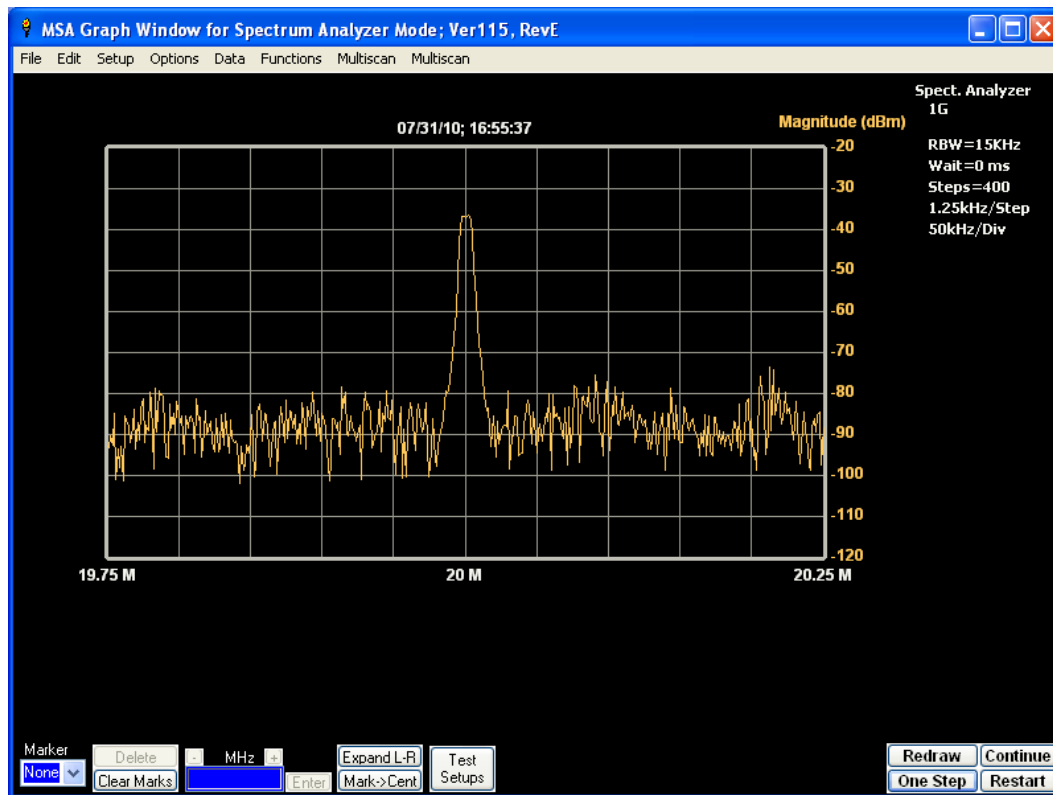


Putting It all together

Ok, the first attempt at a fully USB controlled MSA. 20 MHz signal generator input....



Seems to work.

The screenshot shows a software window titled "MSA/VNA Configuration Manager Version 1.10". The main display is a configuration form titled "ENTER CONFIGURATION DATA FOR YOUR MSA". The form is divided into sections for PLL1, PLL2, and DDS1. PLL1 and PLL2 sections include dropdown menus for Type (4112), Polarity (0(non-inv) and 1(invert)), Reference (MHz) (0.974 and 4), and Mode (0(Integer)). The DDS1 section includes input fields for Center Freq (MHz) (10.7), Bandwidth (MHz) (0.015), L02 (MHz) (1024), Mast Clock (MHz) (64), and DDS1 Parser (1(serial)). There are also buttons for "Set to SLIM Defaults", "Re-Load File", "Add TG", "Add VNA", "Help", "Save Configuration", and "Return to MSA Without Saving". A section for "List your final filters:" shows a table with columns for "frequency" and "bandwidth", with values 10.7 and 15. There are also buttons for "Add" and "How do I find out?". At the bottom, there are dropdown menus for "ADC type" (16(serial 16-bit)) and "Control Board" (3[USB V1.0]), and a field for "LPT Port Address" (Hex 378).

Note the control board type in the above.....

Now I need to start optimising the frequency setting functions. The ADC routines are there now – not much more to do other than adding some error handling. Note that it only supports the serial ADCs at the moment.

Dave