

Change List:

1. Clock generator – same functionality – same LVDS levels
2. FE-FPGA
3. Point of load power converters – changed from TI to Maxim - the input converter is unchanged (should be minimal impact to emissions)
4. RF LNA (receiver)
5. RF Power Amplifier transistors
6. Removed a 133MHz clock driver – now drive the SX1301 modems directly with shorter traces.

Legend – Similarities and Differences:

Same Part and
Same Location

Different Part

Primary Side

Input Load Converter

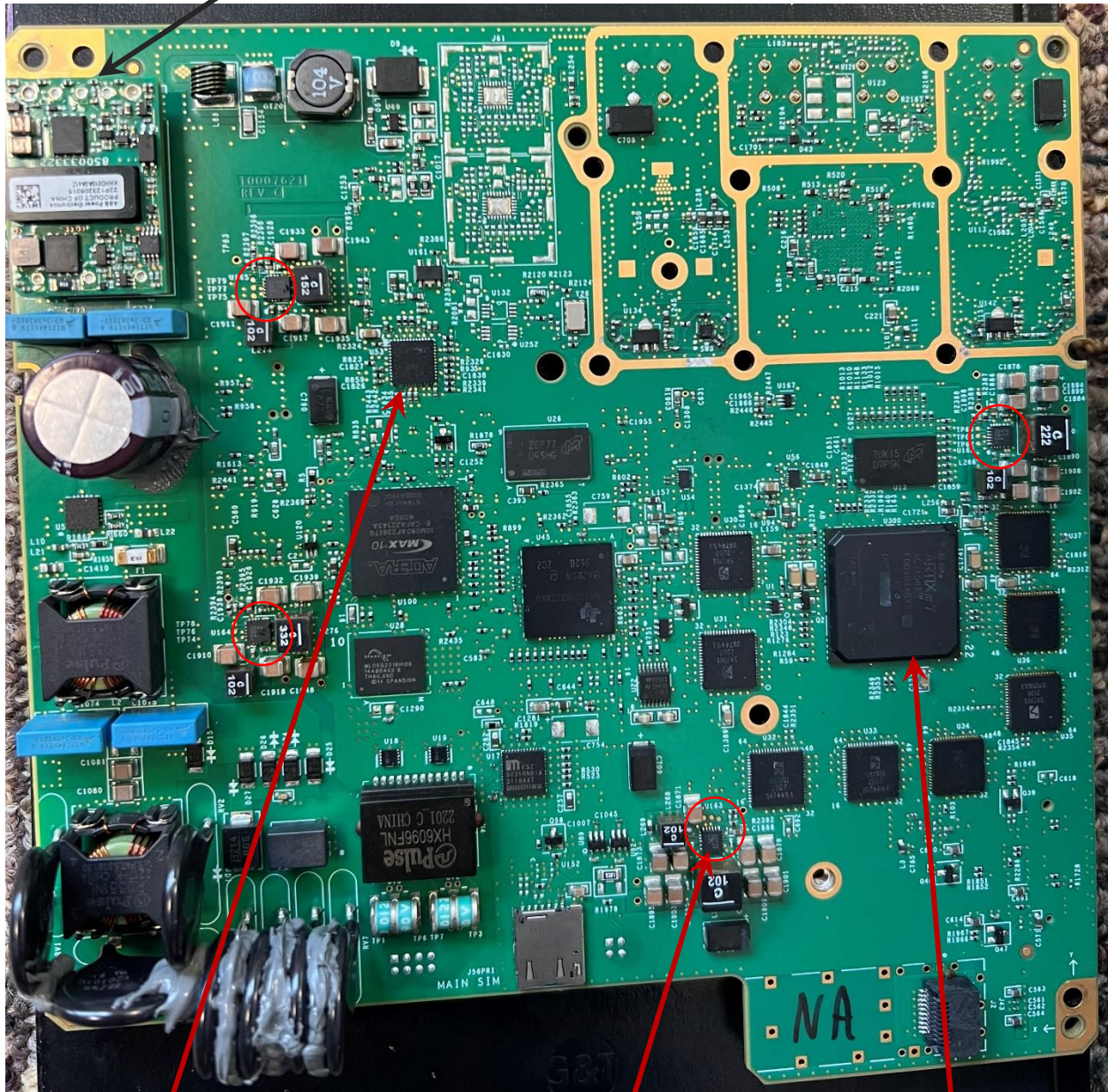


