



SILICON LABS

BG22 Dual Polarized Antenna Array Radio Board 4x4 Antenna Array


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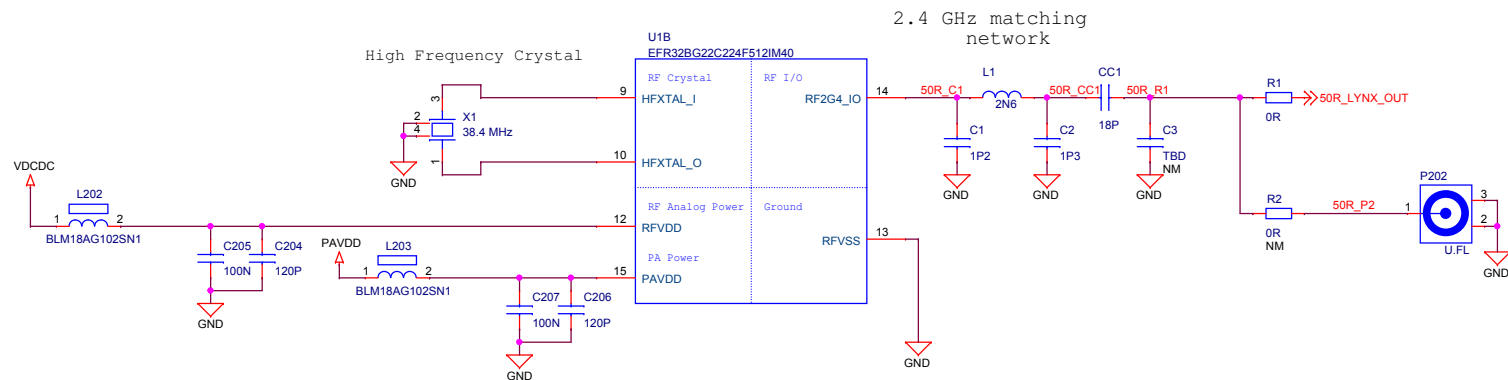
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Revision History

Rev.	Description
A00	Initial production release.
A01	Updated PCB variant. No change in the components.

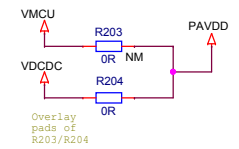
 SILICON LABS		Board Name BG22 Dual Polarized Antenna Array Radio Board	
Designed ADS		Approved RGU	
Size A3	Sheet Modified Date Thursday, January 13, 2022	Board Number BRD4191A	Revision A01
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Antenna & Radio Interface

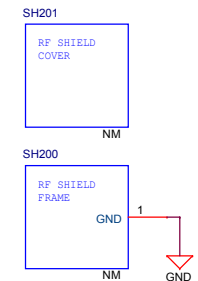


PAVDD Configuration

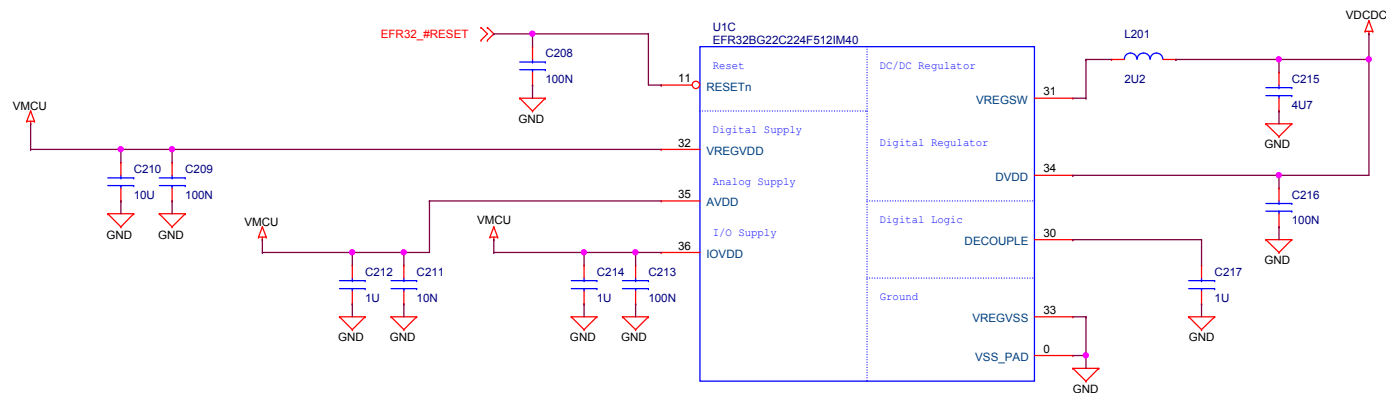
	Power Config 1 VMCU to PAVDD	Power Config 2 DCDC to PAVDD
R203	Mount	Not mount
R204	Not mount	Mount



