EXHIBIT 11: DETAILED DESCRIPTION OF THE MODULATION SYSTEM

SECTION 2.1033(c) (13)

For equipment employing digital modulation techniques, a detailed description of the modulation system to be use, including response characteristics of any filters provided, and a description of the modulating wavetrain, shall be submitted for the maximum rated conditions under which the equipment will be operated.

Sample Response:

The AHCC supports LTE radio access technology, including multiple- input multiple-output (MIMO). A DFE provides all the digital processing for the downlink path and then presents them to the RF ASIC which contains Tx DAC. The output of the DAC is filtered by low-pass filters and then up-converted via an I and Q modulator to the E-UTRA Band 26 sub-band carrier frequency operating in the range of 862.6-869 MHz.

The DFE ASIC performs channel filtering accompanied with RF ASIC for series of filtering and signal conditioning stages. The overall response incorporates the necessary amplitude and phase equalization to meet the requirements of the 3GPP LTE standards.

Digital Pre-Distortion (DPD) performs amplitude and phase sensitive adjustments to the signal by comparing Power Amplifier (PA) non-linearity distortions obtained from Feedback loop to known PA model and cancels out the distortion effects of the power amplifier. The DPD block detects if the average power exceeds a set threshold and adjusts the power of the output signal.

The DFE ASIC also includes a peak limiting block called Clipper, which removes samples above a predetermined threshold without detrimental effects on the EVM (Error Vector Magnitude) metric. This enables the peaks of the baseband signal to be limited to obtain the desired peak to average ratio (PAR) in the output waveform. The overall response achieves pulse shaping and equalization which meets the transmitted signal Rho and EVM requirements when demodulated with the appropriate matched filter (e.g., in test equipment).