

## PCN – Process Change Notification

Change:	MA231 Series GNSS Active Circuit Change
Date:	2017/01/17
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### Affected Products

Model#	Part Number	Changes
MA231 Stream 3 in 1 Combination Antenna_ 2G/3G/4G / GPS/GLONASS / WiFi Functions	MA231 All Series	Add another SAW filter in between two LNA components.

### Type of Change

- Hardware Modification  
 Production Process Advance  
 Others –Add another SAW filter in GNSS active circuit..

### Description of Change

Due to the out band rejection level isn't enough on original Pre-SAW filter design, causing to system integration failed on EMI testing. Taoglas added another SAW filter in between two LNA components to solve this problem. Details information are shown in below.

### Schedule

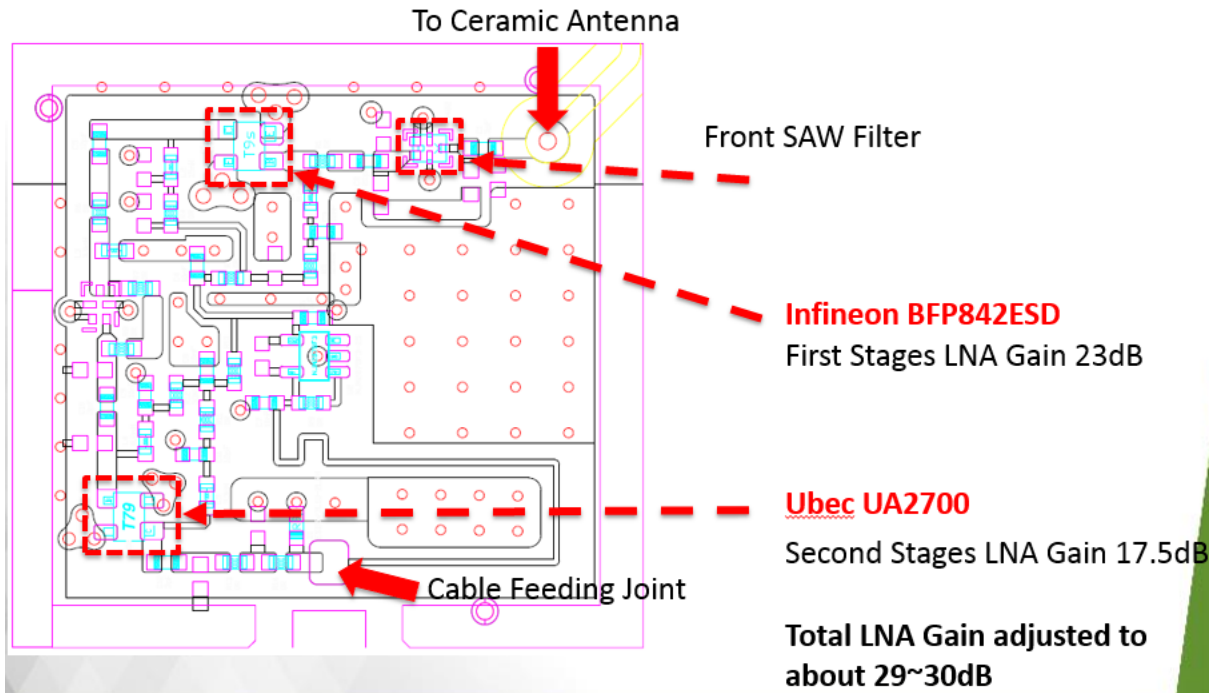
2017, January, Taoglas will adopt into production.

### Forecast Estimated Transition Date

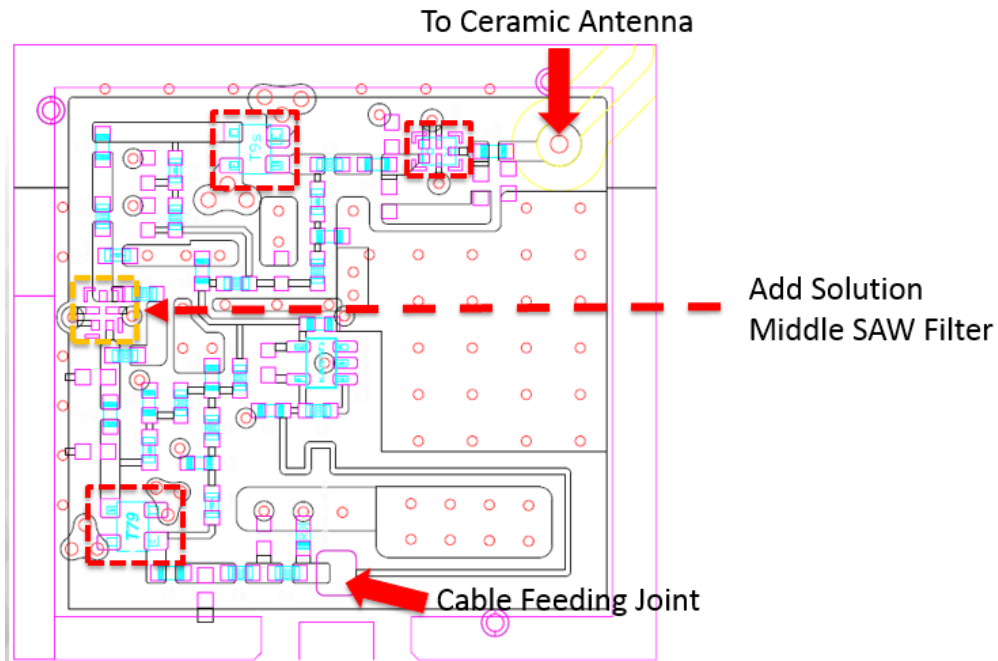
January /2017

**Illustration of Change**

**Original Design**



**New Solution to solve EMI issue**



Evaluate Results,

Original Circuit Out Band Rejection



New Solution Out Band Rejection

