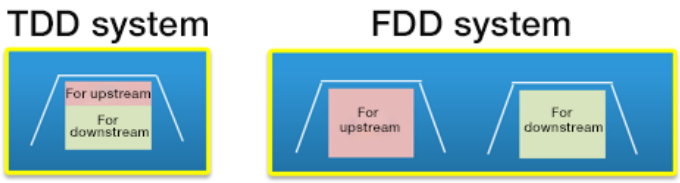
Product Map for RF Components and Modules (Base Stations)

TDK's wide lineup of RF components includes filters, diplexers, triplexers, baluns, directional couplers, chip antennas, isolators/circulators and modules developed with LTCC, thin-film and SESUB (Semiconductor Embedded in SUBstrate) technology.

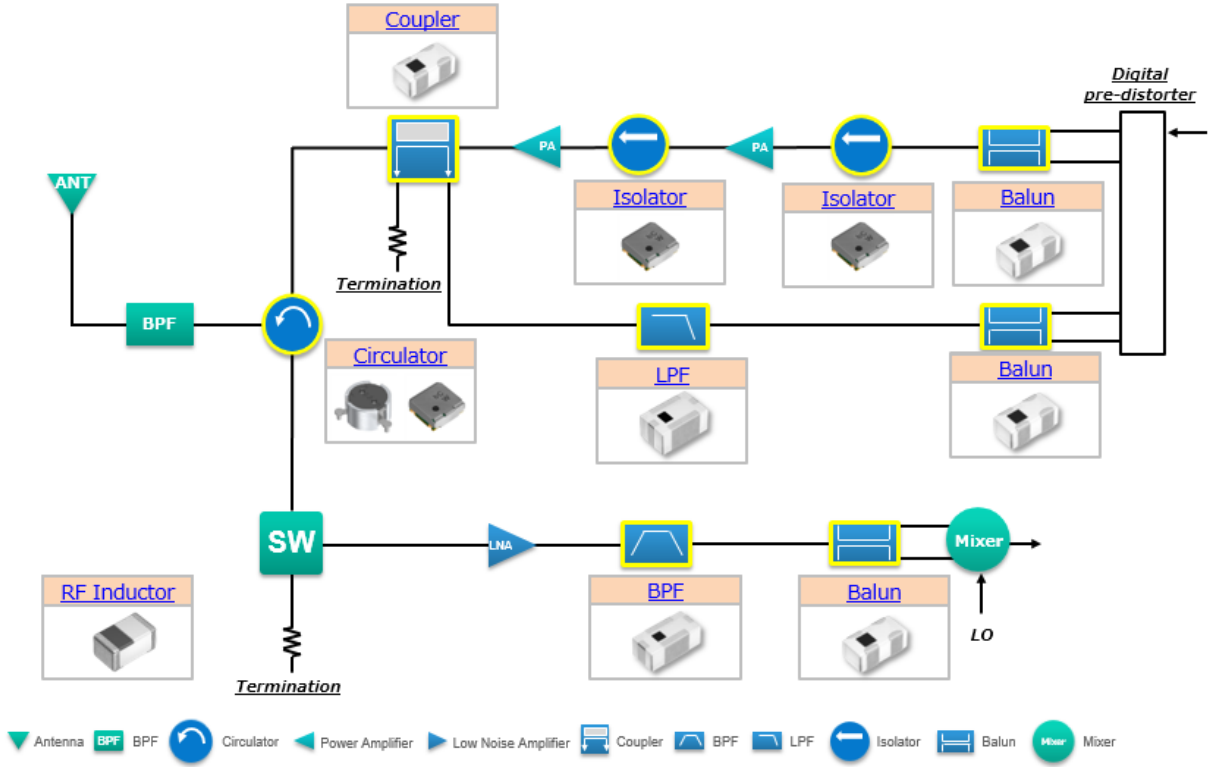
Click on the product names to view detailed information.

In the TDD (Time Division Duplex) system, one frequency band is shared for both upstream and downstream operations.

