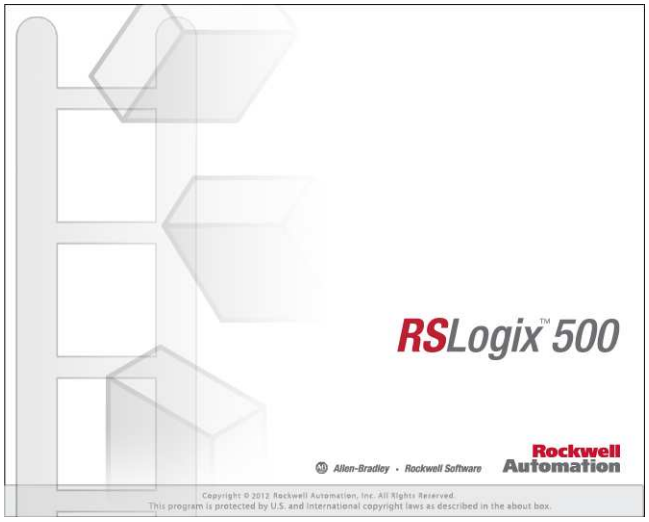
RSLogix 500 Project Report



Processor Information

Processor Type: Bul.1763 MicroLogix 1100 Series B

Processor Name: UNTITLED

Total Memory Used: 227 Instruction Words Used - 78 Data Table Words Used

Total Memory Left: 6429 Instruction Words Left

Program Files: 7

Data Files: 9

Program ID: db1

I/O Configuration

0	Bul.1763	MicroLogix 1100 Series B
1		
2		
3		
4		

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: 00:00:00:00:00:00
IP Address: 0.0.0.0
Subnet Mask: 0.0.0.0
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: Yes
Dhcp Enable No
SNMP Enable: No
HTTP Enable: Yes
Auto Negotiate Enable: Yes
Port Speed Enable: 10/100 Mbps Full Duplex/Half Duplex
Contact:
Location:

