

Tune-up procedure

The factory process flow used by Nextivity Inc to manufacture Cel-Fi units consists of different “Stations” each serving a specific function in the design flow. The next section summarizes the parameters calibrated at the *factory calibration station*.

Factory Calibration Station

The “*calibration station*” is used to calibrate and test the radio frequency transceiver units. All calibration and post-calibration testing are under **software control**. There is no manual tuning of any radio transceiver parameters in the design flow. Following is the list of calibrated parameters:

Calibration parameters:

- **Cell transceiver transmit power:** Externally measured power-level spanning frequency band and all power settings
- **Crystal oscillator:** VCTXO control level for centre frequency.
- **UNII transceiver transmit power:** Externally measured power-level spanning frequency band at max power

Post-calibration testing:

- Test RF and oscillator performance at calibrated levels.

Temperature compensation:

- Generic compensation based on average temperature drift measured on a sample of units. Additional margin / back-off applied to RX / TX levels to allow for worst-case deviation from average temperature drift.