



User Guide

EVB-ATEK258P4-01

Document Code : 023-102201
Revision No : 04
Revision Date : 25/07/2023

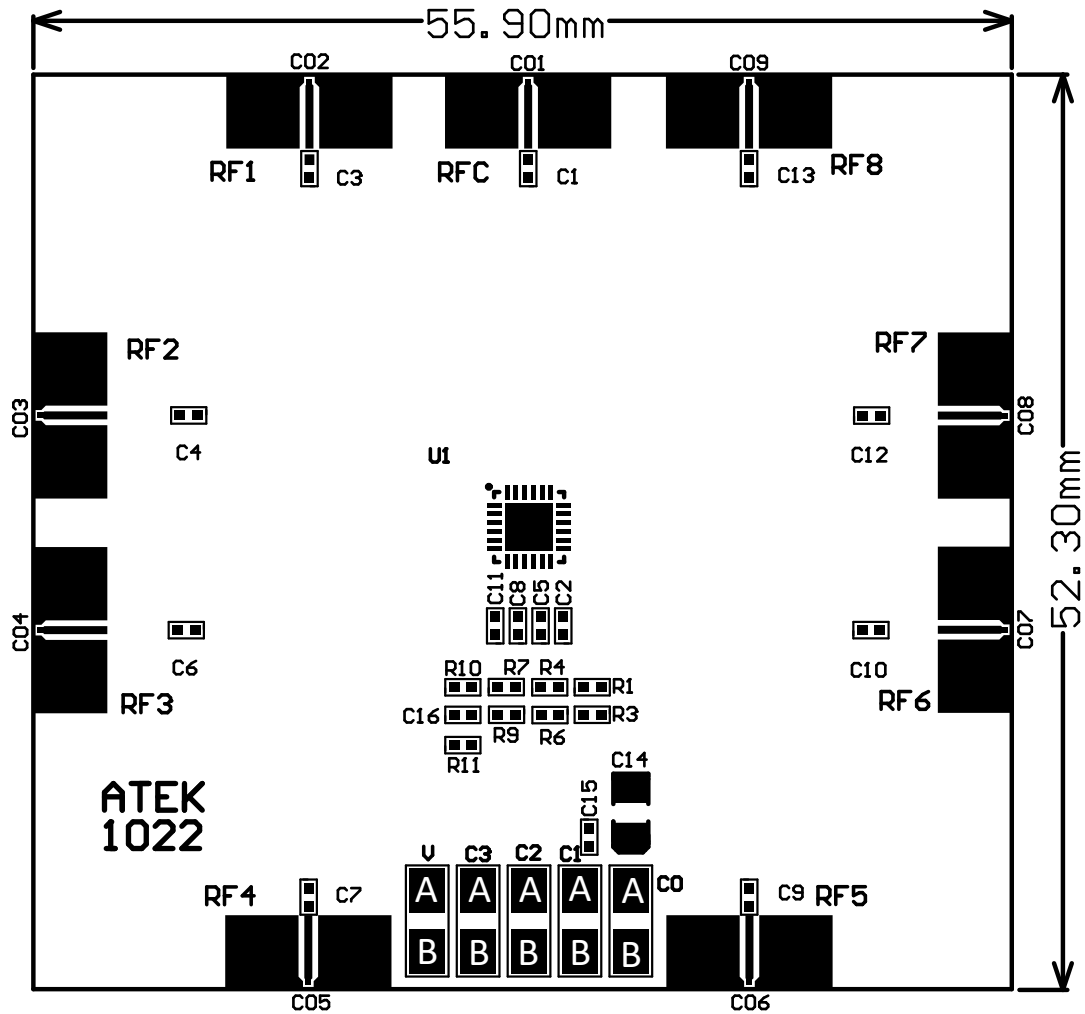
Revisions

Revision No	Revision Date	Revision Reason	Section / Page No
1.0	20.06.2022	Initial Release	
1.1	25.07.2023	Pin Definition Revised	
1.2	16.12.2024	Pin Definition Table Revised	
1.3	16.12.2024	Pin Definition Notes Added	

