



# HC04CH-FM

## TECHNICAL ANNEX VOLUME 2



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Member of CISQ Federation



CERTIFIED MANAGEMENT SYSTEM  
ISO 9001



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## 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 HC04CH-FM. L'appendice è composta dalle seguenti sezioni:

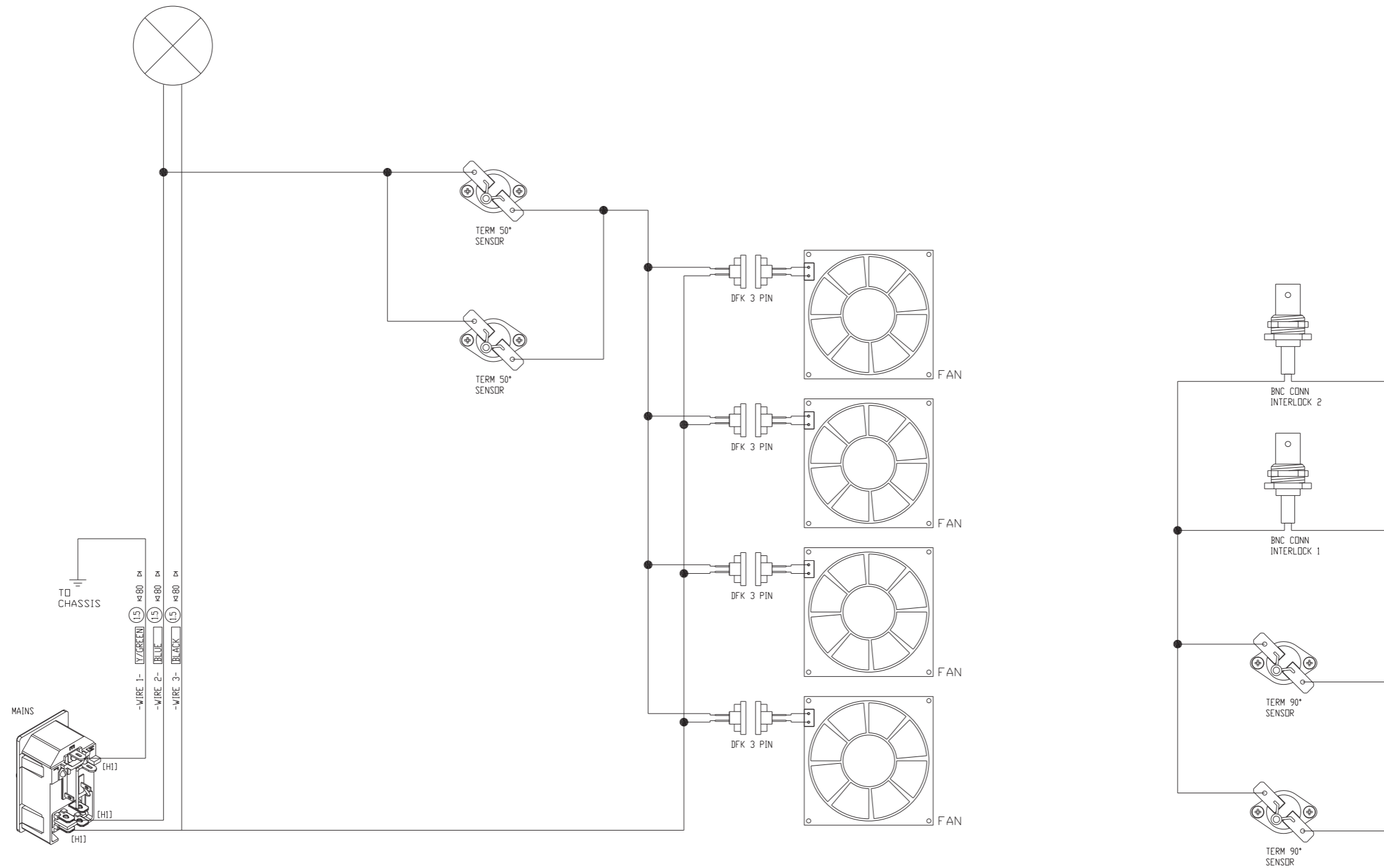
*This part of the manual contains the technical details about the different boards of the HC04CH-FM. This appendix is composed of the following sections:*

