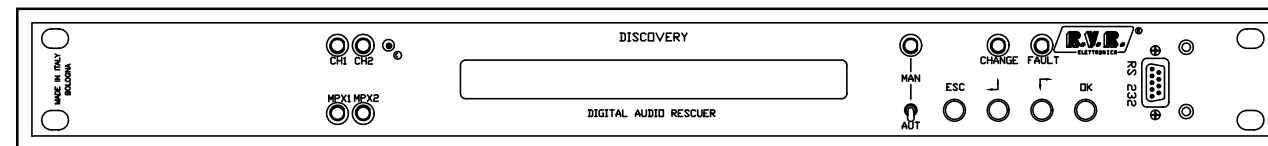

DISCOVERY



User manual Volume 2: Technical Appendix

Appendix A Piani di montaggio, schemi elettrici, liste componenti / *Component layouts, schematics, bills of material*

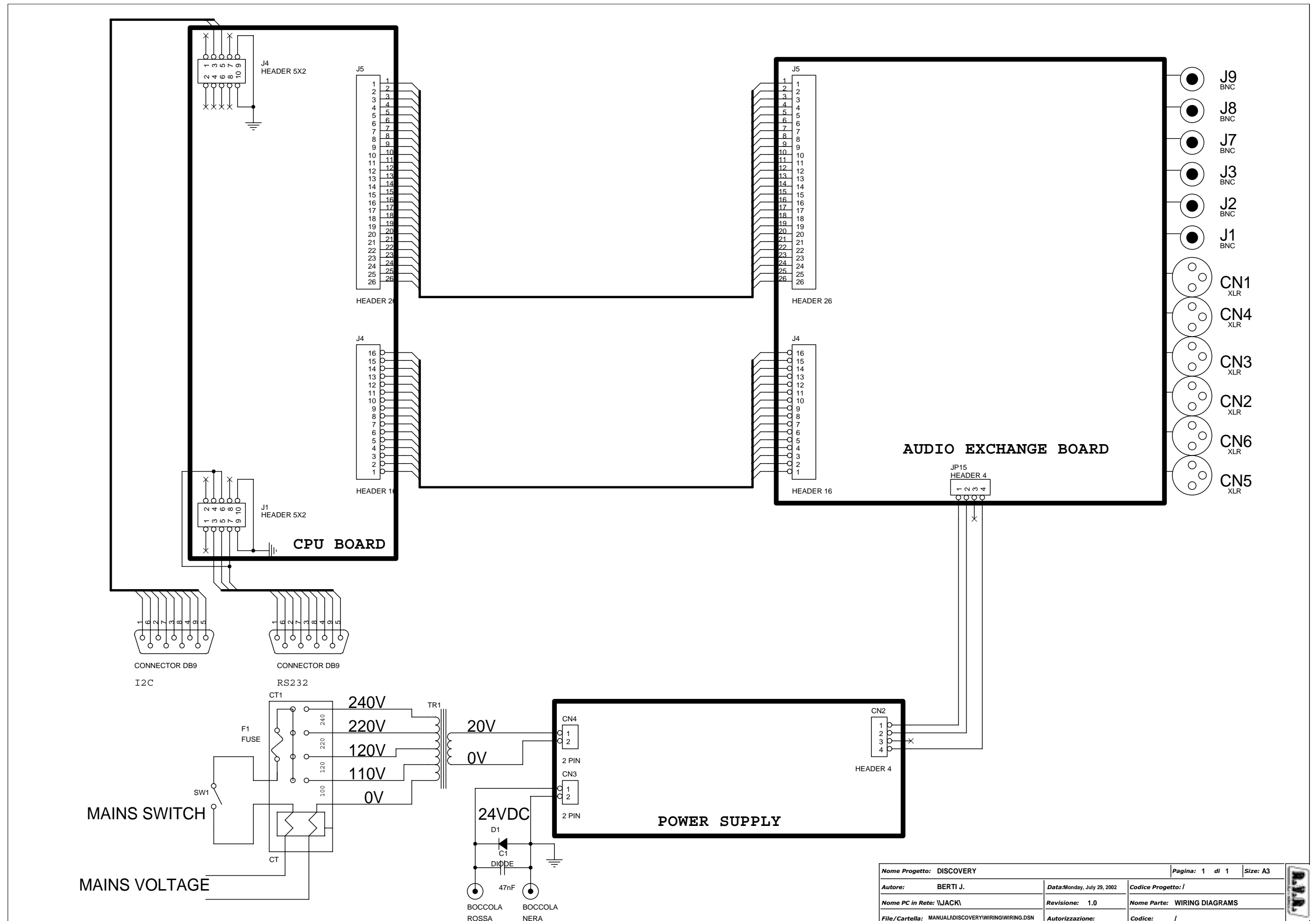
Questa parte del manuale contiene i dettagli tecnici riguardanti la costruzione delle singole schede componenti il DISCOVERY. L'appendice è composta dalle seguenti sezioni:

This part of the manual contains the technical details about the different boards of the DISCOVERY. This appendix is composed of the following sections:

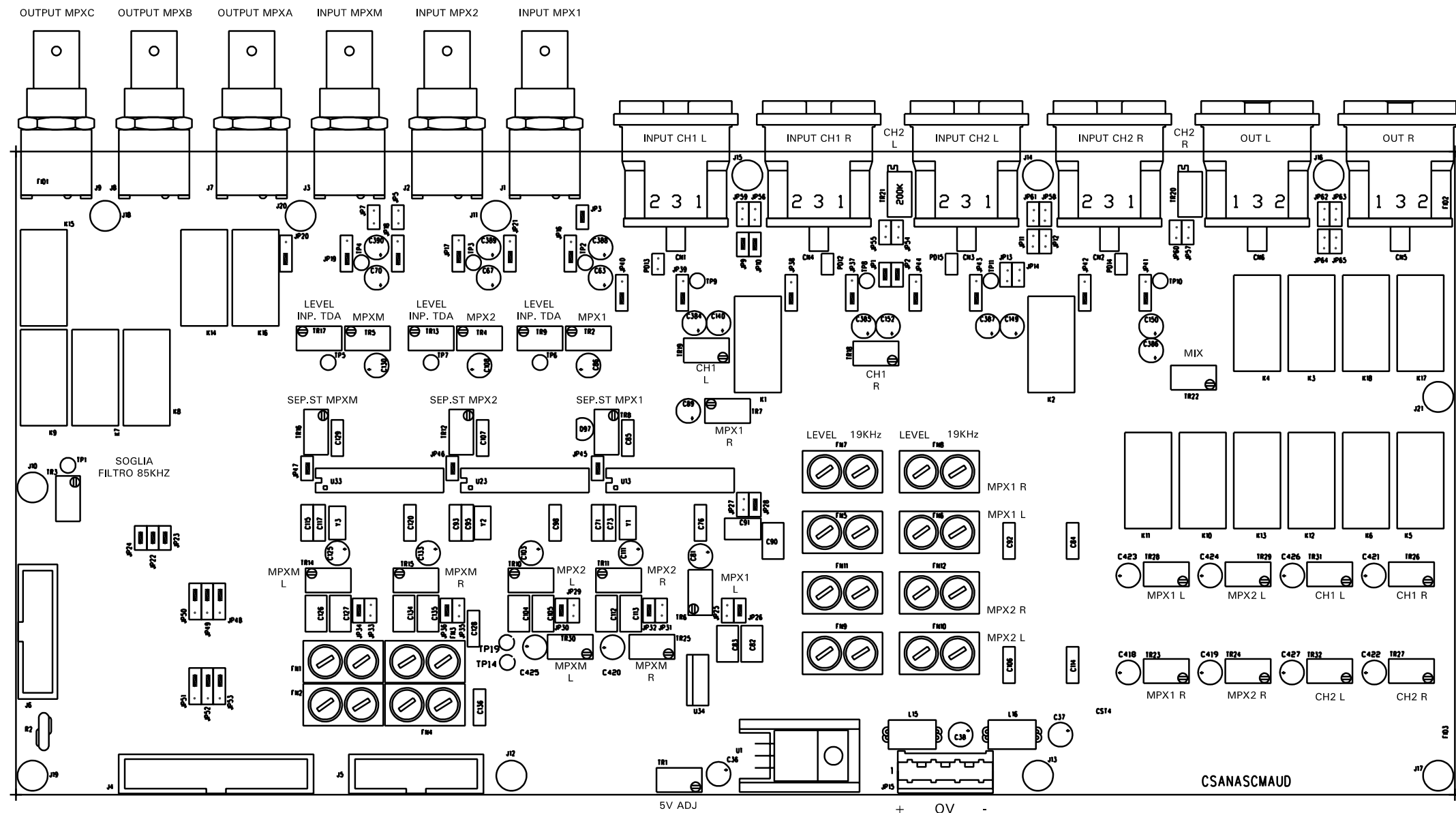
Description	RVR Code	Vers.	Pages
Wiring Diagrams	/	1.0	1
Audio exchange board	CSANASCMAUD	1.0	2
CPU board	CSCPUSCMAUD	1.0	20
Power supply	CSSWPSUP003	1.0	23

