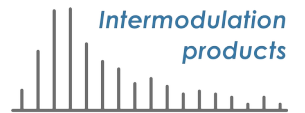


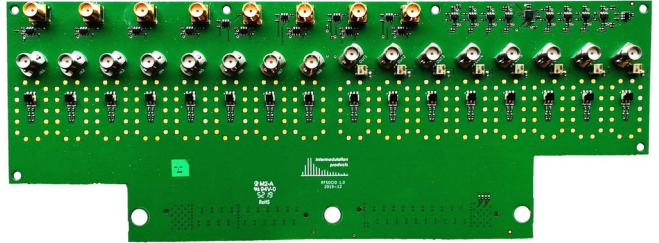
Intermodulation Products – VFE-100 Specifications

Latest update: 2020-06-01



Front-end / plug-in board for Xilinx RFSoc platform

- Single ended inputs and outputs
- Programmable DC bias on output (set from FGPA)
- Digital inputs and outputs for markers / triggers
- replaces HW-RFMC-XM500



RF inputs

# ports	8
Impedance	50 ohm
Coupling	AC
Bandwidth	10 MHz to 4 GHz

RF outputs

# ports	8
Impedance	50 ohm
Coupling	AC + bias
Bandwidth	10 MHz to 4 GHz
Bias	Built-in bias tee for DC offset, 16 bit DAC, ±1.25 V

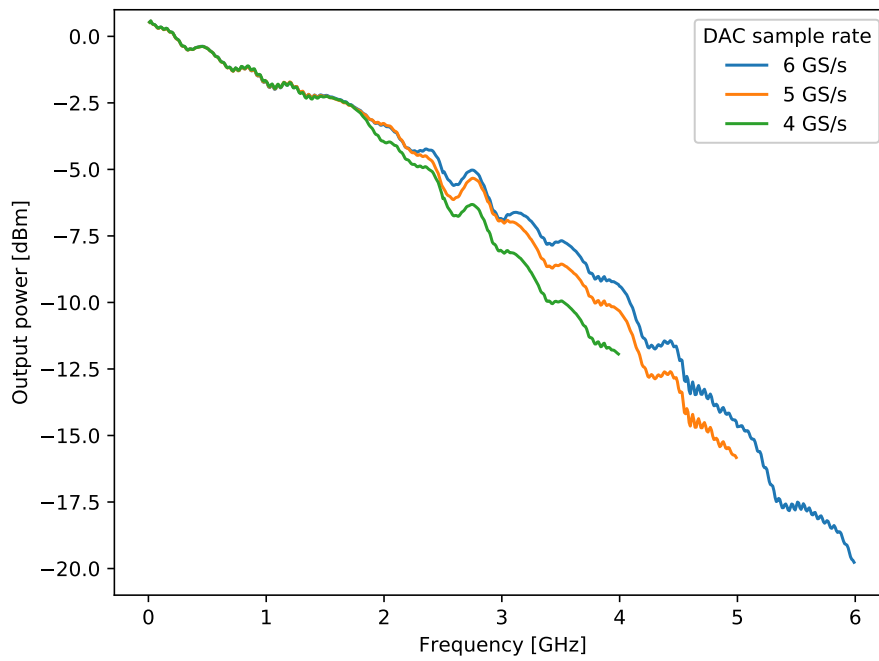
Digital markers / triggers

# input ports	4
Input impedance	10 kohm
# output ports	4
Output impedance	50 ohm
Output voltage	3.3 V
Output rise time, 10-90%	670 ps
Output rise time, 20-80%	440 ps
Output fall time, 90-10%	570 ps
Output fall time, 80-20%	360 ps

