3 STATES ENCODER

3 態編碼 IC

GENERAL DESCRIPTION 功能敘述

The M45026 is a CMOS ASIC encoder. It will en-code 9 parallel inputs and serially transmit them to the output when $\overline{TE}$ depressed. These address inputs are 3 states i.e. LOW (0)、OPEN (X) and HIGH (1).

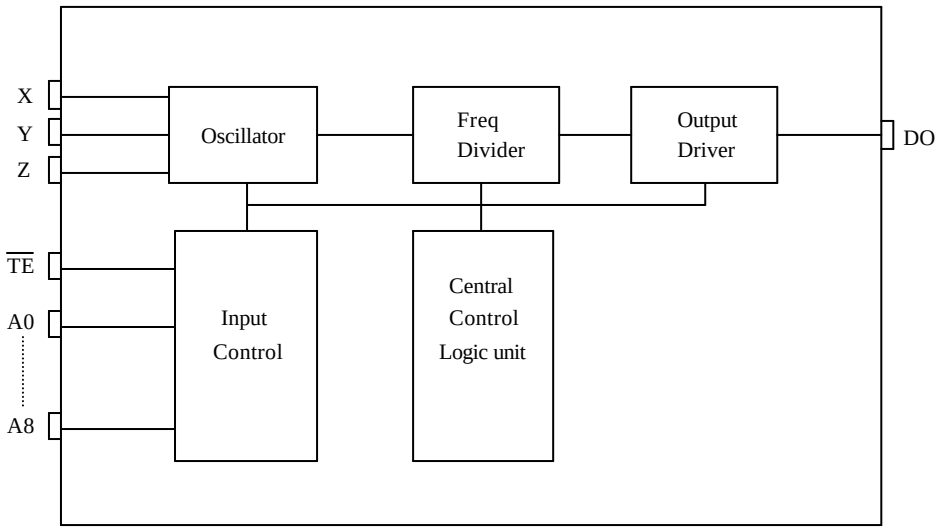
FEATURES 產品特長

- RC oscillator.
- 3^9 =19,683 codes, “0”,”X”,”1” Tri-states.
- Minimum two transmission words.

APPLICATIONS 產品應用

- Car/home alarm system, garage control etc..

BLOCK DIAGRAM 功能方塊圖



*All specs and applications shown above subject to change without prior notice.
（以上電路及規格僅供參考,本公司得逕行修正）

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ABSOLUTE MAXIMUM RATING

(TA=25℃)

Parameter	Rating	Unit
Supply Voltage	-0.3 to 15	V
Input Voltage	-0.2~V_{DD} +0.2	V
Operating Temperature	-20 to 75	℃
Storage Temperature	-50 to 125	℃

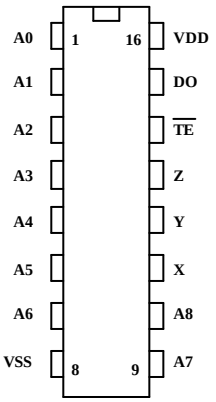
ELECTRICAL CHARACTERISTICS

Characteristics	Sym.	Min.	Typ.	Max.	Unit	Conditions
Operating Voltage	V_{DD}	2.4	—	15	V	
Operating Current	I_{OP}	—	0.1	1	μA	No load
Quiescent Current	I_{SB}	—	0.1	0.5	mA	
Output Drive Current	I_O	—	2	—	mA	@V_{DS}=1.2V
Input Voltage	V_{IH}	V_{DD}−0.2	V_{DD}	V_{DD}	V	
	V_{IL}	V_{SS}	V_{SS}	V_{SS} +0.2		
Oscillator Frequency	Fosc	—	22	—	KHz	External±30%

PIN DESCRIPTION

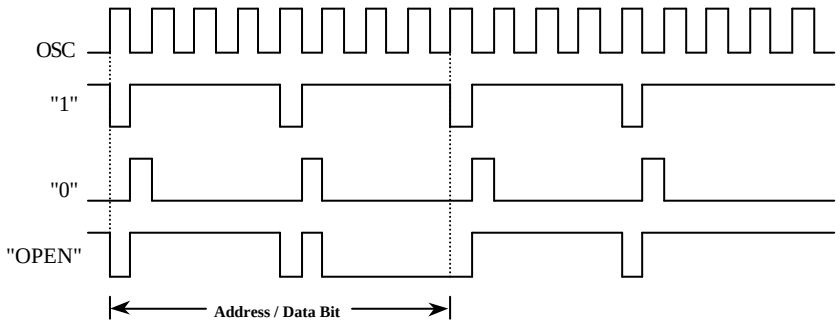
No.	Name	Description
1~7	A0~A7	3 states address inputs
8	VSS	Negative power supply
9~10	A7、A8	3 states address inputs
11	X	Oscillator input
12	Y	Oscillator output
13	Z	Oscillator output
14	$\overline{TE}$	Transmit enable
15	DO	Data output
16	VDD	Positive power supply

