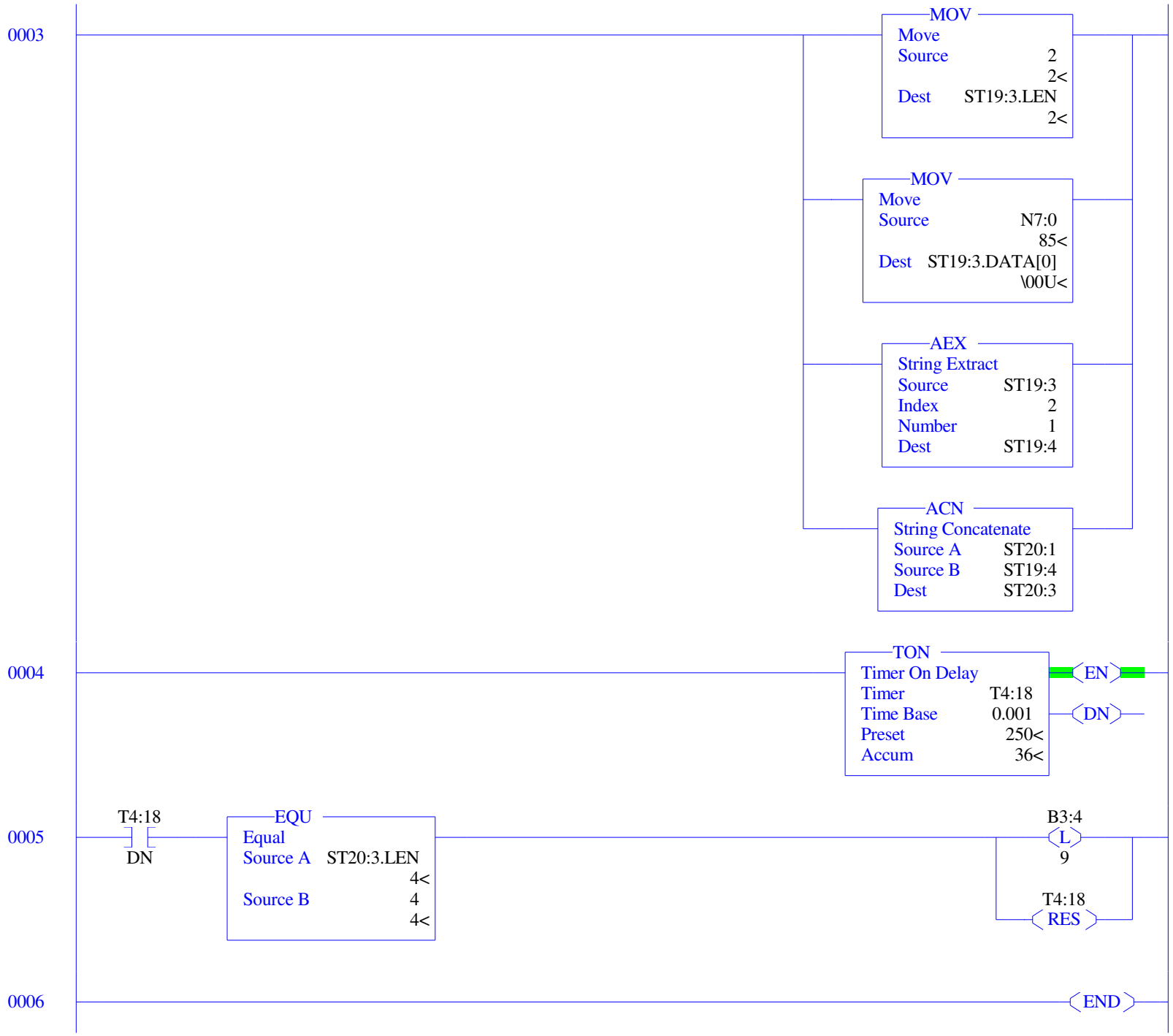
ACN
String Concatenate
Source A ST19:0
Source B ST19:2
Dest ST19:2

MOV
Move
Source ST19:2.DATA[0]
\00S<
Dest N7:76
83<

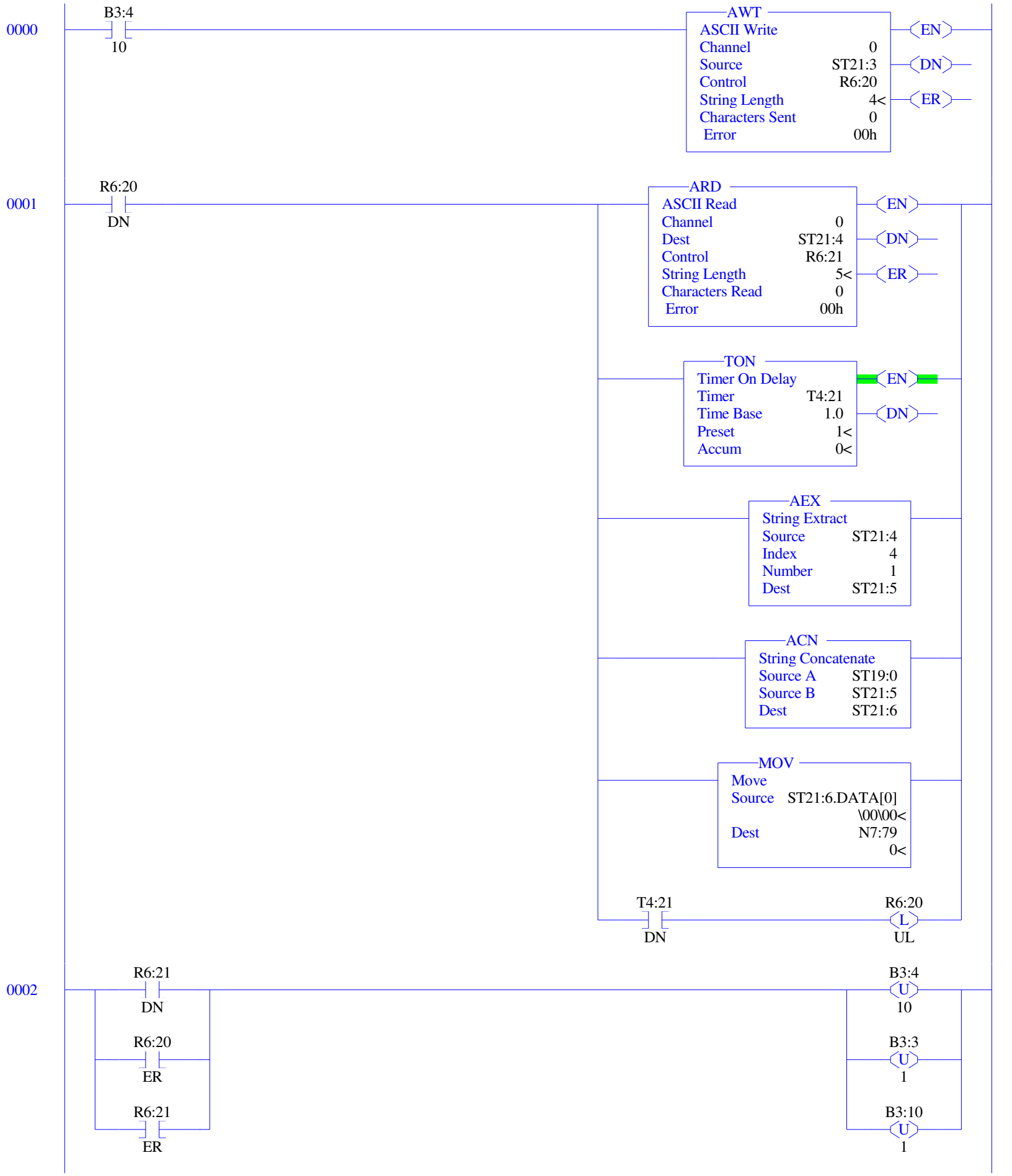
0002

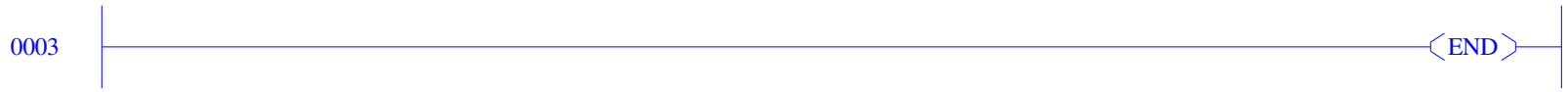
XOR
Bitwise Exclusive OR
Source A N7:1
0002h<
Source B N7:75
0004h<
Dest N7:0
0055h<

XOR
Bitwise Exclusive OR
Source A N7:76
0053h<
Source B N7:0
0055h<
Dest N7:0
0055h<

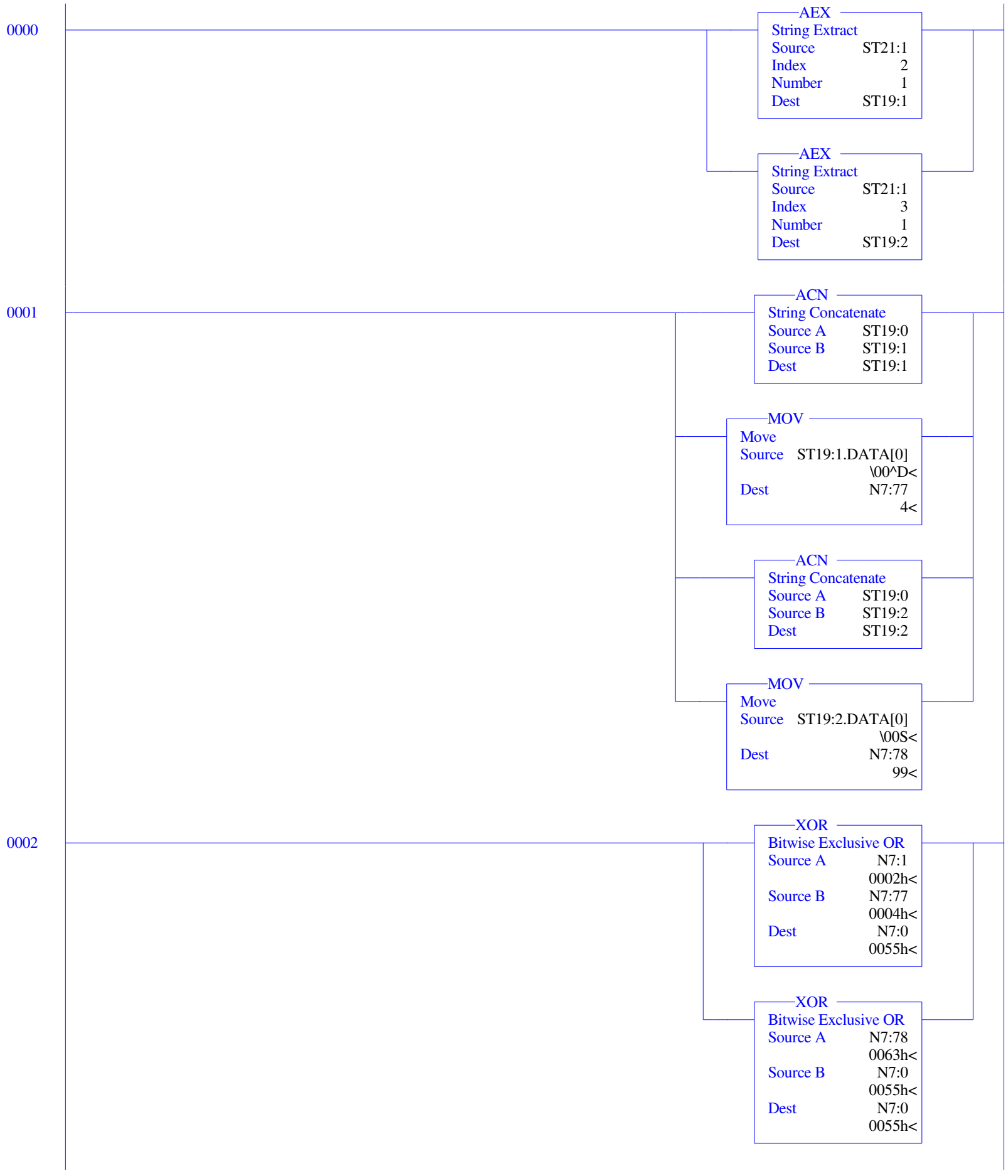

0003
MOV
Move
Source 2
2<
Dest ST19:3.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:3.DATA[0]
\00U<
AEX
String Extract
Source ST19:3
Index 2
Number 1
Dest ST19:4
ACN
String Concatenate
Source A ST20:1
Source B ST19:4
Dest ST20:3
0004
TON
Timer On Delay
Timer T4:18
Time Base 0.001
Preset 250<
Accum 36<
EN
DN
0005
T4:18
DN
EQU
Equal
Source A ST20:3.LEN
4<
Source B 4
4<
B3:4
L
9
T4:18
RES
0006
END

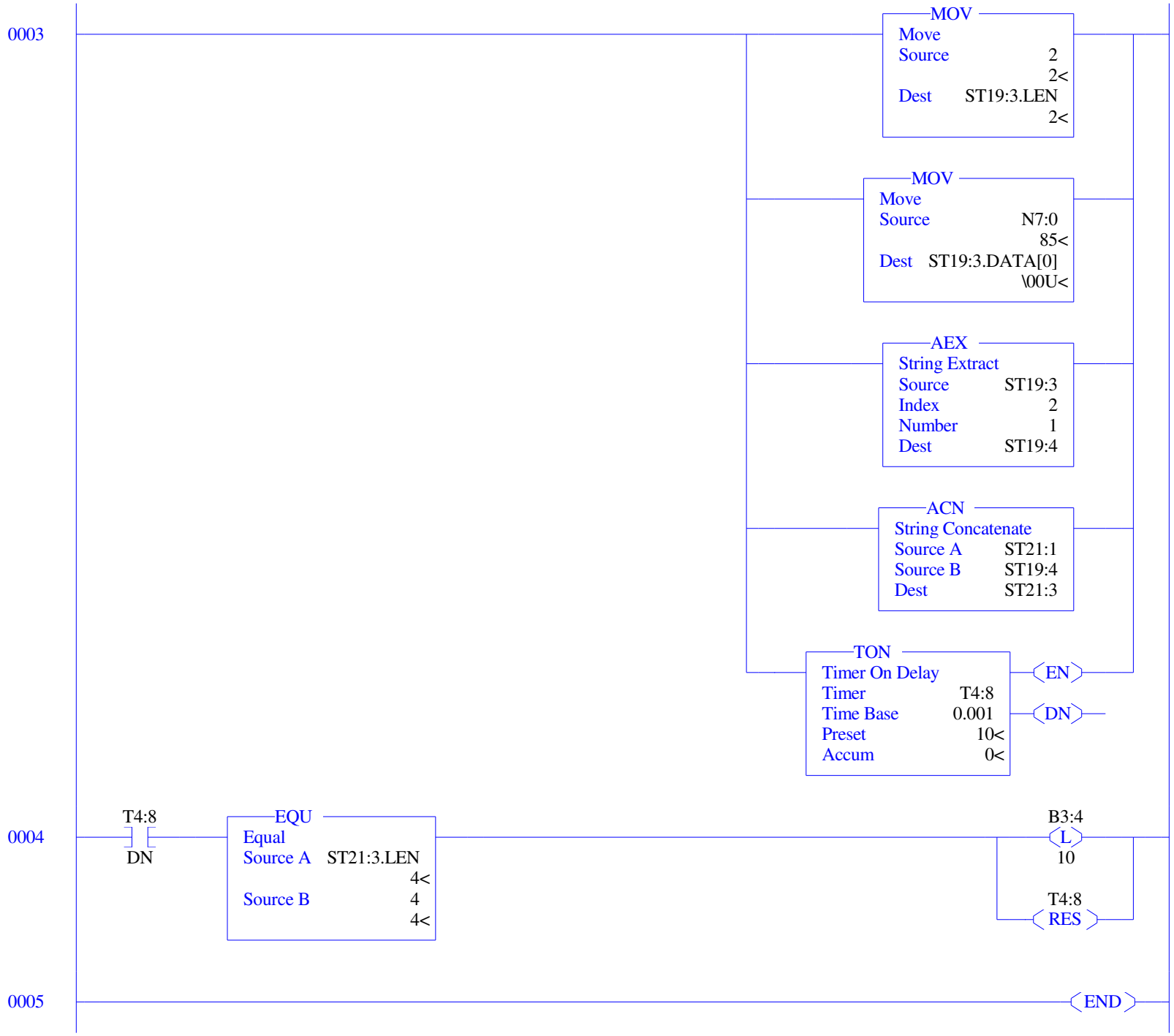
LAD 21 - COLOR CHAN - Read Color Channel --- Total Rungs in File = 4



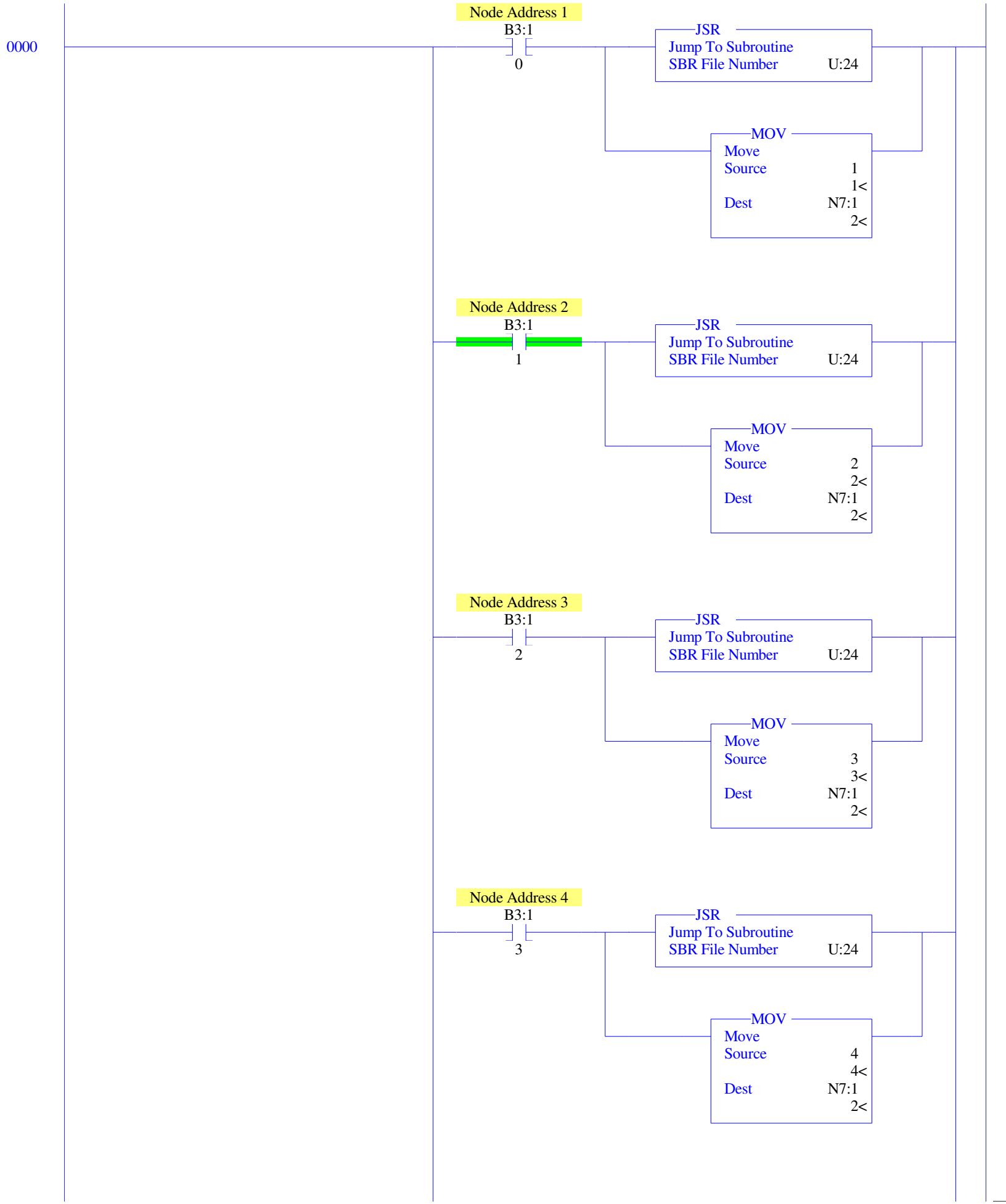

0003
END

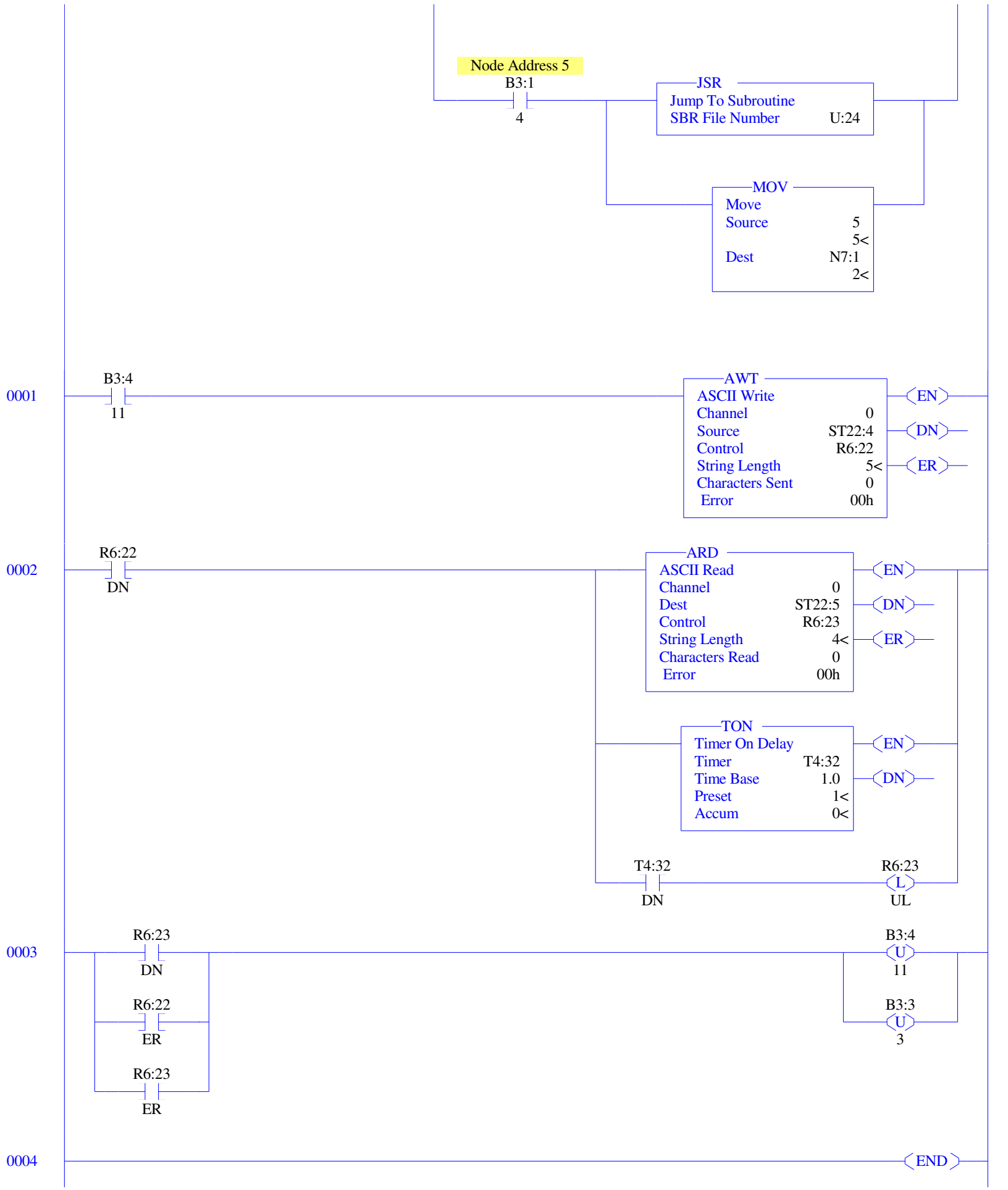
LAD 22 - CLR CHAN_1 - Read Color Channel of Sensor --- Total Rungs in File = 6

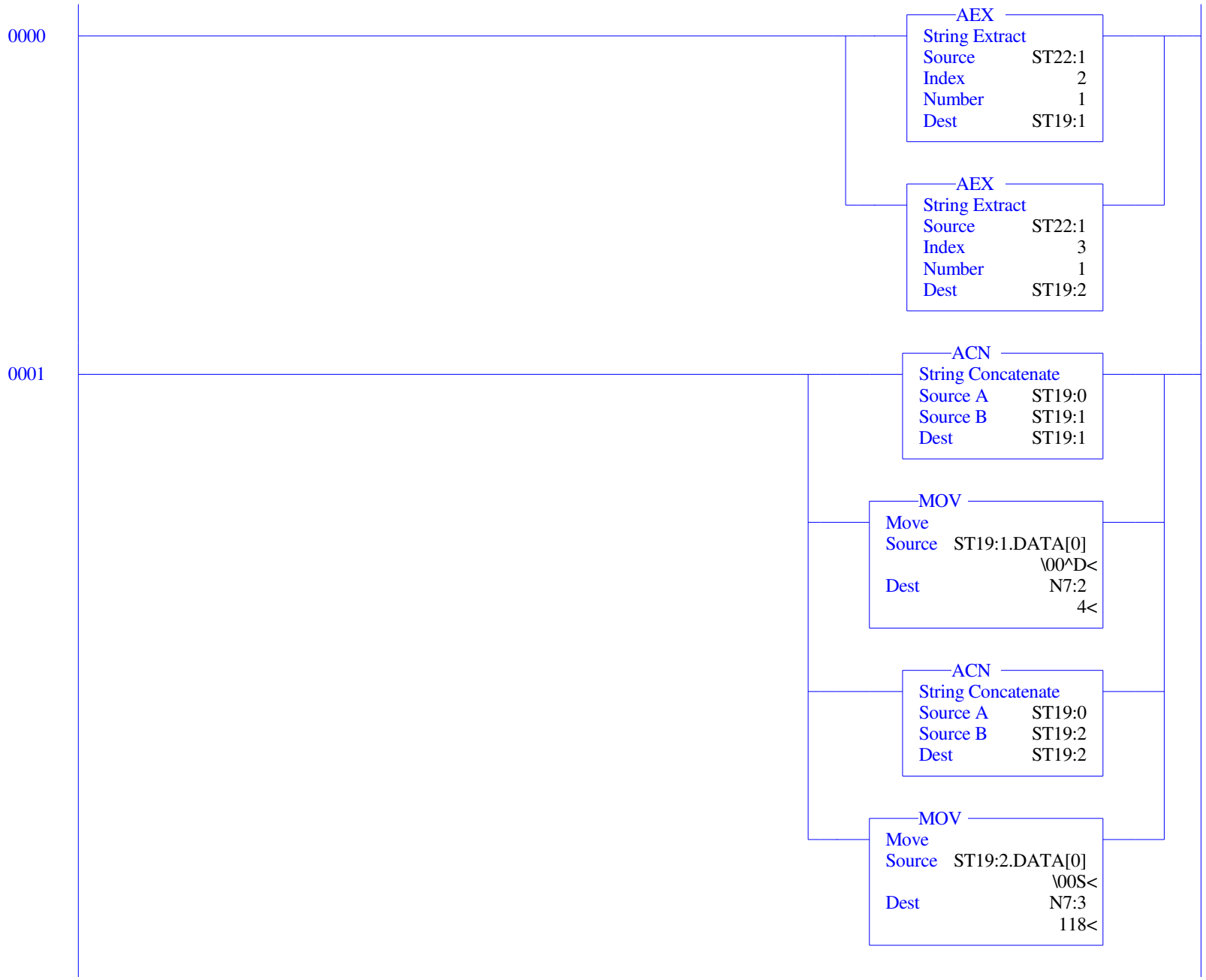


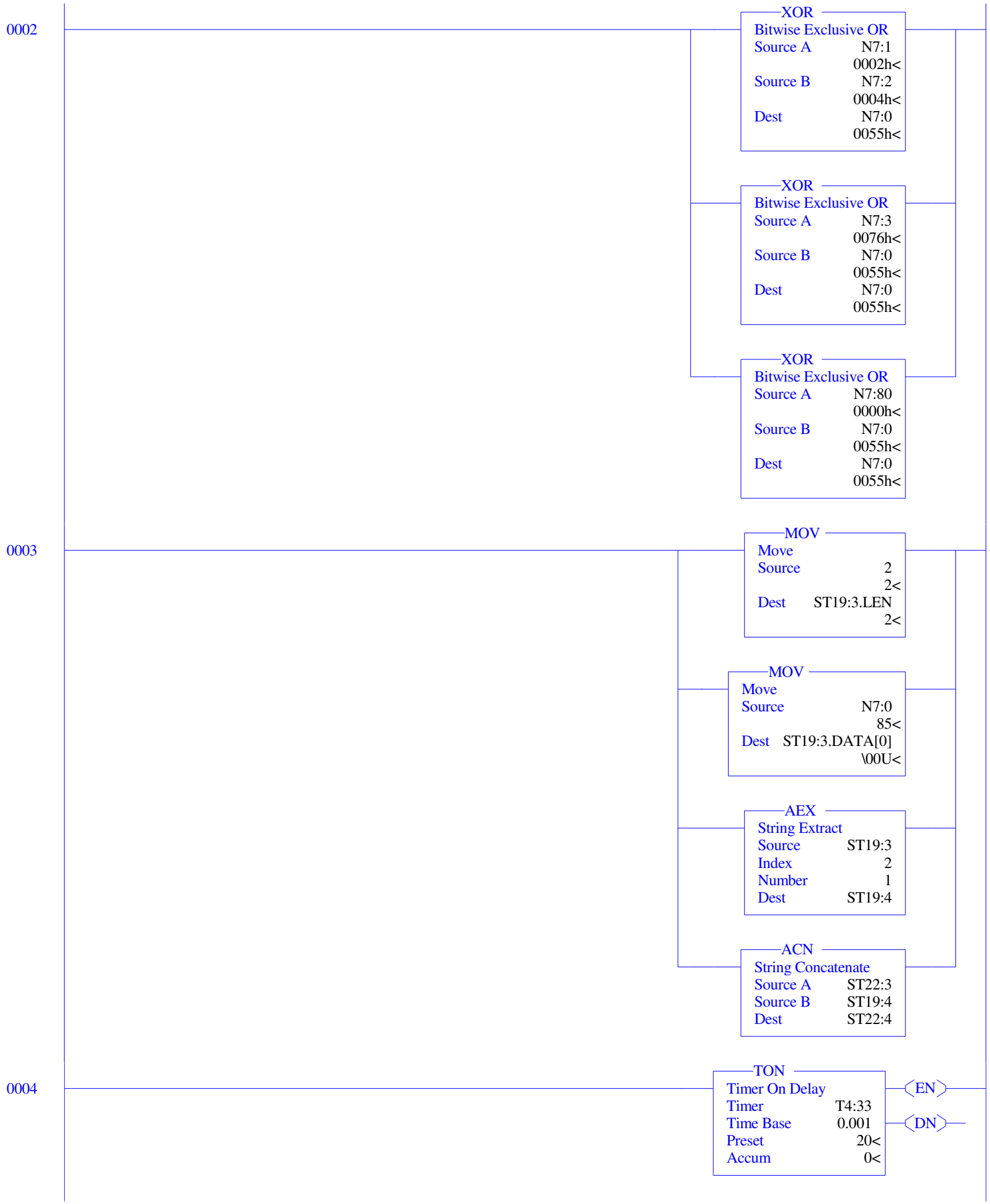

0003
MOV
Move
Source 2
2<
Dest ST19:3.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:3.DATA[0]
\00U<
AEX
String Extract
Source ST19:3
Index 2
Number 1
Dest ST19:4
ACN
String Concatenate
Source A ST21:1
Source B ST19:4
Dest ST21:3
TON
Timer On Delay
Timer T4:8
Time Base 0.001
Preset 10<
Accum 0<
EN
DN
0004
T4:8
DN
EQU
Equal
Source A ST21:3.LEN
4<
Source B 4
4<
B3:4
L
10
T4:8
RES
0005
END

LAD 23 - KEY LOCK - Disable Use of Keys --- Total Rungs in File = 5

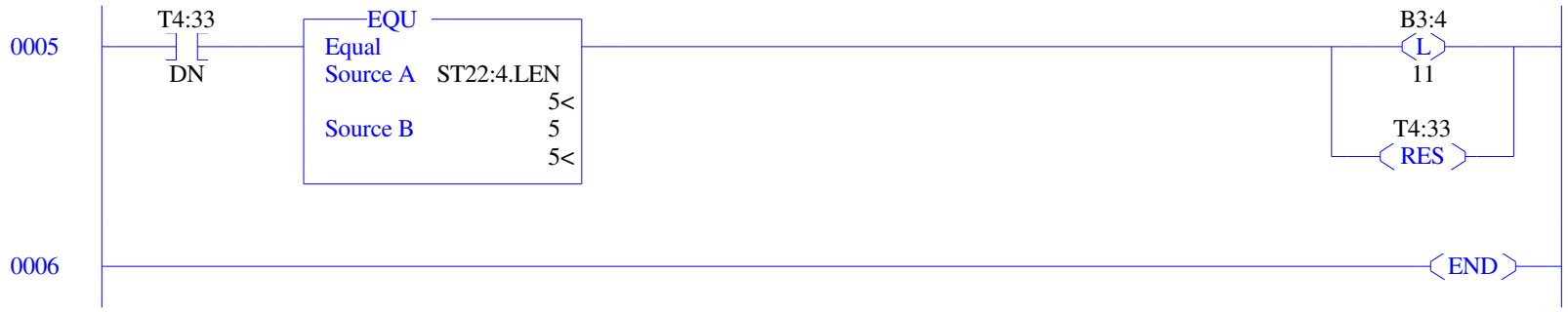


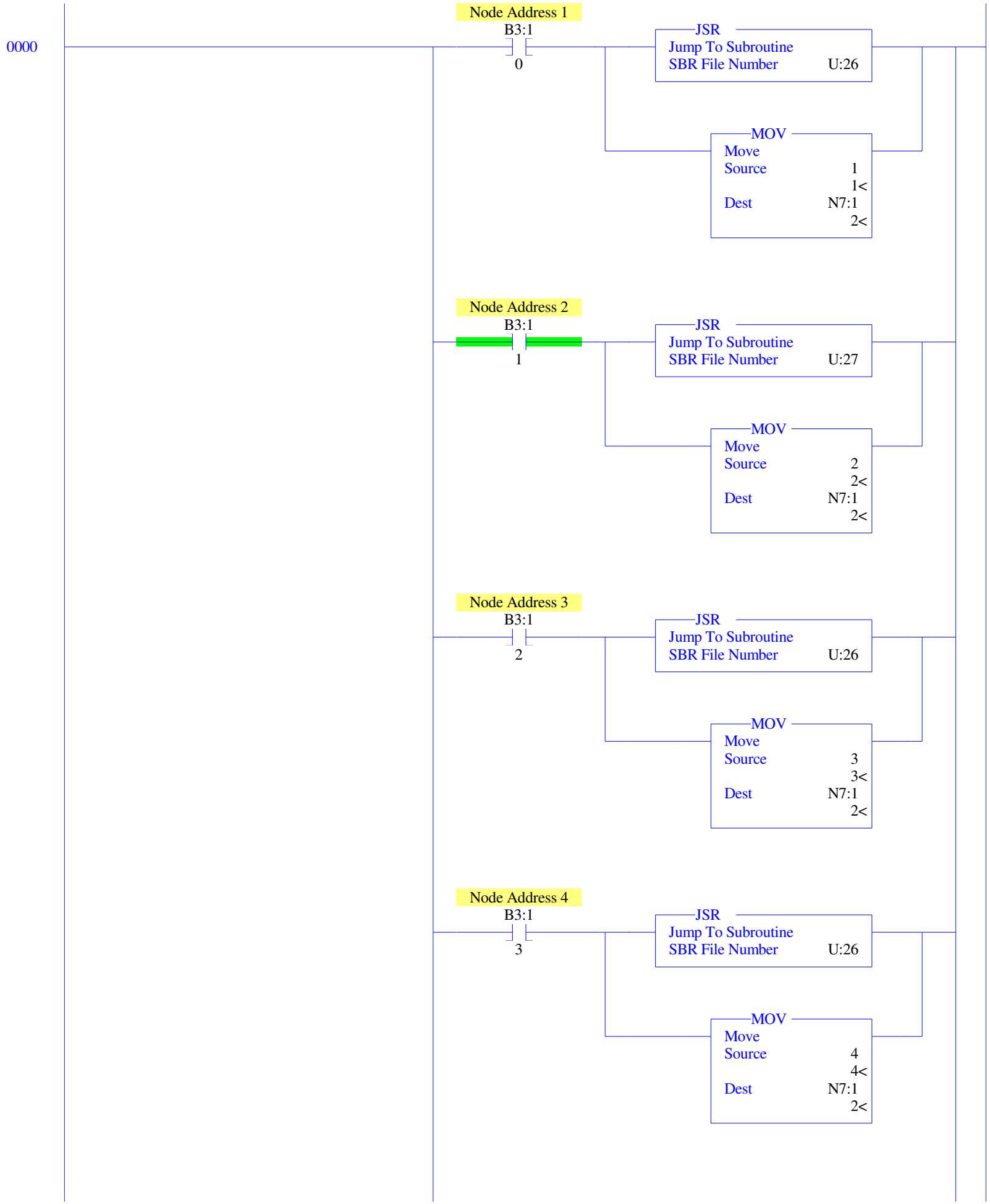

Node Address 5
B3:1
4
JSR
Jump To Subroutine
SBR File Number U:24
MOV
Move
Source 5
5<
Dest N7:1
2<
0001
B3:4
11
AWT
ASCII Write
Channel 0
Source ST22:4
Control R6:22
String Length 5<
Characters Sent 0
Error 00h
EN
DN
ER
0002
R6:22
DN
ARD
ASCII Read
Channel 0
Dest ST22:5
Control R6:23
String Length 4<
Characters Read 0
Error 00h
TON
Timer On Delay
Timer T4:32
Time Base 1.0
Preset 1<
Accum 0<
T4:32
DN
R6:23
L
UL
0003
R6:23
DN
R6:22
ER
R6:23
ER
B3:4
U
11
B3:3
U
3
0004
END

