

AM3103 / AM3104 Application Note

Digitally Tunable Bandpass

Typical Application



Recommended Component List (or equivalent):

Part	Value	Part Number	Manufacturer
C1, C2	0.1µF	0402BB104KW160	Passive Plus

Notes:

- 1. DC blocking capacitors should be low-loss, broadband capacitors for optimum performance
- 2. VDD and control lines filtered internally providing high frequency isolation to 50 + GHz.
 - a. See AM35 datasheet for more information.
 - b. Adding an additional ferrite bead, LC, or LCL filter on VDD lines is recommended in applications that have space to improve VDD isolation

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Recommended Layout



Notes:

- 1. Power line filtering is made symmetric here such that it is L C L filtering. L C filtering or even a single ferrite bead may be used if space is critical.
- 2. Recommended input trace is grounded coplanar waveguide, 50 ohms.
- 3. IC and RF inputs / outputs should be via fenced.
- 4. Vias should be placed under IC and GND pads (not shown).
- 5. Vias shown are 10mil hole size with 24mil pad.

Revision History

Date	Revision Number	Notes
May 21, 2020	1	Initial Release