RSLogix 500 Project Report

Processor Information

Processor Type: Bul.1766 MicroLogix 1400 Series B

Processor Name: ML1400

Total Memory Used: 239 Instruction Words Used - 168 Data Table Words Used

Total Memory Left: 12195 Instruction Words Left

Program Files: 6

Data Files: 12

Program ID: a91f

I/O Configuration

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

Channel Configuration

CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex
   CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Edit Resource/Owner Timeout: 60
   CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Passthru Link ID: 1
   CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Write Protected: No
   CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Comms Servicing Selection: Yes
   CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Message Servicing Selection: Yes
   CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex 1st AWA Append Character: \d
   CHANNEL 0 (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

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: F4:54:33:AA:A6:86
   IP Address: 10.0.0.10
   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: No
   HTTP Enable: Yes
   Auto Negotiate Enable: Yes
   DNP3 over IP Enable: No
   Modbus TCP Enable: Yes
   Disable EtherNet/IP Incoming Connection: No
   Disable Duplicate IP Address Detection: No
   Port Speed Enable: 10/100 Mbps Full Duplex/Half Duplex
   Contact:
   Location:

   Extend Area: No
   Enable Access Control for Master IP addresses: No
   Coil Base File Number: 0
   Contact Base File Number: 0
   Input Register Base File Number: 0
   Holding Register Base File Number: 9
   Client IP Address 0: 0.0.0.0
   Client IP Address 1: 0.0.0.0
   Client IP Address 2: 0.0.0.0
   Client IP Address 3: 0.0.0.0
   Client IP Address 4: 0.0.0.0
   Local TCP Port: 502
   Diagnostic File Number: 0