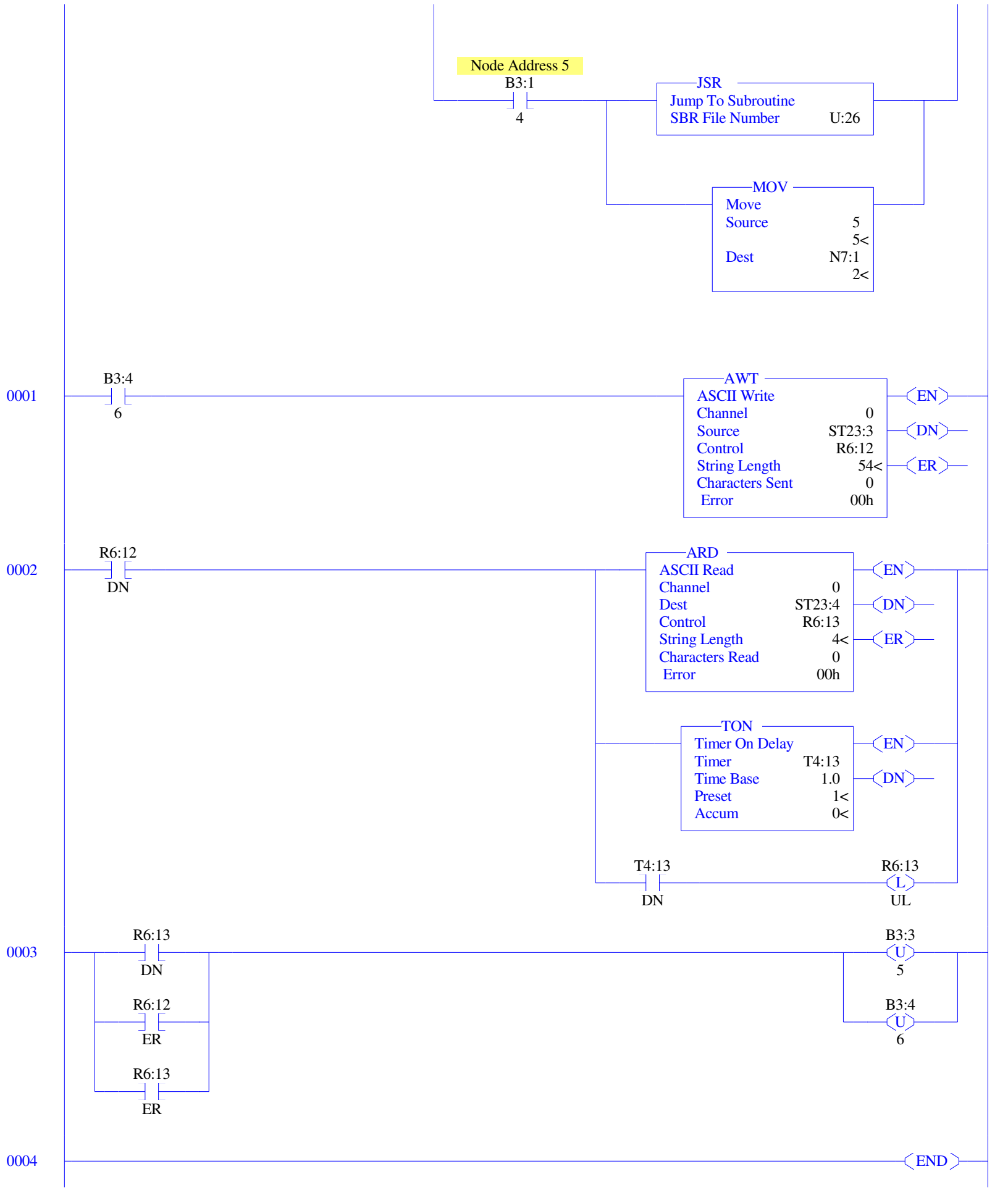

0000
AEX
String Extract
Source ST22:1
Index 2
Number 1
Dest ST19:1
AEX
String Extract
Source ST22:1
Index 3
Number 1
Dest ST19:2
0001
ACN
String Concatenate
Source A ST19:0
Source B ST19:1
Dest ST19:1
MOV
Move
Source ST19:1.DATA[0]
\00^D<
Dest N7:2
4<
ACN
String Concatenate
Source A ST19:0
Source B ST19:2
Dest ST19:2
MOV
Move
Source ST19:2.DATA[0]
\00S<
Dest N7:3
118<


0002
XOR
Bitwise Exclusive OR
Source A N7:1
0002h<
Source B N7:2
0004h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:3
0076h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:80
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
0003
MOV
Move
Source 2
2<
Dest ST19:3.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:3.DATA[0]
\00U<
AEX
String Extract
Source ST19:3
Index 2
Number 1
Dest ST19:4
ACN
String Concatenate
Source A ST22:3
Source B ST19:4
Dest ST22:4
0004
TON
Timer On Delay
Timer T4:33
Time Base 0.001
Preset 20<
Accum 0<
EN
DN

LAD 24 - KEY LOCK_1 --- Total Rungs in File = 7




0000
Node Address 1
B3:1
0
JSR
Jump To Subroutine
SBR File Number U:26
MOV
Move
Source 1
1<
Dest N7:1
2<
Node Address 2
B3:1
1
JSR
Jump To Subroutine
SBR File Number U:27
MOV
Move
Source 2
2<
Dest N7:1
2<
Node Address 3
B3:1
2
JSR
Jump To Subroutine
SBR File Number U:26
MOV
Move
Source 3
3<
Dest N7:1
2<
Node Address 4
B3:1
3
JSR
Jump To Subroutine
SBR File Number U:26
MOV
Move
Source 4
4<
Dest N7:1
2<


Node Address 5
B3:1
4
JSR
Jump To Subroutine
SBR File Number U:26
MOV
Move
Source 5
5<
Dest N7:1
2<
0001
B3:4
6
AWT
ASCII Write
Channel 0
Source ST23:3
Control R6:12
String Length 54<
Characters Sent 0
Error 00h
EN
DN
ER
0002
R6:12
DN
ARD
ASCII Read
Channel 0
Dest ST23:4
Control R6:13
String Length 4<
Characters Read 0
Error 00h
TON
Timer On Delay
Timer T4:13
Time Base 1.0
Preset 1<
Accum 0<
T4:13
DN
R6:13
L
UL
0003
R6:13
DN
R6:12
ER
R6:13
ER
B3:3
U
5
B3:4
U
6
0004
END

0000

AEX
String Extract
Source ST23:1
Index 2
Number 1
Dest ST19:1

AEX
String Extract
Source ST23:1
Index 3
Number 1
Dest ST19:2

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 6
Number 1
Dest ST19:3

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 7
Number 1
Dest ST19:4

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 8
Number 1
Dest ST19:5

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 9
Number 1
Dest ST19:6

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 10
Number 1
Dest ST19:7

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 11
Number 1
Dest ST19:8

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 12
Number 1
Dest ST19:9

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 13
Number 1
Dest ST19:10

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 14
Number 1
Dest ST19:11

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 15
Number 1
Dest ST19:12

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 16
Number 1
Dest ST19:13

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 17
Number 1
Dest ST19:14

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 18
Number 1
Dest ST19:15

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 19
Number 1
Dest ST19:16

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 20
Number 1
Dest ST19:17

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 21
Number 1
Dest ST19:18

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 22
Number 1
Dest ST19:19

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 23
Number 1
Dest ST19:20

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 24
Number 1
Dest ST19:21

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 25
Number 1
Dest ST19:22

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 26
Number 1
Dest ST19:23

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 27
Number 1
Dest ST19:24

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 28
Number 1
Dest ST19:25

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 29
Number 1
Dest ST19:26

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 30
Number 1
Dest ST19:27

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 31
Number 1
Dest ST19:28

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 32
Number 1
Dest ST19:29

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 33
Number 1
Dest ST19:30

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 34
Number 1
Dest ST19:31

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 35
Number 1
Dest ST19:32

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 36
Number 1
Dest ST19:33

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 37
Number 1
Dest ST19:34

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 38
Number 1
Dest ST19:35

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 39
Number 1
Dest ST19:36

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 40
Number 1
Dest ST19:37

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 41
Number 1
Dest ST19:38

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 42
Number 1
Dest ST19:39

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 43
Number 1
Dest ST19:40

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 44
Number 1
Dest ST19:41

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 45
Number 1
Dest ST19:42

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 46
Number 1
Dest ST19:43

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 47
Number 1
Dest ST19:44

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 48
Number 1
Dest ST19:45

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 49
Number 1
Dest ST19:46

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 50
Number 1
Dest ST19:47

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 51
Number 1
Dest ST19:48

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 52
Number 1
Dest ST19:49

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 53
Number 1
Dest ST19:50

Sensor: Read All Sensor Configurations for Node Address 1

AEX
String Extract
Source ST17:4
Index 54
Number 1
Dest ST19:51

Sensor: Read All Sensor Configurations for Node Address 1

AEX

String Extract	
Source	ST17:4
Index	55
Number	1
Dest	ST19:52

0001

ACN
String Concatenate
Source A ST19:0
Source B ST19:1
Dest ST19:1

ACN
String Concatenate
Source A ST19:0
Source B ST19:2
Dest ST19:2

ACN
String Concatenate
Source A ST19:0
Source B ST19:3
Dest ST19:3

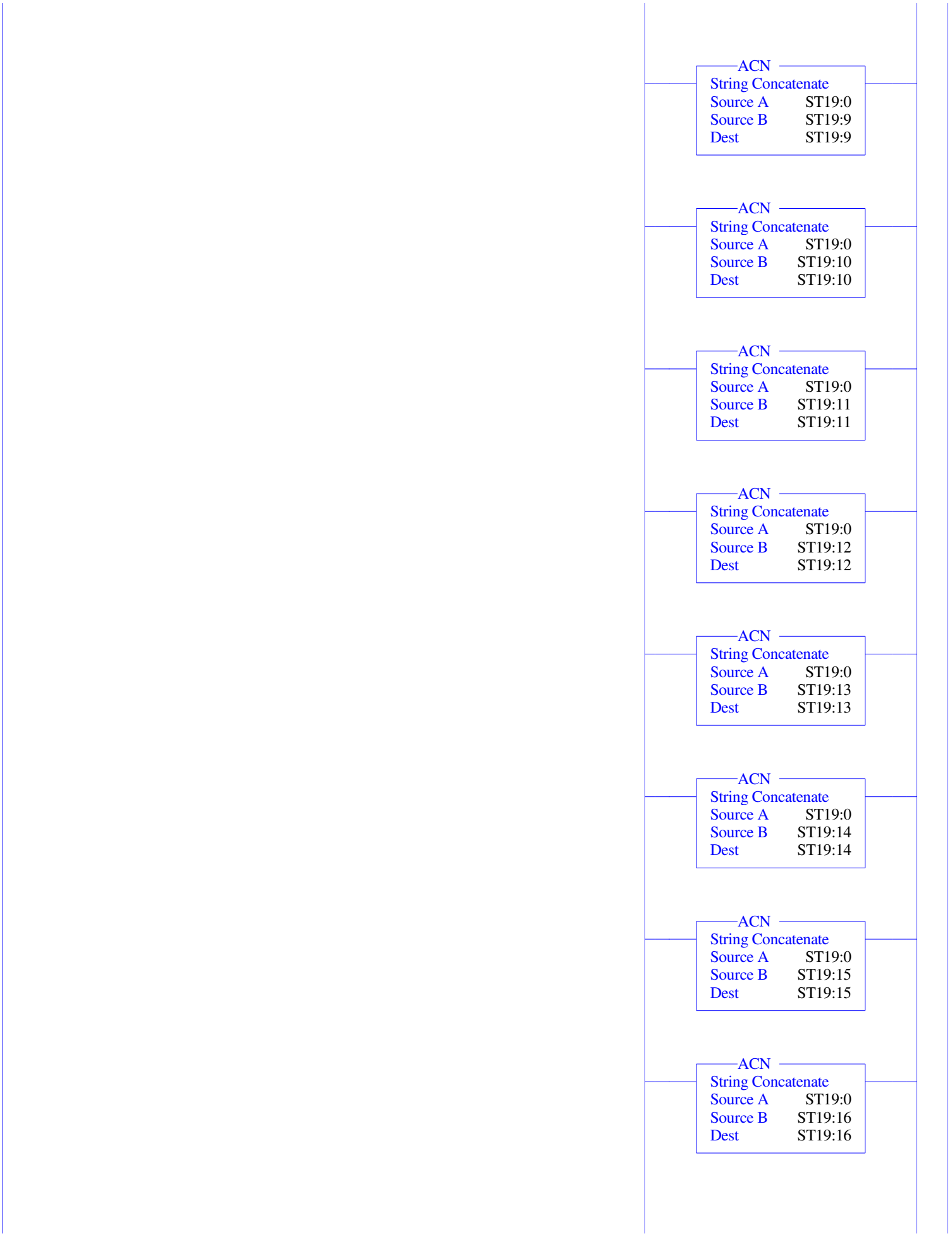
ACN
String Concatenate
Source A ST19:0
Source B ST19:4
Dest ST19:4

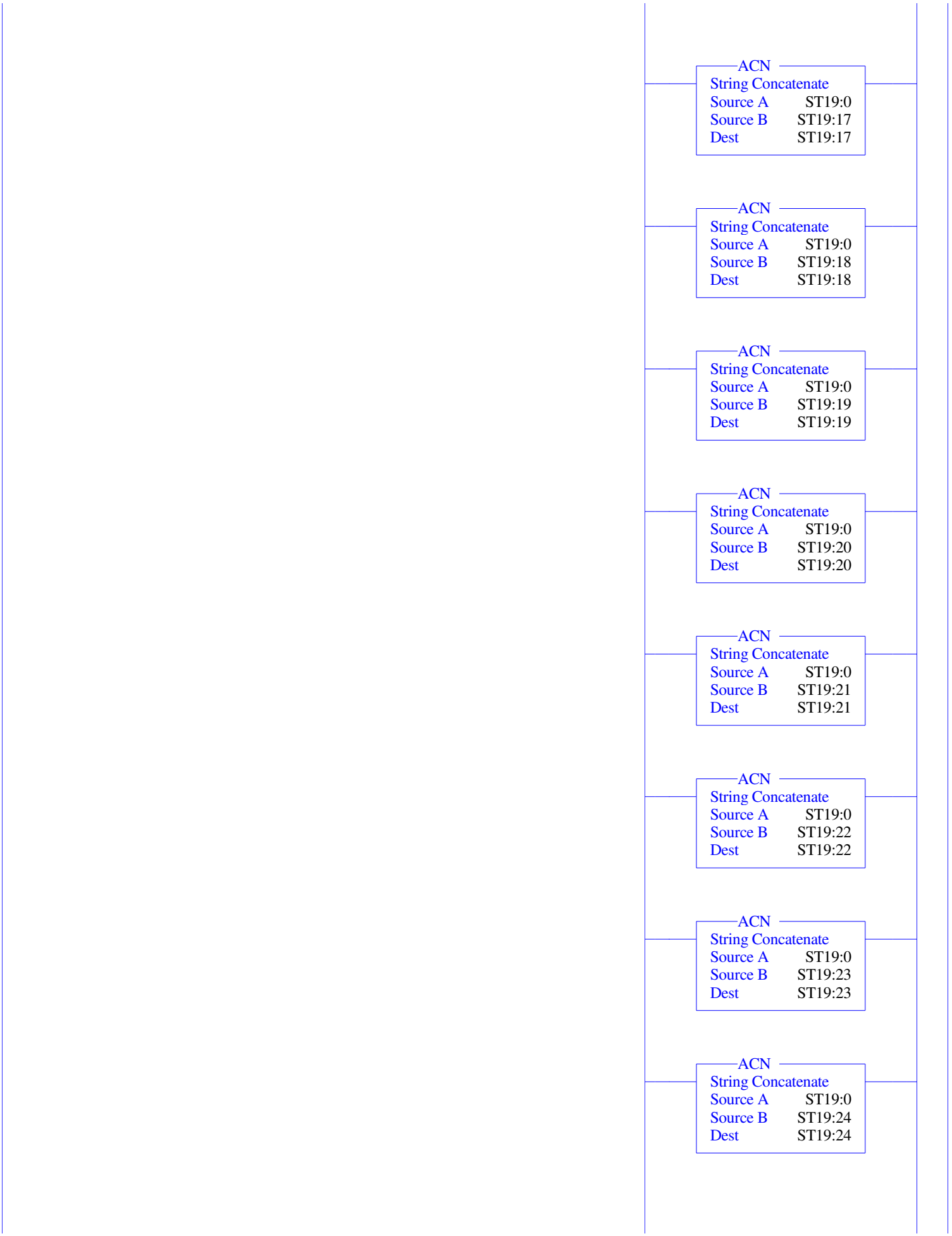
ACN
String Concatenate
Source A ST19:0
Source B ST19:5
Dest ST19:5

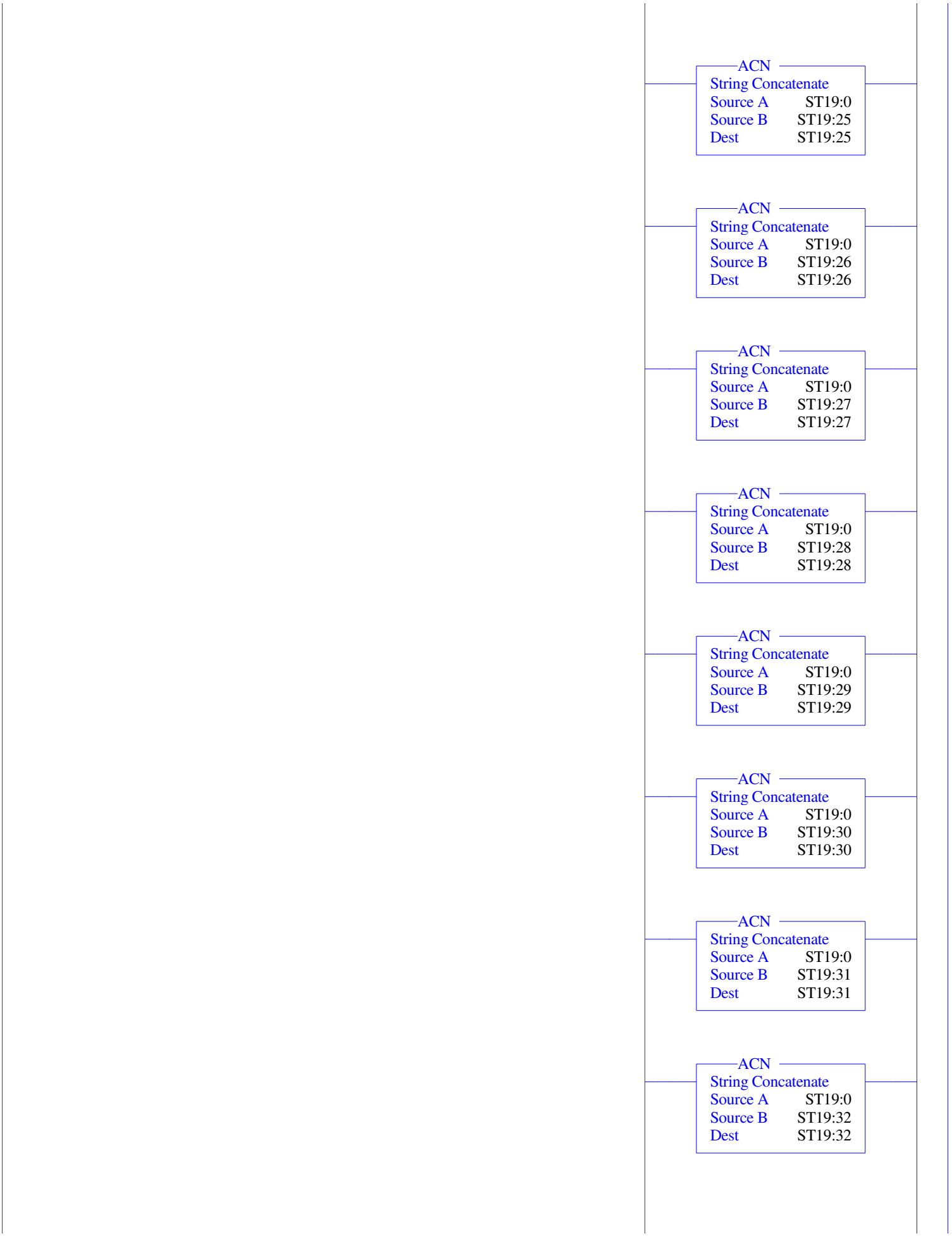
ACN
String Concatenate
Source A ST19:0
Source B ST19:6
Dest ST19:6

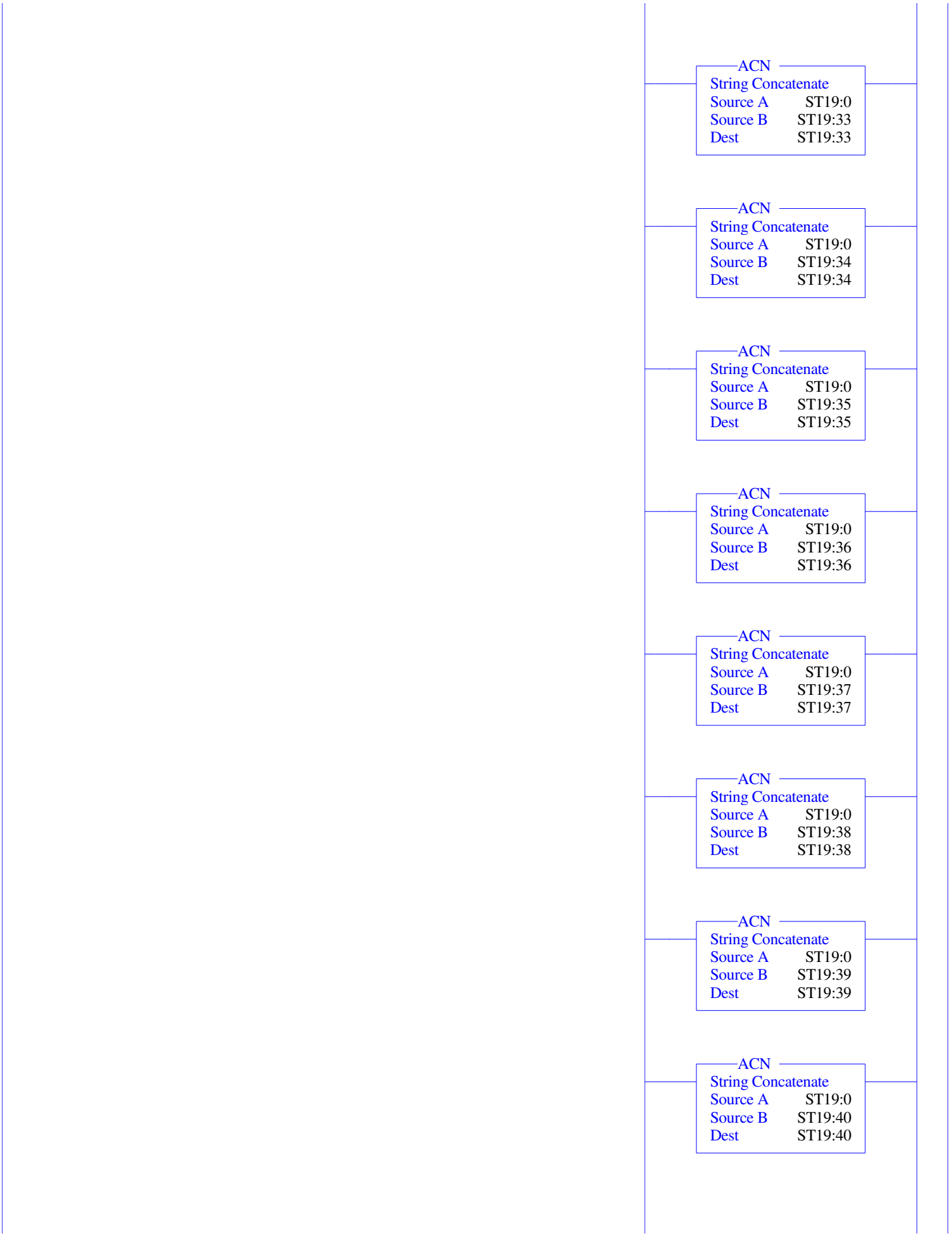
ACN
String Concatenate
Source A ST19:0
Source B ST19:7
Dest ST19:7

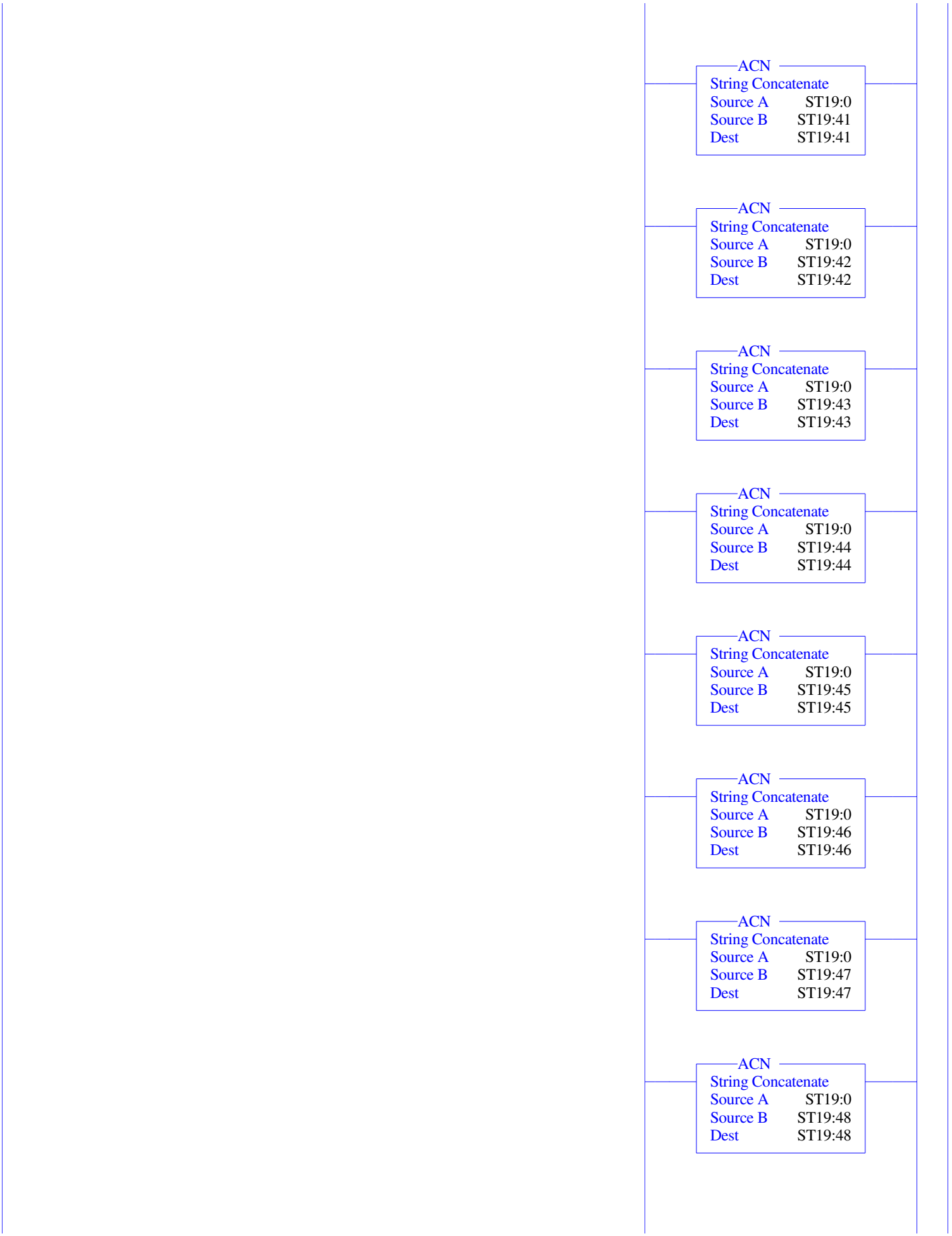
ACN
String Concatenate
Source A ST19:0
Source B ST19:8
Dest ST19:8

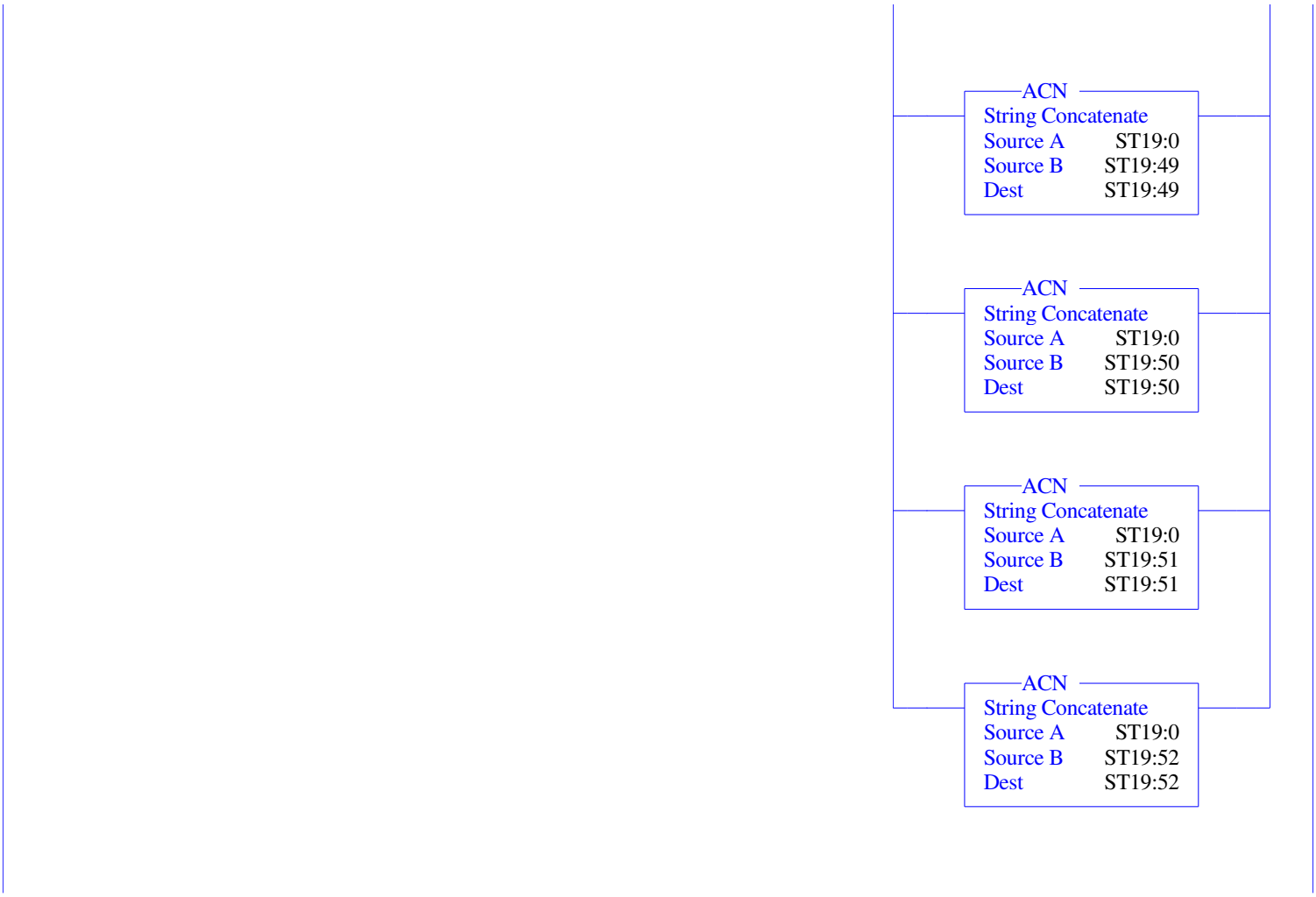

ACN
String Concatenate
Source A ST19:0
Source B ST19:9
Dest ST19:9
ACN
String Concatenate
Source A ST19:0
Source B ST19:10
Dest ST19:10
ACN
String Concatenate
Source A ST19:0
Source B ST19:11
Dest ST19:11
ACN
String Concatenate
Source A ST19:0
Source B ST19:12
Dest ST19:12
ACN
String Concatenate
Source A ST19:0
Source B ST19:13
Dest ST19:13
ACN
String Concatenate
Source A ST19:0
Source B ST19:14
Dest ST19:14
ACN
String Concatenate
Source A ST19:0
Source B ST19:15
Dest ST19:15
ACN
String Concatenate
Source A ST19:0
Source B ST19:16
Dest ST19:16


ACN
String Concatenate
Source A ST19:0
Source B ST19:17
Dest ST19:17
ACN
String Concatenate
Source A ST19:0
Source B ST19:18
Dest ST19:18
ACN
String Concatenate
Source A ST19:0
Source B ST19:19
Dest ST19:19
ACN
String Concatenate
Source A ST19:0
Source B ST19:20
Dest ST19:20
ACN
String Concatenate
Source A ST19:0
Source B ST19:21
Dest ST19:21
ACN
String Concatenate
Source A ST19:0
Source B ST19:22
Dest ST19:22
ACN
String Concatenate
Source A ST19:0
Source B ST19:23
Dest ST19:23
ACN
String Concatenate
Source A ST19:0
Source B ST19:24
Dest ST19:24


