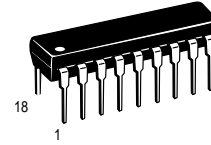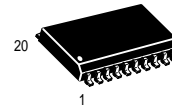# MC145145-2

4-Bit Data Bus Input
PLL Frequency Synthesizer
Interfaces with Single–Modulus Prescalers

The MC145145–2 is programmed by a 4–bit input, with strobe and address lines. The device features consist of a reference oscillator, 12–bit programmable reference divider, digital phase detector, 14–bit programmable divide–by–N counter, and the necessary latch circuitry for accepting the 4–bit input data.

- Operating Temperature Range: – 40 to 85°C
- Low Power Consumption Through the Use of CMOS Technology
- 3.0 to 9.0 V Supply Range
- Single Modulus 4–Bit Data Bus Programming
- ÷N Range = 3 to 16,383, ÷R Range = 3 to 4,095
- "Linearized" Digital Phase Detector Enhances Transfer Function Linearity
- Two Error Signal Options:
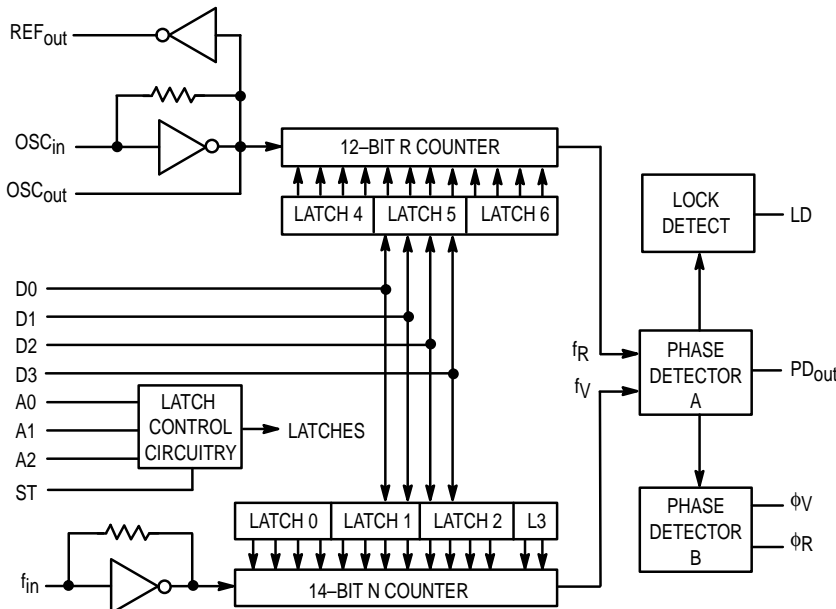   Single–Ended (Three–State)
    Double–Ended

> **NOT RECOMMENDED FOR NEW DESIGNS;**
> **PRODUCT TO BE PHASED OUT.**
> **Closest equivalents are the MC145151–2, MC145170–1,**
> **MC14519X series, and MC14520X series.**

P SUFFIX
PLASTIC DIP
CASE 707

DW SUFFIX
SOG PACKAGE
CASE 751D

ORDERING INFORMATION

MC145145P2	Plastic DIP
MC145145DW2	SOG Package

PIN ASSIGNMENTS

PLASTIC DIP

D1	1		18	D2
D0	2		17	D3
f_{in}	3		16	REF_{out}
V_{SS}	4		15	ϕR
V_{DD}	5		14	ϕV
OSC_{in}	6		13	LD
OSC_{out}	7		12	PD_{out}
A0	8		11	ST
A1	9		10	A2

SOG PACKAGE

D1	1		20	D2
D0	2		19	D3
NC	3		18	REF_{out}
f_{in}	4		17	ϕR
V_{SS}	5		16	ϕV
V_{DD}	6		15	LD
OSC_{in}	7		14	PD_{out}
OSC_{out}	8		13	ST
A0	9		12	A2
A1	10		11	NC

NC = NO CONNECTION

BLOCK DIAGRAM

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