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

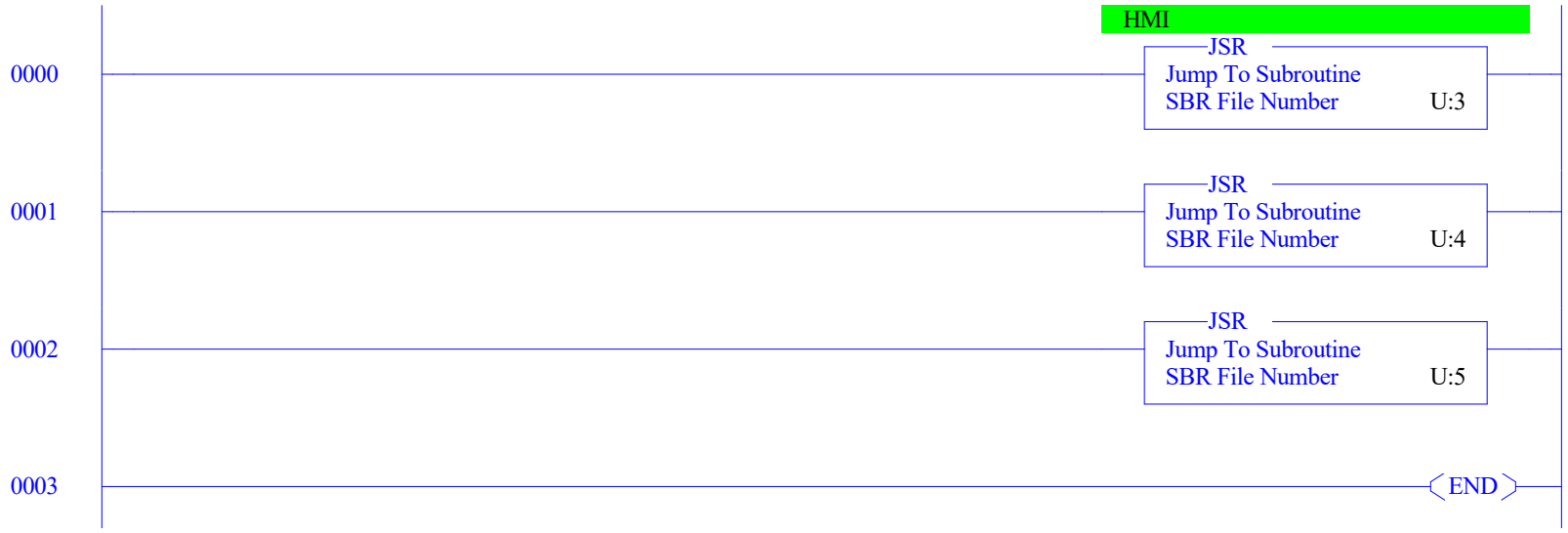
Program File List

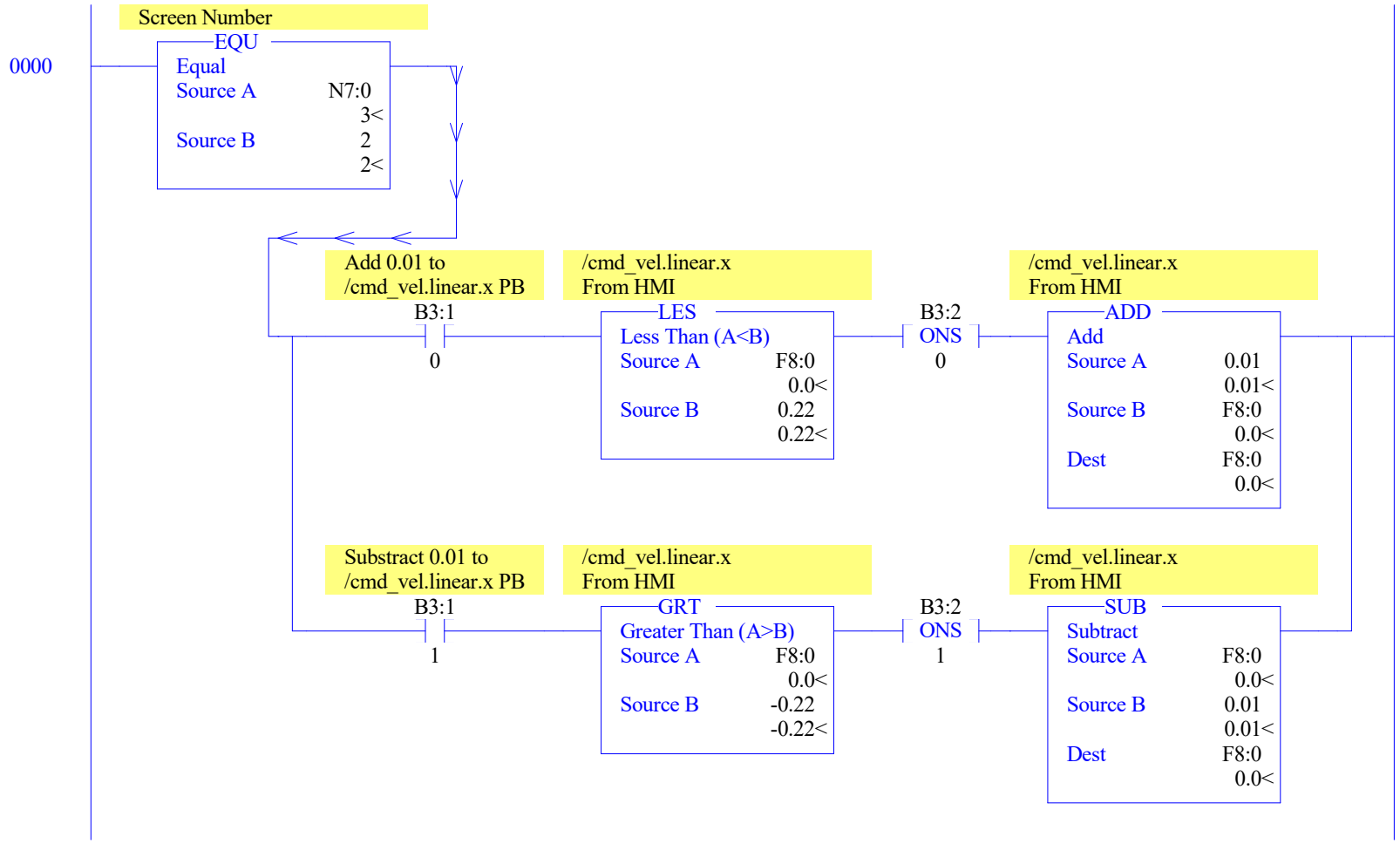
Name	Number	Type	Rungs	Debug	Bytes
[SYSTEM]	0	SYS	0	No	0
	1	SYS	0	No	0
	2	LADDER	4	No	30
HMI	3	LADDER	5	No	555
TELEOP	4	LADDER	7	No	391
COMMAND	5	LADDER	8	No	487

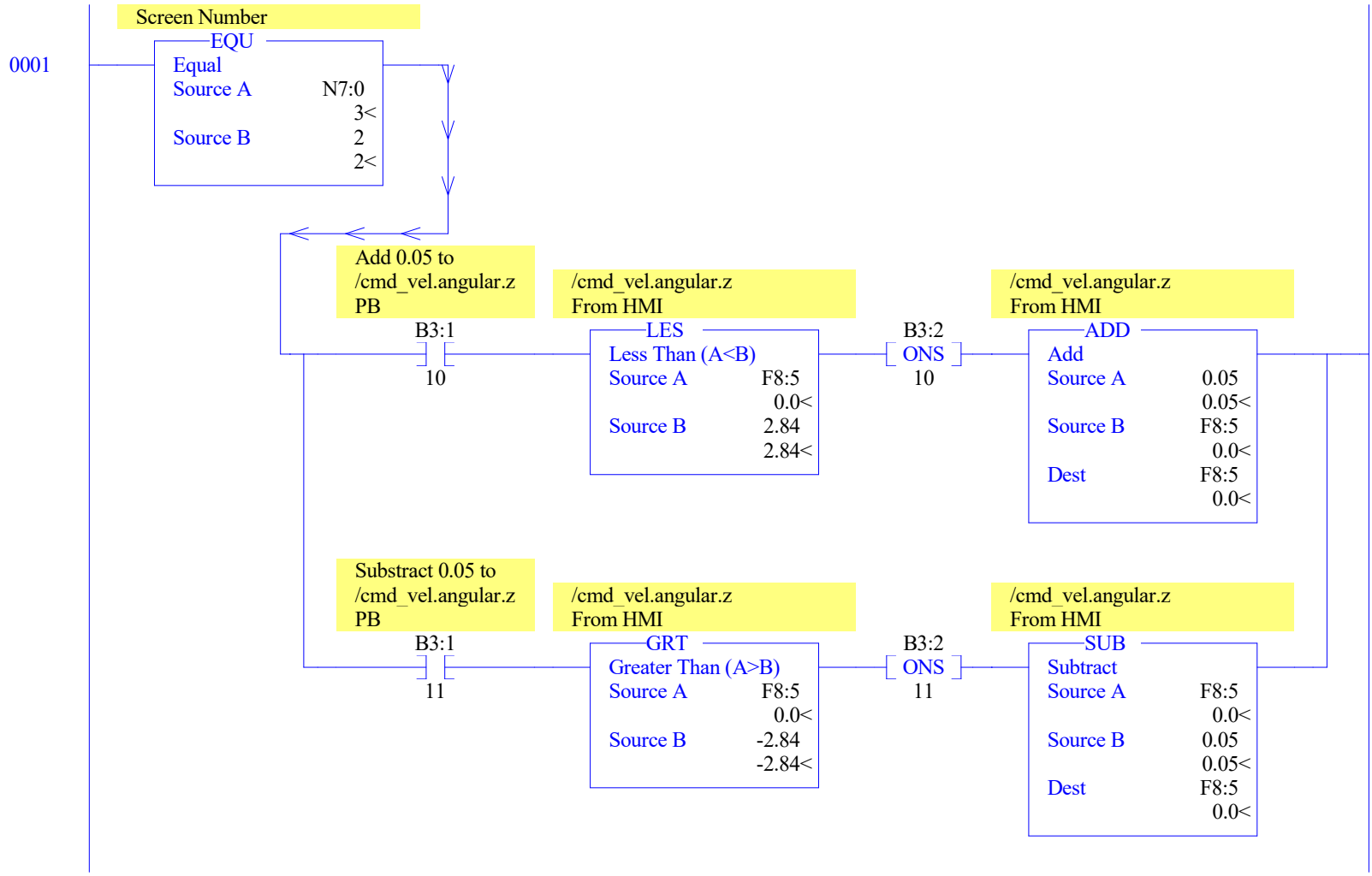
Data File List

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	32	32	B3:31
TIMER	4	T	Global	No	3	1	T4:0
COUNTER	5	C	Global	No	3	1	C5:0
CONTROL	6	R	Global	No	3	1	R6:0
INTEGER	7	N	Global	No	20	20	N7:19
FLOAT	8	F	Global	No	20	10	F8:9
HOLD_REG	9	N	Global	No	25	25	N9:24
DECIMALES	10	F	Global	No	14	7	F10:6
	11	N	Global	No	6	6	N11:5

