Tune-up Procedure of

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During manufacturing each module will be individually calibrated.
The measurement is done in a fully calibrated setup, which is based on
Agilent 8960 or RS CMU200 (TX power, AFC, DRP, LNA Gain…..).

Furthermore, the highest power level is verified afterwards in a call
measurement on three channels (low, mid and high).

Procedure:

1. Set the module to operational voltage and on one certain channel in a
special service mode by means of company proprietary software.
2. The actual power is measured at several power levels.
3. The gain factors of each individual phone are adjusted via the Board-test
SW using automatic adjustment arithmetic until the target value is met.
    The appropriate gain control settings are stored in RF table (a special
section in Nor Flash marked with Read only and untouchable for end user)
each phone individually (for each power level).
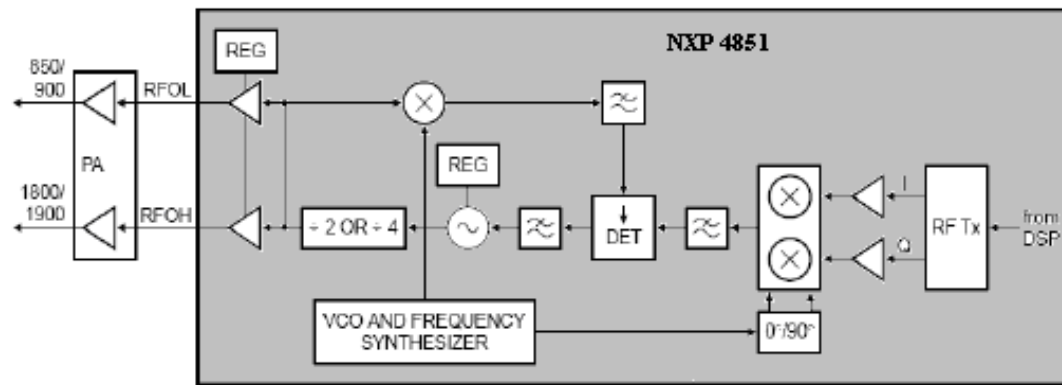   The user has no possibility to change these settings later on.

SIM900 Block Diagram
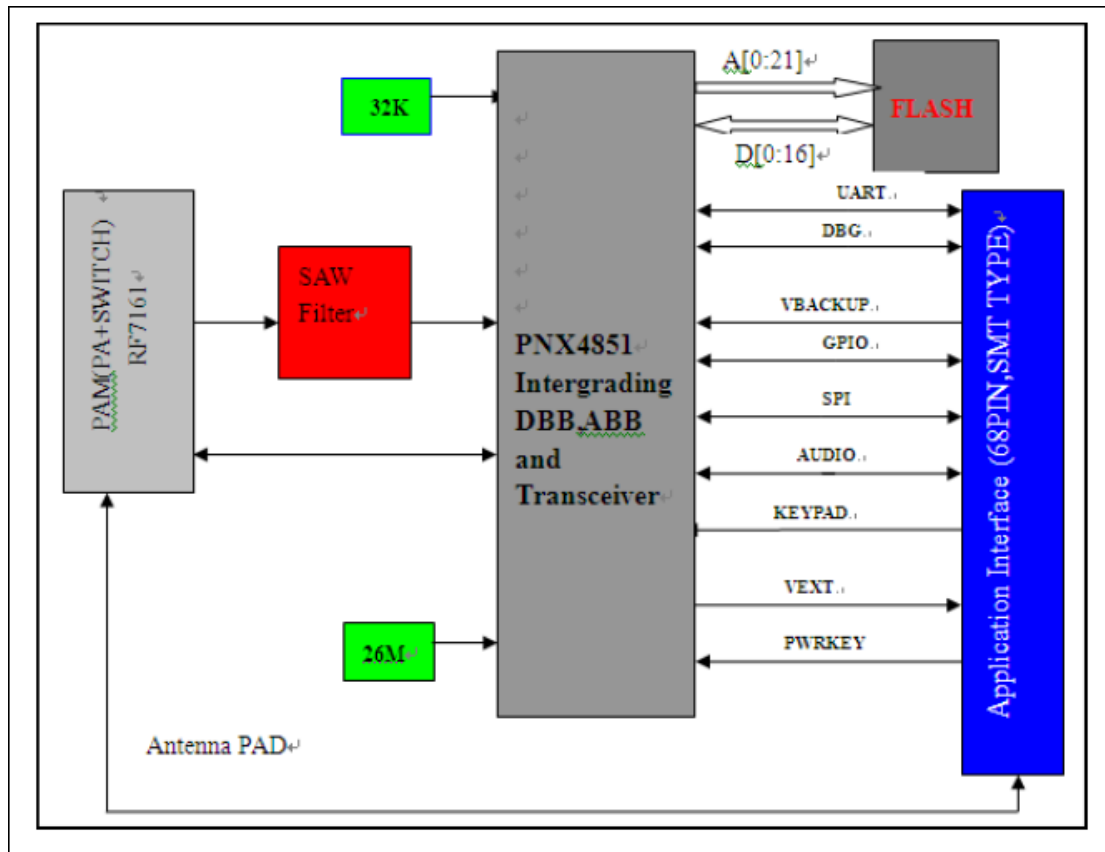
SIM900 RF Signal Flow:
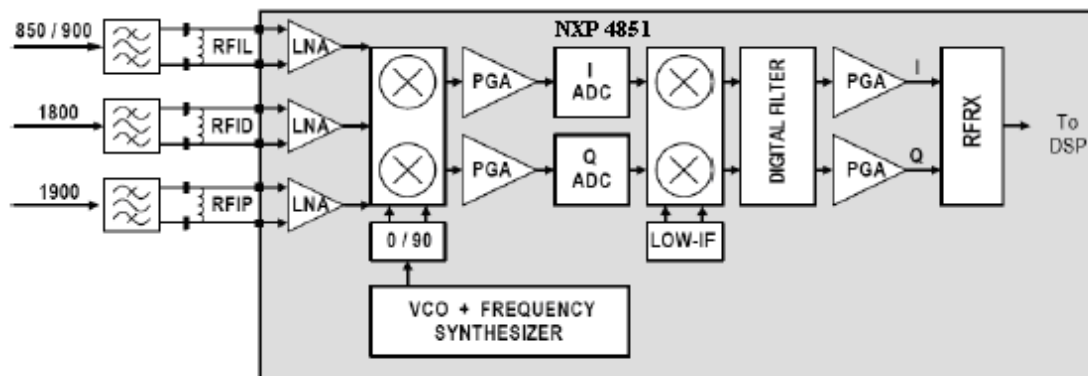
1) Receiver flow: Antenna PAD → Switch →SAW Filter → LNA → DBB→Transceiver →DSP→ABB → Audio (Application interface)

2) Transfer flow: Audio (Application interface) → ABB → DBB → Transceiver → PA
→ Antenna PAD