

3.6 Range of Operating Power

The 800 MHz MFRM range of operating RF power is 0 dBm to 47.8 dBm . The maximum RF power output is 47.8 dBm..

3.7 Complete Circuit Diagrams

The RF chain of the 800 MHz MFRM is made up of Nortel's MTRM (Multi-carrier Transmit/Receive Module) and OEM equipment. Exhibit 8 contains the schematics of the MTRM and Exhibit 9 contains the parts lists of the MTRM.

The OEM MCPA 800 MHz power amplifier is approved under FCC ID E675JS0047.

3.8 Tune-up Procedure

The tune-up tests will be performed as part of the factory testing on the MFRM. This procedure includes power output levels, spurious emissions, and occupied bandwidth. There are no end-user adjustments that will have any effect on these settings. No tune-up testing is required in the field.

3.9 Circuit Description for Frequency Determining and Stabilizing

The Global Positioning Satellite Timing Module (GPSTM) is the primary clock source in the system. It consists of two outputs:

EVEN_SEC Clock and,
SYS_CLK (at 8fc or 9.8304 MHz)

In addition, the GPSTM has a 10 MHz reference output that can be used to synchronize external measurement equipment during system testing.

The GPSTM distributes the primary clock signals directly to the Control Module (CM) and the CORE modules (see Exhibit 3) which in-turn distribute the clock signals to the digital modules and to the MFRM via the high speed optical link.

The GPSTM has a frequency stability of better than 1.0 part per billion.

3.10 Circuit Description for Suppression of Spurious Radiation

The Tx band pass filter in the DPM provides out of band emission rejection and permits only signals in the Tx band to the antenna for emission.