Description	RVR Code	Vers.	Pages
Wiring Diagram	/	1.0	1
Hybrid Combiner Board	SLCM0492R01V01	1.0	3
Band Pass Filter Card	SLFI0495R01V01	1.0	5
RF Measure Card	SLDC0497R01V01	1.0	7

### Document History

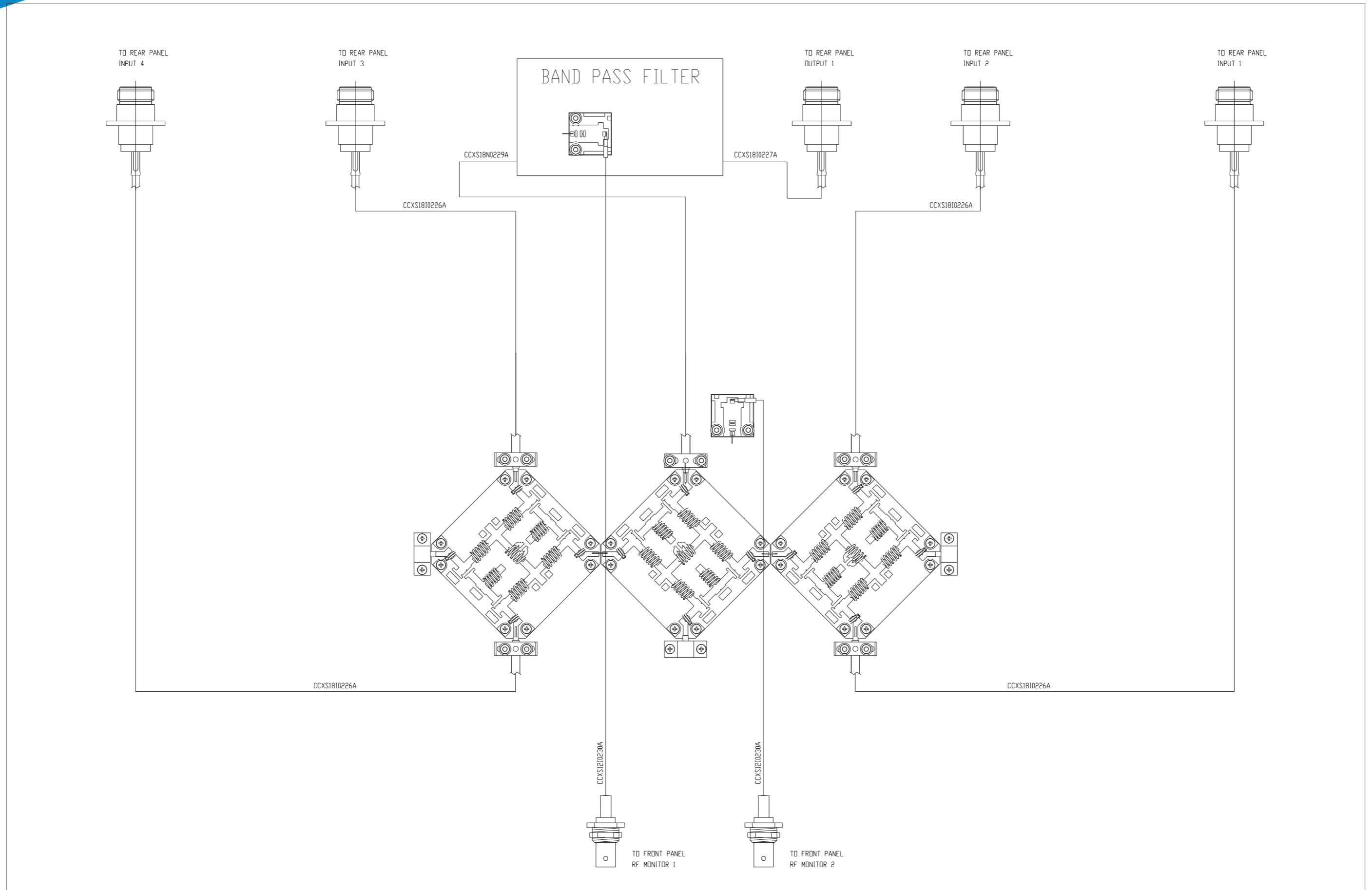
Date	Version	Reason	Code	Editor
29/01/2021	1.0	First Version	/	J.H. Berti

