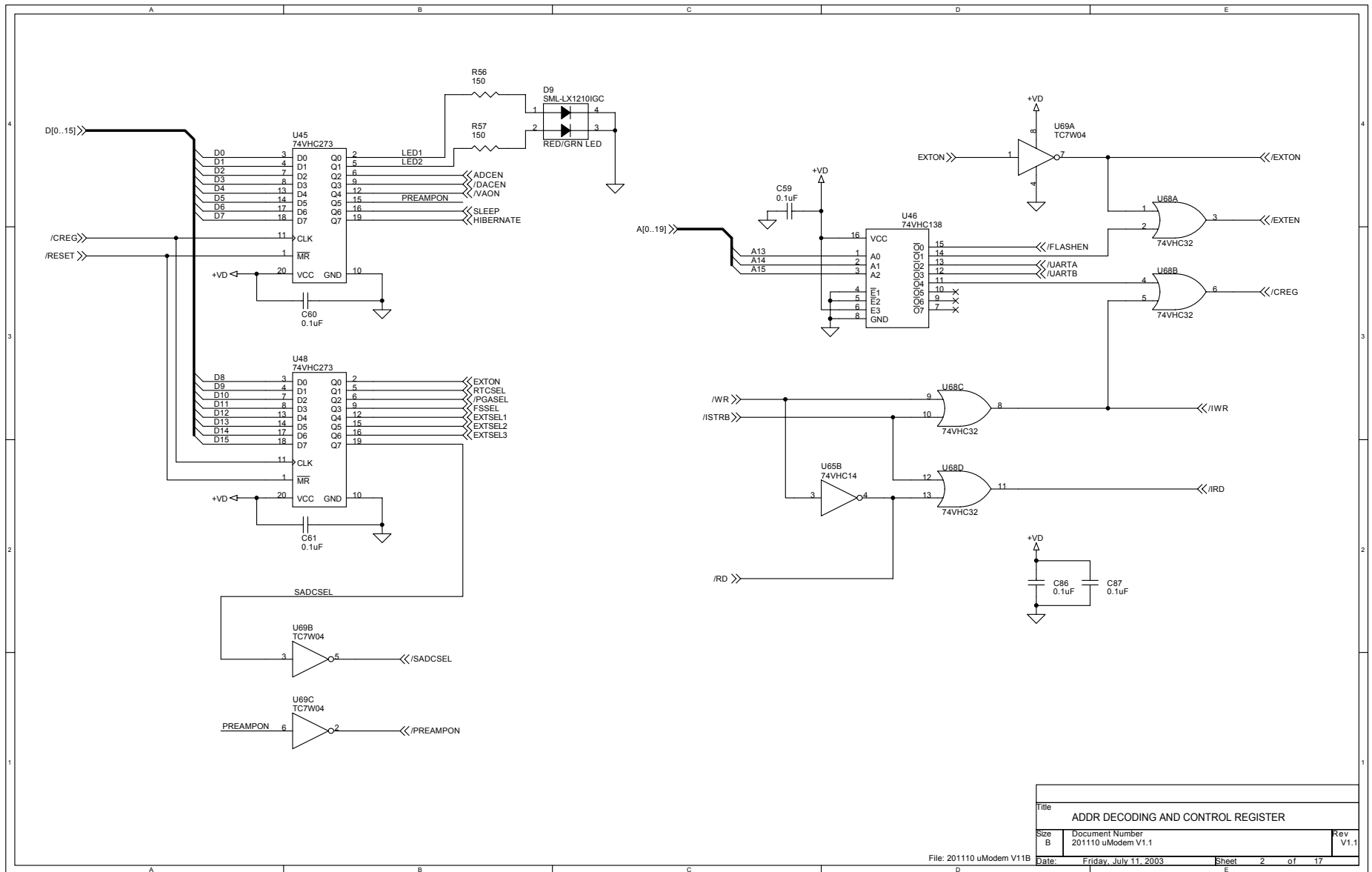
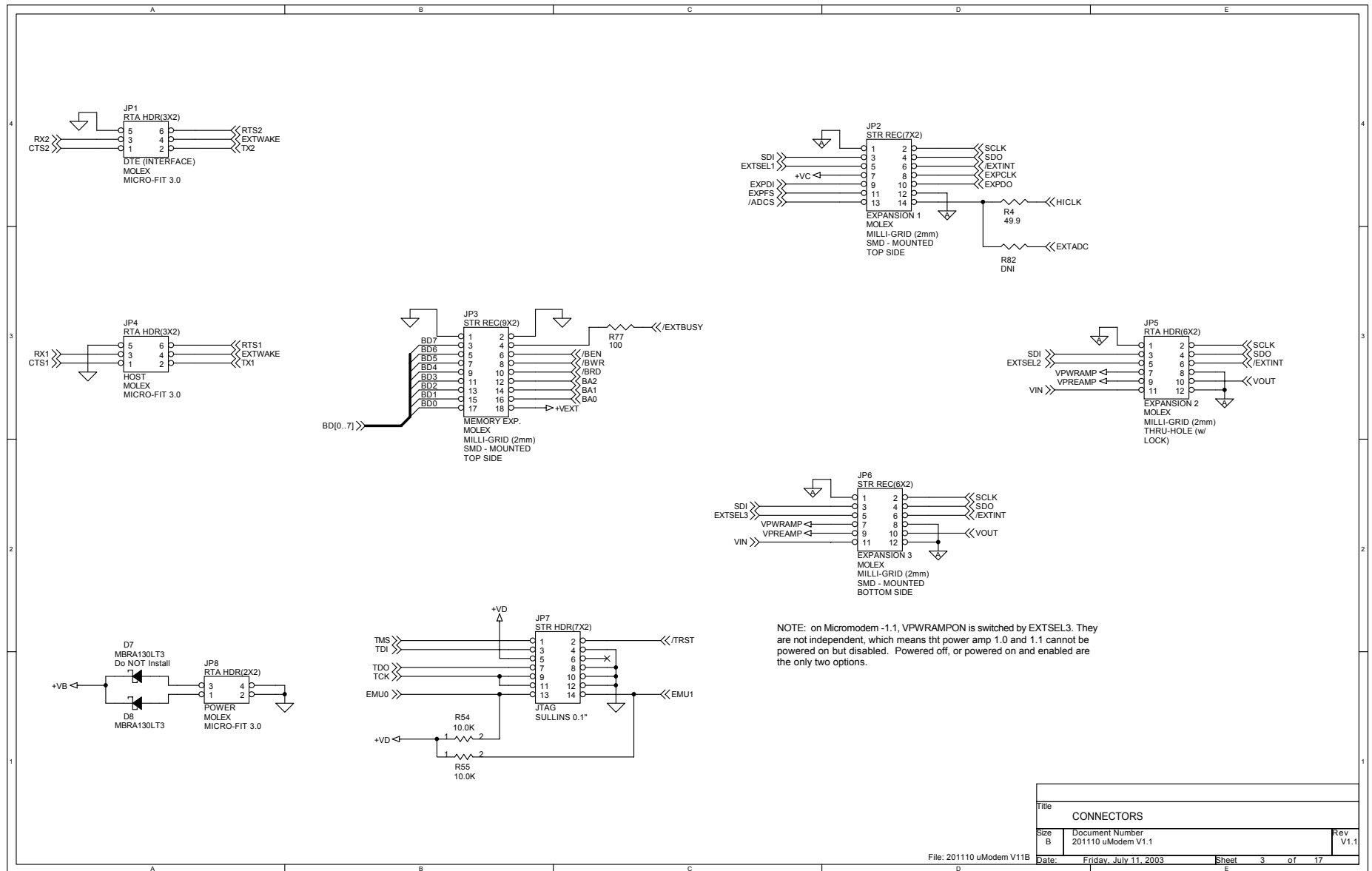
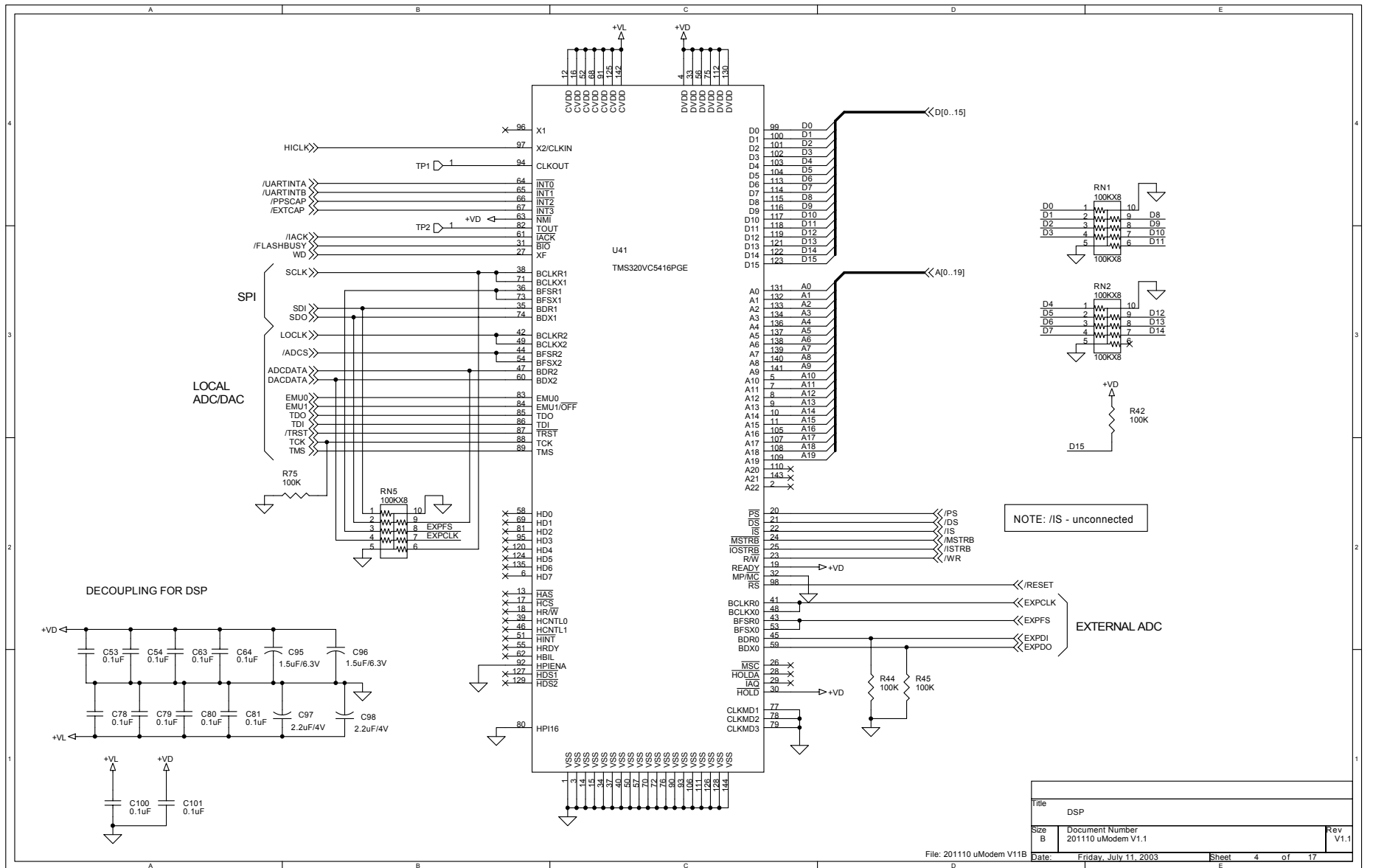
File: 201110 uModem V11B