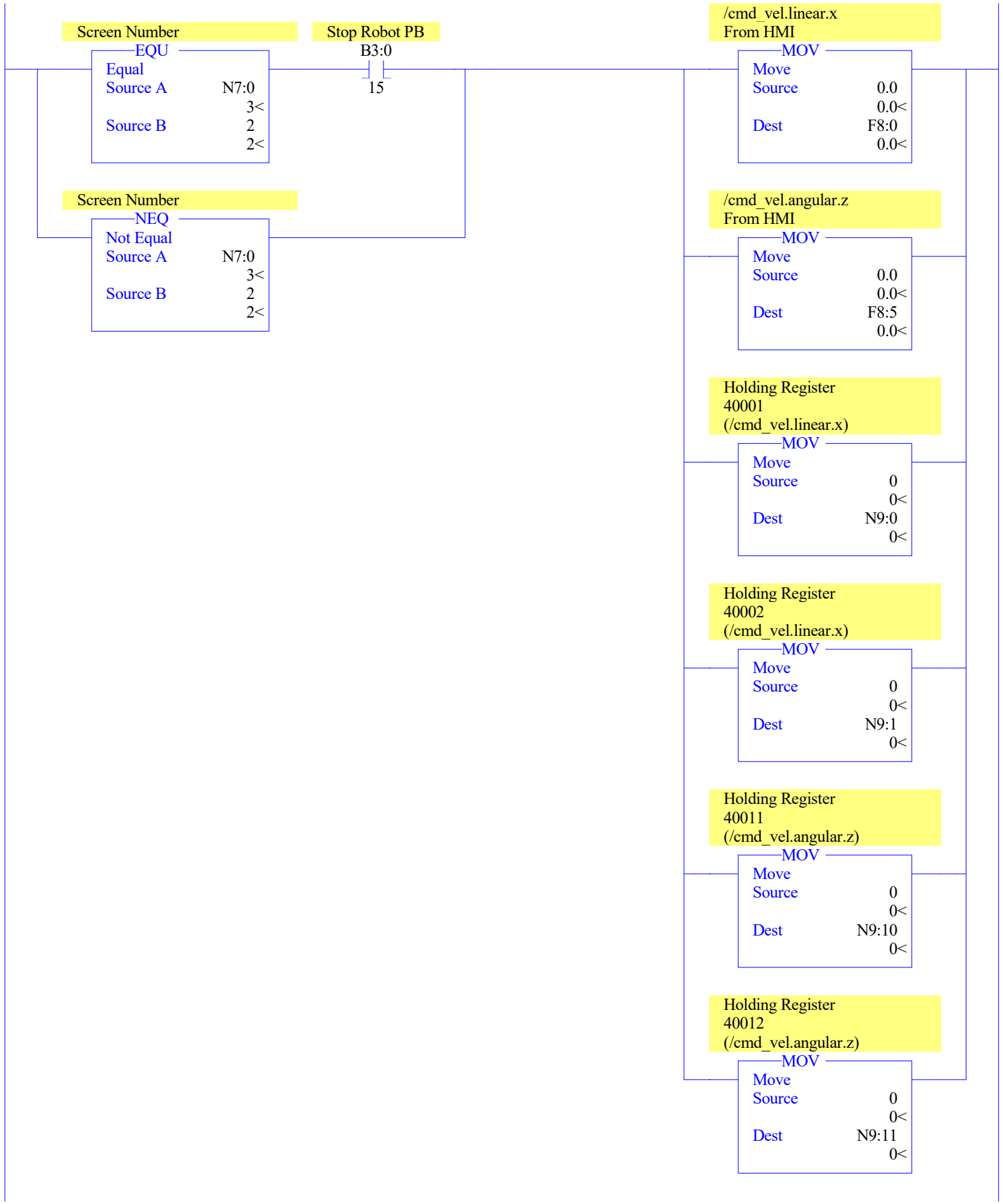
LAD 2 - --- Total Rungs in File = 4



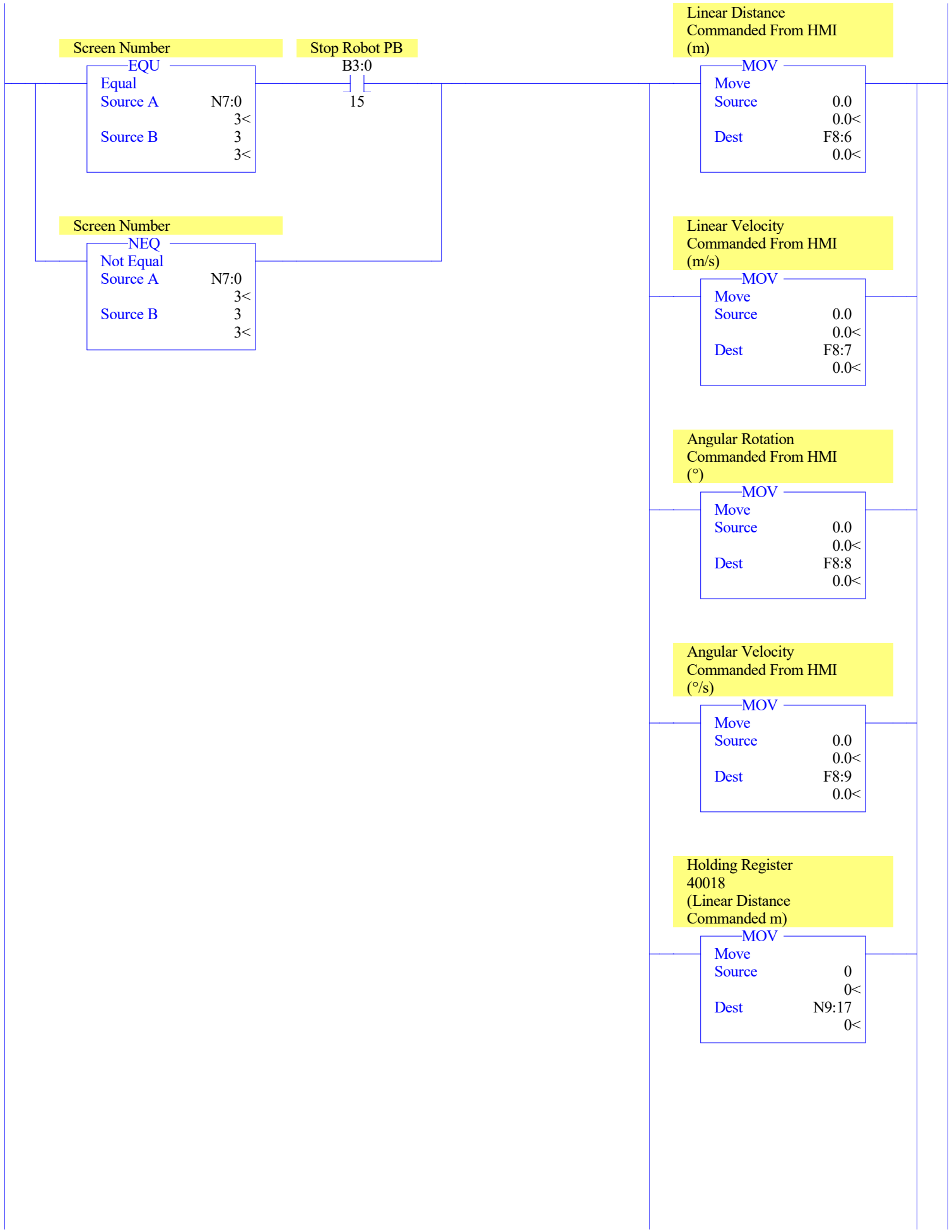

Screen Number
0000
EQU
Equal
Source A N7:0
3<
Source B 2
2<
Add 0.01 to /cmd_vel.linear.x PB
B3:1
0
/cmd_vel.linear.x From HMI
LES
Less Than (A<B)
Source A F8:0
0.0<
Source B 0.22
0.22<
B3:2
ONS
0
/cmd_vel.linear.x From HMI
ADD
Add
Source A 0.01
0.01<
Source B F8:0
0.0<
Dest F8:0
0.0<
Substract 0.01 to /cmd_vel.linear.x PB
B3:1
1
/cmd_vel.linear.x From HMI
GRT
Greater Than (A>B)
Source A F8:0
0.0<
Source B -0.22
-0.22<
B3:2
ONS
1
/cmd_vel.linear.x From HMI
SUB
Subtract
Source A F8:0
0.0<
Source B 0.01
0.01<
Dest F8:0
0.0<


Screen Number
0001
EQU
Equal
Source A N7:0
3<
Source B 2
2<
Add 0.05 to /cmd_vel.angular.z PB
B3:1
10
/cmd_vel.angular.z From HMI
LES
Less Than (A<B)
Source A F8:5
0.0<
Source B 2.84
2.84<
B3:2
ONS
10
/cmd_vel.angular.z From HMI
ADD
Add
Source A 0.05
0.05<
Source B F8:5
0.0<
Dest F8:5
0.0<
Substract 0.05 to /cmd_vel.angular.z PB
B3:1
11
/cmd_vel.angular.z From HMI
GRT
Greater Than (A>B)
Source A F8:5
0.0<
Source B -2.84
-2.84<
B3:2
ONS
11
/cmd_vel.angular.z From HMI
SUB
Subtract
Source A F8:5
0.0<
Source B 0.05
0.05<
Dest F8:5
0.0<

0002


Screen Number
EQU
Equal
Source A N7:0 3<
Source B 2 2<
Stop Robot PB
B3:0
15
Screen Number
NEQ
