Trac-a-Rack

with Control Chief

Communication via Modem - Locar ---->> Upcar				
Locar PLC Address	Locar Buffer PLC Address **for Modem xfer**	Description **for Modem xfer**	Upcar Buffer PLC Address **for Modem xfer**	Upcar PLC Address
I:6.0	O:6.0	Processor System Clock	I:6.0	N7:21
S:1	O:6.1	PLC'S No Fault/Run Mode	I:6.1	B3:8
---	O:6.2	---	I:6.2	---
---	O:6.3	---	I:6.3	---
---	O:6.4	---	I:6.4	B3:85
OK to go signal, send = **'2'**	O:6.5	OK to GO	I:6.5	Use for Compare
N107:1 or N27:1	O:6.6	Pass # to Upcar	I:6.6	N47:40
N27:0	O:6.7	Locar current Position	I:6.7	Use for Compare
---	O:6.8	---	I:6.8	---
N107:10 - OK to Enter Loader Signal, send = '**1**'	O:6.9	OK to Enter Loader Signal	I:6.9	---
N107:12 - OK to Raise Fork Signal, send = '**1**'	O:6.10	OK to Raise Fork Signal	I:6.10	---
N107:11 - OK to Enter Unloader Signal, send = '**1**'	O:6.11	OK to Enter Unloader Signal	I:6.11	---
---	O:6.12 thru O:6.31	---	I:6.12 thru I:6.31	---

Communication via Modem - Upcar ---->> Locar				
Upcar PLC Address	Upcar Buffer PLC Address	Description	Locar Buffer PLC Address	Locar PLC Address
	for Modem xfer		**for Modem xfer**	
S:4	O:6.0	Processor System Clock	I:6.0	O:6.0
S:1	O:6.1	PLC'S No Fault/Run Mode	I:6.1	N7:11
I:1.0/0 - I:1.0/15	O:6.2	Upcar Input Module slot # 1	I:6.2	B103:20
I:2.0/0 - I:2.0/15	O:6.3	Upcar Input Module slot # 2	I:6.3	B103:21
O:3.0/0 - O:3.0/15	O:6.4	Upcar Output Module slot # 3	I:6.4	B103:22
---	O:6.5	---	I:6.5	---
I:5.1	O:6.6	Upcar High Speed Encoder Module	I:6.6	Not Used
N57:179	O:6.7	Upcar Actual Position (Count)	I:6.7	B103:1
N57:80	O:6.8	Upcar Target Position (Count)	I:6.8	B103:2
N57:96	O:6.9	Upcar Creep Count	I:6.9	B103:3
N57:81	O:6.10	Upcar Remaining Count	I:6.10	B103:4
---	O:6.11	---	I:6.11	---
---	O:6.12	---	I:6.12	---
---	O:6.13	---	I:6.13	---
B3/65 - At Loader, value = **'4'** B3/66 - At LK, value = '7' B3/67 - At LK, value = **'8'** B3/68 - At Unloader, value = '**6**'	O:6.14	Upcar Location - Verify for Position	I:6.14	Compare w/ N27:0
N47:40	O:6.15	Pass Number Verify	I:6.15	Compare w/ O:6/6
B53/332 - Upcar Task Completed, send = **'2'**	O:6.16	Cycle Complete	I:6.16	Compare to 2 or 0
B63:0 - see 'upcar alarm' worksheet	O:6.17	Upcar Alarm Word # 0	I:6.17	B103:7
B63:1 - see 'upcar alarm' worksheet	O:6.18	Upcar Alarm Word # 1	I:6.18	B103:8
B53:20 - see 'Upcar Sequencer desc.' worksheet	O:6.19	Upcar / Locar Communication Sequence Drum Word	I:6.19	B103:31
B53:25 - see 'Upcar Sequencer desc.' worksheet	O:6.20	Upcar Sequence Drum Word	I:6.20	B103:32
---	O:6.21 thru O:6.31	---	I:6.21 thru I:6.31	---

Main PLC w/ MSG **Read** Instruction from Cars (Lad 17 - rung 2)