M45026

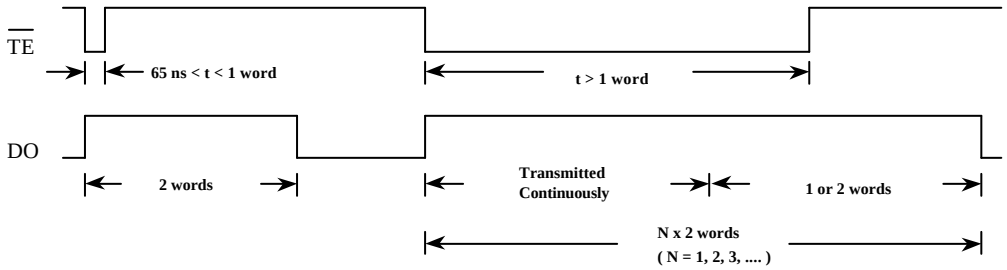


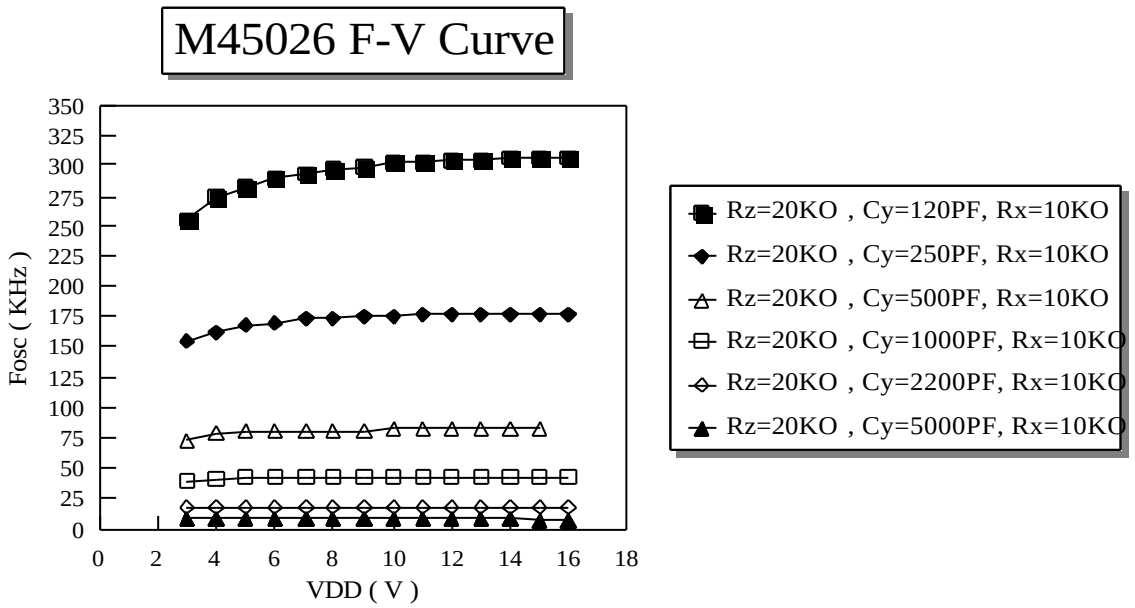
TIMING WAVEFORM

(1) Bit format

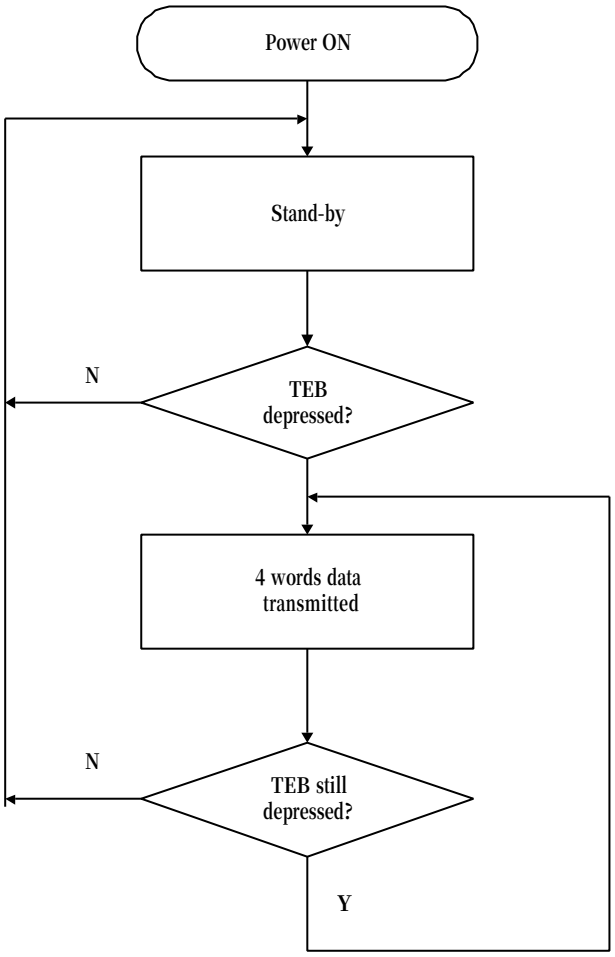


(2) TIMING DIAGRAM

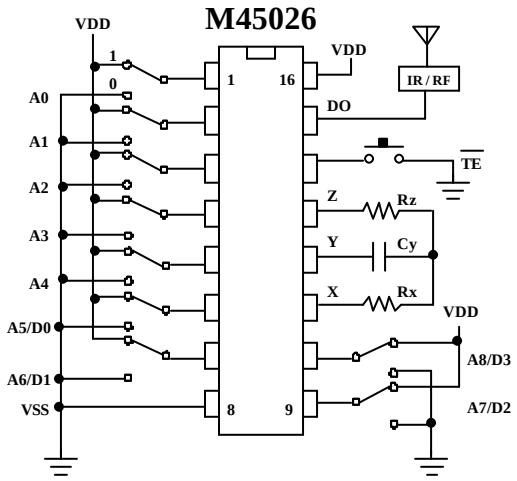


