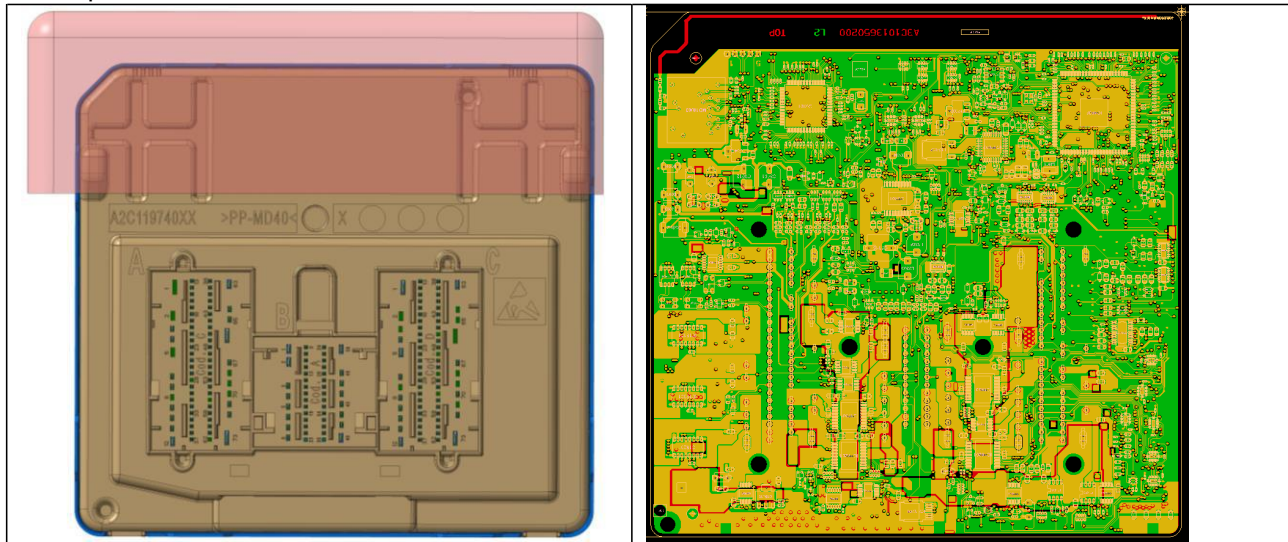
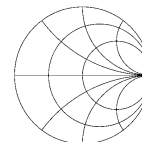


RF Antenna Specification

1. Antenna shape

The pictures below are showing antenna portion and antenna design on the BCM. Antenna type is a PCB Monopole antenna.

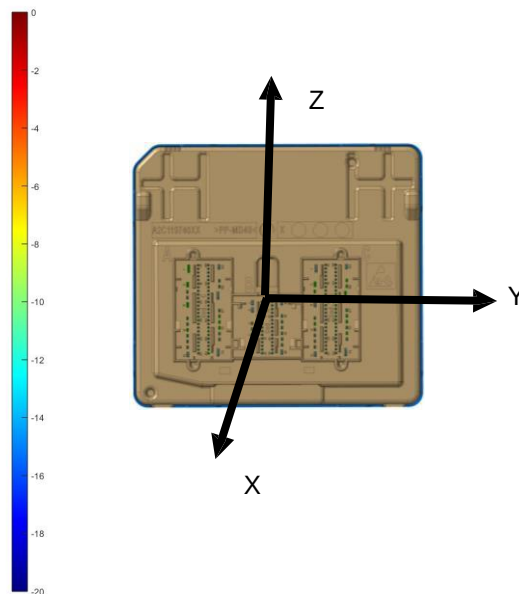
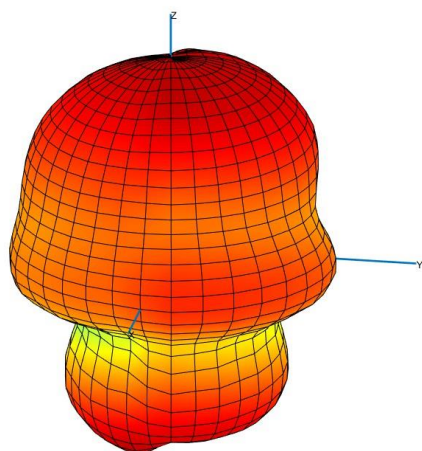




