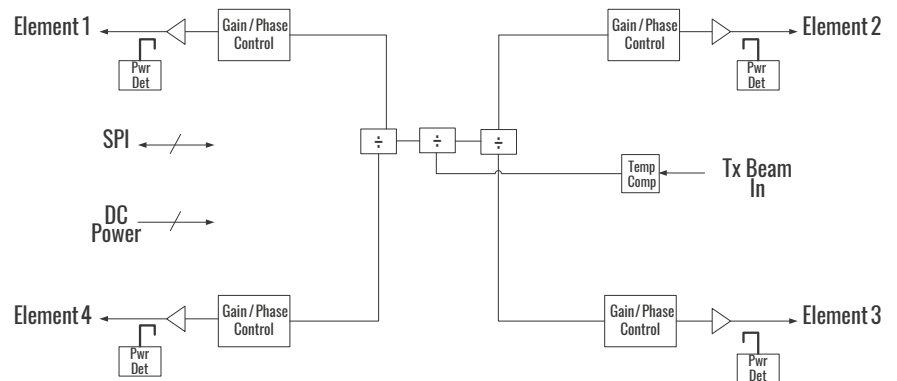


## Product Features

- 37.1 - 40.0 GHz operation
- Supports 4 radiating elements
- +12 dBm Tx OP1dB
- 5 bit phase control (LSB=11.25°)
- 5 bit gain control (LSB=0.5 dB)
- Fast beam steering
- Telemetry reporting
- 3.70 x 3.74 mm WLCSP
- +1.8 V and +2.5V operation

## Block Diagram



## Applications

5G communications antenna arrays

## General Description

The AWMF-0123 is a highly integrated silicon quad core Tx IC intended for 5G phased array applications. The device supports four radiating elements, includes 5 bit phase control and 5 bit gain control for analog RF beam steering. The device provides +12 dBm output power and includes gain compensation over temperature, temperature reporting, Tx power telemetry, and fast beam switching using on-chip beam weight storage registers. The device features ESD protection on all pins, operates from a +1.8 V and 2.5 V supply, and is packaged in a 3.70 x 3.74 mm WLCSP (wafer level chip scale package) for easy flip chip installation in planar phased array antennas.