

subject: **9115 CR FCC approval permissive change submission
for Ocelot Family of Cordless Telephones**

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Engineer's Notes

1. INTRODUCTION

The PCC 900MHz Digital Low Power Cordless Telephone System which 9115 Ocelot Family of products make use of a 900 MHz radio system with the transmit and receive frequencies separated by the Intermediate Frequency (IF) of the radio receiver. In all cases the base transmit frequency will be the handset receive frequency and the handset transmit frequency will be the base receive frequency.

It is desirable to avoid the band edges because of commercial pager system just outside the band edge. Additionally, most analog 900 MHz cordless telephones operate at 904 and 926 MHz, so that area should be avoided as well. Additionally, most ISM equipment is designed to operate with a center frequency of 915 MHz so that frequency should be avoided as well. The frequency table below has been constructed with those goals in mind.

2. FREQUENCY PLAN

The frequency plan is to be as shown in Table 1 below:

<u>Channel Number</u>	<u>BaseTX/HandRX (MHz)</u>	<u>HandTX/BaseRX (MHz)</u>
1	902.600	913.300
2	902.800	913.500
3	903.000	913.700
4	903.200	913.900
5	903.400	914.100
6	903.600	914.300
7	903.800	914.500
8	904.000	914.700
9	904.200	914.900
10	904.400	915.100
11	904.600	915.300
12	904.800	915.500
13	905.000	915.700
14	905.200	915.900
15	905.400	916.100
16	905.600	916.300

3. PERMISSIVE CHANGE APPROVAL REQUEST

PCC hereby submit request to FCC for the permissive change of the radio systems for 9115 model and its series models. PCC modified PWB layout and some RF component changes as listed it in section 4 for the Radio Modules from the models which currently approved by FCC. Purpose of the changes are to improve the performance of the radio design as well as to meet the customer demand for cost objectives.

4. LIST OF THE CHANGES SUMMARY

The radio main system functional blocks has been changed or modified with new components and its circuit system from its current FCC approved radios for model 9115 and its series models as follows,

	Current	New
1. PWB layout	Rev. J	Issue 3
2. RF chipsets	MC13158 FM IF IC MC13142 Mixer/VCO/LNA MC13144 RX LNA IC MC145202 PLL IC	AM79RF431(One Chip RF IC)
3. TX Power Amp	MC13144 TX LNA IC	BFG 505 Transistor
4. RX/TX VCO	MC13142, Ceramic Resonator	Coil tuned tank circuit
5. Voltage Regulator	TK11230BM	Used baseband regulator
6. Front end BPF	SC915	Moved its position to in front of IC5
7. RX BPF SAW filter	B4648 B4648	SAFC914.4 SAFC903.7

These changes has been done to improve the radio performance characteristics as well as to improve production yield with reduced number of component counts to meet the customer demand. PCC also added two more alignments on each radio modules as for the VCO voltage tuning and 10.7 MHz IF discriminator tuning for its minimum audio distortion performance.

5. RATIONAL FOR THE PERMISSIVE CHANGES SUBMISSION

PCC had been conducted to test the new radio performance in an FCC approved test site such as Oath test site in Holmdel , NJ and had confirmed that these changes will not impact or violate the current FCC approval which previously had been granted by FCC.

6. EQUIPMENT MODIFICATIONS

The EUT required no modifications or the addition of specialized devices to meet compliance with the aforementioned rules.

Applicant Signature_____ Date_____

Printed Name: Cayetano Chavez

7. TESTED SYSTEM DETAILS

The system was configured for testing in a typical fashion (as a customer would normally use it). The equipment under test(EUT) a 9115 900MHz cordless telephone system was connected to a Central Office (CO) simulator.

Please copy the set up from its original FCC submission file.

8. ATTACHEMENTS

1. A set of Schematic Diagram
2. Complete Component Bill Of Materials

PBN:pbn

Copy to:
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