Not Equal
Source A N7:0 3<
Source B 2 2<
/cmd_vel.linear.x
From HMI
MOV
Move
Source 0.0 0.0<
Dest F8:0 0.0<
/cmd_vel.angular.z
From HMI
MOV
Move
Source 0.0 0.0<
Dest F8:5 0.0<
Holding Register
40001
(/cmd_vel.linear.x)
MOV
Move
Source 0 0<
Dest N9:0 0<
Holding Register
40002
(/cmd_vel.linear.x)
MOV
Move
Source 0 0<
Dest N9:1 0<
Holding Register
40011
(/cmd_vel.angular.z)
MOV
Move
Source 0 0<
Dest N9:10 0<
Holding Register
40012
(/cmd_vel.angular.z)
MOV
Move
Source 0 0<
Dest N9:11 0<

0003


Screen Number
EQU
Equal
Source A N7:0 3<
Source B 3 3<
Stop Robot PB
B3:0
15
Screen Number
NEQ
Not Equal
Source A N7:0 3<
Source B 3 3<
Linear Distance Commanded From HMI (m)
MOV
Move
Source 0.0 0.0<
Dest F8:6 0.0<
Linear Velocity Commanded From HMI (m/s)
MOV
Move
Source 0.0 0.0<
Dest F8:7 0.0<
Angular Rotation Commanded From HMI (°)
MOV
Move
Source 0.0 0.0<
Dest F8:8 0.0<
Angular Velocity Commanded From HMI (°/s)
MOV
Move
Source 0.0 0.0<
Dest F8:9 0.0<
Holding Register 40018 (Linear Distance Commanded m)
MOV
Move
Source 0 0<
Dest N9:17 0<

Holding Register
40019 (Linear
Distance
Commanded cm)

MOV
Move
Source 0
0<
Dest N9:18
0<

Holding Register
40020 (Rotation
Angle Commanded [°])

MOV
Move
Source 0
0<
Dest N9:19
0<

Holding Register
40021 (Linear
Velocity Commanded
in X axis [m])

