

	10	.TITLE "DSNEV601"
0000	0100	#= \$E400
=E459	0110	SIOV = \$E459
=E45C	0120	SETVBV = \$E45C
=E468	0130	SENDEV = \$E468
=F095	0140	SIO5B = \$F095
E400 FBF3	0150	EDITOR .WORD \$F3FC-1
E402 33F6	0160	.WORD \$F634-1
E404 3DF6	0170	.WORD \$F63E-1
E406 A3F6	0180	.WORD \$F6A4-1
E408 33F6	0190	.WORD \$F634-1
E40A 3CF6	0200	.WORD \$F63D-1
E40C 4CD0F3	0210	JMP \$F3D0 :PWRONA
E40F 00	0220	.BYTE 0
E410 F5F3	0230	DISPLA .WORD \$F3F6-1
E412 33F6	0240	.WORD \$F634-1
E414 92F5	0250	.WORD \$F593-1
E416 B6F5	0260	.WORD \$F5B7-1
E418 33F6	0270	.WORD \$F634-1
E41A DCFC	0280	.WORD \$FCDD-1
E41C 4CD0F3	0290	JMP \$F3D0
E41F 00	0300	.BYTE 0
E420 33F6	0310	KBDHND .WORD \$F634-1
E422 33F6	0320	.WORD \$F634-1
E424 E1F6	0330	.WORD \$F6E2-1
E426 3CF6	0340	.WORD \$F63D-1
E428 33F6	0350	.WORD \$F634-1
E42A 3CF6	0360	.WORD \$F63D-1
E42C 4CD0F3	0370	JMP \$F3D0
E42F 00	0380	.BYTE 0
E430 9EEE	0390	PTRHND .WORD PHOPEN-1
E432 DBEE	0400	.WORD PHCLOS-1
E434 9DEE	0410	.WORD BADST-1
E436 A6EE	0420	.WORD PHWRIT-1
E438 B0EE	0430	.WORD PHSTAT-1
E43A 9DEE	0440	.WORD BADST-1
E43C 4C7BEE	0450	JMP PHINIT
E43F 00	0460	.BYTE 0
E440 4BEF	0470	CASHND .WORD OPENC-1
E442 2AF0	0480	.WORD \$F02B-1
E444 D5EF	0490	.WORD 6BYTE-1
E446 0FF0	0500	.WORD \$F010-1
E448 27F0	0510	.WORD \$F02B-1
E44A 4AEF	0520	.WORD SPECIA-1
E44C 4C41EF	0530	JMP INIT
E44F 00	0540	.BYTE 0
E450 4CEAED	0550	JMP DINIT
E453 4CF0ED	0560	JMP DSKIF
E456 4CC4E4	0570	JMP CIO
E459 4C59E9	0580	JMP SIO
E45C 4CEDEB	0590	JMP SETVBL
E45F 4CAEE7	0600	JMP SYSVBL
E462 4C05E9	0610	JMP XITVBL
E465 4C44E9	0620	JMP SIOINT
E468 4CF2EB	0630	JMP SENDEN
E46B 4CD5E6	0640	JMP IHINIT
E46E 4CA6E4	0650	JMP CIOINT
E471 4C23F2	0660	JMP \$F223
E474 4C1BF1	0670	JMP \$F11B
E477 4C25F1	0680	JMP \$F125
E47A 4CE9EF	0690	JMP RBLOK

E47D 4C5DEF	0700	JMP DPINP
E480 90E7	0710	.WORD SYRTI
E482 8FE7	0720	.WORD SYIRGB
E484 8FE7	0730	.WORD SYIRGB
E486 8FE7	0740	.WORD SYIRGB
E488 BEFF	0750	.WORD \$FFBE
E48A 0FEB	0760	.WORD ISRSIR
E48C 90EA	0770	.WORD ISRODN
E48E CFEA	0780	.WORD ISRTD
E490 8FE7	0790	.WORD SYIRGB
E492 8FE7	0800	.WORD SYIRGB
E494 8FE7	0810	.WORD SYIRGB
E496 06E7	0820	.WORD SYIRB
E498 00000000	0830	.BYTE 0,0,0,0,0,0,0,0,0,0
E49C 00000000		
E4A0 0000		
E4A2 AEE7	0840	.WORD SYSVBL
E4A4 05E9	0850	.WORD XITVBL
E4A6 A200	0860	CIOINT LDX #0
E4A8 A9FF	0870	CIOI1 LDA #\$FF
E4AA 9D4003	0880	STA \$0340,X
E4AD A9C0	0890	LDA #\$C0
E4AF 9D4603	0900	STA \$0346,X
E4B2 A9E4	0910	LDA #\$E4
E4B4 9D4703	0920	STA \$0347,X
E4B7 8A	0930	TXA
E4B8 18	0940	CLC
E4B9 6910	0950	ADC #\$10
E4BB AA	0960	TAX
E4BC C980	0970	CMP #\$80
E4BE 90EB	0980	BCC CIOI1
E4C0 60	0990	RTS
=E4C0	1000	ERRTN = \$E4C0
=00E4	1010	ERRTNH = \$E4
=00C0	1020	ERRTNL = \$C0
E4C1 A0B5	1030	LDY #\$B5
E4C3 60	1040	RTS
E4C4 852F	1050	CIO STA \$2F
E4C6 862E	1060	STX \$2E
E4C8 8A	1070	TXA
E4C9 290F	1080	AND #\$0F
E4CB D004	1090	BNE CIERR1
E4CD E080	1100	CPX #\$80
E4CF 9005	1110	BCC IOC1
E4D1 A0B6	1120	CIERR1 LDY #\$B6
E4D3 4C1BE6	1130	JMP CIRTN1
E4D6 A000	1140	IOC1 LDY #0
E4D8 BD4003	1150	IOC1A LDA \$0340,X
E4DB 992000	1160	STA \$20,Y
E4DE EB	1170	INX
E4DF CB	1180	INY
E4E0 C00C	1190	CPY #12
E4E2 90F4	1200	BCC IOC1A
E4E4 A0B4	1210	LDY #\$B4
E4E6 A522	1220	LDA \$22
E4E8 C903	1230	CMP #3
E4EA 9025	1240	BCC CIERR4
E4EC AB	1250	TAY
E4ED C00E	1260	CPY #\$0E
E4EF 9002	1270	BCC IOC2
E4F1 A00E	1280	LDY #\$0E

E4F3	8417	1290	IOC2 STY #17
E4F5	B9C6E6	1300	LDA CONTAB-3,Y
E4F8	F00F	1310	BEG CIOPEN
E4FA	C902	1320	CMP #2
E4FC	F035	1330	BEG CICLOS
E4FE	C908	1340	CMP #8
E500	B04C	1350	BCS CISTSP
E502	C904	1360	CMP #4
E504	F063	1370	BEG CIREAD
E506	4CC9E5	1380	JMP CIWRIT
E509	A520	1390	CIOPEN LDA #20
E50B	C9FF	1400	CMP #9FF
E50D	F005	1410	BEG IOC6
E50F	A081	1420	CIERR3 LDY #81
E511	4C1BE6	1430	CIERR4 JMP CIRTN1
E514	209EE6	1440	IOC6 JSR DEVSRC
E517	B0F8	1450	BCS CIERR4
E519	203DE6	1460	IOC7 JSR COMENT
E51C	B0F3	1470	BCS CIERR4
E51E	2089E6	1480	JSR GOHAND
E521	A90B	1490	LDA #90B
E523	8517	1500	STA #17
E525	203DE6	1510	JSR COMENT
E528	A52C	1520	LDA #2C
E52A	8526	1530	STA #26
E52C	A52D	1540	LDA #2D
E52E	8527	1550	STA #27
E530	4C1DE6	1560	JMP CIRTN2
E533	A001	1570	CICLOS LDY #1
E535	8423	1580	STY #23
E537	203DE6	1590	JSR COMENT
E53A	B003	1600	BCS CICLO2
E53C	2089E6	1610	JSR GOHAND
E53F	A9FF	1620	CICLO2 LDA #9FF
E541	8520	1630	STA #20
E543	A9E4	1640	LDA #ERRTNH
E545	8527	1650	STA #27
E547	A9C0	1660	LDA #ERRTNL
E549	8526	1670	STA #26
E54B	4C1DE6	1680	JMP CIRTN2
E54E	A520	1690	CISTSP LDA #20
E550	C9FF	1700	CMP #9FF
E552	D005	1710	BNE CIST1
E554	209EE6	1720	JSR DEVSRC
E557	B0B8	1730	BCS CIERR4
E559	203DE6	1740	CIST1 JSR COMENT
E55C	2089E6	1750	JSR GOHAND
E55F	A62E	1760	LDX #2E
E561	BD4003	1770	LDA #0340,X
E564	8520	1780	STA #20
E566	4C1DE6	1790	JMP CIRTN2
E569	A522	1800	CIREAD LDA #22
E56B	252A	1810	AND #2A
E56D	D005	1820	BNE RC11A
E56F	A083	1830	LDY #83
E571	4C1BE6	1840	RC11B JMP CIRTN1
E574	203DE6	1850	RC11A JSR COMENT
E577	B0F8	1860	BCS RC11B
E579	A528	1870	LDA #28
E57B	0529	1880	DRA #29
E57D	D008	1890	BNE RC13

