

A DSP board in side “A” is wired to take inputs from RFFE boards in slots 9 & 8 and drives RFBE boards in slots 1, 2, 5 & 6. A DSP board in side “B” takes inputs from RFFE boards in slot 7 and drives RFBE boards in slots 3, 4, 7 & 8.

The DSP module can be removed and replaced whilst the DSPbR is powered, however the functionality will cease, inhibiting the signal path between RFFE and RFBE's whilst a DSP module is unplugged. An arrow with the letters “UP” on the rear face indicates the module orientation.

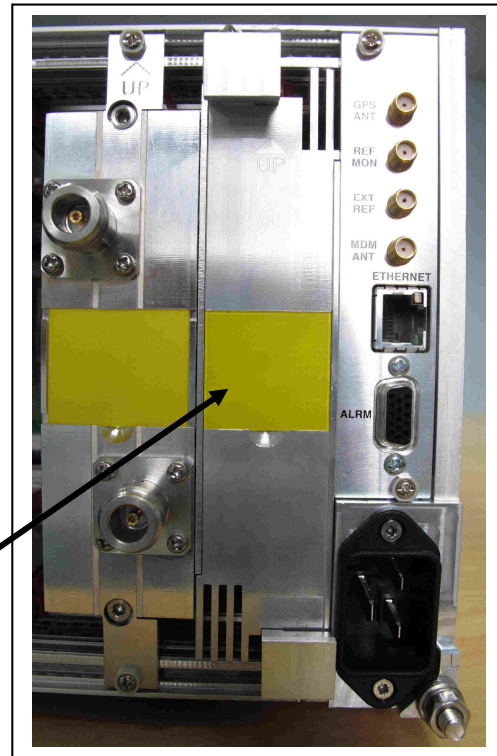


Figure 8 – DSP Module

3.3.6 RFFE – RF Front End Module

An RFFE module is partitioned into side “A” and side “B”. Two RFFE boards are fitted into an RFFE module. The RFFE boards can be in different bands, however the BPFM fasted to the RFFE module must have the corresponding Side “A” and Side “B” band pass filters.

The motherboard architecture accommodates up to six RFFE boards (three modules). The 1st slot allocation for the RFFE module is slot 9 (please note that slot 9 is dedicated to an RFFE slot only) followed by slots 8 and 7 respectively.

The frequency bandwidth of each RFFE is a contiguous 20MHz. One RFFE can feed any number of corresponding channelized RFBE's. This is true for bi-directional uplink and downlink configurations.

Although the individual channel frequency and its characteristics within an RFFE band is adjustable, the RFFE band is fixed and is not adjustable. A different RFFE module is required for each 20MHz band.