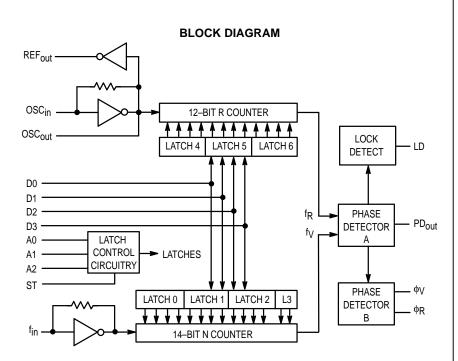
## 4-Bit Data Bus Input PLL Frequency Synthesizer Interfaces with Single–Modulus Prescalers

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

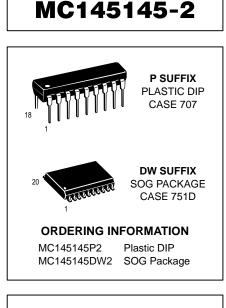
> NOT RECOMMENDED FOR NEW DESIGNS; PRODUCT TO BE PHASED OUT. Closest equivalents are the MC145151–2, MC145170–1, MC14519X series, and MC14520X series.



REV 2 1/98 TN98012200



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| PIN ASSIGNMENTS      |    |    |        |  |
|----------------------|----|----|--------|--|
| PLASTIC DIP          |    |    |        |  |
| D1 [                 | 1• | 18 | D2     |  |
| D0 [                 | 2  | 17 | D3     |  |
| f <sub>in</sub> [    | 3  | 16 | REFout |  |
| v <sub>ss</sub> C    | 4  | 15 | φR     |  |
| V <sub>DD</sub> [    | 5  | 14 | φV     |  |
| OSC <sub>in</sub> [  | 6  | 13 | LD     |  |
| osc <sub>out</sub> [ | 7  | 12 | PDout  |  |
| A0 [                 | 8  | 11 | ST     |  |
| A1 [                 | 9  | 10 | A2     |  |
| SOG PACKAGE          |    |    |        |  |

| SOUTACIAGE           |    |    |                      |  |
|----------------------|----|----|----------------------|--|
| D1 [                 | 1● | 20 | D2                   |  |
| D0 [                 | 2  | 19 | ] D3                 |  |
| ис 🛛                 | 3  | 18 | ] REF <sub>out</sub> |  |
| f <sub>in</sub> D    | 4  | 17 | ] ¢R                 |  |
| v <sub>ss</sub> d    | 5  | 16 | ΙφV                  |  |
| V <sub>DD</sub> [    | 6  | 15 | ] LD                 |  |
| osc <sub>in</sub> [  | 7  | 14 | ] PD <sub>out</sub>  |  |
| osc <sub>out</sub> [ | 8  | 13 | ] ST                 |  |
| A0 🛛                 | 9  | 12 | ] A2                 |  |
| A1 [                 | 10 | 11 | D NC                 |  |
| NC = NO CONNECTION   |    |    |                      |  |

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