RF Shielding



Power & Decoupling



	Board Name
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BG22 Dual Polarized Antenna Array Radio Board

Page Title

RF, Antenna and Power

	Board Number
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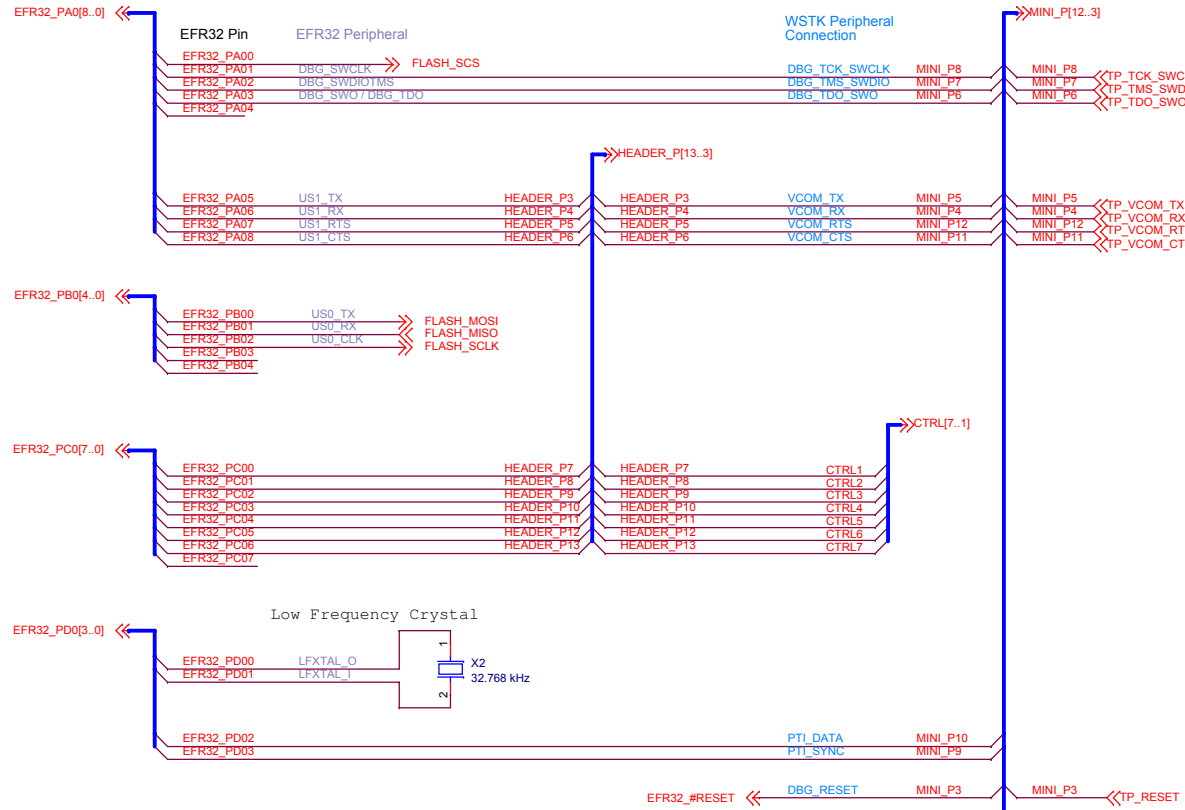
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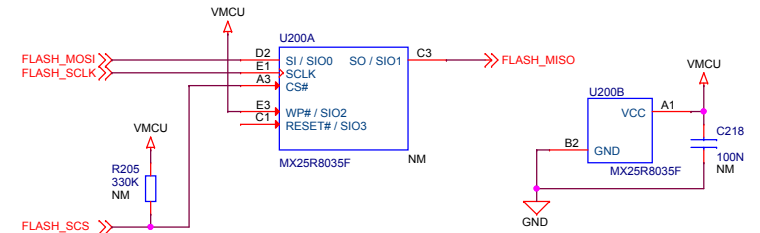
EFR32 Pin Mapping



