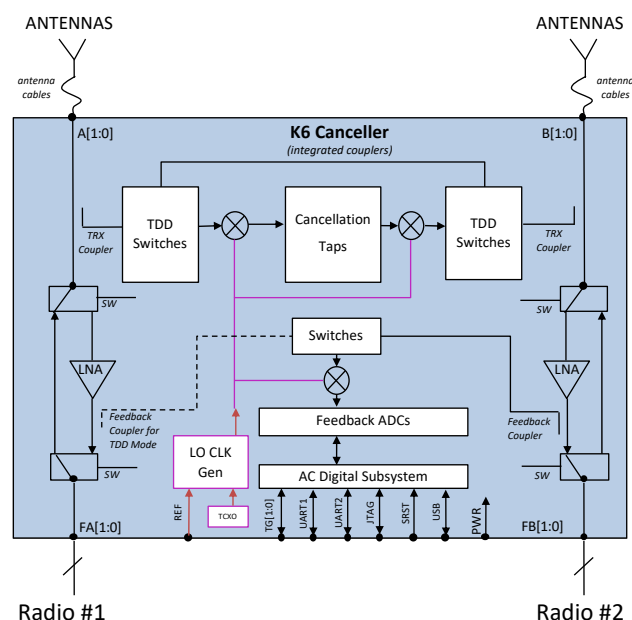


The K6 Cancellor suppresses the interference a transmitter presents to a co-located receiver, even if the two radios operate with zero guard band in between them. It allows unprecedented densification and spectrum utilization in every RF environment. The solution adapts in real-time to the changing reflection environment to ensure consistent high isolation between the two radios.

- Analog Self-Interference Cancellation >40dB
- Support for wide range of frequency bands (1.1GHz – 6GHz) with 5 SKU variants
- Up to 80MHz instantaneous bandwidth
- Up to 700ns delay spread support
- Up to 85dB Dynamic Range
- Max output cancellation power of -5dBm
- Real-time tuning so cancellation is maintained even in presence of wireless channel variations
- Front-end existing radios without need for radio modifications
- Integrated switches allow for bi-directional operation for co-located TDD radios
- Integrated LNA and transmit / receive (TRX) coupler options to reduce system size, cost
- Support for 2Tx 2Rx MIMO or SISO radios
- Low Insertion loss
- Multiple digital control interface options (USB, UART, JTAG)

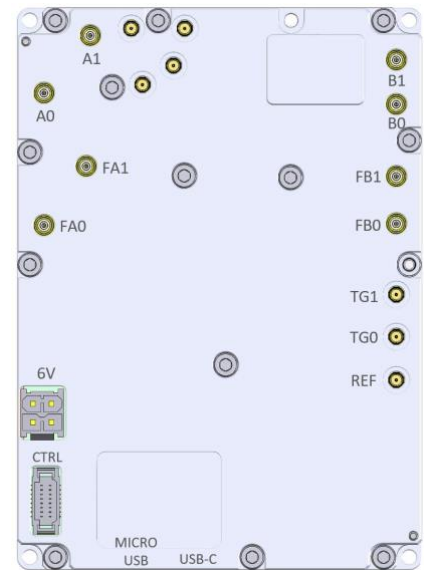


Electrical / Mechanical / Environmental

Parameter	Min	Typ	Max	Units	Comments
Dimensions		3.6" x 5" x 0.6"		in	
Power Consumption		15		W	Single canceller chain active (SISO)
		25		W	Both canceller chains active (2x2 MIMO)
Input Voltage	6		12	V	
Allowed Input ripple			60	mV	
ESD Protection		TBD		kV	
Temperature Range	-35		70	C	Operating
Reliability					TBD

Interfaces

Interface	Physical Connector	Purpose	Nominal Voltage
A [1:0]	MCX	Radio #1 I/O to Antenna	
B [1:0]	MCX	Radio #2 I/O to Antenna	
FA [1:0]	MCX	I/O from Radio #1	
FB [1:0]	MCX	I/O from Radio #2	
TG [1:0]	MMCX	Input indicating TDD direction for Radio #1 and Radio #2	1.8V
REF	MMCX	External Reference Clock Input	3.3V
USB	USB-C	USB Control interface	3.3V
UART-1 & 2	16-pin CTRL, micro-USB	Digital controls for serial-console & modem control	3.3V
JTAG		Used for system recovery	3.3V
SRST		Soft Reset for processor	3.3V
PWR	Custom	Power Supply	+6V to +12V



SKU Variants

SKU	Operating Frequency Range	Comments
K6011	1.1GHz – 1.4GHz	
K6021	1.4GHz – 2.4GHz	
K6031	2.3GHz – 3.8GHz	Includes integrated couplers, LNA
K6041	3.5GHz – 5.0GHz	
K6051	5.0GHz – 6.0GHz	

In addition to the standard variants, the module features many build options to fit any environment. This includes delay variants to match long antenna delays or other pre-existing predictable latency sources and filter options to modify frequency ranges. Contact us for custom and standard quotes.

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