Figure 1 Kona Mega Gateway

TI CDCM6208
Clock Generator

MAX 20404 Load
Buck Converters

Artix 7 50T
FE-FPGA

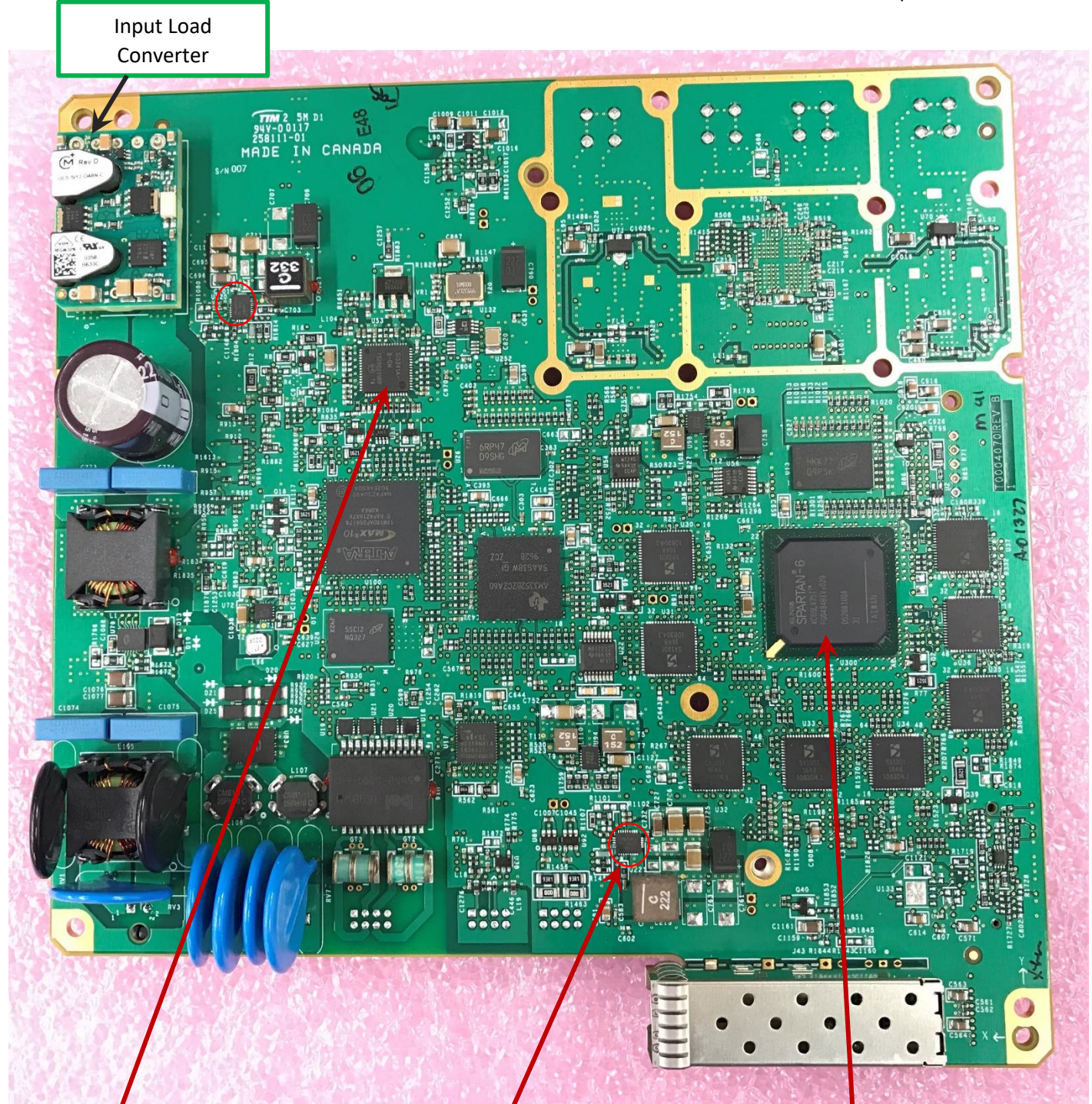


Figure 2 Kona Macro Gateway

SI5341A-D-GM
Clock Generator

TPS53513RVET
Buck Converter