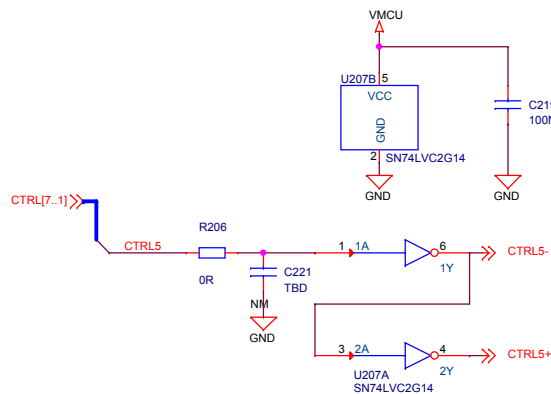
EFR32 I/O Port Pins



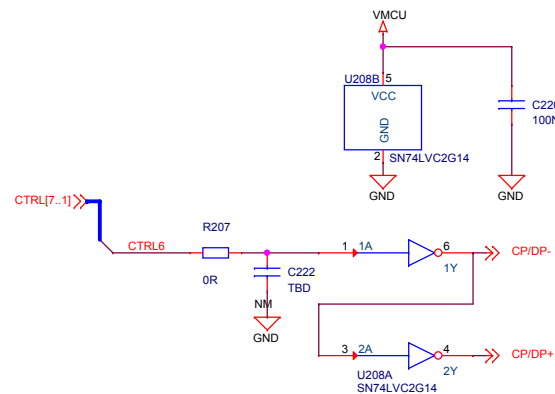
Serial Flash



CHW Selection Signal Buffering

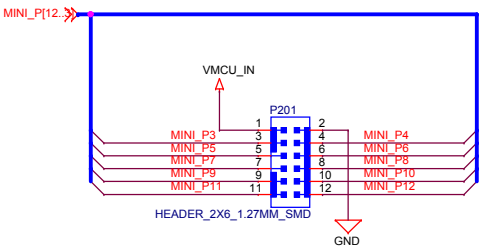


CP/DP Signal Buffering

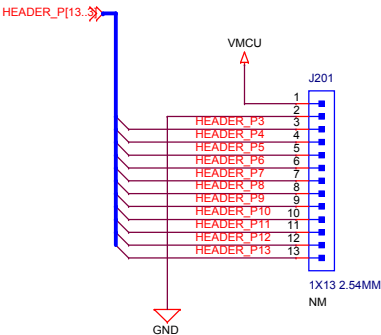


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Designed ADS		Page Title	
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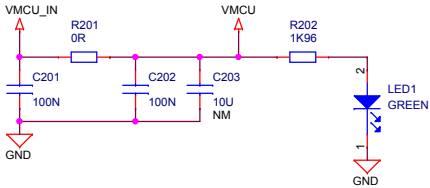
Simplicity Mini+ Connector