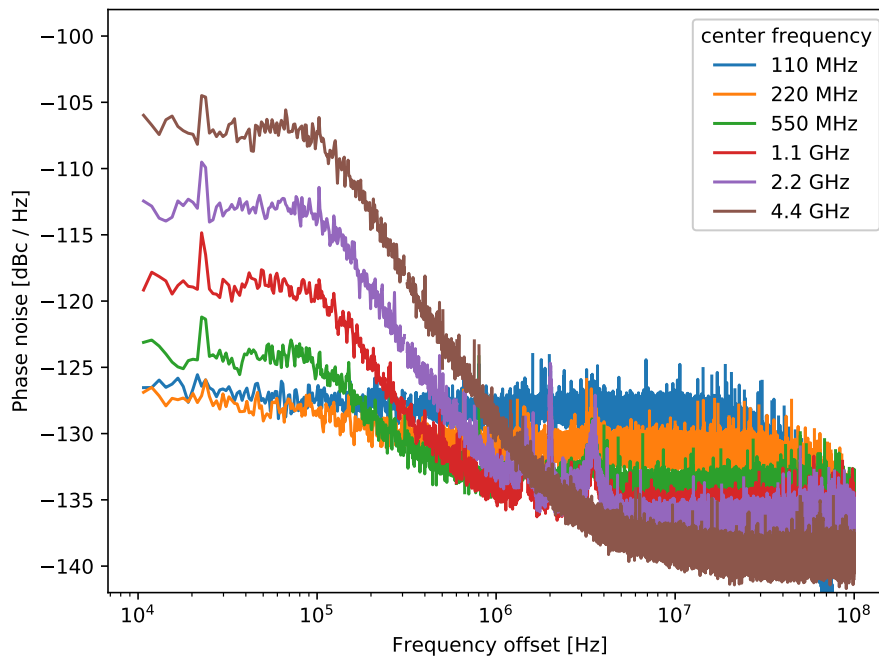
General

Size	250 mm x 94 mm
Connectors	24x SMA, 2x LPAM-40
Compatible with	EK-U1-ZCU111-G

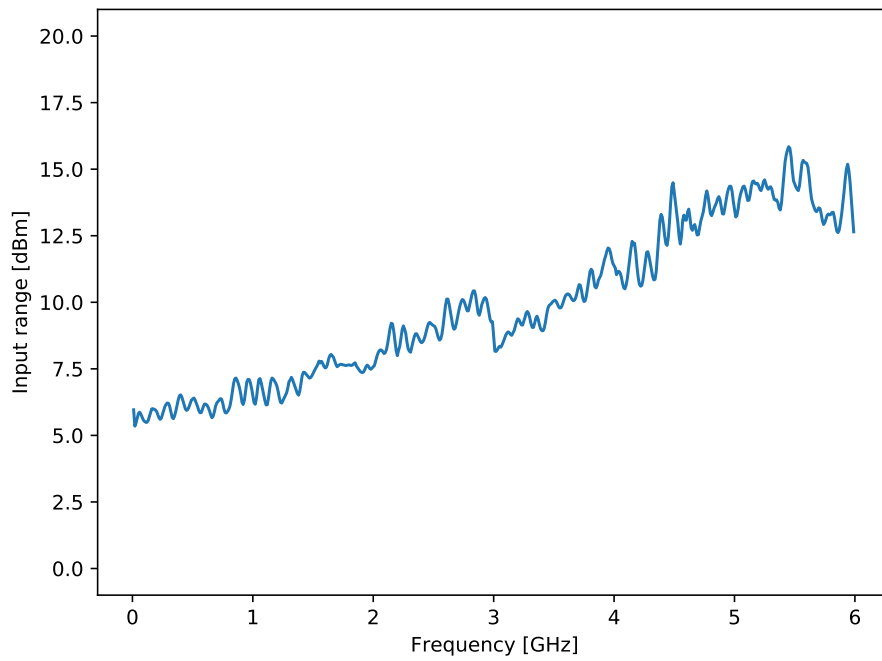
Output power versus frequency



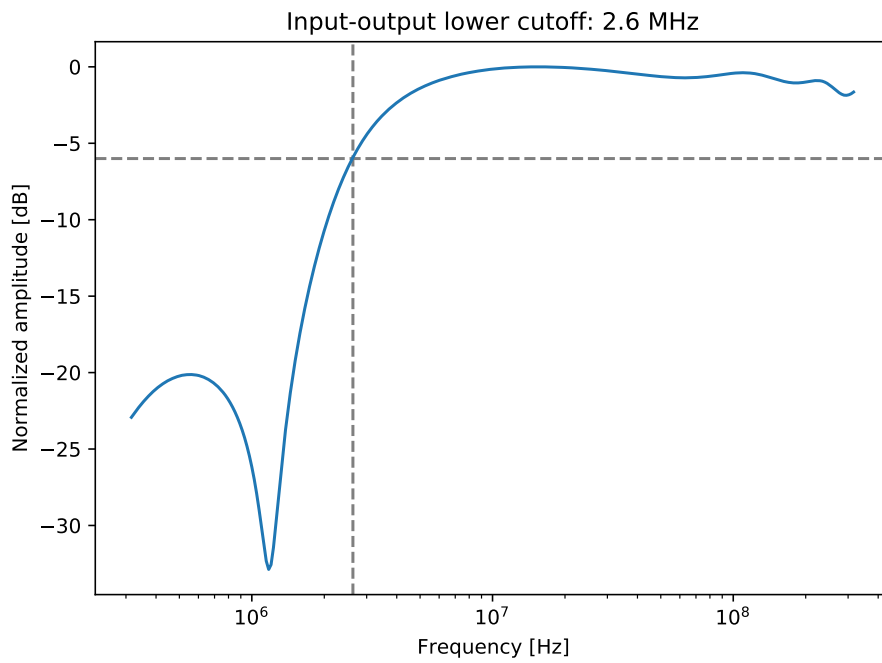
Phase noise at select frequencies (preliminary)



Input range versus frequency



Low-frequency cut-off



Input noise versus frequency

