

SPECIFICATION

Customer :

Customer's Model No. :

Model No. : LV4 1D Barcode Scanner Module

Date :

Sample Serial No. :

Spec. Version & Revision Date:

V01

2009.08.13

Received/Approved by

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A. Introduction

LV4 is an embedded one-dimensional barcode scanner module, which can easily read barcodes on media such as paper and commodities.

can be powerful.

The affordable price of the barcode scanner module developed and designed by our company is believed to be what you need for a fixed barcode scanner.

The best choice for flexible and cost-effective customization of products for specific applications, we have successfully developed a range of built-in unique

Modular parts not only improve production efficiency, but also make maintenance easy, allowing customers to enjoy perfect products

Has perfect after-sales service.

Our design philosophy is to surpass competitors and insist on providing customers with the best quality, time-saving, high-efficiency and reasonably priced products.

products to meet the constantly innovative and changing market requirements of the world.

It can be easily embedded in various OEM products, etc. Its main features:

- Small size, can be easily embedded in other devices

- Can easily read all mainstream one-dimensional barcodes on the market

- Integrated high-performance processor and decoding board, with fast decoding and high-precision reading capabilities



B. Physical Properties Parameters

weight

Body weight (including decoder) 31g (1.09 oz)

board) Shell material Interface type PC & Fiber Plastic

Screw standard size JAE (or Compatible) 10P Pitch 2.0

M2 X 7 mm

47 mm X 41 mm X 21 mm

LV4 1D barcode scanner module

In 0 1

Wire Specifications

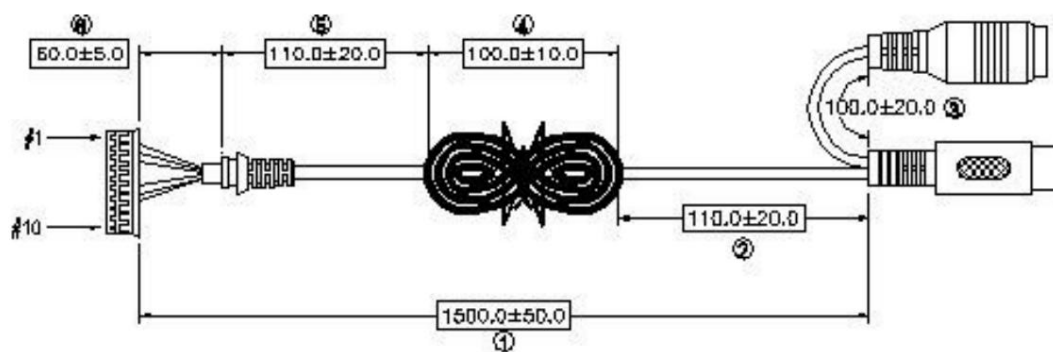
Unit : mm

1) RS232 Interface :

Unit : mm

2) Keyboard Interface :

Unit : mm



連接頭種類：MiniDIN6 公座及母座

腳位定義：

JAE 2.0 Mini DIN6M Mini DIN6F 顏色 功能定義

JAE 2.0	Mini DIN6M	Mini DIN6F	顏色	功能定義
1	4	4	紅	VCC
2		5	橙	KB CLK
3	5		藍	HOST CLK
6		1	黃	KB DATA
7	1		綠	HOST DATA
8	3	3	棕	GND

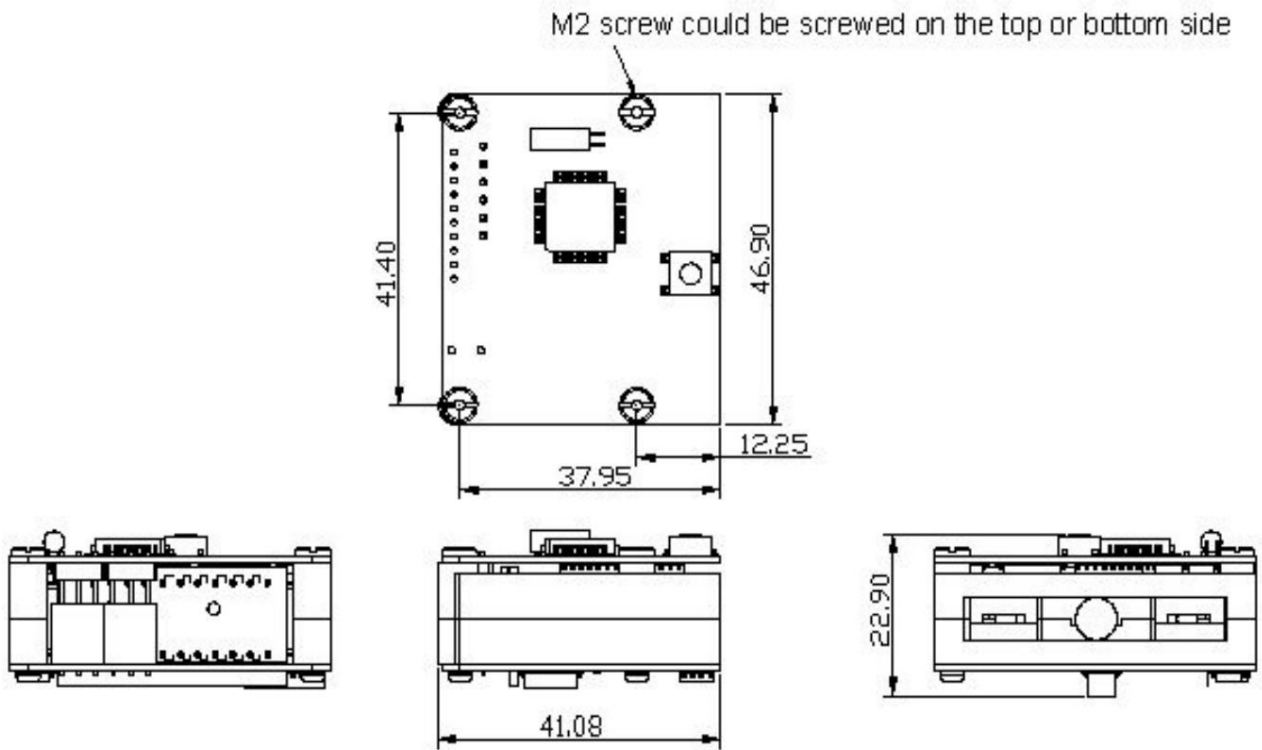
3) USB Interface :