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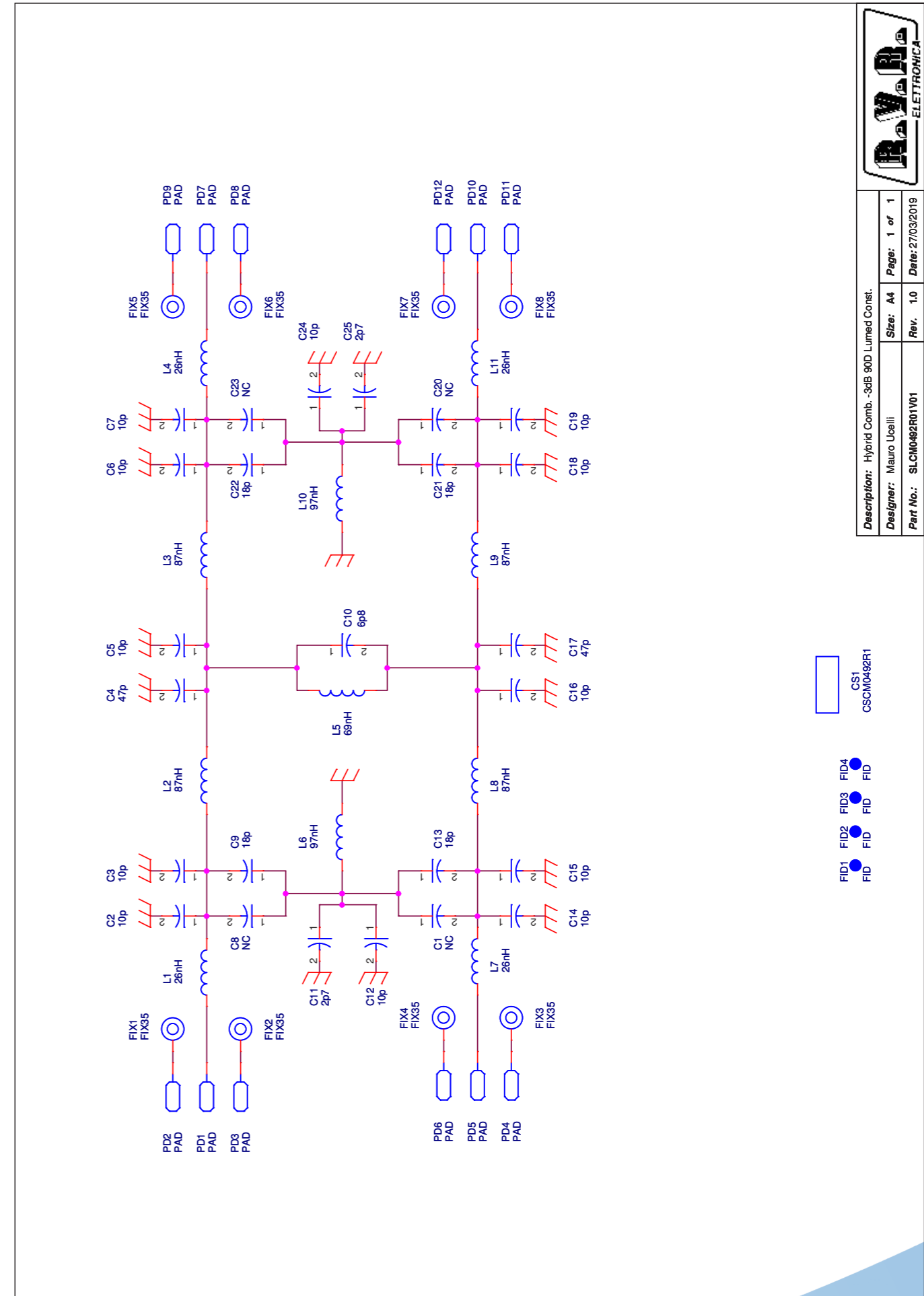
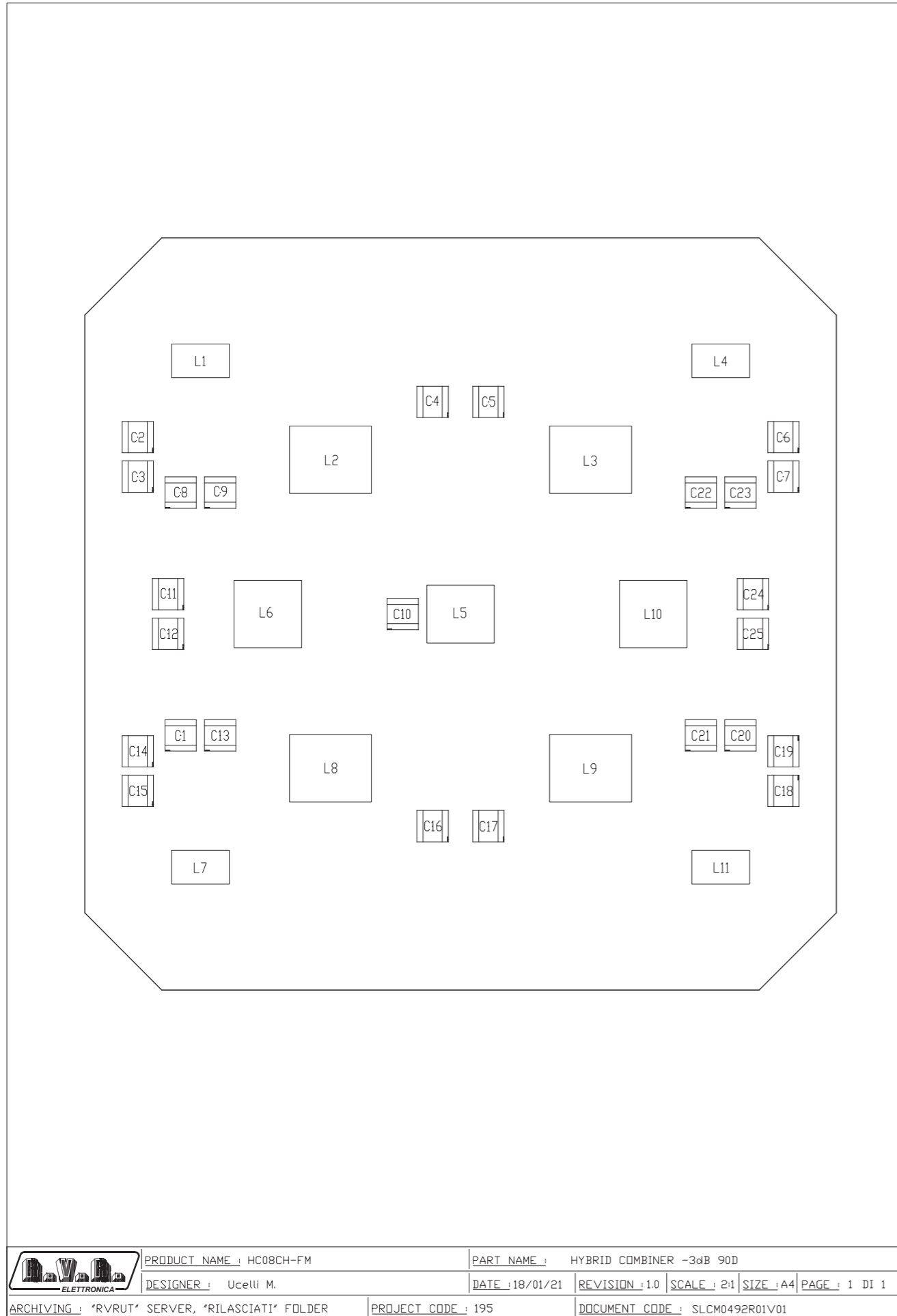
	PRODUCT NAME : HC04CH-FM	PART NAME : WIRING DIAGRAM			
	DESIGNER : G. DE DONNO	DATE 27/01/21	REVISION 1.0	SCALE 1:1	SIZE A3
ARCHIVING : 'RVRUT' SERVER, 'RILASCIATI' FOLDER		PROJECT CODE : 195	DOCUMENT CODE : <		

