MOTOROLA

MC145144

4-BIT DATA BUS INPUT PLL FREQUENCY SYNTHESIZER

The MC145144 is one of a family of LSI PLL frequency synthesizer parts from Motorola CMOS. The family includes devices having serial, parallel and 4-bit data bus programmable inputs. Options include single- or dual-modulus capability, transmit/receive offsets, choice of phase detector types and choice of reference divider integer values.

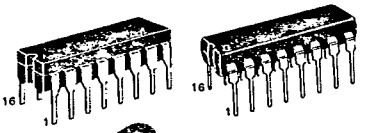
The MC145144 is programmed by a 4-bit input, with strobe and address lines. The device features consist of a reference oscillator, programmable reference divider, digital-phase detector, programmable divide-by-N counter and the necessary latch circuitry for accepting the 4-bit input data. When combined with a loop filter and VCO, the MC145144 can provide all the remaining functions for a PLL frequency synthesizer operating up to the device's frequency limit. For higher VCO frequency operation, a down mixer or a fixed divide prescaler can be used between the VCO and MC145144.

- Tailored for TV Tuning Applications
- Low Power Drain
- 3.0 to 9.0 Vdc Supply Range
- >30 MHz Typical Input Capability @5 Vdc
- Programmable Reference Divider for Values Between 3584 and 3839
- On- or Off-Chip Reference Oscillator Operation
- Single Modulus 4-Bit Data Bus Programming
- ÷N Range = 4 to 4092 in Steps of Eight
- "Linearized" Digital Phase Detector Enhances Transfer Function Linearity
- Pin-for-Pin Compatible with the MM6044

CMOS LSI

(LOW-POWER COMPLEMENTARY MOS)

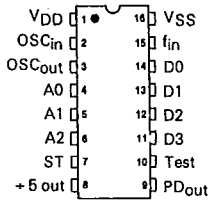
4-BIT DATA BUS INPUT PLL FREQUENCY SYNTHESIZER



L SUFFIX
CERAMIC PACKAGE
CASE 620

P SUFFIX
PLASTIC PACKAGE
CASE 648

PIN ASSIGNMENT



NOT RECOMMENDED FOR NEW DESIGNS
PRODUCT BEING PHASED OUT

Closest equivalent is the MC145145-1