ACN
String Concatenate
Source A ST19:0
Source B ST19:25
Dest ST19:25
ACN
String Concatenate
Source A ST19:0
Source B ST19:26
Dest ST19:26
ACN
String Concatenate
Source A ST19:0
Source B ST19:27
Dest ST19:27
ACN
String Concatenate
Source A ST19:0
Source B ST19:28
Dest ST19:28
ACN
String Concatenate
Source A ST19:0
Source B ST19:29
Dest ST19:29
ACN
String Concatenate
Source A ST19:0
Source B ST19:30
Dest ST19:30
ACN
String Concatenate
Source A ST19:0
Source B ST19:31
Dest ST19:31
ACN
String Concatenate
Source A ST19:0
Source B ST19:32
Dest ST19:32


ACN
String Concatenate
Source A ST19:0
Source B ST19:33
Dest ST19:33
ACN
String Concatenate
Source A ST19:0
Source B ST19:34
Dest ST19:34
ACN
String Concatenate
Source A ST19:0
Source B ST19:35
Dest ST19:35
ACN
String Concatenate
Source A ST19:0
Source B ST19:36
Dest ST19:36
ACN
String Concatenate
Source A ST19:0
Source B ST19:37
Dest ST19:37
ACN
String Concatenate
Source A ST19:0
Source B ST19:38
Dest ST19:38
ACN
String Concatenate
Source A ST19:0
Source B ST19:39
Dest ST19:39
ACN
String Concatenate
Source A ST19:0
Source B ST19:40
Dest ST19:40


ACN
String Concatenate
Source A ST19:0
Source B ST19:41
Dest ST19:41
ACN
String Concatenate
Source A ST19:0
Source B ST19:42
Dest ST19:42
ACN
String Concatenate
Source A ST19:0
Source B ST19:43
Dest ST19:43
ACN
String Concatenate
Source A ST19:0
Source B ST19:44
Dest ST19:44
ACN
String Concatenate
Source A ST19:0
Source B ST19:45
Dest ST19:45
ACN
String Concatenate
Source A ST19:0
Source B ST19:46
Dest ST19:46
ACN
String Concatenate
Source A ST19:0
Source B ST19:47
Dest ST19:47
ACN
String Concatenate
Source A ST19:0
Source B ST19:48
Dest ST19:48


ACN
String Concatenate
Source A ST19:0
Source B ST19:49
Dest ST19:49
ACN
String Concatenate
Source A ST19:0
Source B ST19:50
Dest ST19:50
ACN
String Concatenate
Source A ST19:0
Source B ST19:51
Dest ST19:51
ACN
String Concatenate
Source A ST19:0
Source B ST19:52
Dest ST19:52

0002

MOV
Move
Source ST19:1.DATA[0]
\00^D<
Dest N7:23
54<

MOV
Move
Source ST19:2.DATA[0]
\00S<
Dest N7:24
105<

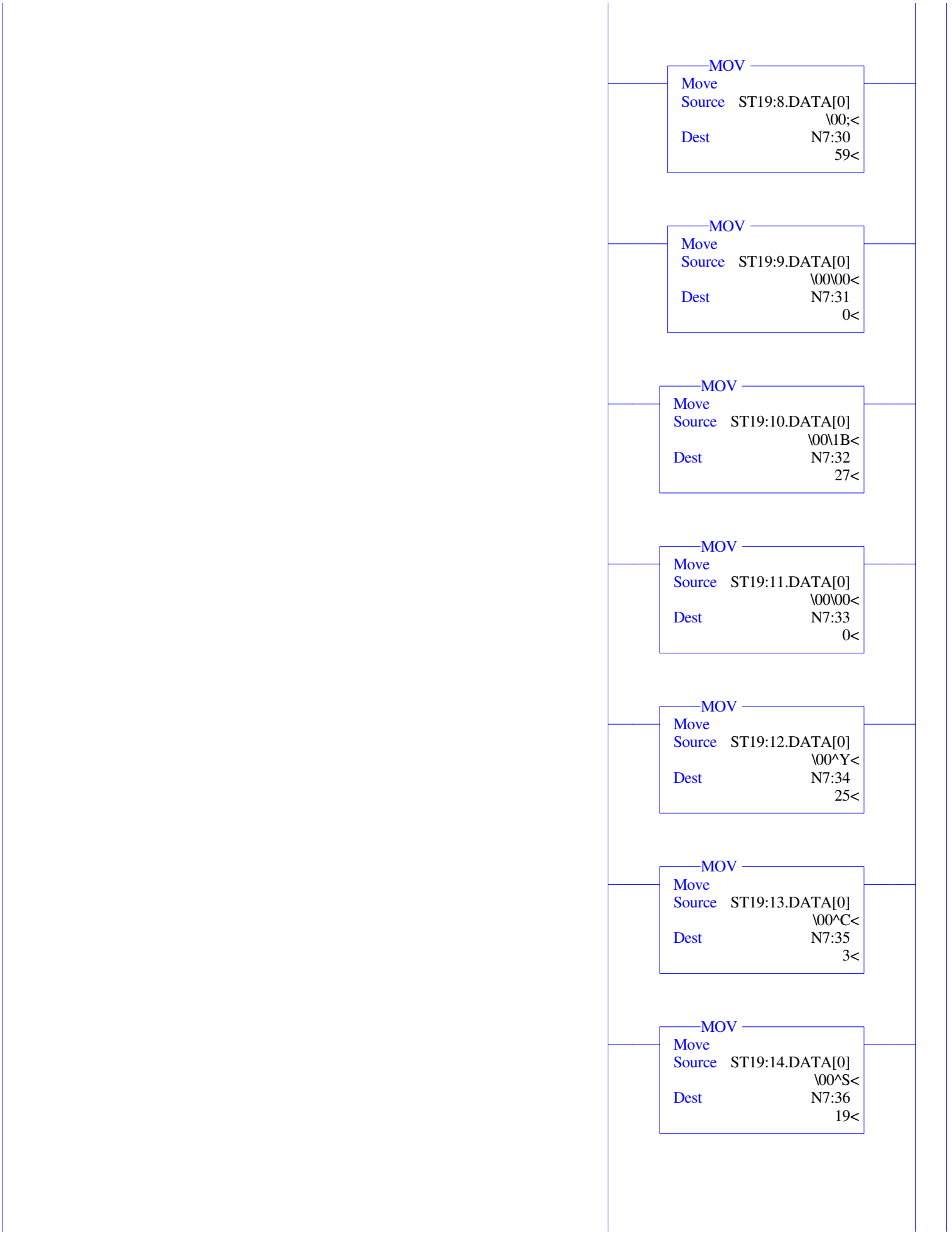
MOV
Move
Source ST19:3.DATA[0]
\00U<
Dest N7:25
5<

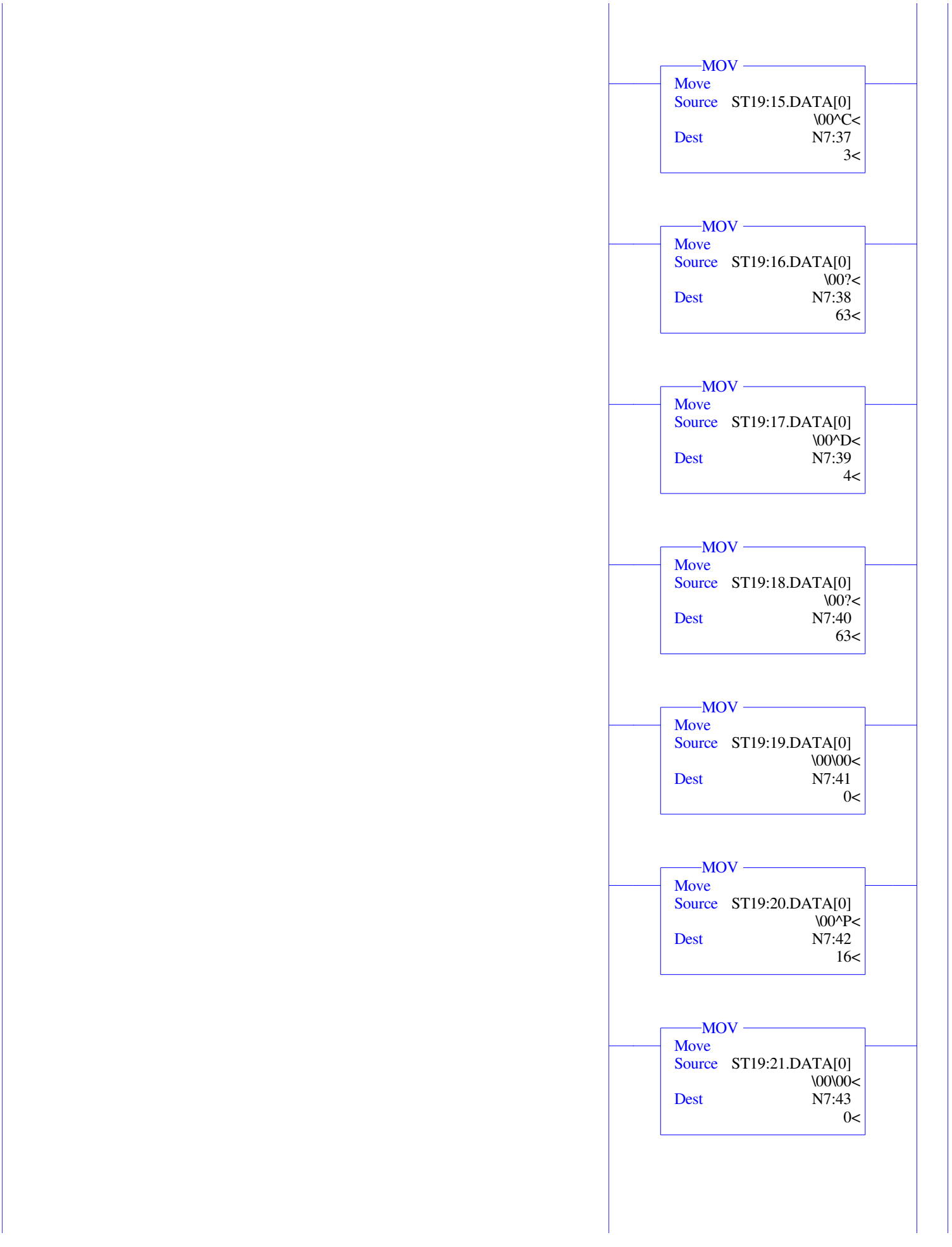
MOV
Move
Source ST19:4.DATA[0]
U^R<
Dest N7:26
18<

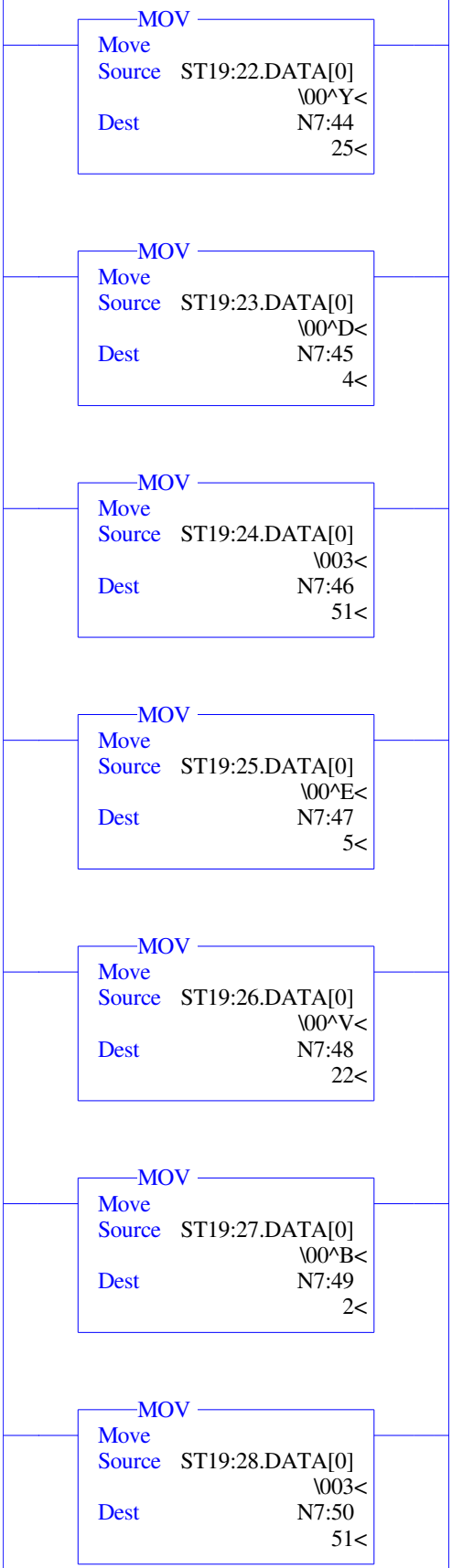
MOV
Move
Source ST19:5.DATA[0]
\00^E<
Dest N7:27
5<

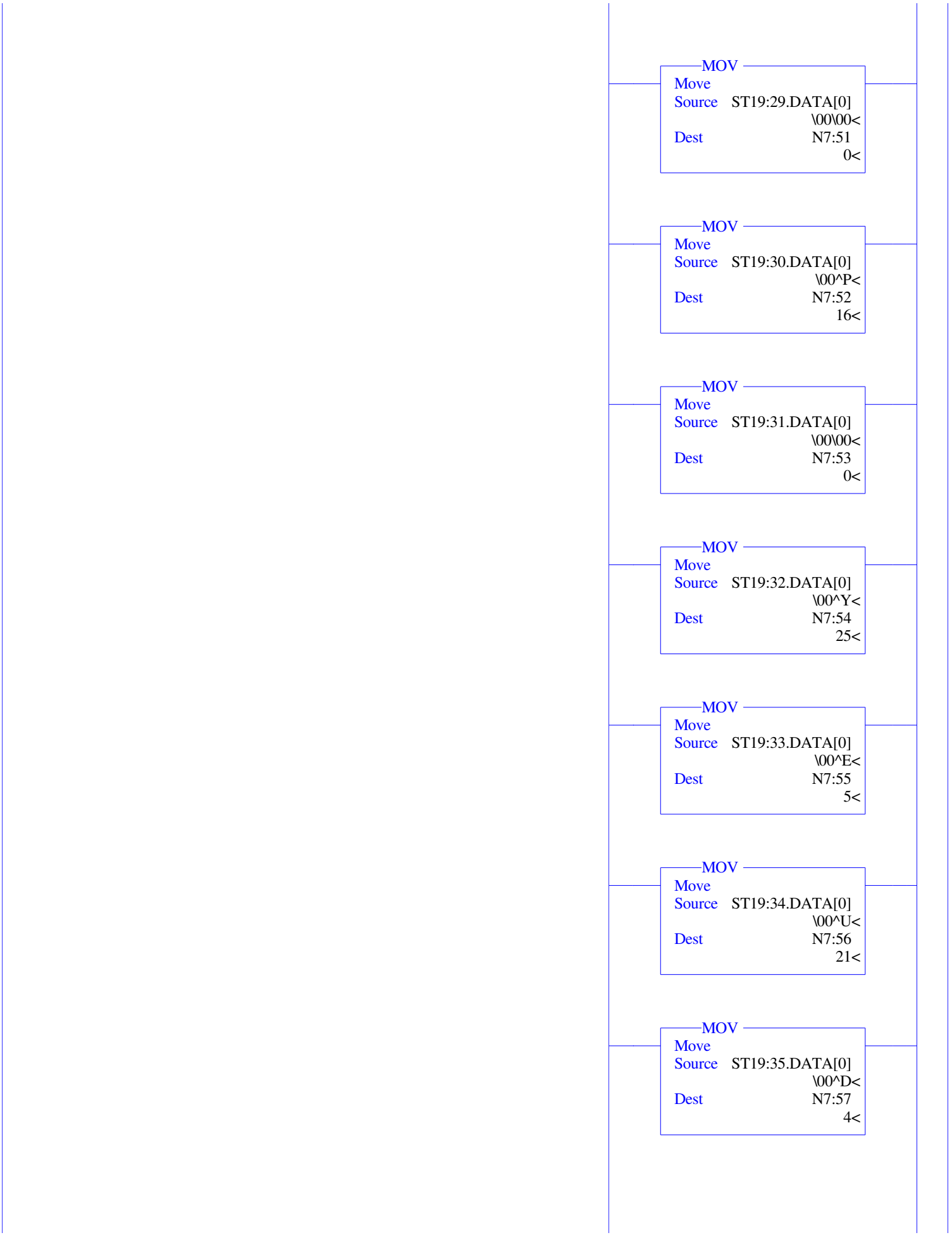
MOV
Move
Source ST19:6.DATA[0]
\00^A<
Dest N7:28
1<

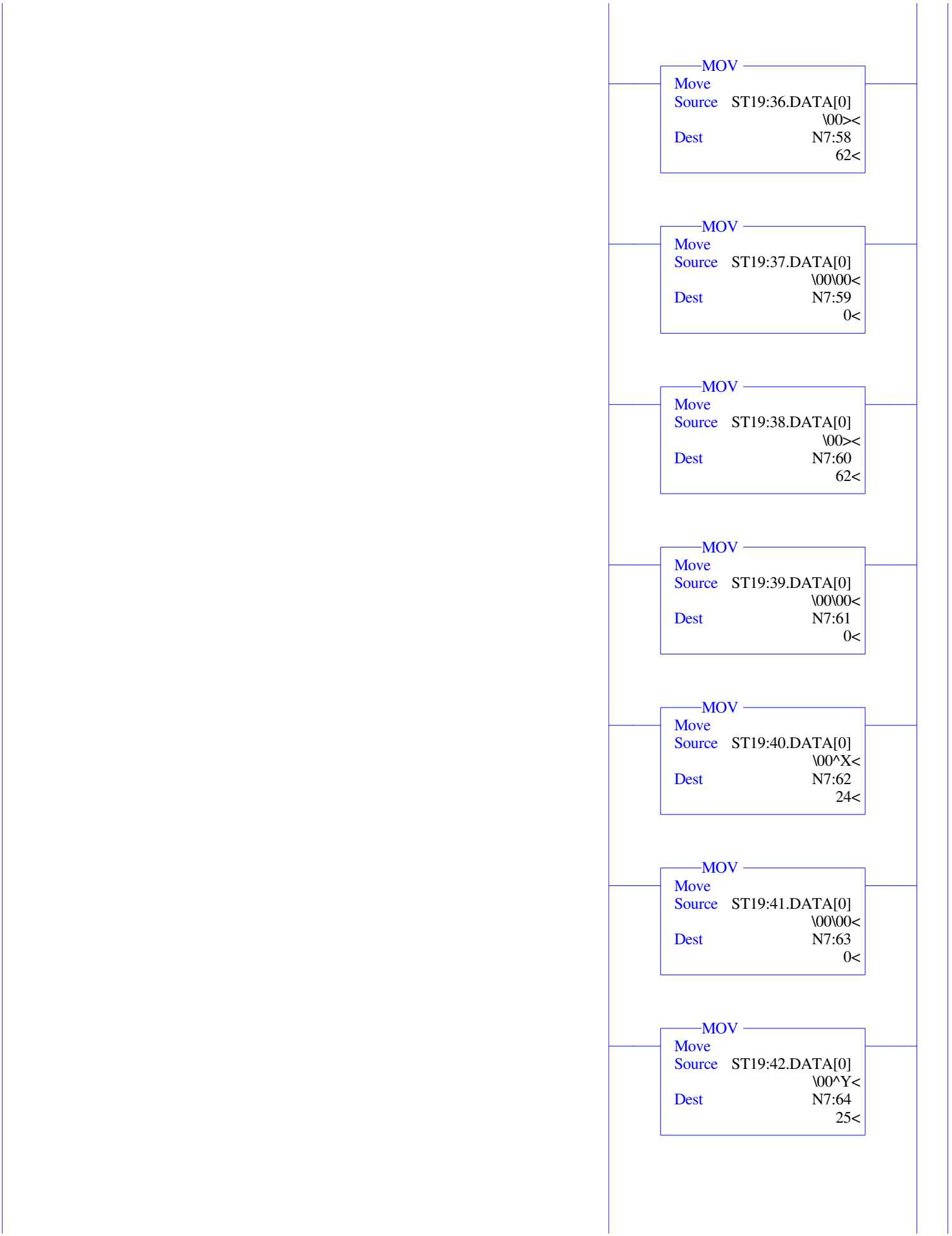
MOV
Move
Source ST19:7.DATA[0]
\00\00<
Dest N7:29
0<

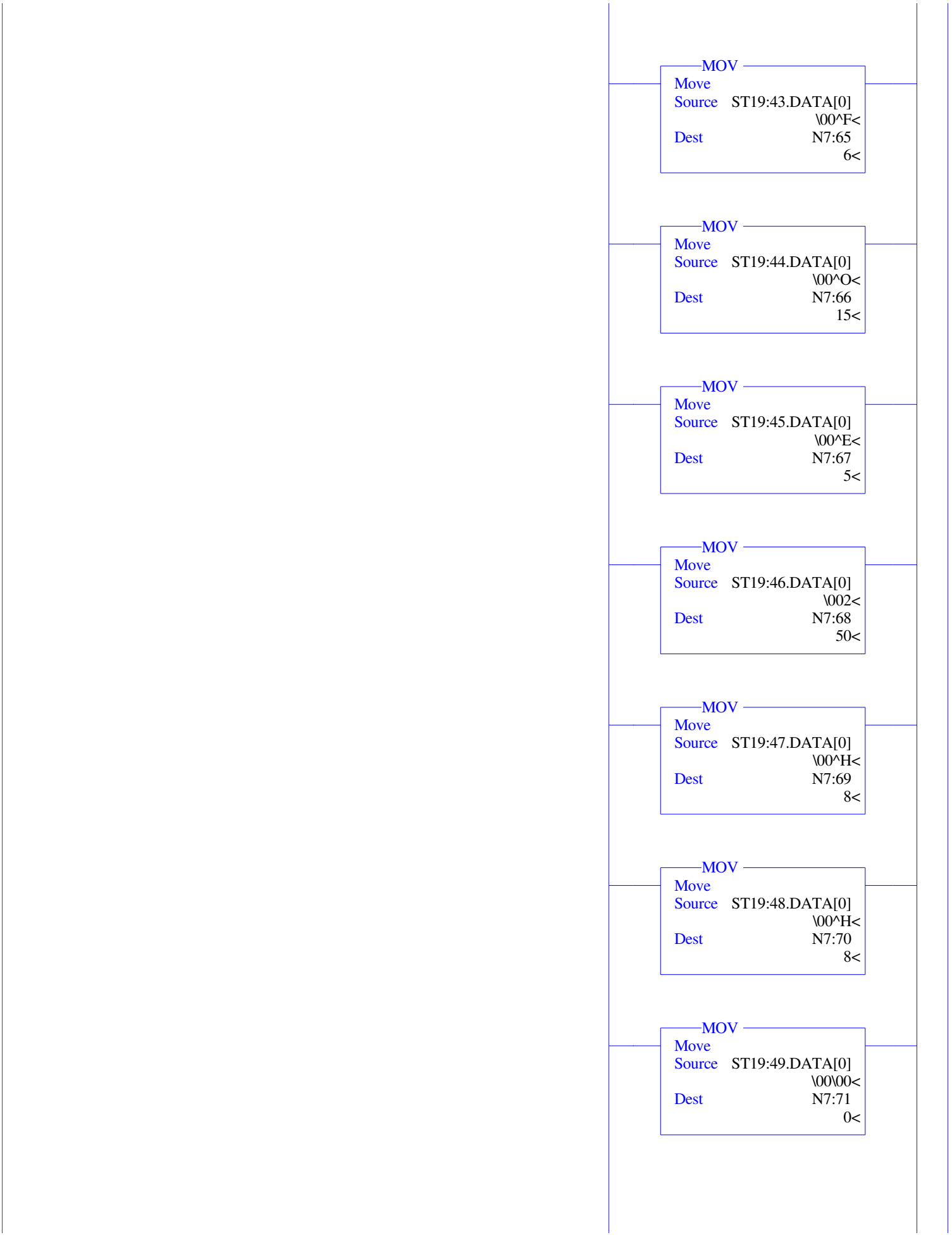

MOV
Move
Source ST19:8.DATA[0]
\00;<
Dest N7:30
59<
MOV
Move
Source ST19:9.DATA[0]
\00\00<
Dest N7:31
0<
MOV
Move
Source ST19:10.DATA[0]
\00\1B<
Dest N7:32
27<
MOV
Move
Source ST19:11.DATA[0]
\00\00<
Dest N7:33
0<
MOV
Move
Source ST19:12.DATA[0]
\00^Y<
Dest N7:34
25<
MOV
Move
Source ST19:13.DATA[0]
\00^C<
Dest N7:35
3<
MOV
Move
Source ST19:14.DATA[0]
\00^S<
Dest N7:36
19<

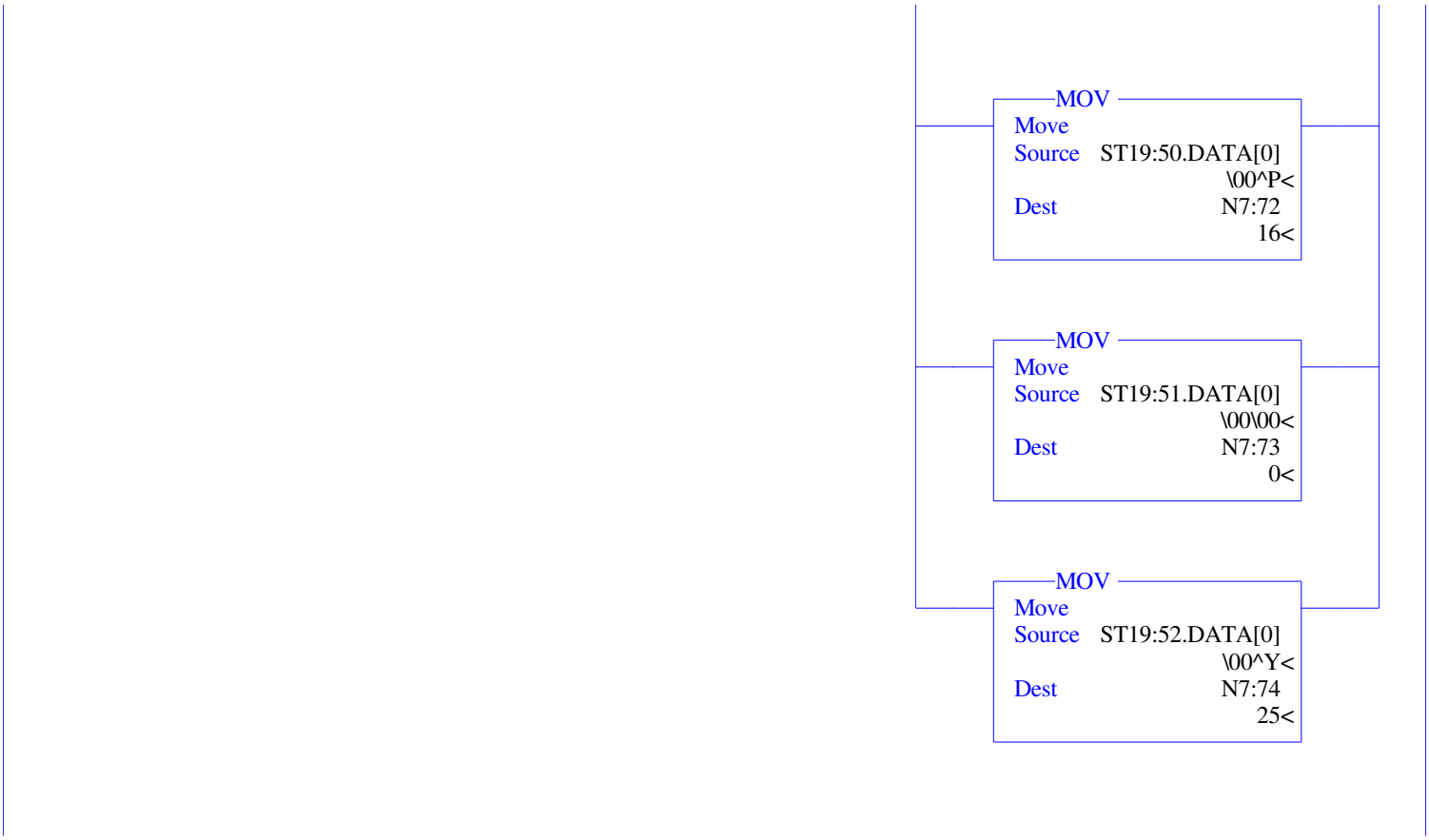

MOV
Move
Source ST19:15.DATA[0]
\00^C<
Dest N7:37
3<
MOV
Move
Source ST19:16.DATA[0]
\00?<
Dest N7:38
63<
MOV
Move
Source ST19:17.DATA[0]
\00^D<
Dest N7:39
4<
MOV
Move
Source ST19:18.DATA[0]
\00?<
Dest N7:40
63<
MOV
Move
Source ST19:19.DATA[0]
\00\00<
Dest N7:41
0<
MOV
Move
Source ST19:20.DATA[0]
\00^P<
Dest N7:42
16<
MOV
Move
Source ST19:21.DATA[0]
\00\00<
Dest N7:43
0<


MOV
Move
Source ST19:22.DATA[0]
\00^Y<
Dest N7:44
25<
MOV
Move
Source ST19:23.DATA[0]
\00^D<
Dest N7:45
4<
MOV
Move
Source ST19:24.DATA[0]
\003<
Dest N7:46
51<
MOV
Move
Source ST19:25.DATA[0]
\00^E<
Dest N7:47
5<
MOV
Move
Source ST19:26.DATA[0]
\00^V<
Dest N7:48
22<
MOV
Move
Source ST19:27.DATA[0]
\00^B<
Dest N7:49
2<
MOV
Move
Source ST19:28.DATA[0]
\003<
Dest N7:50
51<

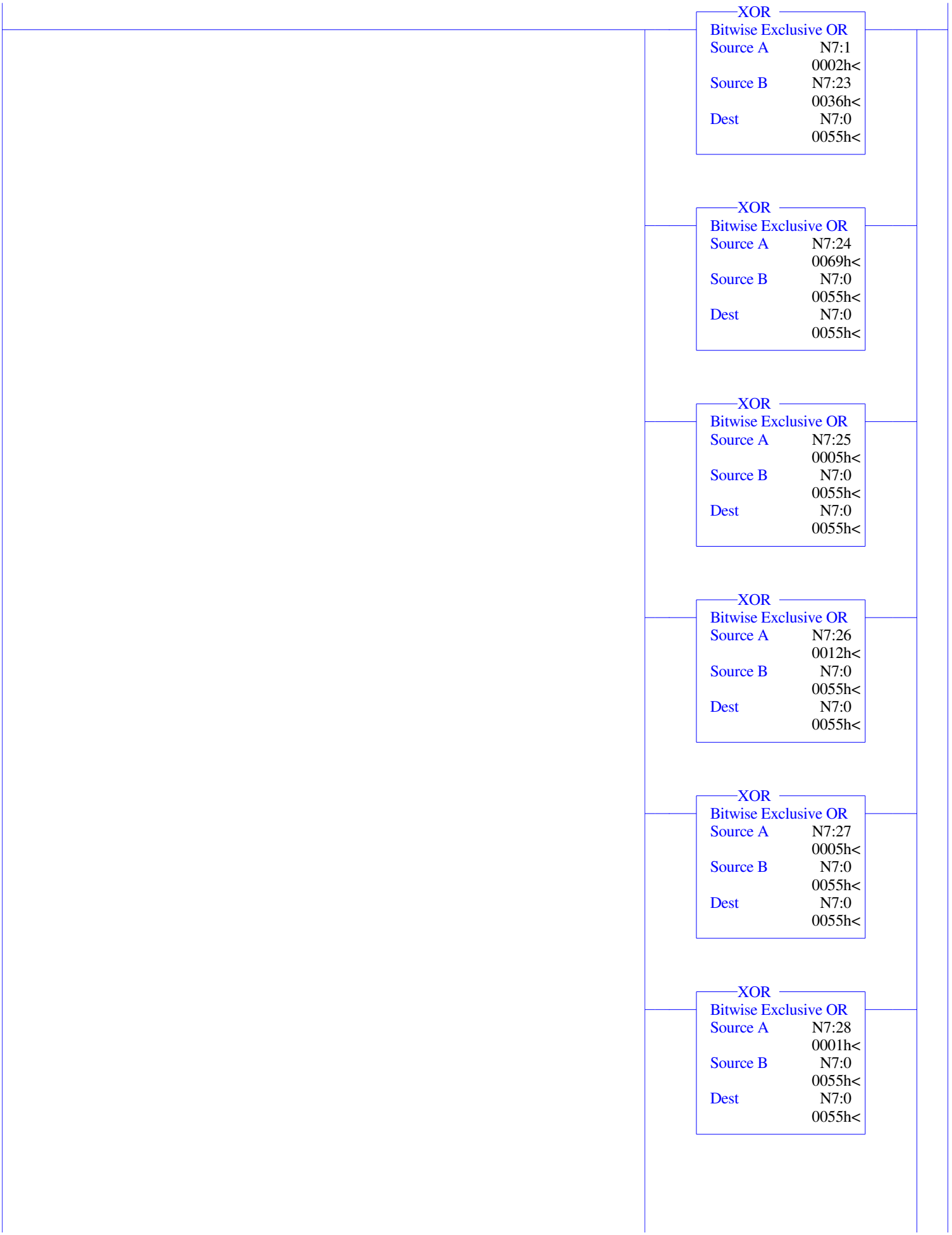

MOV
Move
Source ST19:29.DATA[0]
\00\00<
Dest N7:51
0<
MOV
Move
Source ST19:30.DATA[0]
\00^P<
Dest N7:52
16<
MOV
Move
Source ST19:31.DATA[0]
\00\00<
Dest N7:53
0<
MOV
Move
Source ST19:32.DATA[0]
\00^Y<
Dest N7:54
25<
MOV
Move
Source ST19:33.DATA[0]
\00^E<
Dest N7:55
5<
MOV
Move
Source ST19:34.DATA[0]
\00^U<
Dest N7:56
21<
MOV
Move
Source ST19:35.DATA[0]
\00^D<
Dest N7:57
4<