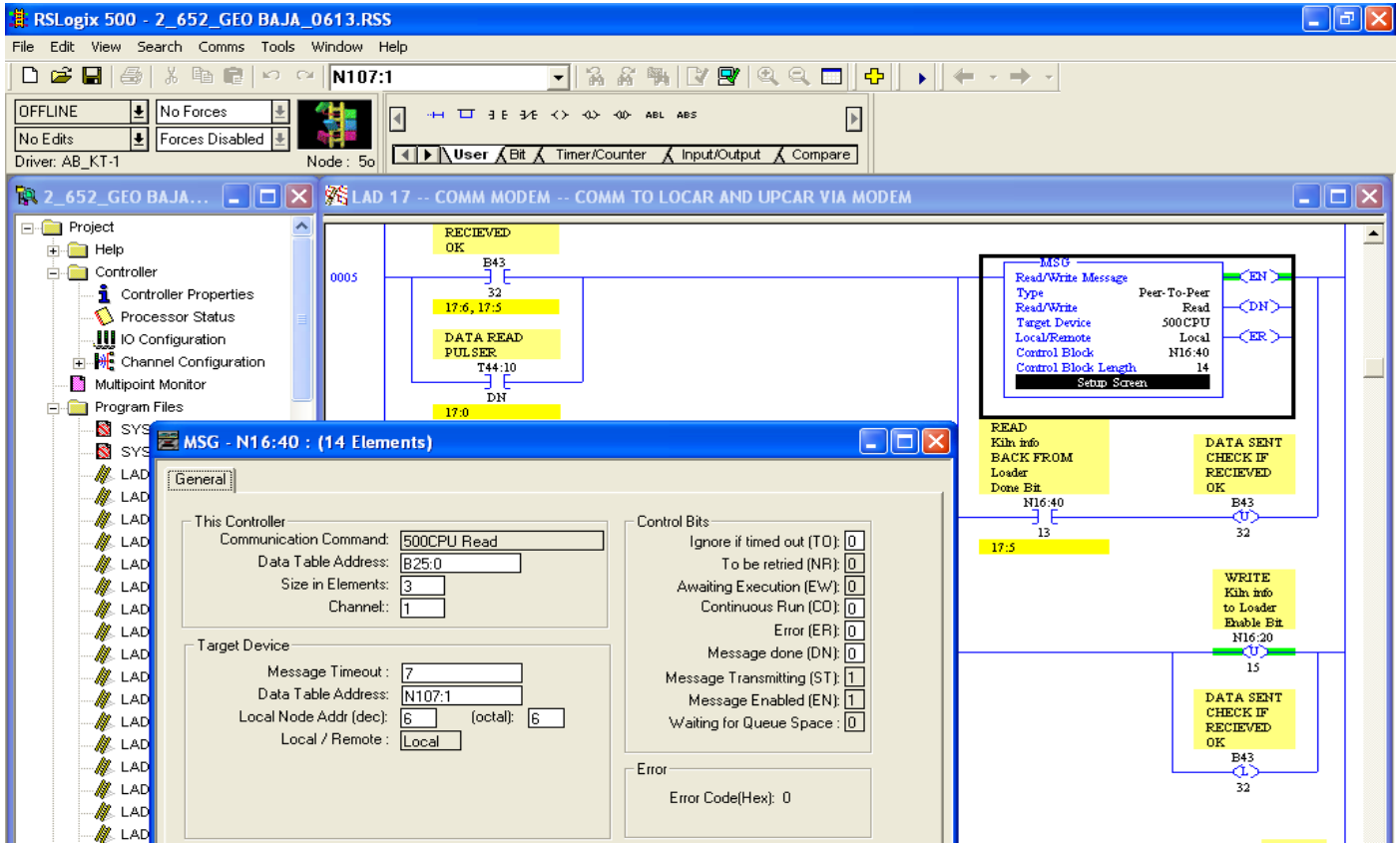
Size in Elements	**32**
Main PLC channel	1
Locar Local Node Address	16
Message Timeout	5