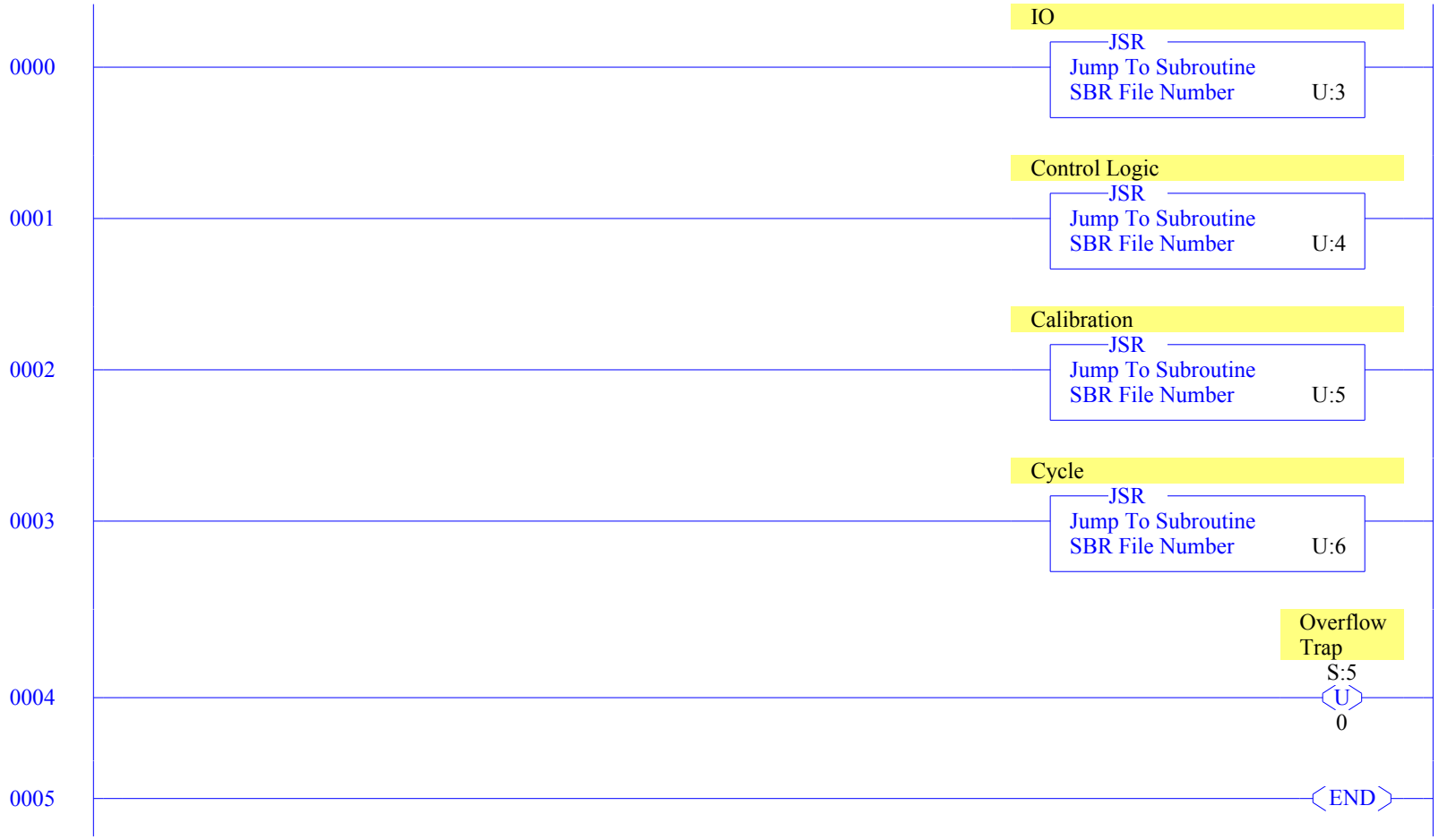
Program File List

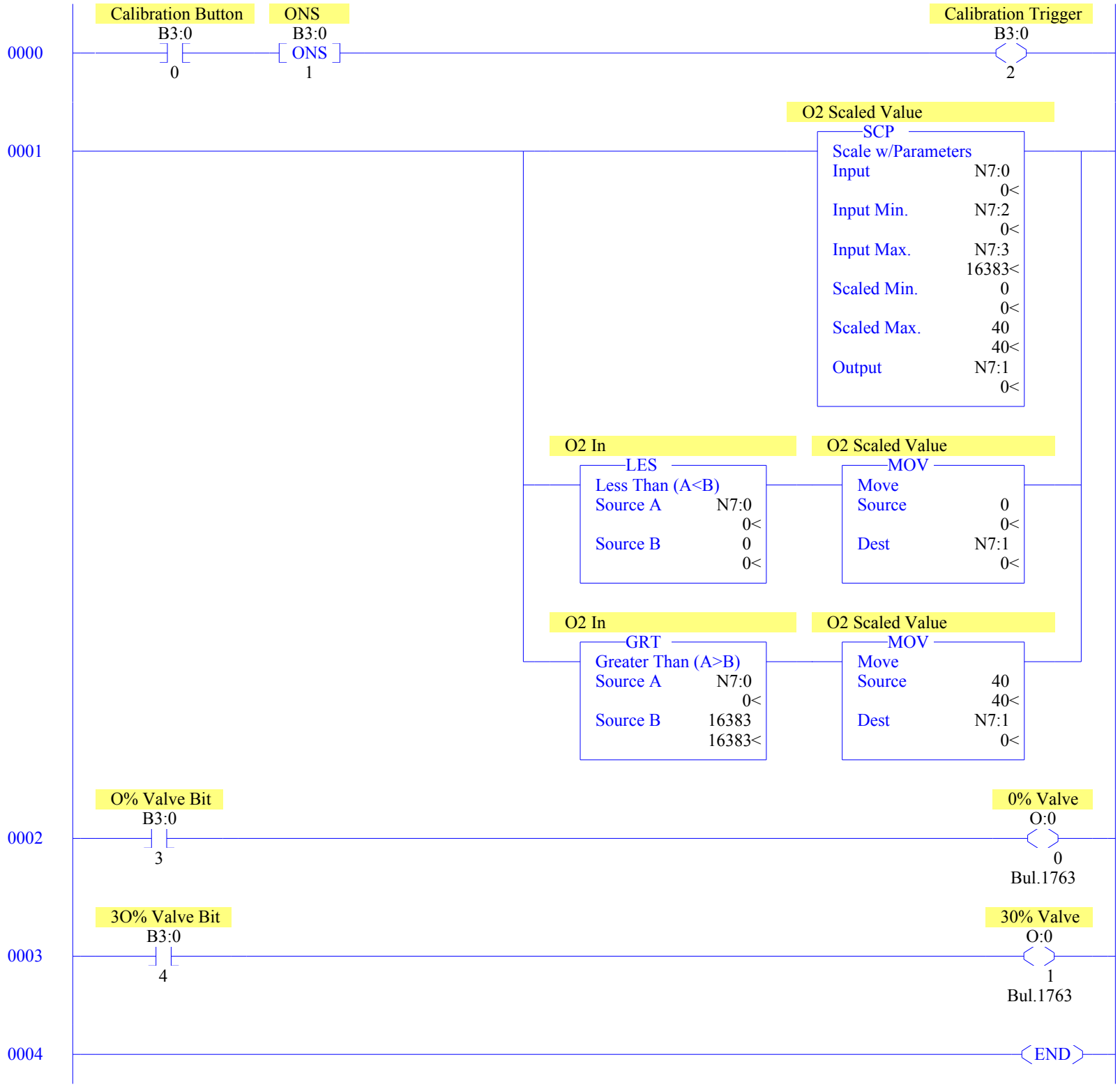
Name	Number	Type	Rungs	Debug	Bytes
[SYSTEM]	0	SYS	0	No	0
	1	SYS	0	No	0
	2	LADDER	6	No	48
IO	3	LADDER	5	No	157
CTRL	4	LADDER	3	No	75
CAL	5	LADDER	8	No	403
CYCLE	6	LADDER	2	No	39