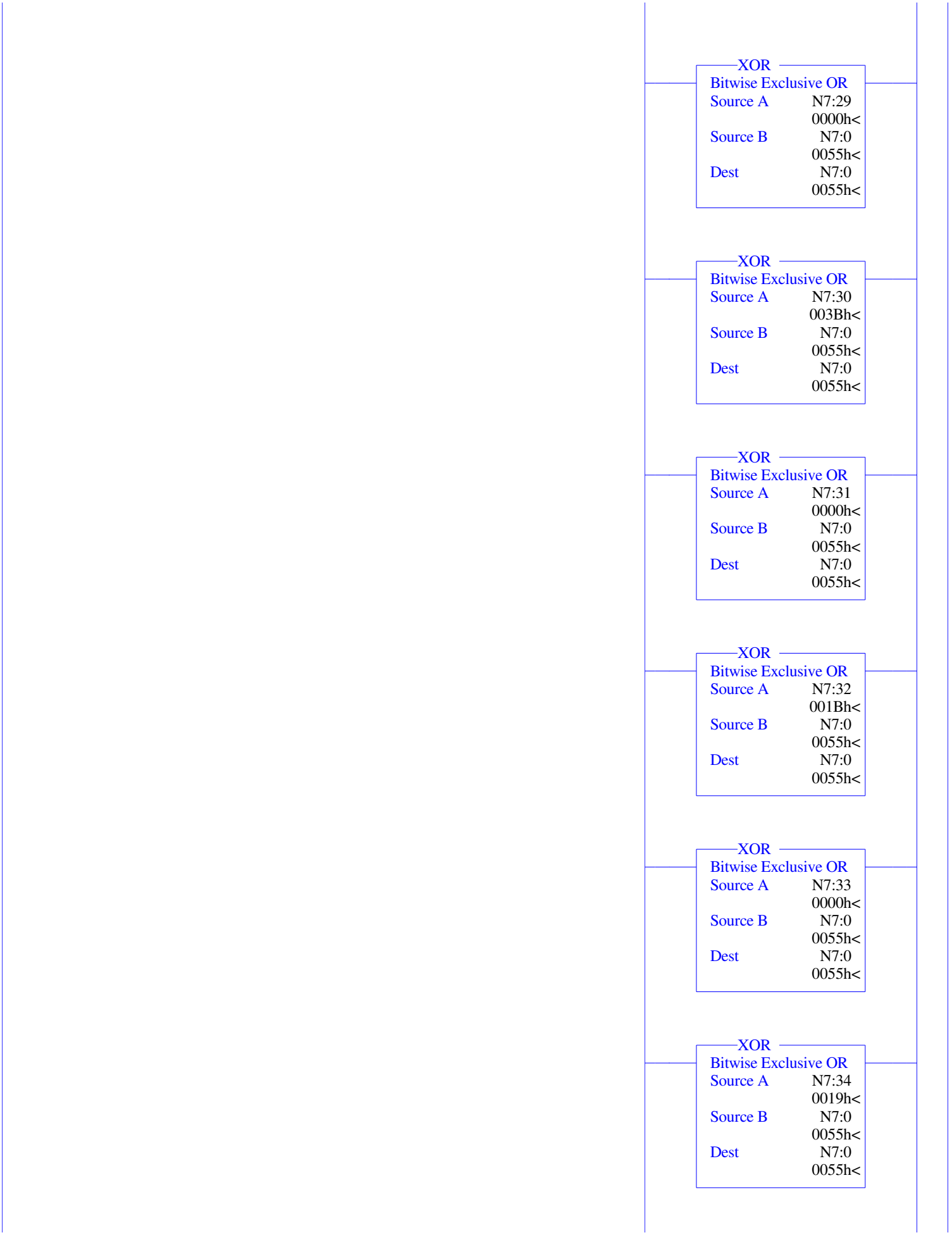

MOV
Move
Source ST19:36.DATA[0]
\00><
Dest N7:58
62<
MOV
Move
Source ST19:37.DATA[0]
\00\00<
Dest N7:59
0<
MOV
Move
Source ST19:38.DATA[0]
\00><
Dest N7:60
62<
MOV
Move
Source ST19:39.DATA[0]
\00\00<
Dest N7:61
0<
MOV
Move
Source ST19:40.DATA[0]
\00^X<
Dest N7:62
24<
MOV
Move
Source ST19:41.DATA[0]
\00\00<
Dest N7:63
0<
MOV
Move
Source ST19:42.DATA[0]
\00^Y<
Dest N7:64
25<

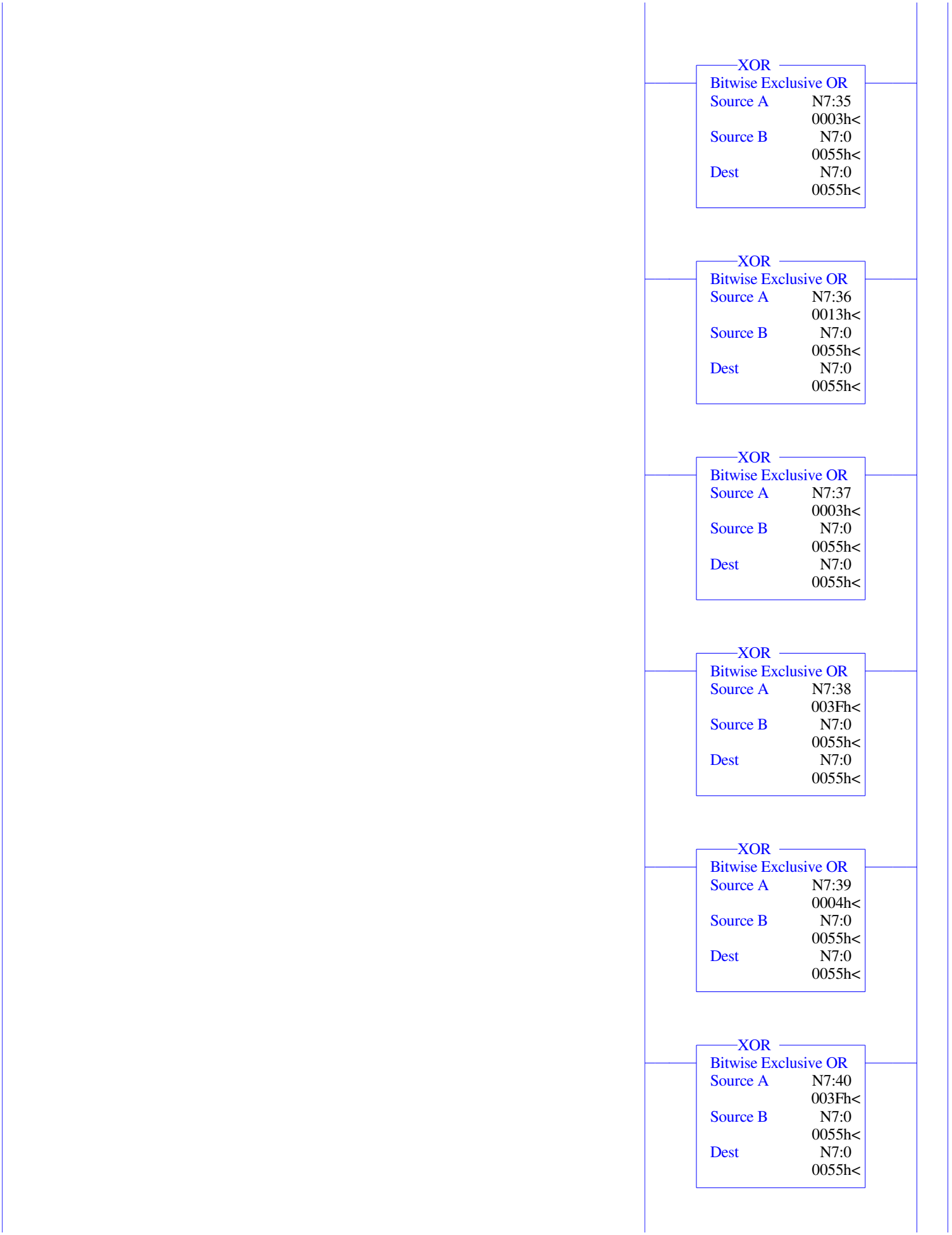

MOV
Move
Source ST19:43.DATA[0]
\00^F<
Dest N7:65
6<
MOV
Move
Source ST19:44.DATA[0]
\00^O<
Dest N7:66
15<
MOV
Move
Source ST19:45.DATA[0]
\00^E<
Dest N7:67
5<
MOV
Move
Source ST19:46.DATA[0]
\002<
Dest N7:68
50<
MOV
Move
Source ST19:47.DATA[0]
\00^H<
Dest N7:69
8<
MOV
Move
Source ST19:48.DATA[0]
\00^H<
Dest N7:70
8<
MOV
Move
Source ST19:49.DATA[0]
\00\00<
Dest N7:71
0<

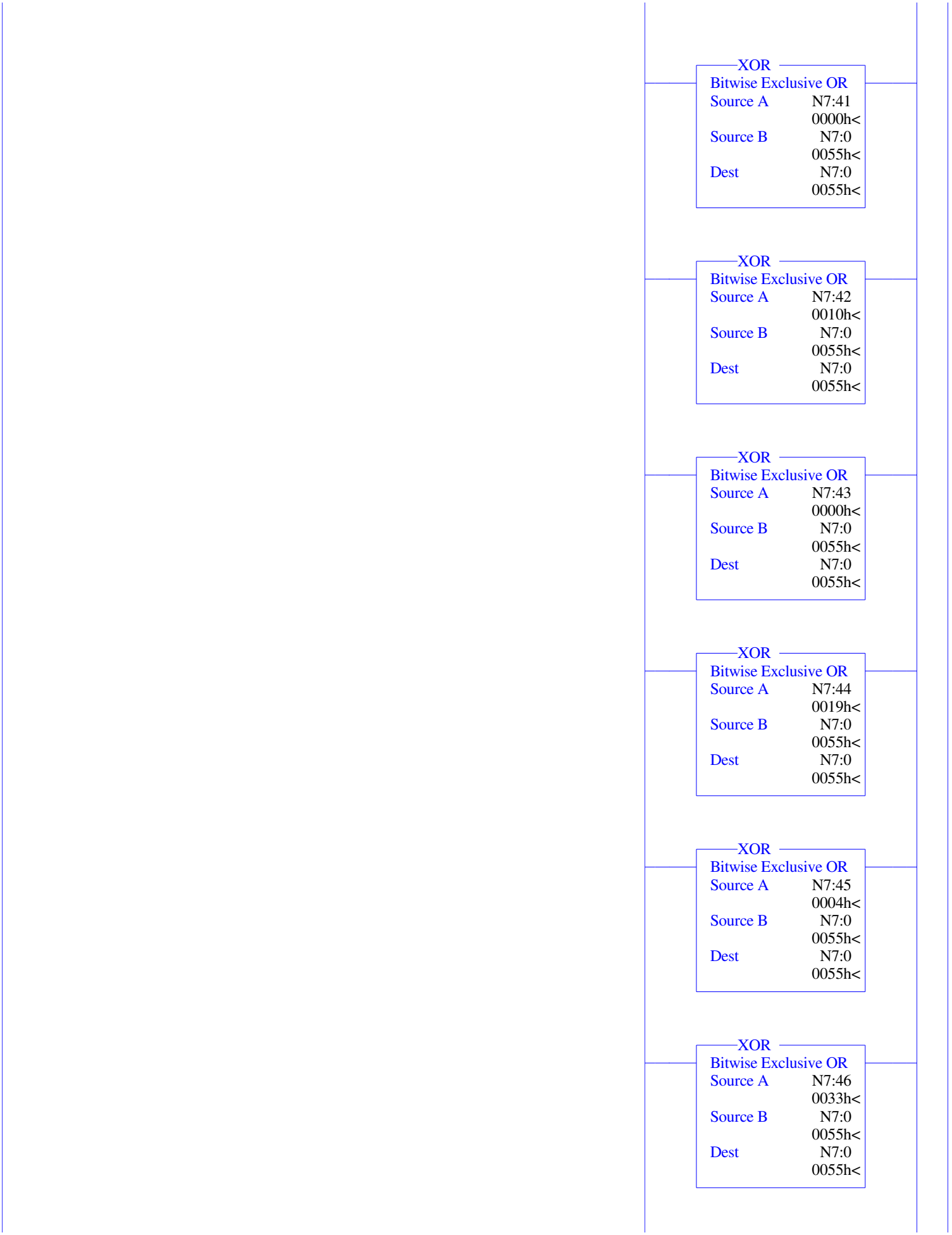

MOV
Move
Source ST19:50.DATA[0]
\00^P<
Dest N7:72
16<
MOV
Move
Source ST19:51.DATA[0]
\00\00<
Dest N7:73
0<
MOV
Move
Source ST19:52.DATA[0]
\00^Y<
Dest N7:74
25<

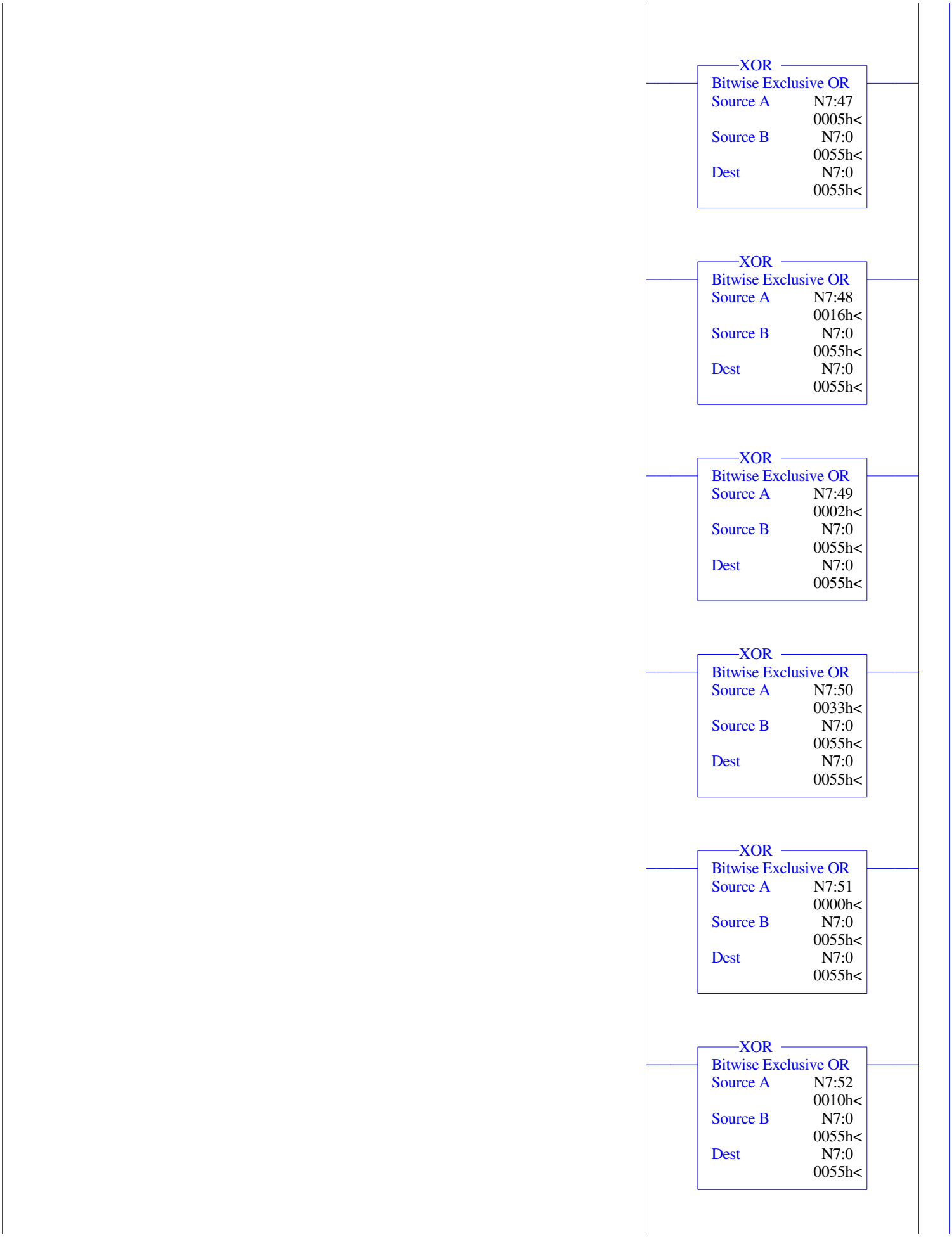
0003

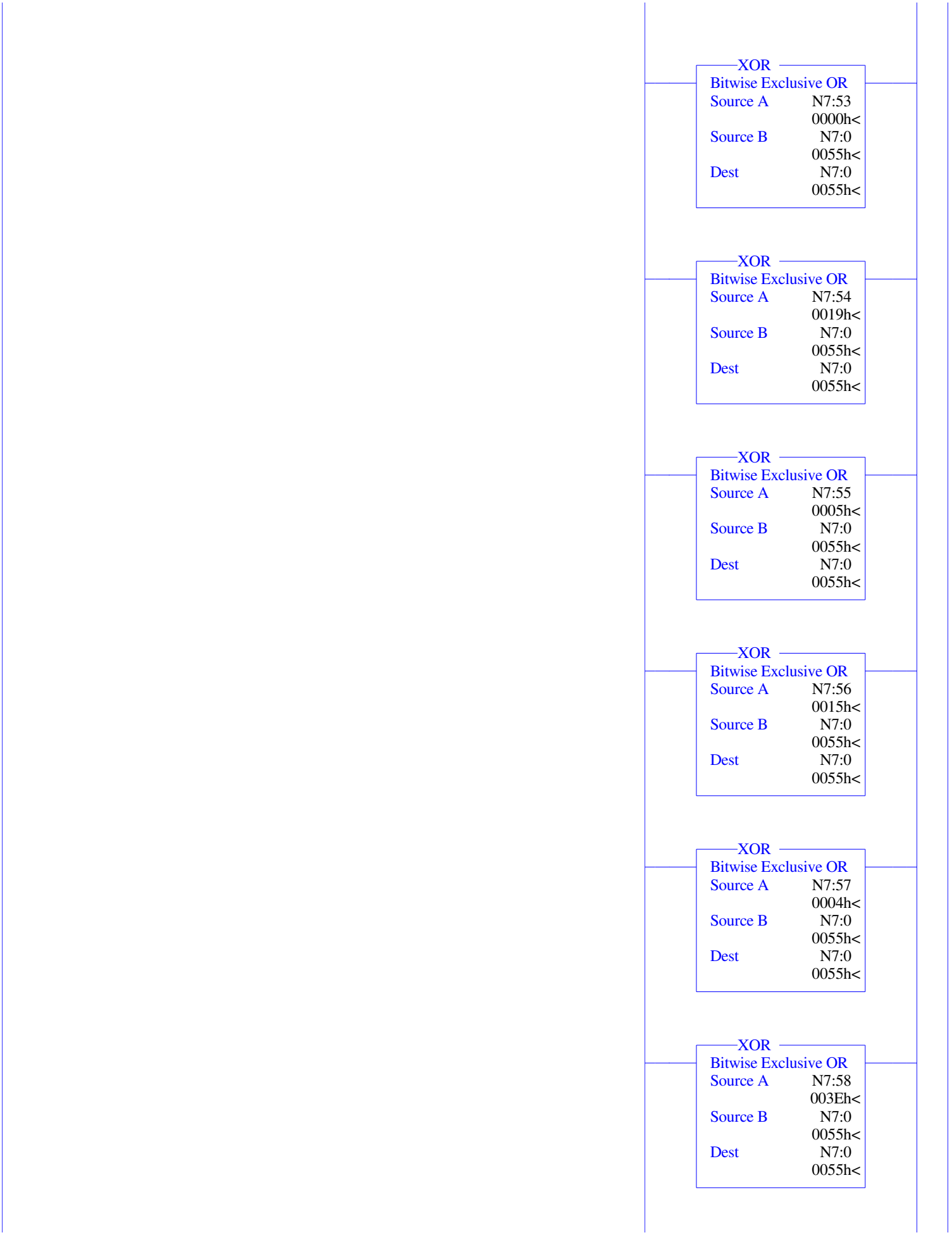

XOR
Bitwise Exclusive OR
Source A N7:1
0002h<
Source B N7:23
0036h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:24
0069h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:25
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:26
0012h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:27
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:28
0001h<
Source B N7:0
0055h<
Dest N7:0
0055h<

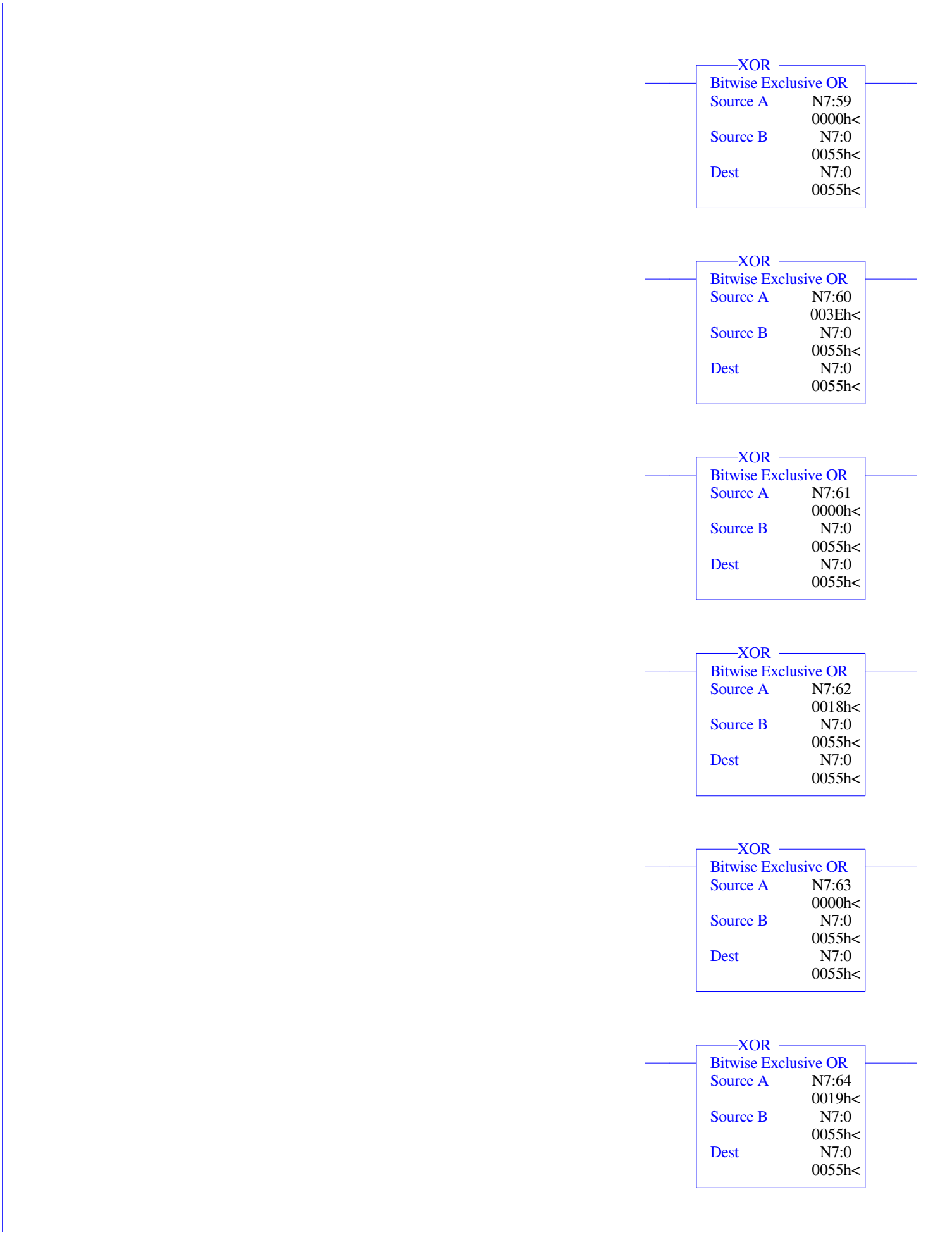

XOR
Bitwise Exclusive OR
Source A N7:29
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:30
003Bh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:31
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:32
001Bh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:33
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:34
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<

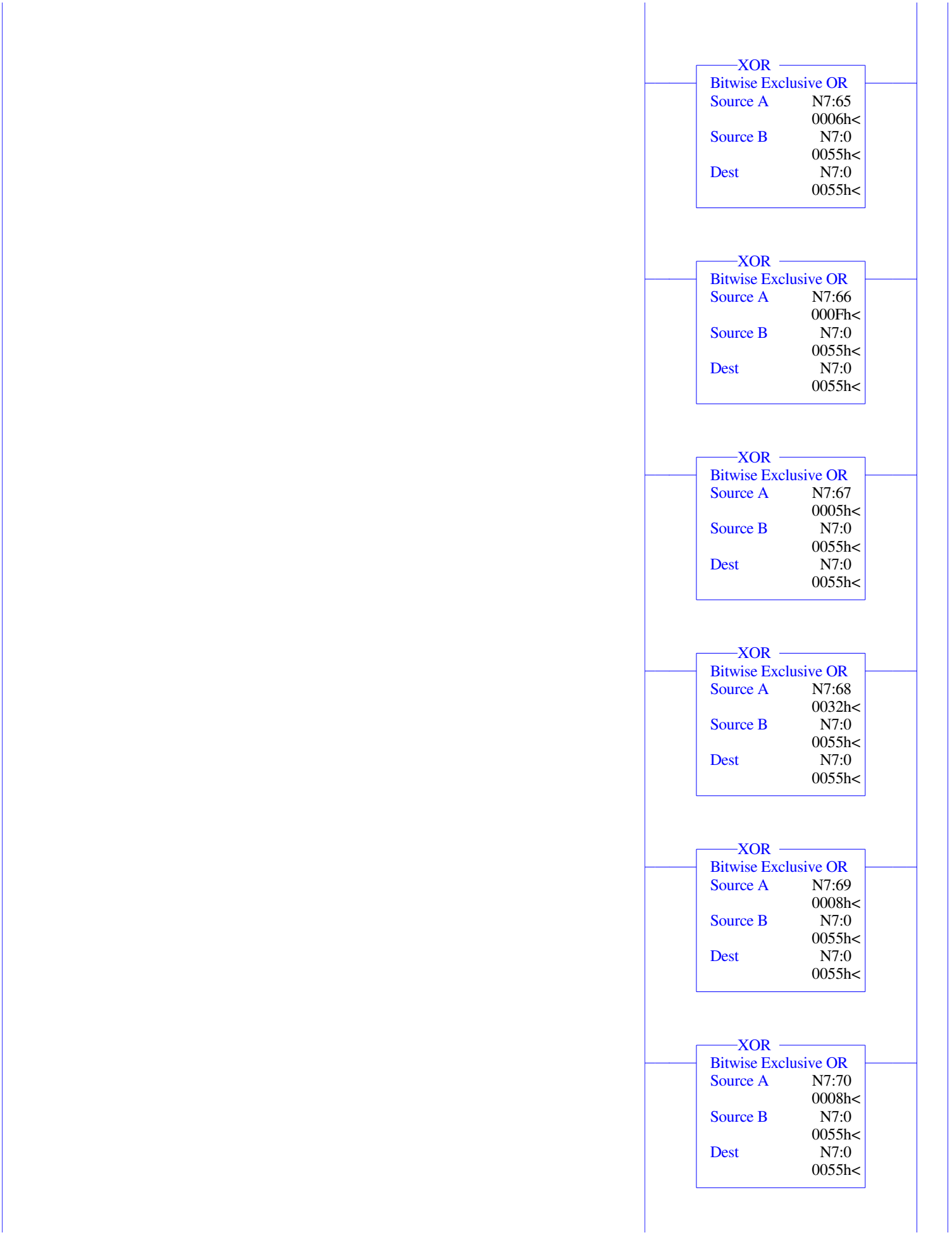

XOR
Bitwise Exclusive OR
Source A N7:35
0003h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:36
0013h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:37
0003h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:38
003Fh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:39
0004h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:40
003Fh<
Source B N7:0
0055h<
Dest N7:0
0055h<

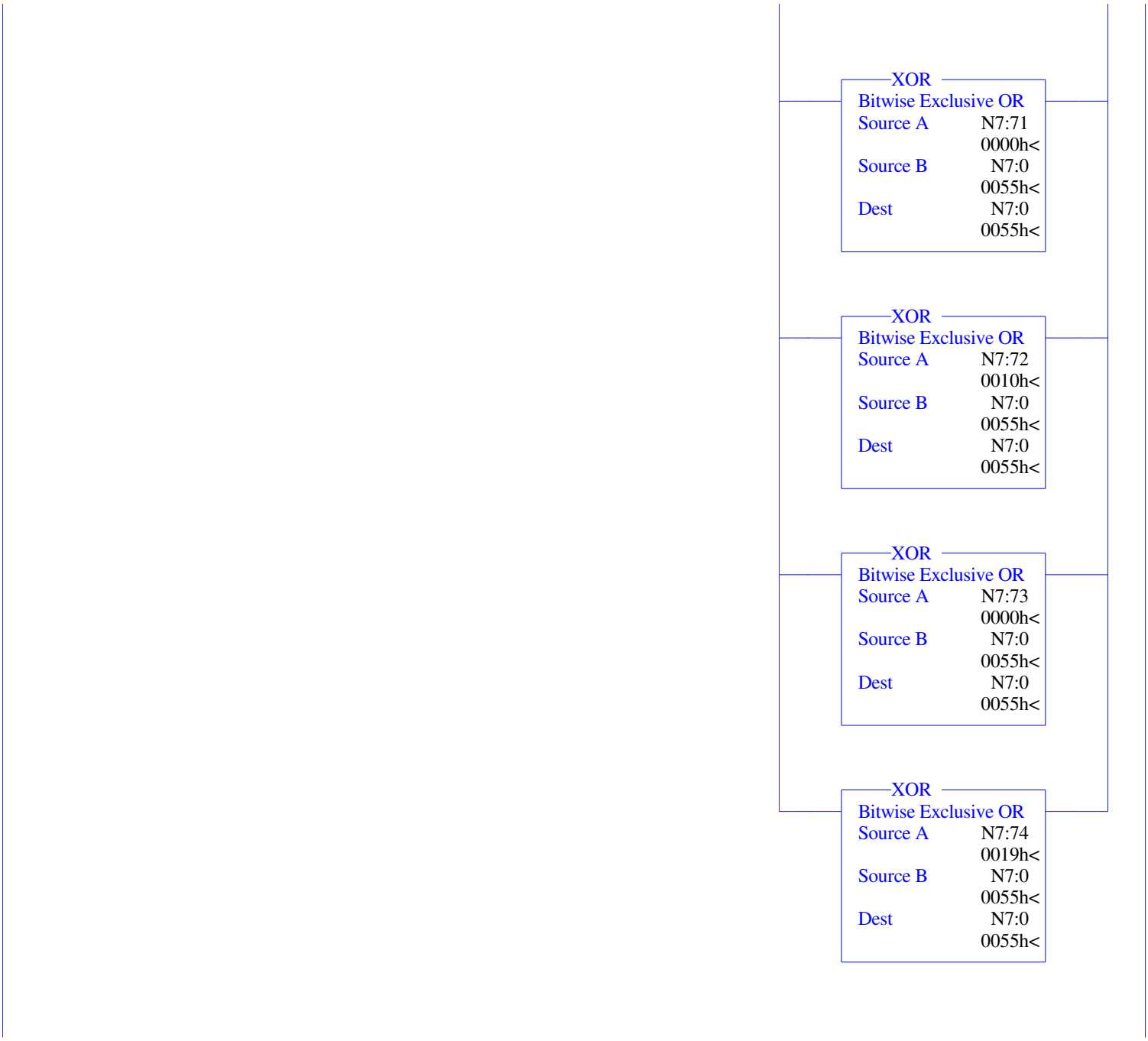

XOR
Bitwise Exclusive OR
Source A N7:41
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:42
0010h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:43
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:44
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:45
0004h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:46
0033h<
Source B N7:0
0055h<
Dest N7:0
0055h<

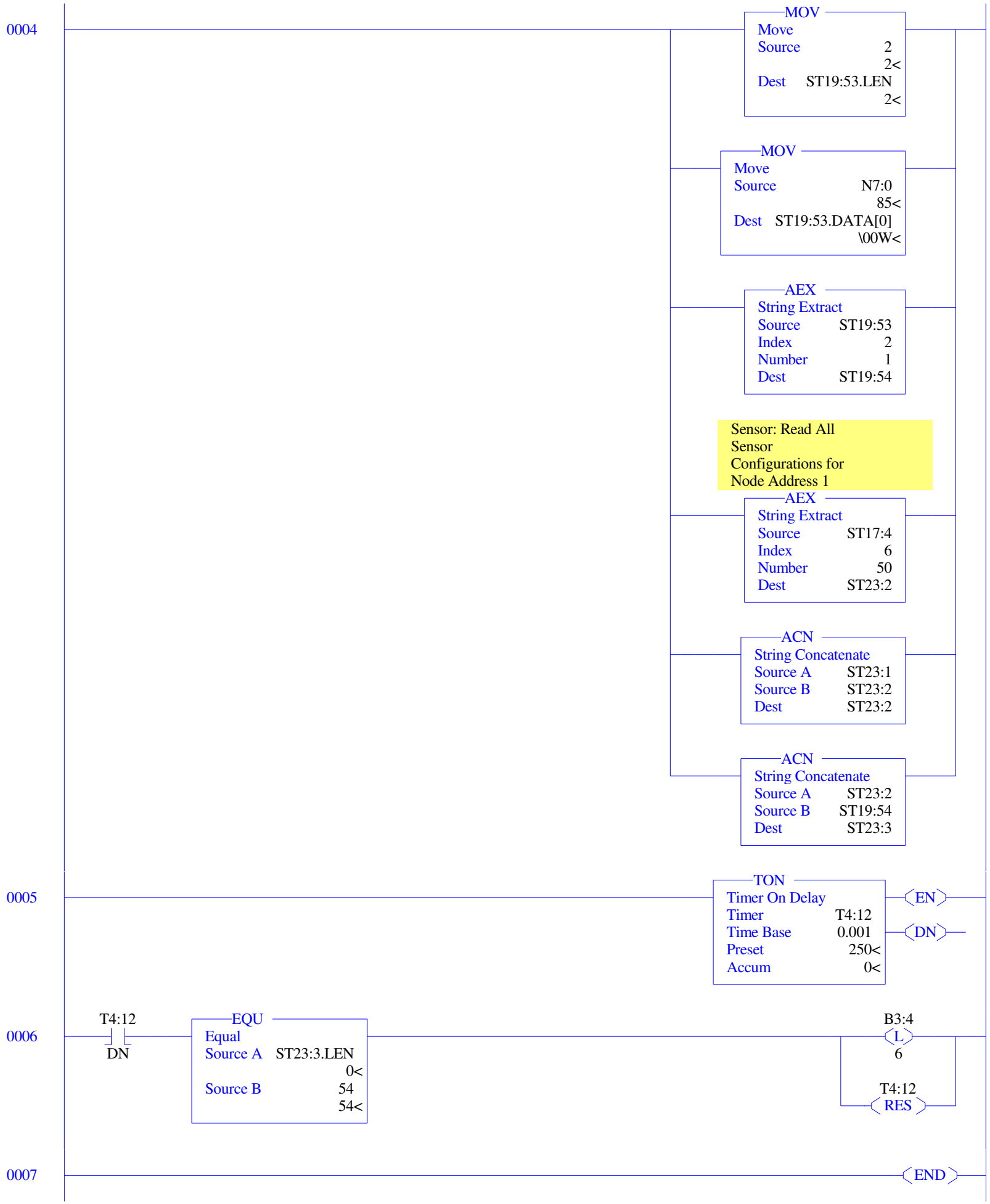

XOR
Bitwise Exclusive OR
Source A N7:47
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:48
0016h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:49
0002h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:50
0033h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:51
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:52
0010h<
Source B N7:0
0055h<
Dest N7:0
0055h<


XOR
Bitwise Exclusive OR
Source A N7:53
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:54
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:55
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:56
0015h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:57
0004h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:58
003Eh<
Source B N7:0
0055h<
Dest N7:0
0055h<


XOR
Bitwise Exclusive OR
Source A N7:59
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:60
003Eh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:61
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:62
0018h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:63
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:64
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<


XOR
Bitwise Exclusive OR
Source A N7:65
0006h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:66
000Fh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:67
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:68
0032h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:69
0008h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:70
0008h<
Source B N7:0
0055h<
Dest N7:0
0055h<


XOR
Bitwise Exclusive OR
Source A N7:71
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:72
0010h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:73
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:74
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<


0004
MOV
Move
Source 2
2<
Dest ST19:53.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:53.DATA[0]
\00W<
AEX
String Extract
Source ST19:53
Index 2
Number 1
Dest ST19:54
Sensor: Read All Sensor Configurations for Node Address 1
AEX
String Extract
Source ST17:4
Index 6
Number 50
Dest ST23:2
ACN
String Concatenate
Source A ST23:1
Source B ST23:2
Dest ST23:2
ACN
String Concatenate
Source A ST23:2
Source B ST19:54
Dest ST23:3
0005
TON
Timer On Delay
Timer T4:12
Time Base 0.001
Preset 250<
Accum 0<
EN
DN
0006
T4:12
DN
EQU
Equal
Source A ST23:3.LEN
0<
Source B 54
54<
B3:4
L
6
T4:12
RES
0007
END

