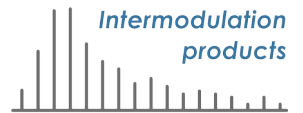


Intermodulation Products – VFE-100

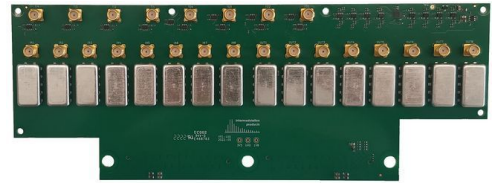
Specifications

Latest update: 2022-08-12



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

- Single ended inputs and outputs through balun transformers
- Bias tee and programmable DC bias on all output (set from FPGA) for IQ mixer balancing and other applications
- Digital inputs and outputs for markers / triggers
- replaces HW-RFMC-XM500



RF inputs

# ports	8 (SMA)
Impedance	50 Ω
Coupling	AC
Bandwidth	10 MHz to 4 GHz

RF outputs

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

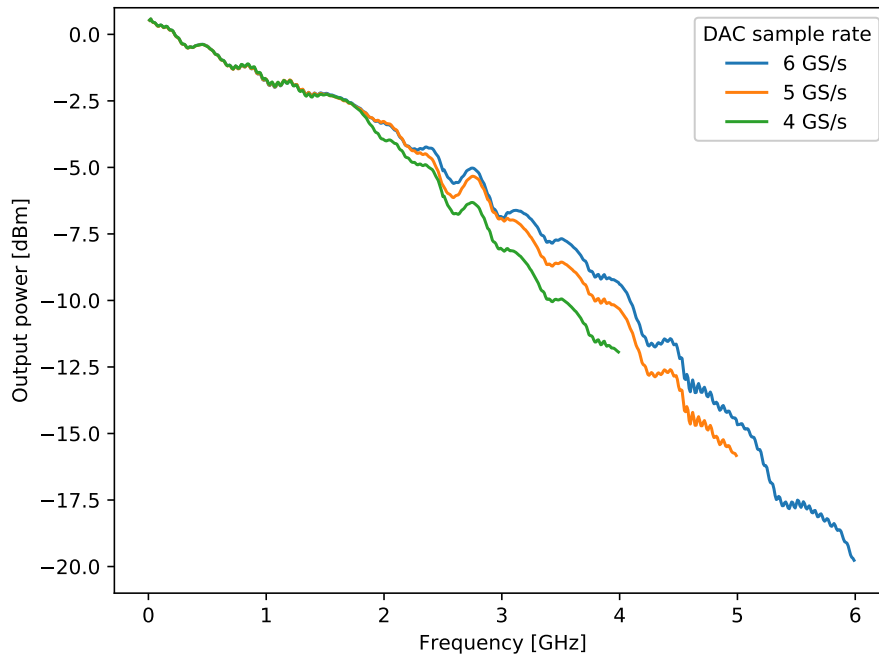
Digital markers / triggers

# input ports	4 (SMA)
Input impedance	10 kΩ
# output ports	4 (SMA)
Output impedance	50 Ω
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

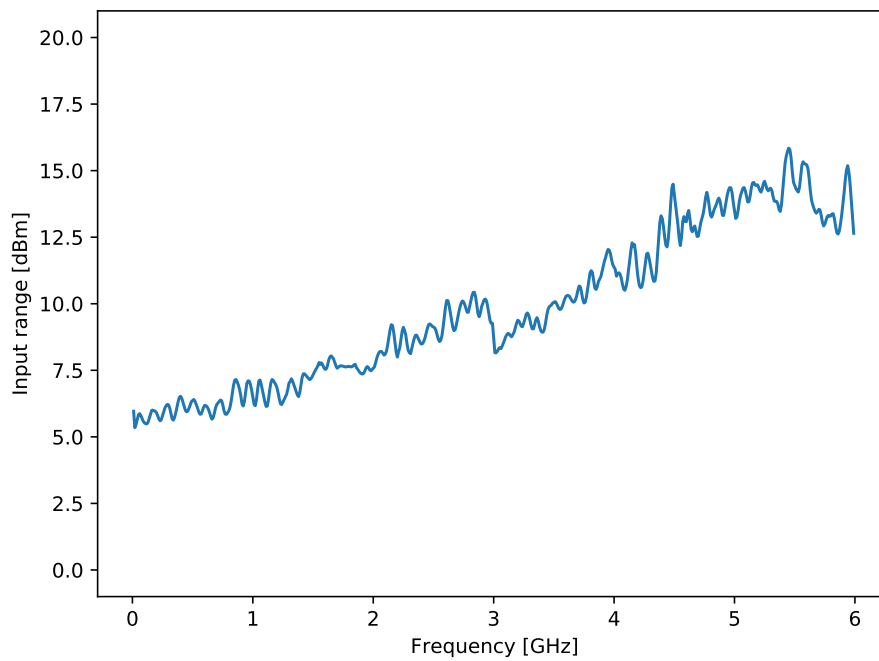
Size	250 mm x 94 mm
Connectors	24x SMA, 2x LPAM-40
Compatible with	ZCU111
Country of origin	Sweden
Classifications	RoHS, HS 90309000

Output power versus frequency



Typical full-scale output power when connected to ZCU111 as function of ZCU111 sampling rate.

Input range versus frequency



Low-frequency cut-off

