



# 25 to 8 MUX LCD Controller and Driver High Uniformity of Contrast and no external components

### Description

The EM6124 is an ultra-low power bit map controller and driver for full dot matrix monochrome STN LCD displays. The driving capability is **25 rows x 96 columns** to **8 rows x 113 columns** addressed by 3-wire interface.  $V_{LCD}$  is internally generated until 7V without external components.

### **Key Features**

- High accuracy of frame frequency and LCD voltage by laser trimming
- No external components
- □ Generated LCD voltage on chip
- □ 3-wire interfaces
- □ LCD voltage digitally programmable 3V to 7V
- □ Supply voltage from low 1.8V up to 5.5V
- □ True Low Current:  $I_{HV}$ =65µA

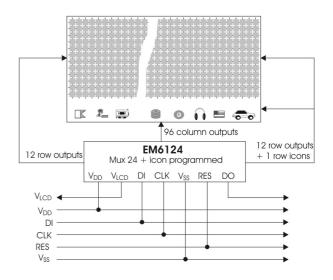
I<sub>DD</sub>=16µA (active)

I<sub>DD</sub>=0.1µA (sleep)

- Temperature compensation of V<sub>LCD</sub> (4 coefficients)
- Oscillator for LCD refresh on chip
- Intermediate bias voltage generation on chip
- □ Available in die with gold bumps, COG, COF and COB

## & BENEFITS

Flexibility and easy to design-in Uniformity of contrast of all dies in production Usable with a wide range of modules No flickering Ideal for portable and mobile phones applications Save PCB space Cost effective



### **Typical Applications**

- Mobile and DECT phones
- □ MP3 and DVD players
- □ Automotive displays & car audio
- Graphic calculators
- Credit card readers
- Scales and utility meters

