



GENERAL DESCRIPTION 功能叙述

The M318E is a CMOS ASIC encoder. It will en-code 12 parallel data inputs (A0~A11) and serially \overline{TE} transmit them to the output when transmits enable (\overline{TE}) depressed. The address inputs are 3 states i.e. LOW (0)、OPEN (X) or HIGH(1). It will transmit 1 cycle each depressed.

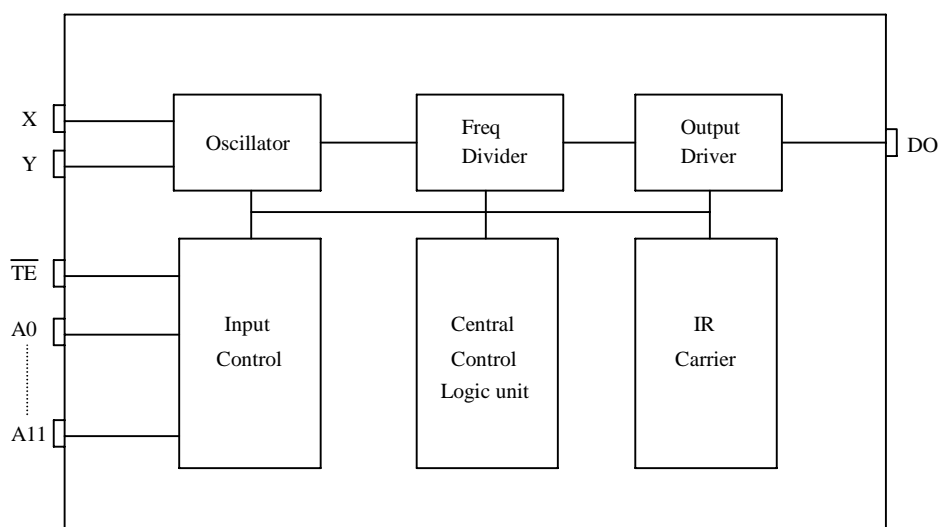
FEATURES 产品特长

- Same Rosc matched to the DECODER M318D/F
- $3^{18} = 387,420,489$ codes, "0"、"X"、"1" Tri-state
- Internal code A0~A7 1 0 1 1 1 0 A8~A11
- 1 cycle transmission each time
- Direct data transmit type : (Eliminating TE and diodes)
- M318E-H : switch to VDD

APPLICATIONS 产品应用

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

BLOCK DIAGRAM 功能方块图



*All specs and applications shown above subject to change without prior notice.

(以上电路及规格仅供参考,本公司得径行修正)



3 STATES ENCODER

3 态编码 IC

M318E

ABSOLUTE MAXIMUM RATING

(TA=25°C)

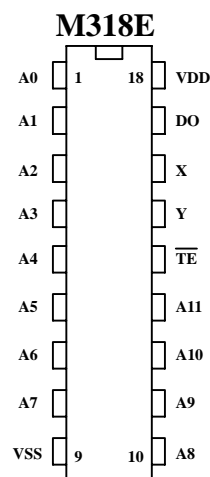
Parameter	Rating	Unit
Supply Voltage	-0.3 to 15	V
Input Voltage	-0.2~V _{DD} +0.2	V
Operating Temperature	-50 to 125	°C
Storage Temperature	0 to 70	°C

ELECTRICAL CHARACTERISTICS

Characteristics	Sym.	Min.	Typ.	Max.	Unit	Conditions
Operating Voltage	V _{DD}	2.4	—	15	V	
Operating Current	I _{OP}	—	0.1	1	μ A	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	F _{osc}	—	76	—	KHz	External ± 30%, R _{osc} =240K Ω

PIN DESCRIPTION

No.	Name	Description
1~8	A0~A7	Address inputs
9	VSS	Negative power supply
10~13	A8~A11	Address inputs
14	$\overline{\text{TE}}$	Transmit enable
15	Y	Oscillator output
16	X	Oscillator input
17	DO	Data output
18	VDD	Positive power supply