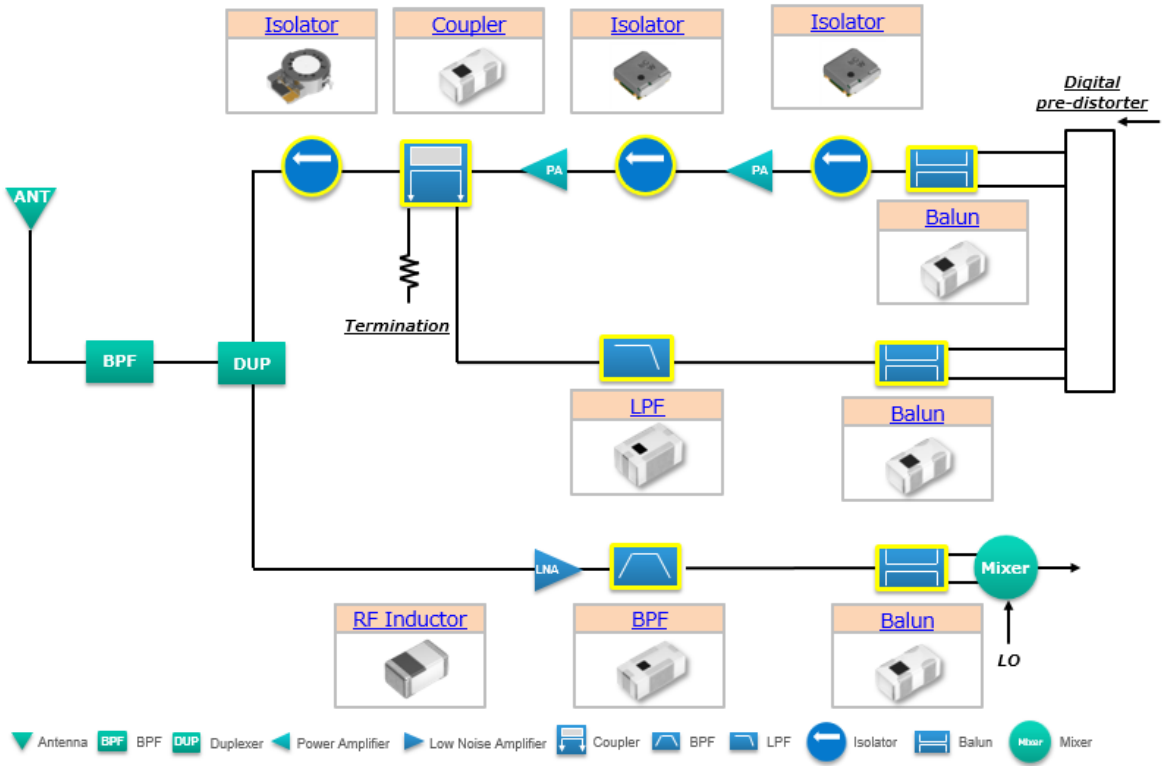
In the FDD (Frequency Division Duplex) system, there are two frequency bands, one for upstream and one for downstream operations.



▶BLOCK DIAGRAM EXAMPLE : TDD SYSTEM



▶BLOCK DIAGRAM EXAMPLE : FDD SYSTEM



Product Name	Symbol in Diagrams	Image	Functions and TDK Product Features
Filter: LPF / HPF			A fixed frequency is used for communication between wireless devices. A filter has functions to pick up only the signals in this required frequency, and eliminate the signals in the frequencies which are not required.
Filter: BPF			
Balun			A balun has functions to convert unbalanced signals into balanced signals, or vice versa, and to also simultaneously convert the impedance values.
Directional coupler			A directional coupler has functions to pick up a part of the output in order to constantly maintain and control the output gain of the power amplifier (PA), and to provide feedback to the PA input.
Isolator			A circulator transmits the high frequency signal that entered terminal ① only to terminal ②, and the high frequency signal entered terminal ② is sent only to the terminal ③. In this manner, it transmits only in one fixed direction, and the signals are not transmitted in the opposite direction. Also, an isolator is a component in which one of the three terminals of a circulator is connected to a termination resistor. Product Overview : Isolator / Circulator
Circulator			
RF inductor			Unique ceramic material and configuration allows for the realization of high Q characteristics that are equivalent to that of air core wound inductors. Multilayer method allows for a lineup with fine increments of inductance.