MOV
Move
Source 0
0<
Dest N9:20
0<

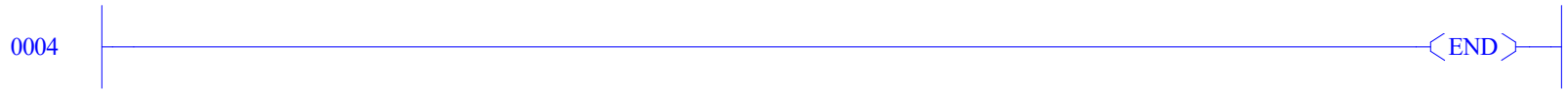
Holding Register
40022 (Linear
Velocity Commanded
in X axis [cm])

MOV
Move
Source 0
0<
Dest N9:21
0<

Holding Register
40023 (Angular
Velocity Commanded
in Z axis [°/s])

MOV
Move
Source 0
0<
Dest N9:22
0<

LAD 3 - HMI - HMI Routine --- Total Rungs in File = 5



0000

##

(ES) Este renglon lee el valor de F8:0 (linear.x) del HMI y lo mueve a N9:0. Debido a que esta fancion redondea el valor en lugar de truncarlo, la segunda y tercer rama de la logica corrigen el error en caso de existir.
(EN) This rung reads F8:0 (linear.x) from HMI and moves it to N9:0. Due to it rounds the value instead of truncate it, second and third branches correct error if any.

##

Screen Number

EQU
Equal
Source A N7:0 3<
Source B 2 2<

Holding Register 40001 (/cmd_vel.linear.x)

MOV
Move
Source F8:0 0.0<
Dest N9:0 0<

Holding Register 40001 (/cmd_vel.linear.x)

GEQ
Grtr Than or Eql (A>=B)
Source A N9:0 0<
Source B 0 0<

Holding Register 40001 (/cmd_vel.linear.x)

GRT
Greater Than (A>B)
Source A N9:0 0<
Source B F8:0 0.0<

Holding Register 40001 (/cmd_vel.linear.x)

SUB
Subtract
Source A N9:0 0<
Source B 1 1<
Dest N9:0 0<

Holding Register 40001 (/cmd_vel.linear.x)

LES
Less Than (A<B)
Source A N9:0 0<
Source B 0 0<

Holding Register 40001 (/cmd_vel.linear.x)

LES
Less Than (A<B)
Source A N9:0 0<
Source B F8:0 0.0<

Holding Register 40001 (/cmd_vel.linear.x)

ADD
Add
Source A N9:0 0<
Source B 1 1<
Dest N9:0 0<

0001

```
##################################################################################################

(ES) Se obtiene la parte decimal de /cmd_vel.linear.x
(EN) Gets decimal part of /cmd_vel.linear.x

##################################################################################################
```

Screen Number

EQU
Equal
Source A N7:0 3<
Source B 2 2<

/cmd_vel.linear.x
Division Module

SUB
Subtract
Source A F8:0 0.0<
Source B N9:0 0<
Dest F10:0 0.03<

0002

```
##################################################################################################

(ES) Multiplica la parte decimal de /cmd_vel.linear.x por 1000.0 para convertirla a numero entero y poder asignarla al Holding Register
(EN) Multiplies decimal part of /cmd_vel.linear.x by 1000.0 to convert it to integer and asign it to Holding Register

##################################################################################################
```

Screen Number

EQU
Equal
Source A N7:0 3<
Source B 2 2<

Holding Register
40002
(/cmd_vel.linear.x)

MUL
Multiply
Source A F10:0 0.03<
Source B 1000.0 1000.0<
Dest N9:1 0<

0003

##

(ES) Este renglon lee el valor de F8:5 (angular.z) del HMI y lo mueve a N9:10. Debido a que esta fancion redondea el valor en lugar de truncarlo, la segunda y tercer rama de la logica corrigen el error en caso de existir.
(EN) This rung reads F8:5 (angular.z) from HMI and moves it to N9:10. Due to it rounds the value instead of truncate it, second and third branches correct error if any.

##

Screen Number

EQU
Equal
Source A N7:0 3<
Source B 2 2<

Holding Register 40011 (/cmd_vel.angular.z)

MOV
Move
Source F8:5 0.0<
Dest N9:10 0<

Holding Register 40011 (/cmd_vel.angular.z)

GEQ
Grtr Than or Eql (A>=B)
Source A N9:10 0<
Source B 0 0<

Holding Register 40011 (/cmd_vel.angular.z)

GRT
Greater Than (A>B)
Source A N9:10 0<
Source B F8:5 0.0<

Holding Register 40011 (/cmd_vel.angular.z)

SUB
Subtract
Source A N9:10 0<
Source B 1 1<
Dest N9:10 0<

Holding Register 40011 (/cmd_vel.angular.z)

