

MODEL:MC6985 BLOCK DIAGRAM DESCRIPTION

BASE CORDLESS PHONE:

- (1) TRANSMISSION CIRCUIT
RING DETECTION :
THE RING SIGNAL FROM THE LINE TO CPU VIA IC LM 324.
COMMUNICATION CIRCUIT:
THE COMMUNICATION SIGNAL FROM THE LINE TO CPU VIA THE TRANSFORMER ..
ALL SIGNAL ARE SENT FROM CPU TO ANT VIA IC AN8953FA,TX POWERAMPLIFIER,
AND DUPLEXER.
- (2) RECEIVING CIRCUIT
THE ANT PICK UP THE SIGNAL AND SEND THEM TO LINE VIA DUPLEXER,RFI
AMPLIFIER & MIXER,10.7MHz FILTER,IC AN8953FA,IC LM324 AND TRANSFORMER .
- (3) THE ANT IS MADE BY 26 TWISTED COPPER WIRES,THE DIAMETER OF THE COPPER
WIRE IS 0.15mm.
- (4) MCU (EM78911)
MCU PROVIDES RING DETECTION, FSK DECODING ,CORDLESS PHONE CONTROLLER
- (5) CRYSTAL 32.768 KHz PROVIDES THE CLOCK FOR CPU
CRYSTAL 4.0MHz PROVIDES THE CLOCK FOR AN8953FA.

BASE CLOCK RADIO

- (1) AM BAND CIRCUIT:
THE AM ANT PICK-UP THE SIGNAL AND SEND IT TO IC1 (PIN ARI) VIA PVC, THE AUDIO
SIGNAL FROM THE AFO PIN OF IC1 IS SENT TO DRIVE THE SPEAKER.
- (2) FM BAND CIRCUIT:
THE FM ANT PICK-UP THE SIGNAL AND SEND IT TO IC1 (PIN FRI) VIA PVC, THE AUDIO
SIGNAL FROM THE AFO PIN OF IC1 IS SENT TO DRIVE THE SPEAKER.
- (3) THE MCU (IC2 EC98001)PROVIDES TIME COUNTER AND LCD DRIVER, IT DRIVES THE
LCD DISPLY DIRECTLY AND CONTROL THE RADIO POWER VIA Q1.
- (4) IC1 PROVIDES FM FE,AM FE,FM IF DET ,AM IF DET, AF POWER AMP,POWER SUPPLY.
- (5) THE AM ANT IS MADE BY A COIL COPPER WIRE WITH A MAGNETIC CORE.
- (6) THE FM ANT IS MADE BY AWG#24(THE CONNECTION WIRE OF AC ADAPTER)
- (7) CRYSTAL 32.768 KHz PROVIDES THE CLOCK FOR CPU EC98001.

HANDSET:

- (1) TRAMSMISSION CIRCUIT
COMMUNICATION:
THE MICROPHONE PICK UP THE VOICE SIGNAL AND SEND THEM TO ANT VIA IC
AN8953FA,TX POWER AMPLIFIER AND DUPLEXER.
DTMF/DATA:
THE KEYBOARD IS CONSISTED OF 18 KEYS, DTMF & THE DATA ARE CONTROLLED BY
THE CORRESPONDING KEY WHICH CONNECT TO CPU.THE CPU SEND THE SIGNAL TO
ANT VIA IC AN8953FA,TX POWER AMPLIFIER AND DUPLEXER.
- (2) RECEIVING CIRCUIT
COMMUNICATION:
ANT PICK UP THE SIGNAL AND SEND THEM TO RECEIVER VIA DUPLEXER,RFI

AMPLIFIER&MIXER, 10.7MHz FILTER, AND IC AN8953FA

- (3) THE ANT IS MADE BY A SCREWED,NICKEL COPPER WIRE,THE DIAMETER OF THE COPPER WIRE IS 1.0mm,THE DIAMETER OF SCREW IS 4.8mm.
- (4) MCU PROVIDES KEY BOARD SCANNING, DIALER&CORDLESS PHONE CONTROLLER.
- (5) CRYSTAL 32.768KHz PROVIDES THE CLOCK FOR CPU.
CRYSTAL 4.0MHz PROVIDES THE CLOCK FOR AN8953FA.

Testing Mode Descriptions of MC6985

1. 40 Channels Freq Table in Test Mode

Channel	Base (MHz)		Handset (MHz)	
	Tx	Local Osc.	Tx	Local Osc.
20	903.60	937.40	926.70	892.90
39	904.55	938.35	927.65	893.85
0	902.60	936.40	925.70	891.90
1	902.65	936.45	925.75	891.95
2	902.70	936.50	925.80	892.00
3	902.75	936.55	925.85	892.05
4	902.80	936.60	925.90	892.10
5	902.85	936.65	925.95	892.15
6	902.90	936.70	926.00	892.20
7	902.95	936.75	926.05	892.25
8	903.00	936.80	926.10	892.30
9	903.05	936.85	926.15	892.35
10	903.10	936.90	926.20	892.40
11	903.15	936.95	926.25	892.45
12	903.20	937.00	926.30	892.50
13	903.25	937.05	926.35	892.55
14	903.30	937.10	926.40	892.60
15	903.35	937.15	926.45	892.65
16	903.40	937.20	926.50	892.70
17	903.45	937.25	926.55	892.75
18	903.50	937.30	926.60	892.80
19	903.55	937.35	926.65	892.85
20	903.60	937.40	926.70	892.90
21	903.65	937.45	926.75	892.95
22	903.70	937.50	926.80	893.00
23	903.75	937.55	926.85	893.05
24	903.80	937.60	926.90	893.10
25	903.85	937.65	926.95	893.15
26	903.90	937.70	927.00	893.20
27	903.95	937.75	927.05	893.25
28	904.00	937.80	927.10	893.30
29	904.05	937.85	927.15	893.35
30	904.10	937.90	927.20	893.40
31	904.15	937.95	927.25	893.45
32	904.20	938.00	927.30	893.50
33	904.25	938.05	927.35	893.55
34	904.30	938.10	927.40	893.60
35	904.35	938.15	927.45	893.65
36	904.40	938.20	927.50	893.70
37	904.45	938.25	927.55	893.75
38	904.50	938.30	927.60	893.80
39	904.55	938.35	927.65	893.85
0	902.60	936.40	925.70	891.90
1	902.65	936.45	925.75	891.95
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38	904.50	938.30	927.60	893.80
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0	902.60	936.40	925.70	891.90