0000

AEX
String Extract
Source ST23:1
Index 2
Number 1
Dest ST19:1

AEX
String Extract
Source ST23:1
Index 3
Number 1
Dest ST19:2

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 6
Number 1
Dest ST19:3

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 7
Number 1
Dest ST19:4

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 8
Number 1
Dest ST19:5

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 9
Number 1
Dest ST19:6

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 10
Number 1
Dest ST19:7

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 11
Number 1
Dest ST19:8

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 12
Number 1
Dest ST19:9

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 13
Number 1
Dest ST19:10

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 14
Number 1
Dest ST19:11

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 15
Number 1
Dest ST19:12

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 16
Number 1
Dest ST19:13

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 17
Number 1
Dest ST19:14

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 18
Number 1
Dest ST19:15

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 19
Number 1
Dest ST19:16

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 20
Number 1
Dest ST19:17

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 21
Number 1
Dest ST19:18

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 22
Number 1
Dest ST19:19

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 23
Number 1
Dest ST19:20

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 24
Number 1
Dest ST19:21

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 25
Number 1
Dest ST19:22

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 26
Number 1
Dest ST19:23

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 27
Number 1
Dest ST19:24

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 28
Number 1
Dest ST19:25

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 29
Number 1
Dest ST19:26

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 30
Number 1
Dest ST19:27

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 31
Number 1
Dest ST19:28

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 32
Number 1
Dest ST19:29

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 33
Number 1
Dest ST19:30

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 34
Number 1
Dest ST19:31

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 35
Number 1
Dest ST19:32

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 36
Number 1
Dest ST19:33

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 37
Number 1
Dest ST19:34

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 38
Number 1
Dest ST19:35

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 39
Number 1
Dest ST19:36

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 40
Number 1
Dest ST19:37

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 41
Number 1
Dest ST19:38

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 42
Number 1
Dest ST19:39

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 43
Number 1
Dest ST19:40

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 44
Number 1
Dest ST19:41

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 45
Number 1
Dest ST19:42

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 46
Number 1
Dest ST19:43

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 47
Number 1
Dest ST19:44

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 48
Number 1
Dest ST19:45

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 49
Number 1
Dest ST19:46

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 50
Number 1
Dest ST19:47

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 51
Number 1
Dest ST19:48

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 52
Number 1
Dest ST19:49

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 53
Number 1
Dest ST19:50

Sensor: Read All Sensor Configurations for Node Address 2

AEX
String Extract
Source ST17:10
Index 54
Number 1
Dest ST19:51

Sensor: Read All Sensor Configurations for Node Address 2

AEX

String Extract

Source	ST17:10
Index	55
Number	1
Dest	ST19:52

0001

ACN
String Concatenate
Source A ST19:0
Source B ST19:1
Dest ST19:1

ACN
String Concatenate
Source A ST19:0
Source B ST19:2
Dest ST19:2

ACN
String Concatenate
Source A ST19:0
Source B ST19:3
Dest ST19:3

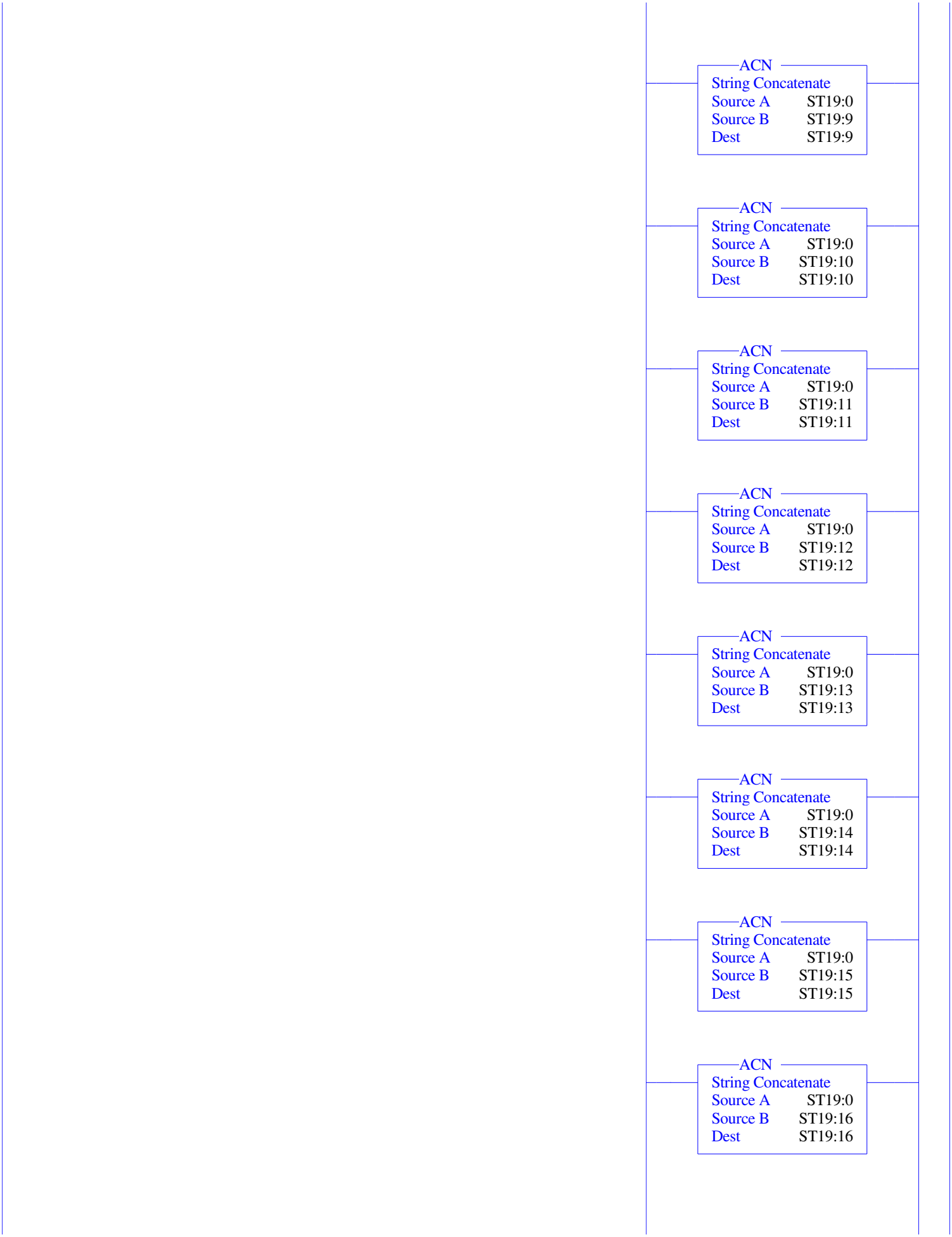
ACN
String Concatenate
Source A ST19:0
Source B ST19:4
Dest ST19:4

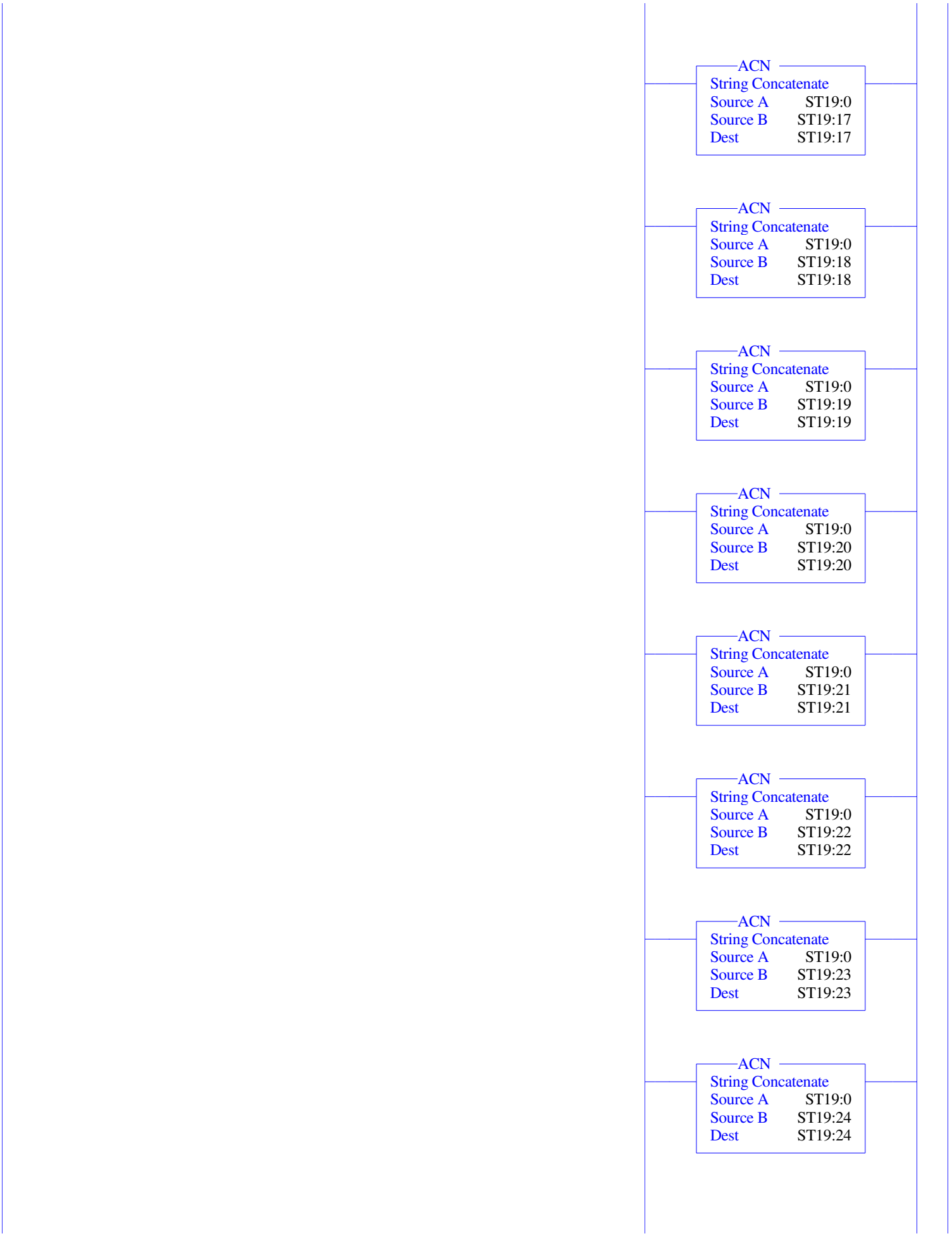
ACN
String Concatenate
Source A ST19:0
Source B ST19:5
Dest ST19:5

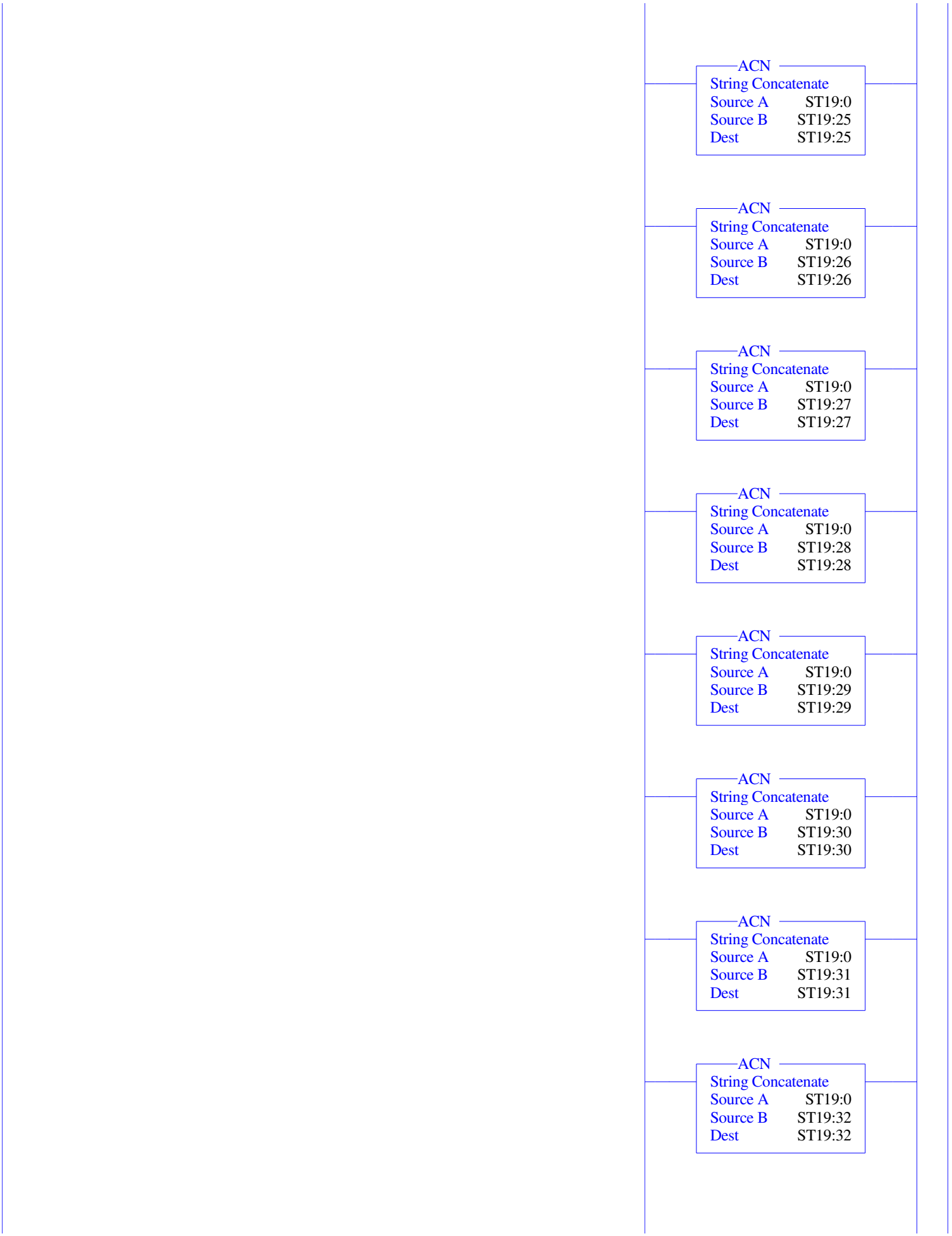
ACN
String Concatenate
Source A ST19:0
Source B ST19:6
Dest ST19:6

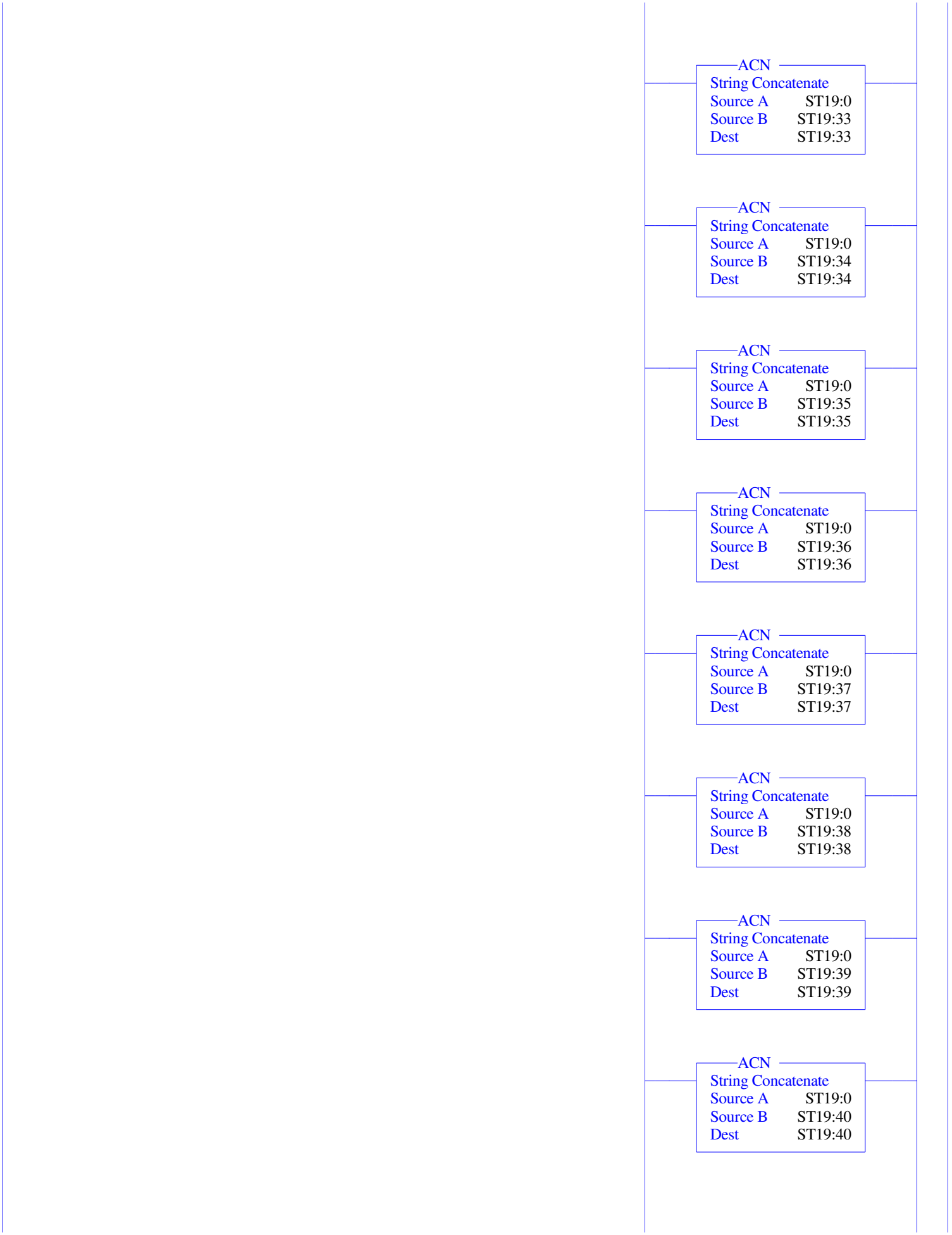
ACN
String Concatenate
Source A ST19:0
Source B ST19:7
Dest ST19:7

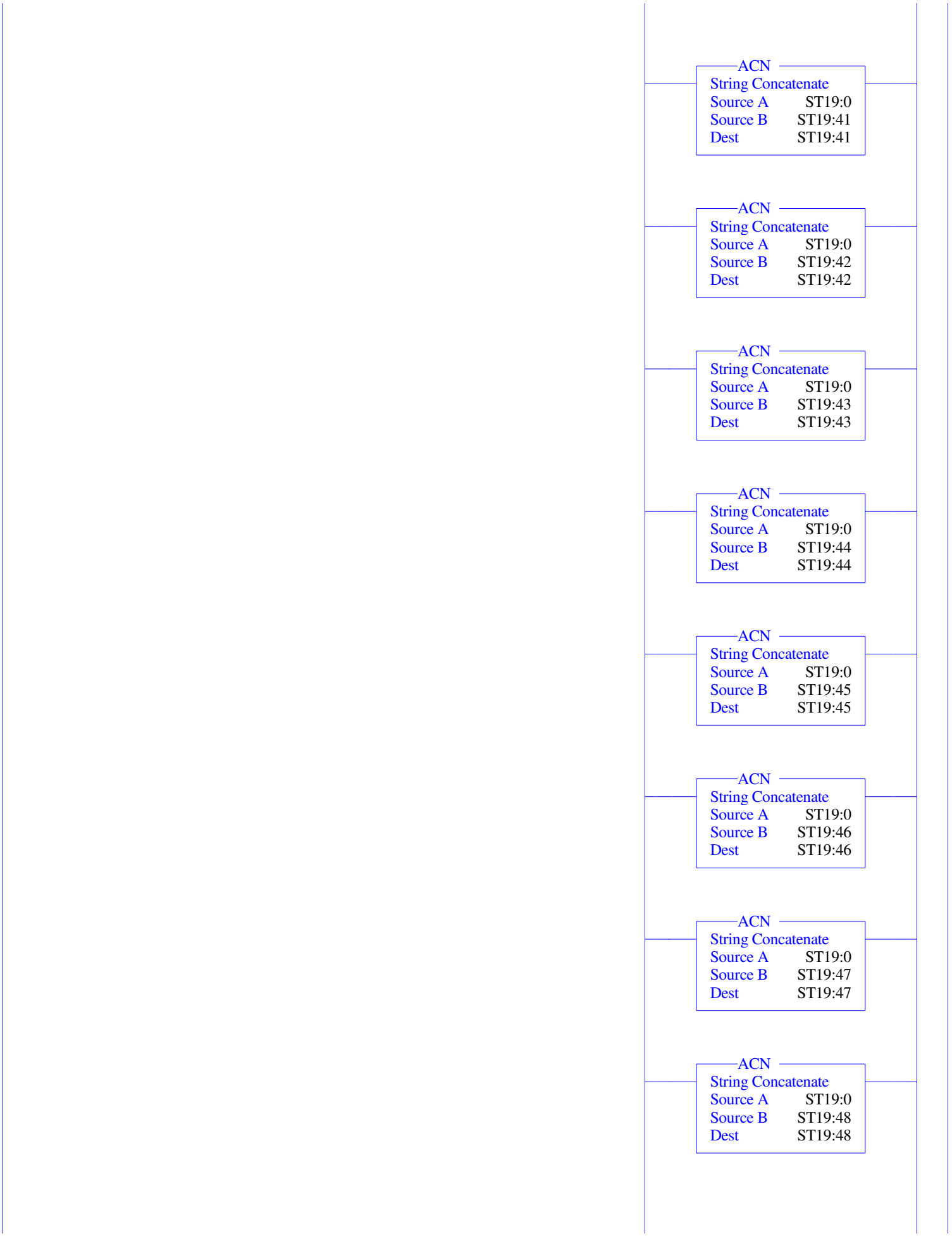
ACN
String Concatenate
Source A ST19:0
Source B ST19:8
Dest ST19:8

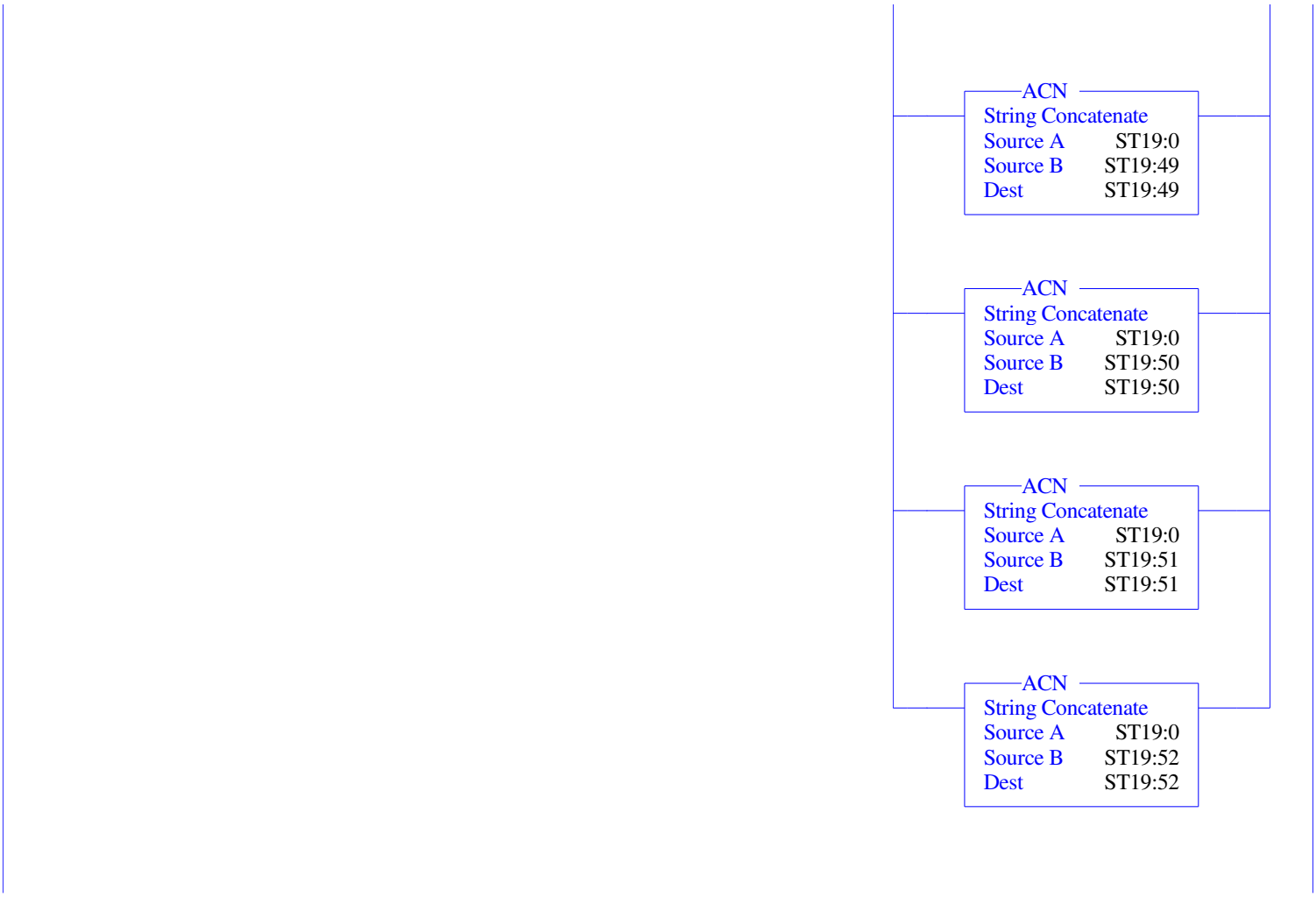

ACN
String Concatenate
Source A ST19:0
Source B ST19:9
Dest ST19:9
ACN
String Concatenate
Source A ST19:0
Source B ST19:10
Dest ST19:10
ACN
String Concatenate
Source A ST19:0
Source B ST19:11
Dest ST19:11
ACN
String Concatenate
Source A ST19:0
Source B ST19:12
Dest ST19:12
ACN
String Concatenate
Source A ST19:0
Source B ST19:13
Dest ST19:13
ACN
String Concatenate
Source A ST19:0
Source B ST19:14
Dest ST19:14
ACN
String Concatenate
Source A ST19:0
Source B ST19:15
Dest ST19:15
ACN
String Concatenate
Source A ST19:0
Source B ST19:16
Dest ST19:16


ACN
String Concatenate
Source A ST19:0
Source B ST19:17
Dest ST19:17
ACN
String Concatenate
Source A ST19:0
Source B ST19:18
Dest ST19:18
ACN
String Concatenate
Source A ST19:0
Source B ST19:19
Dest ST19:19
ACN
String Concatenate
Source A ST19:0
Source B ST19:20
Dest ST19:20
ACN
String Concatenate
Source A ST19:0
Source B ST19:21
Dest ST19:21
ACN
String Concatenate
Source A ST19:0
Source B ST19:22
Dest ST19:22
ACN
String Concatenate
Source A ST19:0
Source B ST19:23
Dest ST19:23
ACN
String Concatenate
Source A ST19:0
Source B ST19:24
Dest ST19:24


ACN
String Concatenate
Source A ST19:0
Source B ST19:25
Dest ST19:25
ACN
String Concatenate
Source A ST19:0
Source B ST19:26
Dest ST19:26
ACN
String Concatenate
Source A ST19:0
Source B ST19:27
Dest ST19:27
ACN
String Concatenate
Source A ST19:0
Source B ST19:28
Dest ST19:28
ACN
String Concatenate
Source A ST19:0
Source B ST19:29
Dest ST19:29
ACN
String Concatenate
Source A ST19:0
Source B ST19:30
Dest ST19:30
ACN
String Concatenate
Source A ST19:0
Source B ST19:31
Dest ST19:31
ACN
String Concatenate
Source A ST19:0
Source B ST19:32
Dest ST19:32


ACN
String Concatenate
Source A ST19:0
Source B ST19:33
Dest ST19:33
ACN
String Concatenate
Source A ST19:0
Source B ST19:34
Dest ST19:34
ACN
String Concatenate
Source A ST19:0
Source B ST19:35
Dest ST19:35
ACN
String Concatenate
Source A ST19:0
Source B ST19:36
Dest ST19:36
ACN
String Concatenate
Source A ST19:0
Source B ST19:37
Dest ST19:37
ACN
String Concatenate
Source A ST19:0
Source B ST19:38
Dest ST19:38
ACN
String Concatenate
Source A ST19:0
Source B ST19:39
Dest ST19:39
ACN
String Concatenate
Source A ST19:0
Source B ST19:40
Dest ST19:40


ACN
String Concatenate
Source A ST19:0
Source B ST19:41
Dest ST19:41
ACN
String Concatenate
Source A ST19:0
Source B ST19:42
Dest ST19:42
ACN
String Concatenate
Source A ST19:0
Source B ST19:43
Dest ST19:43
ACN
String Concatenate
Source A ST19:0
Source B ST19:44
Dest ST19:44
ACN
String Concatenate
Source A ST19:0
Source B ST19:45
Dest ST19:45
ACN
String Concatenate
Source A ST19:0
Source B ST19:46
Dest ST19:46
ACN
String Concatenate
Source A ST19:0
Source B ST19:47
Dest ST19:47
ACN
String Concatenate
Source A ST19:0
Source B ST19:48
Dest ST19:48


ACN
String Concatenate
Source A ST19:0
Source B ST19:49
Dest ST19:49
ACN
String Concatenate
Source A ST19:0
Source B ST19:50
Dest ST19:50
ACN
String Concatenate
Source A ST19:0
Source B ST19:51
Dest ST19:51
ACN
String Concatenate
Source A ST19:0
Source B ST19:52
Dest ST19:52

0002

MOV
Move
Source ST19:1.DATA[0]
\00^D<
Dest N7:23
54<

MOV
Move
Source ST19:2.DATA[0]
\00S<
Dest N7:24
105<

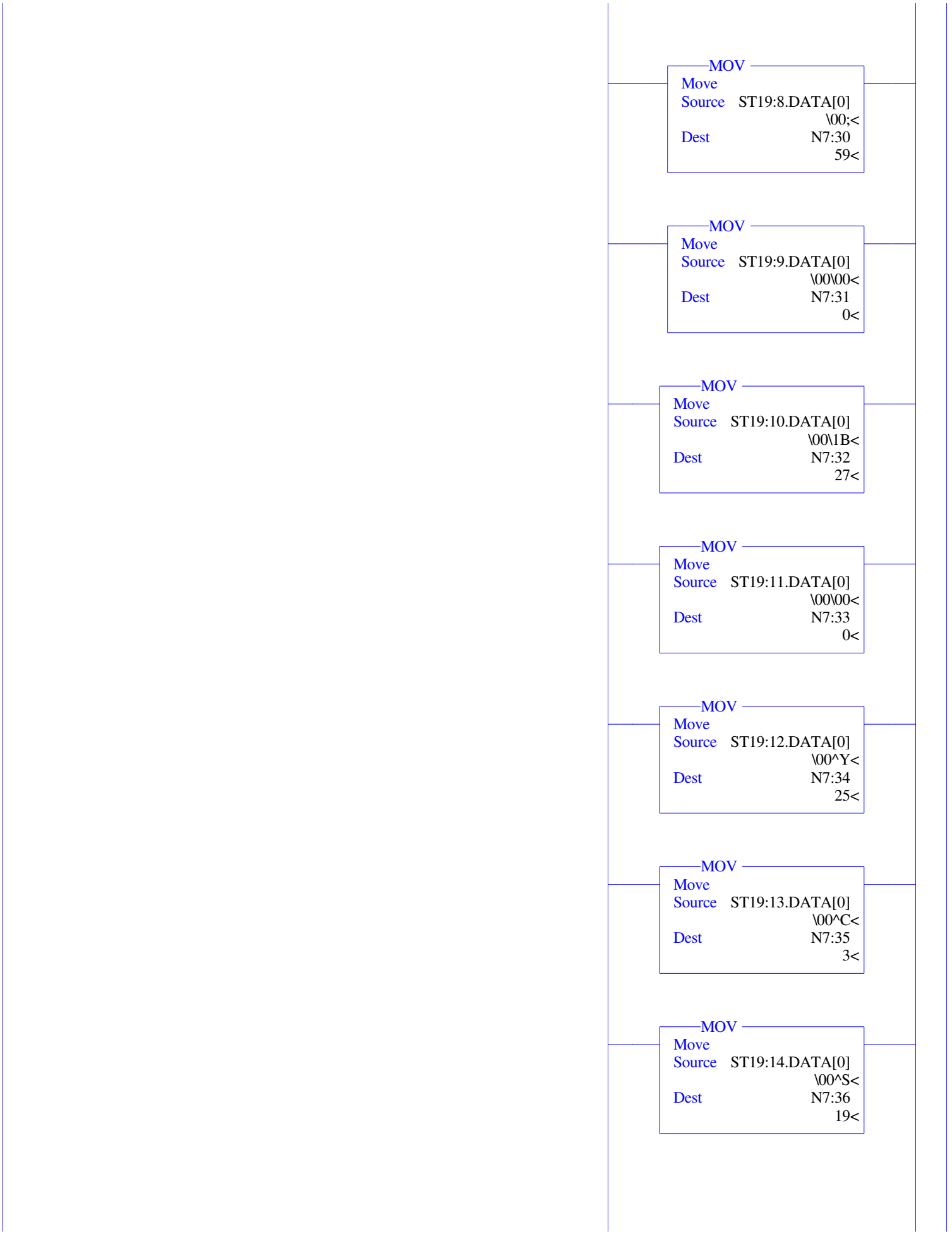
MOV
Move
Source ST19:3.DATA[0]
\00U<
Dest N7:25
5<

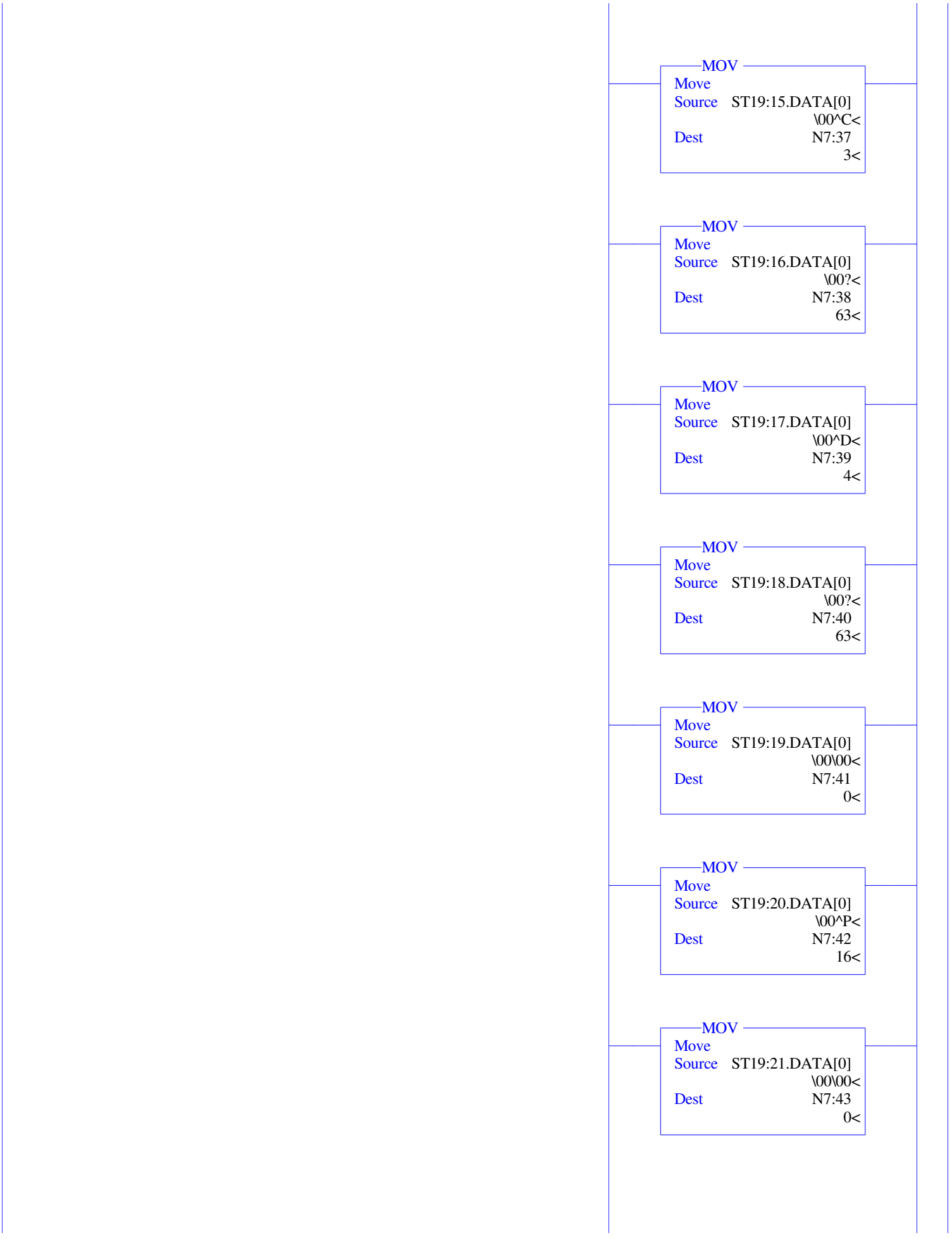
MOV
Move
Source ST19:4.DATA[0]
U^R<
Dest N7:26
18<