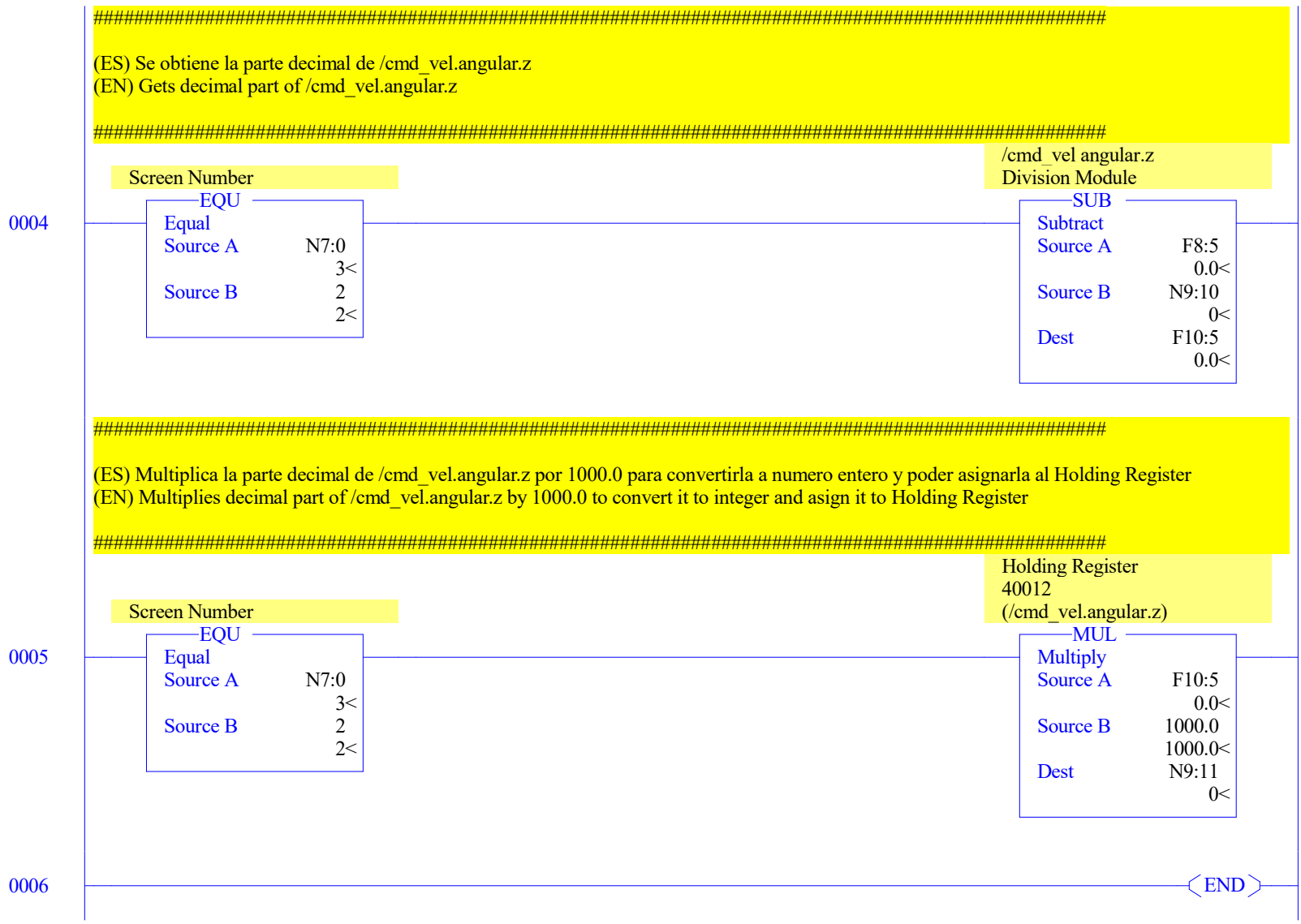
LES
Less Than (A<B)
Source A N9:10 0<
Source B 0 0<

Holding Register 40011 (/cmd_vel.angular.z)

LES
Less Than (A<B)
Source A N9:10 0<
Source B F8:5 0.0<

Holding Register 40011 (/cmd_vel.angular.z)

ADD
Add
Source A N9:10 0<
Source B 1 1<
Dest N9:10 0<


##
(ES) Se obtiene la parte decimal de /cmd_vel.angular.z
(EN) Gets decimal part of /cmd_vel.angular.z
##
Screen Number
EQU
Equal
Source A N7:0
3<
Source B 2
2<
/cmd_vel angular.z
Division Module
SUB
Subtract
Source A F8:5
0.0<
Source B N9:10
0<
Dest F10:5
0.0<
0004
##
(ES) Multiplica la parte decimal de /cmd_vel.angular.z por 1000.0 para convertirla a numero entero y poder asignarla al Holding Register
(EN) Multiplies decimal part of /cmd_vel.angular.z by 1000.0 to convert it to integer and asign it to Holding Register
##
Holding Register
40012
(/cmd_vel.angular.z)
Screen Number
EQU
Equal
Source A N7:0
3<
Source B 2
2<
MUL
Multiply
Source A F10:5
0.0<
Source B 1000.0
1000.0<
Dest N9:11
0<
0005
0006
END

0000

##

(ES) Este renglon lee el valor de F8:9 (Distancia Linear Comandada) del HMI y lo mueve a N9:17. Debido a que esta fancion redondea el valor en lugar de truncarlo, la segunda y tercer rama de la logica corrigen el error en caso de existir.
(EN) This rung reads F8:9 (Linear Distance Commanded) from HMI and moves it to N9:17. Due to it rounds the value instead of truncate it, second and third branches correct error if any.

##

Screen Number

EQU
Equal
Source A N7:0 3<
Source B 3 3<

Command Linear Motion
B3:1
5

Holding Register 40018 (Linear Distance Commanded m)

MOV
Move
Source F8:6 0.0<
Dest N9:17 0<

Holding Register 40018 (Linear Distance Commanded m)

GEQ
Grtr Than or Eql (A>=B)
Source A N9:17 0<
Source B 0 0<

Holding Register 40018 (Linear Distance Commanded m)

GRT
Greater Than (A>B)
Source A N9:17 0<
Source B F8:6 0.0<

Holding Register 40018 (Linear Distance Commanded m)

SUB
Subtract
Source A N9:17 0<
Source B 1 1<
Dest N9:17 0<

Holding Register 40018 (Linear Distance Commanded m)

LES
Less Than (A<B)
Source A N9:17 0<
Source B 0 0<

Holding Register 40018 (Linear Distance Commanded m)

LES
Less Than (A<B)
Source A N9:17 0<
Source B F8:6 0.0<

Holding Register 40018 (Linear Distance Commanded m)

ADD
Add
Source A N9:17 0<
Source B 1 1<
Dest N9:17 0<

0001

```
##################################################################################################

(ES) Se obtiene la parte decimal de la distancia lineal comandada
(EN) Gets decimal part of Linear Distance Commanded

##################################################################################################
```

Screen Number

EQU
Equal
Source A N7:0 3<
Source B 3 3<

Command Linear Motion

B3:1
5

Linear Distance Decimal Part

SUB
Subtract
Source A F8:6 0.0<
Source B N9:17 0<
Dest F10:6 0.4<

0002

```
##################################################################################################

(ES) Multiplica la parte decimal de Distancia Linear Comandad por 1000.0 para convertirla a numero entero y poder asignarla al Holding Register
(EN) Multiplies decimal part of Linear Distance Commanded by 1000.0 to convert it to integer and asign it to Holding Register

##################################################################################################
```