Data File List

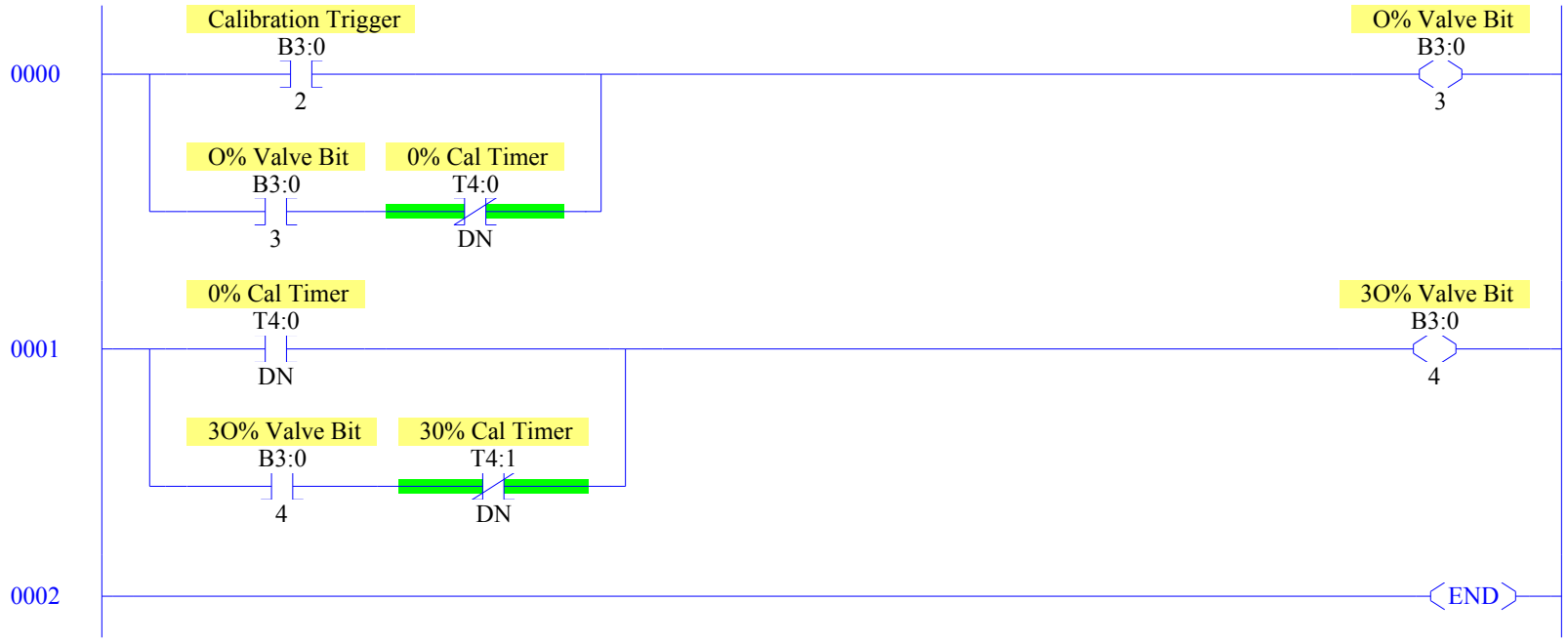
Name	Number	Type	Scope	Debug	Words	Elements	Last
OUTPUT	0	O	Global	No	12	4	O:3
INPUT	1	I	Global	No	18	6	I:5
STATUS	2	S	Global	No	0	66	S:65
BINARY	3	B	Global	No	1	1	B3:0
TIMER	4	T	Global	No	12	4	T4:3
COUNTER	5	C	Global	No	6	2	C5:1
CONTROL	6	R	Global	No	3	1	R6:0
INTEGER	7	N	Global	No	8	8	N7:7
FLOAT	8	F	Global	No	18	9	F8:8