3 Date: Friday, July 11, 2003

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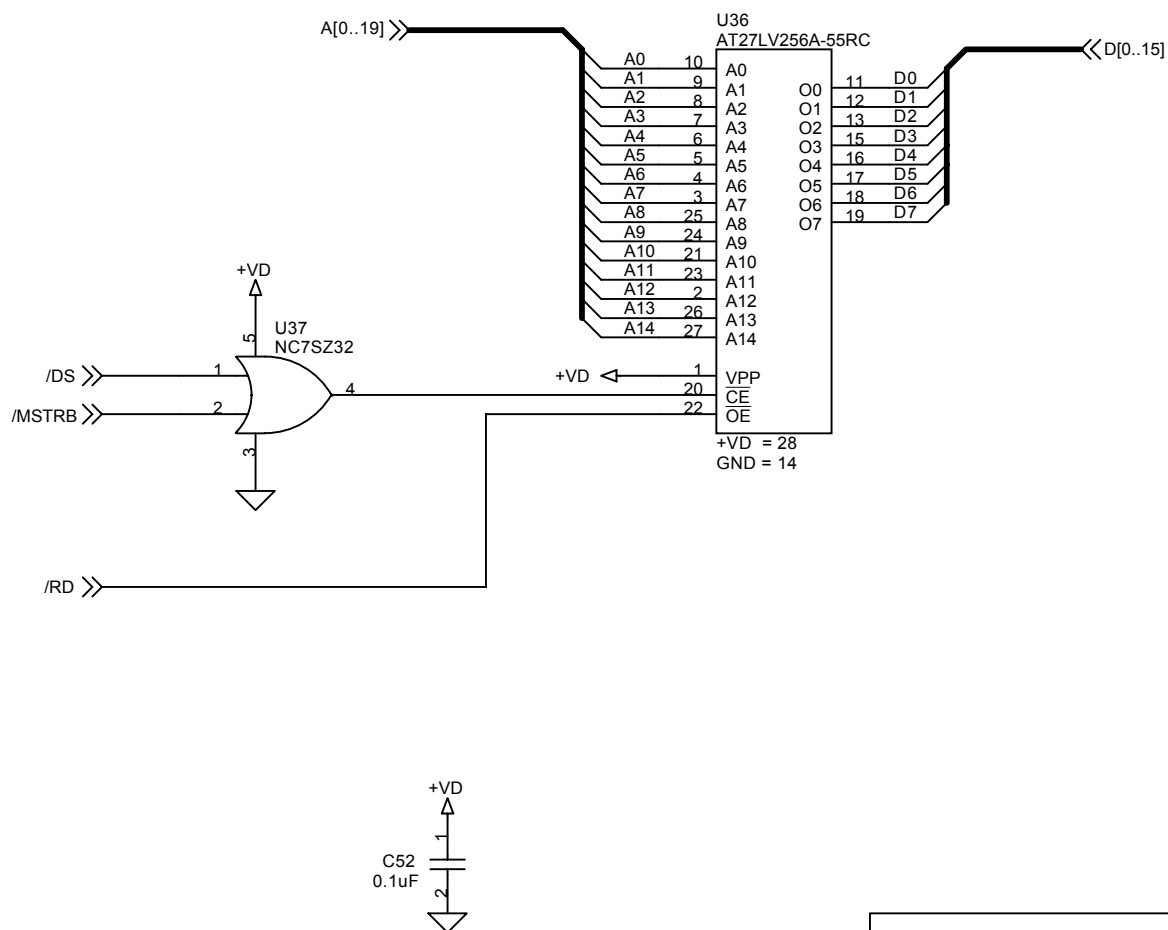


