






# Sapera Essential Barcode Tool Benchmarks

This is a report of the DALSA Coreco Barcode tool performance. The system used for the benchmark is a P4 3.2 GHz with 1 GB of memory (DDR 400) and running the Windows XP operating system.

The benchmarks are made on the images shown in the tables below. These images are available in the **Sapera Essential package**.

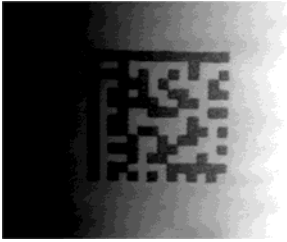


## Test 1: Linear Barcode Decoding

| Image  | Results  |
|--|--|
| <p>Image Size: 796x410x8-bit</p>                   | <p>Execution Time: 4.7 msec<br/>Code Type: Codabar<br/>Decoded String: A899117930401A</p>  |
| <p>Image Size: 515x466 x8-bit</p>                 | <p>Execution Time: 5.5 msec<br/>Code Type: Code 128<br/>Decoded String: W8124237489</p>  |
| <p>Image Size: 640x480 x8-bit<br/>2 barcodes</p>  | <p>Execution Time: 10.2 msec (to decode both barcodes)<br/>Code Type: Code 39<br/>Decoded Strings: 1PE06101DPS2-C, SJ992306760</p> |


|                                   |  |
|-----------------------------------|--|
| <p>Image Size: 640x480 x8-bit</p> | <p>Execution Time: 6.1 msec<br/>Code Type: EAN13<br/>Decoded String: 5011295020852</p> |
| <p>Image Size: 496x424 x8-bit</p> | <p>Execution Time: 3.0 msec<br/>Code Type: UPCa<br/>Decoded String: 058808171002</p>   |

## Test 2: Data Matrix (ECC200) Barcode Decoding

| Image   | Results  |
|---|--|
| <p>Image Size: 640x493 x8-bit<br/>Normal Conditions</p> | <p>Execution Time: 8.4 msec<br/>Code Type: Data Matrix<br/>Matrix Size: 16x16<br/>Decoded String: PKG089</p>         |
| <p>Image Size: 640x480 x8-bit<br/>Distorted Symbol</p>  | <p>Execution Time: 34.1 msec<br/>Code Type: Data Matrix<br/>Matrix Size: 16x16<br/>Decoded String: ipd A-CAM-TM1</p> |

|  |  |
|--|--|
| <p>Image Size: 512x388 x8-bit<br/>Flipped - Nonlinear Contrast</p>  | <p>Execution Time: 29.3 msec<br/>Code Type: Data Matrix<br/>Matrix Size: 14x14<br/>Decoded String: ABC12345</p>  |
| <p>Image Size: 640x493 x8-bit<br/>Extra Parts</p>                   | <p>Execution Time: 82.1 msec<br/>Code Type: Data Matrix<br/>Matrix Size: 44x44<br/>Decoded String: DALSA Coreco<br/>7075 Place Robert-Joncas<br/>Suite #142<br/>St-Laurent, Quebec<br/>Canada, H4M 2Z2<br/>Tel: 514-333-1301<br/>Fax: 514-333-1318<br/><a href="http://www.imaging.com">http://www.imaging.com</a></p> |
| <p>Image Size: 640x493 x8-bit<br/>Multiple Symbols (3)</p>         | <p>Execution Time: 29.8 msec (to decode all three data matrices)<br/>Code Type: Data Matrix<br/>Matrix Size: 16x16<br/>Decoded Strings: PKG089, PKG010, PKG010</p>   |

### Test 3: QR-Code Barcode Decoding

| Image   | Results   |
|---|---|
| <p>Image Size: 512x394 x8-bit<br/>Normal Conditions</p>  | <p>Execution Time: 8.3 msec<br/>Code Type: QR - Model 1<br/>Matrix Size: 21x21<br/>Decoded String: CWY934</p> |

|   |   |
|---|---|
| <p>Image Size: 640x493 x8-bit<br/>Flipped – Extra Parts</p>  | <p>Execution Time: 13.9 msec<br/>Code Type: QR - Model 1<br/>Matrix Size: 25x25<br/>Decoded String: 0123456789<br/>                  ABCDEFGHIJKLMN<strong>OP</strong>QRSTUVWXYZ</p>  |
| <p>Image Size: 640x493 x8-bit</p>                            | <p>Execution Time: 14.0 msec<br/>Code Type: QR - Model 2<br/>Matrix Size: 45x45<br/>Decoded String: DALS<strong>A</strong> Coreco<br/>                  7075 Place Robert-Joncas, Bureau 142<br/>                  St-Laurent, Quebec Canada H4M 2Z2<br/>                  Tel: 514 - 333 3297<br/>                  Fax: 514 - 333 1318<br/>                  www.dalsa-coreco.com</p> |

**Notes**

- Decoding performed on the whole image, no ROI specified.
- All tests use default parameters except for DataMatrix and QR-Code where the size of the matrix (e.g., 16x16) is specified.



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