



# **/AUDIGIN-TFT**

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**USER MANUAL**

## **Additional Manual for TEX-TFT series**



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**Version:** 1.0

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### Revision History

Date	Version	Reason	Editor
04/03/2022	1.0	First edition	J. H. Berti

AUDIGIN-TFT - User Manual  
Version 1.0

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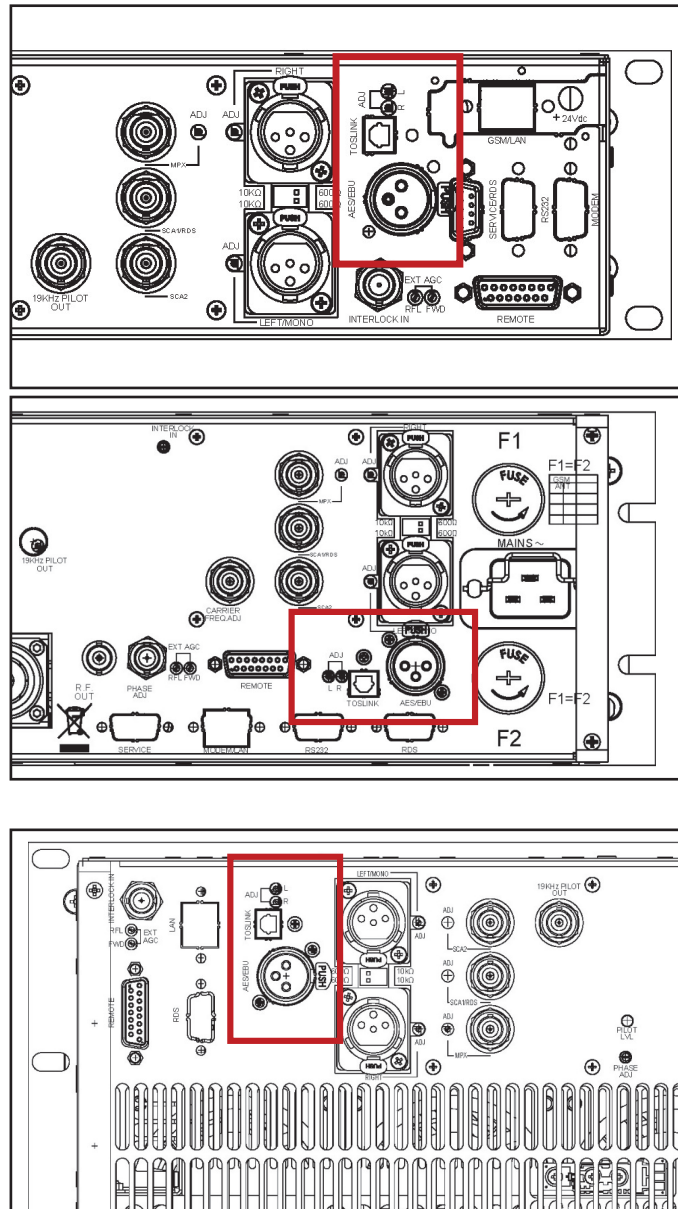
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# 1. Introduction

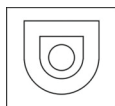
## 1.1 Main Highlights

- The card allows to TEX-TFT excites the integration into those systems that use digital audio distribution.  
It is located on rear panel of the TEX-TFT and is internally connected to the audio motherboard using a 10-pin flat connector.
- The card allows the conversion of digital signal into “Left” and “Right” analog signals and then to deliver it to the modulator.
- This card can be added without requiring any special adjustments to the typical analog audio input section; by updating it there is no need to change the exciter firmware.
- The system provides for twelve cyclical queries that allow you to immediately find the active channel and put it on the air.  
If a digital input is present, then it is automatically selected by the included logic. The automatic exchange takes place to select the digital input between balanced (AES/EBU) or optical (TOSLINK).
- Through the two trimmers it is possible to adjust the converted digital input level, to normalize the R and L signals with respect to the adjusted level for the analog input.
- The D/A conversion is performed automatically by 24-bit converters using a sampling frequency from 32 to 96 KHz.
- This card supports S/PDIF, AES/EBU, IEC958 and EIAJ CP340/1201 data formats.