E57F 2089E6	1900	JSR 60HAND
E582 852F	1910	STA #2F
E584 4C1DE6	1920	JMP CIRTN2
E587 2089E6	1930	RCI3 JSR 60HAND
E58A 852F	1940	STA #2F
E58C 3035	1950	BMI RCI4
E58E A000	1960	LDY #0
E590 9124	1970	STA (#24),Y
E592 2070E6	1980	JSR INCBFP
E595 A522	1990	LDA #22
E597 2902	2000	AND #2
E599 D00C	2010	BNE RCI1
E59B A52F	2020	LDA #2F
E59D C99B	2030	CMP ##9B
E59F D006	2040	BNE RCI1
ESA1 2063E6	2050	JSR DECBFL
ESA4 4CC3E5	2060	JMP RCI4
ESA7 2063E6	2070	RCI1 JSR DECBFL
ESAA D0DB	2080	BNE RCI3
ESAC A522	2090	RCI2 LDA #22
ESAE 2902	2100	AND #2
ESB0 D011	2110	BNE RCI4
ESB2 2089E6	2120	RCI6 JSR 60HAND
ESB5 852F	2130	STA #2F
ESB7 300A	2140	BMI RCI4
ESB9 A52F	2150	LDA #2F
ESBB C99B	2160	CMP ##9B
ESBD D0F3	2170	BNE RCI6
ESBF A989	2180	RCI11 LDA ##89
ESC1 8523	2190	STA #23
ESC3 2077E6	2200	RCI4 JSR SUBBFL
ESC6 4C1DE6	2210	JMP CIRTN2
ESC9 A522	2220	CIWRIT LDA #22
ESCB 252A	2230	AND #2A
ESCD D005	2240	BNE WCI1A
ESCF A087	2250	LDY ##87
ESD1 4C1BE6	2260	WCI1B JMP CIRTN1
ESD4 203DE6	2270	WCI1A JSR COMENT
ESD7 B0FB	2280	BCS WCI1B
ESD9 A528	2290	LDA #28
ESDB 0529	2300	ORA #29
ESDD D006	2310	BNE WCI3
ESDF A52F	2320	LDA #2F
ESE1 E628	2330	INC #28
ESE3 D006	2340	BNE WCI4
ESE5 A000	2350	WCI3 LDY #0
ESE7 B124	2360	LDA (#24),Y
ESE9 852F	2370	STA #2F
ESEB 2089E6	2380	WCI4 JSR 60HAND
ESEE 3025	2390	BMI WCI5
ESF0 2070E6	2400	JSR INCBFP
ESF3 A522	2410	LDA #22
ESF5 2902	2420	AND #2
ESF7 D00C	2430	BNE WCI1
ESF9 A52F	2440	LDA #2F
ESFB C99B	2450	CMP ##9B
ESFD D006	2460	BNE WCI1
ESFF 2063E6	2470	JSR DECBFL
E602 4C15E6	2480	JMP WCI5
E605 2063E6	2490	WCI1 JSR DECBFL
E608 D0DB	2500	BNE WCI3

E60A	A522	2510	WCI2 LDA \$22
E60C	2902	2520	AND #2
E60E	D005	2530	BNE WCI5
E610	A99B	2540	LDA ##9B
E612	2089E6	2550	JSR 6OHAND
E615	2077E6	2560	WCI5 JSR SUBBFL
E618	4C1DE6	2570	JMP CIRTN2
E61B	B423	2580	CIRTN1 STY \$23
E61D	A42E	2590	CIRTN2 LDY \$2E
E61F	B94403	2600	LDA \$0344,Y
E622	8524	2610	STA \$24
E624	B94503	2620	LDA \$0345,Y
E627	8525	2630	STA \$25
E629	A200	2640	LDX #0
E62B	B520	2650	CIRT3 LDA \$20,X
E62D	994003	2660	STA \$0340,Y
E630	EB	2670	INX
E631	CB	2680	INY
E632	E00C	2690	CPX #12
E634	90F5	2700	BCC CIRT3
E636	A52F	2710	LDA \$2F
E638	A62E	2720	LDX \$2E
E63A	A423	2730	LDY \$23
E63C	60	2740	RTS
E63D	A420	2750	COMENT LDY \$20
E63F	C022	2760	CPY ##21+1
E641	9004	2770	BCC COM1
E643	A085	2780	LDY ##85
E645	B01B	2790	BCS COM2
E647	B91B03	2800	COM1 LDA \$031B,Y
E64A	852C	2810	STA \$2C
E64C	B91C03	2820	LDA \$031C,Y
E64F	852D	2830	STA \$2D
E651	A417	2840	LDY \$17
E653	B9C6E6	2850	LDA COMTAB-3,Y
E656	AB	2860	TAY
E657	B12C	2870	LDA (\$2C),Y
E659	AA	2880	TAX
E65A	CB	2890	INY
E65B	B12C	2900	LDA (\$2C),Y
E65D	852D	2910	STA \$2D
E65F	862C	2920	STX \$2C
E661	1B	2930	CLC
E662	60	2940	COM2 RTS
E663	C62B	2950	DECBFL DEC \$2B
E665	A52B	2960	LDA \$2B
E667	C9FF	2970	CMP ##FF
E669	D002	2980	BNE DECBF1
E66B	C629	2990	DEC \$29
E66D	0529	3000	DECBF1 ORA \$29
E66F	60	3010	RTS
E670	E624	3020	INCBFP INC \$24
E672	D002	3030	BNE INCBF1
E674	E625	3040	INC \$25
E676	60	3050	INCBF1 RTS
E677	A62E	3060	SUBBFL LDX \$2E
E679	3B	3070	SEC
E67A	BD4803	3080	LDA \$0348,X
E67D	E52B	3090	SBC \$2B
E67F	852B	3100	STA \$2B
E681	BD4903	3110	LDA \$0349,X

E684 E529	3120	SBC \$29
E686 8529	3130	STA \$29
E688 60	3140	RTS
E689 A092	3150	GDHAND LDY ##92
E68B 2093E6	3160	JSR CIJUMP
E68E 8423	3170	STY \$23
E690 C000	3180	CPY #0
E692 60	3190	RTS
E693 AA	3200	CIJUMP TAX
E694 A52D	3210	LDA \$2D
E696 48	3220	PHA
E697 A52C	3230	LDA \$2C
E699 48	3240	PHA
E69A 8A	3250	TXA
E69B A62E	3260	LDX \$2E
E69D 60	3270	RTS
E69E A000	3280	DEVSRD LDY #0
E6A0 B124	3290	LDA (\$24),Y
E6A2 F00C	3300	BEB CIERR2
E6A4 A021	3310	LDY ##21
E6A6 D91A03	3320	DEVSI CMP #031A,Y
E6A9 F00A	3330	BEB DEVS2
E6AB 88	3340	DEY
E6AC 88	3350	DEY
E6AD 88	3360	DEY
E6AE 10F6	3370	BPL DEVS1
E6B0 A082	3380	CIERR2 LDY ##82
E6B2 38	3390	SEC
E6B3 B013	3400	BCS DEVS4
E6B5 98	3410	DEVSI TYA
E6B6 8520	3420	STA \$20
E6B8 38	3430	SEC
E6B9 A001	3440	LDY #1
E6BB B124	3450	LDA (\$24),Y
E6BD E930	3460	SBC ##30
E6BF C90A	3470	CMP ##0A
E6C1 9002	3480	BCC DEVS3
E6C3 A901	3490	LDA #1
E6C5 8521	3500	DEVSI STA \$21
E6C7 18	3510	CLC
E6C8 60	3520	DEVSI RTS
E6C9 00040404	3530	COMTAB .BYTE 0,4,4,4,4,6
E6CD 0406		
E6CF 06060602	3540	.BYTE 6,6,6,2,8,10
E6D3 080A		
E6D5 A940	3550	IHINIT LDA ##40
E6D7 BD0ED4	3560	STA \$D40E
E6DA A938	3570	LDA ##38
E6DC 8D02D3	3580	STA \$D302
E6DF BD03D3	3590	STA \$D303
E6E2 A900	3600	LDA #0
E6E4 BD00D3	3610	STA \$D300
E6E7 BD01D3	3620	STA \$D301
E6EA A93C	3630	LDA ##3C
E6EC BD02D3	3640	STA \$D302
E6EF BD03D3	3650	STA \$D303
E6F2 60	3660	RTS
E6F3 6C1602	3670	PIRD JMP (\$0216)
E6F6 B0400402	3680	CMPTAB .BYTE \$80,\$40,4,2,1,8,\$10,\$20
E6FA 01081020		
E6FE 36081412	3690	ADRTAB .BYTE \$36,B,\$14,\$12,\$10,\$0E,\$0C,\$0A

