: Multiple Interfaces
$\because$ UIMG $^{\circledR}$ Technology
!. Snappy On-Screen Barcode Capture
※. Outstanding Power Efficiency
$\because$ Compact \& Lightweight Design


## LV2097

## OEM Scan Engine

## Features

## UIMG ${ }^{\circledR}$ Technology

Armed with Six-generation of UIMG ${ }^{\circledR}$ Technology, the Scan Engine Can Swiftly And Effortlessly Decode Even Poor Quality Barcodes(e.g., Low Contrast, Laminated, Damaged,
Torn,warped or Wrinkled).

## Snappy On-Screen Barcode Capture

The LV2097 Excels at Reading On-screen Barcodeseven
When the Screen is Covered with Protectivefilm or Set to Its Lowest Brightness Level.

## Compact \& Lightweight Design

Seamless Integration of Imager and Decoder Boardmakes the Scan Engine Extremely Smallest And Lightweight and Easy to Fit into Miniature Equipment.

Outstanding Power Efficiency
The Advanced NLDC Technology Incorporated in Thescan Engine Helps Reduce Its Power Consumption Andprolong Its Service Life.

## Multiple Interfaces

The LV2097 Supports USB and TTL-232 Interfacesto Meet Diverse Customer Needs.

## Application Scenarios

## LV2097

## OEM Scan Engine

| Performance | Image Sensor |  | 640*480 CMOS |
| :---: | :---: | :---: | :---: |
|  | Illumination |  | White LED |
|  | Aiming |  | Red LED ( 625 nm ) |
|  | Symbologies | 2D | PDF417, QR Code, Micro QR, Data Matrix. |
|  |  | 1D | Code 128, EAN-13, EAN-8, Code 39, UPC-A, UPC-E, Codabar, Interleaved 2 of 5, ITF-6, ITF-14, ISBN, ISSN, Code 93, UCC/EAN-128, GS1 Databar, Matrix 2 of 5, Code 11, Industrial 2 of 5, Standard 2 of 5, AIM128, Plessey, MSI-Plessey |
|  | Resolution* |  | $\geq 3 \mathrm{mil}$ |
|  | Typical Depth of Field* |  | EAN-13 (13mil): $60 \mathrm{~mm}-350 \mathrm{~mm}$ |
|  |  |  | Code 39 ( 5 mil ): $40 \mathrm{~mm}-150 \mathrm{~mm}$ |
|  |  |  | PDF417 ( 6.7 mil ): $50 \mathrm{~mm}-125 \mathrm{~mm}$ |
|  |  |  | Data Matrix ( 10 mil ): $45 \mathrm{~mm}-120 \mathrm{~mm}$ |
|  |  |  | QR Code ( 15 mil ): $30 \mathrm{~mm}-170 \mathrm{~mm}$ |
|  | Min. Symbol Contrast* |  | 25\% |
|  | Scan Angle** |  | Roll: $360^{\circ}$, Pitch: $\pm 60^{\circ}$, Skew: $\pm 60^{\circ}$ |
|  | Field of View |  | Horizontal $42^{\circ}$, Vertical $31.5^{\circ}$ |
| Mechanical/ <br> Electrical | Interface |  | TTL-232, USB |
|  | Operating Voltage |  | $3.3 \mathrm{VDC} \pm 5 \%$ |
|  | Current@3.3VDC | Operating | 138mA (typical) |
|  |  | Idle | 11.8 mA |
|  | Dimensions |  | $21.5(\mathrm{~W}) \times 9.0(\mathrm{D}) \times 7.0(\mathrm{H}) \mathrm{mm}$ (max) |
|  | Weight |  | 1.2 g |
| Environmental | Operating Temperature |  | $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$ |
|  | Storage Temperature |  | $-40^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}$ |
|  | Humidity |  | 5\% to 95\% (non-condensing) |
|  | Ambient Light |  | 0~100,000lux (natural light) |
| Certifications |  |  | FCC Part15 Class B, CE EMC Class B, RoHS2.0, IEC62471 |
| Accessories | EVK-N1 | Software beeper and | velopment board for the NLS-N1, equipped with a trigger button, RS-232 \& USB Type-C interfaces. |
|  | Cable | $\begin{array}{ll} \hline \text { USB } & \text { US } \\ \text { RS-232 } & \text { U } \\ \hline \end{array}$ | d to connect the EVK-N1 to a host device. d to connect the EVK-N1 to a host device. |

*Test conditions: $\mathrm{T}=23^{\prime} \mathrm{C}$; llumination= 300lux using incandescent lamp; sample barcodes made by Rakinda.
*Test conditions: Scan Distance=(min. DOF + max. DOF)/2; $\mathrm{T}=23^{\circ} \mathrm{C}$; llumination=300lux using incandescent lamp; 2D: QR Code; 10 Bytes; Resolution=30mil; $\mathrm{PCS}=0.8$. Specifications are subject to change without notice.

