

## **LIST OF CHANGES**

## **800 Transceiver Board (NTGS81AB)**

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#### **Receiver**

- AH-1 Amplifier removed on the receiver and replaced with a MACOM LNA part
- Receive RF mixer has been changed to MACOM from WJ
- MACOM attenuator has been replaced with alpha part
- New Thomson saw filter to accommodate both 800 and 1900 MHz IF
- Mini-Circuits transformer has been replaced with a cheaper version
- Test switch has been changed from MACOM to Alpha. (Will be removed in production)

#### **Transmit**

- Test switch has been changed from MACOM to Alpha. (Will be removed in production)
- Mini-Circuits transformer has been replaced with a cheaper version
- Using RF saw filter instead of Dielectric filter
- Cheaper thermopad used
- Using 1 31dB alpha attenuator. On board logic to stay at 31 if higher attenuation is selected
- Gain blocks and lineup reworked
- Using new power detector design with cheaper instrumentation amplifier.

#### **Local Oscillators**

- All LO's are using new PLL chips from National Semiconductor
- RF VCO will likely be panasonic instead of Mini-Circuits
- PLLs are programmed with an onboard microcontroller (COP8)
- Cheaper hitachi splitter used for LO distribution.

#### **Digital Baseband**

- Using LVTTTL for all clocks
- All prescalers replaced with one single PLD chip
- New clock recovery scheme