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E702 100E0C0A
E706 4B      3700 SYIRQ PHA
E707 AD0ED2  3710   LDA $D20E
E70A 2920    3720   AND #$20
E70C D00D    3730   BNE SYIRQ2
E70E A9DF    3740   LDA #$DF
E710 8D0ED2  3750   STA $D20E
E713 A510    3760   LDA $10
E715 8D0ED2  3770   STA $D20E
E718 6C0A02  3780   JMP ($020A)
E71B 8A      3790 SYIRQ2 TXA
E71C 4B      3800   PHA
E71D A206    3810   LDX #6
E71F BDF6E6  3820 LOOPM LDA CMPTAB,X
E722 E005    3830   CPX #5
E724 D004    3840   BNE LDOPM2
E726 2510    3850   AND $10
E728 F005    3860   BEB LL
E72A 2C0ED2  3870 LOOPM2 BIT $D20E
E72D F006    3880   BEB JMPP
E72F CA      3890 LL  DEX
E730 10ED    3900   BPL LDOPM
E732 4C62E7  3910   JMP SYIRQB
E735 49FF    3920 JMPP EOR #$FF
E737 8D0ED2  3930   STA $D20E
E73A A510    3940   LDA $10
E73C 8D0ED2  3950   STA $D20E
E73F BDFEE6  3960   LDA ADRTAB,X
E742 AA      3970   TAX
E743 BD0002  3980   LDA $0200,X
E746 8D8C02  3990   STA $028C
E749 BD0102  4000   LDA $0200+1,X
E74C 8D8D02  4010   STA $028D
E74F 68      4020   PLA
E750 AA      4030   TAX
E751 6C8C02  4040   JMP ($028C)
E754 A900    4050 BRKKY2 LDA #0
E756 8511    4060   STA $11
E758 8DFF02  4070   STA $02FF
E75B 8DF002  4080   STA $02F0
E75E 854D    4090   STA $4D
E760 68      4100   PLA
E761 40      4110   RTI
E762 68      4120 SYIRQB PLA
E763 AA      4130   TAX
E764 2C02D3  4140   BIT $D302
E767 1006    4150   BPL SYIRQ9
E769 AD00D3  4160   LDA $D300
E76C 6C0202  4170   JMP ($0202)
E76F 2C03D3  4180 SYIRQ9 BIT $D303
E772 1006    4190   BPL SYIRQA
E774 AD01D3  4200   LDA $D301
E777 6C0402  4210   JMP ($0204)
E77A 68      4220 SYIRQA PLA
E77B 8D8C02  4230   STA $028C
E77E 68      4240   PLA
E77F 4B      4250   PHA
E780 2910    4260   AND #$10
E782 F007    4270   BEQ SYRT12
E784 AD8C02  4280   LDA $028C
E787 4B      4290   PHA

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E788 6C0602	4300	JMP (\$0206)
E788 AD8C02	4310	SYRTI2 LDA \$028C
E78E 48	4320	PHA
E78F 68	4330	SYIRQB PLA
E790 40	4340	SYRTI RTI
E791 2C0FD4	4350	PNMI BIT \$D40F
E794 1003	4360	BPL PNMI1
E796 6C0002	4370	JMP (\$0200)
E799 48	4380	PNMI1 PHA
E79A AD0FD4	4390	LDA \$D40F
E79D 2920	4400	AND #\$20
E79F F003	4410	BEG #+5
E7A1 4C74E4	4420	JMP \$E474
E7A4 8A	4430	TXA
E7A5 48	4440	PHA
E7A6 98	4450	TYA
E7A7 48	4460	PHA
E7A8 8D0FD4	4470	STA \$D40F
E7AB 6C2202	4480	JMP (\$0222)
E7AE E614	4490	SYSVBL INC \$14
E7B0 D008	4500	BNE SYSVB1
E7B2 E64D	4510	INC \$4D
E7B4 E613	4520	INC \$13
E7B6 D002	4530	BNE SYSVB1
E7B8 E612	4540	INC \$12
E7BA A9FE	4550	SYSVB1 LDA #\$FE
E7BC A200	4560	LDX #0
E7BE A44D	4570	LDY \$4D
E7C0 1006	4580	BPL VBATRA
E7C2 854D	4590	STA \$4D
E7C4 A613	4600	LDX \$13
E7C6 A9F6	4610	LDA #\$F6
E7C8 854E	4620	VBATRA STA \$4E
E7CA 864F	4630	STX \$4F
E7CC A200	4640	LDX #0
E7CE 20D0E8	4650	JSR DCTIMR
E7D1 D003	4660	BNE SYSVB2
E7D3 20CAE8	4670	JSR JTIMR1
E7D6 A542	4680	SYSVB2 LDA \$42
E7D8 D008	4690	BNE XXIT
E7DA BA	4700	TSX
E7DB BD0401	4710	LDA \$0104,X
E7DE 2904	4720	AND #4
E7E0 F003	4730	BEG SYSVB3
E7E2 4C05E9	4740	XXIT JMP XITVBL
E7E5 AD0DD4	4750	SYSVB3 LDA \$D40D
E7E8 8D3502	4760	STA \$0235
E7EB AD0CD4	4770	LDA \$D40C
E7EE 8D3402	4780	STA \$0234
E7F1 AD3102	4790	LDA \$0231
E7F4 8D03D4	4800	STA \$D403
E7F7 AD3002	4810	LDA \$0230
E7FA 8D02D4	4820	STA \$D402
E7FD AD2F02	4830	LDA \$022F
E800 8D00D4	4840	STA \$D400
E803 AD6F02	4850	LDA \$026F
E806 8D1BD0	4860	STA \$D01B
E809 A208	4870	LDX #8
E80B BE1FD0	4880	STX \$D01F
E80E 58	4890	SCOLLP CLI
E80F BDC002	4900	LDA \$02C0,X



EB12	454F	4910	EOR \$4F
EB14	254E	4920	AND \$4E
EB16	9D12D0	4930	STA \$D012,X
EB19	CA	4940	DEX
EB1A	10F2	4950	BPL SCOLLP
EB1C	ADF402	4960	LDA \$02F4
EB1F	8D09D4	4970	STA \$D409
EB22	ADF302	4980	LDA \$02F3
EB25	8D01D4	4990	STA \$D401
EB28	A202	5000	LDX #2
EB2A	20D0EB	5010	JSR DCTIMR
EB2D	D003	5020	BNE SYSVB4
EB2F	20CDEB	5030	JSR JTIMR2
EB32	A202	5040	SYSVB4 LDX #2
EB34	E8	5050	SYSVBB INX
EB35	E8	5060	INX
EB36	BD1802	5070	LDA \$0218,X
EB39	1D1902	5080	ORA \$0219,X
EB3C	F006	5090	BEG SYSVBA
EB3E	20D0EB	5100	JSR DCTIMR
EB41	9D2602	5110	STA \$0226,X
EB44	E008	5120	SYSVBA CPX #B
EB46	DOEC	5130	BNE SYSVBB
EB48	AD0FD2	5140	LDA \$D20F
EB4B	2904	5150	AND #4
EB4D	F008	5160	BEG SYVB6A
EB4F	ADF102	5170	LDA \$02F1
EB52	F003	5180	BEG SYVB6A
EB54	CEF102	5190	DEC \$02F1
EB57	AD2B02	5200	SYVB6A LDA \$022B
EB5A	F017	5210	BEG SYSVB7
EB5C	AD0FD2	5220	LDA \$D20F
EB5F	2904	5230	AND #4
EB61	D060	5240	BNE SYSVB6
EB63	CE2B02	5250	DEC \$022B
EB66	D00B	5260	BNE SYSVB7
EB68	A903	5270	LDA #3
EB6A	8D2B02	5280	STA \$022B
EB6D	AD09D2	5290	LDA \$D209
EB70	8DFC02	5300	STA \$02FC
EB73	A001	5310	SYSVB7 LDY #1
EB75	A203	5320	LDX #3
EB77	B900D3	5330	STLOOP LDA \$D300,Y
EB7A	4A	5340	LSR A
EB7B	4A	5350	LSR A
EB7C	4A	5360	LSR A
EB7D	4A	5370	LSR A
EB7E	9D7802	5380	STA \$0278,X
EB81	CA	5390	DEX
EB82	B900D3	5400	LDA \$D300,Y
EB85	290F	5410	AND #\$0F
EB87	9D7802	5420	STA \$0278,X
EB8A	CA	5430	DEX
EB8B	88	5440	DEY
EB8C	10E9	5450	BPL STLOOP
EB8E	A203	5460	LDX #3
EB90	BD10D0	5470	STRL LDA \$D010,X
EB93	9DB402	5480	STA \$02B4,X
EB96	BD00D2	5490	LDA \$D200,X
EB99	9D7002	5500	STA \$0270,X
EB9C	BD04D2	5510	LDA \$D204,X

E89F 9D7402	5520	STA \$0274,X
E8A2 CA	5530	DEX
E8A3 10EB	5540	BPL STRL
E8A5 8D0BD2	5550	STA \$D20B
E8A8 A206	5560	LDX #6
E8AA A003	5570	LDY #3
E8AC B97B02	5580	PTRLP LDA \$0278,Y
E8AF 4A	5590	LSR A
E8B0 4A	5600	LSR A
E8B1 4A	5610	LSR A
E8B2 9D7D02	5620	STA \$027D,X
E8B5 A900	5630	LDA #0
E8B7 2A	5640	ROL A
E8B8 9D7C02	5650	STA \$027C,X
E8BB CA	5660	DEX
E8BC CA	5670	DEX
E8BD 88	5680	DEY
E8BE 10EC	5690	BPL PTRLP
E8C0 6C2402	5700	JMP (\$0224)
=00E8	5710	SV7H = SYSVB7/256
=0073	5720	SV7L = SYSVB7&255
E8C3 A900	5730	SYSVB6 LDA #0
E8C5 8D2B02	5740	STA \$022B
E8CB F0A9	5750	BEG SYSVB7
E8CA 6C2602	5760	JTIMR1 JMP (\$0226)
E8CD 6C2802	5770	JTIMR2 JMP (\$0228)
E8D0 BC1802	5780	DCTIMR LDY \$0218,X
E8D3 D008	5790	BNE DCTIM1
E8D5 BC1902	5800	LDY \$0219,X
E8DB F010	5810	BEG DCTXF
E8DA DE1902	5820	DEC \$0219,X
E8DD DE1802	5830	DCTIM1 DEC \$0218,X
E8E0 D008	5840	BNE DCTXF
E8E2 BC1902	5850	LDY \$0219,X
E8E5 D003	5860	BNE DCTXF
E8E7 A900	5870	LDA #0
E8E9 60	5880	RTS
E8EA A9FF	5890	DCTXF LDA #\$FF
E8EC 60	5900	RTS
E8ED 0A	5910	SETVBL ASL A
E8EE 8D2D02	5920	STA \$022D
E8F1 8A	5930	TXA
E8F2 A205	5940	LDX #5
E8F4 8D0AD4	5950	STA \$D40A
E8F7 CA	5960	SETLOP DEX
E8F8 D0FD	5970	BNE SETLOP
E8FA AE2D02	5980	LDX \$022D
E8FD 9D1702	5990	STA \$0217,X
E900 98	6000	TYA
E901 9D1602	6010	STA \$0216,X
E904 60	6020	RTS
E905 68	6030	XITVBL PLA
E906 AB	6040	TAY
E907 68	6050	PLA
E908 AA	6060	TAX
E909 68	6070	PLA
E90A 40	6080	RTI
E90B 66667E66	6090	.BYTE \$66,\$66,\$7E,\$66,0,0,\$7C
E90F 00007C		
E912 4CEDEB	6100	JMP \$EBED
E915 4C25F1	6110	OMNI1 JMP \$F125