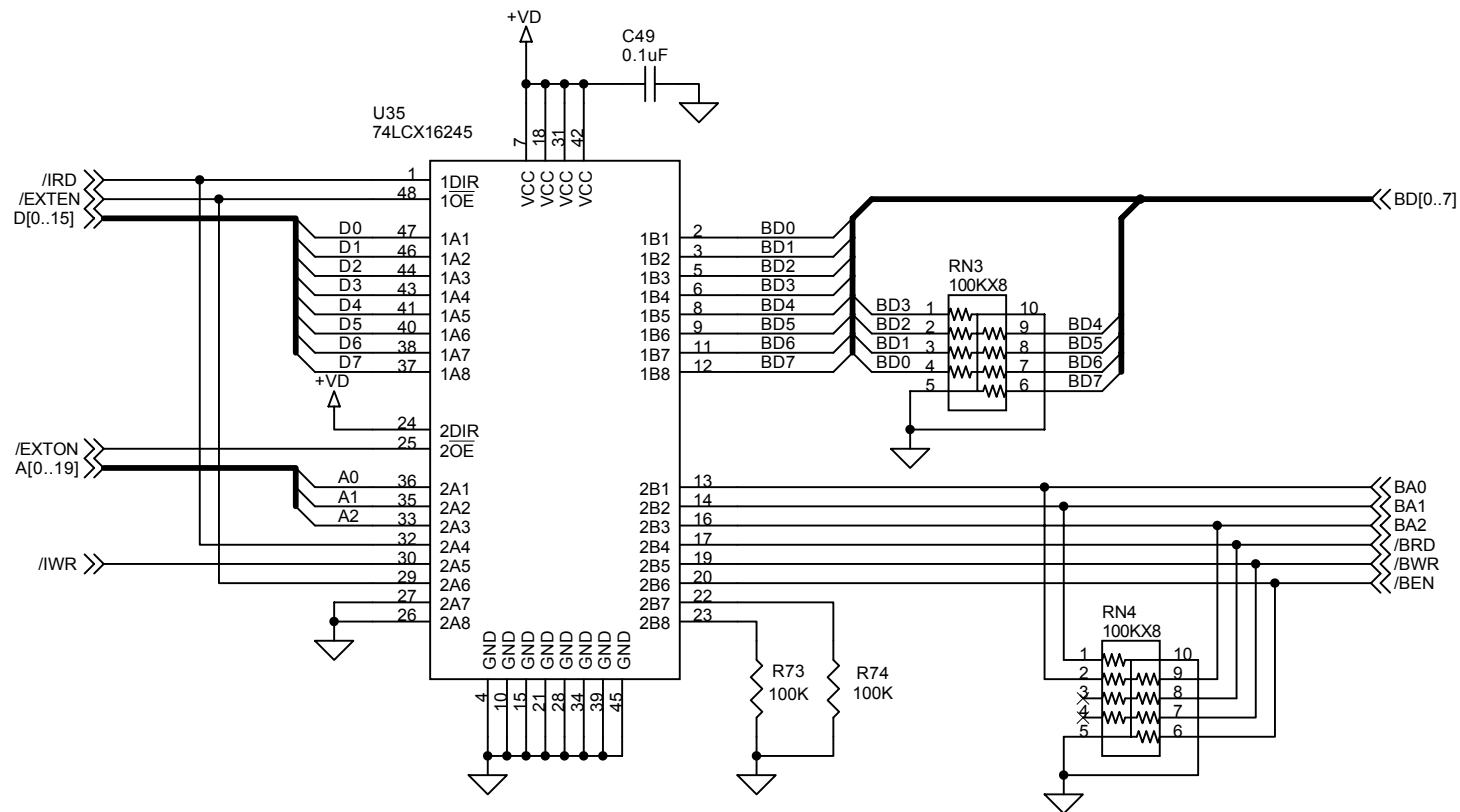




Microchip 27LV256-20 obsolete
 Replace with:

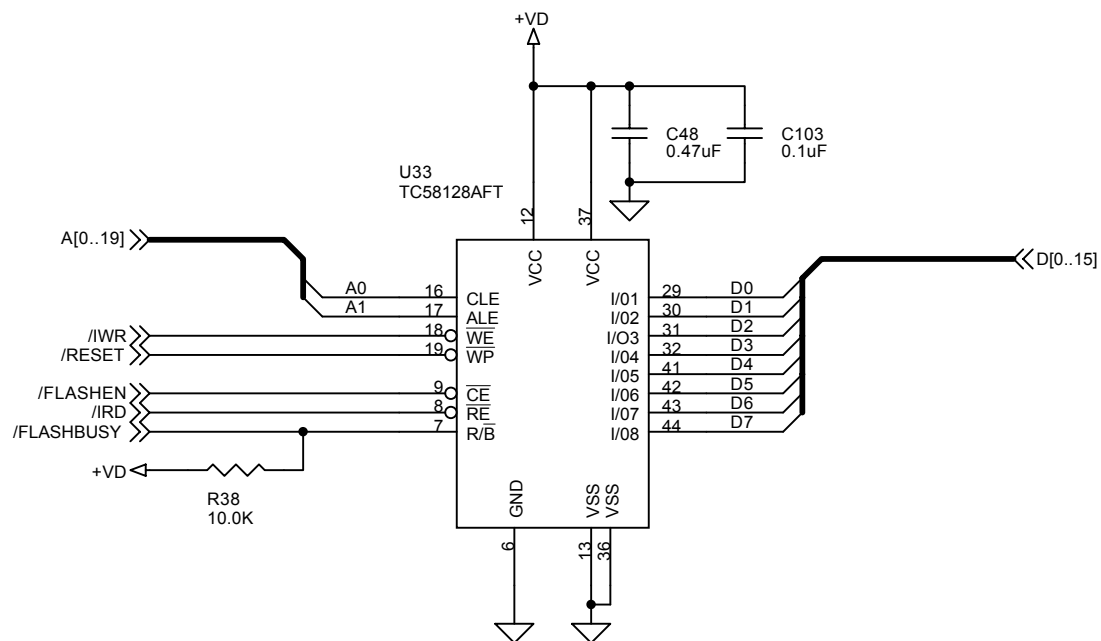
Atmel AT27LV256A-55RC
 Newer 1.1 layouts are for 330 mil
 packages, namely the Atmel
 AT27LV256A