Document History

Date	Version	Reason	Editor
27/11/03	2.0	First Release in A3 Format	J. Berti

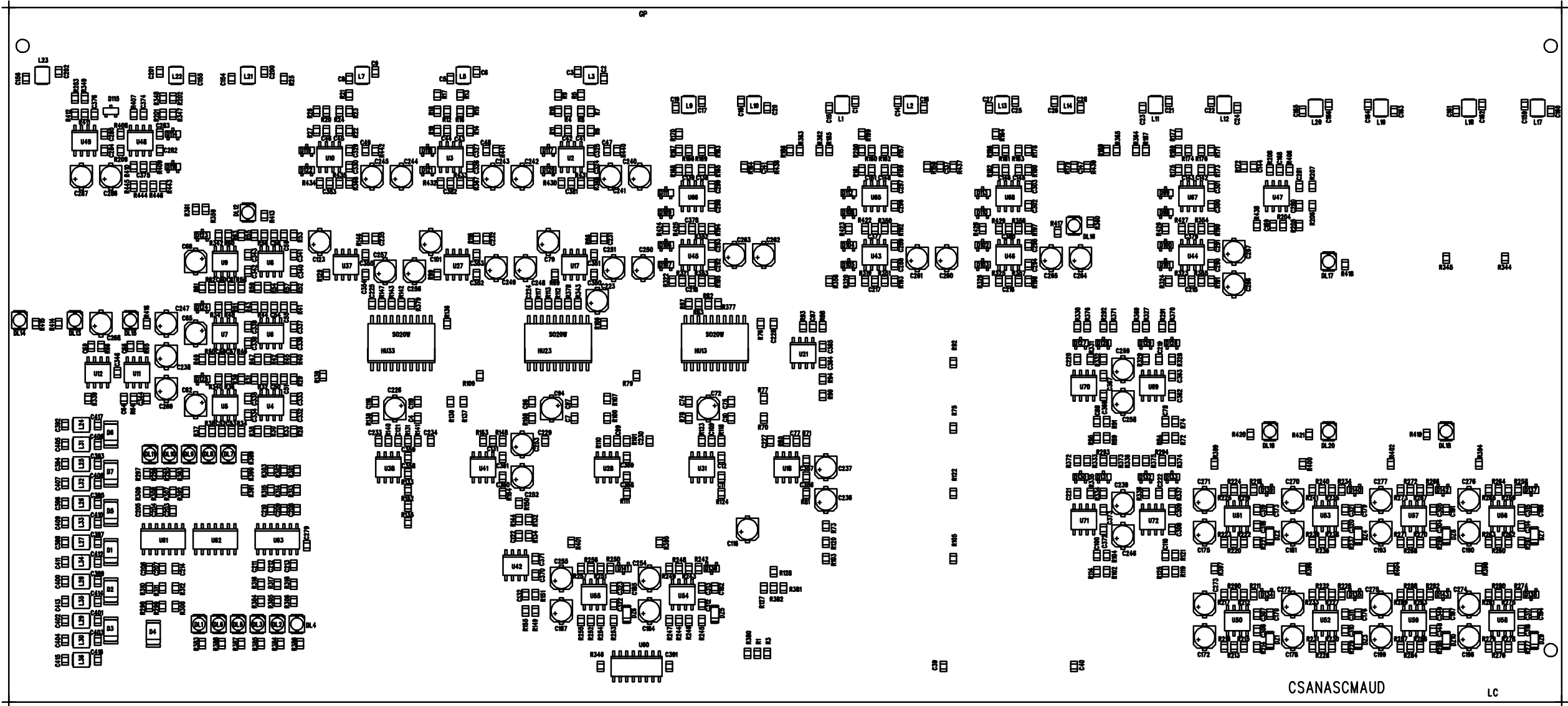


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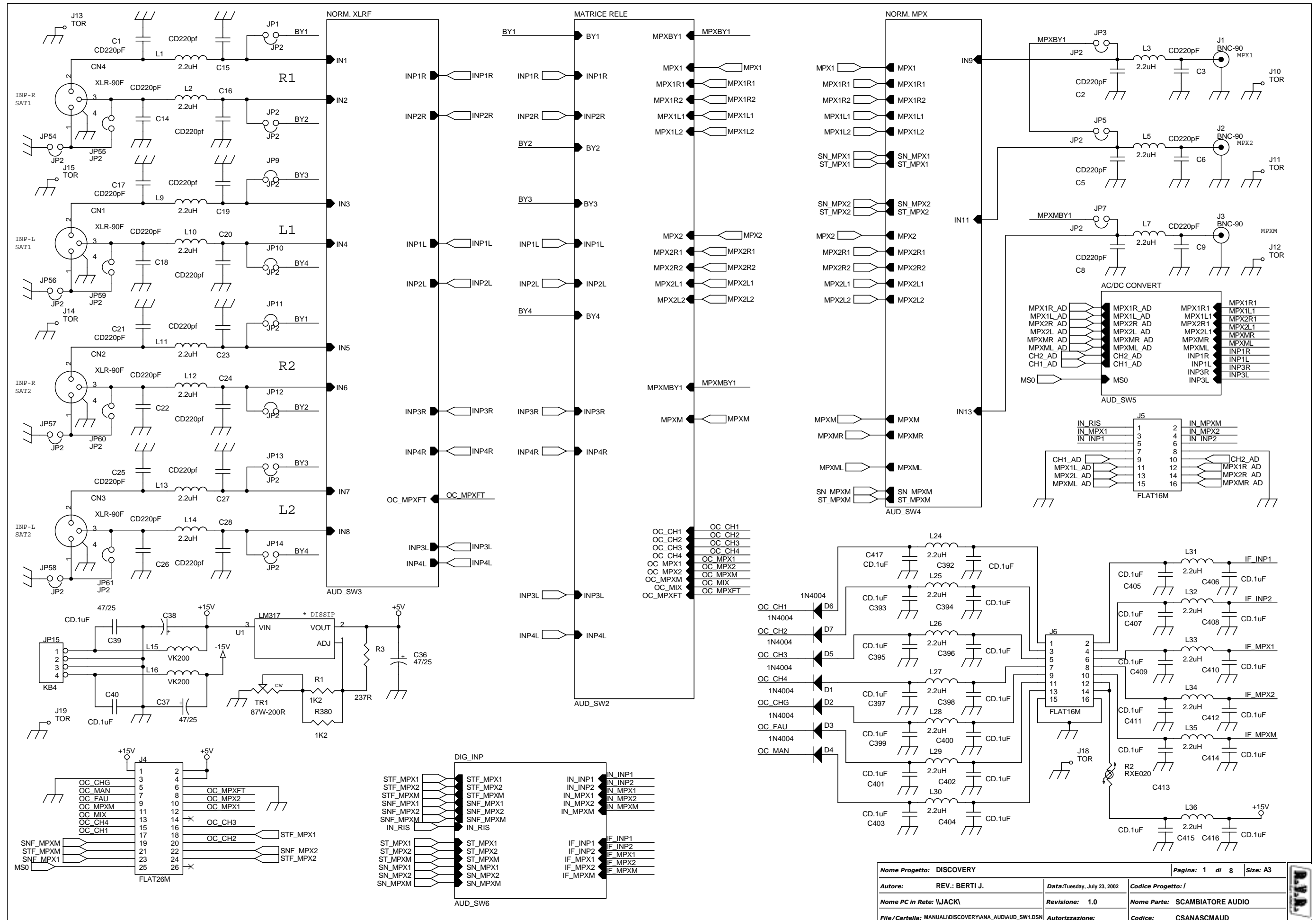