E918 EA	6120	NOP
E919 4C9AE7	6130	OMNI2 JMP PNMI1+1
E91C 2C0FD4	6140	BIT \$D40F
E91F 1003	6150	BPL OMNI3
E921 6C0002	6160	JMP (\$0200)
E924 48	6170	OMNI3 PHA
E925 AD00C0	6180	LDA \$C000
E928 C968	6190	CMP ##68
E92A D0ED	6200	BNE OMNI2
E92C 4D00C0	6210	EOR \$C000
E92F D0EB	6220	BNE OMNI2
E931 4CD7CF	6230	JMP \$CFD7
E934 EA	6240	NOP
E935 AD00C0	6250	LDA \$C000
E938 C968	6260	CMP ##68
E93A D0D9	6270	BNE OMNI1
E93C 4D00C0	6280	EOR \$C000
E93F D0D4	6290	BNE OMNI1
E941 4CF5CF	6300	JMP \$CFF5
E944 A93C	6310	SIDINT LDA ##3C
E946 8D02D3	6320	STA \$D302
E949 A93C	6330	LDA ##3C
E94B 8D03D3	6340	STA \$D303
E94E A903	6350	LDA #3
E950 8D3202	6360	STA \$0232
E953 8541	6370	STA \$41
E955 8D0FD2	6380	STA \$D20F
E958 60	6390	RTS
E959 BA	6400	SID TSX
E95A 8E1803	6410	STX \$0318
E95D A901	6420	LDA #1
E95F 8542	6430	STA \$42
E961 AD0003	6440	LDA \$0300
E964 C960	6450	CMP ##60
E966 D003	6460	BNE NOTCST
E968 4CB0EB	6470	JMP CASENT
E96B A900	6480	NOTCST LDA #0
E96D 8D0F03	6490	STA \$030F
E970 A901	6500	LDA #1
E972 8537	6510	STA \$37
E974 A90D	6520	COMMND LDA ##0D
E976 8536	6530	STA \$36
E978 A928	6540	COMFRM LDA ##28
E97A 8D04D2	6550	STA \$D204
E97D A900	6560	LDA #0
E97F 8D06D2	6570	STA \$D206
E982 18	6580	CLC
E983 AD0003	6590	LDA \$0300
E986 6D0103	6600	ADC \$0301
E989 69FF	6610	ADC ##FF
E98B 8D3A02	6620	STA \$023A
E98E AD0203	6630	LDA \$0302
E991 8D3B02	6640	STA \$023B
E994 AD0A03	6650	LDA \$030A
E997 8D3C02	6660	STA \$023C
E99A AD0B03	6670	LDA \$030B
E99D 8D3D02	6680	STA \$023D
E9A0 18	6690	CLC
E9A1 A93A	6700	LDA ##3A
E9A3 8532	6710	STA \$32
E9A5 6904	6720	ADC #4

E9A7	8534	6730	STA #34
E9A9	A902	6740	LDA #2
E9AB	8533	6750	STA #33
E9AD	8535	6760	STA #35
E9AF	A934	6770	LDA ##34
E9B1	8D03D3	6780	STA #D303
E9B4	208AEC	6790	JSR SENDIN
E9B7	AD3F02	6800	LDA #023F
E9BA	D003	6810	BNE BADCOM
E9BC	98	6820	TYA
E9BD	D007	6830	BNE ACKREC
E9BF	C636	6840	BADCOM DEC #36
E9C1	10B5	6850	BPL COMFRM
E9C3	4C06EA	6860	JMP DERR1
E9C6	AD0303	6870	ACKREC LDA #0303
E9C9	100C	6880	BPL WATCOM
E9CB	A90D	6890	LDA ##0D
E9CD	8536	6900	STA #36
E9CF	206AEB	6910	JSR LDPNTR
E9D2	208AEC	6920	JSR SENDIN
E9D5	F0E8	6930	BEG BADCOM
E9D7	2075EC	6940	WATCOM JSR STTMDT
E9DA	A900	6950	LDA #0
E9DC	8D3F02	6960	STA #023F
E9DF	209BEC	6970	JSR WAITER
E9E2	F012	6980	BEG DERR
E9E4	2C0303	6990	BIT #0303
E9E7	7007	7000	BVS MODATA
E9E9	AD3F02	7010	LDA #023F
E9EC	D018	7020	BNE DERR1
E9EE	F01D	7030	BEG RETURN
E9F0	206AEB	7040	MODATA JSR LDPNTR
E9F3	20E0EA	7050	JSR RECEIV
E9F6	AD3F02	7060	DERR LDA #023F
E9F9	F005	7070	BEG NOTERR
E9FB	AD1903	7080	LDA #0319
E9FE	8530	7090	STA #30
EA00	A530	7100	NOTERR LDA #30
EA02	C901	7110	CMP #1
EA04	F007	7120	BEG RETURN
EA06	C637	7130	DERR1 DEC #37
EA08	3003	7140	BMI RETURN
EA0A	4C74E9	7150	JMP COMMD
EA0D	205FEC	7160	RETURN JSR SENDDS
EA10	A900	7170	LDA #0
EA12	8542	7180	STA #42
EA14	A430	7190	LDY #30
EA16	8C0303	7200	STY #0303
EA19	60	7210	RTS
EA1A	A900	7220	WAIT LDA #0
EA1C	8D3F02	7230	STA #023F
EA1F	18	7240	CLC
EA20	A93E	7250	LDA ##3E
EA22	8532	7260	STA #32
EA24	6901	7270	ADC #1
EA26	8534	7280	STA #34
EA28	A902	7290	LDA #2
EA2A	8533	7300	STA #33
EA2C	8535	7310	STA #35
EA2E	A9FF	7320	LDA ##FF
EA30	853C	7330	STA #3C

EA32	20E0EA	7340	JSR RECEIV
EA35	A0FF	7350	LDY ##FF
EA37	A530	7360	LDA \$30
EA39	C901	7370	CMP #1
EA3B	D019	7380	BNE NWOK
EA3D	AD3E02	7390	WOK LDA \$023E
EA40	C941	7400	CMP ##41
EA42	F021	7410	BEB GOOD
EA44	C943	7420	CMP ##43
EA46	F01D	7430	BEB GOOD
EA48	C945	7440	CMP ##45
EA4A	D006	7450	BNE NOTDER
EA4C	A990	7460	LDA ##90
EA4E	B530	7470	STA \$30
EA50	D004	7480	BNE NWOK
EA52	A98B	7490	NOTDER LDA ##8B
EA54	B530	7500	STA \$30
EA56	A530	7510	NWOK LDA \$30
EA58	C98A	7520	CMP ##8A
EA5A	F007	7530	BEB BAD
EA5C	A9FF	7540	LDA ##FF
EA5E	BD3F02	7550	STA \$023F
EA61	D002	7560	BNE GOOD
EA63	A000	7570	BAD LDY #0
EA65	A530	7580	GOOD LDA \$30
EA67	BD1903	7590	STA \$0319
EA6A	60	7600	RTS
EA6B	A901	7610	SEND LDA #1
EA6D	B530	7620	STA \$30
EA6F	20F2EB	7630	JSR SENDEN
EA72	A000	7640	LDY #0
EA74	B431	7650	STY \$31
EA76	B43B	7660	STY \$3B
EA78	B43A	7670	STY \$3A
EA7A	B132	7680	LDA (\$32),Y
EA7C	BD0DD2	7690	STA \$D20D
EA7F	B531	7700	STA \$31
EAB1	A511	7710	NOTDON LDA \$11
EAB3	D003	7720	BNE NTBKO
EAB5	4CA0ED	7730	JMP BROKE
EAB8	A53A	7740	NTBKO LDA \$3A
EABA	F0F5	7750	BEB NOTDON
EABC	205FEC	7760	JSR SENDDS
EABF	60	7770	RTS
EA90	98	7780	ISRODN TYA
EA91	4B	7790	PHA
EA92	E632	7800	INC \$32
EA94	D002	7810	BNE NOWRPO
EA96	E633	7820	INC \$33
EA98	A532	7830	NOWRPO LDA \$32
EA9A	C534	7840	CMP \$34
EA9C	A533	7850	LDA \$33
EA9E	E535	7860	SBC \$35
EAA0	901C	7870	BCC NOTEND
EAA2	A53B	7880	LDA \$3B
EAA4	D00B	7890	BNE RELONE
EAA6	A531	7900	LDA \$31
EAA8	BD0DD2	7910	STA \$D20D
EAA8	A9FF	7920	LDA ##FF
EAAD	B53B	7930	STA \$3B
EAAF	D009	7940	BNE CHKDON