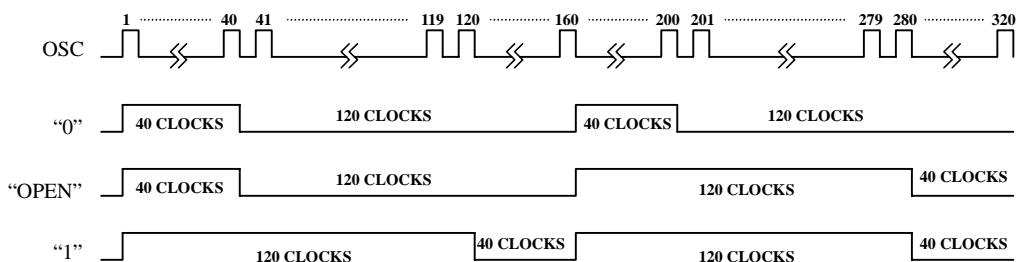
3 STATES ENCODER

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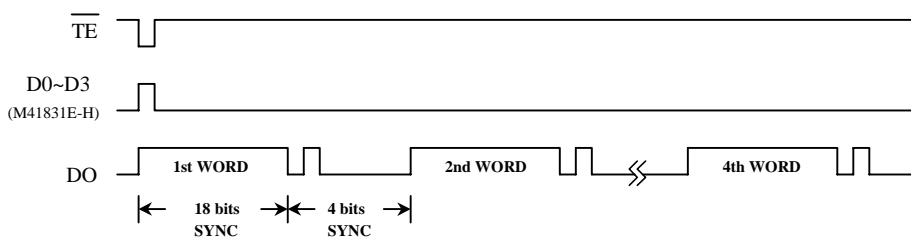
M318E

