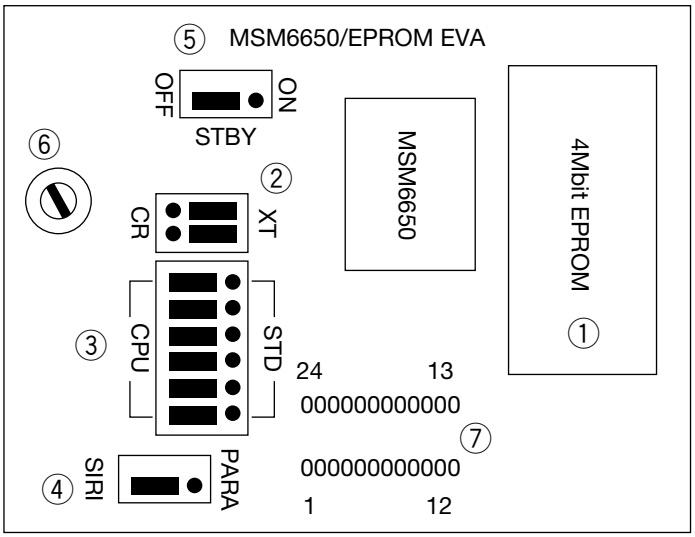
OKI Semiconductor

This version: Feb. 1999
Previous version: May 1997

MSM6650 4MegOTP I/F BOARD

4MegOTP Conversion Board

1. BOARD APPEARANCE



2. BOARD SETTING

① 4Mbit EPROM Socket
Insert a 4Mbit EPROM, which is programmed with the voice data through voice analysis.

② XT/$\overline{RC}$ Select jumpers
These jumpers are used to select ceramic oscillation or RC oscillation.
To select ceramic oscillation, set the jumpers ② to the right side.
To select RC oscillation, set the jumpers ② to the left side.
When a microcontroller is used, only ceramic oscillation can be selected.

③ Stand-alone/Microcontroller Select Jumpers
These jumpers are used to select Stand-alone Mode or Microcontroller Interface Mode for operation of the MSM6650.
To select Stand-alone Mode, set the jumpers ③ to the right side.
To select Microcontroller Interface Mode, set the jumpers ③ to the left side.
However, set the jumper ④ to the right for Stand-alone Mode and the jumper ⑤ to the left for Microcontroller Interface Mode.

④ Serial Input Interface/Parallel Input Interface Select Swich
When a microcontroller is used, this switch selects the serial input of addresses and command data or the parallel input of them.
To select the serial input, set the switch to the left side. To select the parallel input, set the switch to the right side.

⑤ Stanby Select Jumper
When the jumper is set to the right side and The MSM6650 is not activated toward the next phrase within 0.2 second after the voice is terminated, the MSM6650 enters the standby state. (In the standby state, all functions of the MSM6650 are stopped.)

⑥ Variable Resistor for Adjusting Frequency of RC Oscillation
This variable resistor can change the frequency of RC oscillation. The frequency becomes low when the resistor is turned to the right, and the frequency becomes high when the resistor is turned to the left. (The oscillation frequency is set to 256kHz before shipment)

⑦ External Connection Pins
The necessary signal lines are connected to the FC cable connector for external connections. The signals for each connector pin are described below.