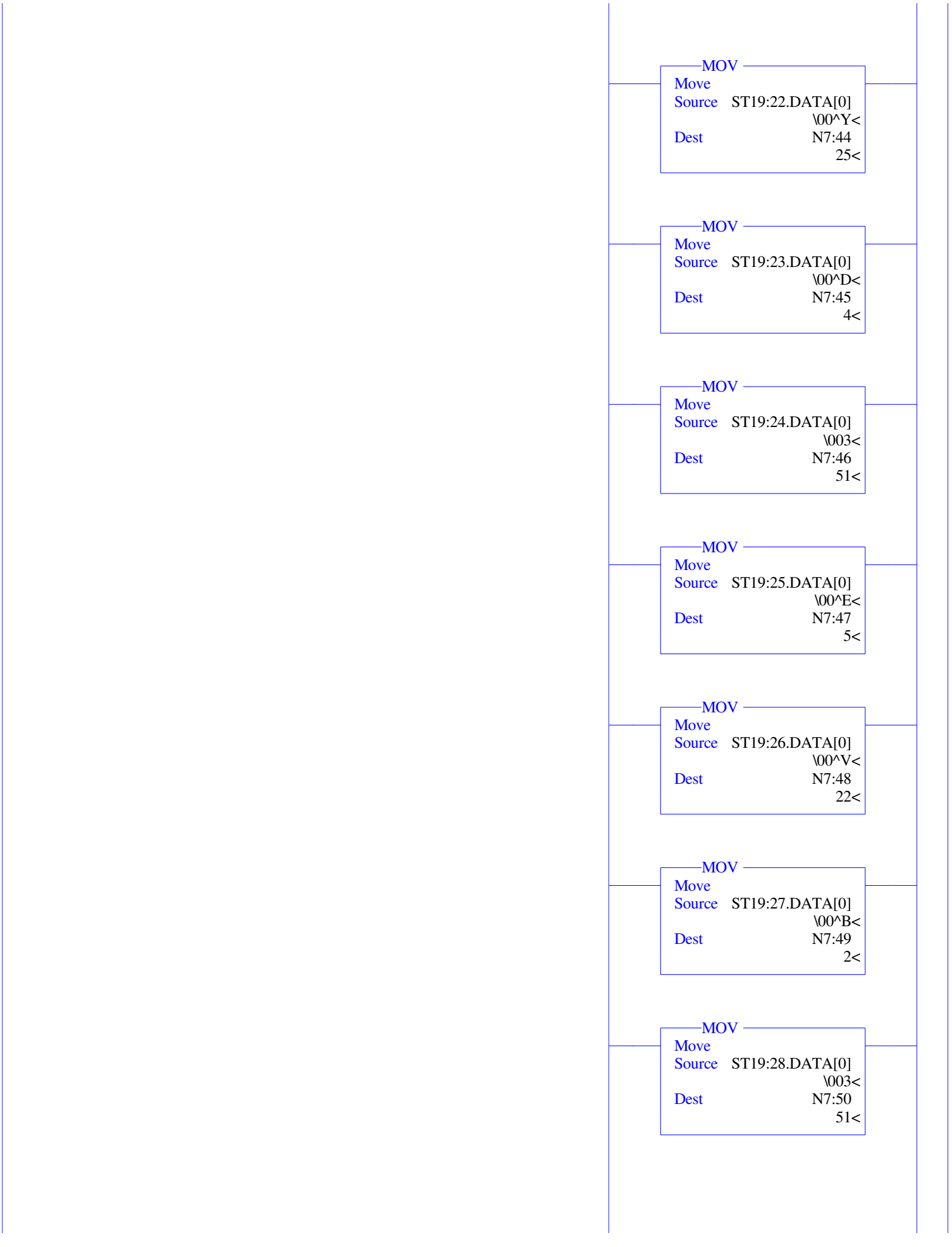
MOV
Move
Source ST19:5.DATA[0]
\00^E<
Dest N7:27
5<

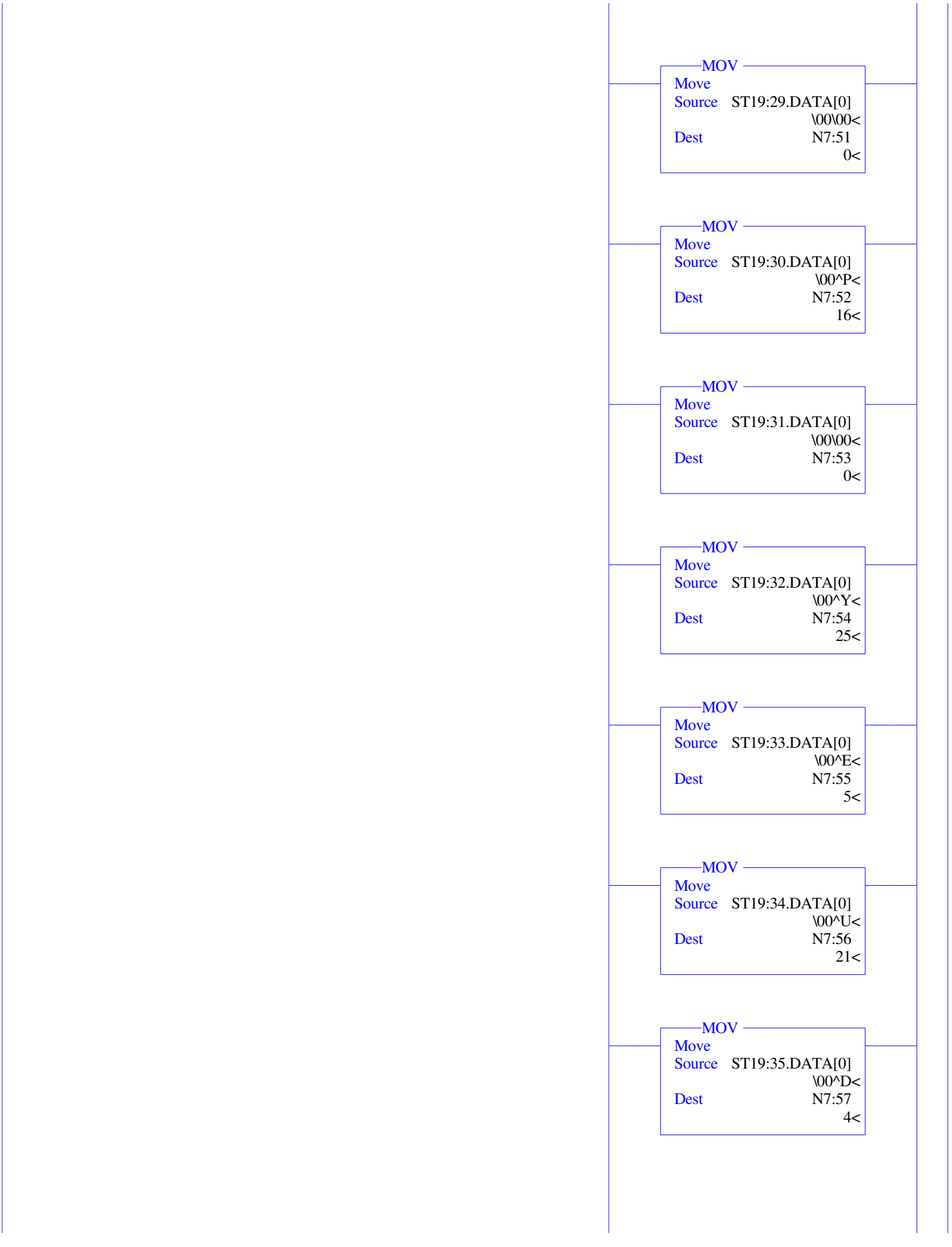
MOV
Move
Source ST19:6.DATA[0]
\00^A<
Dest N7:28
1<

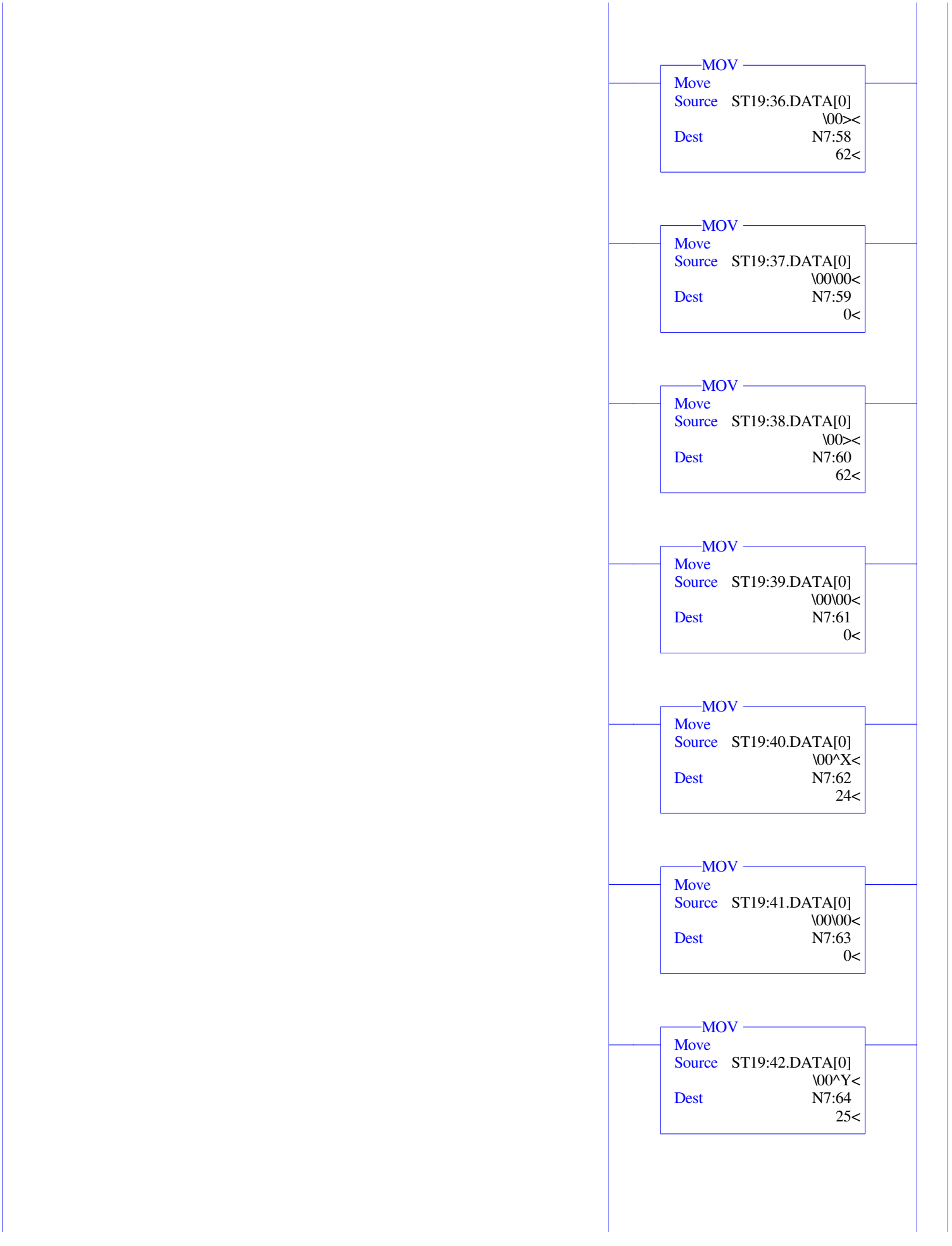
MOV
Move
Source ST19:7.DATA[0]
\00\00<
Dest N7:29
0<

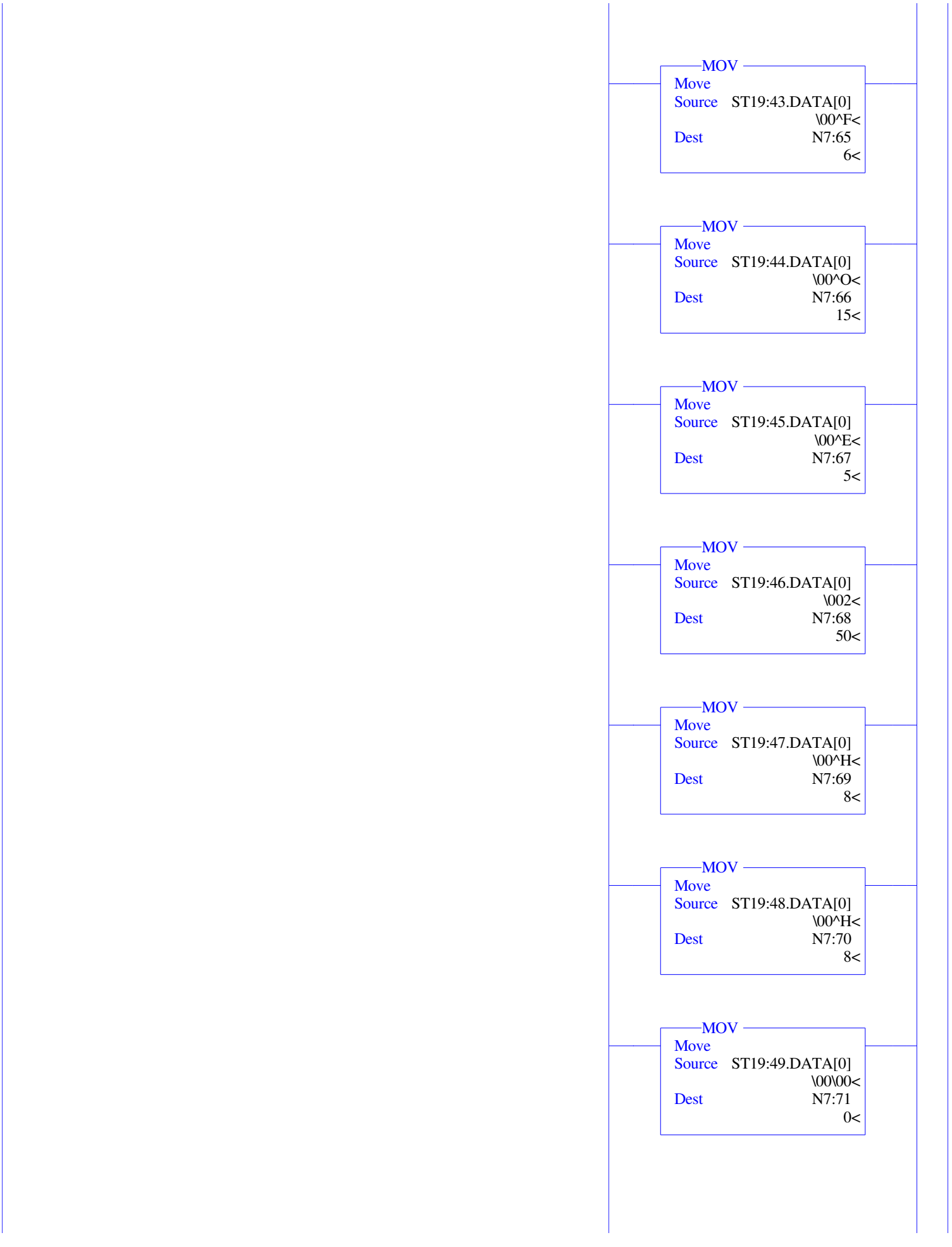

MOV
Move
Source ST19:8.DATA[0]
\00;<
Dest N7:30
59<
MOV
Move
Source ST19:9.DATA[0]
\00\00<
Dest N7:31
0<
MOV
Move
Source ST19:10.DATA[0]
\00\1B<
Dest N7:32
27<
MOV
Move
Source ST19:11.DATA[0]
\00\00<
Dest N7:33
0<
MOV
Move
Source ST19:12.DATA[0]
\00^Y<
Dest N7:34
25<
MOV
Move
Source ST19:13.DATA[0]
\00^C<
Dest N7:35
3<
MOV
Move
Source ST19:14.DATA[0]
\00^S<
Dest N7:36
19<

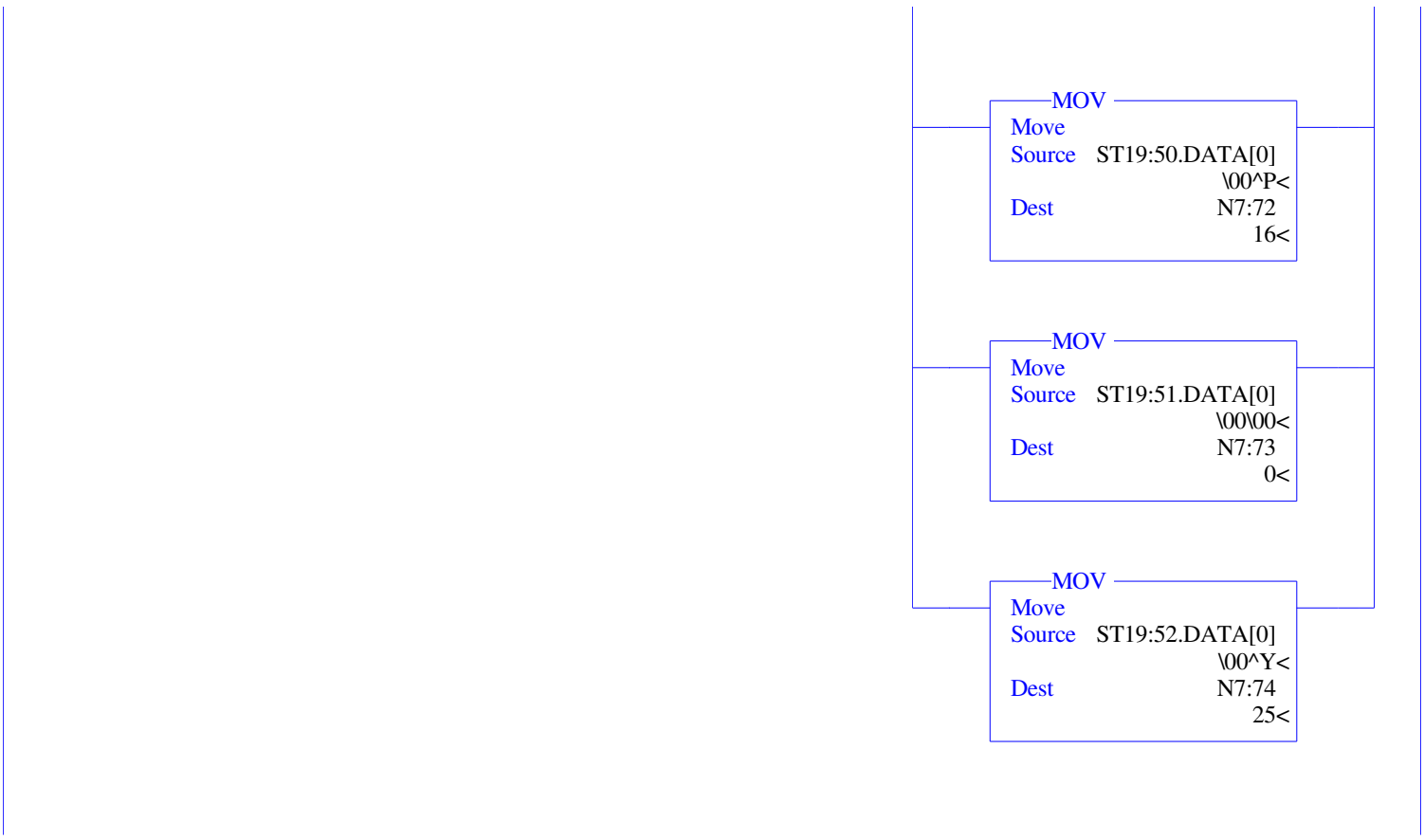

MOV
Move
Source ST19:15.DATA[0]
\00^C<
Dest N7:37
3<
MOV
Move
Source ST19:16.DATA[0]
\00?<
Dest N7:38
63<
MOV
Move
Source ST19:17.DATA[0]
\00^D<
Dest N7:39
4<
MOV
Move
Source ST19:18.DATA[0]
\00?<
Dest N7:40
63<
MOV
Move
Source ST19:19.DATA[0]
\00\00<
Dest N7:41
0<
MOV
Move
Source ST19:20.DATA[0]
\00^P<
Dest N7:42
16<
MOV
Move
Source ST19:21.DATA[0]
\00\00<
Dest N7:43
0<


MOV
Move
Source ST19:22.DATA[0]
\00^Y<
Dest N7:44
25<
MOV
Move
Source ST19:23.DATA[0]
\00^D<
Dest N7:45
4<
MOV
Move
Source ST19:24.DATA[0]
\003<
Dest N7:46
51<
MOV
Move
Source ST19:25.DATA[0]
\00^E<
Dest N7:47
5<
MOV
Move
Source ST19:26.DATA[0]
\00^V<
Dest N7:48
22<
MOV
Move
Source ST19:27.DATA[0]
\00^B<
Dest N7:49
2<
MOV
Move
Source ST19:28.DATA[0]
\003<
Dest N7:50
51<

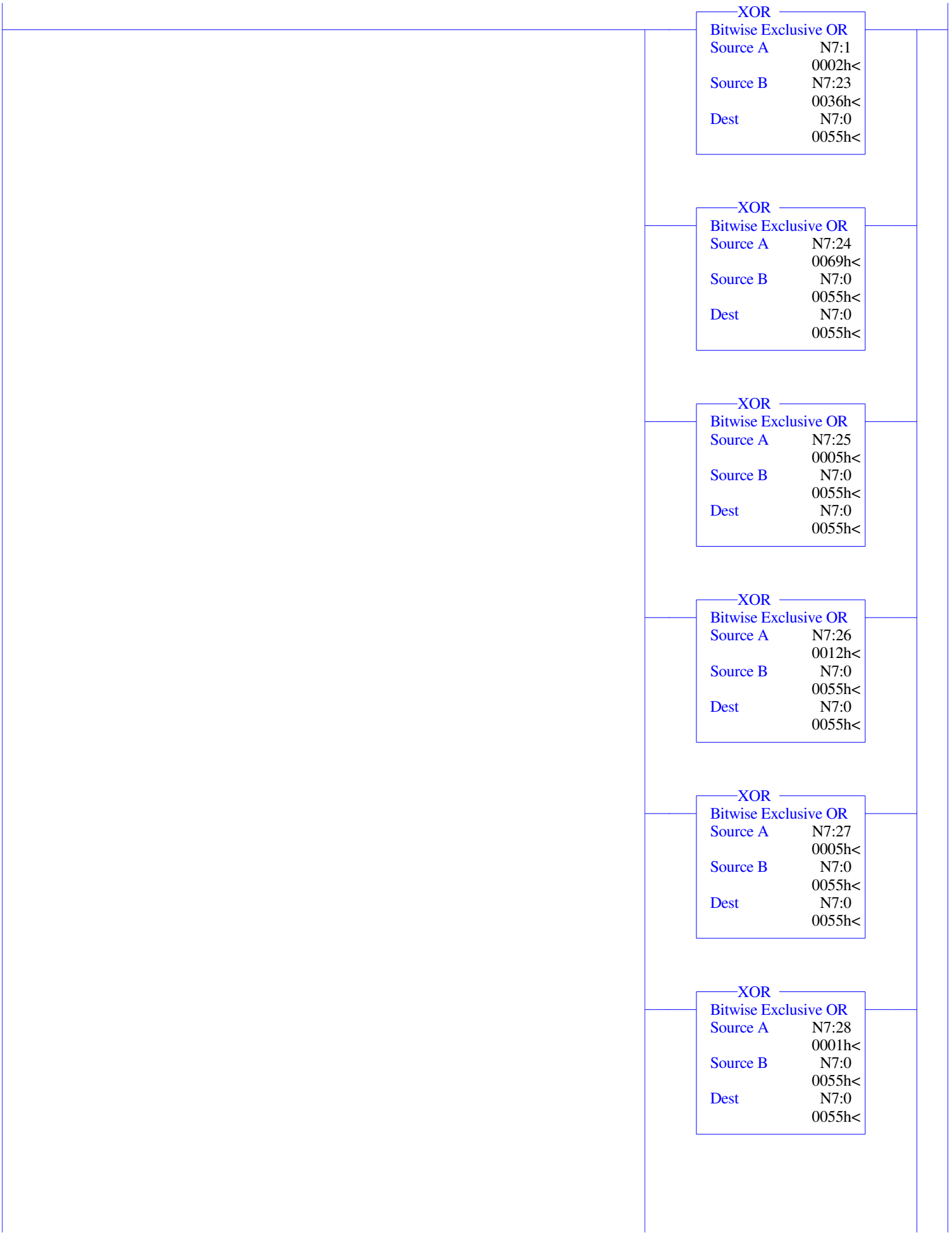

MOV
Move
Source ST19:29.DATA[0]
\00\00<
Dest N7:51
0<
MOV
Move
Source ST19:30.DATA[0]
\00^P<
Dest N7:52
16<
MOV
Move
Source ST19:31.DATA[0]
\00\00<
Dest N7:53
0<
MOV
Move
Source ST19:32.DATA[0]
\00^Y<
Dest N7:54
25<
MOV
Move
Source ST19:33.DATA[0]
\00^E<
Dest N7:55
5<
MOV
Move
Source ST19:34.DATA[0]
\00^U<
Dest N7:56
21<
MOV
Move
Source ST19:35.DATA[0]
\00^D<
Dest N7:57
4<

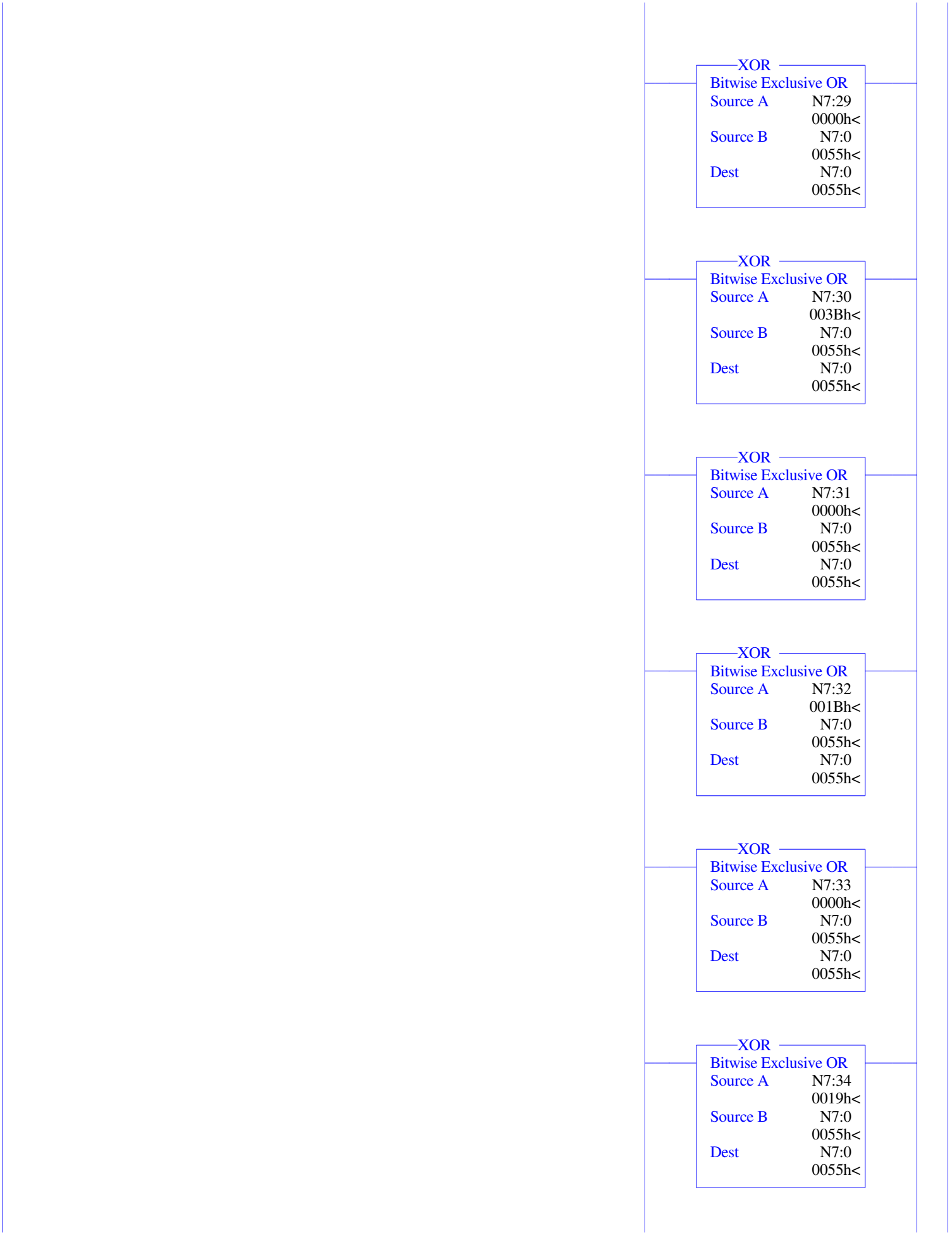

MOV
Move
Source ST19:36.DATA[0]
\00><
Dest N7:58
62<
MOV
Move
Source ST19:37.DATA[0]
\00\00<
Dest N7:59
0<
MOV
Move
Source ST19:38.DATA[0]
\00><
Dest N7:60
62<
MOV
Move
Source ST19:39.DATA[0]
\00\00<
Dest N7:61
0<
MOV
Move
Source ST19:40.DATA[0]
\00^X<
Dest N7:62
24<
MOV
Move
Source ST19:41.DATA[0]
\00\00<
Dest N7:63
0<
MOV
Move
Source ST19:42.DATA[0]
\00^Y<
Dest N7:64
25<

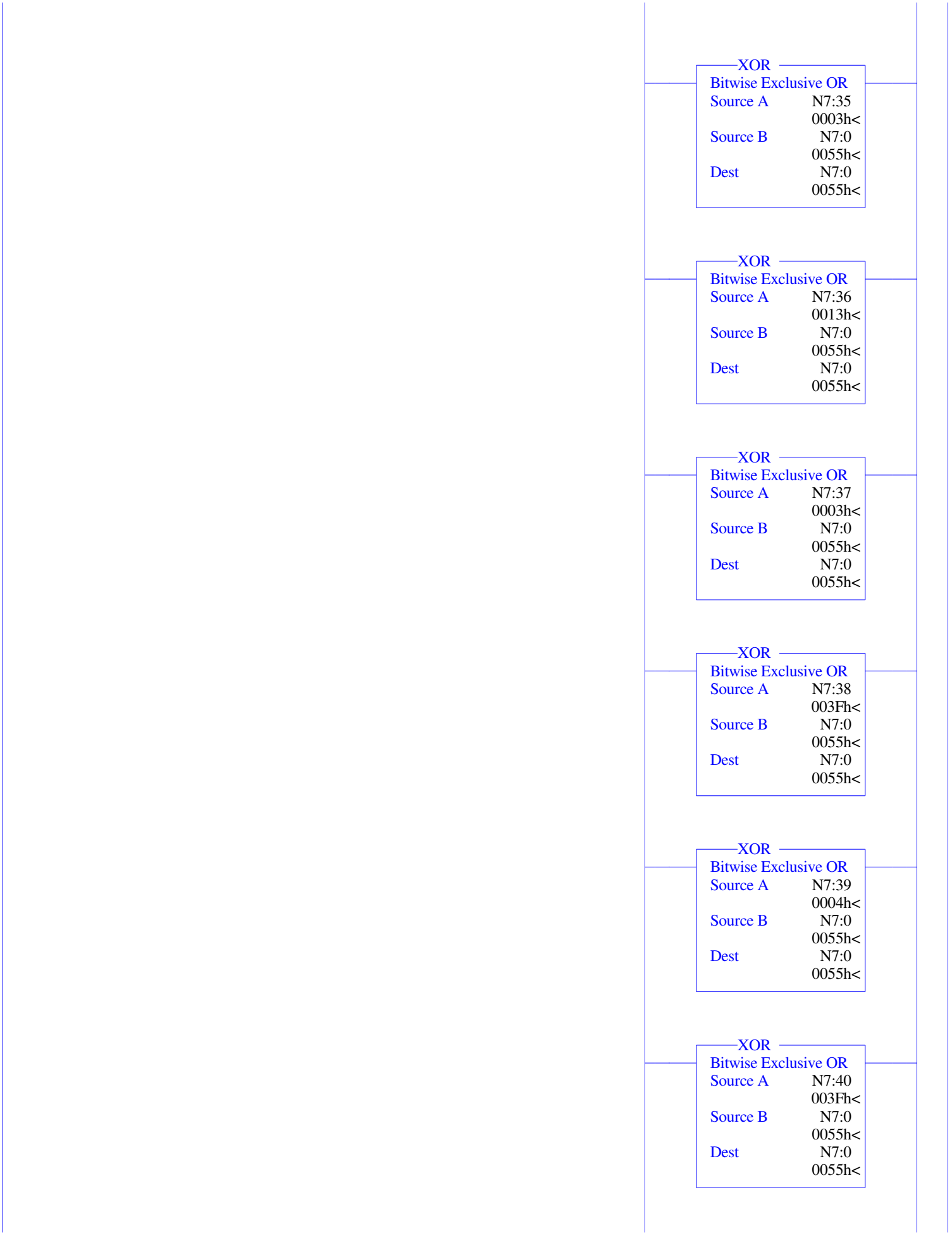

MOV
Move
Source ST19:43.DATA[0]
\00^F<
Dest N7:65
6<
MOV
Move
Source ST19:44.DATA[0]
\00^O<
Dest N7:66
15<
MOV
Move
Source ST19:45.DATA[0]
\00^E<
Dest N7:67
5<
MOV
Move
Source ST19:46.DATA[0]
\002<
Dest N7:68
50<
MOV
Move
Source ST19:47.DATA[0]
\00^H<
Dest N7:69
8<
MOV
Move
Source ST19:48.DATA[0]
\00^H<
Dest N7:70
8<
MOV
Move
Source ST19:49.DATA[0]
\00\00<
Dest N7:71
0<