TIMING WAVEFORM

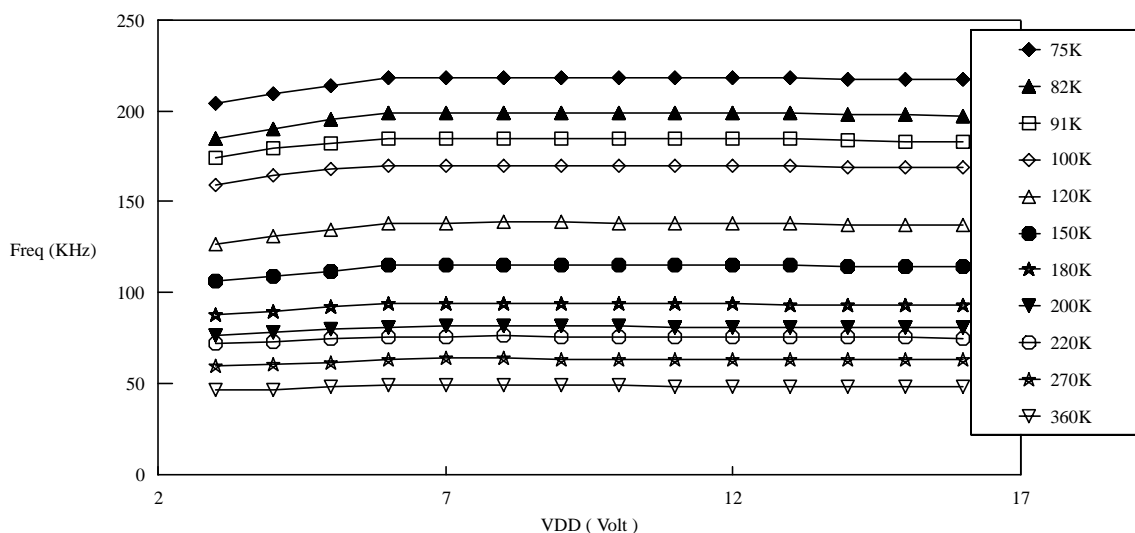
(1) Bit format



(2) TIMING DIAGRAM



M318E F-V curve

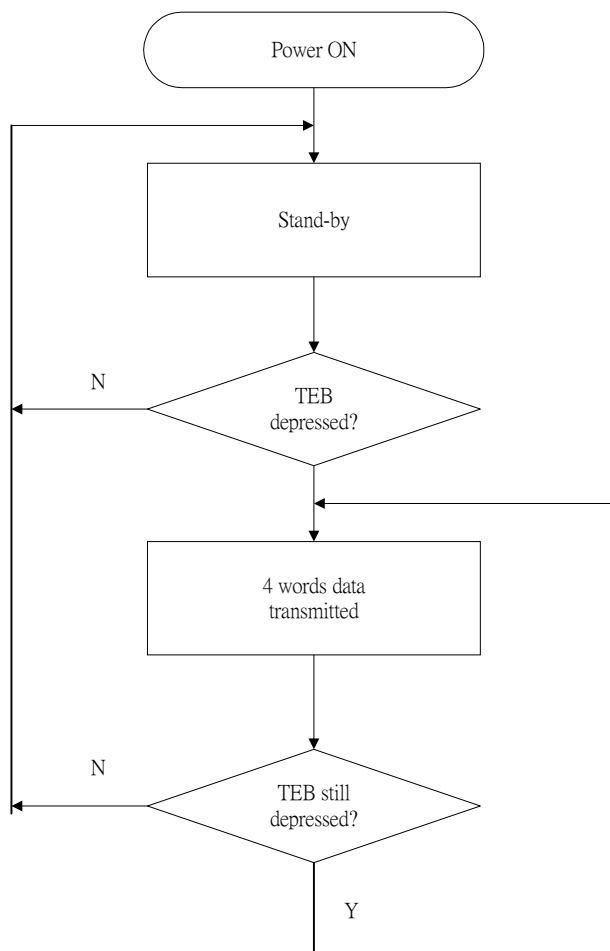




3 STATES ENCODER

3 态编码 IC

OPERATING FLOWCHART

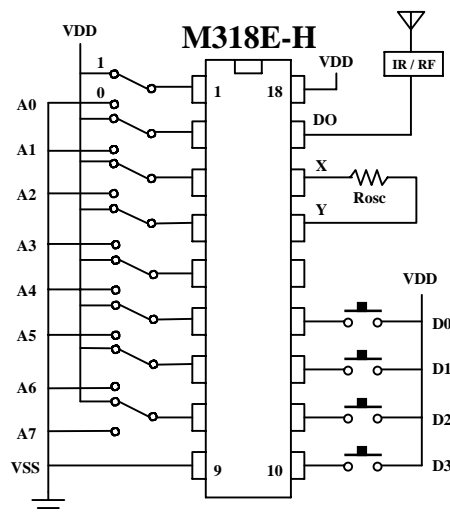
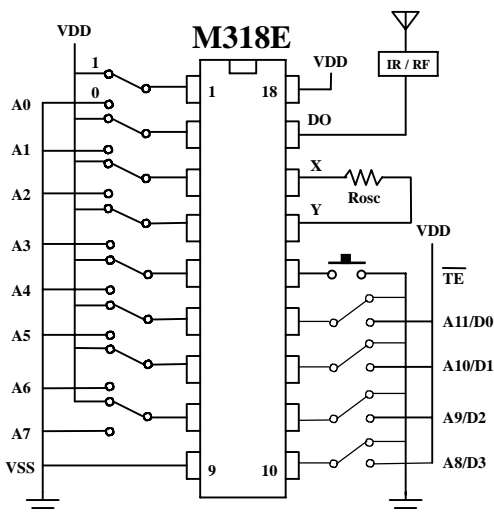




APPLICATION DIAGRAM 参考电路图

(1) DIP PACKAGE

直接发射 (VDD)



(2) SOP PACKAGE

直接发射 (VDD)