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	PRODUCT NAME : HC04CH-FM	PART NAME : WIRING DIAGRAM			
	DESIGNER : G. DE DONNO	DATE 27/01/21	REVISION 1.0	SCALE 1:1	SIZE A3
ARCHIVING : "RVUT" SERVER, "RILASCIATI" FOLDER		PROJECT CODE : 195	DOCUMENT CODE : <		

SLCM0492R01V01



<b>R.V.R.</b> ELETTRONICA	
Description: Hybrid Comb. -3dB 90D Lumped Const.	Size: A4
Designer: Mauro Ucelli	Page: 1 of 1
Part No.: SLCM0492R01V01	Rev. 1.0
	Date: 27/03/2019

- CS1
- CSCM0492R1
- FID1
- FID2
- FID3
- FID4
- FID
- FID
- FID
- FID

<b>R.V.R.</b> ELETTRONICA	PRODUCT NAME : HC08CH-FM	PART NAME : HYBRID COMBINER -3dB 90D
	DESIGNER : Ucelli M.	DATE : 18/01/21
	REVISION : 1.0	SCALE : 2:1
	SIZE : A4	PAGE : 1 DI 1
ARCHIVING : 'RVRUT' SERVER, 'RILASCIATI' FOLDER	PROJECT CODE : 195	DOCUMENT CODE : SLCM0492R01V01