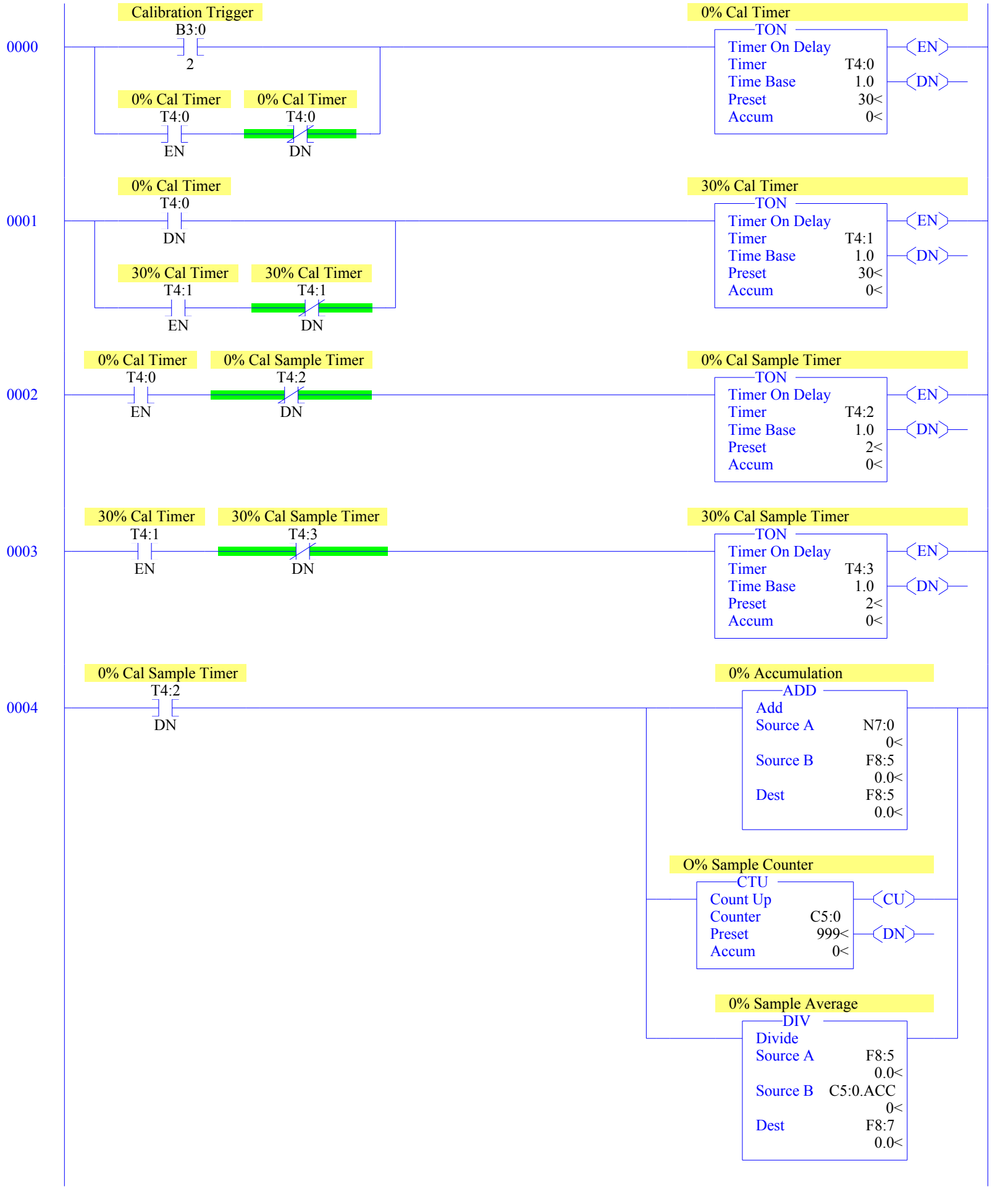
LAD 2 - --- Total Rungs in File = 6

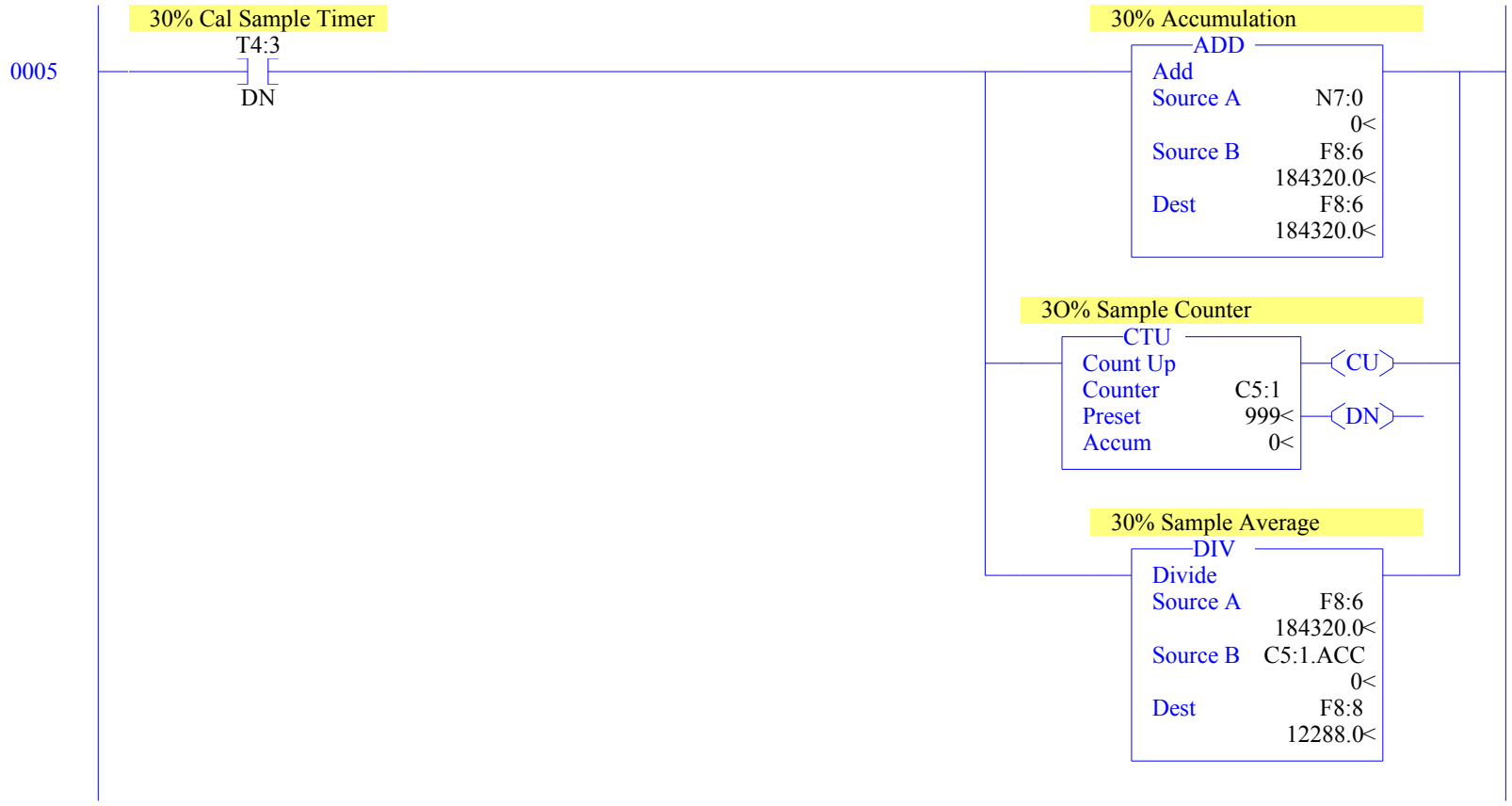



Calibration Button
B3:0
0
ONS
B3:0
ONS
1
Calibration Trigger
B3:0
2
0000
O2 Scaled Value
SCP
Scale w/Parameters
Input N7:0 0<
Input Min. N7:2 0<
Input Max. N7:3 16383<
Scaled Min. 0 0<
Scaled Max. 40 40<
Output N7:1 0<
0001
O2 In
LES
Less Than (A<B)
Source A N7:0 0<
Source B 0 0<
O2 Scaled Value
MOV
Move
Source 0 0<
Dest N7:1 0<
O2 In
GRT
Greater Than (A>B)
Source A N7:0 0<
Source B 16383 16383<
O2 Scaled Value
MOV
Move
Source 40 40<
Dest N7:1 0<
O% Valve Bit
B3:0
3
0% Valve
O:0
0
Bul.1763
0002
3O% Valve Bit
B3:0
4
30% Valve
O:0
1
Bul.1763
0003
END
0004

LAD 4 - CTRL --- Total Rungs in File = 3




0000
Calibration Trigger
B3:0
2
0% Cal Timer
T4:0
EN
0% Cal Timer
T4:0
DN
0% Cal Timer
TON
Timer On Delay
Timer T4:0
Time Base 1.0
Preset 30<
Accum 0<
EN
DN
0001
0% Cal Timer
T4:0
DN
30% Cal Timer
T4:1
EN
30% Cal Timer
T4:1
DN
30% Cal Timer
TON
Timer On Delay
Timer T4:1