EAB1	A510	7950	RELONE LDA \$10
EAB3	0908	7960	ORA #8
EAB5	8510	7970	STA \$10
EAB7	8D0ED2	7980	STA \$D20E
EABA	68	7990	CHKDON PLA
EABB	AB	8000	TAY
EABC	68	8010	PLA
EABD	40	8020	RTI
EABE	A000	8030	NOTEND LDY #0
EAC0	B132	8040	LDA (\$32),Y
EAC2	8D0DD2	8050	STA \$D20D
EAC5	18	8060	CLC
EAC6	6531	8070	ADC \$31
EAC8	6900	8080	ADC #0
EACA	8531	8090	STA \$31
EACC	4CBAEA	8100	JMP CHKDON
EACF	A538	8110	ISRTD LDA \$3B
EAD1	F008	8120	BEG FOOEY
EAD3	853A	8130	STA \$3A
EAD5	A510	8140	LDA \$10
EAD7	29F7	8150	AND #\$F7
EAD9	8510	8160	STA \$10
EADB	8D0ED2	8170	STA \$D20E
EADE	68	8180	FOOEY PLA
EADF	40	8190	RTI
EAE0	A900	8200	RECEIV LDA #0
EAE2	AC0F03	8210	LDY \$030F
EAE5	D002	8220	BNE NOCLR
EAE7	8531	8230	STA \$31
EAE9	8538	8240	NOCLR STA \$3B
EAEB	8539	8250	STA \$39
EAE0	A901	8260	LDA #1
EAEF	8530	8270	STA \$30
EAF1	201BEC	8280	JSR RECVEN
EAF4	A93C	8290	LDA #\$3C
EAF6	8D03D3	8300	STA \$D303
EAF9	A511	8310	CHKTIM LDA \$11
EAFB	D003	8320	BNE NTBRK1
EAFD	4CA0ED	8330	JMP BROKE
EB00	AD1703	8340	NTBRK1 LDA \$0317
EB03	F005	8350	BEG TOUT
EB05	A539	8360	LDA \$39
EB07	F0F0	8370	BEG CHKTIM
EB09	60	8380	GOBACK RTS
EB0A	A98A	8390	TOUT LDA #\$8A
EB0C	8530	8400	STA \$30
EB0E	60	8410	RRETRN RTS
EB0F	98	8420	ISRSIR TYA
EB10	48	8430	PHA
EB11	AD0FD2	8440	LDA \$D20F
EB14	8D0AD2	8450	STA \$D20A
EB17	3004	8460	BMI NTFRAM
EB19	A08C	8470	LDY #\$8C
EB1B	8430	8480	STY \$30
EB1D	2920	8490	NTFRAM AND #\$20
EB1F	D004	8500	BNE NTOVRN
EB21	A08E	8510	LDY #\$8E
EB23	8430	8520	STY \$30
EB25	A538	8530	NTOVRN LDA \$38
EB27	F013	8540	BEG NOTYET
EB29	AD0DD2	8550	LDA \$D20D

EB2C C531	8560	CMP \$31
EB2E F004	8570	BEG SRETRN
EB30 A08F	8580	LDY ##8F
EB32 B430	8590	STY \$30
EB34 A9FF	8600	SRETRN LDA ##FF
EB36 B539	8610	STA \$39
EB3B 68	8620	SUSUAL PLA
EB39 A8	8630	TAY
EB3A 68	8640	PLA
EB3B 40	8650	RTI
EB3C AD0DD2	8660	NOTYET LDA \$D20D
EB3F A000	8670	LDY #0
EB41 9132	8680	STA (\$32),Y
EB43 18	8690	CLC
EB44 6531	8700	ADC \$31
EB46 6900	8710	ADC #0
EB4B B531	8720	STA \$31
EB4A E632	8730	INC \$32
EB4C D002	8740	BNE NTWRP1
EB4E E633	8750	INC \$33
EB50 A532	8760	NTWRP1 LDA \$32
EB52 C534	8770	CMP \$34
EB54 A533	8780	LDA \$33
EB56 E535	8790	SBC \$35
EB5B 90DE	8800	BCC SUSUAL
EB5A A53C	8810	LDA \$3C
EB5C F006	8820	BEG GOON
EB5E A900	8830	LDA #0
EB60 B53C	8840	STA \$3C
EB62 F0D0	8850	BEG SRETRN
EB64 A9FF	8860	GOON LDA ##FF
EB66 B53B	8870	STA \$3B
EB6B D0CE	8880	BNE SUSUAL
EB6A 18	8890	LDPNTR CLC
EB6B AD0403	8900	LDA \$0304
EB6E B532	8910	STA \$32
EB70 6D0803	8920	ADC \$030B
EB73 B534	8930	STA \$34
EB75 AD0503	8940	LDA \$0305
EB7B B533	8950	STA \$33
EB7A 6D0903	8960	ADC \$0309
EB7D B535	8970	STA \$35
EB7F 60	8980	RTS
EB80 AD0303	8990	CASENT LDA \$0303
EB83 102E	9000	BPL CASRED
EB85 20A3EC	9010	JSR COMPUT
EB8B 4C8FEB	9020	JMP NEW1
EB8B 04	9030	.BYTE 4
EB8C 8D06D2	9040	STA \$D206
EB8F 20F2EB	9050	NEW1 JSR SENDEN
EB92 A00F	9060	LDY ##0F
EB94 AD0B03	9070	LDA \$030B
EB97 3002	9080	BMI SRTIRO
EB99 A0B4	9090	LDY ##B4
EB9B A200	9100	SRTIRO LDX #0
EB9D 20B9ED	9110	JSR SETVBX
EBA0 A934	9120	LDA ##34
EBA2 8D02D3	9130	STA \$D302
EBA5 AD1703	9140	TIMIT LDA \$0317
EBA8 D0FB	9150	BNE TIMIT
EBA A 206AEB	9160	JSR LDPNTR

EBAD 206BEA	9170	JSR SEND
EBB0 4CDFEB	9180	JMP CRETRN
EBB3 A9FF	9190	CASRED LDA ##FF
EBB5 8D0F03	9200	STA \$030F
EBB8 A00A	9210	LDY ##0A
EBBA AD0B03	9220	LDA \$030B
EBBD 3002	9230	BMI SRTIR1
EBBF A078	9240	LDY ##78
EBC1 A200	9250	SRTIR1 LDX #0
EBC3 20B9ED	9260	JSR SETVBX
EBC6 A934	9270	LDA ##34
EBC8 8D02D3	9280	STA \$D302
EBCB AD1703	9290	TIMIT1 LDA \$0317
EBCE D0FB	9300	BNE TIMIT1
EBD0 206AEB	9310	JSR LDPNTR
EBD3 2075EC	9320	JSR STTMDT
EBD6 20B9ED	9330	JSR SETVBX
EBD9 2010ED	9340	JSR BEGIN
EBDC 20E0EA	9350	JSR RECEIV
EBDF AD0B03	9360	CRETRN LDA \$030B
EBE2 3005	9370	BMI SRTIR2
EBE4 A93C	9380	LDA ##3C
EBE6 8D02D3	9390	STA \$D302
EBE9 4C0DEA	9400	SRTIR2 JMP RETURN
EBEC A900	9410	JTIMER LDA #0
EBEE 8D1703	9420	STA \$0317
EBF1 60	9430	RTS
EBF2 A907	9440	SENDEN LDA #7
EBF4 2D3202	9450	AND \$0232
EBF7 0920	9460	ORA ##20
EBF9 AC0003	9470	LDY \$0300
EBFC C060	9480	CPY ##60
EBFE D00C	9490	BNE NOTCAS
EC00 0908	9500	ORA #8
EC02 A007	9510	LDY #7
EC04 8C02D2	9520	STY \$D202
EC07 A005	9530	LDY #5
EC09 8C00D2	9540	STY \$D200
EC0C 8D3202	9550	NOTCAS STA \$0232
EC0F 8D0FD2	9560	STA \$D20F
EC12 A9C7	9570	LDA ##C7
EC14 2510	9580	AND \$10
EC16 0910	9590	ORA ##10
EC18 4C31EC	9600	JMP CONTIN
EC1B A907	9610	RECVEN LDA #7
EC1D 2D3202	9620	AND \$0232
EC20 0910	9630	ORA ##10
EC22 8D3202	9640	STA \$0232
EC25 8D0FD2	9650	STA \$D20F
EC28 8D0AD2	9660	STA \$D20A
EC2B A9C7	9670	LDA ##C7
EC2D 2510	9680	AND \$10
EC2F 0920	9690	ORA ##20
EC31 8510	9700	CONTIN STA \$10
EC33 8D0ED2	9710	STA \$D20E
EC36 A928	9720	LDA ##28
EC38 8D0BD2	9730	STA \$D20B
EC3B A206	9740	LDX #6
EC3D A9AB	9750	LDA ##AB
EC3F A441	9760	LDY \$41
EC41 D002	9770	BNE NOISE1



