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# Integrated Passive Devices (IPD) for RF applications

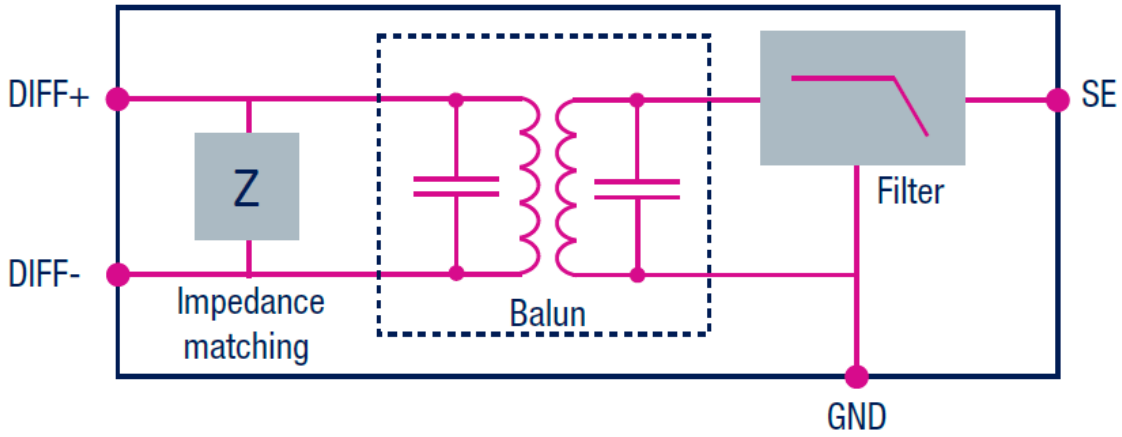
## STM32WBA companion chip

DISCRETE & FILTER DIVISION

# Tuned for high RF integration

**ST RF IPD baluns improve system performance & simplify RFIC to antenna matching network complexity**

Designed with integrated harmonic filters, they facilitate compliance with major EMC regulations: CCC, FCC, ETSI, ARIB




ST baluns integrate the following functions:

- Impedance matching
- 50 Ω nominal input impedance
- Harmonic filter

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RF IPD

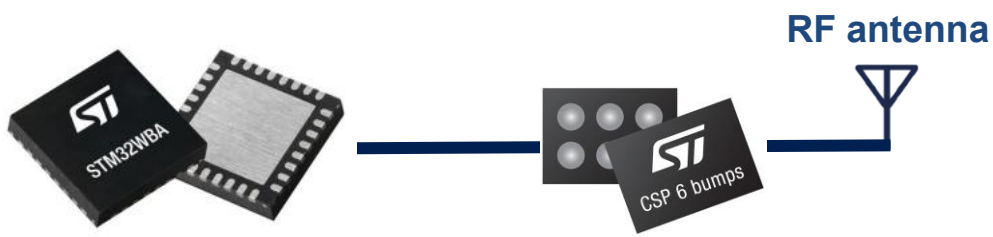
LONGEVITY 10 YEARS COMMITMENT

# MLPF-WB-04D3

## Matched Low-Pass Filter for STM32WBA series

### High RF performance in low PCB footprint

- **Simpler integration**
  - Impedance matching, harmonics filtering and antenna protection
- **Cost effective**
  - BOM reduction and reliability improvement
- **Efficiency**
  - Optimizes wireless performance




**STM32WBA** **MLPF-WB-04D3**

***Chip Scale Package on glass 6 bumps***
*1.00 x 1.60 x 0.63 mm*

### *Applications*

- *BTLE 5.4, IEEE 802.15.4, Zigbee, Thread, Matter*
- *Alarms, appliances, lighting, Door locks*
- *Smoke detectors, Heating/Cooling systems*
- *Wearable and medical equipment,*

### *ST Competitive Edge*

- Co-designed, optimized and validated in ST for best RF performances
- Glass substrate is less sensitive to process and temperature variation than passive discretes
- PCB space reduction with higher RF performance vs discrete solution

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