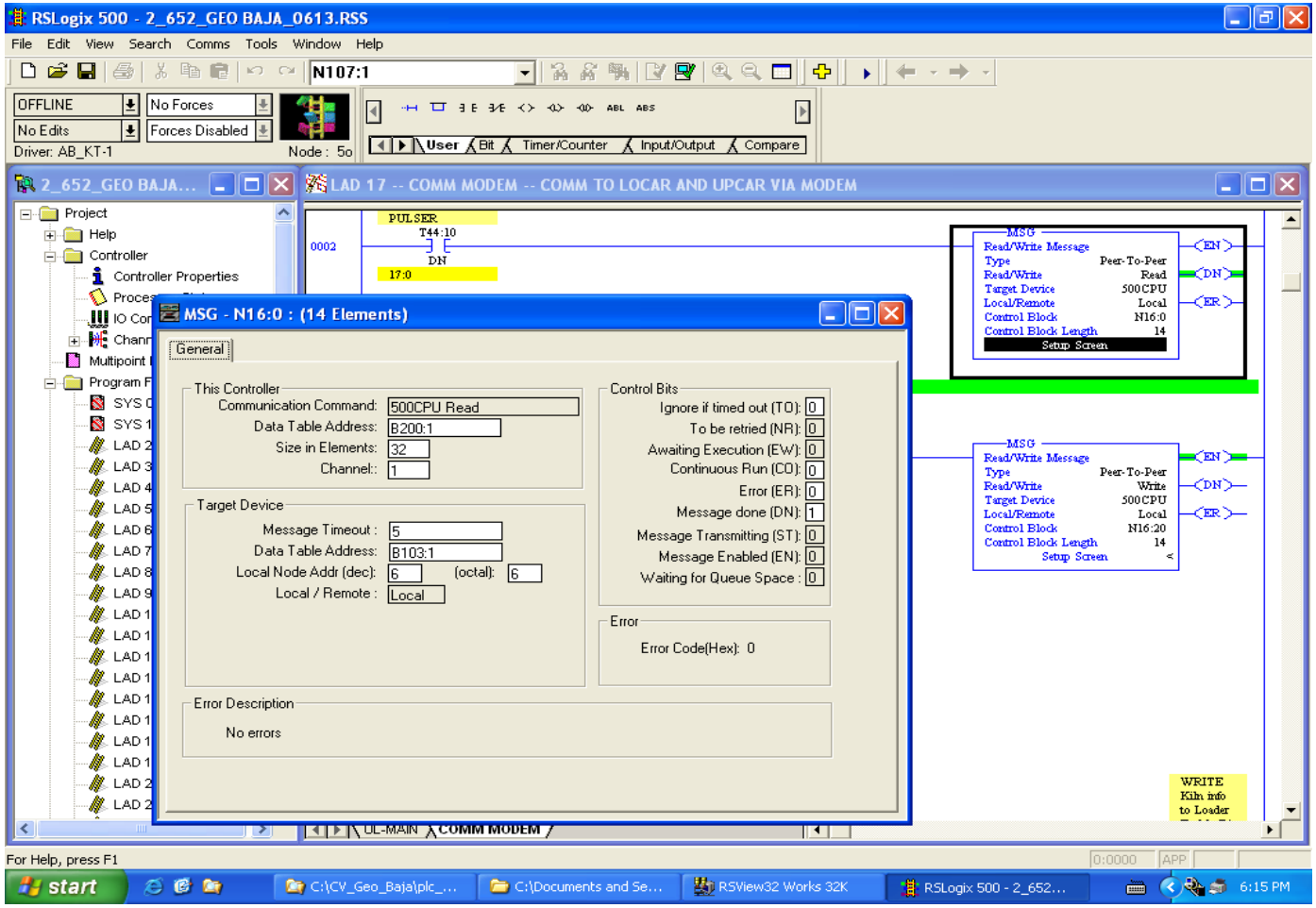
Description	Ucar PLC local address	Upcar PLC Addr. for Modem xfer	Locar PLC Addr. for Modem xfer	Locar PLC local address		Locar PLC Address for MSG instruction	Main PLC Address for MSG instruction	Main PLC local address
Upcar Actual Position	N57:179	O:6.7	I:6.7	--->>	--->>	B103:1	B200:1	
Upcar Target Position	N57:80	O:6.8	I:6.8	--->>	--->>	B103:2	B200:2	
Upcar Creep Countd	N57:96	O:6.9	I:6.9	--->>	--->>	B103:3	B200:3	
Upcar Remaining Counts	N57:81	O:6.10	I:6.10	--->>	--->>	B103:4	B200:4	
-	-	-	-	-	-	B103:5	B200:5	
-	-	-	-	-	-	B103:6	B200:6	
Upcar Alarm Word # 0	B11:1	O:6.17	I:6.17	--->>	--->>	B103:7	B200:7	
Upcar Alarm Word # 1	B11:2	O:6.18	I:6.18	--->>	--->>	B103:8	B200:8	
Locar Actual Position	-	-	-	N57:179	--->>	B103:9	B200:9	
Locar Target Position	-	-	-	N57:180	--->>	B103:10	B200:10	
Locar Creep Count	-	-	-	N57:196	--->>	B103:11	B200:11	
Locar Remaining Count	-	-	-	N57:181	--->>	B103:12	B200:12	
-	-	-	-	-	-	B103:13	B200:13	
-	-	-	-	-	-	B103:14	B200:14	
Locar Alarm Word # 0	-	-	-	B63:0	--->>	B103:15	B200:15	