Time Base 1.0
Preset 30<
Accum 0<
EN
DN
0002
0% Cal Timer
T4:0
EN
0% Cal Sample Timer
T4:2
DN
0% Cal Sample Timer
TON
Timer On Delay
Timer T4:2
Time Base 1.0
Preset 2<
Accum 0<
EN
DN
0003
30% Cal Timer
T4:1
EN
30% Cal Sample Timer
T4:3
DN
30% Cal Sample Timer
TON
Timer On Delay
Timer T4:3
Time Base 1.0
Preset 2<
Accum 0<
EN
DN
0004
0% Cal Sample Timer
T4:2
DN
0% Accumulation
ADD
Add
Source A N7:0
0<
Source B F8:5
0.0<
Dest F8:5
0.0<
O% Sample Counter
CTU
Count Up
Counter C5:0
Preset 999<
Accum 0<
CU
DN
0% Sample Average
DIV
Divide
Source A F8:5
0.0<
Source B C5:0.ACC
0<
Dest F8:7
0.0<


0005
30% Cal Sample Timer
T4:3
DN
30% Accumulation
ADD
Add
Source A N7:0 0<
Source B F8:6 184320.0<
Dest F8:6 184320.0<
3O% Sample Counter
CTU
Count Up
Counter C5:1
Preset 999<
Accum 0<
CU
DN
30% Sample Average
DIV
Divide
Source A F8:6 184320.0<
Source B C5:1.ACC 0<
Dest F8:8 12288.0<

0006

30% Cal Timer
T4:1
DN

MaxC / CalC
DIV
Divide
Source A F8:3 40.0<
Source B F8:4 30.0<
Dest F8:0 1.333333<