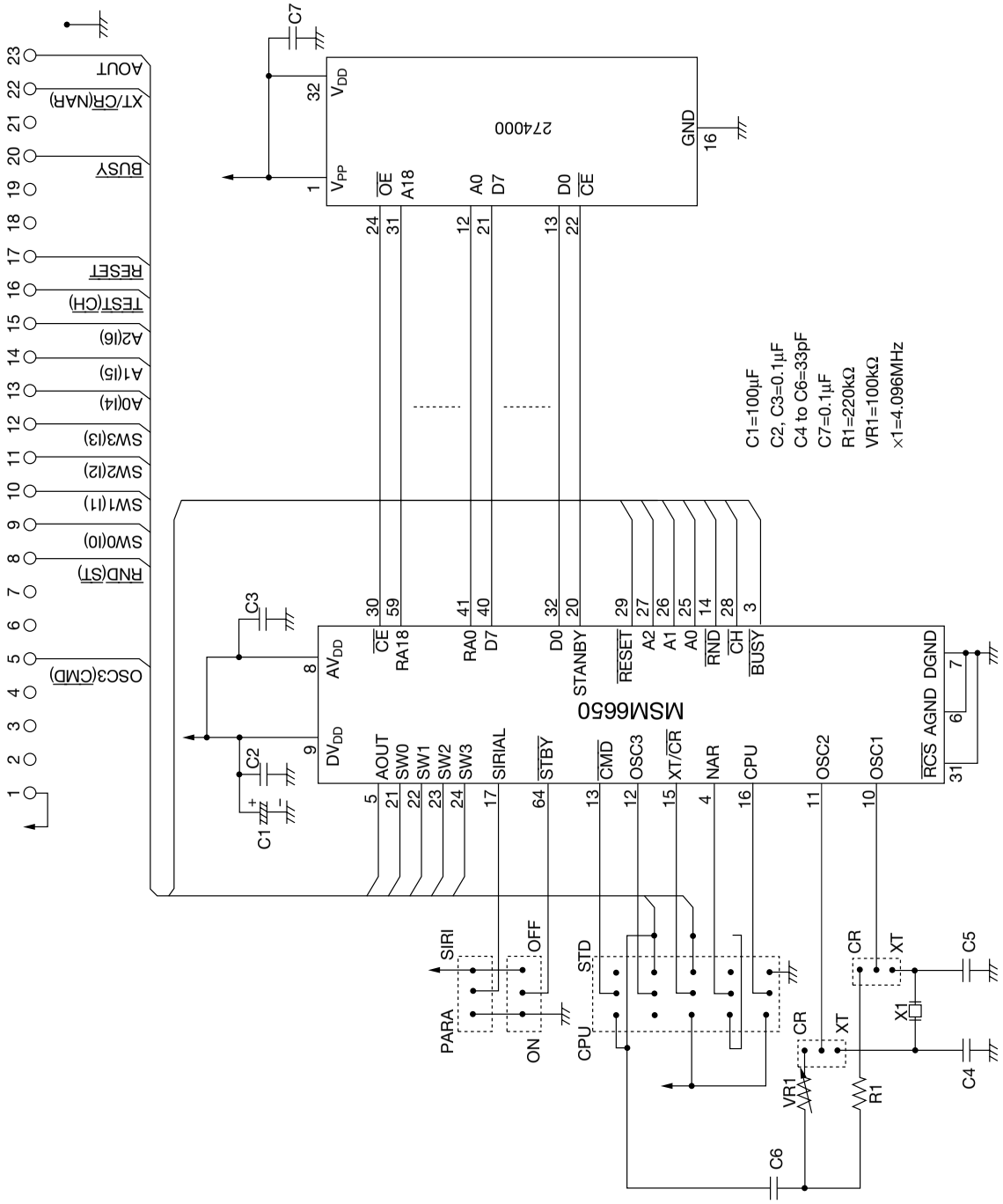
Signals in Standalone Mode

Connector pin No.	Signal	Connector pin No.	Signal
1	V_{DD}	13	A0
2	NC	14	A1
3	NC	15	A2
4	NC	16	$\overline{TEST}$
5	OSC3	17	$\overline{RESET}$
6	NC	18	NC
7	NC	19	NC
8	$\overline{RND}$	20	$\overline{BUSY}$
9	SW0	21	NC
10	SW1	22	XT/$\overline{CR}$
11	SW2	23	AOUT
12	SW3	24	GND

Signals in Microcontroller Interface Mode

Connector pin No.	Signal	Connector pin No.	Signal
1	V_{DD}	13	I4
2	NC	14	I5/SI
3	NC	15	I6/SD
4	NC	16	$\overline{CH}$
5	$\overline{CMD}$	17	$\overline{RESET}$
6	NC	18	NC
7	NC	19	NC
8	$\overline{ST}$	20	$\overline{BUSY}$
9	I0	21	NC
10	I1	22	NAR
11	I2/PORT0	23	AOUT
12	I3/PORT1	24	GND