Screen Number

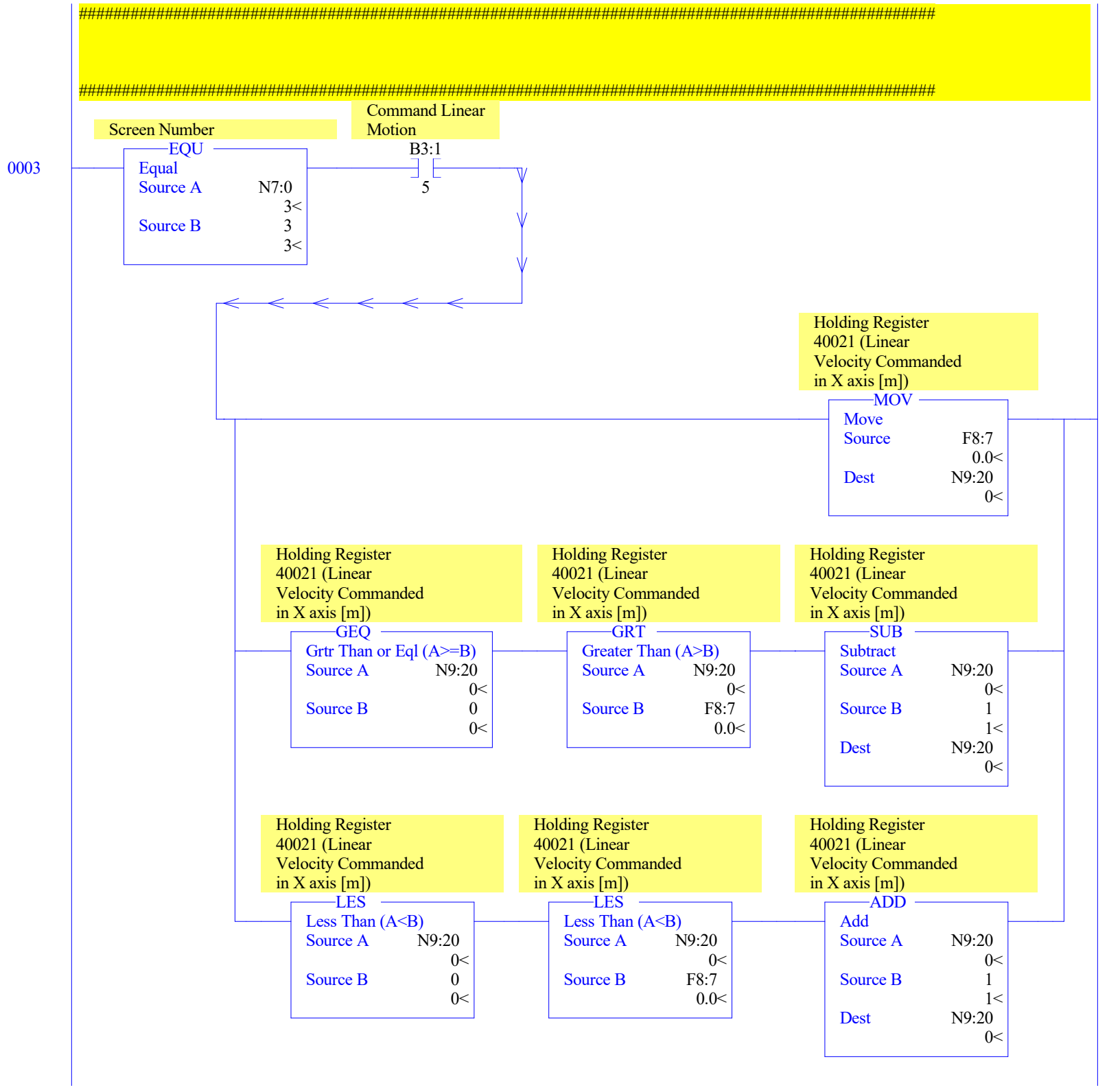
EQU
Equal
Source A N7:0 3<
Source B 3 3<

Command Linear Motion

B3:1
5

Holding Register 40019 (Linear Distance Commanded cm)

MUL
Multiply
Source A F10:6 0.4<
Source B 1000.0 1000.0<
Dest N9:18 0<


0003
Screen Number
EQU
Equal
Source A N7:0 3<
Source B 3 3<
Command Linear Motion
B3:1
5
Holding Register 40021 (Linear Velocity Commanded in X axis [m])
MOV
Move
Source F8:7 0.0<
Dest N9:20 0<
Holding Register 40021 (Linear Velocity Commanded in X axis [m])
GEQ
Grtr Than or Eql (A>=B)
Source A N9:20 0<
Source B 0 0<
Holding Register 40021 (Linear Velocity Commanded in X axis [m])
GRT
Greater Than (A>B)
Source A N9:20 0<
Source B F8:7 0.0<
Holding Register 40021 (Linear Velocity Commanded in X axis [m])
SUB
Subtract
Source A N9:20 0<
Source B 1 1<
Dest N9:20 0<
Holding Register 40021 (Linear Velocity Commanded in X axis [m])
LES
Less Than (A<B)
Source A N9:20 0<
Source B 0 0<
Holding Register 40021 (Linear Velocity Commanded in X axis [m])
LES
Less Than (A<B)
Source A N9:20 0<
Source B F8:7 0.0<
Holding Register 40021 (Linear Velocity Commanded in X axis [m])
ADD
Add
Source A N9:20 0<
Source B 1 1<
Dest N9:20 0<

0004

(ES) Se obtiene la parte decimal de la velocidad lineal comandada
(EN) Gets decimal part of Linear Velocity Commanded

Screen Number

EQU
Equal
Source A N7:0 3<
Source B 3 3<

Command Linear Motion
B3:1
5

linear.y Decimal

SUB
Subtract
Source A F8:7 0.0<
Source B N9:20 0<
Dest F10:1 0.18<

0005

(ES) Multiplica la parte decimal de la Velocidad Linear Comandad por 1000.0 para convertirla a numero entero y poder asignarla al Holding Register
(EN) Multiplies decimal part of Linear Velocity Commanded by 1000.0 to convert it to integer and asign it to Holding Register

Holding Register 40022 (Linear Velocity Commanded in X axis [cm])

Screen Number

EQU
Equal
Source A N7:0 3<
Source B 3 3<

Command Linear Motion
B3:1
5

MUL
Multiply
Source A F10:1 0.18<
Source B 1000.0 1000.0<
Dest N9:21 0<

0006

Holding Register 40020 (Rotation Angle Commanded [°])