Spartan-6 FE-
FPGA

TQL9092 LNA

Secondary Side

RF6886
Power
Amplifier

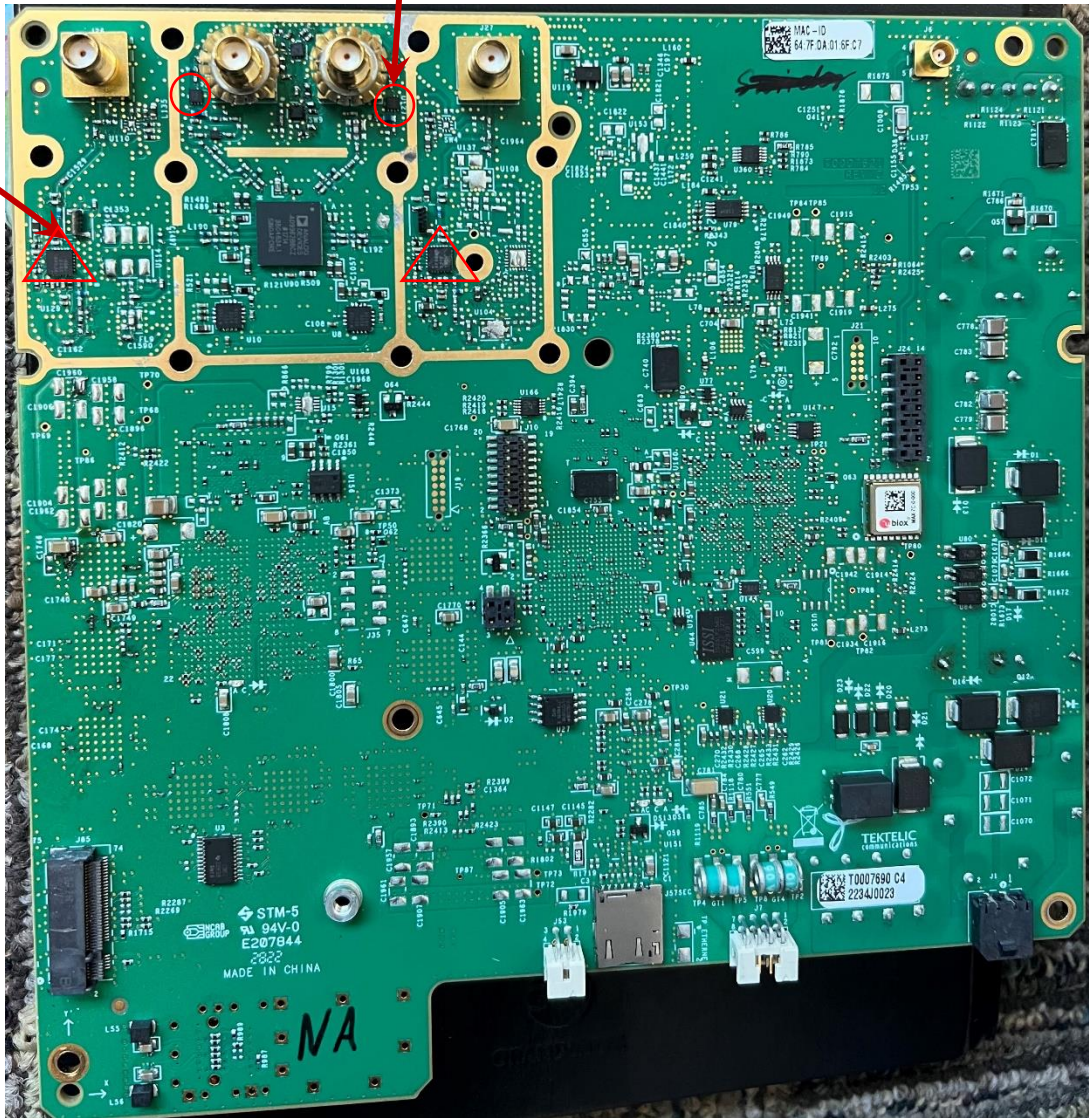


Figure 3 Kona Mega Gateway

PSA4-5043+ LNA

RF5110G

Power
Amplifier

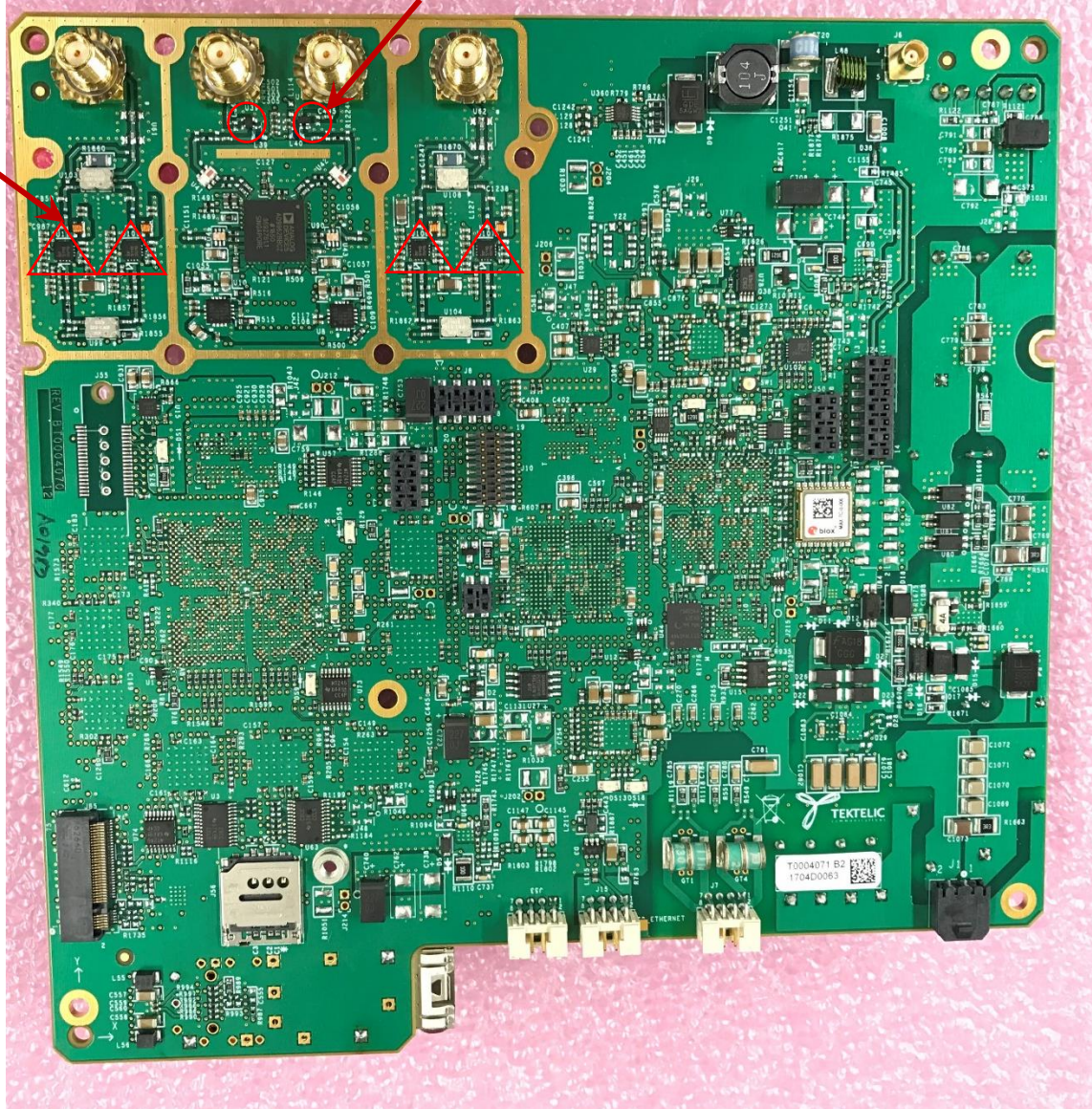


Figure 4 Kona Macro Gateway