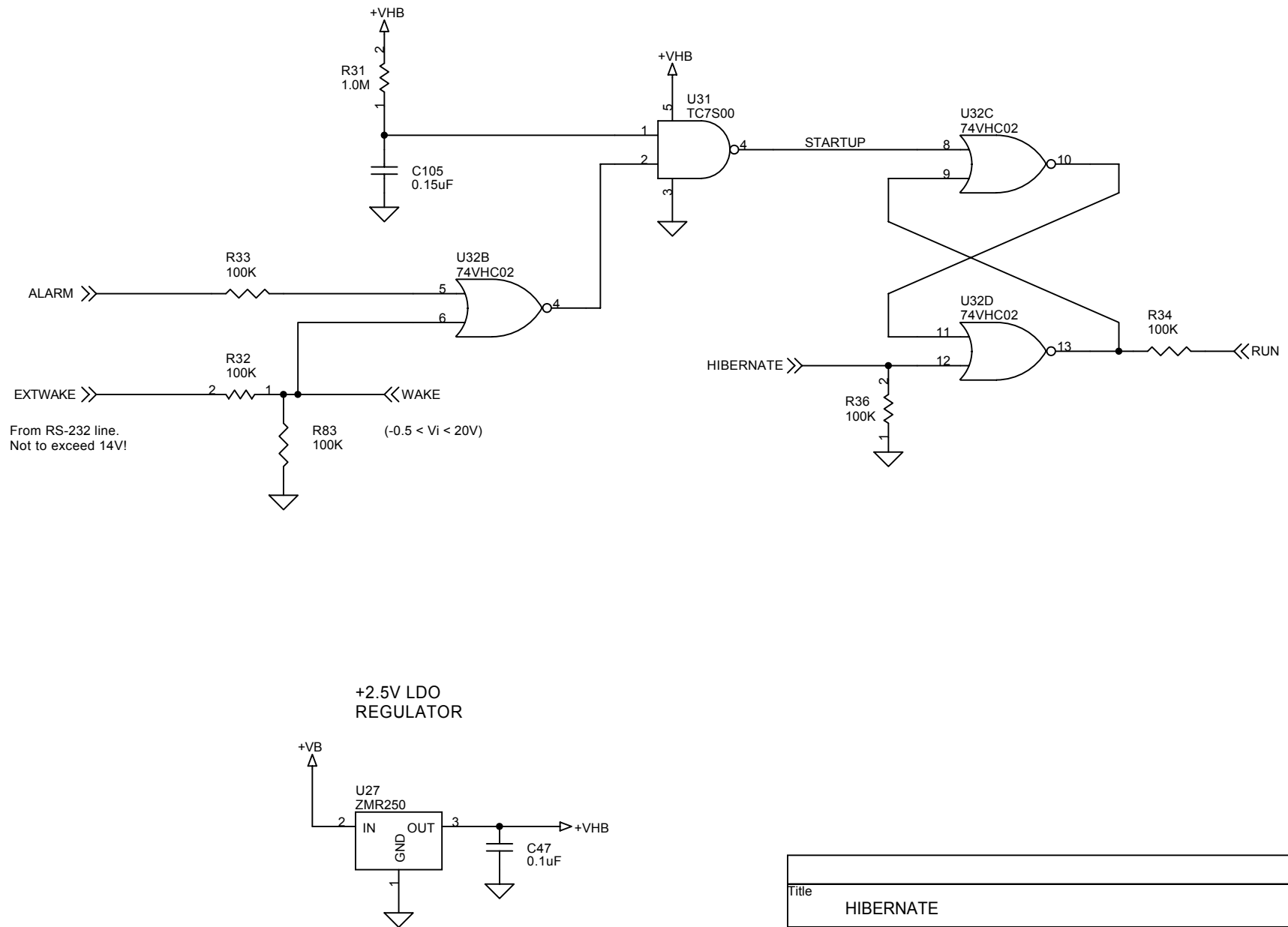


Title		
EXTERNAL INTERFACE		
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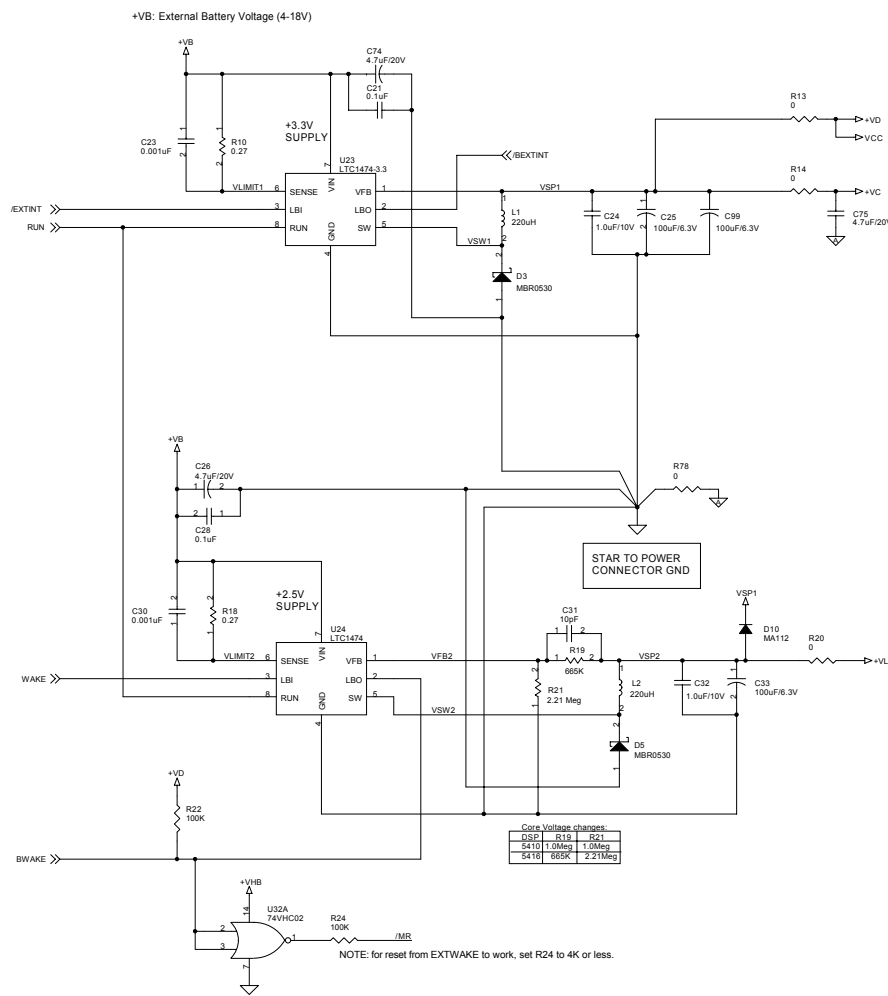
File: 201110 uModem V11B



Title		
FLASH MEM. (16Mx8)		
Size	Document Number	Rev
A	201110 uModem V1.1	V1.1
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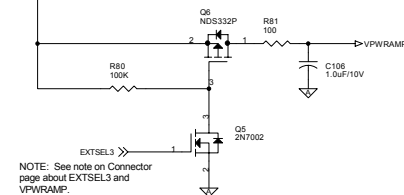
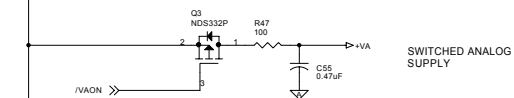
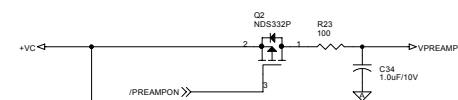
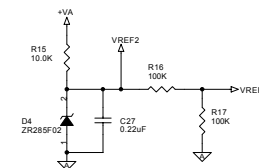
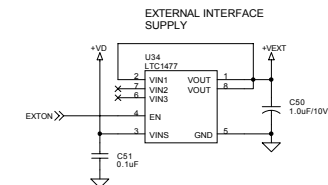
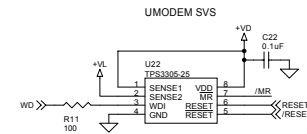


Title		
HIBERNATE		
Size	Document Number	Rev
A	201110 uModem V1.1	V1.1
Date: Friday, July 11, 2003		
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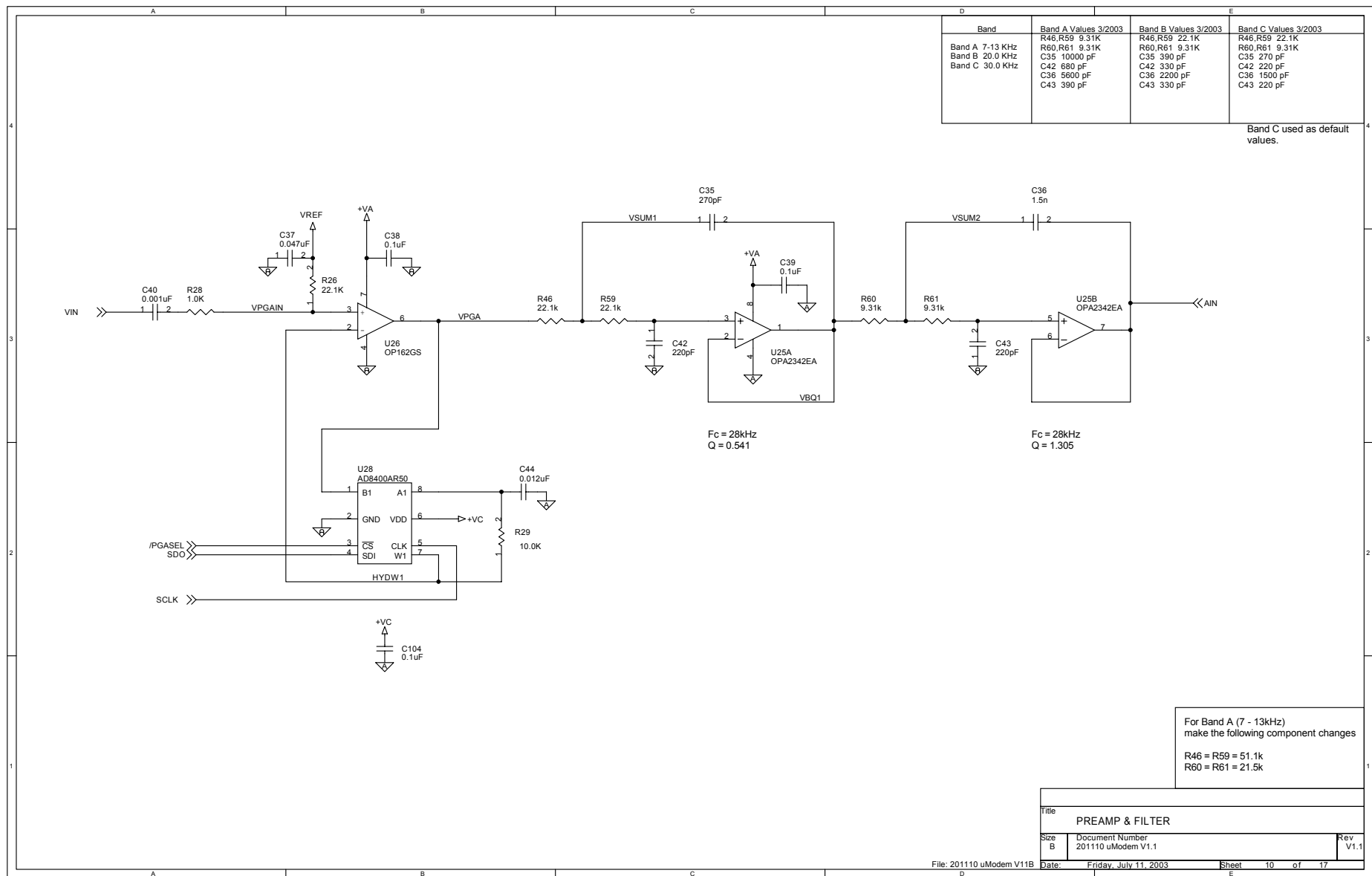
Changes required for 5416 DSP:

