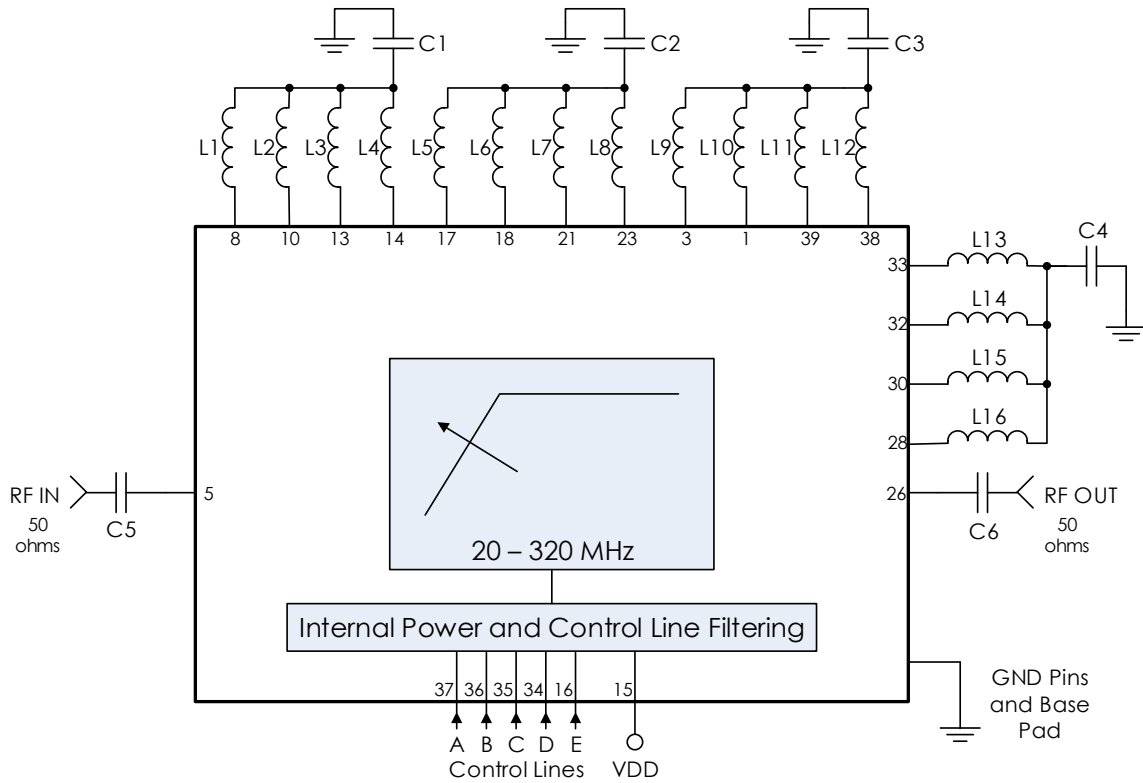


AM3151 Application Note

Digitally Tunable 20 to 320 MHz Highpass

Typical Application



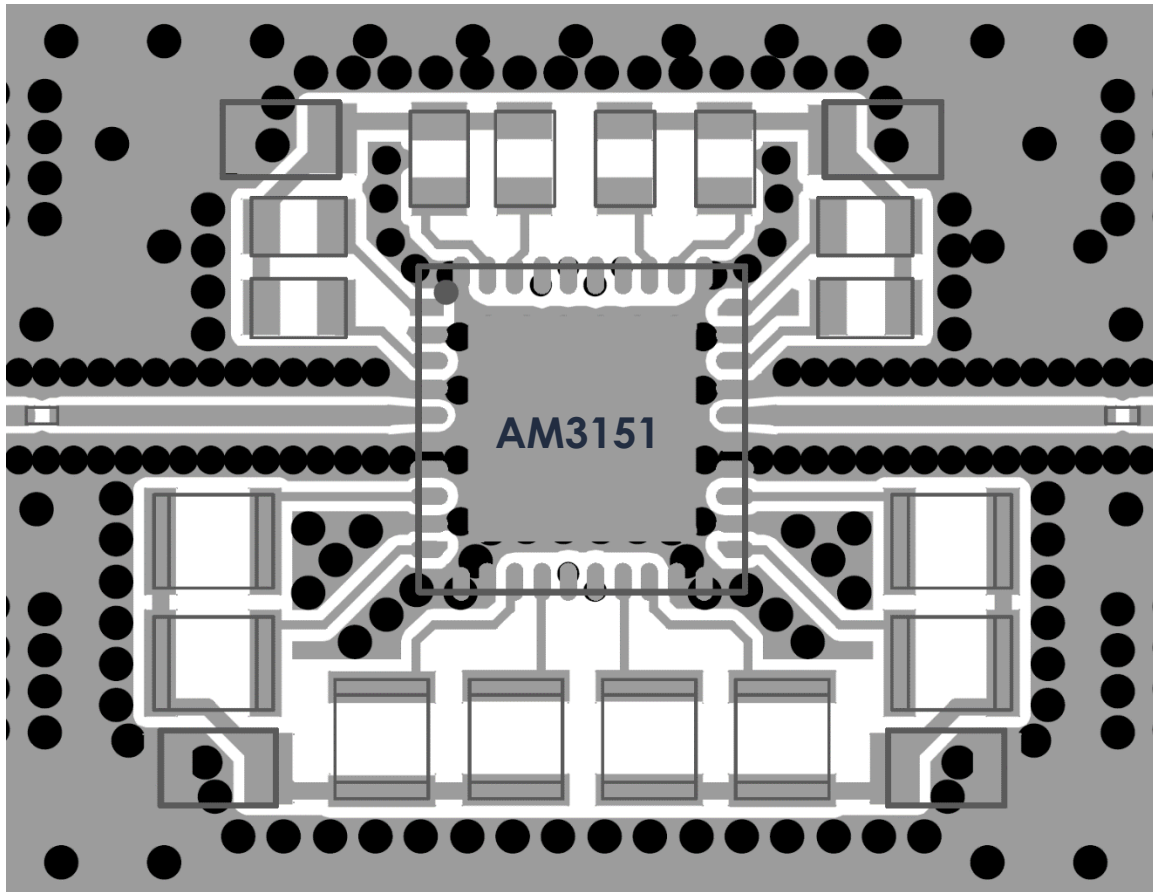
Recommended Component List (or equivalent):

Part	Value	Part Number	Manufacturer
C1, C2	47 μ F	GRM21BR61A476ME15L	Murata
C3, C4	10 μ F	GCM21BR71A106KE22K	Murata
C5, C6	0.1 μ F	0201BB104KW160	Passives Plus
L1-L8	390 nH	0805HP-391XGRB	Coilcraft
L9, L11, L14, L16	39 nH	0603HP-39NXGEU	Coilcraft
L10, L12, L13, L15	56 nH	0603HP-56NXGEU	Coilcraft

Notes:

1. RF blocking capacitors should be high performance, low-loss, broadband capacitors for optimum performance.
2. VDD and control lines filtered internally providing high frequency isolation.
3. RC time constant is 20ns for control lines.

Recommended Layout



Notes:

1. Recommended input trace is grounded coplanar waveguide, 50 ohms.
2. IC and RF inputs / outputs should be via fenced.
3. Vias should be placed under IC and GND pads (not shown).
4. Vias shown are 10mil hole size with 24mil pad.
5. To facilitate a better layout, control lines and power should via directly into board.
 - a. Vias shown here are 6mil hole size with 14mil pad.
6. Ground pour around inductors should be at least 8mil away to minimize fringing capacitance.

Revision History

Date	Revision Number	Notes
April 10, 2020	1	Initial Release