EC43 A9A0	9780	LDA ##A0
EC45 9D01D2	9790	NOISE1 STA \$D201,X
EC48 CA	9800	DEX
EC49 CA	9810	DEX
EC4A 10F9	9820	BPL NOISE1
EC4C A9A0	9830	LDA ##A0
EC4E 8D05D2	9840	STA \$D205
EC51 AC0003	9850	LDY \$0300
EC54 C060	9860	CPY ##60
EC56 F006	9870	BEG CAS31
EC58 8D01D2	9880	STA \$D201
EC5B 8D03D2	9890	STA \$D203
EC5E 60	9900	CAS31 RTS
EC5F EA	9910	SENDDS NOP
EC60 A9C7	9920	RECVDS LDA ##C7
EC62 2510	9930	AND \$10
EC64 8510	9940	STA \$10
EC66 8D0ED2	9950	STA \$D20E
EC69 A206	9960	LDX #6
EC6B A900	9970	LDA #0
EC6D 9D01D2	9980	ZERIT STA \$D201,X
EC70 CA	9990	DEX
EC71 CA	010000	DEX
EC72 10F9	010010	BPL ZERIT
EC74 60	010020	RTS
EC75 AD0603	010030	STTMOT LDA \$0306
EC78 6A	010040	ROR A
EC79 6A	010050	ROR A
EC7A A8	010060	TAY
EC7B 293F	010070	AND ##3F
EC7D AA	010080	TAX
EC7E 9B	010090	TYA
EC7F 6A	010100	ROR A
EC80 29C0	010110	AND ##C0
EC82 AB	010120	TAY
EC83 60	010130	RTS
EC84 0FEB	010140	INTTBL .WORD ISRSIR
EC86 90EA	010150	.WORD ISRODN
EC88 CFEA	010160	.WORD ISRTD
EC8A A201	010170	SENDIN LDX #1
EC8C A0FF	010180	DELAY0 LDY ##FF
EC8E 88	010190	DELAY1 DEY
EC8F D0FD	010200	BNE DELAY1
EC91 CA	010210	DEX
EC92 D0FB	010220	BNE DELAY0
EC94 206BEA	010230	JSR SEND
EC97 A002	010240	LDY #2
EC99 A200	010250	LDX #0
EC9B 20B9ED	010260	WAITER JSR SETVBX
EC9E 201AEA	010270	JSR WAIT
ECA1 9B	010280	TYA
ECA2 60	010290	RTS
ECA3 ADEE02	010300	COMPUT LDA \$02EE
ECA6 8D04D2	010310	STA \$D204
ECA9 ADEF02	010320	LDA \$02EF
ECAC 8D06D2	010330	STA \$D206
ECAF 60	010340	RTS
ECB0 A90B	010350	TEST1 LDA #B
ECB2 2C0FD2	010360	BIT \$D20F
ECB5 F003	010370	BEG TRETRN
ECB7 6CFEBF	010380	JMP (\$BFFE)

ECBA 60	010390	TRETRN RTS	
ECBB 48	010400	TEST2 PHA	
ECBC A908	010410	LDA #8	
ECBE 2C0FD2	010420	BIT \$D20F	
ECC1 F009	010430	BEG DOS	
ECC3 68	010440	PLA	
ECC4 2901	010450	AND #1	
ECC6 F001	010460	BEG NBOT1	
ECC8 60	010470	TRTRN1 RTS	
ECC9 4CFFF1	010480	NBOT1 JMP \$F1FF	
ECCC 68	010490	DOS PLA	
ECCD 20CFF2	010500	JSR \$F2CF	
ECDO A900	010510	LDA #0	
ECD2 8D4402	010520	STA \$0244	
ECDS 6C0A00	010530	JMP (\$0A)	
ECDB A908	010540	TEST3 LDA #8	
ECDA 2C0FD2	010550	BIT \$D20F	
ECDD F0E9	010560	BEG TRTRN1	
ECDF 4C3CF2	010570	JMP \$F23C	
ECE2 A908	010580	TEST4 LDA #8	
ECE4 2C0FD2	010590	BIT \$D20F	
ECE7 F0DF	010600	BEG TRTRN1	
ECE9 4C39F2	010610	JMP \$F239	
ECFC 00	010620	.BYTE 0	
ECED 8C0E03	010630	STY \$030E	; JUNK CODE FROM HERE
ECF0 38	010640	SEC	
ECF1 E907	010650	SBC #7	
ECF3 1003	010660	BPL PLUS	
ECF5 CE0E03	010670	DEC \$030E	
ECF8 18	010680	PLUS CLC	
ECF9 7DD0ED	010690	ADC POKTAB,X	
ECFC AB	010700	TAY	
ECFD AD0E03	010710	LDA \$030E	
ED00 7DD1ED	010720	ADC POKTAB+1,X	
ED03 60	010730	RTS	
ED04 C97C	010740	ADJUST CMP #\$7C	
ED06 3004	010750	BMI ADJ1	
ED08 38	010760	SEC	
ED09 E97C	010770	SBC #\$7C	
ED0B 60	010780	RTS	
ED0C 18	010790	ADJ1 CLC	
ED0D 6907	010800	ADC #7	
ED0F 60	010810	RTS	; TO HERE.NOT USED BY OSN
ED10 A511	010820	BEGIN LDA \$11	
ED12 D003	010830	BNE NTBKR2	
ED14 4CA0ED	010840	JMP BROKE	
ED17 78	010850	NTBKR2 SEI	
ED18 AD1703	010860	LDA \$0317	
ED1B D002	010870	BNE OKTIM1	
ED1D F025	010880	BEG TOUT1	
ED1F AD0FD2	010890	OKTIM1 LDA \$D20F	
ED22 2910	010900	AND #10	
ED24 D0EA	010910	BNE BEGIN	
ED26 8D1603	010920	STA \$0316	
ED29 AE0BD4	010930	LDX \$D40B	
ED2C A414	010940	LDY \$14	
ED2E 8E0C03	010950	STX \$030C	
ED31 8C0D03	010960	STY \$030D	
ED34 A201	010970	LDX #1	
ED36 8E1503	010980	STX \$0315	
ED39 A00A	010990	LDY #10	

ED3B A511	011000	COUNT LDA #11
ED3D F061	011010	BEG BROKE
ED3F AD1703	011020	LDA #0317
ED42 D004	011030	BNE OKTIMR
ED44 58	011040	TOUTI CLI
ED45 4C0AEB	011050	JMP TOUT
ED48 AD0FD2	011060	OKTIMR LDA #D20F
ED4B 2910	011070	AND #10
ED4D CD1603	011080	CMP #0316
ED50 F0E9	011090	BEG COUNT
ED52 8D1603	011100	STA #0316
ED55 88	011110	DEY
ED56 D0E3	011120	BNE COUNT
ED58 CE1503	011130	DEC #0315
ED5B 3012	011140	BMI GOREAD
ED5D ADOBD4	011150	LDA #D40B
ED60 A414	011160	LDY #14
ED62 20A3EC	011170	JSR COMPUT
ED65 EA	011180	NOP
ED66 EA	011190	NOP
ED67 EA	011200	NOP
ED68 EA	011210	NOP
ED69 EA	011220	NOP
ED6A EA	011230	NOP
ED6B A009	011240	LDY #9
ED6D D0CC	011250	BNE COUNT
ED6F ADEE02	011260	GOREAD LDA #02EE
ED72 8D04D2	011270	STA #D204
ED75 ADEF02	011280	LDA #02EF
ED78 8D06D2	011290	STA #D206
ED7B A900	011300	LDA #0
ED7D 8D0FD2	011310	STA #D20F
ED80 AD3202	011320	LDA #0232
ED83 8D0FD2	011330	STA #D20F
ED86 A955	011340	LDA #55
ED88 9132	011350	STA (#32),Y
ED8A C8	011360	INY
ED8B 9132	011370	STA (#32),Y
ED8D A9AA	011380	LDA #9AA
ED8F 8531	011390	STA #31
ED91 18	011400	CLC
ED92 A532	011410	LDA #32
ED94 6902	011420	ADC #2
ED96 8532	011430	STA #32
ED98 A533	011440	LDA #33
ED9A 6900	011450	ADC #0
ED9C 8533	011460	STA #33
ED9E 58	011470	CLI
ED9F 60	011480	RTS
EDA0 205FEC	011490	BROKE JSR SENDDS
EDA3 A93C	011500	LDA #93C
EDA5 8D02D3	011510	STA #D302
EDAB 8D03D3	011520	STA #D303
EDAB A980	011530	LDA #980
EDAD 8530	011540	STA #30
EDAF AE1803	011550	LDX #0318
EDB2 9A	011560	TXS
EDB3 C611	011570	DEC #11
EDB5 58	011580	CLI
EDB6 4C0DEA	011590	JMP RETURN
EDB9 A9EC	011600	SETVBX LDA #9EC