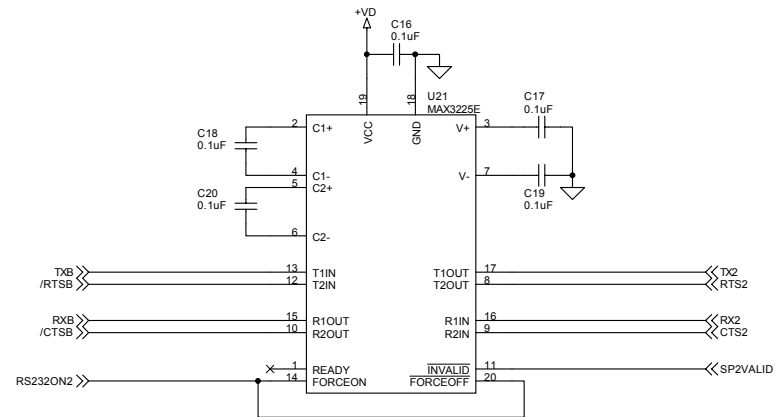
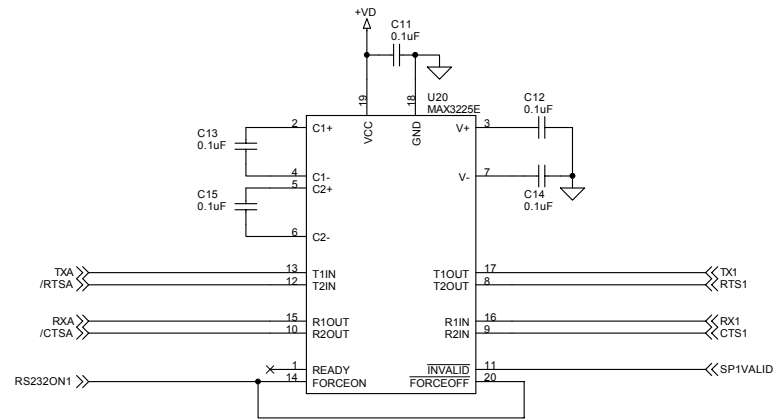
1. R19 = 665k
2. R21 = 2.21M
3. lift U22.2 and tie to U22.1



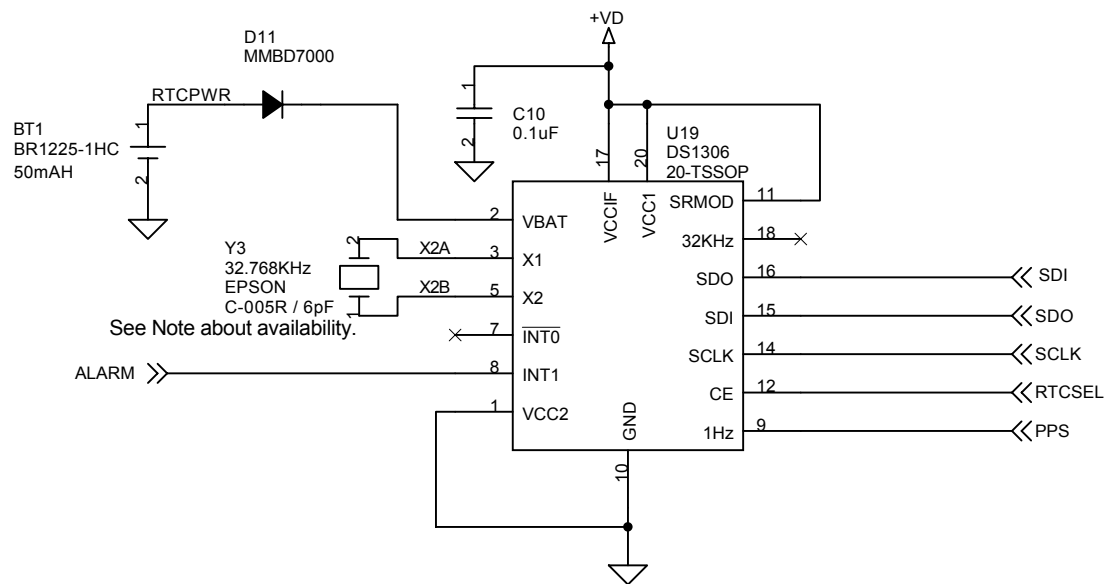
File		POWER SUPPLIES / RESET
Site	Document Number	201110 uModem V1.1
C		
Date	Friday, July 13, 2003	Sheet 5 of 17

File: 201110 uModem V1.1





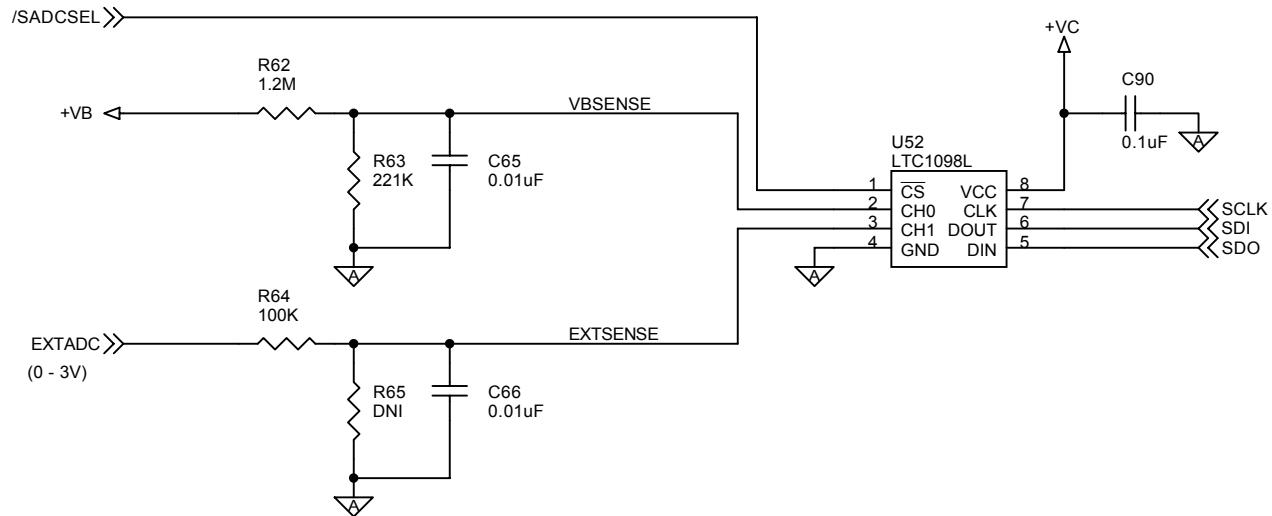
Title			
RS232 INTERFACE			
Size	Document Number		Rev
B	201110 uModem V1.1		V1.1
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Possible package change for Y3
Implement for any new pc design (V1.2, V2.0)
C005 is difficult to buy, use C002 as an alternate.
(C002R-32.768K-E)