Locar Alarm Word # 1	-	-	-	B63:1	--->>	B103:16	B200:16	
-	-	-	-	-	-	B103:17	B200:17	
-	-	-	-	-	-	B103:18	B200:18	
Pass Completed Signal to Main				value of "1" or "0"	--->>	B103:19	B200:19	
Upcar Input Module slot # 1	I:1.0/0 - I:1.0/15	O:6.2	I:6.2	--->>	--->>	B103:20	B200:20	
Upcar Input Module slot # 2	I:2.0/0 - I:2.0/15	O:6.3	I:6.3	--->>	--->>	B103:21	B200:21	
Upcar Output Module slot # 3	O:3.0/0 - O:3.0/15	O:6.4	I:6.4	--->>	--->>	B103:22	B200:22	
-	-	-	-	-	-	B103:23	B200:23	
Locar Input Module slot # 1	-	-	-	I:1.0/0 - I:1.0/15	--->>	B103:24	B200:24	
Locar Input Module slot # 2	-	-	-	I:2.0/0 - I:2.0/15	--->>	B103:25	B200:25	
Locar Output Module slot # 3	-	-	-	O:3.0/0 - O:3.0/15	--->>	B103:26	B200:26	
-	-	-	-	-	-	B103:27	B200:27	
-	-	-	-	-	--->>	B103:28	B200:28	
Locar Sequencer #1	-	-	-	B53:20	--->>	B103:29	B200:29	
Locar Sequencer #2	-	-	-	B53:25	-	B103:30	B200:30	
Upcar Sequencer #1	B53:20	O:6.19	I:6.19	--->>	--->>	B103:31	B200:31	
Upcar Sequencer #2	B53:25	O:6.20	I:6.20	--->>	--->>	B103:32	B200:32	