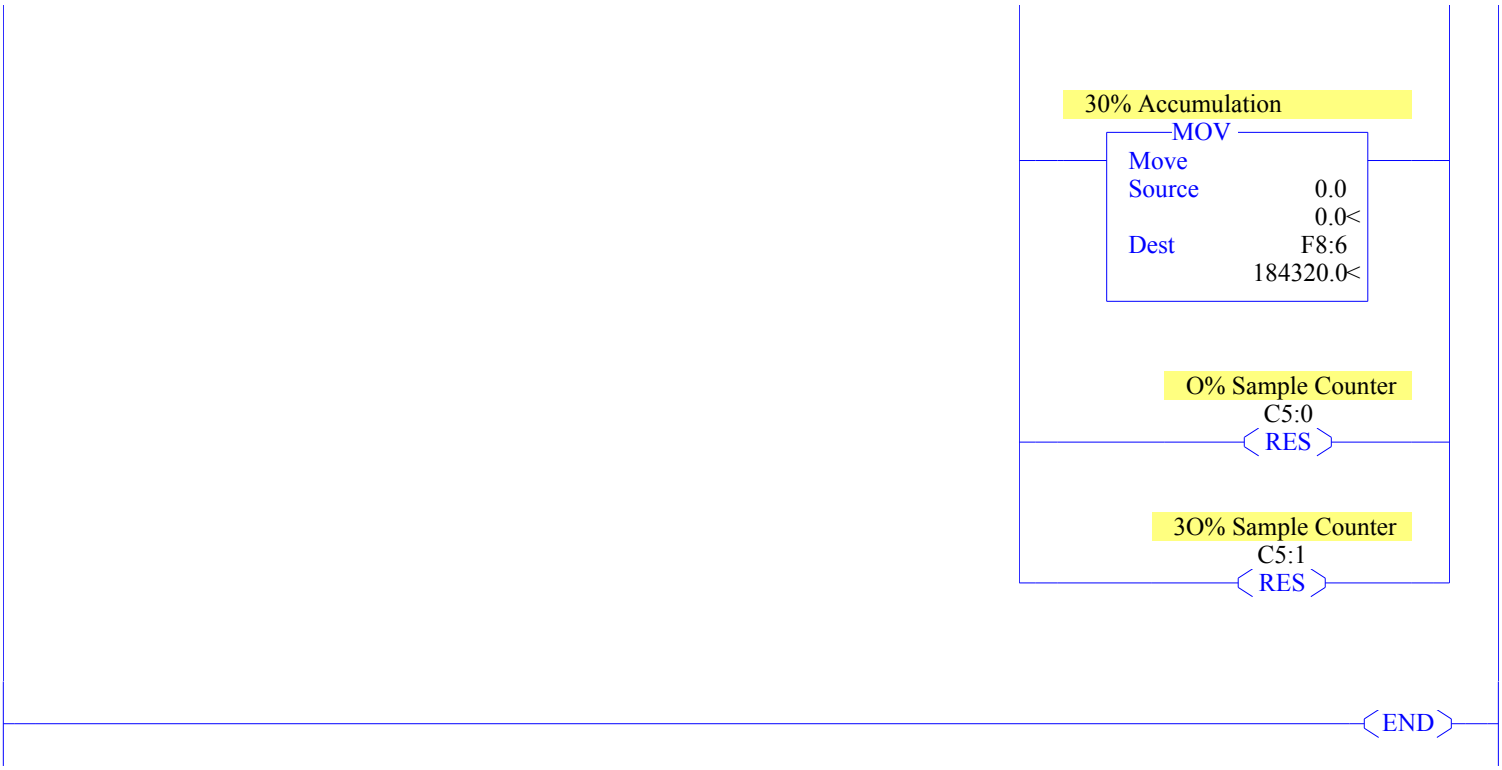
30%A - ZeroA
SUB
Subtract
Source A F8:8 12288.0<
Source B F8:7 0.0<
Dest F8:1 12288.0<

Temp Product
MUL
Multiply
Source A F8:0 1.333333<
Source B F8:1 12288.0<
Dest F8:2 16384.0<

O2 Input Maximum
ADD
Add
Source A F8:2 16384.0<
Source B F8:7 0.0<
Dest N7:3 16383<

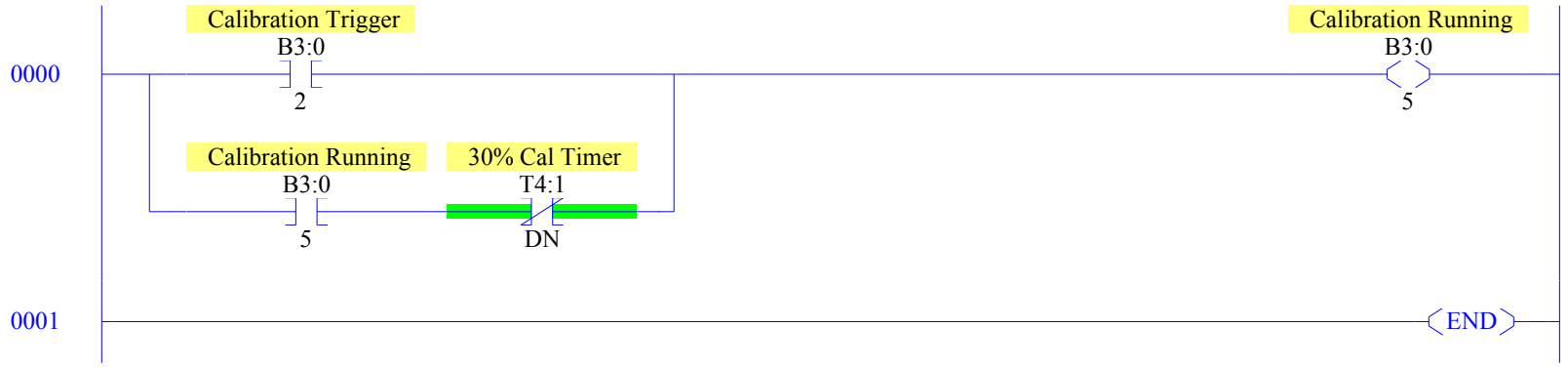
O2 Input Minimum
MOV
Move
Source F8:7 0.0<
Dest N7:2 0<

