

# DLO1000

## Chip Decoder

### Features

- CMOS single chip bar code decoder
- 80 pins SMD package
- Advanced decoding libraries
- 25 MHz clock
- Wand, CCD, laser, input reader autorecognition
- TTL RS232 full duplex, wedge, magnetic reader emulation output
- Either autodiscrimination or bi-directional bar code reading
- Device configurations via either Eeprom memory or device input pins reading

### Applications

DLO1000 is designed to address requirements of OEMs in various market segments, such as:

- Time and attendance machines
- Clinical and Analytical Chemistry Instrumentation
- Test and Measurement Apparatus
- Materials Handling Equipment
- Robotic Systems

### General Description

Datalogic's **DLO1000** chip decoder is an advanced CMOS integrated single chip bar code decoder.

**DLO1000** is designed to address requirements of Equipment Manufacturers giving them the possibility to capture and decode bar code data from various types of readers, and transmit the information to their system in the most suitable way. Laser guns, CCD readers and optical wands can be connected to the **DLO1000** circuitry, which recognizes the input signal and sets the reader parameters where needed.

The output signal is available as TTL serial output, wedge or magnetic emulation. The TTL driver is fully programmable in order to perfectly match system requirements. This type of configuration is very successful in a number of applications. The wedge driver is specifically designed to address those applications where the decoded bar code data is sent to the HOST as if it were typed directly on a keyboard. No modification or Host resident software customization is necessary. One of the most important applications for the decoding driver sees the chip implemented inside a PC/VDT keyboard, which then presents a bar code reader input port on board. The magnetic output driver enables data transmission as if it was sent by a magnetic card reader. This is a major plus for those time and attendance machine manufacturers who want to substitute their magnetic slot readers with bar code readers without modifying any software routine inside the machine.

**DLO1000** is able to decode the most common bar code symbologies, with their typical check and transmission parameters. Bar code autodiscrimination and bi-directional reading are allowed.

**DLO1000** can be programmed through the serial channel or through the bar code reader using a bar code menu. An optional Eeprom memory assures that any configuration is saved when the devices is powered off.

The advanced decoding libraries of **DLO1000** and the 25 MHz clock assure unmatched decoding speed even on poor, damaged or out of specifications codes, making this chip the state of the art in this field.

## Models and Accessories

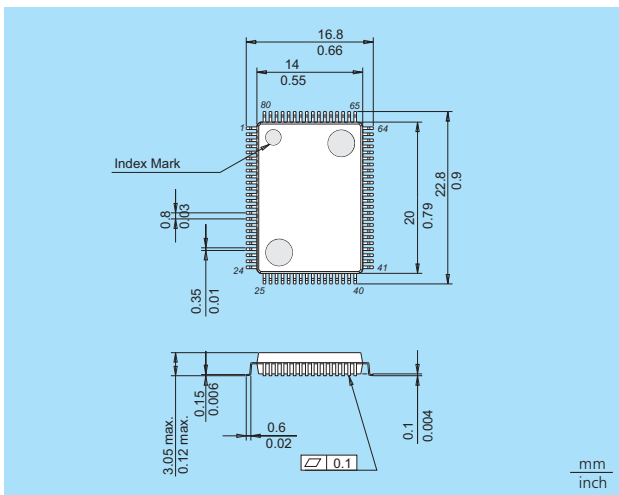
MODEL	DESCRIPTION	ORDER NO.
DLO1000	SMD chip decoder (60 pcs)	930031010

\*Release number 3.00

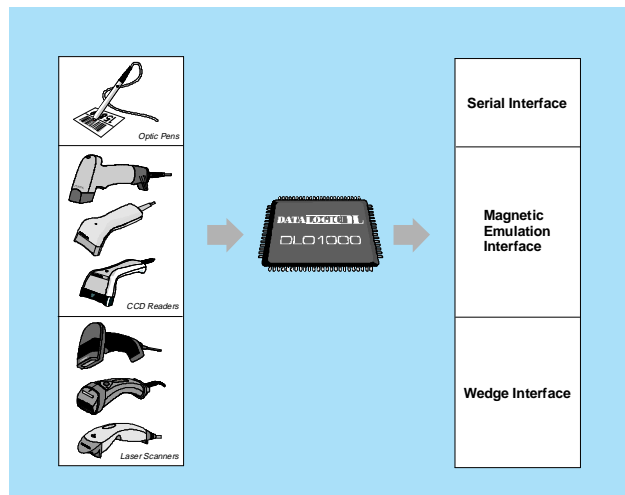
## Specifications

POWER SUPPLY	5 Vdc $\pm$ 10%	READABLE BAR CODES	EAN/UPC/JAN families with or without Add-On Code, 2/5 family (Interleaved, 5 Bars, 3 Bars and Industrial), Code 39 family (standard and Full ASCII), Codabar family (standard and ABC), Code 93, Code 128 family (standard and EAN-128), Pharma codes (32, 39/C.I.P and C.I.P/HR)
POWER CONSUMPTION	19 mA typ., 38 mA max.	BAR CODES OPTIONS	Conversions for EAN/UPC family. Check digit control and transmission for 39 and 2/5 families, start stop equality control and transmission for Codabar family, check digit transmission for EAN/UPC family bar codes
COMPATIBLE READERS	<p><i>Optic pens</i> P51</p> <p><i>Fixed and slot readers</i> F30, DLS2000</p> <p><i>Hand-held CCD readers</i> DLC6065/90-M, DL65/80, DLC7070-M</p> <p><i>Hand-held laser scanners</i> DL910/910LR, DLL5010-M, DLL6010-M</p> <p><i>Readers with pen emulation output</i></p>	MAX. NUMBER OF DIGITS	Depends on the bar code family: Code 39 - 32 digits; Codabar - 44 digits 2/5 and 128 families - 55 digits
OUTPUT INTERFACES	TTL Serial ASCII full duplex output, magnetic emulation, wedge (PC IBM AT/PS2, IBM SURE ONE, IBM terminals: 31xx, 32xx, 34xx, 37xx, 3153)	BAR CODE READING	Single code or auto-discrimination
BAUD RATE	150, 300, 600, 1200, 2400, 4800, 9600, 19200	RESET CONFIGURATION	Optional Eeprom memory for configuration storage. Hardware configuration set up through pins logic state, in case of absence of Eeprom
PARITY	Odd, Even or None	PROGRAMMING METHOD	<p><i>Manual</i> Reading special bar codes</p> <p><i>Automatic (with serial channel)</i> Proper ASCII strings through the serial channel (if possible)</p>
DATA BIT	7, 8 or 9 bits	DIMENSIONS	16,8 x 22,8 x 3,05 mm
STOP BIT	1 or 2	OPERATING TEMPERATURE	-20 $\div$ 85 $^{\circ}$ C
HANDSHAKE	Hardware (RTS/CTS), Software (XON/XOFF) or none	STORAGE TEMPERATURE	-40 $\div$ 150 $^{\circ}$ C
PROTOCOL	Ack/Nack protocol selectable for serial interface		
INPUT SIGNALS	TTL compatible (trigger for hand-held laser scanners, video for pens and hand-held laser scanners, scan for hand-held laser scanners)		
OUTPUT SIGNAL	<p><i>Acoustic beeper signal</i> Four programmable tones and volumes</p> <p><i>Visual signal</i> TTL ON in case of good decoding. It can be used to drive a LED</p>		

## Dimensions



## Interface Choices



**DATA LOGIC DL**  
Bar Code & More

We reserve the right to make modifications and improvements

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