## Circuit Description

# 900MHz DSSS DIGITAL CORDLESS TELEPHONE MODEL: CR-256 USA VERSION

#### Baseset Circuit Description

- ⇒ The signal which inputted in TEL-LINE is DC coupled at TR and transformed Analog into Digital at U100.

  DATA which is transformed into Digital signal is mixed with PN code at U100 (by spread spectrum) and transmitted to RF part.
  - Spreading signal which inputted to RF part is mixed with Carrier supplied to VCO at U1 and create TX frequency of using channel and then is transmitted to ANTENNA through U3 by TX control of D1,D2.
- ⇒ The signal received to antenna is transmitted to U1 by RX/TX control time.

  The signal inputted at U1 is mixed Carrier of VCO and got to direct conversion and create Base band signal.

  And then, create I and Q signal by demodulation (QPSK: Quadrature Phase Shift Keying method-is phase-shifted by 90°)

I and Q signal (Two signal phase is 90°) is transmitted to U100 and remixed with PN code and generated Digital signal.

Digital signal is transformed into Analog at U100.

This audio signal is passed through U100 and transmitted to TEL-LINE.

- ⇒ ID setting: when Handset is placed on Baseset, charge data is transmitted to Handset by CT2 of Baseset. The Handset is received ID and transmitted ACK signal to RF PART.
- ⇒ Y100 is X-tal generating RF reference signal and should be adjusted by C1 accurately.
- ⇒ Q101,Q102,Q104 is charge detector and ID detector circuitry.
- ⇒ U103 is ring signal detector circuitry

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#### Handset Circuit Description

- ⇒ The signal which is inputted to MIC is transformed Analog into Digital at U100.

  DATA which is transformed into Digital signal is mixed with PN code at u100 (by spread spectrum) and transmitted to RF part.

  Spreading signal which inputted to RF part is mixed with Carrier supplied to VCO at U1 and create TX.
  - Spreading signal which inputted to RF part is mixed with Carrier supplied to VCO at U1 and create TX frequency of using channel and then is transmitted to ANTENNA through U3 by TX control of D1,D2
- ⇒ The signal received to antenna is transmitted to U100 by RX/TX control time.

  The signal inputted at U1 is mixed Carrier of VCO and got to direct conversion and create Base band signal.

  And then, create I and Q signal by demodulation (QPSK: Quadrature Phase Shift Keying method is phase-shifted by 90°)

I and Q signal (Two signal phase is 90%) is transmitted to U100 and remixed with PN code and generated Digital signal.

Digital signal is transformed into Analog at U100.

This audio signal is passed through RECEIVER and transmitted.

- ⇒ When the Handset is low voltage R105,R106,C110 make 77pin of U100 change HIGH to LOW and indicate low voltage.
- U102 is parts for stabilization to voltage of CODEC part.

### CR-256 FREQUENCY TABLE

## (1) Channel Number and Freedency for 1.2MHz Channel Spacing

Channel Number	Channel denter Frequency (MHz)	Channel Number	Channel Center Frequency (MHz)
1	904.2	ıı	915.6
2	904.6	12	916.8
3	906.0	13	918.0
4	907.2	14	919.2
5	908.4	15	920.4
6	909.6	16	921.6
7	<b>910</b> .8	17	922.8
8	912.,0	18	924.0
9	913. 2	19	925.2
10	914.4	20	925.8