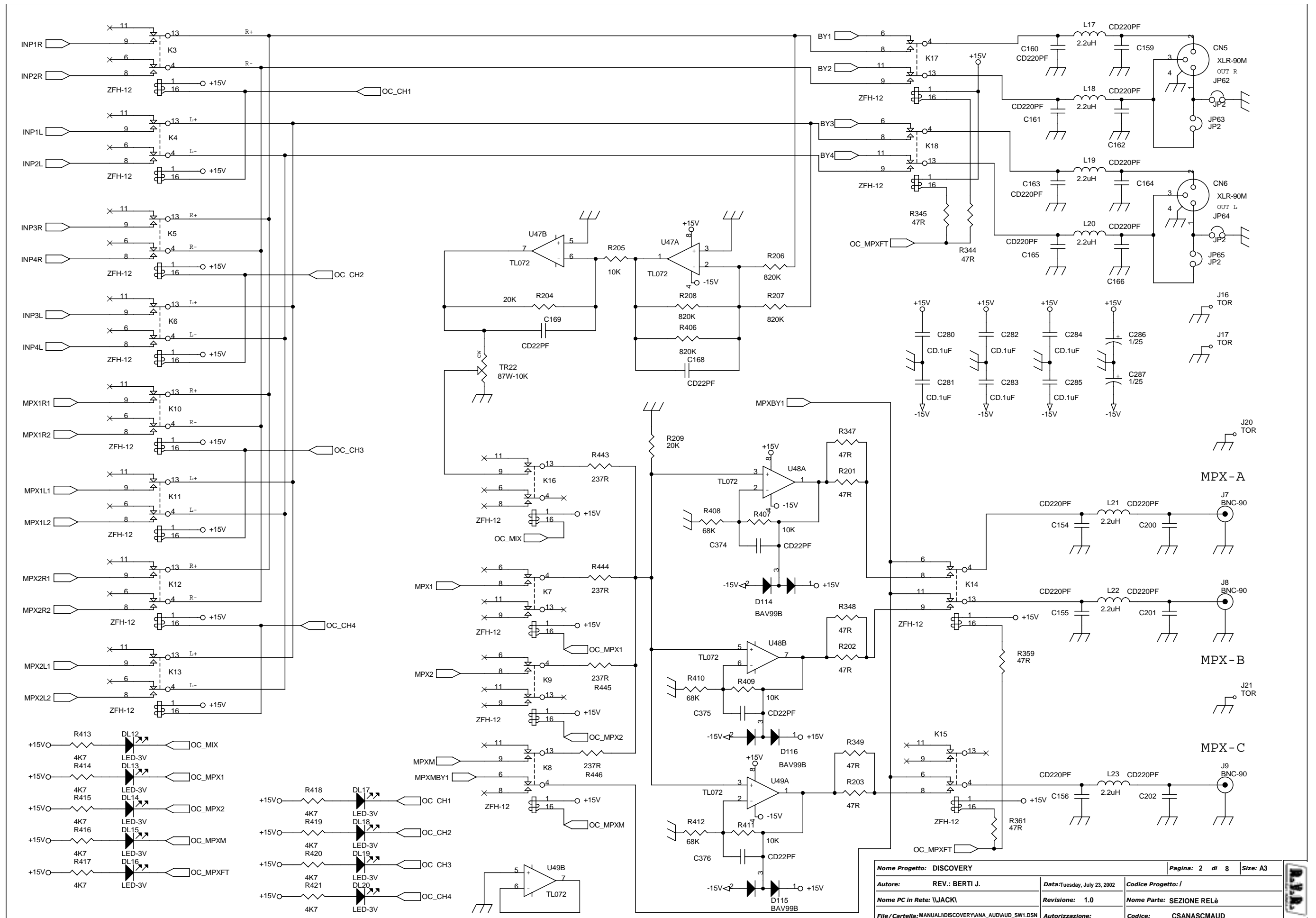
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3	3	C36, C37, C38	47/25
4	28	C39, C40, C392, C393, C394, C395, C396, C397, C398, C399, C400, C401, C402, C403, C404, C405, C406, C407, C408, C409, C410, C411, C412, C413, C414, C415, C416, C417	CD.1uF
5	7	D1, D2, D3, D4, D5, D6, D7	1N4004
6	19	JP1, JP2, JP3, JP5, JP7, JP9, JP10, JP11, JP12, JP13, JP14, JP54, JP55, JP56, JP57, JP58, JP59, JP60, JP61	JP2
7	1	JP15	KB4
8	3	J1, J2, J3	BNC-90
9	1	J4	FLAT26M
10	2	J6, J5	FLAT16M
11	8	J10, J11, J12, J13, J14, J15, J18, J19	TOR
12	24	L1, L2, L3, L5, L7, L9, L10, L11, L12, L13, L14, L24, L25, L26, L27, L28, L29, L30, L31, L32, L33, L34, L35, L36	2.2uH
13	2	L16, L15	VK200
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16	1	R3	237R
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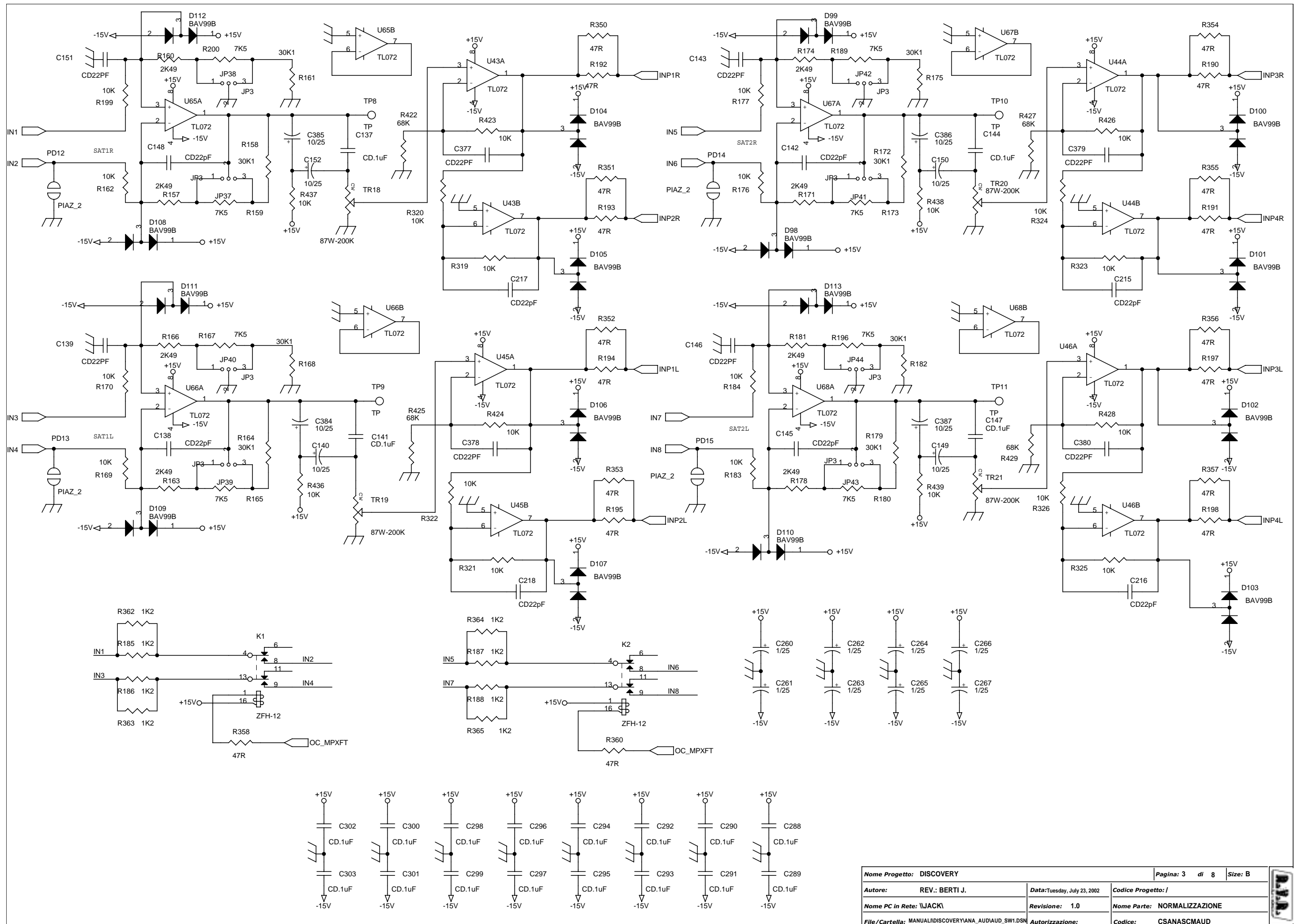


