

Exhibit 12 – Description of Circuit Determining Frequency

RM-948

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Circuits for suppression of spurious radiation

All functional RF blocks are mounted on a single multilayer printed wired board (PWB). This board contains X-Gold614 baseband processor, Memory, Power management IC, RF transceiver and other RF front end components. All components are SMD type and mounted using reflow soldering. The PWB contains one common ground plane. All other layers are signal layers with the unused areas acting as a ground plane. Layout design has been completed according to EMC/EMI guidelines.

Shielding consists of

- Shielding is done by using RF shield and Baseband shield.
- RF transceiver and other RF front end components are in the RF shield: RF transceiver (N7510), 2G FEM (N7550), 3G PAs (N7520, N7530), Power detector (N7540) and SAW/DPXs.
- Baseband components in the Baseband shield: X-Gold614 (D2800), Memory (D3000) and Power management IC (N2210).

System connector to accessories is filtered by using passive components.

Conducted spurious emissions from the RF unit are attenuated with LP filters in Front End Module.

Power Limiting

The desired transmitted power is adjusted by a power control loops. The loop is integrated in 2G FEM module for GSM and combined with power detector for WCDMA.