INDEX

1	GENERAL INFORMATION	3
2	DESIGN INFORMATION	4
2.1	SCHEMATIC	4
2.2	BOM	4
3	TYPICAL PERFORMANCE PLOTS.....	5

1 GENERAL INFORMATION



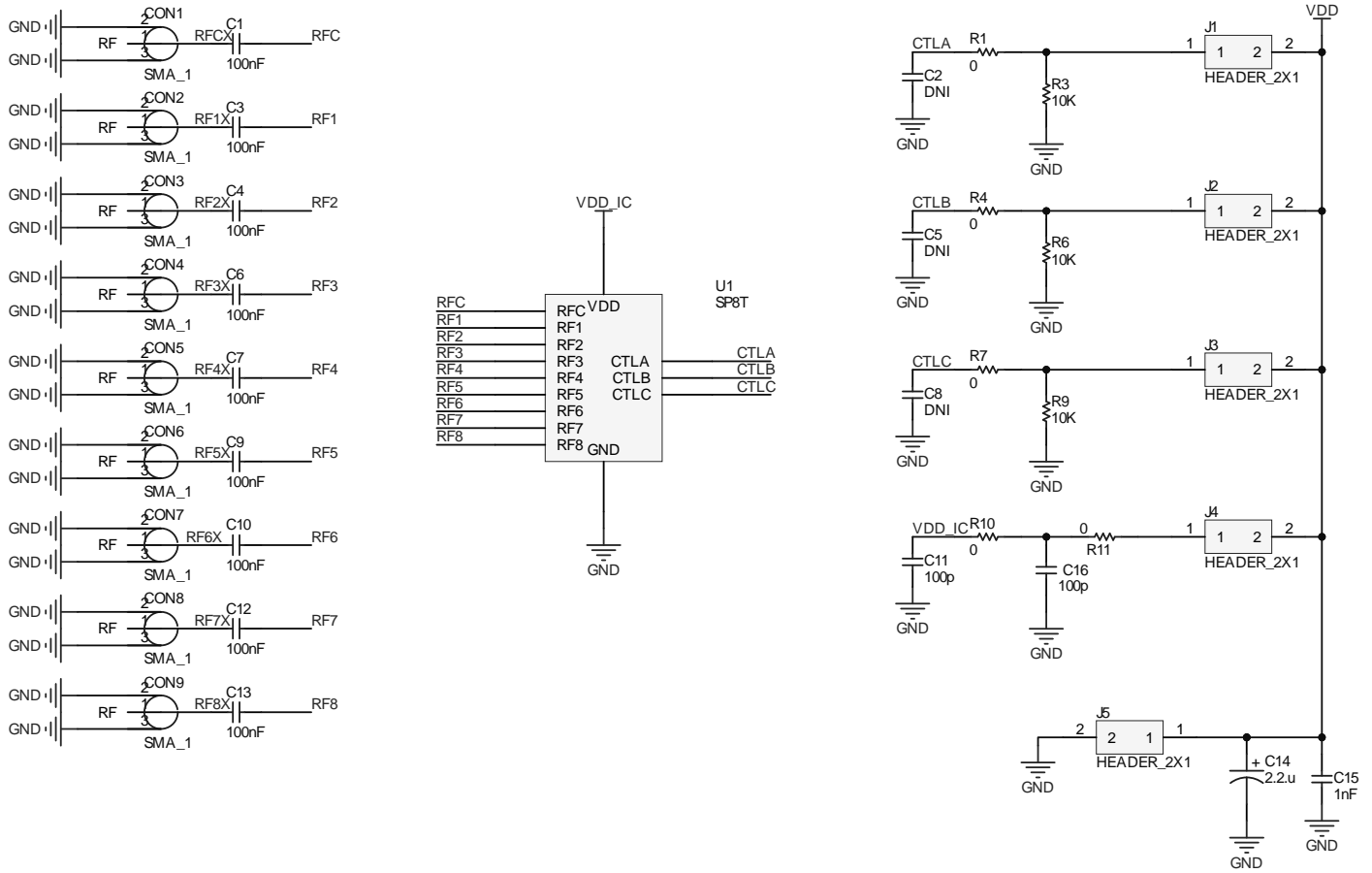
PIN Name	Definition	Comment
CO1	RF IN	SMA Connector
CO2, CO3, CO4, CO5, CO6, CO7, CO8, CO9	RF OUT	SMA Connector
V.A, V.B, C0.A, C1.A, C2.A, C3.A	VDD	2.54mm Header
C0.B	GND	2.54mm Header
C1.B	CTRL A	2.54mm Header
C2.B	CTRL B	2.54mm Header
C3.B	CTRL C	2.54mm Header