## 2. /AUDIGIN-TFT Option



Digital Input



Type: TOS-LINK Female

Left (MONO) / Right

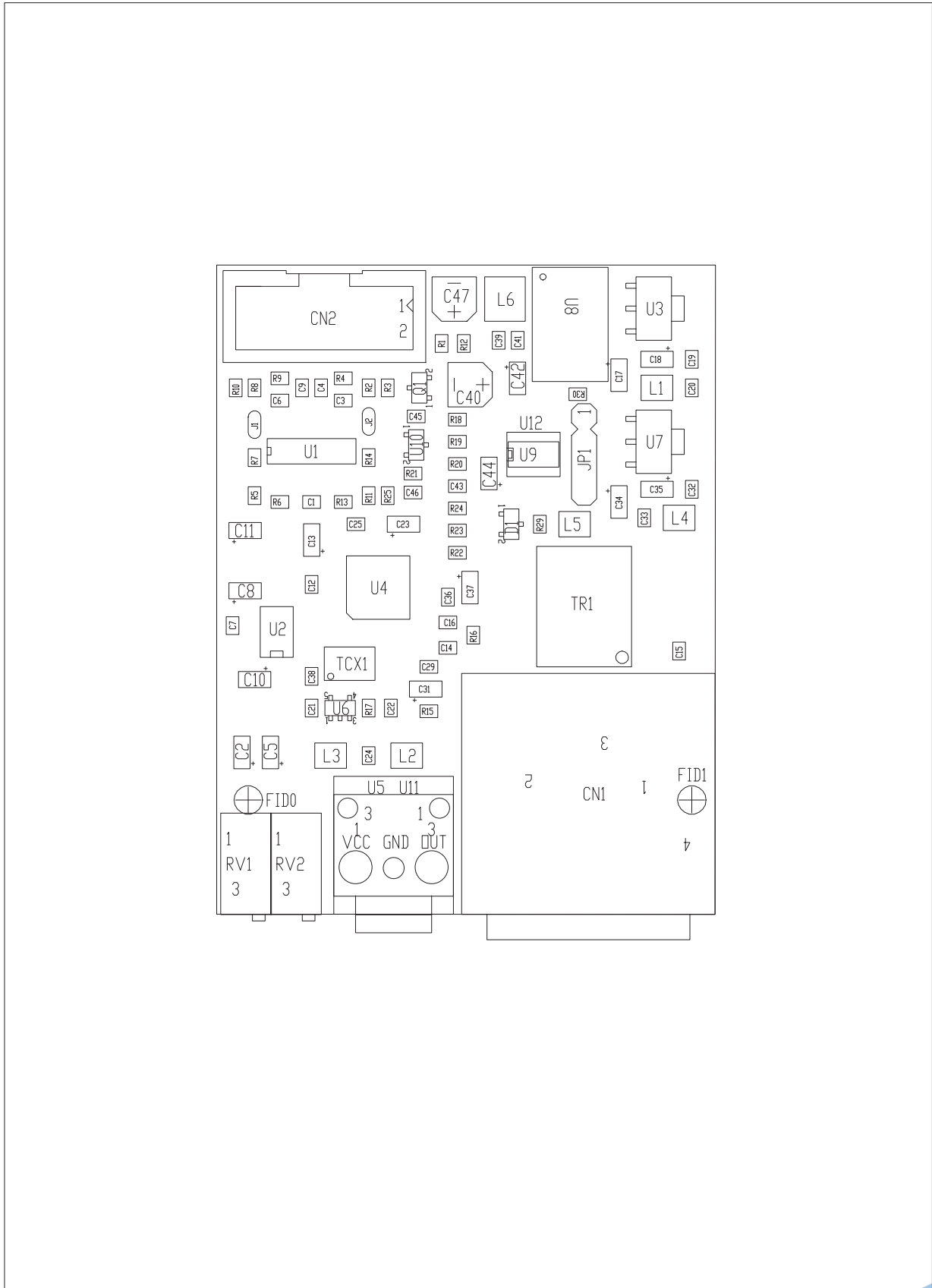
Type: XLR Female



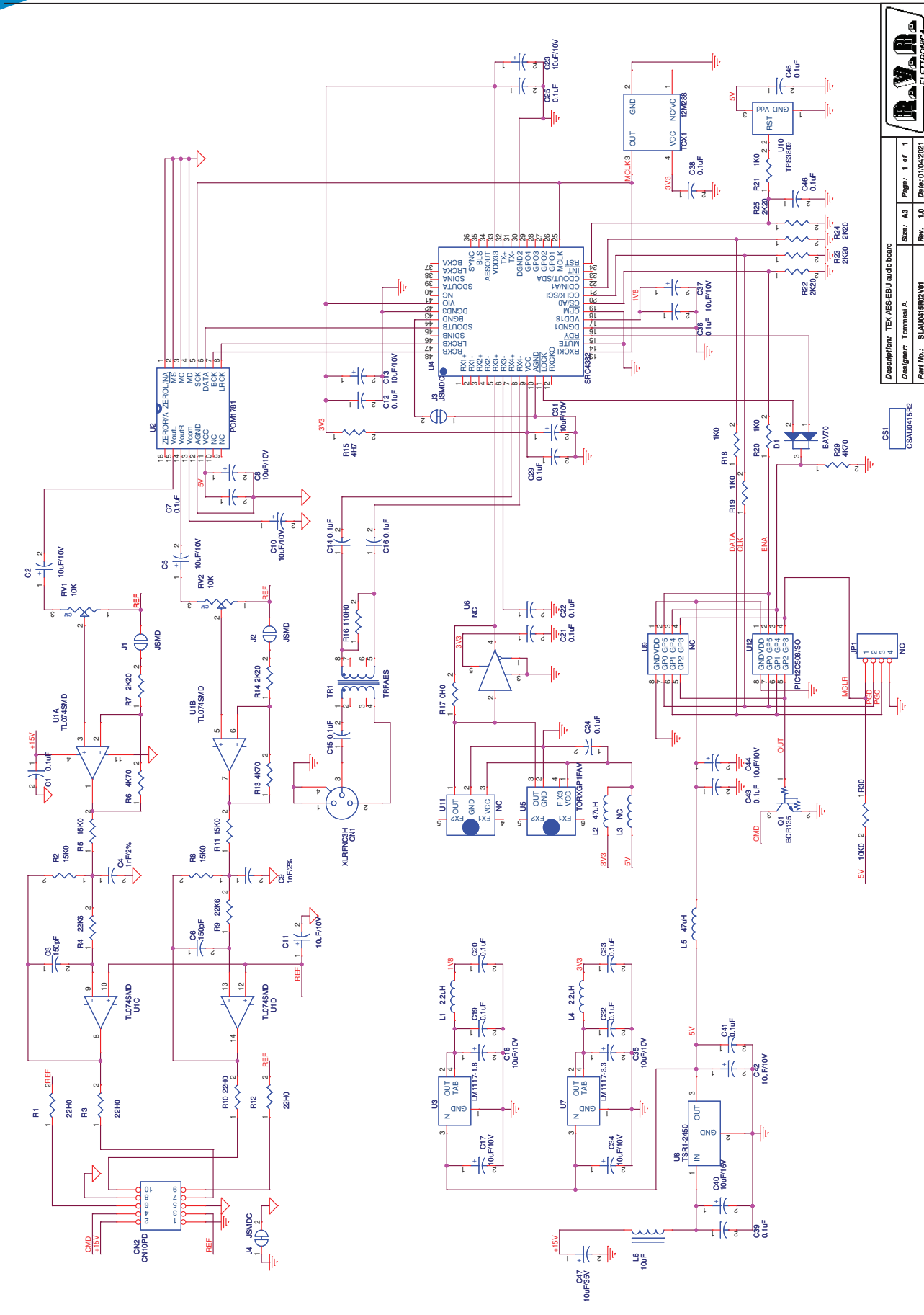
- 1 GND
- 2 Positive
- 3 Negative

### 3. Technical Annex

#### 3.1 AES/EBU Audio Card - SLAU0415R02V01



	PRODUCT NAME : TEX	PART NAME : AES-EBU AUDIO BOARD
	DESIGNER : A. TOMMASI	DATE : 01/04/21   REVISION : 1.0   SCALE : 2:1   SIZE : A4   PAGE : 1 DI 1
	ARCHIVING : "RVVUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE : /   DOCUMENT CODE : SLAU0415R02V01



