# MXEI2240 240-Output ePaper Gate Driver

#### **Features**

- CMOS Technology
- Drives Segment or Active Matrix Displays
- 16V to 57.5V Output Drive (V<sub>DD</sub> to V<sub>EE</sub>)
- · Selectable Output Shift Direction and Polarity
- 3 Output Switching Modes
- Cascadable (4 Maximum)

## **Applications**

- · eBooks / eReaders
- Electronic Shelf Labels / Point Of Purchase Displays
- Mobile Phones / Portable Hand Held Devices
- Smart Cards
- Signage

### **Ordering Information**

Part	Description
MXEI2240WB	Gold Bumped Die / Wafer Form
MXEI2240XB	Gold Bumped Die / Waffle Pack







### **Description**

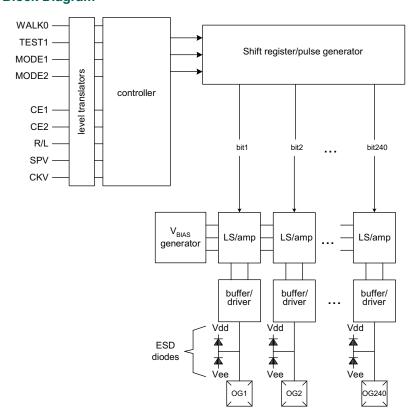
The MXEI2240 is a 240-bit serial shift register, level translator, and high-voltage buffered driver. The shift register is seeded by the CE1, CE2, R/L, SPV, and CKV inputs.

The output pulse pattern is selected with the MODE1 and MODE2 inputs. A one-pulse, continuous two-pulse, jumping two-pulse, or no-pulse pattern can be generated. Pulse polarity is selected with the WALK0 input.

The register output bits are amplified rail-rail from  $V_{EE}$  to  $V_{DD}$ , and the output strength of the buffer drivers is modulated by the  $V_{BIAS}$  generator. This allows the OGn outputs to be continuously optimized for peak performance while minimizing transients over a wide operating range.

The MXEI2240 is designed to operate over a temperature range of -40°C to +85°C, and is available as Gold Bumped Die in Wafer Form or Waffle Pack.

Figure 1. Functional Block Diagram





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