Notes:

1. Refer to the datasheet for VDD and Control Voltages details.
2. Configuration Instruction for first usage:
 - a. Firstly, connect V.A and V.B pins with a jumper.
 - b. After that apply VDD voltage to C0.A.
 - c. All A lines are shorted on the PCB so C1, C2 and C3 pins can be configurable with jumper between A and B pins to choose the requested channel.
 - d. Also, C1.B, C2.B and C3.B pins can be usable directly to choose the requested channel.

2 DESIGN INFORMATION

2.1 SCHEMATIC



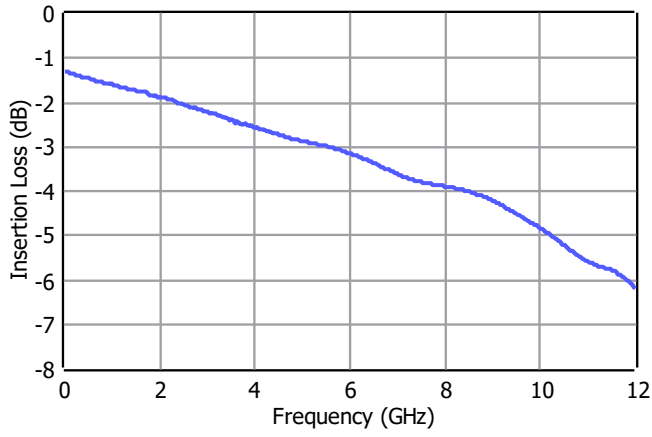
2.2 BOM

Designator	Footprint	Qty	Comment	PN
C1, C3, C4, C6, C7, C9, C10, C12, C13	0402	9	100nF	
C2, C5, C8	0402	3	DNP	
C11, C16	0402	1	100nF	
C14	CASEA	1	2.2uF	
C15	0402	1	1nF	
CO1, CO2, CO3, CO4, CO5, CO6, CO7, CO8, CO9	SMA Connector	9	SMA Connector	
J1, J2, J3, J4, J5	2x1 Header	5	2x1 Header	
R1, R4, R7, R10, R11	0402	5	0R	
R3, R6, R9	0402	3	10k	
U1	ATEKQ4424	1	SP8T	ATEK258P4

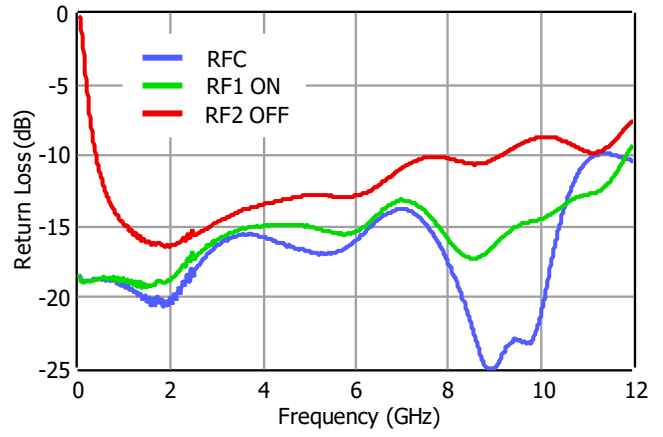
3 TYPICAL PERFORMANCE PLOTS

Conditions unless otherwise specified: $V_{CTRL} = 0/5\text{ V}$, $T = 25\text{ C}$, CW. For details, please refer to the datasheet.

Insertion Loss



Return Loss



Isolation

