



LX527 User's Guide

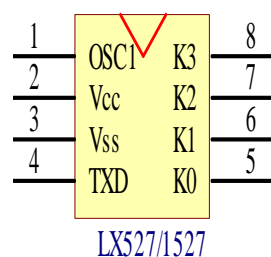
Description

LX527 is designed by CMOS technology, can store ISN and study code beforehand, it is decoded by software; ISN has 20 bits, can store 1048576 combinations, this can reduce any code collision.

Main Features

- 1 . low power consumption quiescent current <math>< 1\mu A</math> ;
- 2 . operating voltage $V_{CC}=2.4 - 13.0V$;
- 3 . input four key-press through combination, that can assemble 8 key-press mostly;
- 4 . single oscillator circuit, need one external resistor only.
- 5 . small volume 8 package by SSOP , it is perfect upgrade product of LX2260;
- 6 . it is compatible with FP527 absolutely.

Pin Configuration



Pin Description

Sign	Description	Pin	I / O
OSCI	Oscillator circuitry input pin, connect resistor to power supply	1	I
VCC	Positive Power Supply	2	
VSS	Negative Power Supply	3	
TXD	Code output pin	4	O
K0	Key-press input pin, contain pull-down resistor	5	I
K1	Key-press input pin, contain pull-down resistor	6	I
K2	Key-press input pin, contain pull-down resistor	7	I
K3	Key-press input pin, contain pull-down resistor	8	I



Limit Parameter

Sign	Parameter	Condition	Scope	Unit
Vcc	Supply voltage		-0.3~15	V
VI	Input voltage		-0.3~Vcc+ 0.3	V
VO	Output voltage		-0.3~Vcc+ 0.3	V
Tst	Storage temperature		-40 ~125	°C
Top	Operating temperature		-20 ~70	°C
Pdis	Most power consumption	Vcc = 12V (Empty)	24	mW

Electric Characteristic

Parameter	Condition	Sign	Least	Type	Most	Unit
Operating voltage		Vcc	2.4	12	15	V
Quiescent current	Vcc = 12V, OSC stop , OutPut Unloaded	Isb			1.0	uA
Operating current	Vcc = 12V , one key-press input (one contact Vcc)	Iop		0.5	1.0	mA
Driven pull current	Vcc = 12V, Voh = 6V	Ioh	5			mA
Driven sink current	Vcc = 12V, Vol = 6V	Iol	3			mA
Operating frequency		Fop		80K		Hz

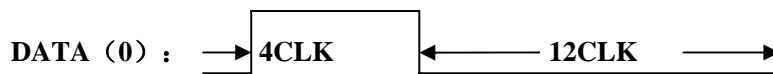
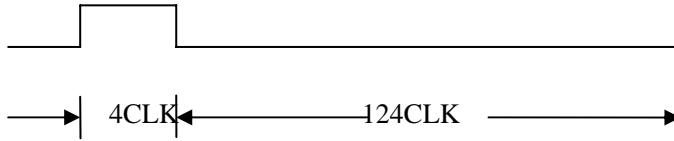
Output Code format

Synchronization code	ISN C0~C19 (1million group)	D0	D1	D2	D3
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Complete format of 1 frame code



synchronization code:



Definition: 1 CLK=8 OSC CLOCK

K0~K3 key-press combination and output relation table

K3	K2	K1	K0	D3	D2	D1	DO
0	0	0	1	0	0	0	1
0	0	1	0	0	0	1	1
0	0	1	1	0	0	1	0
0	1	0	0	1	1	0	0
0	1	0	1	1	1	0	1
0	1	1	0	1	1	1	1
0	1	1	1	1	1	1	0
1	X	X	X	1	1	1	1



Oscillator resistor and 1 bit data width (TD) corresponding table

(unit:ms)

	12V	10V	8V	5V
200K	1.22	1.25	1.255	1.33
220K	1.315	1.34	1.375	1.45
240K	1.435	1.45	1.49	1.55
270K	1.6	1.63	1.675	1.76
300K	1.785	1.81	1.84	1.93
330K	1.94	1.96	1.99	2.095
370K	2.17	2.2	2.23	2.345
390K	2.25	2.275	2.3	2.4

The oscillator resistor replace relation of LX527 and FP527 (for reference only):

FP527	LX527
430K	330K
330K	240K
300K	220K

Application circuit diagram