2. 434MHz Antenna

Antenna Maximum Gain:-1.1dBi
Antenna Efficiency:-4.7dB

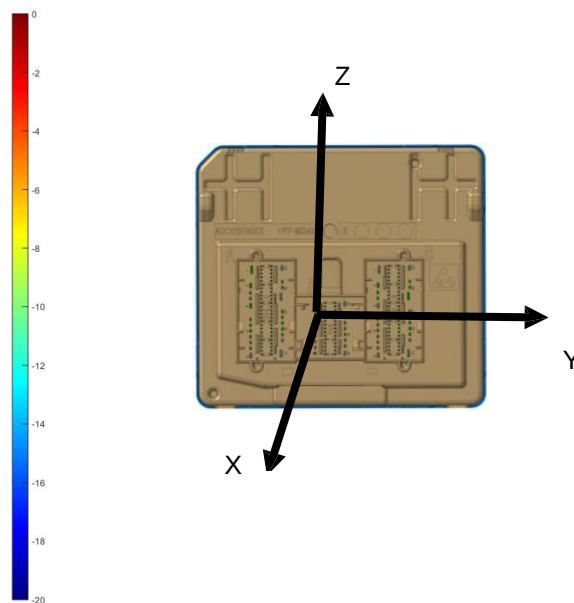
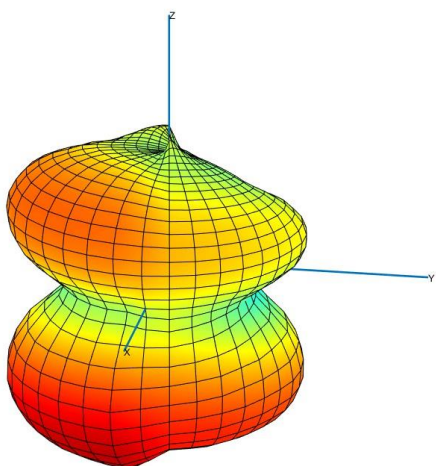
VW_MQB37_Homoboard_434MHz_2018_07_23_11_27_33_a3Ds21data
f=433.92MHz Gain_total [dBi] Max: -1.13dBi Min: -14.21dBi Efficiency: 33.62% (-4.7dB) corr: 0.00dB

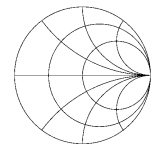


3. 314MHz Antenna

Antenna Max Gain: -1.2dBi
Antenna Efficiency: -7dB

VW_MQB37_Homoboard_315MHz_2018_07_23_12_02_14_a3Ds21data
f=314.9MHz Gain_total [dBi] Max: -1.24dBi Min: -23.93dBi Efficiency: 20.17% (-7.0dB) corr: 0.00dB





RF System parameter overview

1 . VW BCM37WBL TRX 315 MHz(KESSY, Service Key)

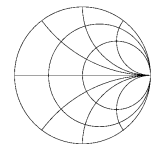
Centre frequency, channel A:	314.6MHz
Centre frequency, channel B:	= channel A
Centre frequency, channel C:	314.9MHz
Used Channels RX :	B,C
Used Channels TX :	B,C
Frequency deviation:	centre frequency $\pm$ 20 kHz
Modulation:	2FSK
Data rate:	19.2 kbps
Antenna type:	PCB monopole antenna
Nominal supply voltage:	12 V
Operating voltage range:	8 V ... 16 V
Sensitivity @50Ohm:	-106dBm

2. VW BCM37WBL TRX 315 MHz(FZV, KESSY LF Response)

Centre frequency, channel A:	314.6MHz
Centre frequency, channel B:	= channel A
Centre frequency, channel C:	314.9MHz
Used Channels RX FZV :	A,C
Used Channels RX KESSY:	B,C
Frequency deviation:	center frequency $\pm$ 8 kHz
Modulation:	2FSK
Data rate:	7.8 kbps
Antenna type:	PCB monopole antenna
Nominal supply voltage:	12 V
Operating voltage range:	8 V ... 16 V
Sensitivity @50Ohm:	-109dBm

3. VW BCM37WBL TRX 434 MHz (KESSY, Service Key) EU/NAR

Center frequency, channel A:	433.46MHz
Center frequency, channel B:	433.92MHz
Center frequency, channel C:	434.36MHz
Used Channels RX:	B,C
Used Channels TX:	B,C
Frequency deviation:	center frequency $\pm$ 20 kHz
Modulation:	2FSK
Data rate:	19.2 kbps
Antenna type:	PCB monopole antenna
Nominal supply voltage:	12 V
Operating voltage range:	8 V ... 16 V
Sensitivity @50Ohm:	-105dBm



4. VW BCM37WBL TRX 434 MHz (FZV, KESSY LF Response) EU/NAR

Center frequency, channel A:	433.46MHz
Center frequency, channel B:	433.92MHz
Center frequency, channel C:	434.36MHz
Used Channels RX FZV:	A, C
Used Channels RX Kessy:	B, C
Frequency deviation:	center frequency $\pm$ 8 kHz
Modulation:	2FSK
Data rate:	7.8 kbps
Antenna type:	PCB monopole antenna
Nominal supply voltage:	12 V
Operating voltage range:	8 V ... 16 V
Sensitivity @50Ohm:	-107dBm

5. VW BCM37WBL TRX 434 MHz (KESSY, Service Key) KOR

Center frequency, channel A:	
Center frequency, channel B:	433.92MHz
Center frequency, channel C:	
Used Channels RX:	B
Used Channels TX:	B
Frequency deviation:	center frequency $\pm$ 20 kHz
Modulation:	2FSK
Data rate:	19.2 kbps
Antenna type:	PCB monopole antenna
Nominal supply voltage:	12 V
Operating voltage range:	8 V ... 16 V
Sensitivity @50Ohm:	-105dBm

6. VW BCM37WBL TRX 434 MHz (FZV, KESSY LF Response) KOR

Center frequency, channel A:	
Center frequency, channel B:	433.92MHz
Center frequency, channel C:	
Used Channels RX:	B
Frequency deviation:	center frequency $\pm$ 8 kHz
Modulation:	2FSK
Data rate:	7.8 kbps
Antenna type:	PCB monopole antenna
Nominal supply voltage:	12 V
Operating voltage range:	8 V ... 16 V
Sensitivity @50Ohm:	-109