

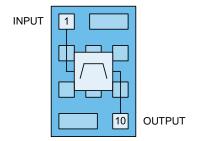
Product Overview

The Qorvo® QPQ5500 is an high-performance, high power, Bulk Acoustic Wave (BAW) band-pass filter with extremely steep skirts, simultaneously exhibiting low loss in the Wi-Fi UNII 1-3 band and high near-in rejection in the UNII5-8 band.

The filter module is specifically designed to enable industry leading capacity performance in Wi-Fi applications that result in higher power capability in more Wi-Fi channels than systems with no or traditional filter solutions. End users will see a better capability to deliver features that take advantage of sub-banding the 5GHz from 6GHz Wi-Fi spectrum in use cases such as triradio Wi-Fi mesh applications.

Using common module packaging techniques to achieve the industry standard footprint while negating as many external passive placements to help end users ease of integration into their circuits.

Functional Block Diagram



Top View

QPQ5500 Wi-Fi U-NII 1-3 bandBoost Filter



10 Pad 1.1 x 1.7 mm Laminate Package

Key Features

- 5170-5835 MHz
- · Low Insertion Loss in Wi-Fi UNII 1-3 bands
- High Rejection in Wi-Fi UNII 5-8 bands
- Extended temperature performance from -20 to +95 °C
- High power handling to +28dBm averaged Input Power
- Integrated match

Applications

- Access Points
- Wireless Routers
- Residential Gateways
- Customer Premise Equipment
- Internet of Things

Ordering Information

Part Number	Description	
QPQ5500SB	Sample bag with 5 pieces	
QPQ5500SR	7" reel with 100 pieces	
QPQ5500TR13	13" reel with 10,000 pieces	
QPQ5500EVB	Assembled Evaluation Board	



QPQ5500 Wi-Fi U-NII 1-3 bandBoost Filter

Handling Precautions

Parameter	Rating	Standard
ESD – Human Body Model (HBM)	Class 1C (1,000V)	ANSI/ESD/JEDEC JS-001
ESD – Charged Device Model (CDM)	Class 3C (1,000V)	ANSI/ESD/JEDEC JS-002
MSL – Moisture Sensitivity Level	MSL 3	IPC/JEDEC J-STD-020



Caution!

ESD sensitive device

Solderability

Compatible with both lead-free (260 °C max. reflow temperature) and tin/lead (245 °C max. reflow temperature) soldering processes.

Package lead plating: Electroless Ni/Electroless Pd/Immersion Au (ENEPIG)

RoHS Compliance

This part is compliant with the 2011/65/EU RoHS directive (Restrictions on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment), as amended by Directive 2015/863/EU.

This product also has the following attributes:

- Leadfree
- Halogen Free (Chlorine, Bromine)
- Antimony Free
- TBBP-A (C₁₅H₁₂Br₄O₂) Free
- SVHC Free

Contact Information

For the latest specifications, additional product information, worldwide sales and distribution locations:

Web: www.qorvo.com **Tel:** 1-844-890-8163

Email: customer.support@qorvo.com

Important Notice

The information contained in this Data Sheet and any associated documents ("Data Sheet Information") is believed to be reliable; however, Qorvo makes no warranties regarding the Data Sheet Information and assumes no responsibility or liability whatsoever for the use of said information. All Data Sheet Information is subject to change without notice. Customers should obtain and verify the latest relevant Data Sheet Information before placing orders for Qorvo® products. Data Sheet Information or the use thereof does not grant, explicitly, implicitly or otherwise any rights or licenses to any third party with respect to patents or any other intellectual property whether with regard to such Data Sheet Information itself or anything described by such information.

DATA SHEET INFORMATION DOES NOT CONSTITUTE A WARRANTY WITH RESPECT TO THE PRODUCTS DESCRIBED HEREIN, AND QORVO HEREBY DISCLAIMS ANY AND ALL WARRANTIES WITH RESPECT TO SUCH PRODUCTS WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Without limiting the generality of the foregoing, Qorvo® products are not warranted or authorized for use as critical components in medical, life-saving, or life-sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death. Applications described in the Data Sheet Information are for illustrative purposes only. Customers are responsible for validating that a particular product described in the Data Sheet Information is suitable for use in a particular application.

© 2023 Qorvo US, Inc. All rights reserved. This document is subject to copyright laws in various jurisdictions worldwide and may not be reproduced or distributed, in whole or in part, without the express written consent of Qorvo US, Inc. | QORVO® is a registered trademark of Qorvo US, Inc.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Qorvo:

QPQ5500EVB QPQ5500TR13