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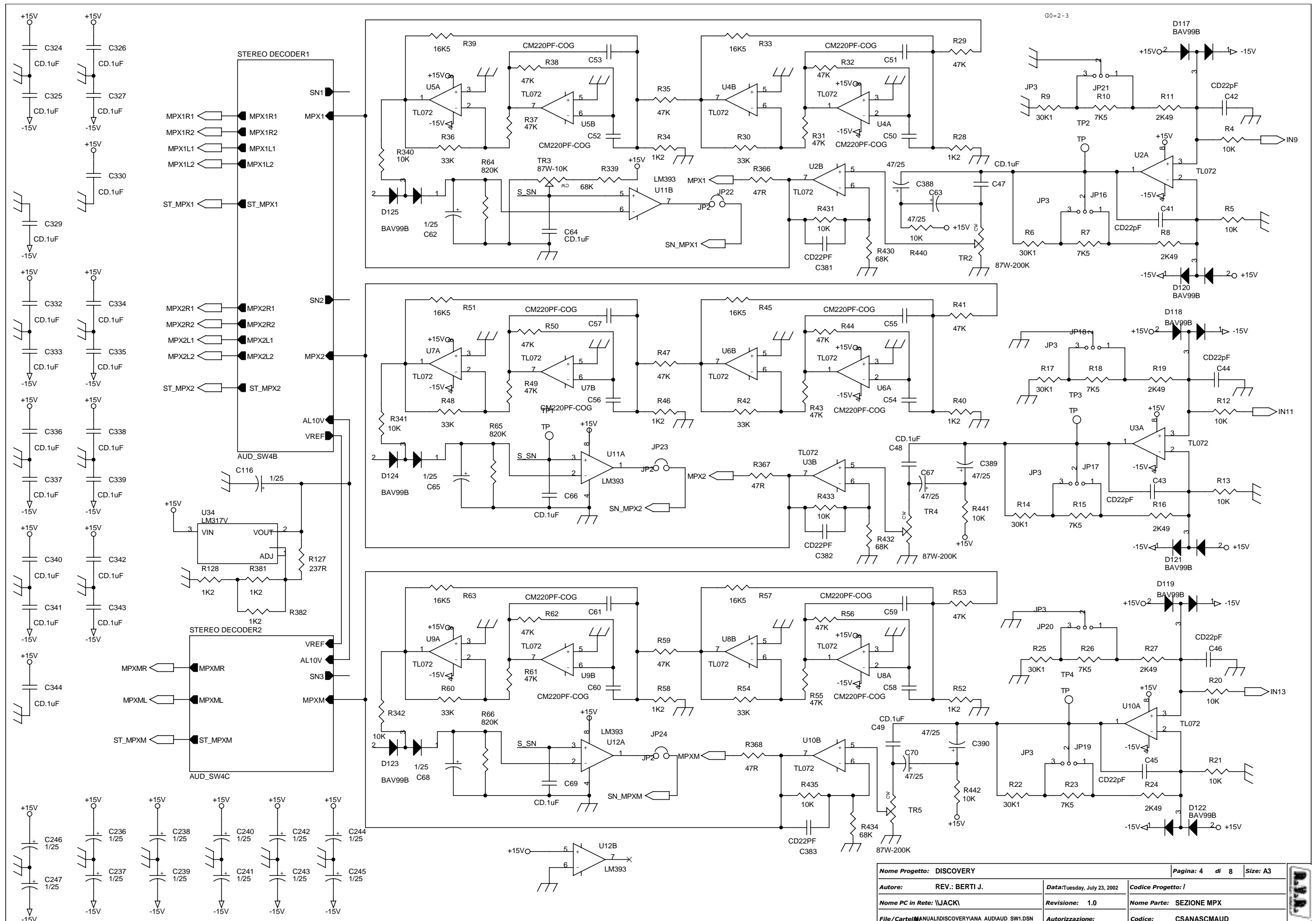
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3	5	C168, C169, C374, C375, C376	CD22PF
4	6	C280, C281, C282, C283, C284, C285	CD.1uF
5	2	C287, C286	1/25
6	9	DL12, DL13, DL14, DL15, DL16, DL17, DL18, DL19, DL20	LED-3V
7	3	D114, D115, D116	BAV99B
8	4	JP62, JP63, JP64, JP65	JP2
9	3	J7, J8, J9	BNC-90
10	4	J16, J17, J20, J21	TOR
11	16	K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, K15, K16, K17, K18	ZFH-12
12	7	L17, L18, L19, L20, L21, L22, L23	2.2uH
13	10	R201, R202, R203, R344, R345, R347, R348, R349, R359, R361	47R
14	2	R209, R204	20K
15	4	R205, R407, R409, R411	10K
16	4	R206, R207, R208, R406	820K
17	3	R408, R410, R412	68K
18	9	R413, R414, R415, R416, R417, R418, R419, R420, R421	4K7
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21	3	U47, U48, U49	TL072



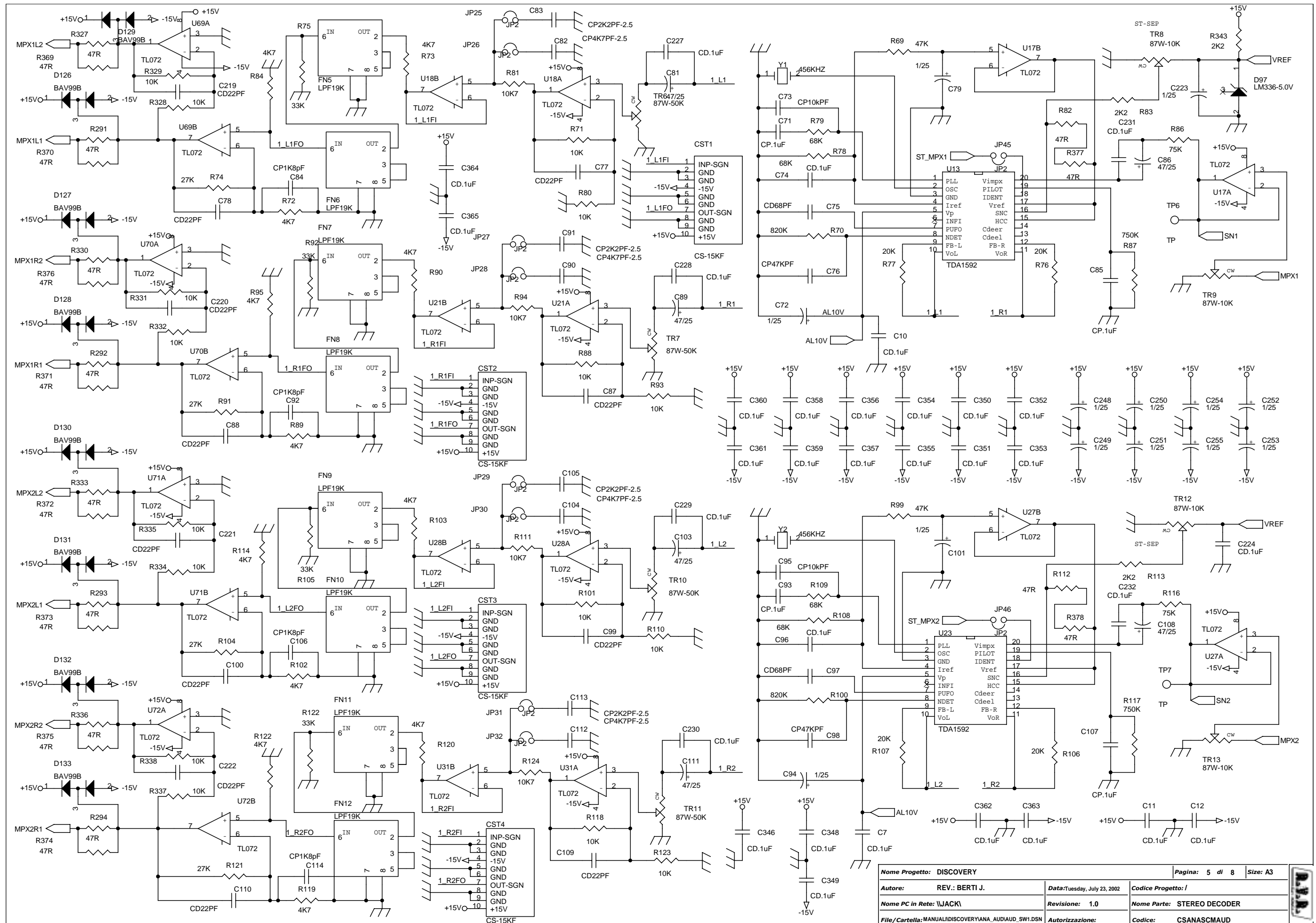
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3	8	C140, C149, C150, C152, C384, C385, C386, C387	10/25
4	8	C260, C261, C262, C263, C264, C265, C266, C267	1/25
5	16	D98, D99, D100, D101, D102, D103, D104, D105, D106, D107, D108, D109, D110, D111, D112, D113	BAV99B
6	8	JP37, JP38, JP39, JP40, JP41, JP42, JP43, JP44	JP3
7	2	K1, K2	ZFH-12
8	4	PD12, PD13, PD14, PD15	PIAZ_2
9	8	R157, R160, R163, R166, R171, R174, R178, R181	2K49
10	8	R158, R161, R164, R168, R172, R175, R179, R182	30K1