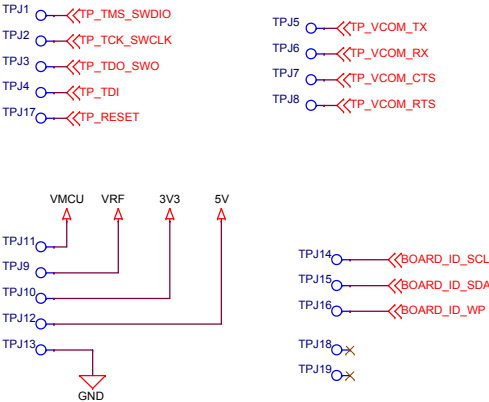
Breakout Header




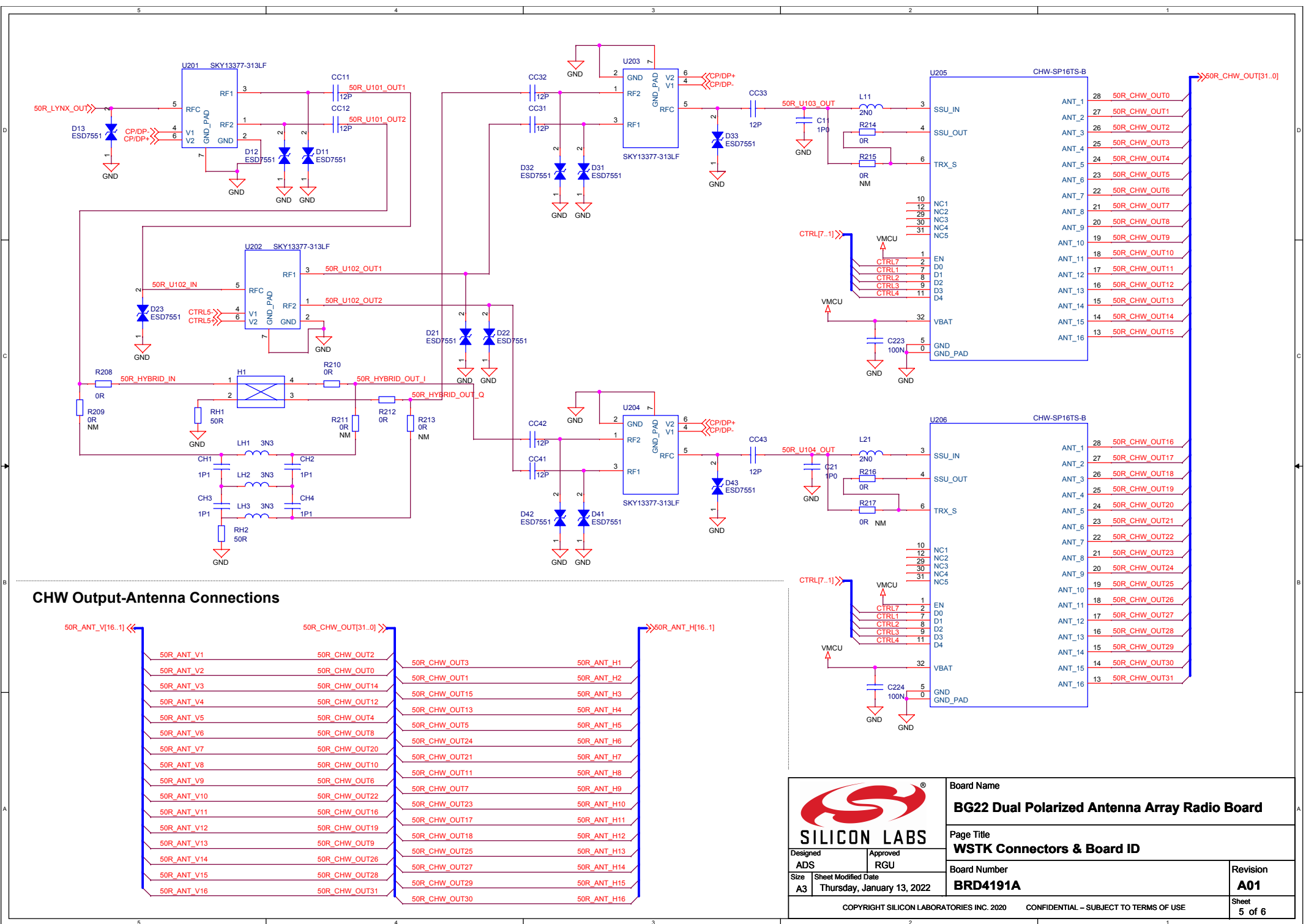
WSTK Power Decoupling



Test Points




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		Page Title				WSTK Connectors & Board ID	
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CHW Output-Antenna Connections

50R_ANT_V[16..1]	50R_CHW_OUT[31..0]	50R_ANT_H[16..1]
50R_ANT_V1	50R_CHW_OUT2	50R_ANT_H1
50R_ANT_V2	50R_CHW_OUT0	50R_ANT_H2
50R_ANT_V3	50R_CHW_OUT14	50R_ANT_H3
50R_ANT_V4	50R_CHW_OUT12	50R_ANT_H4
50R_ANT_V5	50R_CHW_OUT4	50R_ANT_H5
50R_ANT_V6	50R_CHW_OUT8	50R_ANT_H6
50R_ANT_V7	50R_CHW_OUT20	50R_ANT_H7
50R_ANT_V8	50R_CHW_OUT10	50R_ANT_H8
50R_ANT_V9	50R_CHW_OUT6	50R_ANT_H9
50R_ANT_V10	50R_CHW_OUT22	50R_ANT_H10
50R_ANT_V11	50R_CHW_OUT16	50R_ANT_H11
50R_ANT_V12	50R_CHW_OUT19	50R_ANT_H12
50R_ANT_V13	50R_CHW_OUT9	50R_ANT_H13
50R_ANT_V14	50R_CHW_OUT26	50R_ANT_H14
50R_ANT_V15	50R_CHW_OUT28	50R_ANT_H15
50R_ANT_V16	50R_CHW_OUT31	50R_ANT_H16



