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# FCC CLASS II PERMISSIVE CHANGE REQUEST LETTER

Reason for Amendment (current / obsolete)	Revision History		
	From	То	Approved Date
Initial Release (obsolete)	1.0	1.0	Feb-20-2012
Update company logo (current)	1.0	2.0	Jul-29-2019





# **FCC Class II Permissive Change Request Letter**

Date: 09/30/2021

To FCC:

# RE: FCC Permissive II Change Request for Company: JADAK, a business unit of Novanta Corporation FCC ID: QV5IZAR

We are submitting an application for a class II permissive change to the FCC approval of the Company name: JADAK, a business unit of Novanta Corporation, product description: IZAR RFID Reader (FCC: **QV5IZAR**, Original Grant Date: 05/22/2018). Here are the changes:

1) The RFID module, with reference designator U1, inside the product sold under the model name IZAR, with the FCC/IC ID as mentioned above, has a few component replacements in the Bill of Materials with similar electrical performance. The RFID transceiver chip inside the RFID module is the same and only the following front-end components in the RFID module, with reference designator U1, of the IZAR reader have changed. (Please note that the reference designators in the following table are component designators of the RFID module and not of the IZAR reader):

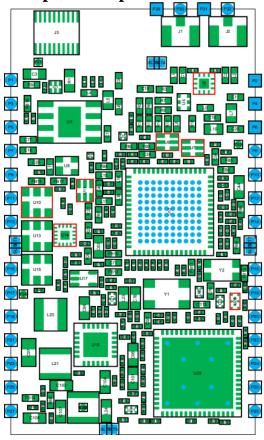
Reference Designator	Description	Old Manufacturer	Old Manufacturer P/N	New Manufacturer	New Manufacturer P/N
U14	RF Switch	Qorvo	RF1236TR7	Skyworks	SKY13399-468LF
U2	RF Switch	Qorvo	RF1602TR7	Qorvo	RFSW1012
U6, U7, U11	Balun	TDK	HHM1522E1	Johanson Technology	0900BL15C050
U10	SAW Filter	Qualcomm	B39921B3588U410W9	Qualcomm	B39921B3728U410
U26	EMI Filter	STMicroelectronics	EMIF02-USB05F2	STMicroelectronics	EMIF02-USB01F2

U2, U6, U7, U11, U10 are drop-in replacements whereas U14, U26 have associated layout changes. The assembly drawing below shows the position of these components on the board. The layout drawings further down show the differences between the old layout and the new layout.

# **U1 inside IZAR marked in RED:**



# Component replacements inside U1 of IZAR marked in RED:

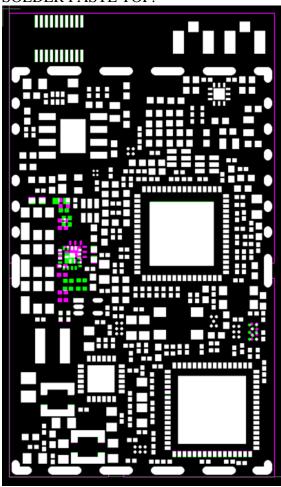


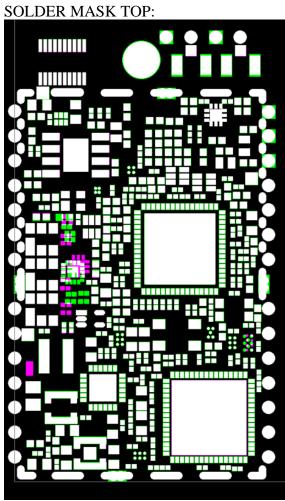
## **LAYOUT CHANGES:**

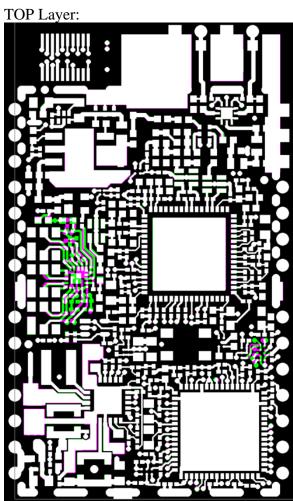
Green: New layout Pink: Old layout

White: Overlap between old layout and new layout

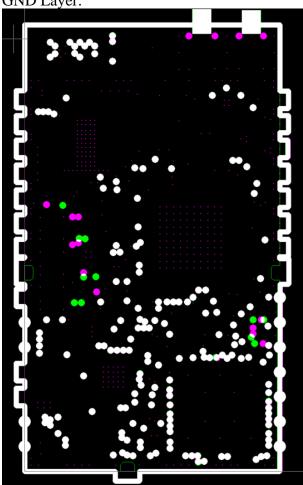
# SOLDER PASTE TOP:



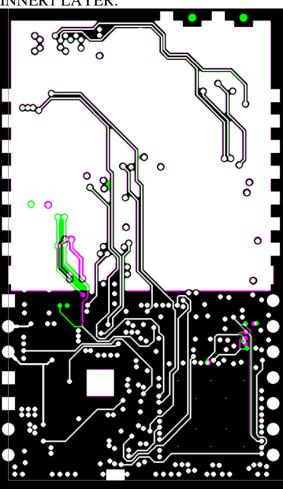




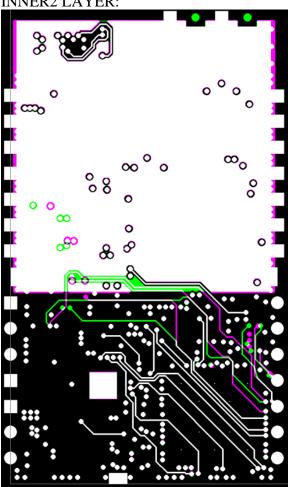
GND Layer:



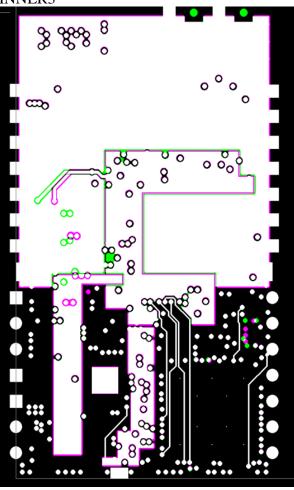
# INNER1 LAYER:



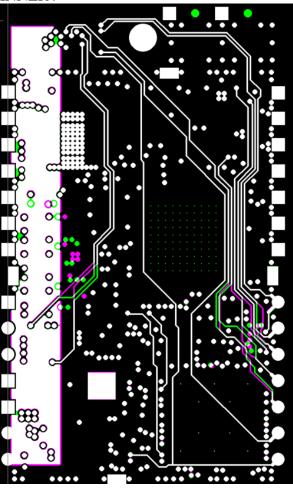
# INNER2 LAYER:



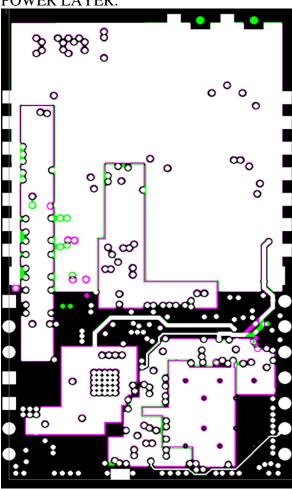
INNER3 LAYER:



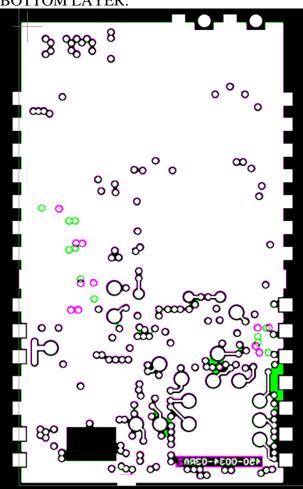
<u>INNER4</u> LAYER:



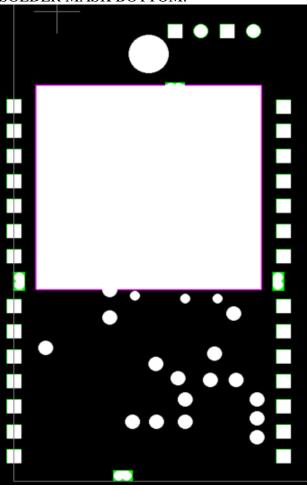
# POWER LAYER:



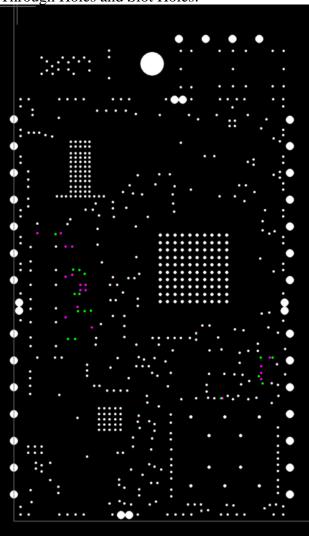
# BOTTOM LAYER:



# SOLDER MASK BOTTOM:



Through Holes and Slot Holes:



Sincerely, Title VP Engineering

Eva Gravius

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