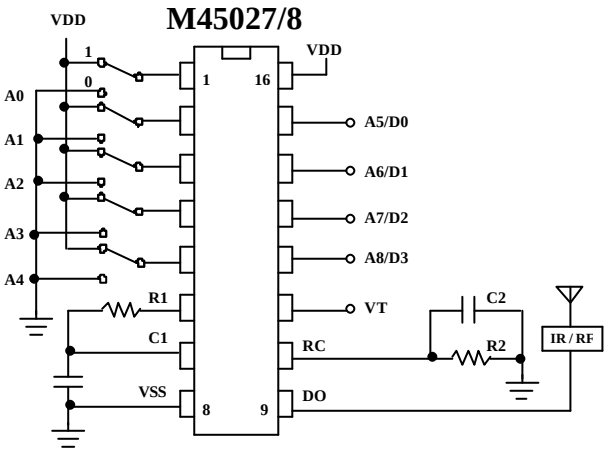


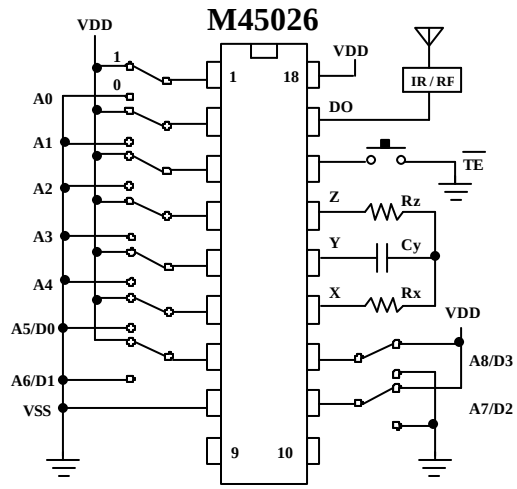
OPERATING FLOWCHART



APPLICATION DIAGRAM 參考電路圖







* @VDD=12V, Rx=20 KΩ, Rz=10KΩ, Cy=500 PF.
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