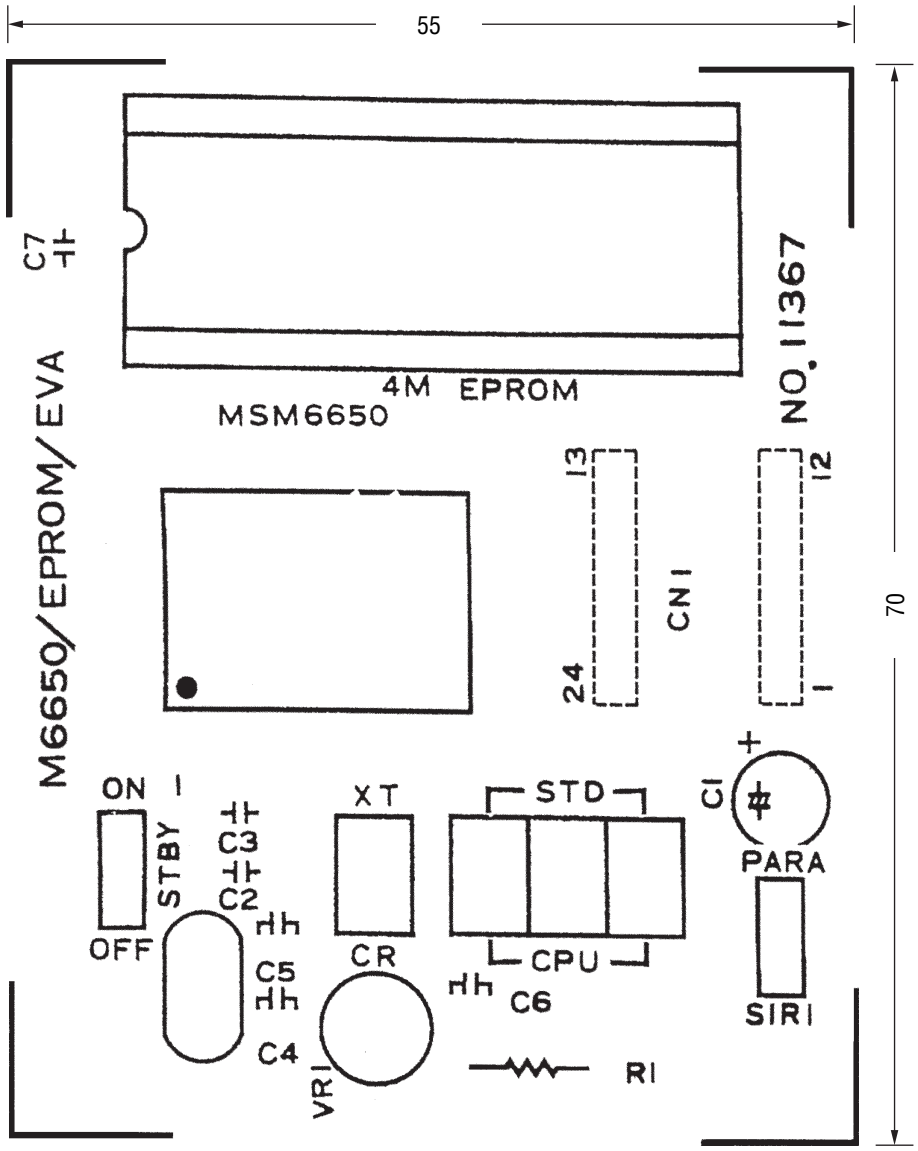
3. CIRCUIT DIAGRAM



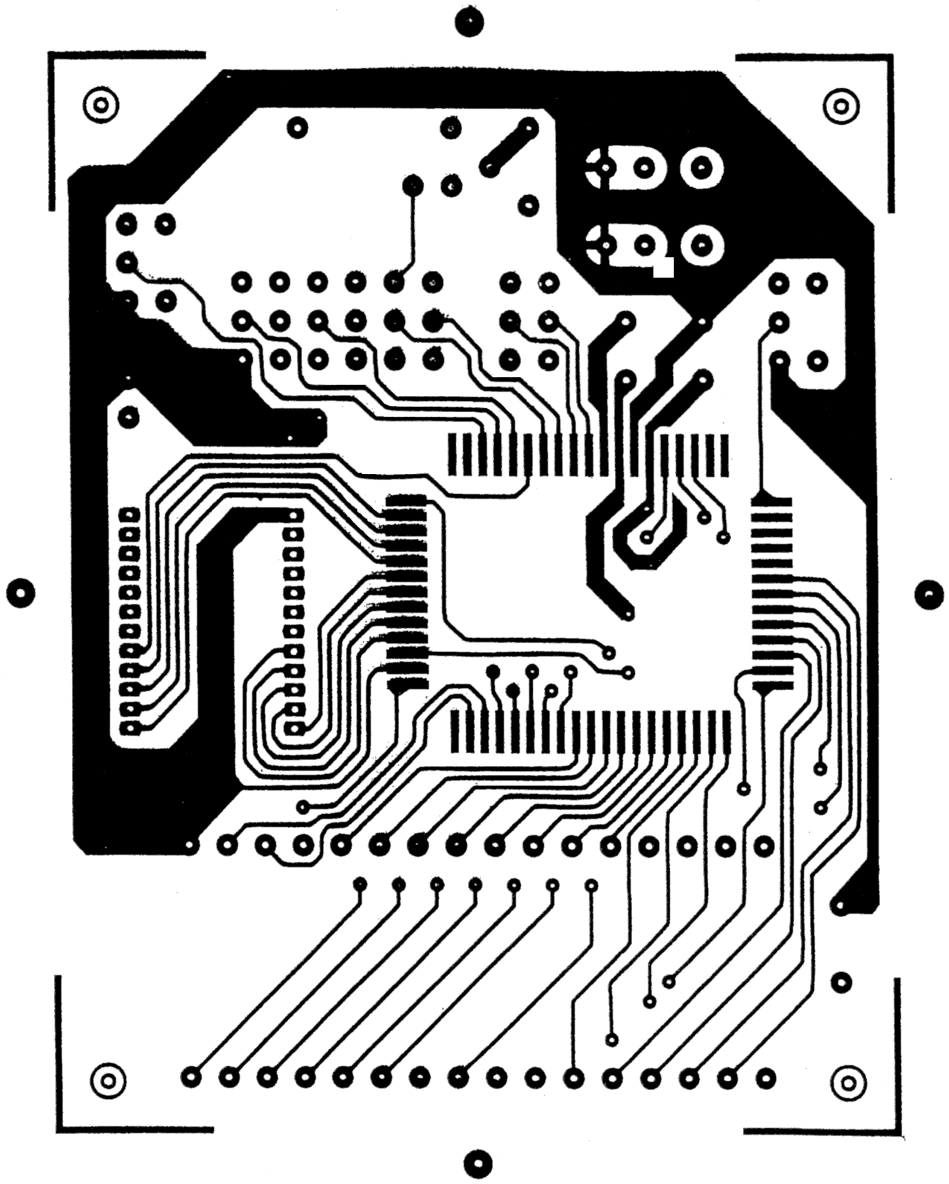
4. PATTERN LAYOUT

4-1. Silk Screen

