FCC ID: OYK-TX027145-0902

Technical Description :

The brief circuit description is listed as follows :
- S1~S4, SW2 and associated circuit act as Control Key
- U1(XXX10) and associated circuit act as Encoder and MCU
- U2(XXX19) and associated circuit act as Voltage Regulator
- Q2 and associated circuit act as Buffer Amplifier
- Q3 and associated circuit act as Modulator and Amplifier
- Q1, X1 and associated circuit act as 27.145 Oscillator
- SW1 and associated circuit act as Channel Switch

Antenna Used :

An integral antenna (non-extendable) has been used.

1. INTRODUCTION

XXX10 is a one-channel voice synthesizer IC with Push-Pull direct drive circuit. It built-in a 4-bit tiny controller with three 4-bit I/O ports. By programming through the tiny controller in XXX10, user's varied applicat- ions including voice section combination, key trigger arrangement, output control, and other logic functions can be easily implemented.

2. FEATURES

- Single power supply 2.4V – 5.5V
- 10 seconds voice capacity are provided (@6KHZ sample rate)
- Built in a 4-bit tiny controller
- I/O Port
  - Three 4-bit I/O ports P1, P2 and P3 are provided.
  - The driving/sink current of P3.2 & P3.3 is up to 8mA/16mA
  - The IO pins P3.3 can be modulated with 38.5Khz carry signal to implement IR function.
- 64*4 bits RAM are provided
- Maximum 16k program ROM is provided
- 32K*10 shared ROM for voice data and program
- Readable ROM code data
- Built in one channel speech synthesizer
- Adaptive playing speed from 2.5k-20kHz is provided
- Built in an 8-level volume control Push-Pull Direct Drive circuit output, can directly connected to Speaker for sound output.
- System clock: 2MHz
- Event Mark function supported
- Low Power Reset
- Watch Dog Timer Supported

3. PIN ASSIGNMENT

Symbol	I/O	Function Description
P10~P13	I/O	I/O port 1: IO
P20~P23	I/O	I/O port 2: IO
P30~P33	I/O	I/O port 3: IO
Rosc	I	Oscillation component connection pin
BUO1	O	Push-Pull output 1
BUO2	O	Push-Pull output 2
RST	I	RST=1→ Reset Chip (Active H)
VDD	I	Positive power supply
GND	I	Negative power supply
Test	I	Test pin