

### Features

- +/-15 Volt Output Driver Supply Voltage
- Drives Segment or Active Matrix Displays
- 3-Level Gray Scale
- 50MHz Clock Frequency
- Bidirectional Data Transfer
- 2.7V to 5.5V Logic Supply Voltage
- Cascadable

### Applications

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

### Ordering Information

| Part       | Description                   |
|------------|-------------------------------|
| IXEP1400WB | Gold Bumped Die / Wafer Form  |
| IXEP1400XB | Gold Bumped Die / Waffle Pack |

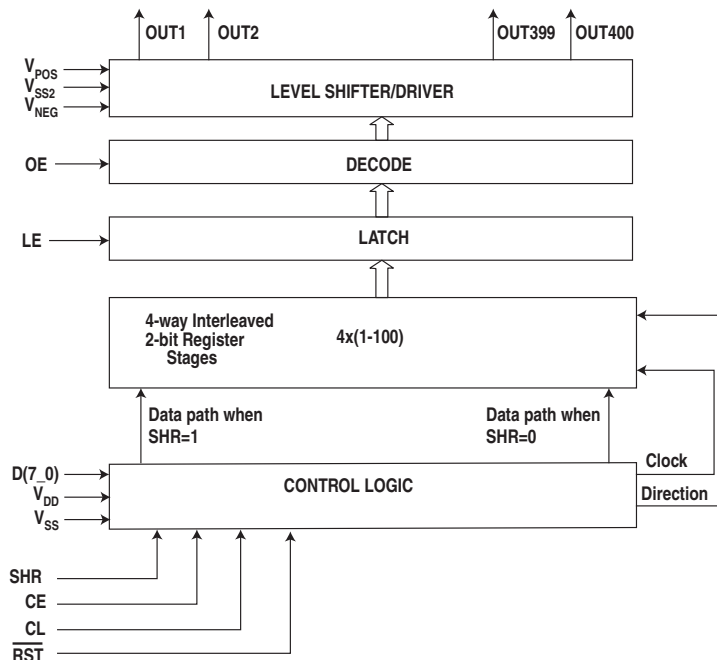


### Description

The IXEP1400 is a 400-channel e-Paper source driver. The IXEP1400 features a 400-bit long, 2-bit wide serial-input parallel-output digital shift register with a level conversion on each parallel output. This converts the 2 digital bits into either  $V_{POS}$ ,  $V_{SS}$ , or  $V_{NEG}$  analog output voltages. An 8-bit input bus simultaneously inputs 4 groups of 2 bits each.

The IXEP1400 is designed to operate over a temperature range of  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ , and is available as Gold Bumped Die in Wafer Form or Waffle Pack.

Figure 1. IXEP1400 Functional Block Diagram



[Click here to request a full data sheet](#)

IXYS Integrated Circuits Division provides its clients and potential customers with the best and most complete data and specifications possible, which might include proprietary information. Therefore, we require that the linked form be completed in order to request a comprehensive datasheet.

If you have special requests or if you don't see the data sheet you need, please feel free to ask in the Notes section of the form, or simply call us.

We do not share your information with anyone, and you will not receive unsolicited email.

**For additional information please visit [www.ixysic.com](http://www.ixysic.com)**

*IXYS Integrated Circuits Division makes no representations or warranties with respect to the accuracy or completeness of the contents of this publication and reserves the right to make changes to specifications and product descriptions at any time without notice. Neither circuit patent licenses or indemnity are expressed or implied. Except as set forth in IXYS Integrated Circuits Division's Standard Terms and Conditions of Sale, IXYS Integrated Circuits Division assumes no liability whatsoever, and disclaims any express or implied warranty relating to its products, including, but not limited to, the implied warranty of merchantability, fitness for a particular purpose, or infringement of any intellectual property right.*

*The products described in this document are not designed, intended, authorized, or warranted for use as components in systems intended for surgical implant into the body, or in other applications intended to support or sustain life, or where malfunction of IXYS Integrated Circuits Division's product may result in direct physical harm, injury, or death to a person or severe property or environmental damage. IXYS Integrated Circuits Division reserves the right to discontinue or make changes to its products at any time without notice.*

Specification: PB-IXEP1400-January 21, 2014  
©Copyright 2014, IXYS Integrated Circuits Division  
All rights reserved. Printed in USA.  
1/21/2014