11	8	R159, R165, R167, R173, R180, R189, R196, R200	7K5
12	24	R162, R169, R170, R176, R177, R183, R184, R199, R319, R320, R321, R322, R323, R324, R325, R326, R423, R424, R426, R428, R436, R437, R438, R439	10K
13	8	R185, R186, R187, R188, R362, R363, R364, R365	1K2
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15	4	R422, R425, R427, R429	68K
16	4	TP8, TP9, TP10, TP11	TP
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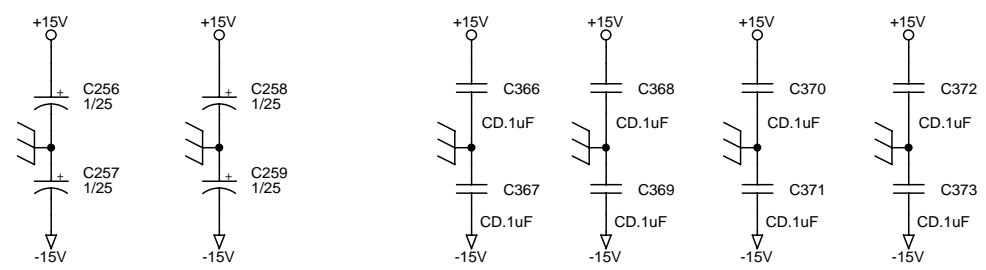
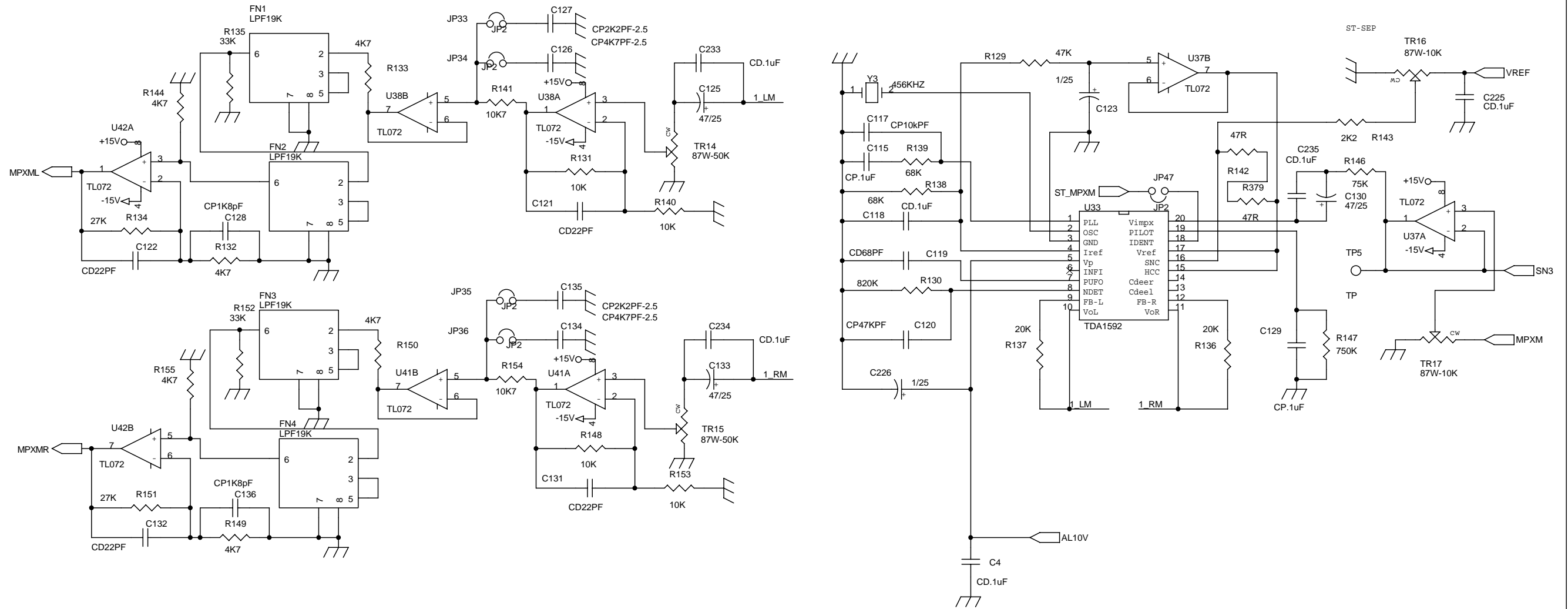
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6	9	D117, D118, D119, D120, D121, D122, D123, D124, D125	BAV99B
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8	3	JP22, JP23, JP24	JP2
9	15	R4, R5, R12, R13, R20, R21, R340, R341, R342, R431, R433, R435, R440, R441, R442	10K
10	6	R6, R9, R14, R17, R22, R25	30K1
11	6	R7, R10, R15, R18, R23, R26	7K5
12	6	R8, R11, R16, R19, R24, R27	2K49
13	9	R28, R34, R40, R46, R52, R58, R128, R381, R382	1K2
14	18	R29, R31, R32, R35, R37, R38, R41, R43, R44, R47, R49, R50, R53, R55, R56, R59, R61, R62	47K
15	6	R30, R36, R42, R48, R54, R60	33K
16	6	R33, R39, R45, R51, R57, R63	16K5
17	3	R64, R65, R66	820K
18	1	R127	237R
19	4	R339, R430, R432, R434	68K
20	3	R366, R367, R368	47R
21	4	TP1, TP2, TP3, TP4	TP
22	3	TR2, TR4, TR5	87W-200K
23	1	TR3	87W-10K
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25	2	U11, U12	LM393
26	1	U34	LM317V