SILICON LABS

Board Name
BG22 Dual Polarized Antenna Array Radio Board

Page Title
WSTK Connectors & Board ID

Board Number
BRD4191A

Revision
A01

Designed
ADS

Approved
RGU

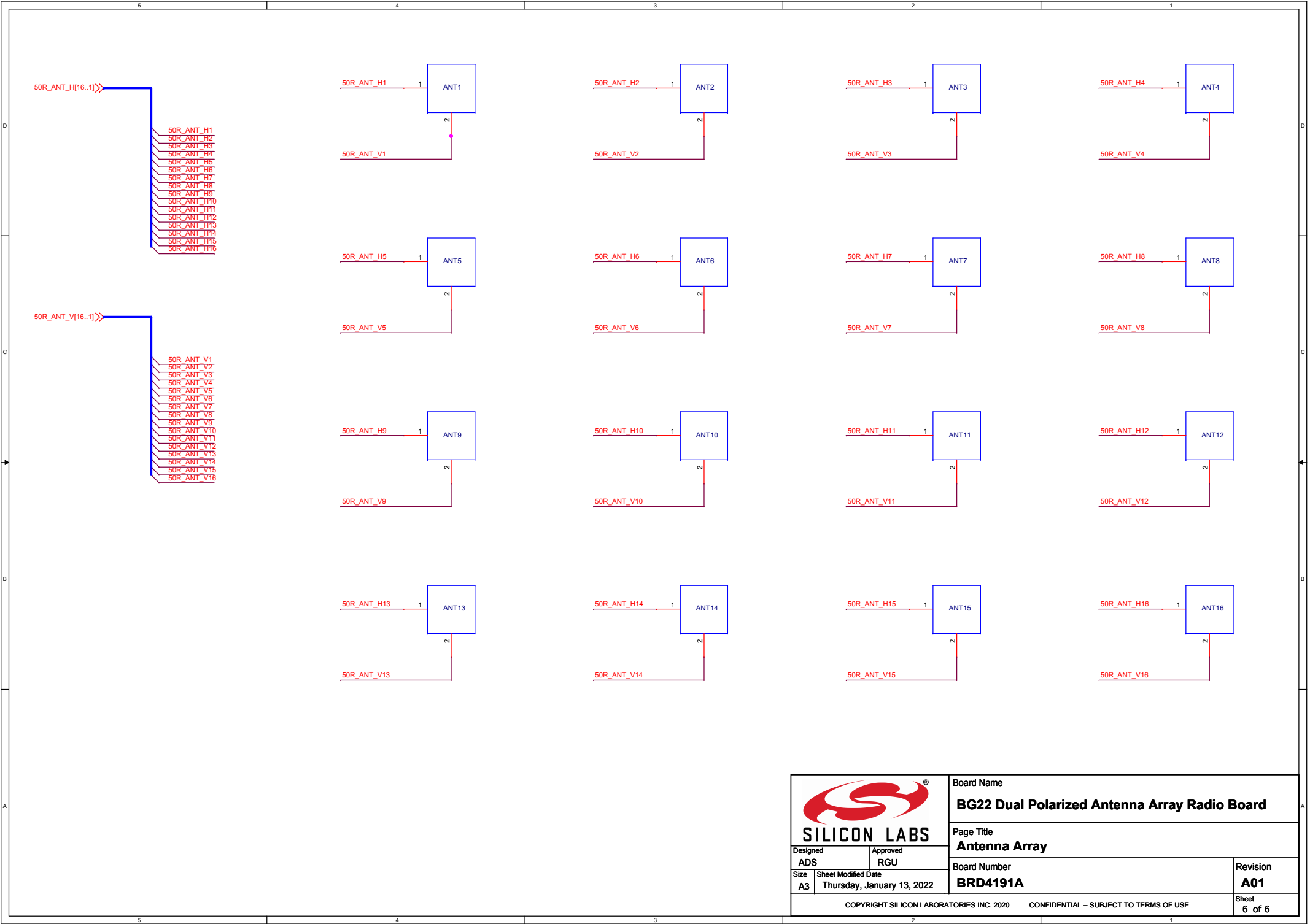
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