



menlo^{micro}

MM1200/3100

Evaluation Kit Instructions

April 2019

Introduction to EVK Revision 1.3

Revision 1.3 is an easy to use EVK enables access to all six channels of the MM1200 and MM3100 with equal length microstrip lines and SMA connectors. RF performance is good up to 3.0 GHz and the launches are matched to better than – 20 dB return loss. The top layer of the PCB where the RF traces are located is fabricated from a low loss dielectric.

Note: The attached board with RF lines should not be used as a calibration board for the VNA, it is intended to help model the equal length RF lines.

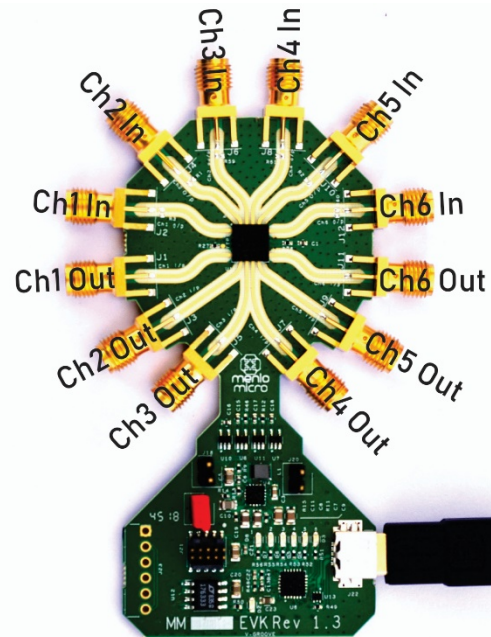
A rudimentary amplitude de-embedding can be accomplished by measuring the long through line and doing relative measurement of the insertion loss.

To simplify the evaluation process, the EVK features power and control over the USB connector. No external power supply is required.

Note: Do not hot switch the EVK over 15 dBm power. A VNA is usually around 0 dBm which is perfectly fine to hot switch.

Note: The MM1200 and MM3100 devices are class 0 ESD sensitive devices. Wrist strap and ESD safe work surfaces must be used.

Note: Digital Multimeters may damage the device. An ordinary DMM can output 5 -7 V during measurement and this is too much during the switch operation. A DMM can be used safely when the device is in a stable on or off state.



Starting up the EVK

In an ESD safe environment, remove the EVK from the ESD bag. Install the control software from the included USB memory stick. An automatic installer is provided.

Connect the EVK and the computer with the USB cable. A small LED on the EVK should light up and indicate pretense of 5.0 V.

Start the software and select the board you are using (MM3100 1.3)

A control screen shows channel assignment and status of all six switches.