Q7 changed to D11

Title		
REAL TIME CLOCK		
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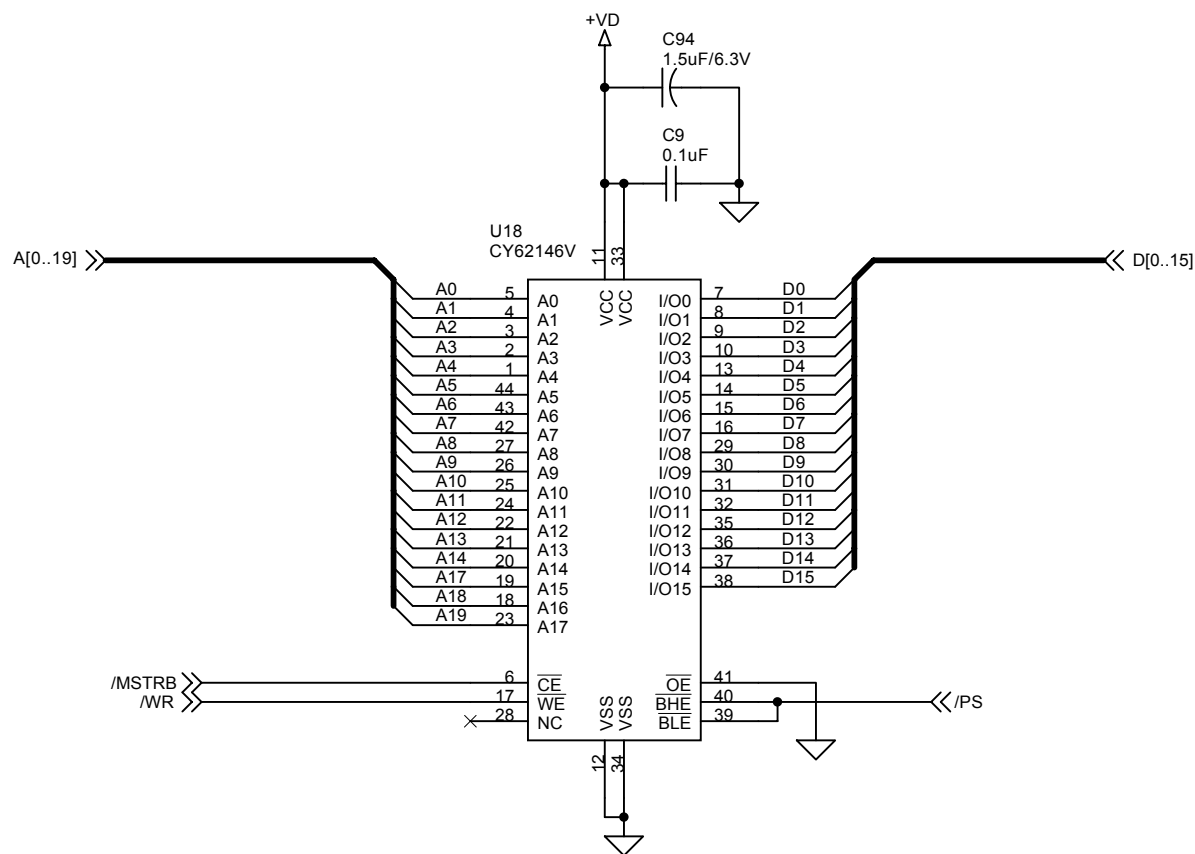