Screen Number

EQU
Equal
Source A N7:0 3<
Source B 3 3<

Command Angular Motion
B3:1
6

MOV
Move
Source F8:8 0.0<
Dest N9:19 0<

Holding Register 40023 (Angular Velocity Commanded in Z axis [°/s])

MOV
Move
Source F8:9 0.0<
Dest N9:22 0<

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 B
O:0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B
O:0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B
O:0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B
O:0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B
O:0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B

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 B
I:0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B
I:0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B
I:0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B
I:0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	Bul.1766	MicroLogix 1400 Series B
I:0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B
I:0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B
I:0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1766	MicroLogix 1400 Series B

Data File S2 (hex) -- STATUS

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 = 1001-1111-0111-0011

Proc

OS Catalog Number S:57 = 1400
OS Series S:58 = B
OS FRS S:59 =
Processor Catalog Number S:60 =
Processor Series S:61 = C
Processor FRN S:62 =
User Program Type S:63 = 9108h
Compiler Revision Number S:64 =

Scan Times

Maximum (x10 ms) S:22 = 17
Watchdog (x10 ms) S:3 (high byte) = 10
Last 100 uSec Scan Time S:35 = 6
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 = No
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	0	0	0	0	
B3:1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:2	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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	0	0	0	0	0	
B3:12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B3:31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Data File T4 -- TIMER

Offset	EN	TT	DN	BASE	PRE	ACC	(Symbol)	Description
T4:0	0	0	0	.01 sec	0	0		

Data File C5 -- COUNTER

Offset	CU	CD	DN	OV	UN	UA	PRE	ACC	(Symbol)	Description
C5:0	0	0	0	0	0	0	0	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	0	0		

Data File N7 (dec) -- INTEGER

Offset	0	1	2	3	4	5	6	7	8	9
N7:0	3	0	0	0	0	0	0	0	0	0
N7:10	0	0	0	0	0	0	0	0	0	0

Data File F8 -- FLOAT

Offset	0	1	2	3	4
F8:0	0	0	0	0	0
F8:5	0	0	0	0	0

Data File N9 (dec) -- HOLD_REG

Offset	0	1	2	3	4	5	6	7	8	9
N9:0	0	0	0	0	0	0	0	0	0	0
N9:10	0	0	0	0	0	0	0	0	0	0
N9:20	0	0	0	0	0					

Data File F10 -- DECIMALES

Offset	0	1	2	3	4
F10:0	0.03	0.18	0	0	0
F10:5	0	0.4			

Data File N11 (dec)

Offset	0	1	2	3	4	5	6	7	8	9
N11:0	5	240	0	0	0	0				

Address (Symbol) = Value [Description]

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. Code
B3:0/15			Stop Robot PB		
B3:1/0			Add 0.01 to /cmd_vel.linear.x PB		
B3:1/1			Substract 0.01 to /cmd_vel.linear.x PB		
B3:1/2			Add 0.05 to /cmd_vel.angular.z PB		
B3:1/3			Substract 0.05 to /cmd_vel.angular.z PB		
B3:1/5			Command Linear Motion		
B3:1/6			Command Angular Motion		
B3:1/10			Add 0.05 to /cmd_vel.angular.z PB		
B3:1/11			Substract 0.05 to /cmd_vel.angular.z PB		
B3:2/0					
B3:2/1					
B3:2/11					
B3:4/0					
F8:0			/cmd_vel.linear.x From HMI		
F8:1			/cmd_vel.linear.y From HMI (Unused in TB3)		
F8:2			/cmd_vel.linear.z From HMI (Unused in TB3)		
F8:3			/cmd_vel.angular.x From HMI (Unused in TB3)		
F8:4			/cmd_vel.angular.y From HMI (Unused in TB3)		
F8:5			/cmd_vel.angular.z From HMI		
F8:6			Linear Distance Commanded From HMI (m)		
F8:7			Linear Velocity Commanded From HMI (m/s)		
F8:8			Angular Rotation Commanded From HMI (°)		
F8:9			Angular Velocity Commanded From HMI (°/s)		
F10:0			/cmd_vel.linear.x Division Module		
F10:1			linear.y Decimal		
F10:2			linear.z Decimal		
F10:3			angular.x Decimal		
F10:4			angular.y Decimal		
F10:5			/cmd_vel angular.z Division Module		
F10:6			Linear Distance Decimal Part		
N7:0			Screen Number		
N7:10			Rotation Angle Commanded From HMI (Deg)		
N9:0			Holding Register 40001 (/cmd_vel.linear.x)		
N9:1			Holding Register 40002 (/cmd_vel.linear.x)		
N9:2			Holding Register 40003 (/cmd_vel.linear.y)		
N9:3			Holding Register 40004 (/cmd_vel.linear.y)		
N9:4			Holding Register 40005 (/cmd_vel.linear.z)		
N9:5			Holding Register 40006 (/cmd_vel.linear.z)		
N9:6			Holding Register 40007 (/cmd_vel.angular.x)		
N9:7			Holding Register 40008 (/cmd_vel.angular.x)		
N9:8			Holding Register 40009 (/cmd_vel.angular.y)		
N9:9			Holding Register 40010 (/cmd_vel.angular.y)		
N9:10			Holding Register 40011 (/cmd_vel.angular.z)		
N9:11			Holding Register 40012 (/cmd_vel.angular.z)		
N9:12			Holding Register 40013 (Spare)		
N9:13			Holding Register 40014 (Spare)		
N9:14			Holding Register 40015 (Spare)		
N9:15			Holding Register 40016 (Spare)		
N9:16			Holding Register 40017 (Spare)		
N9:17			Holding Register 40018 (Linear Distance Commanded m)		
N9:18			Holding Register 40019 (Linear Distance Commanded cm)		
N9:19			Holding Register 40020 (Rotation Angle Commanded [°])		
N9:20			Holding Register 40021 (Linear Velocity Commanded in X axis [m])		
N9:21			Holding Register 40022 (Linear Velocity Commanded in X axis [cm])		
N9:22			Holding Register 40023 (Angular Velocity Commanded in Z axis [°/s])		
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		

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. Code
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		
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		

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. Code
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		
U:3	HMI	Global			

Instruction Comment Database

Address	Instruction	Description

Symbol Group Database

Group_Name	Description