# DE2011-DL 2D IMAGER ENGINE ◆DATALOGIC

## THE MINIATURE 2D IMAGER ENGINE

The DE2011-DL is an ultra-compact high performance 2D imager engine. It features an exceptional high-speed sensor which enables image capture at a full 60 frames per second, delivering outstanding motion tolerance. The steady white illumination is pleasant to the user's eyes.

The small size of this engine makes it ideal for OEM use in size constrained environments.

The DE2011-DL OEM engine features outstanding Depth of Field (DOF) reading, a nominal field of view, high motion tolerance, snappy reading and excellent performance on decoding poorly printed bar codes or bar codes displayed on mobile devices and computer screens.

Datalogic's 'Green Spot' technology for good-read feedback is an optional feature that provides customers with visual confirmation of a good read.

## EASY INTEGRATION

Customers can directly connect the scan engine into their device main board by using the industry standard camera port on a 21-pin ZIF connector.

With the use of the Datalogic Software Decoder for Engines (DSDE), customers can integrate the DE2011-DL OEM engine into their device working with the power of Datalogic decoding algorithms. The DSDE is available for Windows, WinCE, Linux and Android operating systems. Customers have full control of the operation and function of the scan engine working within their application.

The software integration approach not only results in a lower cost solution, but also offers more flexibility and makes it is easier to maintain the application.

GREEN SPOT    4-DOT ✛ AIMER

## FEATURES

- Compact size is able to fit into space constrained application environments
- Highly visible center cross with four corner dots aiming system
- Steady white illumination
- Snappy reading performance with high motion tolerance
- Excellent reading of 1D or 2D codes on print or displayed on mobile device or computer screens
- Low power consumption enables longer battery life
- Datalogic's Software Decoder for Engines (DSDE) includes:
    - Datalogic Decoding Library for Engines (DDLE) with Decoding Algorithms and Engine Control functions
    - API documentation and includes files for DDLE
    - Source code of Reference Drivers for I2C and Camera Interface
    - Source code of Demo Application program
- Datalogic's 'Green Spot' technology for visual good-read feedback (optional)
- Sold in packages of 10

## INDUSTRY-APPLICATIONS

- OEM Applications
    - Self-Service Kiosks
    - Medical Devices
    - Lottery Terminals
    - All-in-One POS Terminals
    - Access Control Devices
    - Small Wireless Scanning Devices
    - Handheld Terminals and PDAs

## TECHNICAL SPECIFICATIONS

### DECODING CAPABILITY

| | |
|---|---|
| 1D / LINEAR CODES | Autodiscriminates all standard 1D codes including GS1 DataBar™ linear codes. |
| 2D CODES | Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code |
| POSTAL CODES | Australian Post; British Post; China Post; IMB; Japanese Post; KIX Post; Korea Post; Planet Code; Postnet; Royal Mail Code (RM4SCC) |
| STACKED CODES | EAN/JAN Composites; GS1 DataBar Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; MicroPDF417; PDF417; UPC A/E Composites |

### ELECTRICAL

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|---|---|
| CURRENT | Operating (Typical): <200mA<br>Standby/Idle (Typical): 21mA<br>Low Power: 0.2mA |
| INPUT VOLTAGE | 3.3 +/- 0.3 VDC at 23 °C |

### ENVIRONMENTAL

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|---|---|
| AMBIENT LIGHT | 0 - 100,000 lux |
| HUMIDITY (NON-CONDENSING) | 5 - 95% |
| SHOCK | 2500 G at 23 °C at 0.85 m sec. |
| TEMPERATURE | Operating: -30 to 55 °C / -22 to 131 °F<br>Storage/Transport: -40 to 70 °C / -40 to 158 °F |

### INTERFACES

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|---|---|
| INTERFACES | Camera port on a 21-pin ZIF Connector |

### PHYSICAL CHARACTERISTICS

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|---|---|
| DIMENSIONS | 11.4 H x 21.0 W x 15.75 D mm /<br>0.45 H x 0.83 W x 0.62 D in |
| WEIGHT | 9.0 g / 0.32 oz |

### READING PERFORMANCE

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|---|---|
| IMAGER SENSOR | WVGA: 752 x 480 pixels |
| LIGHT SOURCE | Aiming: 650 nm VLD<br>Illumination: Steady White LEDs |
| PRINT CONTRAST RATIO (MINIMUM) | 25% |
| FIELD OF VIEW | 40° H x 26° V |
| READING ANGLE | Pitch: +/- 60°; Roll (Tilt): +/-180°;<br>Skew (Yaw): +/- 60° |
| READING INDICATORS | Datalogic 'Green Spot' Technology for visual good-read confirmation (Optional) |
| RESOLUTION (MAXIMUM) | 1D Linear: 0.0762 mm / 3 mils;<br>DataMatrix: 0.195 mm / 7.5 mils;<br>PDF417: 0.127 mm / 5 mils |

### READING RANGES

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|---|---|
| TYPICAL DEPTH OF FIELD | Minimum distance determined by symbol length and scan angle.<br>Printing resolution, contrast, and ambient light dependent. |
| 1D / 2D CODES | 3 mils Code 39: 8.0 to 17.5 cm / 3.1 to 6.9 in<br>5 mils Code 39: 5.5 to 26.0 cm / 2.1 to 10.2 in<br>13 mils EAN-13: 4.5 to 42.0 cm / 1.8 to 16.5 in<br>20 mils Code 39: up to 59.0 cm / up to 23.2 in<br>15 mils DataMatrix: 3.5 to 26.5 cm / 1.4 to 10.4 in<br>10 mils PDF417: up to 20.0 cm / up to 7.9 in |

### SAFETY & REGULATORY

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|---|---|
| ENVIRONMENTAL COMPLIANCE | Complies to China RoHS; Complies to EU RoHS |
| LASER CLASSIFICATION | Caution Laser Radiation - Do not stare into beam<br>IEC 60825 Class 2 |

### SOFTWARE INTEGRATION

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|---|---|
| OPERATING SYSTEM SUPPORT | WinCE;<br>Android;<br>Windows;<br>Linux |
| TOOLS | Datalogic Software Decoder for Engines (DSDE) |

### WARRANTY

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|---|---|
| WARRANTY | 18-Month Factory Warranty |

### DIMENSIONS OF SCAN ENGINE (MEASUREMENTS IN MILLIMETERS)

www.datalogic.com