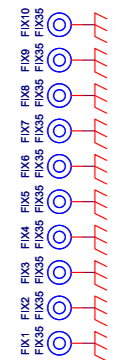
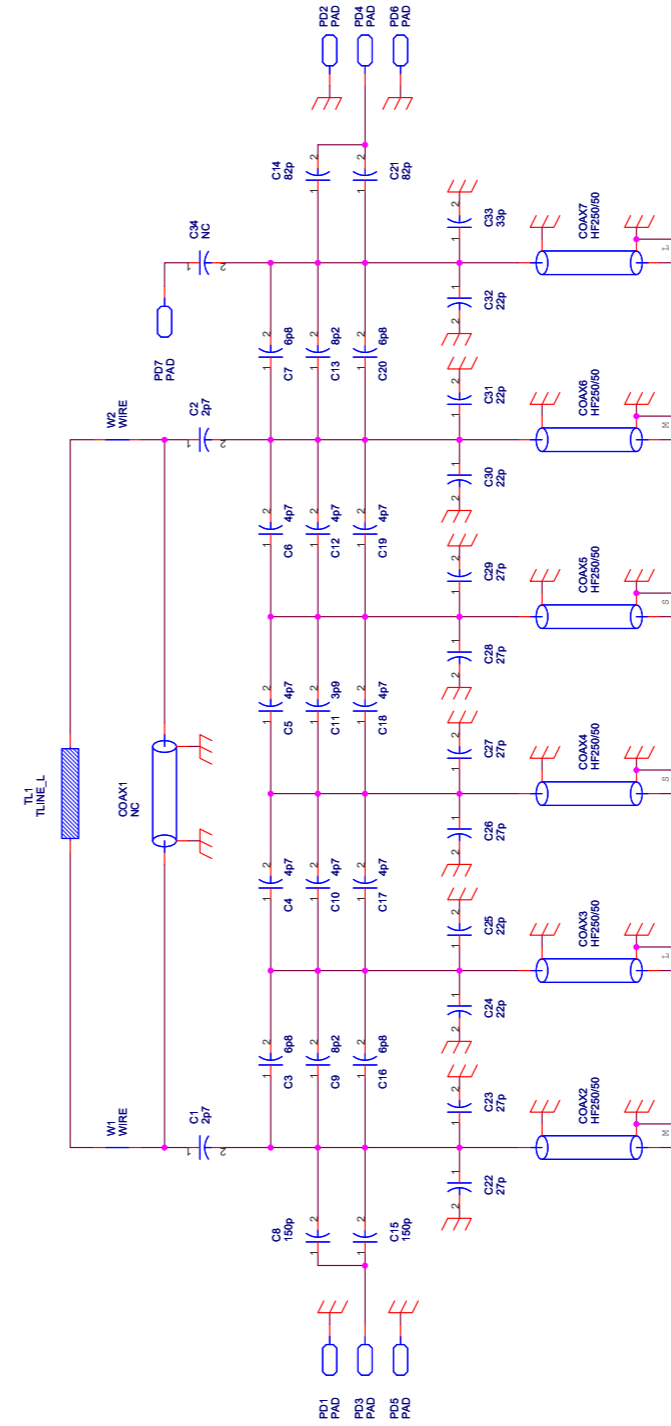
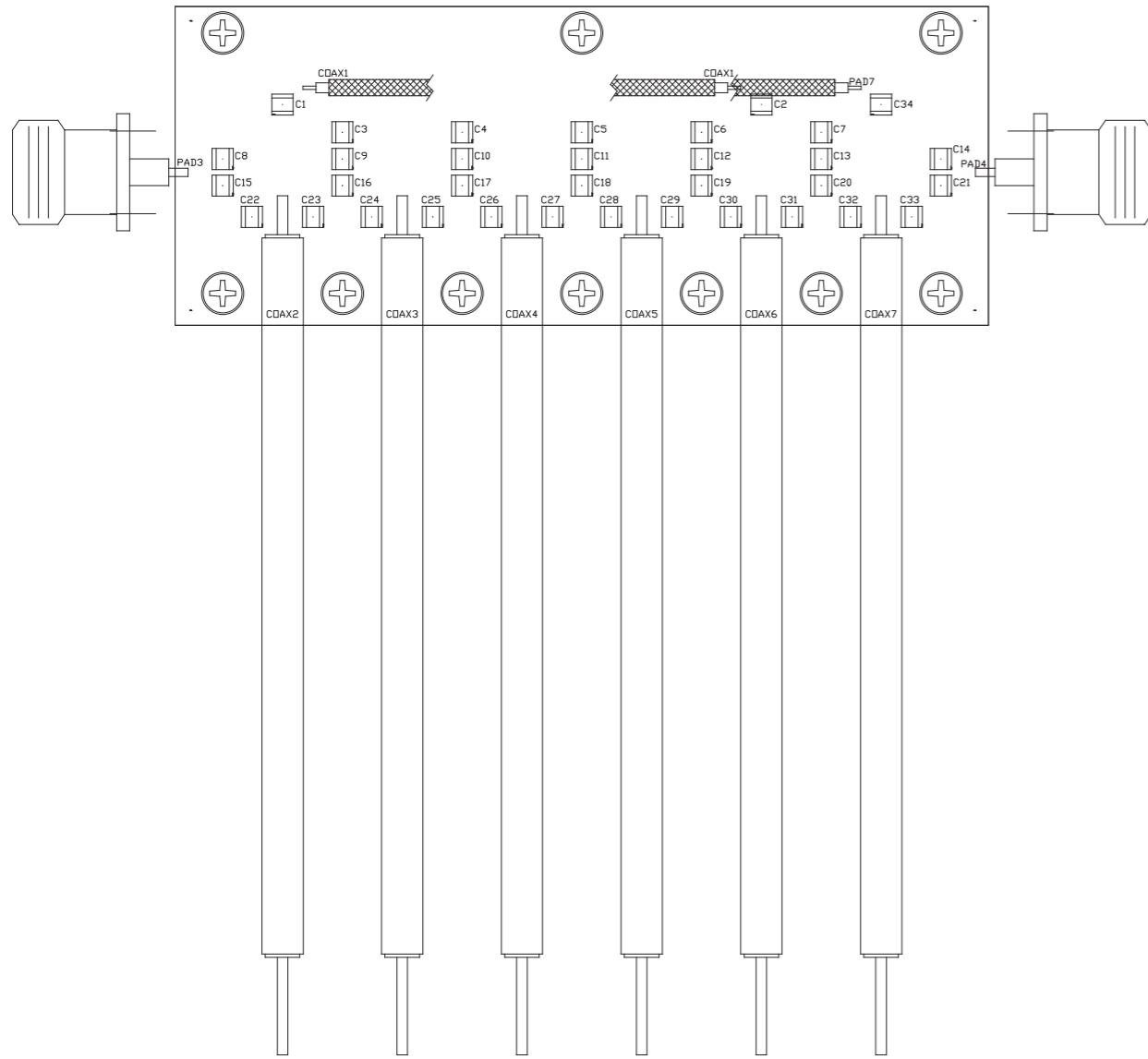
SLCM0492R01V01

Hybrid Comb. -3dB 90D Lumed Const.  
 SLCM0492R01V01  
 Revision: 1.0  
 #####  
 Mauro Ucelli