EDBB 8D2602	011610	STA \$0226
EDBE A9EB	011620	LDA ##EB
EDC0 8D2702	011630	STA \$0227
EDC3 A901	011640	LDA #1
EDC5 78	011650	SEI
EDC6 205CE4	011660	JSR \$E45C
EDC9 A901	011670	LDA #1
EDCB 8D1703	011680	STA \$0317
EDCE 58	011690	CLI
EDCF 60	011700	RTS
EDD0 E803	011720	POKTAB .WORD \$03E8 ;NOT USED
EDD2 4304	011730	.WORD \$0443
EDD4 9E04	011740	.WORD \$049E
EDD6 F904	011750	.WORD \$04F9
EDD8 5405	011760	.WORD \$0554
EDDA AF05	011770	.WORD \$05AF
EDDC 0A06	011780	.WORD \$060A
EDDE 6506	011790	.WORD \$0665
EDE0 C006	011800	.WORD \$06C0
EDE2 1A07	011810	.WORD \$071A
EDE4 7507	011820	.WORD \$0775
EDE6 D007	011830	.WORD \$07D0
EDE8 2485	011840	.BYTE \$24,\$85
EDEA A9A0	011850	DINIT LDA ##A0
EDEC 8D4602	011860	STA \$0246
EDEF 60	011870	RTS
EDF0 A931	011880	DSKIF LDA ##31
EDF2 8D0003	011890	STA \$0300
EDF5 AD4602	011900	LDA \$0246
EDFB AE0203	011910	LDX \$0302
EDFB E021	011920	CPX ##21
EDFD F002	011930	BEQ PUTDTC
EDFF A907	011940	LDA #7
EE01 8D0603	011950	PUTDTC STA \$0306
EE04 A240	011960	LDX ##40
EE06 A0B0	011970	LDY ##80
EE08 AD0203	011980	LDA \$0302
EE08 C957	011990	CMP ##57
EE0D D002	012000	BNE CKSTC
EE0F A2B0	012010	LDX ##80
EE11 C953	012020	CKSTC CMP ##53
EE13 D00C	012030	BNE PUTCNT
EE15 A9EA	012040	LDA ##EA
EE17 8D0403	012050	STA \$0304
EE1A A902	012060	LDA #2
EE1C 8D0503	012070	STA \$0305
EE1F A004	012080	LDY #4
EE21 8E0303	012090	PUTCNT STX \$0303
EE24 8C0803	012100	STY \$0308
EE27 A900	012110	LDA #0
EE29 8D0903	012120	STA \$0309
EE2C 2059E4	012130	JSR SIDV
EE2F 1001	012140	BPL GOODST
EE31 60	012150	RTS
EE32 AD0203	012160	GOODST LDA \$0302
EE35 C953	012170	CMP ##53
EE37 D00A	012180	BNE PUTBC
EE39 206DEE	012190	JSR PUTADR
EE3C A002	012200	LDY #2
EE3E 8115	012210	LDA (\$15),Y
EE40 8D4602	012220	STA \$0246

EE43 AD0203	012230	PUTBC LDA #0302
EE46 C921	012240	CMP ##21
EE48 D01F	012250	BNE ENDDIF
EE4A 206DEE	012260	FMTD JSR PUTADR
EE4D A0FE	012270	LDY ##FE
EE4F C8	012280	TWICE INY
EE50 C8	012290	INY
EE51 B115	012300	RDBAD LDA (#15),Y
EE53 C9FF	012310	CMP ##FF
EE55 D0FB	012320	BNE TWICE
EE57 C8	012330	INY
EE58 B115	012340	LDA (#15),Y
EE5A C8	012350	INY
EE5B C9FF	012360	CMP ##FF
EE5D D0F2	012370	BNE RDBAD
EE5F 88	012380	DEY
EE60 88	012390	DEY
EE61 8C0803	012400	STY #0308
EE64 A900	012410	LDA #0
EE66 8D0903	012420	STA #0309
EE69 AC0303	012430	ENDDIF LDY #0303
EE6C 60	012440	RTS
EE6D AD0403	012450	PUTADR LDA #0304
EE70 8515	012460	STA #15
EE72 AD0503	012470	LDA #0305
EE75 8516	012480	STA #16
EE77 60	012490	RTS
EE78 A91E	012500	PHINIT LDA #30
EE7A 851C	012510	STA #1C
EE7C 60	012520	RTS
EE7D EA02	012530	PHSTLO .WORD #02EA
EE7F C003	012540	PHCHLO .WORD #03C0
EE81 A904	012550	PHSTAT LDA #4
EE83 851E	012560	STA #1E
EE85 AE7DEE	012570	LDX PHSTLO
EE88 AC7EEE	012580	LDY PHSTLO+1
EE8B A953	012590	LDA ##53
EE8D 8D0203	012600	STA #0302
EE90 8D0A03	012610	STA #030A
EE93 20E6EE	012620	JSR SETDCB
EE96 2059E4	012630	JSR SIOV
EE99 3003	012640	BMI BADST
EE9B 2014EF	012650	JSR PHPUT
EE9E 60	012660	BADST RTS
EE9F 2081EE	012670	PHOPEN JSR PHSTAT
EEA2 A900	012680	LDA #0
EEA4 851D	012690	STA #1D
EEA6 60	012700	RTS
EEA7 851F	012710	PHWRIT STA #1F
EEA9 201AEF	012720	JSR PRMODE
EEAC A61D	012730	LDX #1D
EEAE A51F	012740	LDA #1F
EEB0 9DC003	012750	STA #03C0,X
EEB3 E8	012760	INX
EEB4 E41E	012770	CPX #1E
EEB6 F013	012780	BEQ BUFFUL
EEBB 861D	012790	STX #1D
EEBA C99B	012800	CMP ##9B
EEBC F003	012810	BEQ BLFILL
EEBE A001	012820	LDY #1
EEC0 60	012830	RTS

EEC1 A920	012840	BLFILL LDA ##20
EEC3 9DC003	012850	FILLBF STA #03C0,X
EEC6 E8	012860	INX
EEC7 E41E	012870	CPX #1E
EEC9 D0FB	012880	BNE FILLBF
EECB A900	012890	BUFFUL LDA #0
EECD 851D	012900	STA #1D
EECF AE7FEE	012910	LDX PHCHLO
EED2 AC80EE	012920	LDY PHCHLO+1
EED5 20E6EE	012930	JSR SETDCB
EED8 2059E4	012940	JSR SIOV
EEDB 60	012950	RTS
EEDC 201AEF	012960	PHCLDS JSR PRMODE
EEDF A61D	012970	LDX #1D
EEE1 D0DE	012980	BNE BLFILL
EEE3 A001	012990	LDY #1
EEE5 60	013000	RTS
EEE6 8E0403	013010	SETDCB STX #0304
EEE9 8C0503	013020	STY #0305
EEEC A940	013030	LDA ##40
EEEE 8D0003	013040	STA #0300
EEF1 A901	013050	LDA #1
EEF3 8D0103	013060	STA #0301
EEF6 A980	013070	LDA ##80
EEFB AE0203	013080	LDX #0302
EEFB E053	013090	CPX ##53
EEFD D002	013100	BNE PSIOC
EEFF A940	013110	LDA ##40
EF01 8D0303	013120	PSIOC STA #0303
EF04 A51E	013130	LDA #1E
EF06 8D0803	013140	STA #0308
EF09 A900	013150	LDA #0
EF0B 8D0903	013160	STA #0309
EF0E A51C	013170	LDA #1C
EF10 8D0603	013180	STA #0306
EF13 60	013190	RTS
EF14 ADEC02	013200	PHPUT LDA #02EC
EF17 851C	013210	STA #1C
EF19 60	013220	RTS
EF1A A057	013230	PRMODE LDY ##57
EF1C A52B	013240	LDA #2B
EF1E C94E	013250	CMODE CMP ##4E
EF20 D004	013260	BNE CDUBL
EF22 A22B	013270	LDX ##2B
EF24 D00E	013280	BNE SETBSZ
EF26 C944	013290	CDUBL CMP ##44
EF28 D004	013300	BNE CSIDE
EF2A A214	013310	LDX ##14
EF2C D006	013320	BNE SETBSZ
EF2E C953	013330	CSIDE CMP ##53
EF30 D00B	013340	BNE GOERR
EF32 A21D	013350	LDX ##1D
EF34 861E	013360	SETBSZ STX #1E
EF36 8C0203	013370	STY #0302
EF39 8D0A03	013380	STA #030A
EF3C 60	013390	RTS
EF3D A94E	013400	GOERR LDA ##4E
EF3F D0DD	013410	BNE CMODE
EF41 A9CC	013420	INIT LDA ##CC
EF43 8DEE02	013430	STA #02EE
EF46 A905	013440	LDA #5

