

### ***Differences between BGM13PxxA and BGM13PxxE***

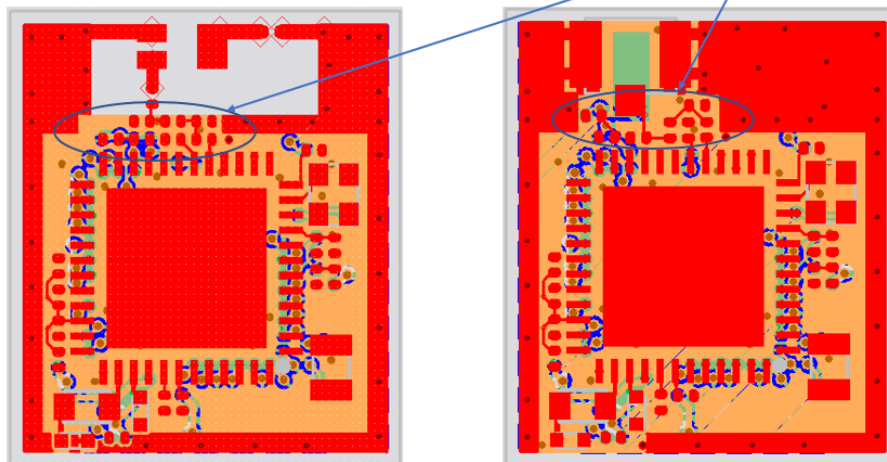
The model BGM13PxxA is electrically identical to BGM13PxxE and the two models have been designed and verified to have same RF characteristics. The differences between the models are:

1. A model is using an internal chip antenna while E model is equipped with a u.fl connector to be used with an external antenna
2. In E model the RF trace and location of some decoupling capacitors have been adjusted to fit in the u.fl connector by keeping the same footprint with A model

The differences are shown in the figure below

1. A variant has internal chip antenna, E variant has u.fl connector for an external antenna

2. RF trace and power supply decoupling capacitors have been adjusted to fit in the u.fl connector to the E variant



**Figure 1: Differences in the layout**