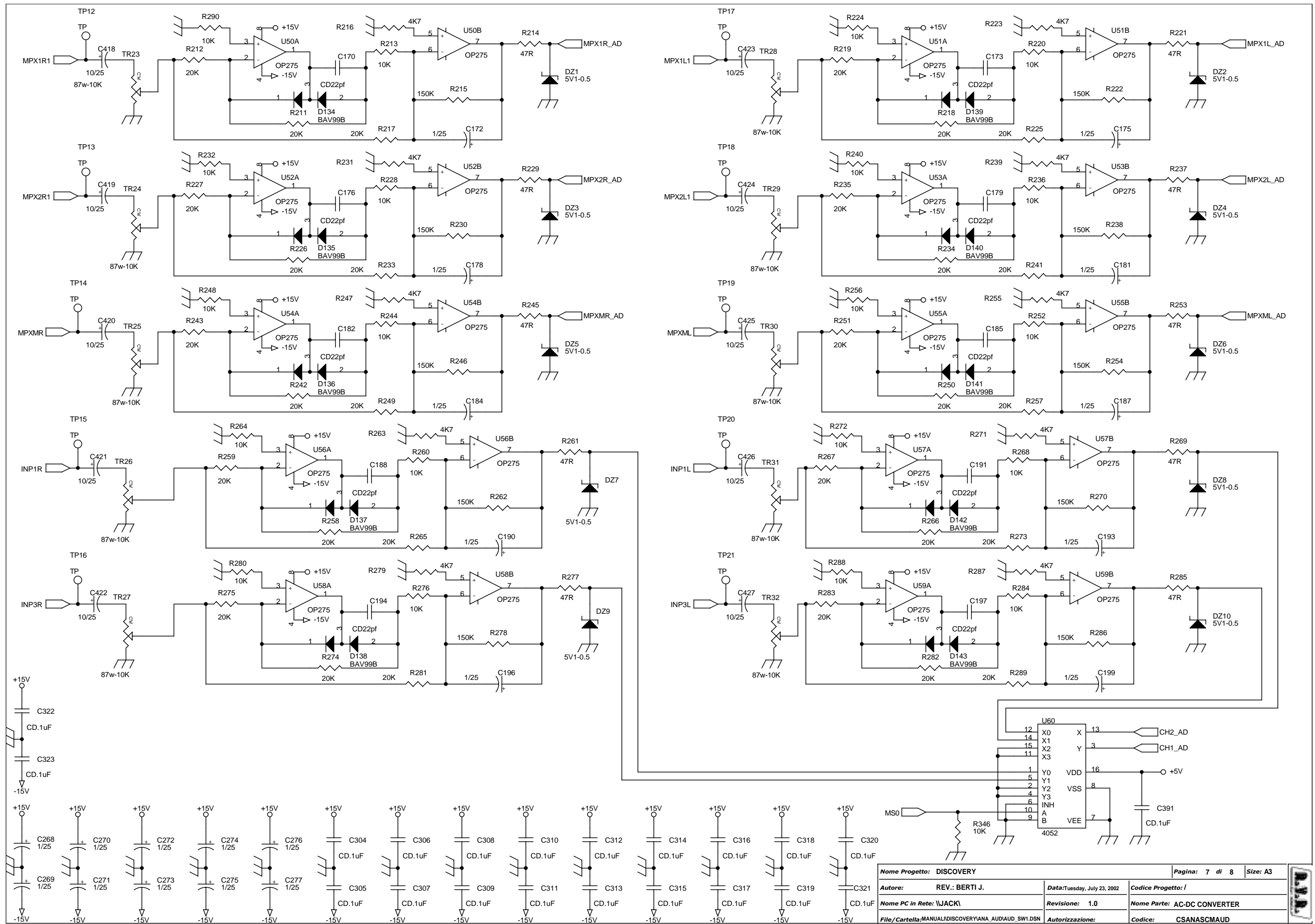
STEREO DECODER Bill Of Materials

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3	4	C71, C85, C93, C107	CP.1uF	34	10	U17, U18, U21, U27, U28, U31, U69, U70, U71, U72	TL072
4	13	C72, C79, C94, C101, C223, C248, C249, C250, C251, C252, C253, C254, C255	1/25	35	2	Y1, Y2	456KHZ
5	2	C73, C95	CP10kPF				
6	2	C75, C97	CD68PF				
7	2	C76, C98	CP47KPF				
8	12	C77, C78, C87, C88, C99, C100, C109, C110, C219, C220, C221, C222	CD22PF				
9	6	C81, C86, C89, C103, C108, C111	47/25				
10	4	C82, C90, C104, C112	CP4K7PF-2.5				
11	4	C83, C91, C105, C113	CP2K2PF-2.5				
12	4	C84, C92, C106, C114	CP1K8pF				
13	1	D97	LM336-5.0V				
14	8	D126, D127, D128, D129, D130, D131, D132, D133	BAV99B				
15	8	FN5, FN6, FN7, FN8, FN9, FN10, FN11, FN12	LPF19K				
16	10	JP25, JP26, JP27, JP28, JP29, JP30, JP31, JP32, JP45, JP46	JP2				
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18	2	R70, R100	820K				
19	16	R71, R80, R88, R93, R101, R110, R118, R123, R328, R329, R331, R332, R334, R335, R337, R338	10K				
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22	4	R75, R92, R105, R122	33K				
23	4	R76, R77, R106, R107	20K				
24	4	R78, R79, R108, R109	68K				
25	4	R81, R94, R111, R124	10K7				
26	20	R82, R112, R291, R292, R293, R294, R327, R330, R333, R336, R369, R370, R371, R372, R373, R374, R375, R376, R377, R378	47R				
27	3	R83, R113, R343	2K2				
28	2	R116, R86	75K				
29	2	R117, R87	750K				
30	2	TP6, TP7	TP				
31	4	TR6, TR7, TR10, TR11	87W-50K				



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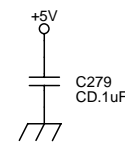
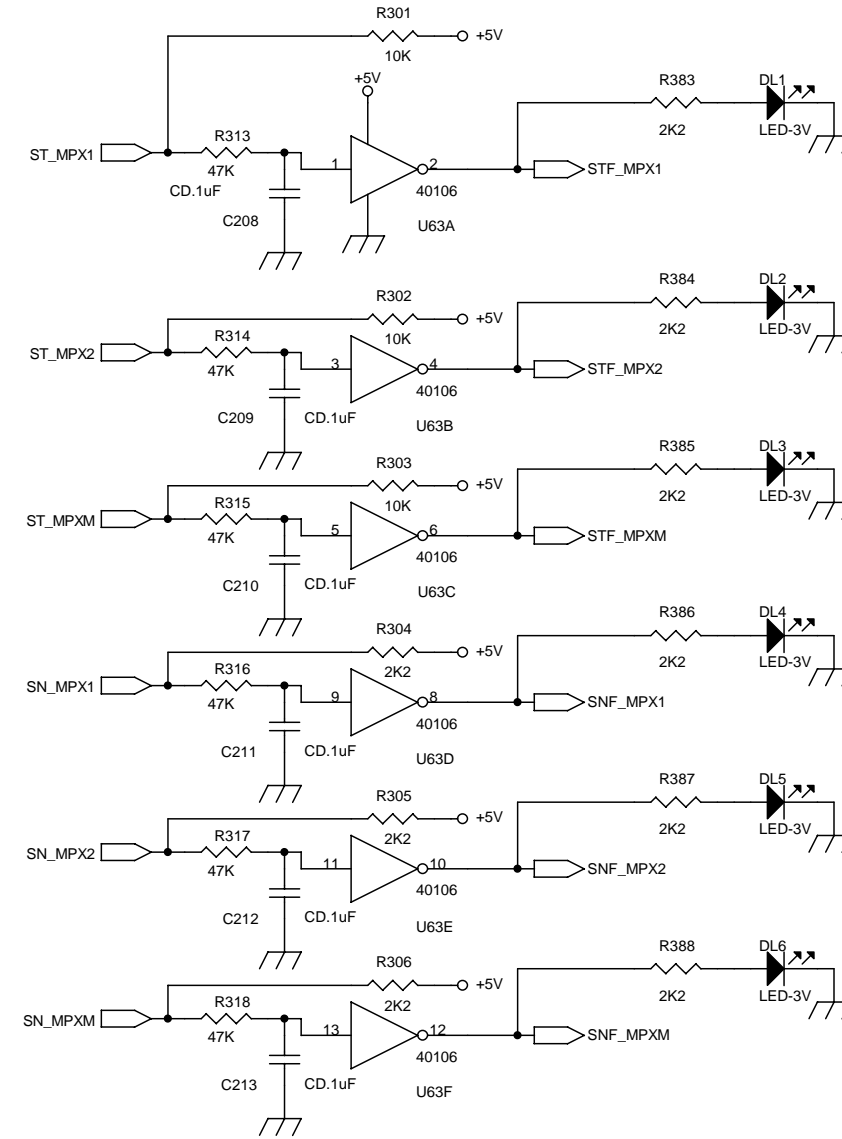
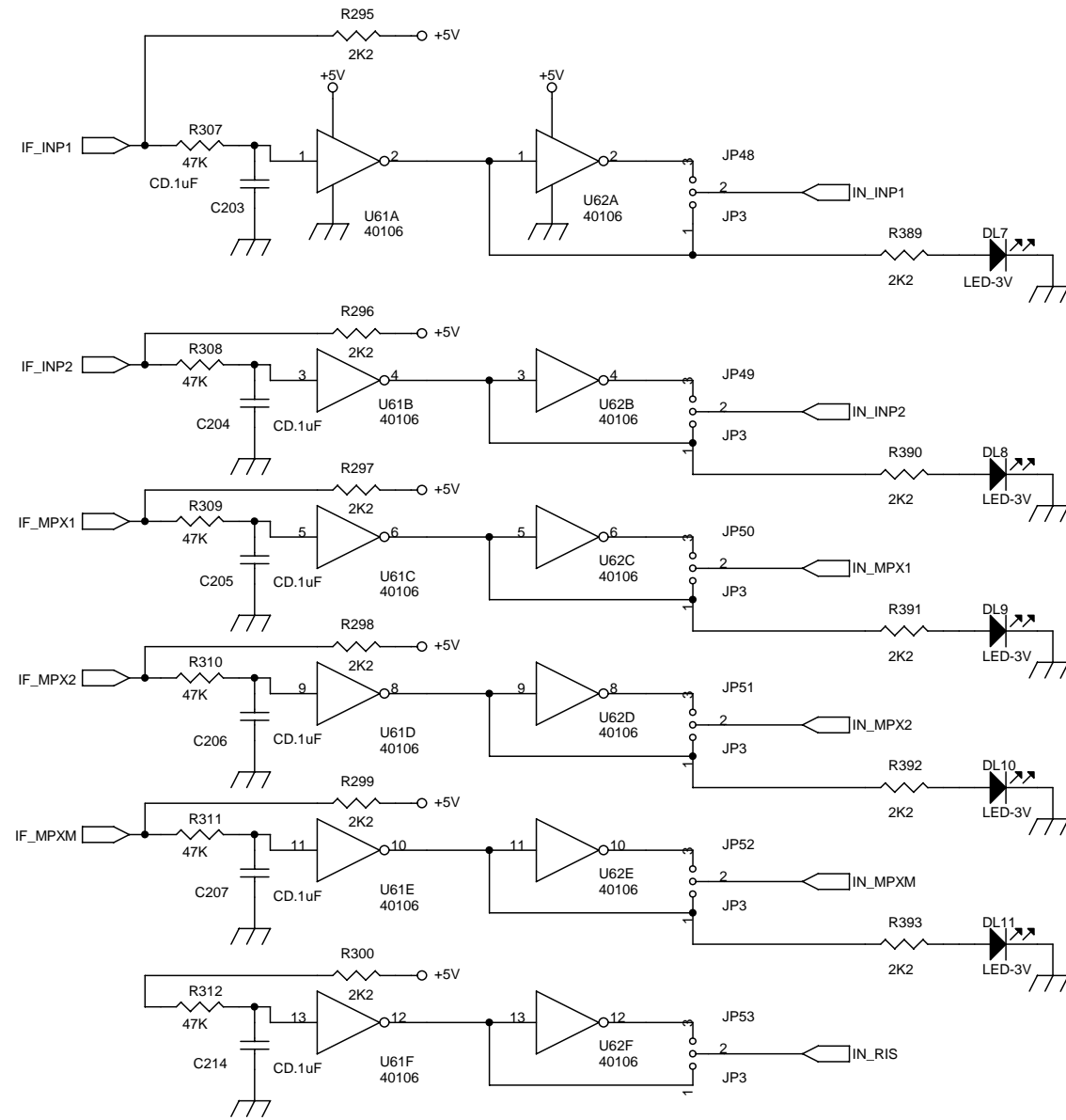
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3	1	C117	CP10kPF
4	1	C119	CD68PF
5	1	C120	CP47KPF
6	4	C121, C122, C131, C132	CD22PF
7	6	C123, C226, C256, C257, C258, C259	1/25
8	3	C125, C130, C133	47/25
9	2	C126, C134	CP4K7PF-2.5
10	2	C127, C135	CP2K2PF-2.5
11	2	C128, C136	CP1K8pF
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18	2	R134, R151	27K
19	2	R135, R152	33K
20	2	R136, R137	20K
21	2	R139, R138	68K
22	2	R141, R154	10K7
23	2	R142, R379	47R
24	1	R143	2K2
25	1	R146	75K
26	1	R147	750K
27	1	TP5	TP
28	2	TR14, TR15	87W-50K
29	2	TR16, TR17	87W-10K
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31	4	U37, U38, U41, U42	TL072
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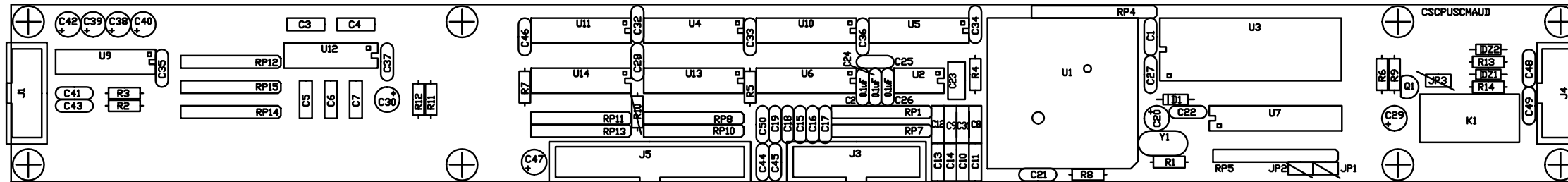
AC-DC CONVERTER Bill Of Materials Page1