Main PLC w/ MSG **Read** Instruction from Cars (Lad 17 - rung 5)

Size in Elements	3
Main PLC channel	1
Locar Local Node Address	16
Message Timeout	7

Description	Ucar PLC local address	Upcar PLC Addr. for Modem xfer	Locar PLC Addr. for Modem xfer	Locar PLC local address	Locar PLC local address	Locar PLC Address for MSG instruction	Main PLC Address for MSG instruction	Main PLC local address
for Confirm - Pass # from Car to Main	N47:40	I:6.6	O:6.6	<<---	<<---	N107:1	B25:0	compare to N137:1
At Loader, value = '4'								
At LK, value = '7'								
At LK, value = '8'								
At Unloader, value = '6'	N19:18	I:6.7	O:6.7	<<---	<<---	N107:2	B25:1	compare to N137:2
-	-	-	-	-	-	N107:3	B25:2	compare to N137:3



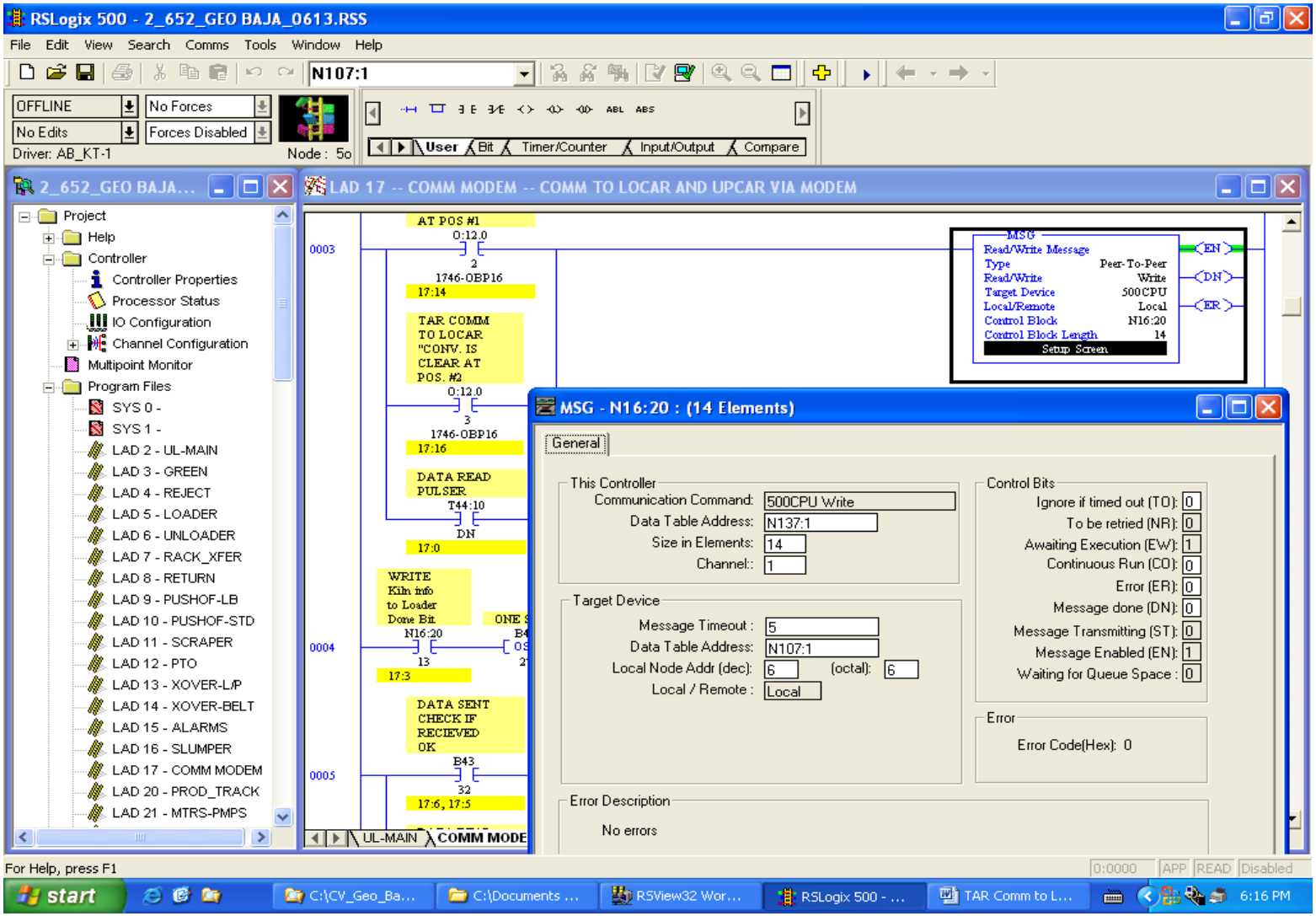

RSLogix 500 - 2_652_GEO BAJA_0613.RSS
File Edit View Search Comms Tools Window Help
N107:1
OFFLINE
No Forces
No Edits
Forces Disabled
Driver: AB_KT-1
Node : 5o
User Bit Timer/Counter Input/Output Compare
2_652_GEO BAJA...
Project
Help
Controller
Controller Properties
Multipoint I
Program F
SYS 0
SYS 1
LAD 2
LAD 3
LAD 4
LAD 5
LAD 6
LAD 7
LAD 8
LAD 9
LAD 1
LAD 1
LAD 1
LAD 1
LAD 1
LAD 1
LAD 1
LAD 1
LAD 2
LAD 2
LAD 17 -- COMM MODEM -- COMM TO LOCAR AND UPCAR VIA MODEM