Description: TEX AES-EBU audio board	
Designer: Tommasi A.	Size: A3
Rev. No.: SLAU0415R02/01	Page: 1 of 1
	Date: 01/04/2021

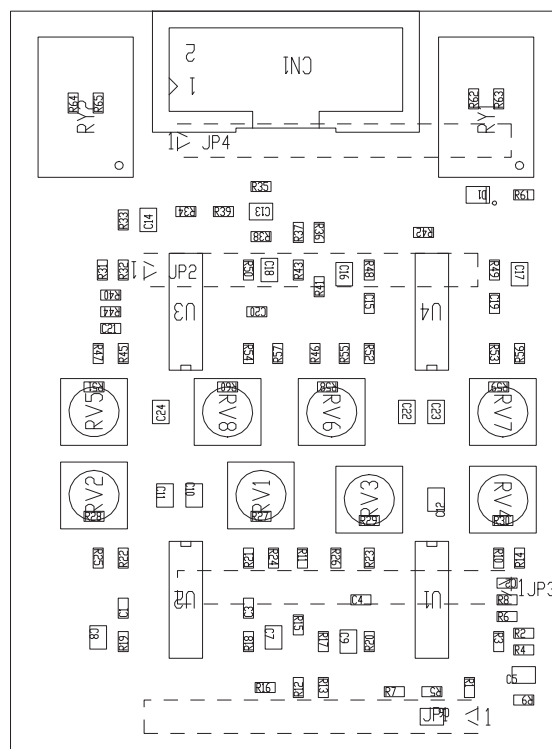
CS1  
CSAU0415R2



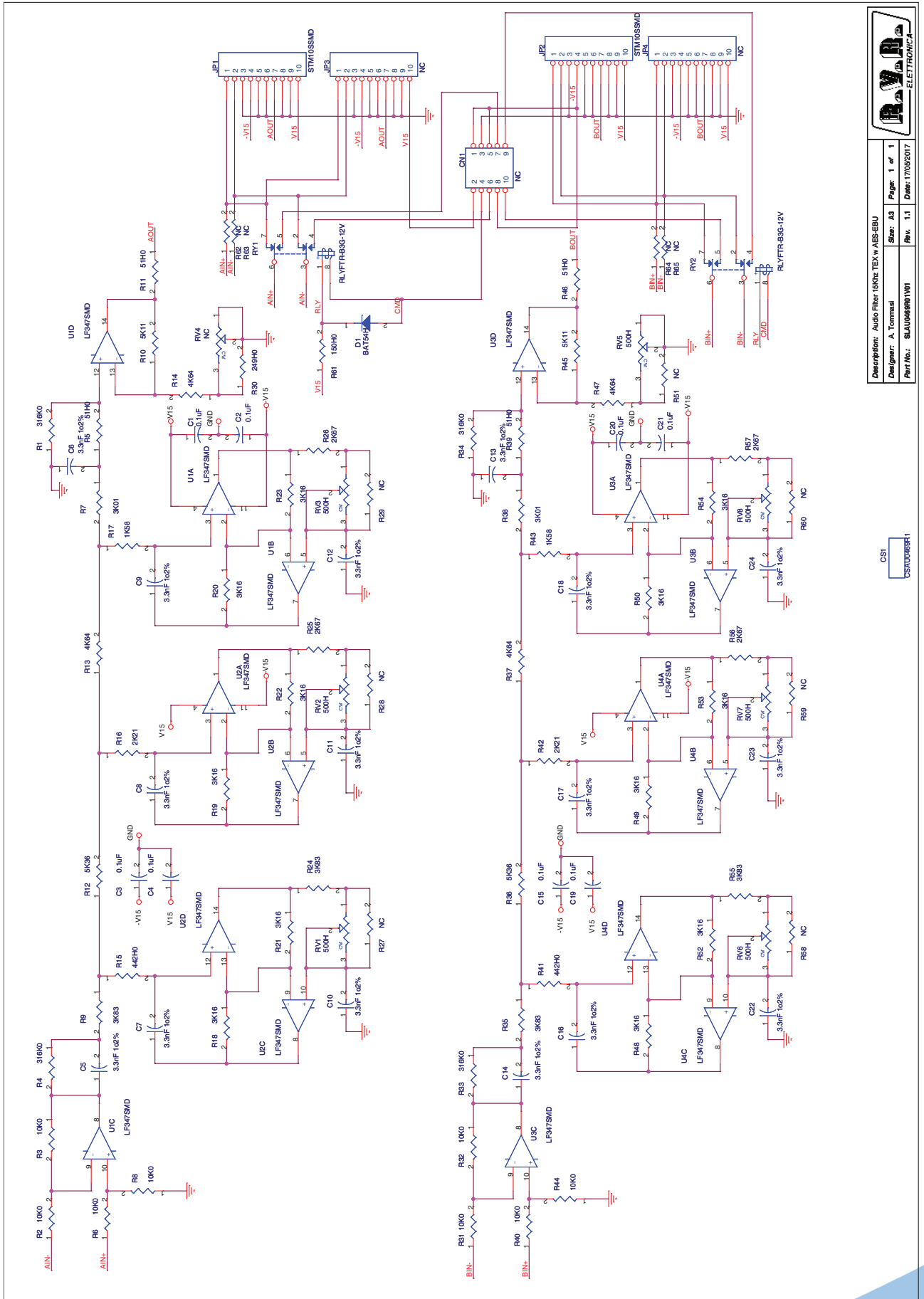
TEX AES-EBU audio board Revised: Thursday, April 01, 2021  
 SLAU0415R02V01 Revision: 1.0  
 Tommasi A.