EF48 8DEF02	013450	STA \$02EF	
EF4B 60	013460	SPECIA RTS	
EF4C A52B	013470	OPENC LDA #2B	
EF4E 853E	013480	STA #3E	
EF50 A52A	013490	LDA #2A	
EF52 290C	013500	AND #*0C	
EF54 C904	013510	CMP #4	
EF56 F005	013520	BEQ OPINP	
EF58 C908	013530	CMP #8	
EF5A F039	013540	BEQ OPOUT	
EF5C 60	013550	RTS	
EF5D A900	013560	OPINP LDA #0	
EF5F 8D8902	013570	STA \$0289	
EF62 853F	013580	STA #3F	
EF64 A901	013590	SFH LDA #1	
EF66 205BF0	013600	JSR \$F05B	;BEEP
EF69 3024	013610	BMI OPNRTN	
EF6B A934	013620	LDA #*34	
EF6D 8D02D3	013630	STA \$D302	
EF70 A040	013640	LDY #*40	
EF72 A202	013650	LDX #2	
EF74 A903	013660	LDA #3	
EF76 8D2A02	013670	STA \$022A	
EF79 205CE4	013680	JSR SETVBV	
EF7C AD2A02	013690	WAITTH LDA \$022A	
EF7F D0FB	013700	BNE WAITTH	
EF81 A980	013710	LDA #*80	
EF83 853D	013720	STA #3D	
EF85 8D8A02	013730	STA \$028A	
EF88 4CD3EF	013740	JMP OPOK	
EF8B A080	013750	PBRK LDY #*80	
EF8D C611	013760	DEC \$11	
EF8F A900	013770	OPNRTN LDA #0	
EF91 8D8902	013780	STA \$0289	
EF94 60	013790	RTS	
EF95 A980	013800	OPOUT LDA #*80	
EF97 8D8902	013810	STA \$0289	
EF9A A902	013820	LDA #2	
EF9C 205BF0	013830	JSR \$F05B	
EF9F 30EE	013840	BMI OPNRTN	
EFA1 20A3EC	013850	JSR COMPUT	
EFA4 4CABEF	013860	JMP EFAB	
EFA7 04	013870	.BYTE 4	
EFAB 8D06D2	013880	STA \$D206	
EFAB A960	013890	EFAB LDA #*60	
EFAD 8D0003	013900	STA \$0300	
EFB0 2068E4	013910	JSR SENDEV	
EFB3 A934	013920	LDA #*34	
EFB5 8D02D3	013930	STA \$D302	
EFB8 A903	013940	LDA #3	
EFBA A202	013950	LDX #2	
EFBC A080	013960	LDY #*80	
EFBE 205CE4	013970	JSR SETVBV	
EFC1 A9FF	013980	LDA #*FF	
EFC3 8D2A02	013990	STA \$022A	
EFC6 A511	014000	WDLR LDA \$11	
EFC8 F0C1	014010	BEQ PBRK	
ECCA AD2A02	014020	LDA \$022A	
EFCD D0F7	014030	BNE WDLR	
EFCF A900	014040	LDA #0	
EFD1 853D	014050	STA #3D	

EFD3 A001	014060 OPOK LDY #1
EFD5 60	014070 RTS
EFD6 A53F	014080 GBYTE LDA #3F
EFD8 3033	014090 BMI ISEOF
EFDA A63D	014100 LDX #3D
EFDC EC8A02	014110 CPX #028A
EFDF F008	014120 BEQ RBLOK
EFE1 BD0004	014130 LDA #0400,X
EFE4 E63D	014140 INC #3D
EFE6 A001	014150 LDY #1
EFE8 60	014160 GBX RTS
EFE9 A952	014170 RBLOK LDA #52
EFE8 2095F0	014180 JSR SIOSB
EFEE 98	014190 TYA
EFEF 30F7	014200 BMI GBX
EFF1 A900	014210 LDA #0
EFF3 853D	014220 STA #3D
EFF5 A280	014230 LDX #80
EFF7 ADFF03	014240 LDA #03FF
EFFA C9FE	014250 CMP #9FE
EFFC F00D	014260 BEQ ATEOF
EFFE C9FA	014270 CMP #9FA
F000 D003	014280 BNE NLR
F002 AE7F04	014290 LDX #047F
F005 8E8A02	014300 NLR STX #028A
F008 4CD6EF	014310 JMP GBYTE
F00B C63F	014320 ATEOF DEC #3F
F00D A088	014330 ISEOF LDY #88
F00F 60	014340 RTS



E9C6 ACKREC	ED0C ADJ1	ED04 ADJUST	E6FE ADRTAB	F00B ATEOF
EA63 BAD	E9BF BADCOM	EE9E BADST	ED10 BEGIN	EEC1 BLFILL
E754 BRKKY2	EDAO BROKE	EECB BUFFUL	EC5E CAS31	EB80 CASENT
E440 CASHND	EBB3 CASRED	EF26 CDUBL	EABA CHKDON	EAF9 CHKTIM
E53F CICLO2	E533 CICLOS	E4D1 CIERR1	E6B0 CIERR2	E50F CIERR3
E511 CIERR4	E693 CIJUMP	E4C4 CIO	E4A8 CIO11	E4A6 CIOINT
E509 CIOPEN	E569 CIREAD	E62B CIRT3	E61B CIRTN1	E61D CIRTN2
E559 CIST1	E54E CISTSP	ESC9 CIWRIT	EE11 CKSTC	EF1E CMODE
E6F6 CMPTAB	E647 COM1	E662 COM2	E63D COMENT	E978 COMFRM
E974 COMMND	ECA3 COMPUT	E6C9 COMTAB	EC31 CONTIN	ED3B COUNT
EBDF CRETRN	EF2E CSIDE	EBDD DCTIM1	EBD0 DCTIMR	E8EA DCTXF
E66D DECBF1	E663 DECBFL	EC8C DELAY0	EC8E DELAY1	E9F6 DERR
EA06 DERR1	E6A6 DEVS1	E6B5 DEVS2	E6C5 DEVS3	E6CB DEVG4
E69E DEVSRC	EDEA DINIT	E410 DISPLA	ECCC DOS	EDF0 DSKIF
E400 EDITOR	EFAB EFAB	EE69 ENDDIF	=E4C0 ERRTN	=00E4 ERRTNH
=00C0 ERRTNL	EEC3 FILLBF	EE4A FMTD	EADE FODEY	EFEB GBX
EFD6 GBYTE	EB09 GOBACK	EF3D GOERR	E689 GOHAND	EA65 GOOD
EE32 GOODST	EB64 GOON	ED6F GOREAD	E6D5 IHINIT	E676 INCBF1
E670 INCBFP	EF41 INIT	EC84 INTTBL	E4D6 IOC1	E4DB IOC1A
E4F3 IOC2	E514 IOC6	E519 IOC7	FOOD ISEOF	EA90 ISRODN
EB0F ISRSIR	EACF ISRTD	E735 JMPP	EBEC JTIMER	E8CA JTIMR1
E8CD JTIMR2	E420 KBDHND	EB6A LDPNTR	E72F LL	E71F LOOPM
E72A LOOPM2	E9F0 MODATA	ECC9 NBOT1	EB8F NEW1	F005 NLR
EAE9 NOCLR	EC45 NOISE1	EC0C NOTCAS	E96B NOTCST	EA52 NOTDER
EAB1 NOTDON	EABE NOTEND	EA00 NOTERR	EB3C NOTYET	EA98 NOWRPO
EAB8 NTBKR0	EB00 NTBKR1	ED17 NTBKR2	EB1D NTFRAM	EB25 NTOVRN
EB50 NTHRP1	EA56 NWOK	ED1F OKTIM1	ED4B OKTIMR	E915 OMNI1
E919 OMNI2	E924 OMNI3	EF4C OPENC	EF5D OPINP	EF8F OPNRTN
EFD3 OPOK	EF95 OPOUT	EF8B PBRK	EE7F PHCHLO	EEDC PHCLOS
EE78 PHINIT	EE9F PHOPEN	EF14 PHPUT	EEB1 PHSTAT	EE7D PHSTLO
EEA7 PHWRIT	E6F3 PIRQ	ECF8 PLUS	E791 PNMI	E799 PNMI1
EDD0 POKTAB	EF1A PRMODE	EF01 PSIOC	E430 PTRHND	EBAC PTRLP
EE6D PUTADR	EE43 PUTBC	EE21 PUTCNT	EE01 PUTDIO	EFE9 RBLOK
EA7 RCI1	ESBF RCI11	E574 RCI1A	E571 RCI1B	E5AC RC12
E587 RC13	ESC3 RC14	E5B2 RC16	EE51 RDBAD	EAE0 RECEIV
EC60 RECVD5	EC1B RECVEN	EAB1 RELONE	EA0D RETURN	EB0E RRETRN
E80E SCOLLP	EA6B SEND	EC5F SENDDS	EBF2 SENDEN	=E468 SENDEV
EC8A SENDIN	EF34 SETBSZ	EEE6 SETDCB	EBF7 SETLOP	E8ED SETVBL
=E45C SETVBV	EDB9 SETVBX	EF64 SFH	E959 SID	E944 SIDINT
=F095 SIDSB	=E459 SIOV	EF4B SPECIA	EB34 SRETRN	EB9B SRTIRO
EBC1 SRTIR1	EBE9 SRTIR2	E877 STLOOP	E890 STRL	EC75 STTHOT
E677 SUBBFL	EB38 SUSUAL	=00E8 SV7H	=0073 SV7L	E706 SYIRQ
E71B SYIRQ2	E762 SYIRQ8	E76F SYIRQ9	E77A SYIRQA	E78F SYIRQB
E790 SYRT1	E78B SYRTI2	E7BA SYSVB1	E7D6 SYSVB2	E7E5 SYSVB3
EB32 SYSVB4	EBC3 SYSVB6	EB73 SYSVB7	EB44 SYSVBA	EB34 SYSVBB
E7AE SYSVBL	EB57 SYVB6A	ECB0 TEST1	ECBB TEST2	ECDB TEST3
ECE2 TEST4	EBA5 TIMIT	EBCB TIMIT1	EBOA TOUT	ED44 TOUT1
ECBA TRETRN	ECC8 TRTRN1	EE4F TWICE	E7CB VBATRA	EA1A WAIT
EC9B WAITER	EF7C WAITTM	E9D7 WATCOM	E605 WC11	E5D4 WC11A
ESD1 WC11B	E60A WC12	E5E5 WC13	E5EB WC14	E615 WC15
EFC6 WDLR	EA3D WOK	E905 XITVBL	E7E2 XXIT	EC6D ZERIT