PULSER
T44:10
DN
0002
17:0
MSG
Read/Write Message
Type Peer-To-Peer
Read/Write Read
Target Device 500CPU
Local/Remote Local
Control Block N16:0
Control Block Length 14
Setup Screen
EN
DN
ER
MSG
Read/Write Message
Type Peer-To-Peer
Read/Write Write
Target Device 500CPU
Local/Remote Local
Control Block N16:20
Control Block Length 14
Setup Screen
WRITE
Kiln info
to Loader
MSG - N16:0 : (14 Elements)
General
This Controller
Communication Command: 500CPU Read
Data Table Address: B200:1
Size in Elements: 32
Channel: 1
Target Device
Message Timeout : 5
Data Table Address: B103:1
Local Node Addr (dec): 6 (octal): 6
Local / Remote : Local
Control Bits
Ignore if timed out (TO): 0
To be retried (NR): 0
Awaiting Execution (EW): 0
Continuous Run (CO): 0
Error (ER): 0
Message done (DN): 1
Message Transmitting (ST): 0
Message Enabled (EN): 0
Waiting for Queue Space : 0
Error
Error Code(Hex): 0
Error Description
No errors
UL-MAIN COMM MODEM
For Help, press F1
0:0000
APP
start
C:\CV_Geo_Baja\plc_...
C:\Documents and Se...
RSView32 Works 32K
RSLogix 500 - 2_652...
6:15 PM

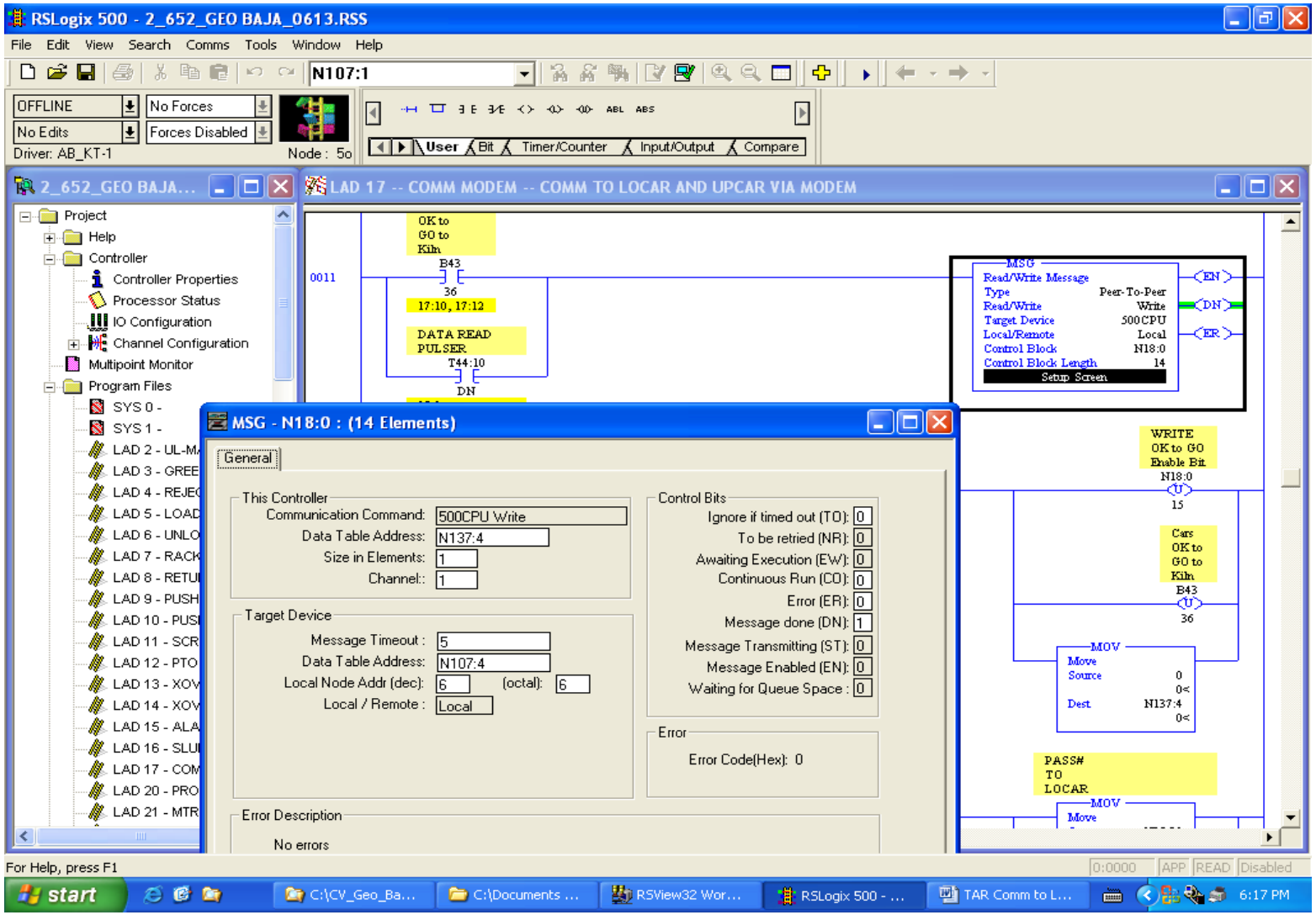
Main PLC w/ MSG **Write** Instruction from Cars (Lad 17 - rung 3)