Item	Quantity	Reference	Part	Description
1	1	CS1	CSCM0492R1	
2	4	C1,C8,C20,C23	NC	HQ Ceramic Capacitor NP0 / C0G
3	12	C2,C3,C5,C6,C7,C12,C14, C15,C16,C18,C19,C24	10p	HQ Ceramic Capacitor NP0 / C0G
4	2	C4,C17	47p	HQ Ceramic Capacitor NP0 / C0G
5	4	C9,C13,C21,C22	18p	HQ Ceramic Capacitor NP0 / C0G
6	1	C10	6p8	HQ Ceramic Capacitor NP0 / C0G
7	2	C11,C25	2p7	HQ Ceramic Capacitor NP0 / C0G
8	8	FIX1,FIX2,FIX3,FIX4,FIX5, FIX6,FIX7,FIX8	FIX35	*
9	4	L1,L4,L7,L11	26nH	2spire filo Ø1 rame arg. avvolte su Ø5.5 lung 2.5
10	4	L2,L3,L8,L9	87nH	6spire filo Ø1 rame arg. avvolte su Ø5.5 lung 12
11	1	L5	69nH	5spire filo Ø1 rame arg. avvolte su Ø5.5 lung 11
12	2	L6,L10	97nH	6spire filo Ø1 rame arg. avvolte su Ø5.5 lung 10
13	12	PD1,PD2,PD3,PD4,PD5,PI PAD PD7,PD8,PD9,PD10,PD11, PD12		*



SLFI0495R01V01



R.V.R. ELETTRONICA

Description: Band Pass Filter FM 50W  
 Designer: Mauro Ucelli  
 Rev. 1.0 Date: 05/04/2019  
 Part No.: SLFI0495R01V01

Page: 1 of 1  
 Size: A3

R.V.R. ELETTRONICA	PRODUCT NAME : HC08CH-FM	PART NAME : BAND PASS FILTER			
	DESIGNER : M. UCELLI	DATE : 19/01/21	REVISION : 1.0	SCALE : 1:1	SIZE : A4
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE : 195	DOCUMENT CODE : SLFI0495R01V01			

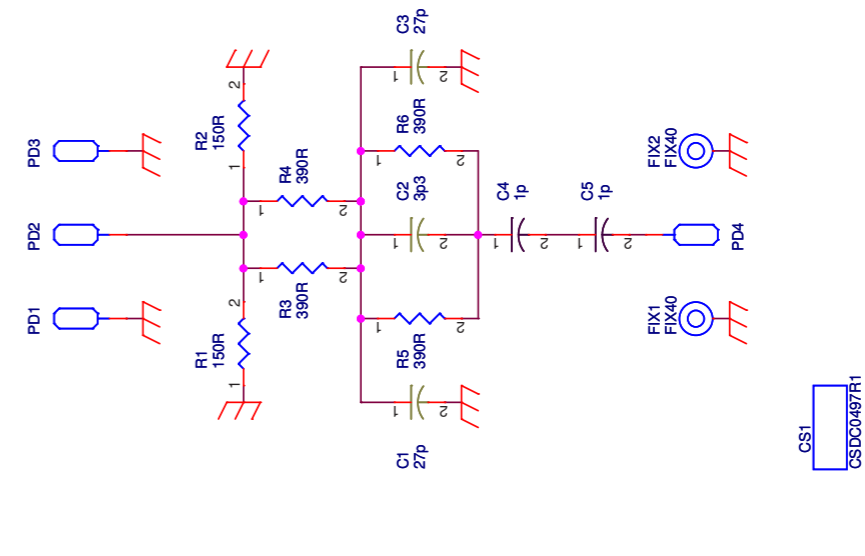
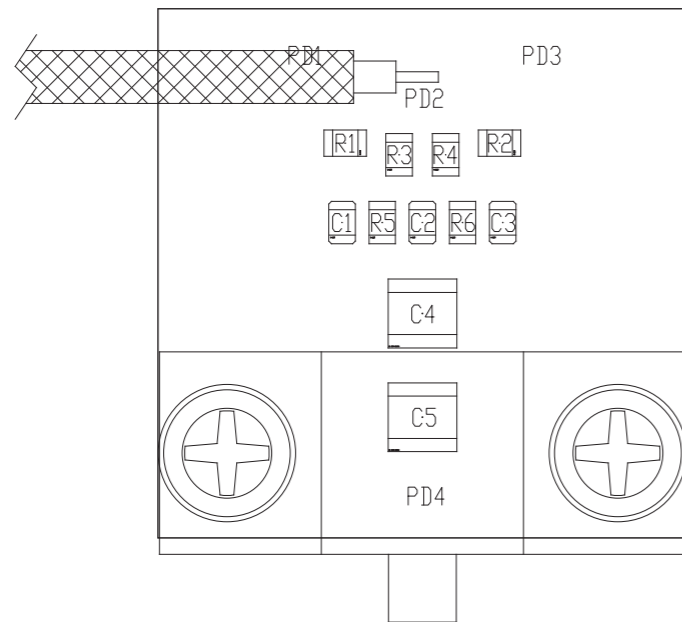
SLFI0495R01V01

