

OS- DRI Modem Service

Page:- 10 Col:- 14

Step	Instruction	Address	Comment	Octal	Step
00			"Go" Indicator	000001	00
01			Save Character	/	01
02	*ENTRY		DRI Input Service (Modem)	← BA →	02
03	DATA2B			010210	03
04	DATA1/STOP			016110	04
05	START			011010	05
06	B=φ				06
07	LDA	Z 0203	"NUL ETX"		07
10	→ CMPA	Z 0202	"NUL STX"		10
11	JUMP	0016	Stop Transmitting		11
12	→ CIA/CMPA		Enable Transmissions		12
13	STA	0000			13
14	JSBR	0047	Output Service (Reverse)		14
15	JUMP	I 0002	Return (Divines Interrupt)		15
16	CIA				16
17	STA	0000			17
20	JUMP	I 0002	Return (Divines Interrupt)		20
21	*ENTRY		OUTPUT Character	← BA →	21
22	LDB	0000	Indicator		22
23	B=φ				23
24	JUMP	0030			24
25	→ STA	0001	Save		25
26	JSBR	0051	WAIT for "Go"		26
27	LDA	0001			27
30	DATA1A/START			015400	30
31	JSBR	0051	WAIT for "Done"		31
32	DATA2A/STOP			016200	32
33	AND				33
34	JUMP	I 0021	Return.		34
35	→ MOOP		* Status		35
36	STA	0044	Status		36
37	CIA				37
40	STA	0045	Indicator Completion		40
41	JSBR	0051	WAIT		41
42	STOP			012000	42
43	JUMP	0041			43
44			Line Feed Count/Status	-	44
45			→ Buffer Wdrl	-	45
46			Count	-	46
47	*ENTRY		DRI Output Service (Modem)	← BA →	47
50	JUMP	I 0051	Reverse Channel Program.		50
51	*ENTRY		WAIT 0/0021	← BA →	51
52	JUMP	I 0047	Divines Interrupt		52
53	INT OFF		* Start Channel Prg.	000005	53
54	LDB	0000	Indicator		54
55	B=φ				55
56	JSBR	0051	WAIT for "Go"		56
57	→ DATAA/STOP			016200	57
60	DATA2B/STOP			012210	60
61	START			011010	61
62	JORA	Z B			62
63	A=φ				63
64	JUMP	0035	Status - Abort		64
65	→ LDB	I 0045	=Wdrl		65
66	BPOS				66
67	LDA	Z 0213	"NUL VT"		67
70	→ B=φ				70
71	LDA	Z 0214	"NUL FF"		71
72	A=φ				72
73	JUMP	0103			73
74	→ STB	0044	Line Feed Count		74
75	JUMP	0100			75
76	LDA	Z 0212	"NUL LF"		76
77	JSBR	0021	Output		77

OS - DRI Modem Service (cont)

Page:- 10 Col:- 15

Step	Instruction	Address	Comment	Octal	Step
00	DESZ	0044	loop feed output		00
01	JUMP	0076	also next line feed		01
02	SKIP				02
03	JSR	0021	output (VT or FF)		03
04	INSZ	0046	Count		04
05	LDA	0045			05
06	ADA	0045	x2		06
07	ADA	Z 0203	CF3		07
10	STA	0045	Source x2		10
11	JUMP	0120			11
12	LDB	0045	Source x2		12
13	INSZ	0045			13
14	JSR	JL 1417	Load Alternate Byte		14
15	CMPL	Z 0260	"NUL 0"		15
16	ADA	Z 0237	"NUL 0"		16
17	JSR	0021	output		17
20	DESZ	0046	Count		20
21	JUMP	0112	also next character		21
22	LDA	Z 0215	"NUL CR"		22
23	JSR	0021	output		23
24	JUMP	0037	Complete		24
25					25
26					26
27					27
30					30
31					31
32					32
33					33
34					34
35					35
36					36
37					37
40					40
41					41
42					42
43					43
44					44
45					45
46					46
47					47
50					50
51					51
52					52
53					53
54					54
55					55
56					56
57					57
60					60
61					61
62					62
63					63
64					64
65					65
66					66
67					67
70					70
71					71
72					72
73					73
74					74
75					75
76					76
77					77

OS - Initializ.