		Size in Elements	14			
		Main PLC channel	1			
		Locar Local Node Address	16			
		Message Timeout	7			
Description	**Main PLC local address**	**Main PLC Address for MSG instruction**	**Locar PLC Address for MSG instruction**	**Locar PLC local address**	**Locar PLC Addr. for Modem xfer**	**Upcar PLC Addr. for Modem xfer**
Pass # to Upcar from Main	N37:30	N137:1	N107:1	N37:30		
Load Kiln # to Upcar from Main	N37:48	N137:2	N107:2	N37:48		
Unload Kiln # to Upcar from Main	N37:49	N137:3	N107:3	N37:49		
OK to GO signal	value of '2' or '0'	N137:4	N107:4	-		
-	-	N137:5	N107:5	-		
Kiln Select from Main Panel	N137:6/0	N137:6	N107:6	-		
-	-	N137:7	N107:7	-		
-	-	N137:8	N107:8	-		
-	-	N137:9	N107:9	-		
OK to enter Loader signal	value of '1' or '0'	N137:10	N107:10	**--->>**	O:6.9	I:6.9
OK to enter Unloader signal	value of '1' or '0'	N137:11	N107:11	**--->>**	O:6.11	I:6.11
-	-	N137:12	N107:12	-		
-	-	N137:13	N107:13	-		
-	-	N137:14	N107:14	-		

Main PLC w/ MSG **Write** Instruction from Cars (Lad 17 - rung 11)

		Size in Elements	1		
		Main PLC channel	1		
		Locar Local Node Address	16		
		Message Timeout	7		
Description	**Main PLC local address**	**Main PLC Address for MSG instruction**	**Locar PLC Address for MSG instruction**	**Locar PLC local address**	
OK to GO signal (**B43/36 - ON**)	value of '2' or '0'	N137:4	N107:4	-	I:9.5