Item	Quantity	Reference	Part	Description
1	1	CN1	XLRFC3H	Connettore XLR NC3 femm. cs 90°
2	1	CN2	CN10PD	Connettore 10 poli Flat cs
3	1		CSAU0415R2	Circuito stampato
4	22	C1, C7, C12, C14, C15, C16, C19, C20, C21, C22, C24, C25, C29, C32, C33, C36, C38, C39, C41, C43, C45, C46	0.1uF	Cond. SMD 0805
5	15	C2, C5, C8, C10, C11, C13, C17, C18, C23, C31, C34, C35, C37, C42, C44	10uF/10V	Cond. Elett. SMD tant. size A
6	2	C3, C6	150pF	Cond. SMD 0805 COG
7	2	C4, C9	1nF/2%	Cond. SMD 0805 COG
8	1	C40	10uF/16V	Cond. Elett. SMD d. 4mm
9	1	C47	10uF/35V	Cond. Elett. SMD d. 4mm
10	1	D1	BAV70	Doppio Diodo SMD SOT23
11	1	JP1	NC	Strip maschio 4 pin
12	2	J1, J2	JSMD	Pad SMD a saldare
13	2	J3, J4	JSMDC	Pad SMD a saldare chiuso
14	2	L1, L4	2.2uH	Induttanza SMD 3225 (1210)
15	2	L2, L5	47uH	Induttanza SMD 3225 (1210)
16	1	L3	NC	Induttanza SMD 3225 (1210)
17	1	L6	10uF	SMD Vertical Ind. WE PD2 series
18	1	Q1	BCR135	Trans./Res. NPN SOT23
19	2	RV1, RV2	10K	Trimmer Rg H 3296X
20	4	R1, R3, R10, R12	22H0	Res. SMD 0805 1%
21	4	R2, R5, R8, R11	15K0	Res. SMD 0805 1%
22	2	R4, R9	22K6	Res. SMD 0805 1%
23	3	R6, R13, R29	4K70	Res. SMD 0805 1%
24	6	R7, R14, R22, R23, R24, R25	2K20	Res. SMD 0805 1%
25	1	R15	4H7	Res. SMD 0805 1%
26	1	R16	110H0	Res. SMD 0805 1%
27	1	R17	0H0	Res. SMD 0805 1%
28	4	R18, R19, R20, R21	1K0	Res. SMD 0805 1%
29	1	R30	10K0	Res. SMD 0805 1%
30	1	TCX1	12M288	OSC SMD 5x3.2mm
31	1	TR1	TRFAES	Trasf. SMD AES/EBU
32	1	U1	TL074SMD	Quad Op. SMD SO14
33	1	U2	PCM1781	Stereo DAC
34	1	U3	LM1117-1.8	Stab. SMD SOT223
35	1	U4	SRC4382	2 ch SRC DIR DIT
36	1	U5	TORXGP1FAV	Ricevitore digitale ottico
37	1	U6	NC	Level translator
38	1	U7	LM1117-3.3	Stab. SMD SOT223
39	1	U8	TSR1-2450	Switching SIP3 regulator
40	1	U9	NC	PIC Microprocessor SMD
41	1	U10	TPS3809	uP supply supervisor
42	1	U11	NC	Ricevitore digitale ottico
43	1	U12	PIC12C508/SO	PIC Microprocessor SMD