Title		
SENSOR ADC (8 BIT)		
Size	Document Number	Rev
A	201110 uModem V1.1	V1.1

File: 201110 uModem V11B

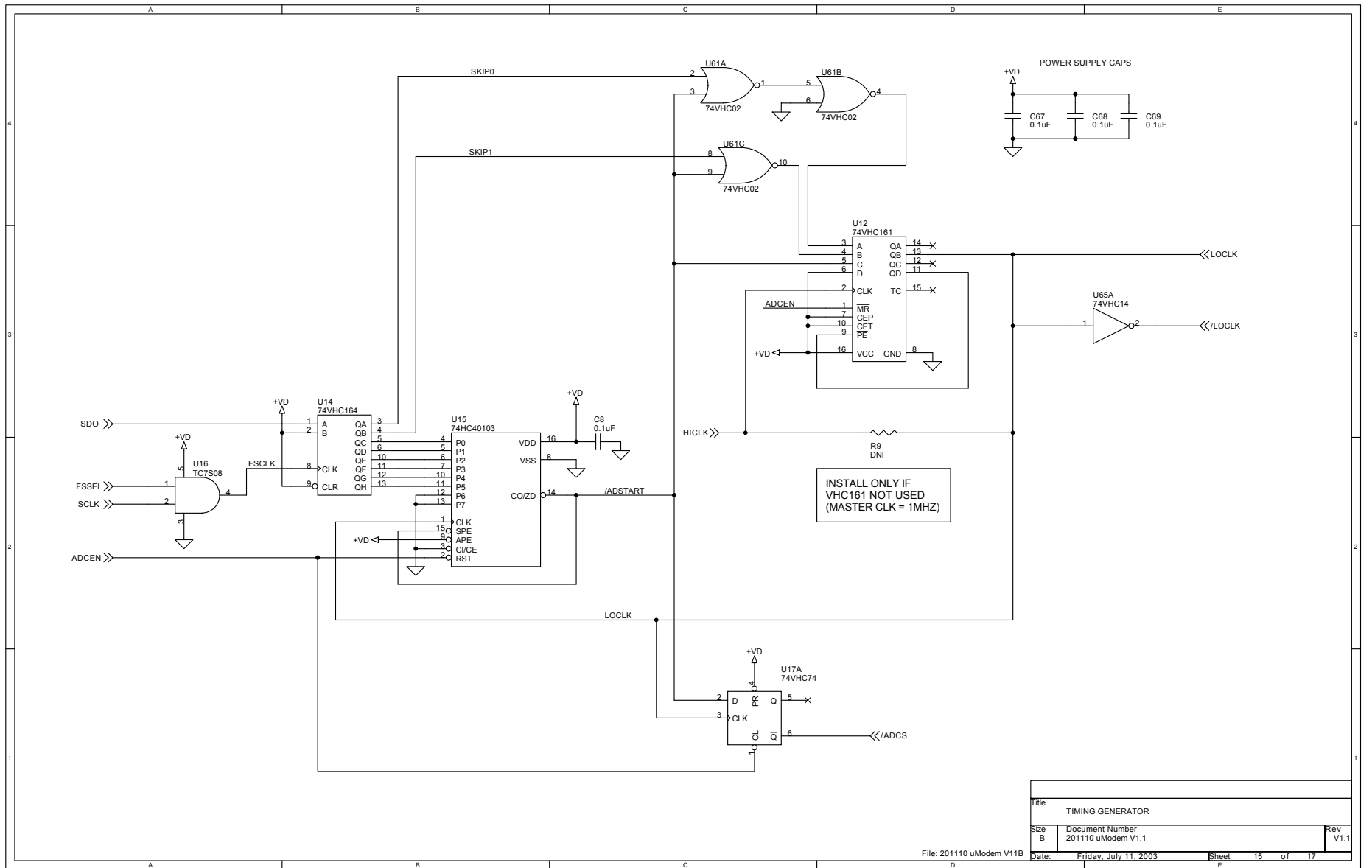
Date: Friday, July 11, 2003

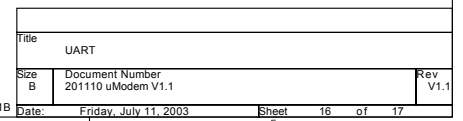
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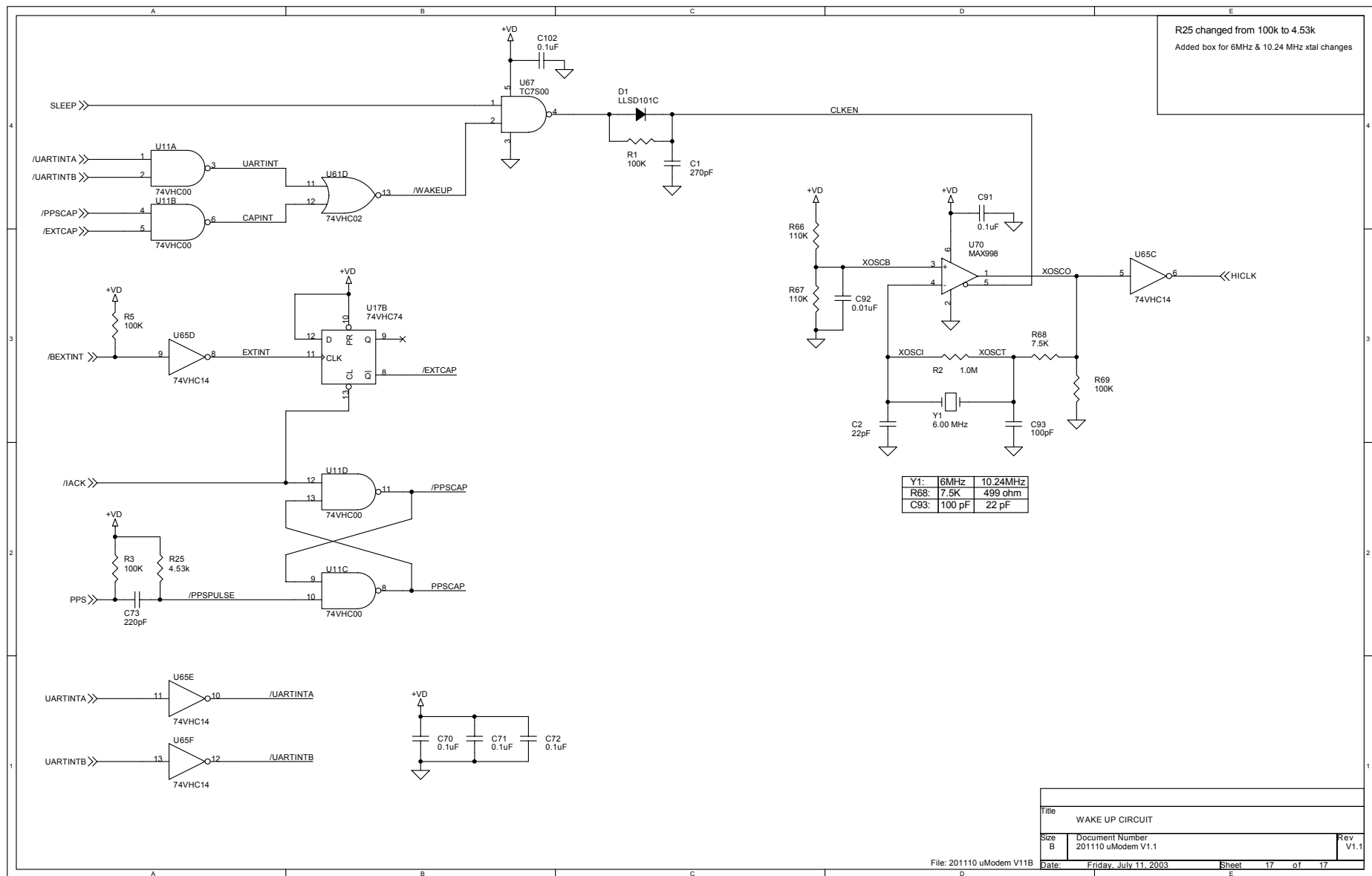


NOTE: A15, A16 from DSP not connected to U18,
leading to segmented memory map.

Title		
SRAM (256Kx16)		
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Revised: Friday, July 11, 2003
 201110 uModem V1.1 Revision: V1.1

Woods Hole Oceanographic Inst.
 86 Water St.
 Woods Hole, MA 02543

Bill Of Materials July 11,2003 10:56:23

Page1

Item	Quantity	Reference	Part	PCB Footprint	Mfg	Mfg PN	Notice
1	1	BT1	BR1225-1HC	BR1225-1HC	PANASONIC	BR1225-1HC	
2	2	C1,C35	270pF	603	PANASONIC	ECU-V1H271JCV	Alternate part ECJ-1VC1H2'
3	2	C2,C6	22pF	603	PANASONIC	ECU-V1H220JCV	Alternate part ECJ-1VC1H2'
4	8	C4,C24,C32,C34,C50,C84, C89,C106	1.0uF/10V	TES-P	PANASONIC	ECS-T1AP105R	
5	52	C5,C8,C9,C10,C11,C12,C13, C14,C15,C16,C17,C18,C19, C20,C21,C22,C28,C38,C39, C47,C49,C51,C52,C53,C54, C58,C59,C60,C61,C63,C64, C67,C68,C69,C70,C71,C72, C78,C79,C80,C81,C85,C86, C87,C88,C90,C91,C100, C101,C102,C103,C104	0.1uF	603	PANASONIC	ECJ-1VB1C104K	
6	1	C7	33pF	603	PANASONIC	ECU-V1H330JCV	Alternate part ECJ-1VC1H3:
7	3	C23,C30,C40	0.001uF	603	PANASONIC	ECU-V1H102KBV	Alternate part ECJ-1VB1H1(
8	3	C25,C33,C99	100uF/6.3V	C-CASE	KEMET	T494C107M006AS	
9	3	C26,C74,C75	4.7uF/20V	B-CASE	KEMET	T494B475M020AS	
10	1	C27	0.22uF	603	PANASONIC	ECJ-1VB1A224K	
11	1	C31	10pF	603	PANASONIC	ECJ-1VC1H100D	
12	1	C36	1.5n	603	PANASONIC	ECJ-1VB1H152K	
13	1	C37	0.047uF	603	PANASONIC	ECJ-1VB1E473K	
14	3	C42,C43,C73	220pF	603	PANASONIC	ECJ-1VC1H221J	
15	1	C44	0.012uF	603	PANASONIC	ECU-V1H123KBV	Alternate part ECJ-1VB1H1:
16	2	C55,C48	0.47uF	603	PANASONIC	ECJ-1VBOJ474K	
17	2	C57,C56	470pF	603	PANASONIC	ECJ-1VC1H471J	
18	1	C62	0.0033uF	603	PANASONIC	ECU-V1H332KBV	Alternate part ECJ-1VB1H3:
19	3	C65,C66,C92	0.01uF	603	PANASONIC	ECJ-1VB1H103K	
20	1	C93	100pF	603	PANASONIC	ECU-V1H101JCV	Alternate part ECJ-1VC1H1(
21	3	C94,C95,C96	1.5uF/6.3V	TES-Z	PANASONIC	ECS-TOJZ155R	
22	2	C98,C97	2.2uF/4V	TES-Z	PANASONIC	ECS-TOGZ225R	
23	1	C105	0.15uF	805	PANASONIC	ECJ-1VB1C154K	
24	1	D1	LLSD101C	MMELF	VISHAY/LITEON	LLSD101C	