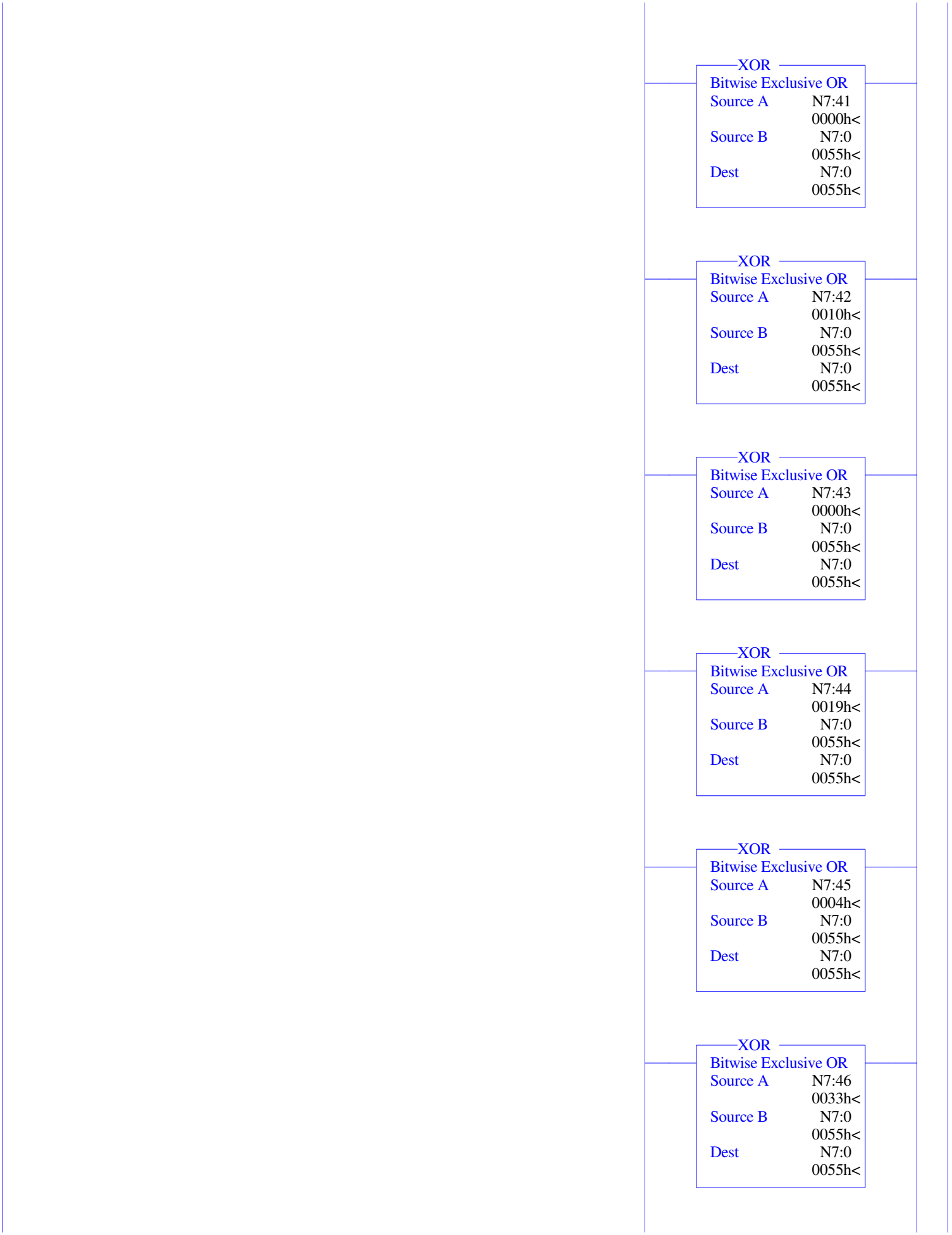

MOV
Move
Source ST19:50.DATA[0]
\00^P<
Dest N7:72
16<
MOV
Move
Source ST19:51.DATA[0]
\00\00<
Dest N7:73
0<
MOV
Move
Source ST19:52.DATA[0]
\00^Y<
Dest N7:74
25<

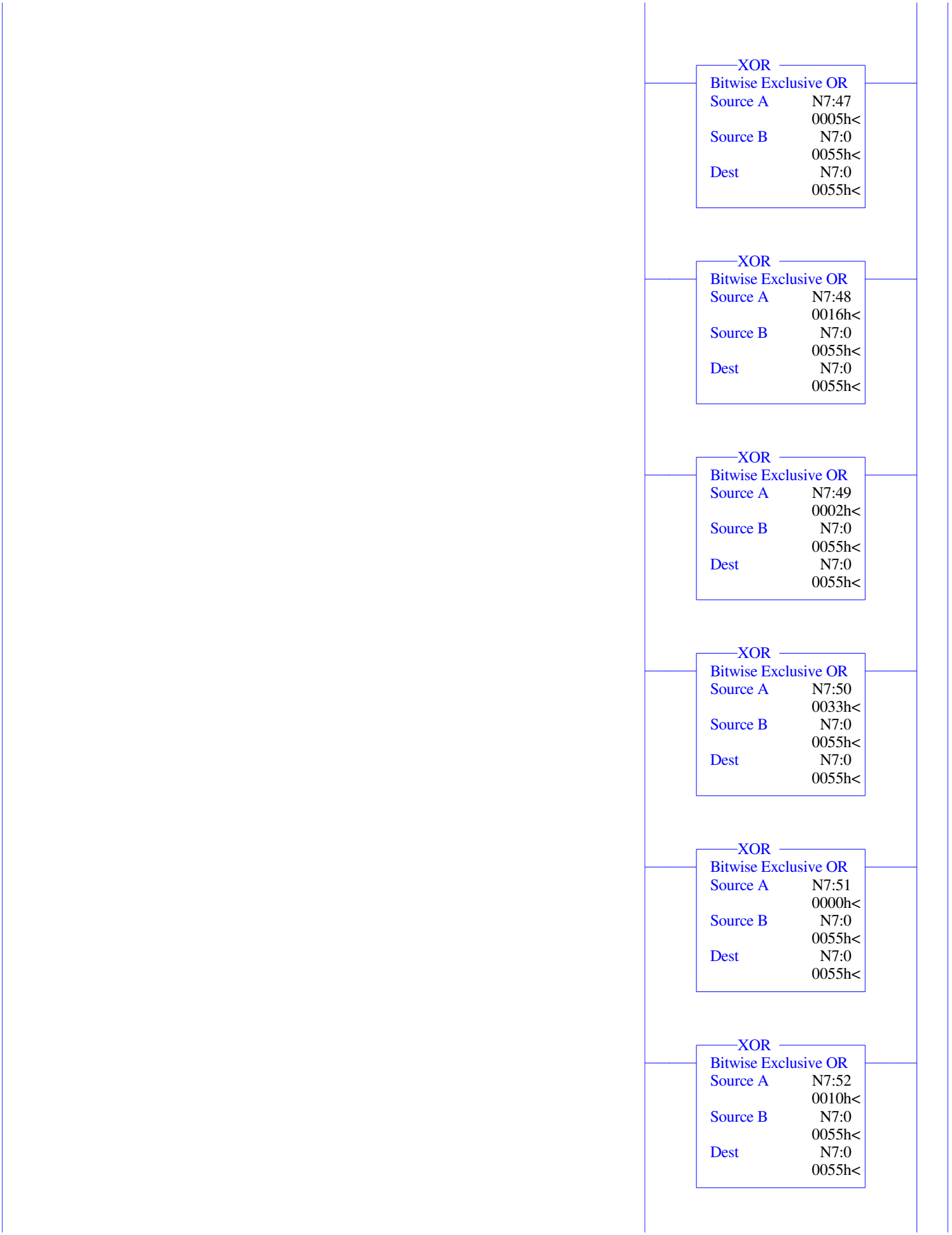
0003

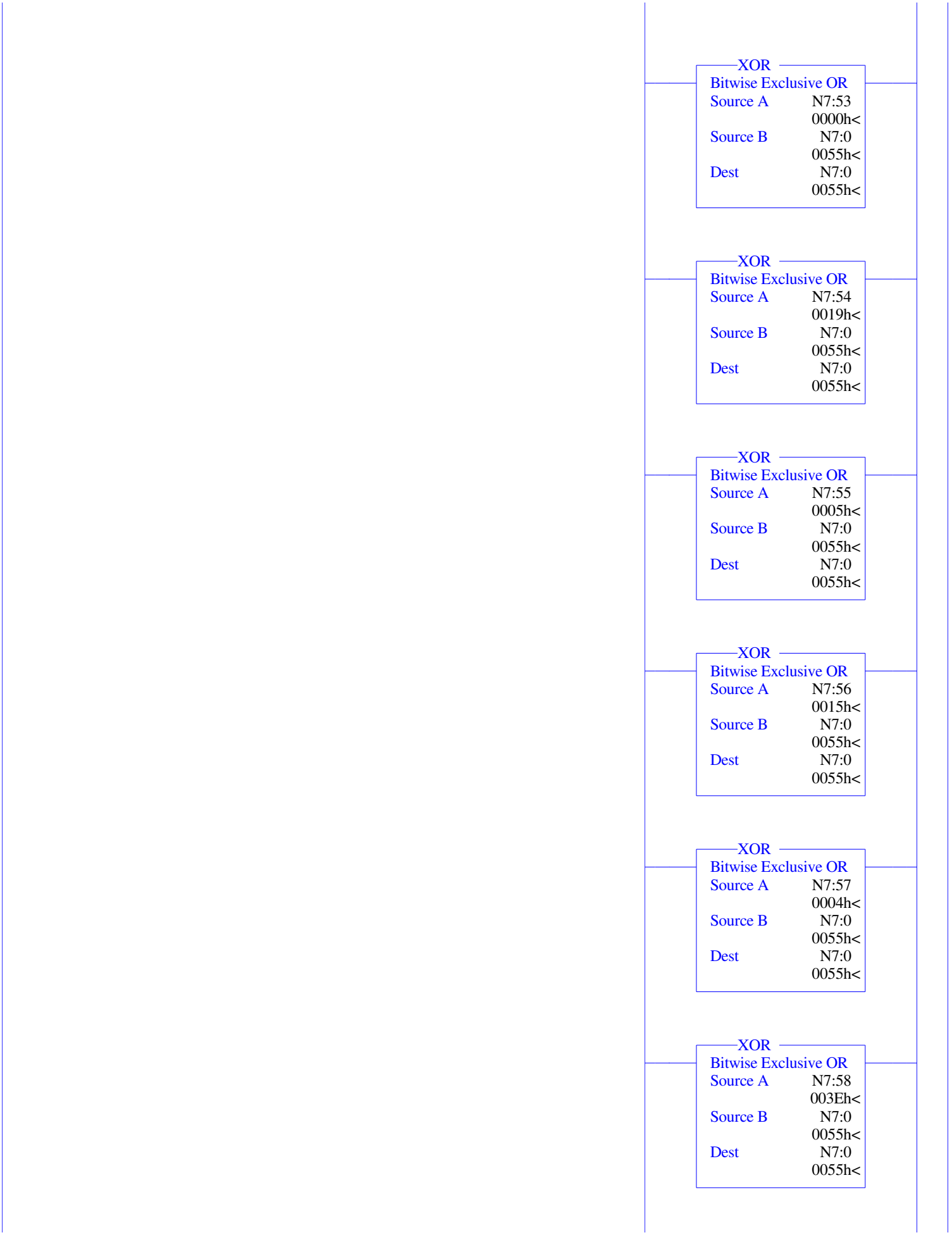

XOR
Bitwise Exclusive OR
Source A N7:1
0002h<
Source B N7:23
0036h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:24
0069h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:25
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:26
0012h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:27
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:28
0001h<
Source B N7:0
0055h<
Dest N7:0
0055h<

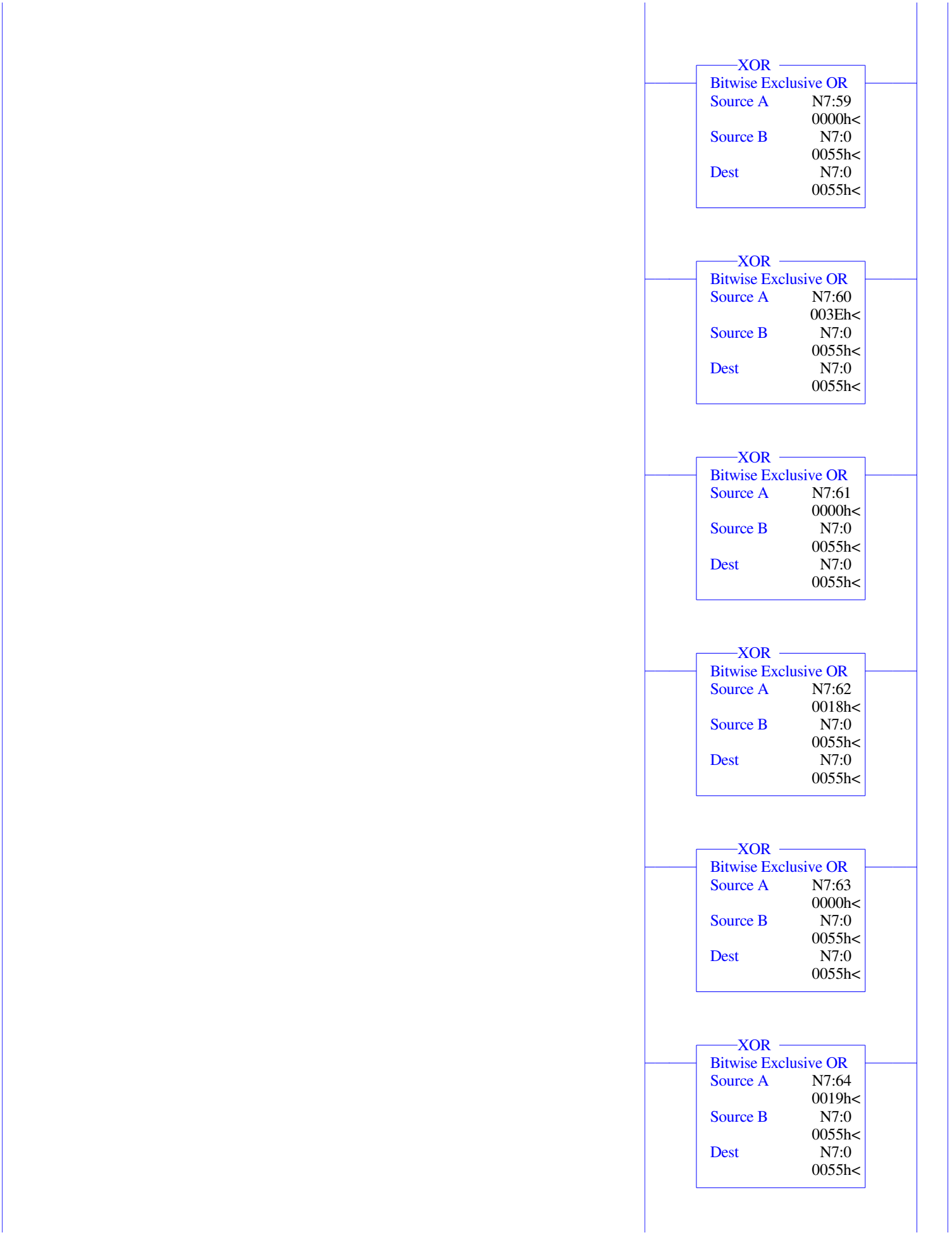

XOR
Bitwise Exclusive OR
Source A N7:29
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:30
003Bh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:31
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:32
001Bh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:33
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:34
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<

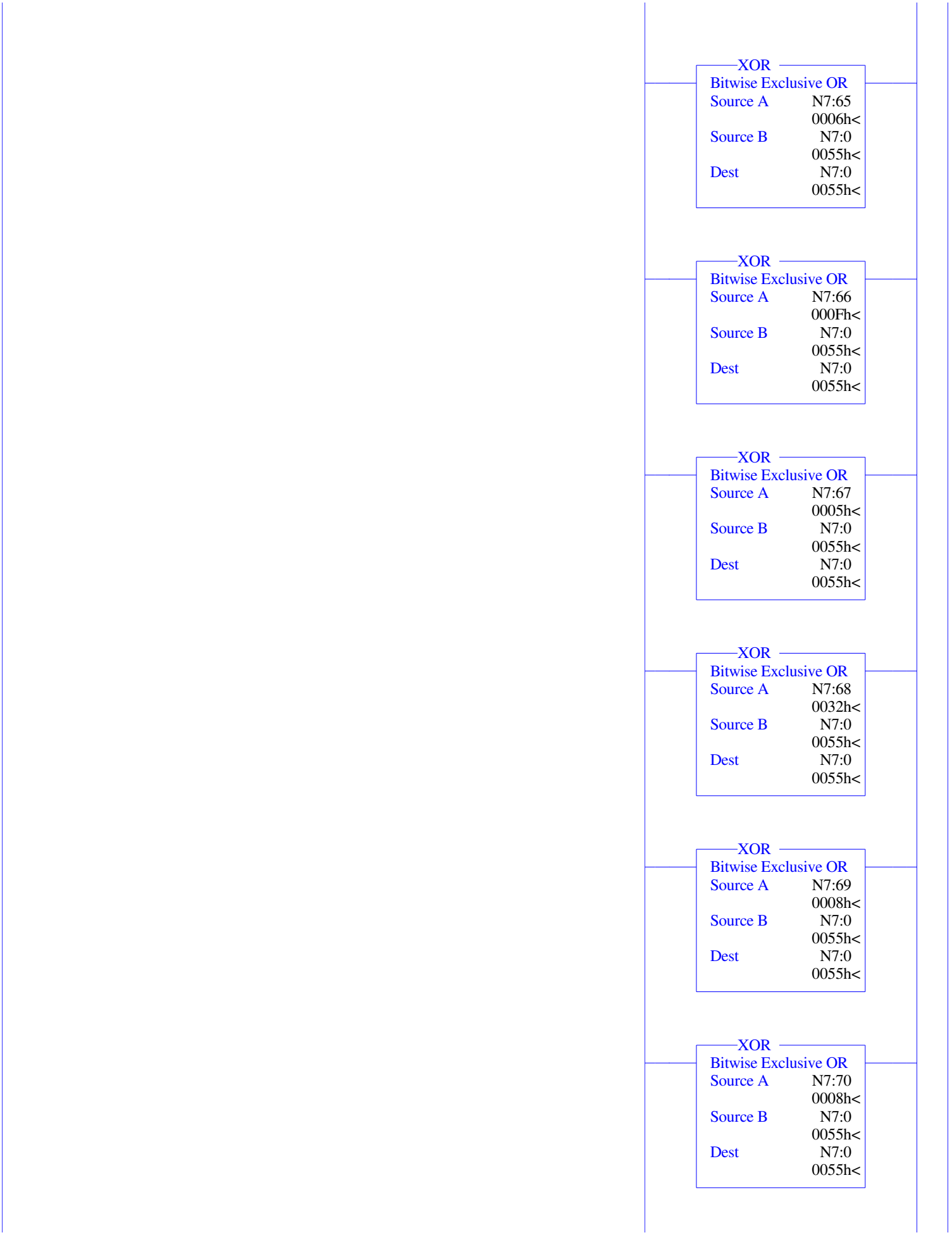

XOR
Bitwise Exclusive OR
Source A N7:35
0003h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:36
0013h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:37
0003h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:38
003Fh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:39
0004h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:40
003Fh<
Source B N7:0
0055h<
Dest N7:0
0055h<

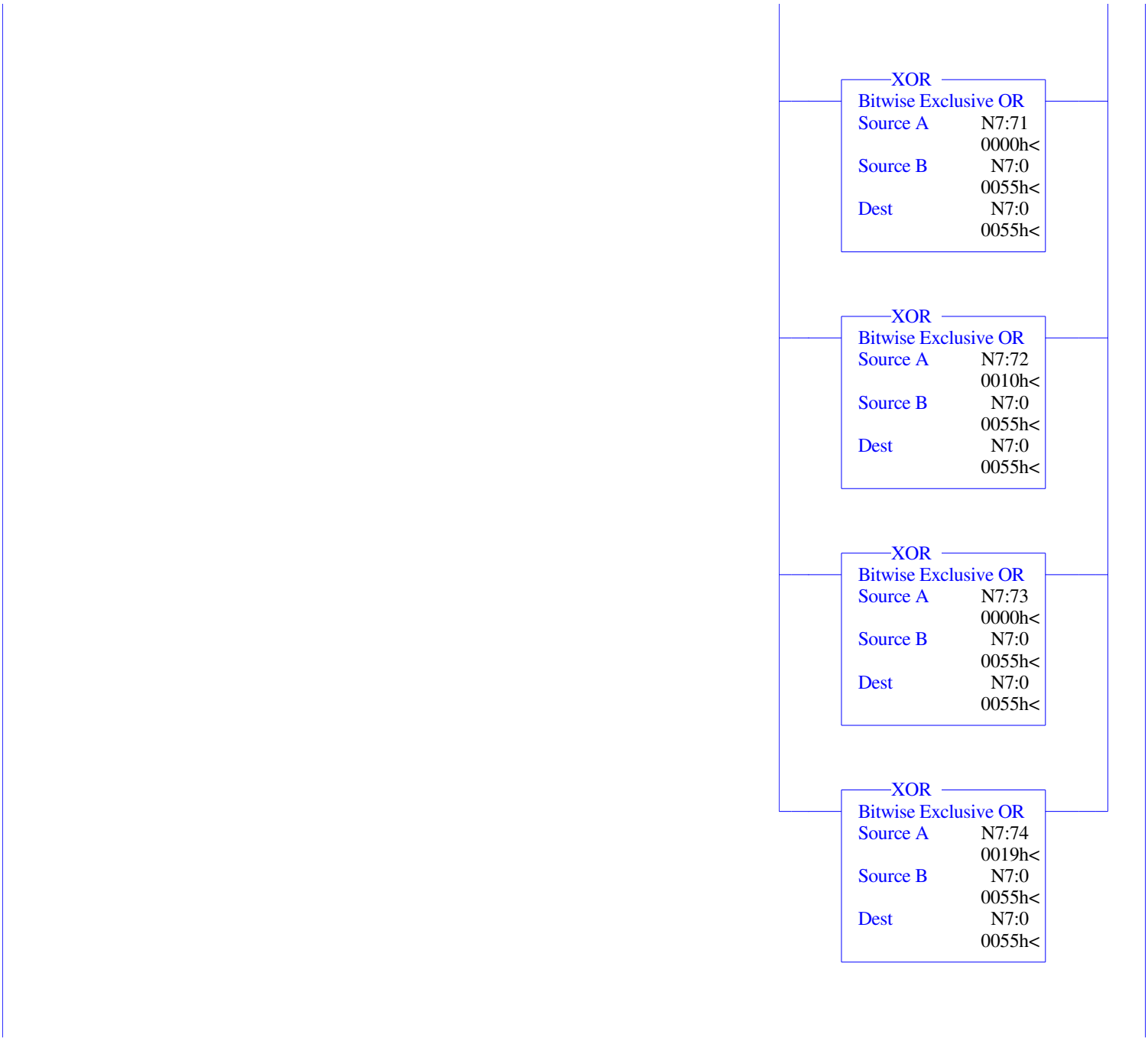

XOR
Bitwise Exclusive OR
Source A N7:41
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:42
0010h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:43
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:44
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:45
0004h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:46
0033h<
Source B N7:0
0055h<
Dest N7:0
0055h<

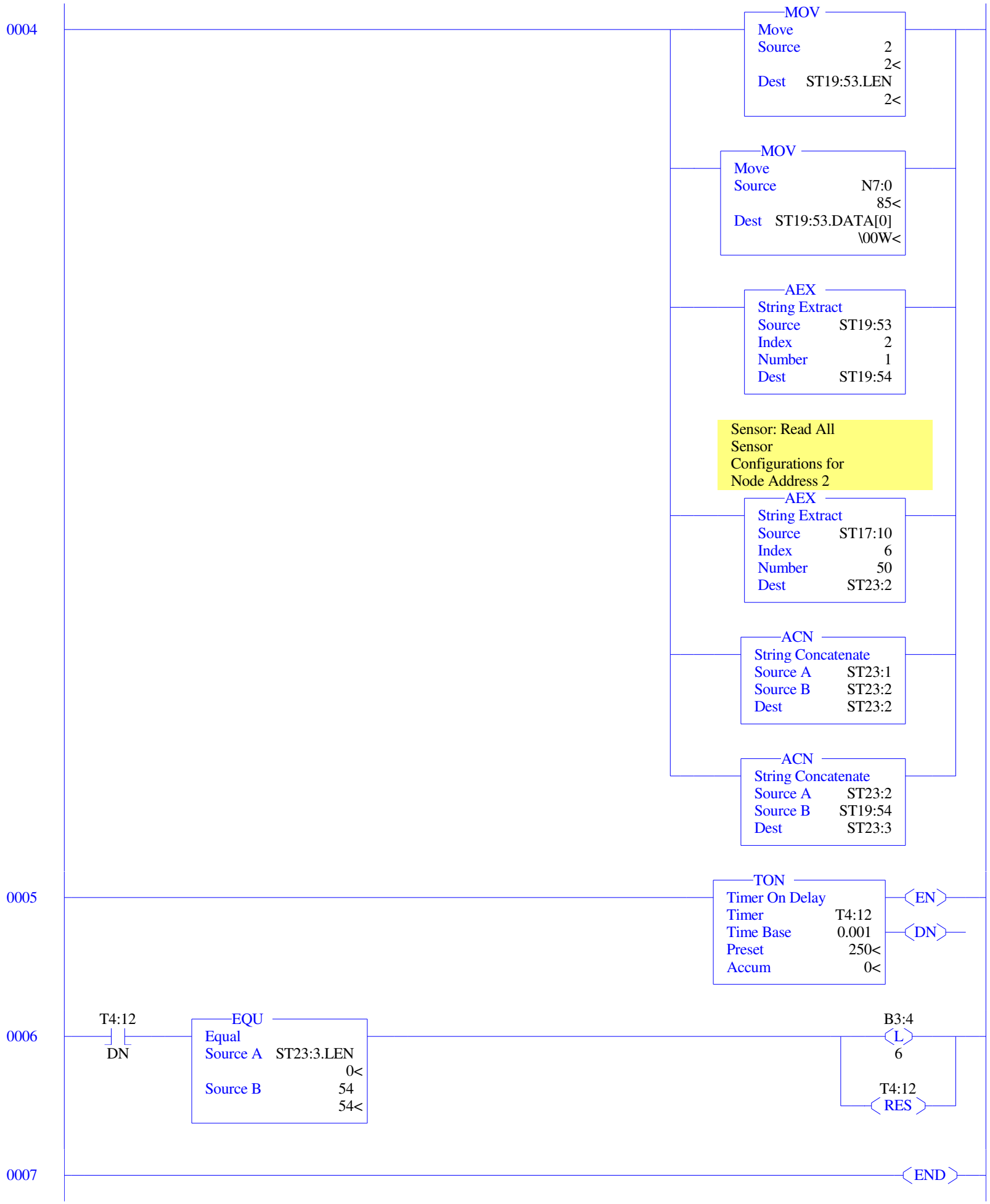

XOR
Bitwise Exclusive OR
Source A N7:47
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:48
0016h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:49
0002h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:50
0033h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:51
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:52
0010h<
Source B N7:0
0055h<
Dest N7:0
0055h<


XOR
Bitwise Exclusive OR
Source A N7:53
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:54
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:55
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:56
0015h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:57
0004h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:58
003Eh<
Source B N7:0
0055h<
Dest N7:0
0055h<


XOR
Bitwise Exclusive OR
Source A N7:59
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:60
003Eh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:61
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:62
0018h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:63
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:64
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<


XOR
Bitwise Exclusive OR
Source A N7:65
0006h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:66
000Fh<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:67
0005h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:68
0032h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:69
0008h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:70
0008h<
Source B N7:0
0055h<
Dest N7:0
0055h<


XOR
Bitwise Exclusive OR
Source A N7:71
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:72
0010h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:73
0000h<
Source B N7:0
0055h<
Dest N7:0
0055h<
XOR
Bitwise Exclusive OR
Source A N7:74
0019h<
Source B N7:0
0055h<
Dest N7:0
0055h<


0004
MOV
Move
Source 2
2<
Dest ST19:53.LEN
2<
MOV
Move
Source N7:0
85<
Dest ST19:53.DATA[0]
\00W<
AEX
String Extract
Source ST19:53
Index 2
Number 1
Dest ST19:54
Sensor: Read All Sensor Configurations for Node Address 2
AEX
String Extract
Source ST17:10
Index 6
Number 50
Dest ST23:2
ACN
String Concatenate
Source A ST23:1
Source B ST23:2
Dest ST23:2
ACN
String Concatenate
Source A ST23:2
Source B ST19:54
Dest ST23:3
0005
TON
Timer On Delay
Timer T4:12
Time Base 0.001
Preset 250<
Accum 0<
EN
DN
0006
T4:12
DN
EQU
Equal
Source A ST23:3.LEN
0<
Source B 54
54<
B3:4
L
6
T4:12
RES
0007
END

Data File O0 (bin) -- OUTPUT

Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
O:0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
O:0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
O:0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
O:0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
O:0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
O:0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A

Data File I1 (bin) -- INPUT

Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0		
I:0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
I:0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
I:0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
I:0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
I:0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
I:0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
I:0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A
I:0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series A

Main

Processor Mode S:1/0 - S:1/4 = Remote Run
On Power up Go To Run (Mode Behavior) S:1/12 = 0
First Pass S:1/15 = No
Free Running Clock S:4 = 1010-0001-1111-0111

Proc

OS Catalog Number S:57 = 1400
OS Series S:58 = A
OS FRS S:59 =
Processor Catalog Number S:60 =
Processor Series S:61 = A
Processor FRN S:62 =
User Program Type S:63 = 9001h
Compiler Revision Number S:64 =

Scan Times

Maximum (x10 ms) S:22 = 44
Watchdog (x10 ms) S:3 (high byte) = 10
Last 100 uSec Scan Time S:35 = 10
Scan Toggle Bit S:33/9 = 0

Math

Math Overflow Selected S:2/14 = 0
Overflow Trap S:5/0 = 0
Carry S:0/0 = 0
Overflow S:0/1 = 0
Zero Bit S:0/2 = 1
Sign Bit S:0/3 = 0
Math Register (lo word) S:13 = 0
Math Register (high word) S:14-S:13 = 0
Math Register (32 Bit) S:14-S:13 = 0

Chan 0

Processor Mode S:1/0- S:1/4 = Remote Run
Node Address S:15 (low byte) = 0
Baud Rate S:15 (high byte) = ?
Channel Mode S:33/3 = 0
Comms Active S:33/4 = 0
Incoming Cmd Pending S:33/0 = 0
Msg Reply Pending S:33/1 = 0
Outgoing Msg Cmd Pending S:33/2 = 0

Debug

Suspend Code S:7 = 0
Suspend File S:8 = 0

Errors

Fault Override At Power Up S:1/8 = 0
Startup Protection Fault S:1/9 = 0
Major Error Halt S:1/13 = 0
Overflow Trap S:5/0 = 0
Control Register Error S:5/2 = 0
Major Error Executing User Fault Rtn. S:5/3 = 0
Battery Low S:5/11 = 0
Input Filter Selection Modified S:5/13 = 0
ASCII String Manipulation error S:5/15 = 0
Fault Routine S:29 = 0
Major Error S:6 = 0h
Error Description:

Protection

Deny Future Access S:1/14 = No
Data File Overwrite Protection Lost S:36/10 = False

Mem Module

Memory Module Loaded On Boot S:5/8 = 0
Password Mismatch S:5/9 = 0
Load Memory Module On Memory Error S:1/10 = 0
Load Memory Module Always S:1/11 = 0
On Power up Go To Run (Mode Behavior) S:1/12 = 0
Program Compare S:2/9 = 0
Data File Overwrite Protection Lost S:36/10 = 0

Forces

Forces Enabled S:1/5 = Yes
Forces Installed S:1/6 = No

Data File B3 (bin) -- BINARY

Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	(Symbol) Description
B3:0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
B3:1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
B3:2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
B3:3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:5	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
B3:6	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
B3:7	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	Set Color Tolerance Level
B3:8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:11	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	

Data File T4 -- TIMER

Offset	EN	TT	DN	BASE	PRE	ACC	(Symbol) Description
T4:0	0	0	0	.001 sec	250	0	
T4:1	0	0	0	1.0 sec	1	0	
T4:2	0	0	0	.001 sec	250	0	
T4:3	0	0	0	1.0 sec	1	0	
T4:4	0	0	0	.001 sec	250	0	
T4:5	0	0	0	1.0 sec	1	0	
T4:6	0	0	0	.001 sec	250	0	
T4:7	0	0	0	1.0 sec	1	0	
T4:8	0	0	0	.001 sec	10	0	
T4:9	1	0	1	1.0 sec	1	1	
T4:10	1	0	1	1.0 sec	2	2	
T4:11	1	1	0	1.0 sec	1	0	
T4:12	0	0	0	.001 sec	250	0	
T4:13	0	0	0	1.0 sec	1	0	
T4:14	1	1	0	.001 sec	250	67	
T4:15	1	1	0	1.0 sec	1	0	
T4:16	1	1	0	.001 sec	500	70	
T4:17	1	1	0	1.0 sec	1	0	
T4:18	1	1	0	.001 sec	250	36	
T4:19	1	1	0	1.0 sec	1	0	
T4:20	0	0	0	.001 sec	1000	0	
T4:21	1	1	0	1.0 sec	1	0	
T4:22	0	0	0	.001 sec	5000	5000	
T4:23	0	0	0	.001 sec	5000	5000	
T4:24	0	0	0	.001 sec	5000	5000	
T4:25	0	0	0	.001 sec	5000	5000	
T4:26	0	0	0	.001 sec	5000	5000	
T4:27	0	0	0	.001 sec	500	500	
T4:28	0	0	0	.001 sec	500	500	
T4:29	0	0	0	.001 sec	500	500	
T4:30	0	0	0	.001 sec	500	500	
T4:31	0	0	0	.001 sec	500	500	
T4:32	0	0	0	1.0 sec	1	0	
T4:33	0	0	0	.001 sec	20	0	
T4:34	1	0	1	.001 sec	1000	1000	

Data File C5 -- COUNTER

Offset	CU	CD	DN	OV	UN	UA	PRE	ACC	(Symbol) Description
C5:0	0	0	0	0	0	0	5	0	
C5:1	0	0	0	0	0	0	5	0	
C5:2	0	0	0	0	0	0	5	0	
C5:3	0	0	0	0	0	0	5	0	
C5:4	0	0	0	0	0	0	5	0	
C5:5	0	0	0	0	0	0	5	0	

Data File R6 -- CONTROL

Offset	EN	EU	DN	EM	ER	UL	IN	FD	LEN	POS	(Symbol) Description
R6:0	0	0	0	0	0	0	0	0	5	0	
R6:1	0	0	0	0	0	0	0	0	4	0	
R6:2	0	0	0	0	0	0	0	0	5	0	
R6:3	0	0	0	0	0	0	0	0	4	0	
R6:4	0	0	0	0	0	0	0	0	4	0	
R6:5	0	0	0	0	0	0	0	0	4	0	
R6:6	0	0	0	0	0	0	0	0	4	0	
R6:7	0	0	0	0	0	0	0	0	6	0	
R6:8	1	0	1	0	0	0	0	0	5	5	
R6:9	1	0	1	0	0	1	0	0	4	4	
R6:10	1	0	1	0	0	0	0	0	5	5	
R6:11	1	0	1	0	0	0	0	0	4	4	
R6:12	0	0	0	0	0	0	0	0	54	0	
R6:13	0	0	0	0	0	0	0	0	4	0	
R6:14	0	0	0	0	0	0	0	0	4	0	
R6:15	0	0	0	0	0	0	0	0	56	0	
R6:16	0	0	0	0	0	0	0	0	54	0	
R6:17	0	0	0	0	0	0	0	0	4	0	
R6:18	1	0	1	0	0	0	0	0	4	4	
R6:19	1	0	1	0	0	0	0	0	4	4	
R6:20	0	0	0	0	0	0	0	0	4	0	
R6:21	0	0	0	0	0	0	0	0	5	0	
R6:22	0	0	0	0	0	0	0	0	5	0	
R6:23	0	0	0	0	0	0	0	0	4	0	
R6:24	0	0	0	0	0	0	0	0	56	0	