### 3.2 15kHz audio filter & AES/EBU card - SLAU0469R01V01



PRODUCT NAME : TEX-LCD	PART NAME : AUDIO FILTER 15KHZ
DESIGNER : FRANCESCHI A.	DATE : 03/05/17   REVISION : 1.0   SCALE : 2:1   SIZE : A4   PAGE : 1 DI 1
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE : 057   DOCUMENT CODE : SLAU0469R01V**



<b>R.V.R.</b> ELETTRONICA	
Description: Audio Filter 16KHz TEXW AES-EBU	Page: 1 of 1
Designer: A. Tommasi	Size: A3
Part No.: SAU0408R1W1	Rev: 1.1
	Date: 17/05/2017

Audio Filter 15Khz TEX w AES/EBU Revised: 17/05/2017  
 SLAU0469R01V01 Revision: 1.1  
 A. Tommasi

Item	Quantity	Reference	Part	Description	Code
1	1	CN1	NC	Conn. 10 poli Flat cs	
2	1	CS1	CSAU0469R1	Circuito stampato	CSAU0469R1
3	8	C1, C2, C3, C4, C15, C19, C20, C21	0.1uF	Cond. SMD 0603	CCC063104KXC
4	16	C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C16, C17, C18, C22, C23, C24	3.3nF 1o2%	Cond. SMD 0805 COG	CCC085332GCB
5	1	D1	BAT54H	SOD323 SMD Diode	DISBAT54HT1G
6	2	JP1, JP2	STM105SMD	Male strip 10 pin SMD	CNTSTMT105DLS Precidip 350-10-110-00-106101
7	2	JP3, JP4	NC	Male strip 10 pin SMD	
8	7	RV1, RV2, RV3, RV5, RV6, RV7, RV8	500H	Trimmer SMD V 3314	RVT4X4H0500V
9	1	RV4	NC	Trimmer SMD V 3314	
10	2	RY1, RY2	RLYFTR-B3G-12V	Rele' FTR-B3G	RLM2V12V2AS Fujitsu FTR-B3G A 012 o FTR-BSS A 012
11	4	R1, R4, R33, R34	316K0	Res. SMD 0603	RCH063F0316K
12	8	R2, R3, R6, R8, R31, R32, R40, R44	10K0	Res. SMD 0603	RCH063F0010K
13	4	R5, R11, R39, R46	51H0	Res. SMD 0603	RCH063F0051H
14	2	R7, R38	3K01	Res. SMD 0603	RCH063F03K01
15	4	R9, R24, R35, R55	3K83	Res. SMD 0603	RCH063F03K83
16	2	R10, R45	5K11	Res. SMD 0603	RCH063F05K11
17	2	R12, R36	5K36	Res. SMD 0603	RCH063F05K36
18	4	R13, R14, R37, R47	4K64	Res. SMD 0603	RCH063F04K64
19	2	R15, R41	442H0	Res. SMD 0603	RCH063F0442H
20	2	R16, R42	2K21	Res. SMD 0603	RCH063F02K21
21	2	R17, R43	1K58	Res. SMD 0603	RCH063F01K58
22	12	R18, R19, R20, R21, R22, R23, R48, R49, R50, R52, R53, R54	3K16	Res. SMD 0603	RCH063F03K16
23	4	R25, R26, R56, R57	2K67	Res. SMD 0603	RCH063F02K67
24	11	R27, R28, R29, R51, R58, R59, R60, R62, R63, R64, R65	NC	Res. SMD 0603	
25	1	R30	249H0	Res. SMD 0603	RCH063F0249H
26	1	R61	150H0	Res. SMD 0603	RCH063F0150H
27	4	U1, U2, U3, U4	LF347SMD	Quad Op. SMD SO14	CILLF347SMD









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