Page:- 10 Col:- 16

Step	Instruction	Address	Comment	Octal	Step
00			{ 0/1440		00
01			{ 96 words	000140	01
02			{ 4/0760		02
03			{ 70 words	000106	03
04			{ 4/0000		04
05			{ 128 words	000200	05
06			{ 7/0000		06
07			{ 128 words	000200	07
10			[Not if D800/D400		10
11			dirs used]	000066	11
12				000000	12
13					13
14					14
15					15
16					16
17					17
20					20
21					21
22					22
23					23
24					24
25					25
26					26
27					27
30					30
31					31
32					32
33					33
34					34
35					35
36					36
37					37
40	*ENTRY		Add table to sys chain	← EA →	40
41	LDA	I 1640	li → table		41
42	STA	1776	Table position		42
43	INSZ	1640			43
44	LDA	I 1776	→ next element	*Next entry	44
45	AND				45
46	JUMP	1655	End.		46
47	CMPPA	1657	7/0000		47
50	JUMP	1653	Byes		50
51	→ LDB	I 1640	= length of element		51
52	ISBR	1730	Add to sys chain		52
53	INSZ	1776			53
54	JUMP	1644	also next element		54
55	INSZ	1640			55
56	JUMP	I 1640	ref am.		56
57				7/0000	57
60					60
61					61
62					62
63					63
64					64
65					65
66					66
67					67
70					70
71					71
72					72
73					73
74					74
75					75
76					76
77					77

OS - Tutorial

Page:- 10 Col:- 17

Step	Instruction	Address	Comment	Octal	Step
00	*ENTRY		Establish free core chain	← BA →	00
01	LDB	I 1776	→ Next free core area + load counting		01
02	BND				02
03	JUMP	1713	End of loop		03
04	INSZ	1776			04
05	LDA	I 1776	= length		05
06	JSBR	1730	Add to chain		06
07	INSZ	1776			07
10	JUMP	1701	core used counting in table		10
11					11
12					12
13	LDB	Z 0416	→ free core table (or 1) keep chain		13
14	LDA	Z 0417	No. of words elements		14
15	A=0				15
16	JUMP	1762	old type of configuration table		16
17	STB	1776			17
20	LDB	I 1776	→ Next core area * NEXT entry		20
21	BND				21
22	JUMP	I 1700	return - end of table		22
23	INSZ	1776			23
24	LDA	I 1776	= length		24
25	JSBR	1730	Add to chain		25
26	INSZ	1776			26
27	JUMP	1720	core used counting in table		27
30	*ENTRY		Add to chain B=free, A=length	← BA →	30
31	STB	I 1777	End of chain		31
32	STB	1777	end of chain		32
33	INCB				33
34	STA	I2 B	= length		34
35	CYA				35
36	STA	I 1777	Indicate end of chain		36
37	JUMP	I 1730	return		37
40	*ENTRY		HARDWARE INSPECTION OF CORE	← BA →	40
41	LDA	Z 0352	10/0000		41
42	LDA	Z 0347	4/0000		42
43	STA	I2 A			43
44	LDB	I2 A			44
45	CHPB	Z A			45
46	JUMP	1742			46
47	STA	Z 1715	Core length indicator		47
50	PARITY		Clear parity indicator	000012	50
51	NOOP				51
52	JUMP	I 1740	return		52
53					53
54					54
55					55
56					56
57					57
60					60
61					61
62	LDA		} x16 = No. of words in word of file (from 1713)		62
63	LDA				63
64	LDA				64
65	LDA				65
66	JSBR	1730	Add word @ table to chain		66
67	JSBR	1740	Add word @ table to free chain		67
70	P= 0/0424				70
71	P= 128 words				71
72	JSBR	1640	Add word @ table to free chain		72
73	P= 0/0430				73
74	P= 69 words			000105	74
75	JUMP	I 1700	return		75
76			Table pointer 10/1600	-	76
77			→ End of chain 0/0037	-	77