Data File N7 (dec) -- INTEGER

Offset	0	1	2	3	4	5	6	7	8	9
N7:0	85	2	4	118	1	1	0	0	20	5
N7:10	88	2	2	4	4	5	73	15	5	88
N7:20	0	4	63	54	105	5	18	5	1	0
N7:30	59	0	27	0	25	3	19	3	63	4
N7:40	63	0	16	0	25	4	51	5	22	2
N7:50	51	0	16	0	25	5	21	4	62	0
N7:60	62	0	24	0	25	6	15	5	50	8
N7:70	8	0	16	0	25	4	83	4	99	0
N7:80	0	0	0	0	0	0	0	0	0	0
N7:90	0	0	0	0	0	0	0	0	0	0
N7:100	0									

Data File F8 -- FLOAT

Offset	0	1	2	3	4
F8:0	0				

Data File ST9 -- NODE ADD -- Node Address of Sensor

Offset	LEN	String Text	(Symbol)	Description
ST9:0	1	\81		
ST9:1	1	\82		
ST9:2	1	\83		
ST9:3	1	\84		
ST9:4	1	\85		
ST9:5	0			

Data File ST10 -- CHANGE ADD -- Change the Node Address

Offset	LEN	String Text (Symbol)	Description
ST10:0	2	^EL	Length
ST10:1	3	\82^EL	
ST10:2	1	^A	
ST10:3	4	\81^EL^A	
ST10:4	5	\81^EL^AJ	
ST10:5	0		
ST10:6	82	\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\0	Current

Data File ST11 -- DATA TRANS -- Set Data Transfer Rate

Offset	LEN	String Text (Symbol)	Description
ST11:0	2	^EB	
ST11:1	3	\82^EB	
ST11:2	1	^A	
ST11:3	4	\81^EB^A	
ST11:4	5	\81^EB^AG	
ST11:5	0		
ST11:6	82	\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\00\0 \00\00\	

Data File ST12 -- DEFAULT -- Activate Factory Setting

Offset	LEN	String Text (Symbol)	Description
ST12:0	2	^DW	
ST12:1	3	\82^DW	
ST12:2	0		
ST12:3	4	\81^DWR	
ST12:4	4	\81^DY\\	
ST12:5	2	\00Y	

Data File ST13 -- SOFTWARE -- Read Software Version

Offset	LEN	String Text (Symbol)	Description
ST13:0	2	^Dv	
ST13:1	3	\82^Dv	
ST13:2	0		
ST13:3	4	\82^Dvp	
ST13:4	6	\82^FY\00^TI	
ST13:5	2	\00\00	
ST13:6	1	\00	
ST13:7	1	\00	
ST13:8	1	^T	
ST13:9	2	\00\00	Seconda
ST13:10	2	\00^T	

Data File ST14 -- START SCAN -- Start Teach-In of Colors for Sensor

Offset	LEN	String Text (Symbol)	Description
ST14:0	3	^EX^B	Length,
ST14:1	4	\82^EX^B	
ST14:2	5	\82^EX^B]	
ST14:3	4	\82^DY_	
ST14:4	1	Y	
ST14:5	2	\00Y	
ST14:6	0		
ST14:7	0		
ST14:8	0		

Data File ST16 -- END SCAN -- End Scan-In of Colors for Sensor

Offset	LEN	String Text (Symbol)	Description
ST16:0	3	^EX\00	Length,
ST16:1	4	\82^EX\00	
ST16:2	5	\82^EX\00_	
ST16:3	4	\82^DY_	
ST16:4	1	Y	
ST16:5	2	\00Y	

Data File ST17 -- CONFIG -- Read All Sensor Configurations

Offset	LEN	String Text (Symbol)	Description
ST17:0	2	^D?	Length
ST17:1	3	\82^D?	Address
ST17:2	0		
ST17:3	4	\82^D?9	Master:
ST17:4	56	\818Y\00\00^F^O^E2^H^H\00^P\00^Y^F^O^E2^H^H\00^P\00^Y^F^O^E2^H^H\00^P\00^Y^F^O^E2^H	Sensor:
ST17:5	10	^E^R^E^A\00;\00\1B\00^Y	Descrip
ST17:6	10	^C^S^C?^D?\00^P\00^Y	Descrip
ST17:7	10	^D3^E^V^B3\00^P\00^Y	Descrip
ST17:8	10	^E^U^D>\00>\00^X\00^Y	Descrip
ST17:9	10	^F^O^E2^H^H\00^P\00^Y	Descrip
ST17:10	56	\828Y\00\00^E.^D*^J^N\00^P\00^Y^E.^D*^J^N\00^P\00^Y^E.^D*^J^N\00^P\00^Y^E.^D*^J^N\0	Sensor:
ST17:11	10	^I4^C^H^C^M\00^P\00^Y	Descrip
ST17:12	10	^C^I^C)^C:\00^P\00^Y	Descrip
ST17:13	10	^E'^D.\00>\00\1C\00^Y	Descrip
ST17:14	10	^D.^E^Z^A\1E\00^Q\00^Y	Descrip
ST17:15	10	^E.^D*^J^N\00^P\00^Y	Descrip

Data File ST18 -- TRANSFER -- Transfer Color Matrix

Offset	LEN	String Text (Symbol)	Description
ST18:0	2	6i	Length,
ST18:1	3	\826i	Address
ST18:2	53	\826i^E^R^E^A\00;\00\1B\00^Y^C^S^C?^D?\00^P\00^Y^D3^E^V^B3\00^P\00^Y^E^U^D>\00>\00^	\00^Y^F
ST18:3	54	\826i^E^R^E^A\00;\00\1B\00^Y^C^S^C?^D?\00^P\00^Y^D3^E^V^B3\00^P\00^Y^E^U^D>\00>\00^	Master:
ST18:4	4	\82^DY_	Sensor:
ST18:5	0		
ST18:6	0		
ST18:7	0		
ST18:8	0		

Data File ST19 -- CHECKSUM -- Checksum Values of Subroutines

Offset	LEN	String Text (Symbol)	Description
ST19:0	1	\00	
ST19:1	2	\00^D	(ST19)
ST19:2	2	\00S	
ST19:3	2	\00U	
ST19:4	1	U	
ST19:5	2	\00^E	
ST19:6	2	\00^A	
ST19:7	2	\00\00	
ST19:8	2	\00;	
ST19:9	2	\00\00	
ST19:10	2	\00\1B	
ST19:11	2	\00\00	
ST19:12	2	\00^Y	
ST19:13	2	\00^C	
ST19:14	2	\00^S	
ST19:15	2	\00^C	
ST19:16	2	\00?	
ST19:17	2	\00^D	
ST19:18	2	\00?	
ST19:19	2	\00\00	
ST19:20	2	\00^P	
ST19:21	2	\00\00	
ST19:22	2	\00^Y	
ST19:23	2	\00^D	
ST19:24	2	\003	
ST19:25	2	\00^E	
ST19:26	2	\00^V	
ST19:27	2	\00^B	
ST19:28	2	\003	
ST19:29	2	\00\00	
ST19:30	2	\00^P	
ST19:31	2	\00\00	
ST19:32	2	\00^Y	
ST19:33	2	\00^E	
ST19:34	2	\00^U	
ST19:35	2	\00^D	
ST19:36	2	\00>	
ST19:37	2	\00\00	
ST19:38	2	\00>	
ST19:39	2	\00\00	
ST19:40	2	\00^X	
ST19:41	2	\00\00	
ST19:42	2	\00^Y	
ST19:43	2	\00^F	
ST19:44	2	\00^O	
ST19:45	2	\00^E	
ST19:46	2	\002	
ST19:47	2	\00^H	
ST19:48	2	\00^H	
ST19:49	2	\00\00	
ST19:50	2	\00^P	
ST19:51	2	\00\00	
ST19:52	2	\00^Y	
ST19:53	2	\00W	
ST19:54	1	W	
ST19:55	0		
ST19:56	0		

Data File ST20 -- STORAGE -- Permanent Storage of Sensor Settings

Offset	LEN	String Text (Symbol)	Description
ST20:0	2	^DS	
ST20:1	3	\82^DS	
ST20:2	0		
ST20:3	4	\82^DSU	
ST20:4	4	\82^DY_	
ST20:5	0		

Data File ST21 -- COLOR CHAN -- Read Color Channel of Sensor

Offset	LEN	String Text (Symbol)	Description
ST21:0	2	^Dc	
ST21:1	3	\82^Dc	
ST21:2	0		
ST21:3	4	\81^Dcf	
ST21:4	5	\81^EY\00]	
ST21:5	1	\00	
ST21:6	2	\00\00	

Data File ST22 -- LOCK KEYS -- Disable Use of Keys

Offset	LEN	String Text (Symbol)	Description
ST22:0	2	^EV	Command
ST22:1	3	\82^EV	
ST22:2	1	\00	
ST22:3	4	\81^EV\00	
ST22:4	5	\81^EV\00R	
ST22:5	4	\81^DY\\	
ST22:6	2	\00Y	

Data File ST23 -- PBR

Offset	LEN	String Text (Symbol)	Description
ST23:0	2	6i	
ST23:1	3	\826i	
ST23:2	0		
ST23:3	0		
ST23:4	0		

Data File N100 (dec)

Offset	0	1	2	3	4	5	6	7	8	9
N100:0	0									

Address (Symbol) = Value [Description]

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
B3:0/0			Change the sensor's address	
B3:0/1			Set data transfer rate	
B3:0/2			Activate factory setting	
B3:0/3			Read software version	
B3:0/4			Start Scan-In	
B3:0/5			Read all sensor configurations	
B3:0/6			Transfer color matrix	
B3:0/7			Permanent storage of sensor settings	
B3:0/8			Parameter Backup & Restore	
B3:0/9			Activate Key Pad Lock	
B3:0/10				
B3:0/11				
B3:0/12				
B3:0/13				
B3:0/14				
B3:0/15				
B3:1/0			Node Address 1	
B3:1/1			Node Address 2	
B3:1/2			Node Address 3	
B3:1/3			Node Address 4	
B3:1/4			Node Address 5	
B3:1/5				
B3:1/6				
B3:1/7				
B3:1/8				
B3:1/9				
B3:1/10				
B3:1/12				
B3:1/13				
B3:1/14				
B3:1/15				
B3:2				
B3:2/0				
B3:2/1				
B3:2/2				
B3:2/3				
B3:2/4				
B3:2/5				
B3:2/6				
B3:2/7				
B3:2/8				
B3:2/9				
B3:2/10				
B3:2/11				
B3:2/12				
B3:2/13				
B3:2/14				
B3:2/15				
B3:3				
B3:3/0				
B3:3/1				
B3:3/2				
B3:3/3				
B3:3/4				
B3:3/5				
B3:3/15			Run Mode	
B3:4				
B3:4/0				
B3:4/1				
B3:4/2				
B3:4/3				
B3:4/4				
B3:4/5				
B3:4/6				
B3:4/7				
B3:4/8				
B3:4/9				
B3:4/10				
B3:4/11				
B3:5				
B3:5/0			Description of Color Channel 1	
B3:5/1			Description of Color Channel 2	
B3:5/2			Description of Color Channel 3	
B3:5/3			Description of Color Channel 4	
B3:5/4			Description of Color Channel 5	
B3:5/5			Sensor did not accept Factory Settings Command	
B3:5/8			Sensor accepted Keypad Lock and Unlock Command	
B3:5/9			Sensor did not accept Permanent Storage of Sensor Settings	
B3:5/10			Sensor accepted Keypad Lock and Unlock Command	
B3:5/11			Sensor did not accept Keypad Lock and Unlock Command	
B3:5/12			Sensor accepted Start Scan-In Command	
B3:5/13			Sensor did not accept Start Scan-In Command	
B3:5/14			Sensor accepted End Scan-In Command	
B3:5/15			Sensor did not accept End Scan-In Command	

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
B3:6/0			Channel 1 has been Assigned for Node Address 1	
B3:6/1			Channel 1 has not been Assigned for Node Address 1	
B3:6/2			Channel 2 has been Assigned for Node Address 1	
B3:6/3			Channel 2 has not been Assigned for Node Address 1	
B3:6/4			Channel 3 has been Assigned for Node Address 1	
B3:6/5			Channel 3 has not been Assigned for Node Address 1	
B3:6/6			Channel 4 has been Assigned for Node Address 1	
B3:6/7			Channel 4 has not been Assigned for Node Address 1	
B3:6/8			Channel 5 has been Assigned for Node Address 1	
B3:6/9			Channel 5 has not been Assigned for Node Address 1	
B3:6/10			All 5 Channels have been Assigned for Node Address 1, Allow Matrix Transfer	
B3:6/11			Channel 1 has been Assigned for Node Address 2	
B3:6/12			Channel 1 has not been Assigned for Node Address 2	
B3:6/13			Channel 2 has been Assigned for Node Address 2	
B3:6/14			Channel 2 has not been Assigned for Node Address 2	
B3:6/15			Channel 3 has been Assigned for Node Address 2	
B3:7			Set Color Tolerance Level	
B3:7/0			Channel 3 has not been Assigned for Node Address 2	
B3:7/1			Channel 4 has been Assigned for Node Address 2	
B3:7/2			Channel 4 has not been Assigned for Node Address 2	
B3:7/3			Channel 5 has been Assigned for Node Address 2	
B3:7/4			Channel 5 has not been Assigned for Node Address 2	
B3:7/5			All 5 Channels have been Assigned for Node Address 2, Allow Matric Transfer	
B3:7/6				
B3:7/7				
B3:7/8				
B3:7/9				
B3:7/10				
B3:8				
B3:8/0			RESET COMS	
B3:8/1				
B3:8/2				
B3:8/3				
B3:9				
B3:10				
B3:10/0				
B3:10/1				
B3:11/0			Sensor Accepted Change of Address Command	
B3:11/1			Sensor did not Accept Change of Address Command	
B3:11/2			Sensor Accepted Change of Data Transfer Command	
B3:11/3			Sensor did not Accept Change of Data Transfer Command	
B3:11/4			Sensor Accepted Factory Settings Command	
B3:11/5			Sensor did not Accept Factory Settings Command	
B3:12				
B19:0				
B19:0/0				
B19:0/1				
C5:0				
C5:1				
C5:1/CU			USA	
C5:2				
C5:2/CU			China	
C5:3				
C5:3/CU			Brazil	
C5:4				
C5:4/CU			India	
C5:5				
C5:5/CU			Germany	
I:0/0				
I:0/1				
I:0/2				
I:0/3				
I:0/4				
I:0/5				
I:0/6				
I:0/9				
I:0/10				
I:0/11				
I:0/12				
N7:0				
N7:1				
N7:1/0				
N7:1/1				
N7:1/2				
N7:1/3				
N7:2				
N7:3				
N7:4				
N7:5				
N7:6			Main version of software for selected sensor.	
N7:7			Secondary version of software for selected sensor	
N7:8			Main version of software for selected sensor	
N7:9				
N7:10				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
N7:11				
N7:12				
N7:13				
N7:14				
N7:15				
N7:16				
N7:17				
N7:18				
N7:19				
N7:20				
N7:21				
N7:22				
N7:23				
N7:24				
N7:25				
N7:26				
N7:27				
N7:28				
N7:29				
N7:30				
N7:31				
N7:32				
N7:33				
N7:34				
N7:35				
N7:36				
N7:37				
N7:38				
N7:39				
N7:40				
N7:41				
N7:42				
N7:43				
N7:44				
N7:45				
N7:46				
N7:47				
N7:48				
N7:49				
N7:50				
N7:51				
N7:52				
N7:53				
N7:54				
N7:55				
N7:56				
N7:57				
N7:58				
N7:59				
N7:60				
N7:61				
N7:62				
N7:63				
N7:64				
N7:65				
N7:66				
N7:67				
N7:68				
N7:69				
N7:70				
N7:71				
N7:72				
N7:73				
N7:74				
N7:75				
N7:76				
N7:77				
N7:78				
N7:79				
N7:80				
N7:81				
N7:90			CHANNEL #	
N7:100				
N23:0				
N23:1				
N23:2				
N23:3				
N23:4				
N23:5				
N24:0			Upper Tolerance Percentage of the Red Portion for Channel 1	
N24:1			Lower Tolerance Percentage of the Red Portion for Channel 1	
N24:2			Upper Tolerance Percentage of the Green Portion for Channel 1	
N24:3			Lower Tolerance Percentage of the Green Portion for Channel 1	
N24:4			Upper Tolerance Percentage of the Intensity Portion for Channel 1	

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
N24:5			Lower Tolerance Percentage of the Intensity Portion for Channel 1	
N24:6			Upper Limit of the Red Portion for Channel 1	
N24:7			Lower Limit of the Red Portion for Channel 1	
N24:8			Upper Limit of the Green Portion for Channel 1	
N24:9			Lower Limit of the Green Portion for Channel 1	
N24:10			Upper Limit of the Intensity Portion for Channel 1	
N24:11			Lower Limit of the Intensity Portion for Channel 1	
N100:0				
N100:1				
O:0/0			Color Channel 1 Output	
O:0/1			Sensor 2, Color Channel 2 Output	
O:0/2			Sensor 2, Color Channel 3 Output	
O:0/3			Sensor 2, Color Channel 4 Output	
O:0/4			Color Channel 5 Output	
O:0/5			Sensor 2, Color Channel 1 Output	
O:0/6			Sensor 2, Color Channel 2 Output	
O:0/7			Sensor 2, Color Channel 3 Output	
O:0/8			Sensor 2, Color Channel 4 Output	
O:0/9			Sensor 2, Color Channel 5	
R6:0				
R6:0/ER				
R6:1				
R6:1/UL				
R6:1/ER				
R6:1/DN				
R6:2				
R6:2/UL				
R6:2/ER				
R6:2/DN				
R6:3				
R6:3/UL				
R6:3/ER				
R6:3/DN				
R6:4				
R6:4/UL				
R6:4/ER				
R6:4/DN				
R6:5				
R6:5/UL				
R6:5/ER				
R6:5/DN				
R6:6				
R6:6/UL				
R6:6/DN				
R6:7				
R6:7/UL				
R6:8				
R6:8/UL				
R6:8/DN				
R6:9				
R6:9/UL				
R6:9/DN				
R6:10				
R6:10/ER				
R6:10/DN				
R6:11				
R6:11/UL				
R6:11/ER				
R6:11/DN				
R6:12				
R6:12/ER				
R6:12/DN				
R6:13				
R6:13/UL				
R6:13/ER				
R6:13/DN				
R6:14				
R6:14/ER				
R6:14/DN				
R6:15				
R6:15/UL				
R6:15/ER				
R6:15/DN				
R6:16/UL				
R6:16/DN				
R6:17/UL				
R6:18				
R6:18/UL				
R6:18/ER				
R6:18/DN				
R6:19				
R6:19/UL				
R6:19/ER				
R6:19/DN				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
R6:20				
R6:20/UL				
R6:20/ER				
R6:20/DN				
R6:21				
R6:21/UL				
R6:21/ER				
R6:21/DN				
R6:22				
R6:22/UL				
R6:22/ER				
R6:22/DN				
R6:23				
R6:23/UL				
R6:23/ER				
R6:23/DN				
R6:24				
R6:24/UL				
R6:24/ER				
R6:24/DN				
R6:29/DN				
S:0			Arithmetic Flags	
S:0/0			Processor Arithmetic Carry Flag	
S:0/1			Processor Arithmetic Underflow/ Overflow Flag	
S:0/2			Processor Arithmetic Zero Flag	
S:0/3			Processor Arithmetic Sign Flag	
S:1			Processor Mode Status/ Control	
S:1/0			Processor Mode Bit 0	
S:1/1			Processor Mode Bit 1	
S:1/2			Processor Mode Bit 2	
S:1/3			Processor Mode Bit 3	
S:1/4			Processor Mode Bit 4	
S:1/5			Forces Enabled	
S:1/6			Forces Present	
S:1/7			Comms Active	
S:1/8			Fault Override at Powerup	
S:1/9			Startup Protection Fault	
S:1/10			Load Memory Module on Memory Error	
S:1/11			Load Memory Module Always	
S:1/12			Load Memory Module and RUN	
S:1/13			Major Error Halted	
S:1/14			Access Denied	
S:1/15			First Pass	
S:2/0			STI Pending	
S:2/1			STI Enabled	
S:2/2			STI Executing	
S:2/3			Index Addressing File Range	
S:2/4			Saved with Debug Single Step	
S:2/5			DH-485 Incoming Command Pending	
S:2/6			DH-485 Message Reply Pending	
S:2/7			DH-485 Outgoing Message Command Pending	
S:2/15			Comms Servicing Selection	
S:3			Current Scan Time/ Watchdog Scan Time	
S:4			Time Base	
S:5/0			Overflow Trap	
S:5/2			Control Register Error	
S:5/3			Major Err Detected Executing UserFault Routine	
S:5/4			M0-M1 Referenced on Disabled Slot	
S:5/8			Memory Module Boot	
S:5/9			Memory Module Password Mismatch	
S:5/10			STI Overflow	
S:5/11			Battery Low	
S:6			Major Error Fault Code	
S:7			Suspend Code	
S:8			Suspend File	
S:9			Active Nodes	
S:10			Active Nodes	
S:11			I/O Slot Enables	
S:12			I/O Slot Enables	
S:13			Math Register	
S:14			Math Register	
S:15			Node Address/ Baud Rate	
S:16			Debug Single Step Rung	
S:17			Debug Single Step File	
S:18			Debug Single Step Breakpoint Rung	
S:19			Debug Single Step Breakpoint File	
S:20			Debug Fault/ Powerdown Rung	
S:21			Debug Fault/ Powerdown File	
S:22			Maximum Observed Scan Time	
S:23			Average Scan Time	
S:24			Index Register	
S:25			I/O Interrupt Pending	
S:26			I/O Interrupt Pending	
S:27			I/O Interrupt Enabled	

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
S:28			I/O Interrupt Enabled	
S:29			User Fault Routine File Number	
S:30			STI Setpoint	
S:31			STI File Number	
S:32			I/O Interrupt Executing	
S:33			Extended Proc Status Control Word	
S:33/0			Incoming Command Pending	
S:33/1			Message Reply Pending	
S:33/2			Outgoing Message Command Pending	
S:33/3			Selection Status User/DF1	
S:33/4			Communicat Active	
S:33/5			Communicat Servicing Selection	
S:33/6			Message Servicing Selection Channel 0	
S:33/7			Message Servicing Selection Channel 1	
S:33/8			Interrupt Latency Control Flag	
S:33/9			Scan Toggle Flag	
S:33/10			Discrete Input Interrupt Reconfigur Flag	
S:33/11			Online Edit Status	
S:33/12			Online Edit Status	
S:33/13			Scan Time Timebase Selection	
S:33/14			DTR Control Bit	
S:33/15			DTR Force Bit	
S:34			Pass-thru Disabled	
S:34/0			Pass-Thru Disabled Flag	
S:34/1			DH+ Active Node Table Enable Flag	
S:34/2			Floating Point Math Flag Disable,Fl	
S:35			Last 1 ms Scan Time	
S:36			Extended Minor Error Bits	
S:36/8			DII Lost	
S:36/9			STI Lost	
S:36/10			Memory Module Data File Overwrite Protection	
S:37			Clock Calendar Year	
S:38			Clock Calendar Month	
S:39			Clock Calendar Day	
S:40			Clock Calendar Hours	
S:41			Clock Calendar Minutes	
S:42			Clock Calendar Seconds	
S:43			STI Interrupt Time	
S:44			I/O Event Interrupt Time	
S:45			DII Interrupt Time	
S:46			Discrete Input Interrupt- File Number	
S:47			Discrete Input Interrupt- Slot Number	
S:48			Discrete Input Interrupt- Bit Mask	
S:49			Discrete Input Interrupt- Compare Value	
S:50			Processor Catalog Number	
S:51			Discrete Input Interrupt- Return Number	
S:52			Discrete Input Interrupt- Accumulat	
S:53			Reserved/ Clock Calendar Day of the Week	
S:55			Last DII Scan Time	
S:56			Maximum Observed DII Scan Time	
S:57			Operating System Catalog Number	
S:58			Operating System Series	
S:59			Operating System FRN	
S:61			Processor Series	
S:62			Processor Revision	
S:63			User Program Type	
S:64			User Program Functional Index	
S:65			User RAM Size	
S:66			Flash EEPROM Size	
S:67			Channel 0 Active Nodes	
S:68			Channel 0 Active Nodes	
S:69			Channel 0 Active Nodes	
S:70			Channel 0 Active Nodes	
S:71			Channel 0 Active Nodes	
S:72			Channel 0 Active Nodes	
S:73			Channel 0 Active Nodes	
S:74			Channel 0 Active Nodes	
S:75			Channel 0 Active Nodes	
S:76			Channel 0 Active Nodes	
S:77			Channel 0 Active Nodes	
S:78			Channel 0 Active Nodes	
S:79			Channel 0 Active Nodes	
S:80			Channel 0 Active Nodes	
S:81			Channel 0 Active Nodes	
S:82			Channel 0 Active Nodes	
S:83			DH+ Active Nodes	
S:84			DH+ Active Nodes	
S:85			DH+ Active Nodes	
S:86			DH+ Active Nodes	
ST9:0				
ST9:1				
ST9:2				
ST9:3				
ST9:4				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
ST9:5				
ST9:6.LEN				
ST9:6.DATA[0]				
ST10:0			Length and Command to change the node address	
ST10:0.LEN				
ST10:1				
ST10:1.DATA[0]			New node address of sensor 1; entered manually in N7:0, decimal format	
ST10:2				
ST10:2.LEN				
ST10:2.DATA[0]			New node address for currently selected sensor (default address is 1)	
ST10:3				
ST10:4				
ST10:4.LEN				
ST10:4.DATA[0]				
ST10:5				
ST10:6			Current node address, length, command, new node address and checksum	
ST10:6.DATA[0]				
ST10:7				
ST10:8				
ST11:0				
ST11:1				
ST11:2				
ST11:2.LEN				
ST11:2.DATA[0]			New data transfer rate for currently selected sensor (default Baud rate is 9600)	
ST11:3				
ST11:4				
ST11:4.LEN				
ST11:4.DATA[0]				
ST11:4.DATA[1]				
ST11:4.DATA[2]				
ST11:5				
ST11:5.DATA[0]				
ST11:5.DATA[1]				
ST11:6				
ST11:6.DATA[0]				
ST12:0				
ST12:1				
ST12:2				
ST12:3				
ST12:3.LEN				
ST12:3.DATA[0]				
ST12:4				
ST12:4.DATA[0]				
ST12:5				
ST12:5.DATA[0]				
ST13:0				
ST13:1				
ST13:2				
ST13:3				
ST13:3.LEN				
ST13:3.DATA[0]				
ST13:3.DATA[1]				
ST13:4				
ST13:5				
ST13:5.LEN				
ST13:5.DATA[0]				
ST13:6				
ST13:6.DATA[0]				
ST13:7				
ST13:7.LEN				
ST13:7.DATA[0]				
ST13:8				
ST13:8.DATA[0]				
ST13:9			Secondary version of software for selected sensor	
ST13:9.DATA[0]				
ST13:10				
ST13:10.LEN			Main version of software for selected sensor	
ST13:10.DATA[0]				
ST14:0			Length, Command of Start Scan	
ST14:1				
ST14:2				
ST14:2.LEN				
ST14:3				
ST14:4				
ST14:5				
ST14:5.DATA[0]				
ST14:6				
ST14:6.DATA[0]			Color Tolerance Level	
ST14:7				
ST14:7.DATA[0]			Intensity Tolerance Level	
ST14:8				
ST14:9				
ST15:0			Tolerance, Length and Command	
ST15:1				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
ST15:2				
ST15:2.LEN				
ST15:2.DATA[0]				
ST15:3				
ST15:4				
ST15:4.LEN				
ST15:5				
ST15:6				
ST15:6.DATA[0]				
ST15:7				
ST15:7.DATA[0]				
ST16:0			Length, Command of End Scan	
ST16:1				
ST16:2				
ST16:2.LEN				
ST16:3				
ST16:4				
ST16:5				
ST16:5.DATA[0]				
ST17:0			Length and Command	
ST17:1			Address, Length, Command	
ST17:2				
ST17:3			Master: Read All Sensor Configurations	
ST17:3.LEN				
ST17:3.DATA[0]				
ST17:4			Sensor: Read All Sensor Configurations for Node Address 1	
ST17:5			Description of Color Channel 1 for Node Address 1	
ST17:6			Description of Color Channel 2 for Node Address 1	
ST17:6.LEN				
ST17:7			Description of Color Channel 3 for Node Address 1	
ST17:7.LEN				
ST17:8			Description of Color Channel 4 for Node Address 1	
ST17:8.LEN				
ST17:9			Description of Color Channel 5 for Node Address 1	
ST17:9.LEN			Description of Color Channel 5 for Node Address 1	
ST17:10			Sensor: Read All Sensor Configurations for Node Address 2	
ST17:10.LEN			Description of Color Channel 4 for Node Address 2	
ST17:11			Description of Color Channel 1 for Node Address 2	
ST17:11.LEN			Description of Color Channel 1 for Node Address 2	
ST17:12			Description of Color Channel 2 for Node Address 2	
ST17:12.LEN			Description of Color Channel 2 for Node Address 2	
ST17:13			Description of Color Channel 3 for Node Address 2	
ST17:13.LEN			Description of Color Channel 3 for Node Address 2	
ST17:14			Description of Color Channel 4 for Node Address 2	
ST17:14.LEN			Description of Color Channel 4 for Node Address 2	
ST17:15			Description of Color Channel 5 for Node Address 2	
ST17:15.LEN				
ST18:0			Length, Command of Transfer Color Matrix	
ST18:1			Address, Length, Command of Transfer Color Matrix	
ST18:2				
ST18:3			Master: Transfer Color Matrix	
ST18:3.LEN				
ST18:4			Sensor: Transfer Color Matrix	
ST18:5				
ST18:6				
ST18:7				
ST18:7.LEN				
ST18:8				
ST19:0				
ST19:0.DATA[0]				
ST19:1	ST19	Global		
ST19:1.DATA[0]				
ST19:2				
ST19:2.DATA[0]				
ST19:3				
ST19:3.LEN				
ST19:3.DATA[0]				
ST19:3.DATA[1]				
ST19:4				
ST19:4.DATA[0]				
ST19:5				
ST19:5.DATA[0]				
ST19:6				
ST19:6.DATA[0]				
ST19:7				
ST19:7.DATA[0]				
ST19:8				
ST19:8.DATA[0]				
ST19:9				
ST19:9.DATA[0]				
ST19:10				
ST19:10.DATA[0]				
ST19:11				
ST19:11.DATA[0]				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
ST19:12				
ST19:12.DATA[0]				
ST19:13				
ST19:13.DATA[0]				
ST19:14				
ST19:14.DATA[0]				
ST19:15				
ST19:15.DATA[0]				
ST19:16				
ST19:16.DATA[0]				
ST19:17				
ST19:17.DATA[0]				
ST19:18				
ST19:18.DATA[0]				
ST19:19				
ST19:19.DATA[0]				
ST19:20				
ST19:20.DATA[0]				
ST19:21				
ST19:21.DATA[0]				
ST19:22				
ST19:22.DATA[0]				
ST19:23				
ST19:23.DATA[0]				
ST19:24				
ST19:24.DATA[0]				
ST19:25				
ST19:25.DATA[0]				
ST19:26				
ST19:26.DATA[0]				
ST19:27				
ST19:27.DATA[0]				
ST19:28				
ST19:28.DATA[0]				
ST19:29				
ST19:29.DATA[0]				
ST19:30				
ST19:30.DATA[0]				
ST19:31				
ST19:31.DATA[0]				
ST19:32				
ST19:32.DATA[0]				
ST19:33				
ST19:33.DATA[0]				
ST19:34				
ST19:34.DATA[0]				
ST19:35				
ST19:35.DATA[0]				
ST19:36				
ST19:36.DATA[0]				
ST19:37				
ST19:37.DATA[0]				
ST19:38				
ST19:38.DATA[0]				
ST19:39				
ST19:39.DATA[0]				
ST19:40				
ST19:40.DATA[0]				
ST19:41				
ST19:41.DATA[0]				
ST19:42				
ST19:42.DATA[0]				
ST19:43				
ST19:43.DATA[0]				
ST19:44				
ST19:44.DATA[0]				
ST19:45				
ST19:45.DATA[0]				
ST19:46				
ST19:46.DATA[0]				
ST19:47				
ST19:47.DATA[0]				
ST19:48				
ST19:48.DATA[0]				
ST19:49				
ST19:49.DATA[0]				
ST19:50				
ST19:50.DATA[0]				
ST19:51				
ST19:51.DATA[0]				
ST19:52				
ST19:52.DATA[0]				
ST19:53				
ST19:53.LEN				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
ST19:53.DATA[0]				
ST19:54				
ST19:55				
ST19:55.LEN				
ST19:55.DATA[0]				
ST19:56				
ST20:0				
ST20:0.DATA[0]				
ST20:1				
ST20:1.DATA[0]				
ST20:2				
ST20:2.DATA[0]				
ST20:3				
ST20:3.LEN				
ST20:3.DATA[0]				
ST20:4				
ST20:4.LEN				
ST20:4.DATA[0]				
ST20:5				
ST21:0				
ST21:0.LEN				
ST21:1				
ST21:3				
ST21:3.LEN				
ST21:3.DATA[0]				
ST21:3.DATA[1]				
ST21:4				
ST21:5				
ST21:5.DATA[0]				
ST21:6				
ST21:6.DATA[0]				
ST22:0			Command to lock keys on sensor face	
ST22:1				
ST22:2				
ST22:2.LEN				
ST22:2.DATA[0]				
ST22:3				
ST22:4				
ST22:4.LEN				
ST22:5				
ST22:5.DATA[0]				
ST22:6				
ST22:6.DATA[0]				
ST22:7				
ST22:7.DATA[0]				
ST23:0				
ST23:1				
ST23:2				
ST23:3				
ST23:3.LEN				
ST23:4				
T4:0				
T4:1				
T4:1/DN				
T4:2				
T4:2/DN				
T4:3				
T4:3/DN				
T4:4				
T4:4/DN				
T4:5				
T4:5/DN				
T4:6				
T4:7				
T4:7/DN				
T4:8				
T4:8/DN				
T4:9				
T4:9/DN				
T4:10				
T4:10/DN				
T4:11				
T4:11/DN				
T4:12				
T4:12/DN				
T4:13				
T4:13/DN				
T4:14				
T4:14/DN				
T4:15				
T4:16				
T4:16/DN				
T4:17				
T4:17/DN				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
T4:18				
T4:18/DN				
T4:19				
T4:19/DN				
T4:20				
T4:20/DN				
T4:21/DN				
T4:22				
T4:23/DN				
T4:24				
T4:24/DN				
T4:25				
T4:25/DN				
T4:26				
T4:26/DN				
T4:27				
T4:27/DN				
T4:28				
T4:28/DN				
T4:29				
T4:29/DN				
T4:30				
T4:30/DN				
T4:31				
T4:31/DN				
T4:32				
T4:32/DN				
T4:33				
T4:33/DN				
T4:34				
T4:34/DN				
U:3				
U:4				
U:5				
U:6				
U:7				
U:8				
U:9				
U:10				
U:11				
U:12				
U:13				
U:14				
U:15				
U:16				
U:17				
U:18				
U:19				
U:20				
U:21				
U:22				
U:23				
U:24				
U:25				
U:26				
U:27				
U:28				
U:29				
U:30				
U:31				
U:32				
U:33				

Instruction Comment Database

Address	Instruction	Description
B3:5/2	OTE	Sensor accepted Change of Data Transfer Command
B3:5/3	OTE	Sensor did not accept Change of Data Transfer Command
B3:5/8	OTE	Sensor accepted Keypad Lock and Unlock Command
B3:5/9	OTE	Sensor did not accept Keypad Lock and Unlock Command
N7:4	MOV	New node address for currently selected sensor (default address is 1)
ST10:0	MOV	Specify the new node address that Sensor 1 will have. Enter number in decimal format.
ST10:1	MOV	New node address of sensor 1; entered manually in N7:0, decimal format
ST10:6	AEX	status of Change Address Command

Symbol Group Database

Group_Name Description