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3	21	C304, C305, C306, C307, C308, C309, C310, C311, C312, C313, C314, C315, C316, C317, C318, C319, C320, C321, C322, C323, C391	CD.1uF
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5	10	DZ1, DZ2, DZ3, DZ4, DZ5, DZ6, DZ7, DZ8, DZ9, DZ10	5V1-0.5
6	10	D134, D135, D136, D137, D138, D139, D140, D141, D142, D143	BAV99B
7	30	R211, R212, R217, R218, R219, R225, R226, R227, R233, R234, R235, R241, R242, R243, R249, R250, R251, R257, R258, R259, R265, R266, R267, R273, R274, R275, R281, R282, R283, R289	20K
8	21	R213, R220, R224, R228, R232, R236, R240, R244, R248, R252, R256, R260, R264, R268, R272, R276, R280, R284, R288, R290, R346	10K
9	10	R214, R221, R229, R237, R245, R253, R261, R269, R277, R285	47R
10	10	R215, R222, R230, R238, R246, R254, R262, R270, R278, R286	150K
11	10	R216, R223, R231, R239, R247, R255, R263, R271, R279, R287	4K7
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13	10	TR23, TR24, TR25, TR26, TR27, TR28, TR29, TR30, TR31, TR32	87w-10K
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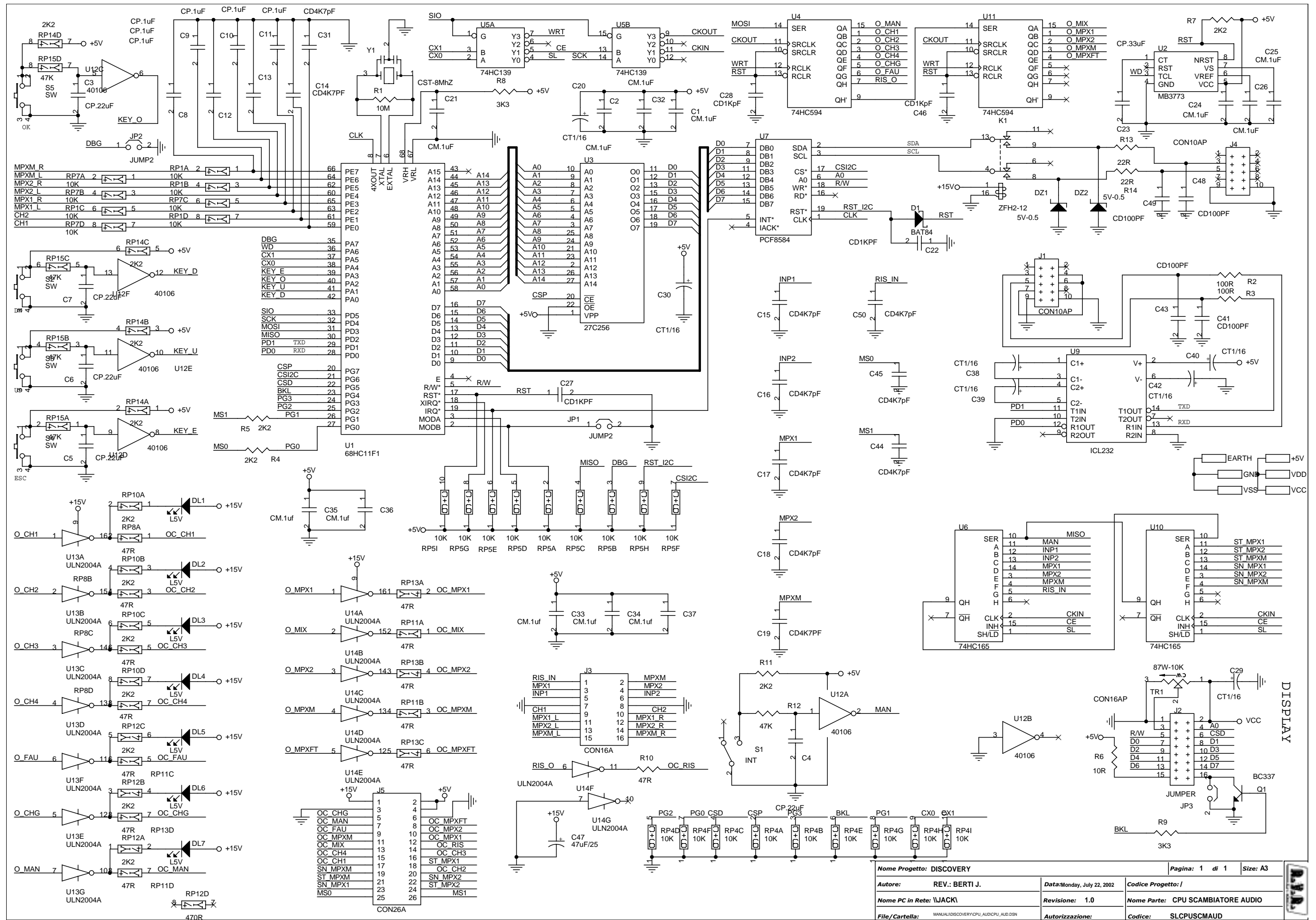
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3	6	JP48, JP49, JP50, JP51, JP52, JP53	JP3
4	20	R295, R296, R297, R298, R299, R300, R304, R305, R306, R383, R384, R385, R386, R387, R388, R389, R390, R391, R392, R393	2K2
5	3	R301, R302, R303	10K
6	12	R307, R308, R309, R310, R311, R312, R313, R314, R315, R316, R317, R318	47K
7	3	U61, U62, U63	40106



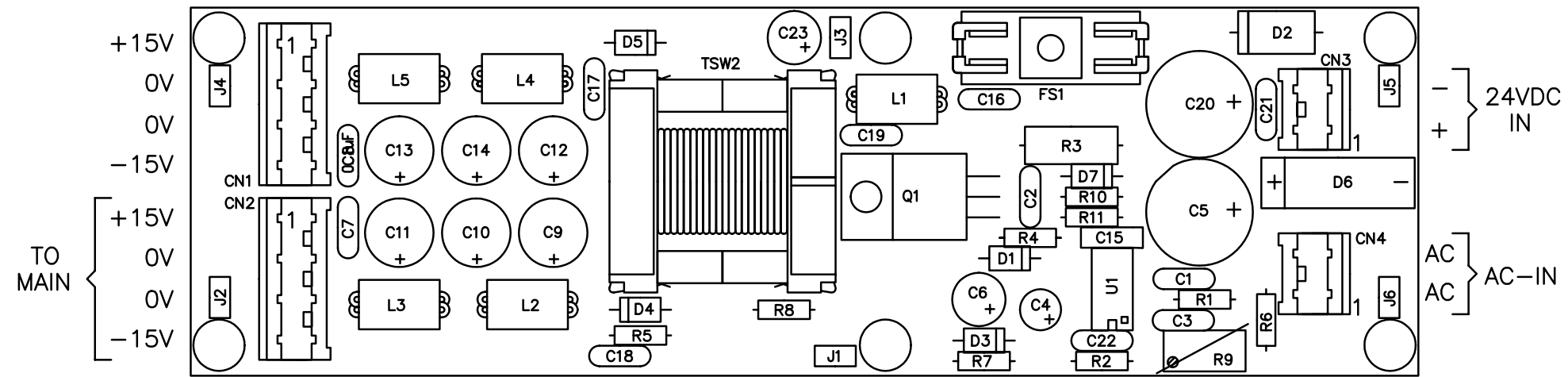
Nome Progetto: DISCOVERY		Pagina: 1 di 1		Size: A3
Autore: REV: BERTI J.	Data: 22/07/02	Codice Progetto: /		
Nome PC in Rete: \\JACK\	Revisione: 1.0	Nome Parte: LAYOUT CPU SCAMBIATORE AUDIO		
File/Cartella: MANUAL\DISCOVERY\CPU_AUD\CPU_AUD.DWG	Autorizzazione:	Codice: CSCPUSCHAUD		
Scala: /	Materiale: /	Trattamento: /	Profilo: /	