25	2	D3,D5	MBR0530	SOD-123	MOTOROLA	MBR0530	
26	1	D4	ZR285F02	SOT-23	ZETEX	ZR285F02	
27	1	D7	MBRA130LT3	DIODE_SMA	MOTOROLA	MBRA130LT3	Do Not Install
28	1	D8	MBRA130LT3	DIODE_SMA	MOTOROLA	MBRA130LT3	
29	1	D9	SML-LX1210IGC	SMLX1210	LUMEX	SML-LX1210IGC	
30	1	D10	MA112	S-MINI	PANASONIC	MA112	
31	1	D11	MMBD7000				
32	2	JP1,JP4	RTA HDR(3X2)	43045-6	MOLEX	43045-0602	
33	1	JP2	STR REC(7X2)	79109-14	MOLEX	79109-0006	
34	1	JP3	STR REC(9X2)	79109-18	MOLEX	79109-0008	
35	1	JP5	RTA HDR(6X2)	87333-12	MOLEX	87333-1220	
36	1	JP6	STR REC(6X2)	79109-12	MOLEX	79109-0005	
37	1	JP7	STR HDR(7X2)	VHDR7X2	SULLINS	PZC07DAAN	
38	1	JP8	RTA HDR(2X2)	43045-4	MOLEX	43045-0402	
39	2	L1,L2	220uH	DS1608	COILCRAFT	DS1608-224	
40	3	Q2,Q3,Q6	NDS332P	SOT-23	FAIRCHILD	NDS332P	
41	1	Q5	2N7002	SOT-23	FAIRCHILD	2N7002	
42	5	RN1,RN2,RN3,RN4,RN5	100KX8	CTS-746	CTS	746X101104J	
43	25	R1,R3,R5,R6,R16,R17,R22, R24,R32,R33,R34,R36,R42, R44,R45,R64,R69,R70,R71, R72,R73,R74,R75,R80,R83	100K	603	PANASONIC	ERJ-3EKF1003V	
44	3	R2,R7,R31	1.0M	603	PANASONIC	ERJ-3EKF1004V	
45	2	R4,R50	49.9	603	PANASONIC	ERJ-3EKF49R9V	
46	3	R9,R65,R82	DNI	603	PANASONIC	ERJ-3EKFxxxx	Do Not Install
47	2	R10,R18	0.27	805	PANASONIC	ERJ-6RQFR27V	
48	5	R11,R23,R47,R77,R81	100	603	PANASONIC	ERJ-3EKF1000V	
49	4	R13,R14,R20,R78	0	603	PANASONIC	ERJ-3GEYJ0R0V	
50	5	R15,R29,R38,R54,R55	10.0K	603	PANASONIC	ERJ-3EKF1002V	
51	1	R19	665K	603	PANASONIC	ERJ-3EKF6653V	
52	1	R21	2.21 Meg	603	PANASONIC	ERJ-3EKF2214V	
53	1	R25	4.53k	603	PANASONIC	ERJ-3EKF1003V	
54	3	R26,R46,R59	22.1k	603	PANASONIC	ERJ-3EKF2212V	
55	1	R28	1.0K	603	PANASONIC	ERJ-3EKF1001V	
56	2	R48,R49	11.0K	603	PANASONIC	ERJ-3EKF1102V	
57	2	R56,R57	150	603	PANASONIC	ERJ-3EKF1500V	
58	1	R58	499	603	PANASONIC	ERJ-3EKF4990V	
59	2	R60,R61	9.31k	603	PANASONIC	ERJ-3EKF9311V	
60	1	R62	1.2M	603	PANASONIC	ERJ-3EKF1204V	
61	1	R63	221K	603	PANASONIC	ERJ-3EKF2213V	
62	2	R66,R67	110K	603	PANASONIC	ERJ-3EKF1103V	
63	1	R68	7.5K	603	PANASONIC	ERJ-3EKF7501V	
64	2	TP1,TP2	T POINT F	TPSMD			

65	1	TP3	TEST POINT		Keystone	5015	
66	1	U9	XR16C2850CM	TQFP-48	EXAR	XR16C2850CM	
67	1	U11	74VHC00	TSSOP-14	FAIRCHILD	74VHC00MTC	
68	1	U12	74VHC161	TSSOP-16	FAIRCHILD	74VHC161MTC	
69	1	U14	74VHC164	TSSOP-14	FAIRCHILD	74VHC164MTC	
70	1	U15	74HC40103	TSSOP-16	PHILIPS	74HC40103PW	
71	1	U16	TC7S08	SSOP5-P-0.95	TOSHIBA	TC7S08F	
72	1	U17	74VHC74	TSSOP-14	FAIRCHILD	74VHC74MTC	
73	1	U18	CY62146V	TSOP-II	CYPRESS	CY62146VLL-70ZI	
74	1	U19	DS1306	TSSOP-20	DALLAS	DS1306E	
75	2	U20,U21	MAX3225E	SSOP-20	MAXIM	MAX3225EAP	
76	1	U22	TPS3305-25	MSOP-8	TEXAS INST	TPS3305-25DGN	
77	1	U23	LTC1474-3.3	MSOP-8	LINEAR TECH.	LTC1474CMS8-3.3	
78	1	U24	LTC1474	MSOP-8	LINEAR TECH.	LTC1474CMS8	
79	1	U25	OPA2342EA	MSOP-8	BURR-BROWN	OPA2342EA	
80	1	U26	OP162GS	SO-8	ANALOG DEVICES	OP162GS	
81	1	U27	ZMR250	SOT-23	ZETEX	ZMR250F	
82	1	U28	AD8400AR50	SO-8	ANALOG DEVICES	AD8400AR50	
83	2	U67,U31	TC7S00	SSOP5-P-0.95	TOSHIBA	TC7S00F	
84	2	U61,U32	74VHC02	TSSOP-14	FAIRCHILD	74VHC02MTC	
85	1	U33	TC58128AFT	TSOP-I	TOSHIBA	TC58128AFT	
86	1	U34	LTC1477	SO-8	LINEAR TECH	LTC1477CS8	
87	1	U35	74LCX16245	TSSOP-48	FAIRCHILD	74LCX16245MTD48	
88	1	U36	AT27LV256A-55RC	SO-28	ATMEL	AT27LV256A-55RC	
89	1	U37	NC7SZ32	SSOP5-P-0.95	FAIRCHILD	NC7SZ32M5	
90	1	U41	TMS320VC5416PGE	PQFP-G144	TEXAS INST	TMS320VC5416PGE	
91	1	U42	TLV5616	MSOP-8	TEXAS INST	TLV5616CDGK	
92	1	U43	LT1637	MSOP-8	LINEAR TECH	LT1637CMS8	
93	2	U45,U48	74VHC273	TSSOP-20	FAIRCHILD	74VHC273MTC	
94	1	U46	74VHC138	TSSOP-16	FAIRCHILD	74VHC138MTC	
95	1	U50	ADS7822EC	MSOP-8	BURR-BROWN	ADS7822EC	
96	1	U52	LTC1098L	SO-8	LINEAR TECH	LTC1098LCS8	
97	1	U65	74VHC14	TSSOP-14	FAIRCHILD	74VHC14MTC	
98	1	U68	74VHC32	TSSOP-14	FAIRCHILD	74VHC32MTC	
99	1	U69	TC7W04	SOP8-P-1.27	TOSHIBA	TC7W04F	
100	1	U70	MAX998	SOT-23-6	MAXIM	MAX998EUT-T	
101	1	Y1	6.00 MHz	HCM49	CITIZEN	HCM49-6.000MABJ	
102	1	Y2	3.6864MHz	HCM49	CITIZEN	HCM49-3.6864MABJ	
103	1	Y3	32.768KHz	C-005R	EPSON	C-005R-32.768K-E	Alternate part C-002R32.768