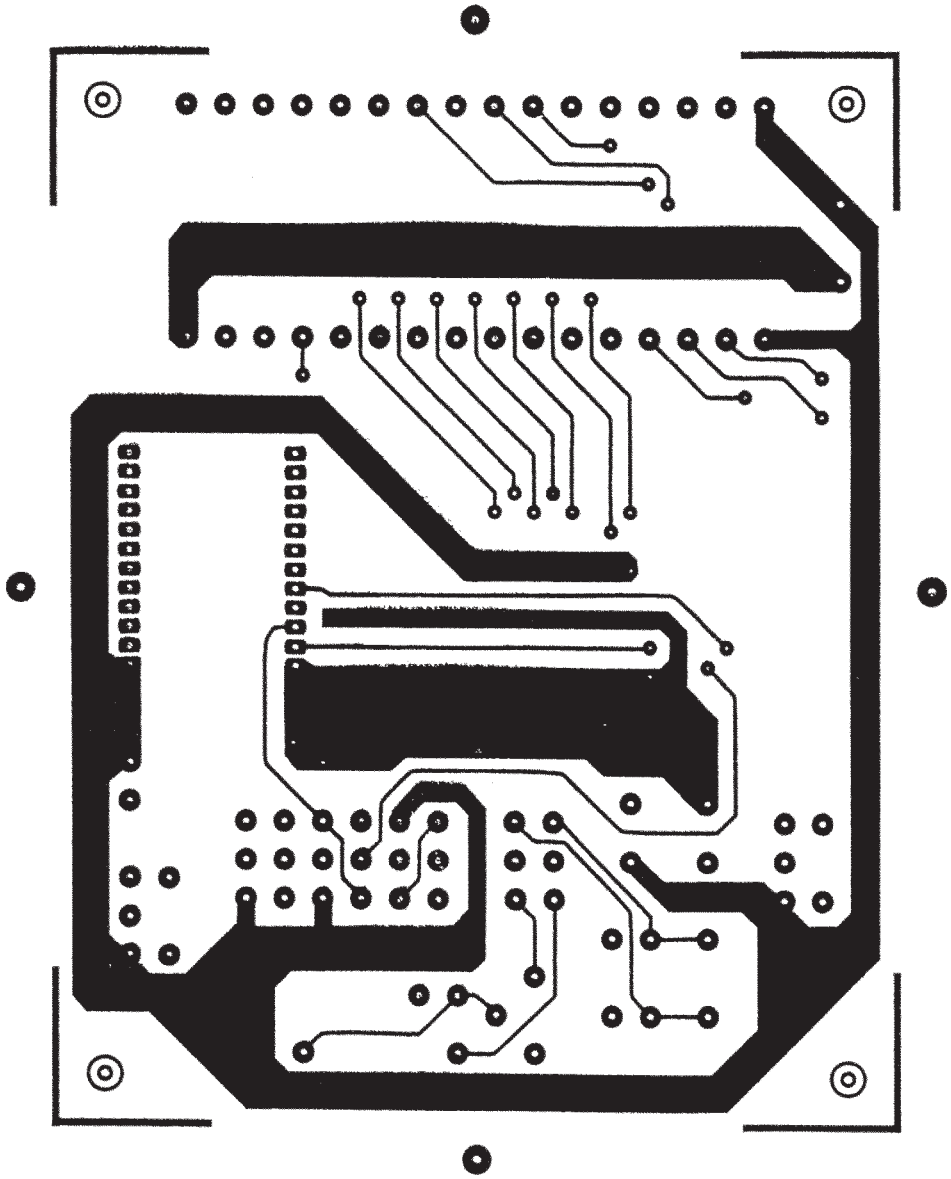
(Unit: mm)



4-2. Mounting Side



4-3. Solder Side



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