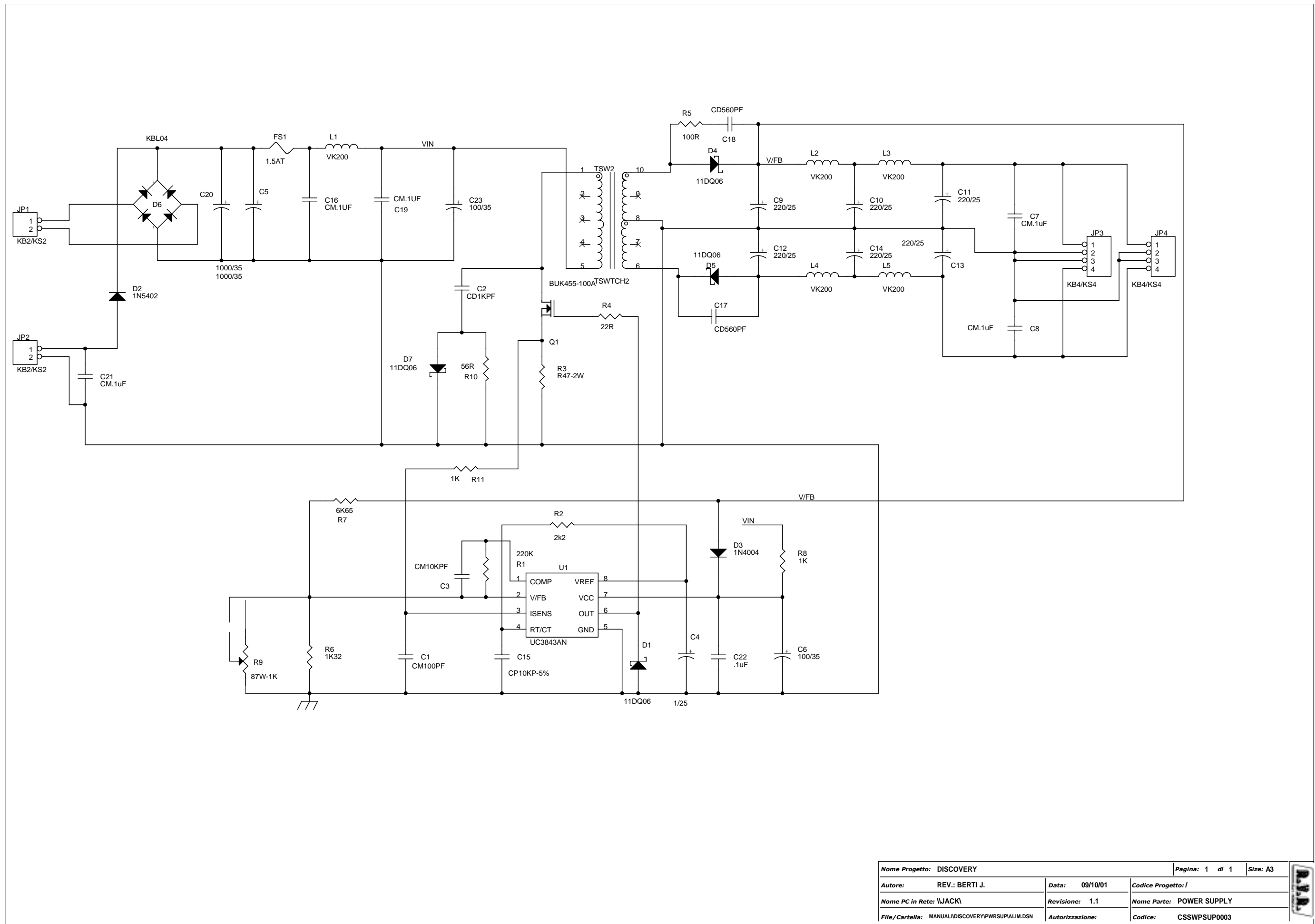
SLCPUSCMAUD Bill Of Materials Page1

Item	Q.ty	Reference	Part
1	12	C1, C2, C21, C24, C25, C26, C32, C33, C34, C35, C36, C37	CM.1uF
2	5	C3, C4, C5, C6, C7	CP.22uF
3	6	C8, C9, C10, C11, C12, C13	CP.1uF
4	10	C14, C15, C16, C17, C18, C19, C31, C44, C45, C50	CD4K7PF
5	7	C20, C29, C30, C38, C39, C40, C42	CT1/16
6	4	C22, C27, C28, C46	CD1KpF
7	1	C23	CP.33uF
8	4	C41, C43, C48, C49	CD100PF
9	1	C47	47uF/25
10	7	DL1, DL2, DL3, DL4, DL5, DL6, DL7	L5V
11	2	DZ2, DZ1	5V-0.5
12	1	D1	BAT84
13	2	JP2, JP1	JUMP2
14	1	JP3	JUMPER
15	2	J1, J4	CON10AP
16	1	J2	CON16AP
17	1	J3	CON16A
18	1	J5	CON26A
19	1	K1	ZFH2-12
20	1	Q1	BC337
21	4	RP1, RP4, RP5, RP7	10K
22	4	RP8, R10, RP11, RP13	47R
23	7	R4, R5, R7, RP10, R11, RP12, RP14	2K2
24	1	RP12	470R
25	2	R12, RP15	47K
26	1	R1	10M
27	2	R3, R2	100R
28	1	R6	10R
29	2	R9, R8	3K3
30	2	R14, R13	22R
31	1	S1	INT
32	4	S2, S3, S4, S5	SW
33	1	TR1	87W-10K
34	1	U1	68HC11F1
35	1	U2	MB3773
36	1	U3	27C256
37	2	U11, U4	74HC594
38	1	U5	74HC139
39	2	U6, U10	74HC165
40	1	U7	PCF8584
41	1	U9	ICL232
42	1	U12	40106
43	2	U13, U14	ULN2004A
44	1	Y1	CST-8MhZ



Nome Progetto: DISCOVERY		Pagina: 1 di 1	Size: A4
Autore: REV.: BERTI J.	Data: 11/07/01	Codice Progetto: /	
Nome PC in Rete: \\JACK\	Revisione: 1.0	Nome Parte: POWER SUPPLY COMPONENT LAYOUT	
File/Cartella: MANUAL\DISCOVERY\PWRSUP\ALIM.DWG	Autorizzazione:	Codice: CSSWPSUP0003	
Scala: /	Materiale: /	Trattamento: /	Profilo: /





Nome Progetto: DISCOVERY		Pagina: 1 di 1		Size: A3
Autore: REV.: BERTI J.	Data: 09/10/01	Codice Progetto: /		
Nome PC in Rete: \\JACK\	Revisione: 1.1	Nome Parte: POWER SUPPLY		
File/Cartella: MANUAL\DISCOVERY\PWRSUPALIM.DSN	Autorizzazione:	Codice: CSSWPSUP0003		

SLSWPSUP003 Bill Of Materials Page1

Item	Quantity	Reference	Part
1	1	C1	CM100PF
2	1	C2	CD1KPF
3	1	C3	CM10KPF
4	1	C4	1/25
5	2	C5, C20	1000/35
6	2	C6, C23	100/35
7	5	C7, C8, C16, C19, C21	CM.1uF
8	6	C9, C10, C11, C12, C13, C14	220/25
9	1	C15	CP10KP-5%
10	2	C17, C18	CD560PF
11	1	C22	.1uF
12	4	D1, D4, D5, D7	11DQ06
13	1	D2	1N5402
14	1	D3	1N4004
15	1	D6	KBL04
16	1	FS1	1.5AT
17	2	JP1, JP2	KB2/KS2
18	2	JP3, JP4	KB4/KS4
19	5	L1, L2, L3, L4, L5	VK200
20	1	Q1	BUK455-100A
21	1	R1	220K
22	1	R2	2K2
23	1	R3	R47-2W
24	1	R4	22R
25	1	R5	100R
26	1	R6	1K32
27	1	R7	6K65
28	1	R9	87W-1K
29	1	R10	56R
30	1	R8, R11	1K
31	1	TSW2	TSWTCH2
32	1	U1	UC3843AN