RSLogix 500 - 2_652_GEO BAJA_0613.RSS
File Edit View Search Comms Tools Window Help
N107:1
OFFLINE
No Forces
No Edits
Forces Disabled
Driver: AB_KT-1
Node : 5o
User Bit Timer/Counter Input/Output Compare
2_652_GEO BAJA...
Project
Help
Controller
Controller Properties
Processor Status
IO Configuration
Channel Configuration
Multipoint Monitor
Program Files
SYS 0 -
SYS 1 -
LAD 2 - UL-MAIN
LAD 3 - GREEN
LAD 4 - REJECT
LAD 5 - LOADER
LAD 6 - UNLOADER
LAD 7 - RACK_XFER
LAD 8 - RETURN
LAD 9 - PUSHOF-LB
LAD 10 - PUSHOF-STD
LAD 11 - SCRAPER
LAD 12 - PTO
LAD 13 - XOVER-L/P
LAD 14 - XOVER-BELT
LAD 15 - ALARMS
LAD 16 - SLUMPER
LAD 17 - COMM MODEM
LAD 20 - PROD_TRACK
LAD 21 - MTRS-PMPS
LAD 17 -- COMM MODEM -- COMM TO LOCAR AND UPCAR VIA MODEM
AT POS #1
0:12.0
1746-OBP16
17:14
TAR COMM TO LOCAR "CONV. IS CLEAR AT POS. #2
DATA READ PULSER
T44:10
DN
17:0
WRITE Kiln info to Loader Done Bit
N16:20
17:3
DATA SENT CHECK IF RECIEVED OK
B43
17:6, 17:5
MSG
Read/Write Message
Type Peer-To-Peer
Read/Write Write
Target Device 500CPU
Local/Remote Local
Control Block N16:20
Control Block Length 14
Setup Screen
EN
DN
ER
MSG - N16:20 : (14 Elements)
General
This Controller
Communication Command: 500CPU Write
Data Table Address: N137:1
Size in Elements: 14
Channel:: 1
Target Device
Message Timeout : 5
Data Table Address: N107:1
Local Node Addr (dec): 6 (octal): 6
Local / Remote : Local
Control Bits
Ignore if timed out (TO): 0
To be retried (NR): 0
Awaiting Execution (EW): 1
Continuous Run (CO): 0
Error (ER): 0
Message done (DN): 0
Message Transmitting (ST): 0
Message Enabled (EN): 1
Waiting for Queue Space : 0
Error
Error Code(Hex): 0
Error Description
No errors
UL-MAIN COMM MODE
For Help, press F1
0:0000 APP READ Disabled
start
C:\CV_Geo_Ba...
C:\Documents ...
RSView32 Wor...
RSLogix 500 - ...
TAR Comm to L...
6:16 PM


RSLogix 500 - 2_652_GEO BAJA_0613.RSS
File Edit View Search Comms Tools Window Help
N107:1
OFFLINE
No Forces
No Edits
Forces Disabled
Driver: AB_KT-1
Node : 5o
User Bit Timer/Counter Input/Output Compare
2_652_GEO BAJA...
Project
Help
Controller
Controller Properties
Processor Status
IO Configuration
Channel Configuration
Multipoint Monitor
Program Files
SYS 0 -
SYS 1 -
LAD 2 - UL-M
LAD 3 - GREE
LAD 4 - REJE
LAD 5 - LOAD
LAD 6 - UNLO
LAD 7 - RACK
LAD 8 - RETU
LAD 9 - PUSH
LAD 10 - PUS
LAD 11 - SCR
LAD 12 - PTO
LAD 13 - XOV
LAD 14 - XOV
LAD 15 - ALA
LAD 16 - SLU
LAD 17 - COM
LAD 20 - PRO
LAD 21 - MTR
LAD 17 -- COMM MODEM -- COMM TO LOCAR AND UPCAR VIA MODEM
OK to GO to Kiln
B43
36
0011
17:10, 17:12
DATA READ PULSER
T44:10
DN
MSG
Read/Write Message
Type Peer-To-Peer
Read/Write Write
Target Device 500CPU
Local/Remote Local
Control Block N18:0
Control Block Length 14
Setup Screen
EN
DN
ER
WRITE OK to GO Enable Bit
N18:0
15
Cars OK to GO to Kiln
B43
36
MOV
Move
Source 0
Dest N137:4
PASS# TO LOCAR
MOV
Move
MSG - N18:0 : (14 Elements)
General
This Controller
Communication Command: 500CPU Write
Data Table Address: N137:4
Size in Elements: 1
Channel:: 1
Target Device
Message Timeout : 5
Data Table Address: N107:4
Local Node Addr (dec): 6 (octal): 6
Local / Remote : Local
Control Bits
Ignore if timed out (TO): 0
To be retried (NR): 0
Awaiting Execution (EW): 0
Continuous Run (CO): 0
Error (ER): 0
Message done (DN): 1
Message Transmitting (ST): 0
Message Enabled (EN): 0
Waiting for Queue Space : 0
Error
Error Code(Hex): 0
Error Description
No errors
For Help, press F1
0:0000 APP READ Disabled
start
C:\CV_Geo_Ba...
C:\Documents ...
RSView32 Wor...
RSLogix 500 - ...
TAR Comm to L...
6:17 PM