0% Accumulation
MOV
Move
Source 0.0 0.0<
Dest F8:5 0.0<


30% Accumulation
MOV
Move
Source
0.0
0.0<
Dest
F8:6
184320.0<
O% Sample Counter
C5:0
RES
3O% Sample Counter
C5:1
RES

0007 END

LAD 6 - CYCLE --- Total Rungs in File = 2



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.1763	MicroLogix 1100 Series B
O:0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
O:0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
O:0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 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.1763	MicroLogix 1100 Series B
I:0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
I:0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
I:0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B
I:0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B-Analog I
I:0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763	MicroLogix 1100 Series B-Analog I

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 = 0000-0001-1100-1001

Proc

OS Catalog Number S:57 = 1100
OS Series S:58 = B
OS FRS S:59 =
Processor Catalog Number S:60 =
Processor Series S:61 = A
Processor FRN S:62 =
User Program Type S:63 = 8001h
Compiler Revision Number S:64 =

Scan Times

Maximum (x10 ms) S:22 = 18
Watchdog (x10 ms) S:3 (high byte) = 10
Last 100 uSec Scan Time S:35 = 0
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 = 0
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

Data File S2 (hex) -- STATUS

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	0	0	0	0		

Data File T4 -- TIMER

Offset	EN	TT	DN	BASE	PRE	ACC	(Symbol) Description
T4:0	0	0	0	1.0 sec	30	0	0% Cal Timer
T4:1	0	0	0	1.0 sec	30	0	30% Cal Timer
T4:2	0	0	0	1.0 sec	2	0	0% Cal Sample Timer
T4:3	0	0	0	1.0 sec	2	0	30% Cal Sample Timer

Data File C5 -- COUNTER

Offset	CU	CD	DN	OV	UN	UA	PRE	ACC	(Symbol) Description
C5:0	0	0	0	0	0	0	999	0	O% Sample Counter
C5:1	0	0	0	0	0	0	999	0	3O% Sample Counter

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	0	0	0	16383	0	0	0	0		

Data File F8 -- FLOAT

Offset	0	1	2	3	4
F8:0	1.333333	12288	16384	40	30
F8:5	0	184320	0	12288	

Address (Symbol) = Value [Description]

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. Code	ABV	BLW
	T3	Global	Cal Sample Timer				
B3:0/0			Calibration Button				
B3:0/1			ONS				
B3:0/2			Calibration Trigger				
B3:0/3			O% Valve Bit				
B3:0/4			3O% Valve Bit				
B3:0/5			Calibration Running				
B3:0/6							
C5:0			O% Sample Counter				
C5:1			3O% Sample Counter				
F8:0			MaxC / CalC				
F8:1			30%A - ZeroA				
F8:2			Temp Product				
F8:3			Max Concentration				
F8:4			Cal Concentration				
F8:5			0% Accumulation				
F8:6			30% Accumulation				
F8:7			0% Sample Average				
F8:8			30% Sample Average				
N7:0			O2 In				
N7:1			O2 Scaled Value				
N7:2			O2 Input Minimum				
N7:3			O2 Input Maximum				
N7:4							
N7:5							
N7:6							
N7:7							
O:0/0			0% Valve				
O:0/1			30% Valve				
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				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. Code	ABV	BLW
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				
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				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. Code	ABV	BLW
S:84			DH+ Active Nodes				
S:85			DH+ Active Nodes				
S:86			DH+ Active Nodes				
T4:0			0% Cal Timer				
T4:1			30% Cal Timer				
T4:2			0% Cal Sample Timer				
T4:3			30% Cal Sample Timer				
U:3			IO				
U:4			Control Logic				
U:5			Calibration				
U:6			Cycle				

Instruction Comment Database

Address	Instruction	Description

Symbol Group Database

Group_Name	Description