Band Pass Filter FM 50W  
 SLFI0495R01V01  
 Revision: 1.0  
 05/04/2019  
 Mauro Ucelli

Item	Quantity	Reference	Part	Description
1	1	COAX1	NC	CAVSM141/50 (SM141/50) - Cut 77mm S2S
2	6	COAX2,COAX3,COAX4,COAX5,COAX6,COAX7	HF250/50	CAVHF250/50 Cut 108mm S2S
3	1	CS1	CSFI0495R1	PCB on PTFE
4	1	CS2	CSFI0496R1	PCB on FR4
5	2	C1,C2	2p7	HQ Ceramic Capacitor NP0 / C0G
6	4	C3,C7,C16,C20	6p8	HQ Ceramic Capacitor NP0 / C0G
7	8	C4,C5,C6,C10,C12,C17,C18,C19	4p7	HQ Ceramic Capacitor NP0 / C0G
8	2	C8,C15	150p	HQ Ceramic Capacitor NP0 / C0G
9	2	C9,C13	8p2	HQ Ceramic Capacitor NP0 / C0G
10	1	C11	3p9	HQ Ceramic Capacitor NP0 / C0G
11	2	C14,C21	82p	HQ Ceramic Capacitor NP0 / C0G
12	6	C22,C23,C26,C27,C28,C29	27p	HQ Ceramic Capacitor NP0 / C0G
13	5	C24,C25,C30,C31,C32	22p	HQ Ceramic Capacitor NP0 / C0G
14	1	C33	33p	HQ Ceramic Capacitor NP0 / C0G
15	1	C34	NC	HQ Ceramic Capacitor NP0 / C0G
16	4	FID1,FID2,FID3,FID4	FID	Fiducial
17	10	FIX1,FIX2,FIX3,FIX4,FIX5, FIX6,FIX7,FIX8,FIX9, FIX10	FIX35	*
18	7	PD1,PD2,PD3,PD4,PD5,PD6, PD7	PAD	*
19	1	TL1	TLINE_L	NOT a Component
20	2	W1,W2	WIRE	Filo Rame Arg D. 0.5mm Lugh. 5mm



SLDC0497R01V01



Description: RF Sniffer	Page: 1 of 1
Designer: Mauro Ucelli	Size: A4
Part No.: SLDC0497R01V01	Rev. 1.0
	Date: 07/04/2019

	PRODUCT NAME : HC08CH-FM	PART NAME : RF SNIFFER			
	DESIGNER : M. UCELLI	DATE : 18/01/21	REVISION : 1.0	SCALE : 3:1	SIZE : A4
ARCHIVING : "RVRUT" SERVER, "RILASCIATI" FOLDER	PROJECT CODE : 195	DOCUMENT CODE : SLDC0497R01V01			

SLDC0497R01V01

RF Sniffer  
 SLDC0497R01V01  
 Revision: 1.0  
 08/04/2019  
 Mauro Ucelli

Item	Quantity	Reference	Part	Description
1	2	C1,C3	27p	Cond. SMD 0805 COG
2	1	C2	3p3	Cond. SMD 0805 COG
3	2	C4,C5	1p	Cond. SMD 1212 HQ
4	3	FID1,FID2,FID3	FID	Fiducial CS
5	2	FIX1,FIX2	FIX40	
6	4	PD1,PD2,PD3,PD4	PAD	PCB pad Not a Component
7	2	R1,R2	150R	Res. SMD 0805
8	4	R3,R4,R5,R6	390R	Res. SMD 0805
9	1	CS1	PCB	PCB