Unit : mm

Appearance and size

Unit : mm

M2 screw could be screwed on the top or bottom side

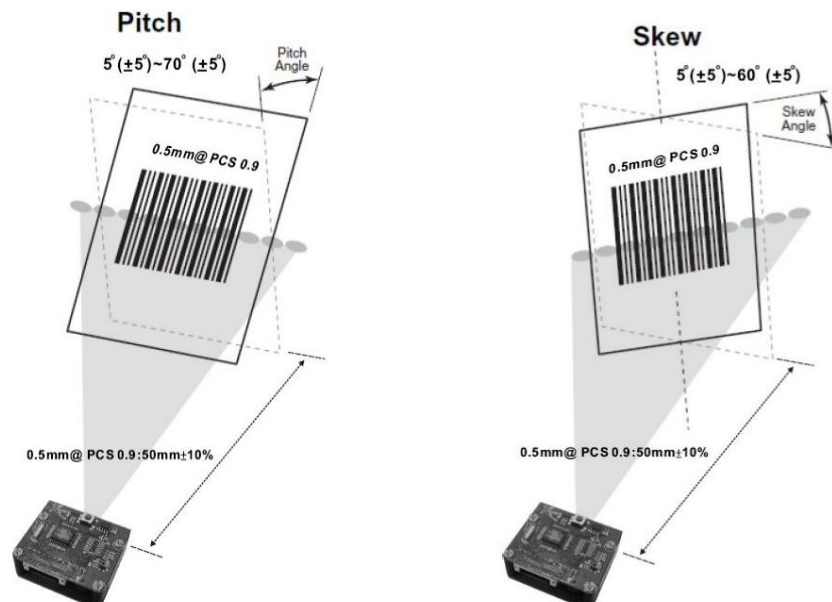


C. Electrical Characteristics

Input voltage power	DC 5V \pm 5%
consumption and	0.4 watts
current consumption (working)	80 mA Typical

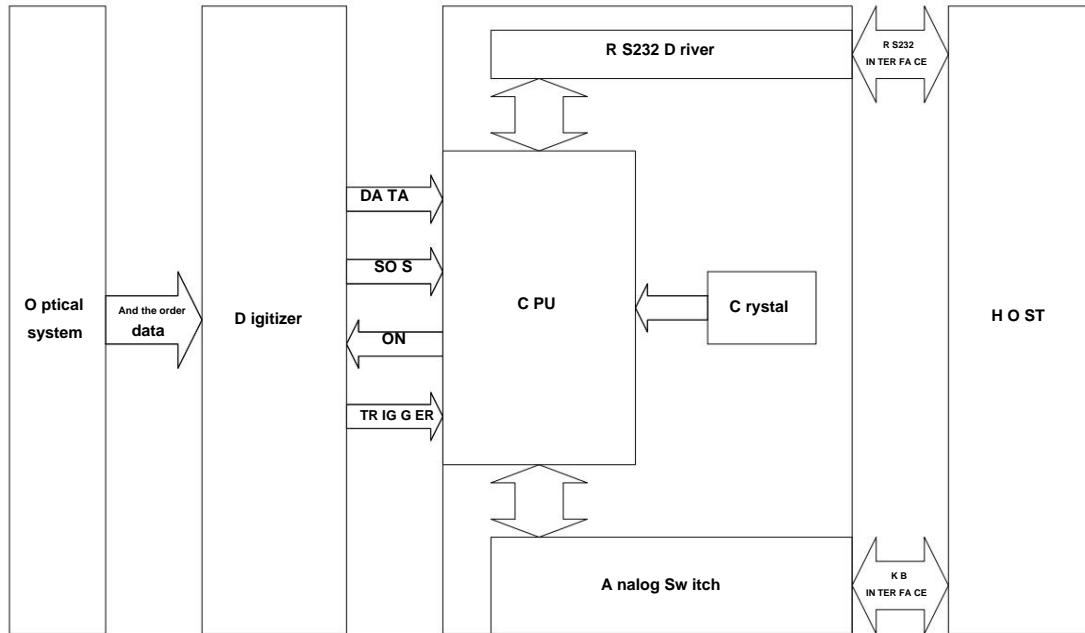
D. Performance Parameters

Light Source	Visible Red light 632nm LED
Sensor	Linear CCD Sensor
Processor Type	8051 compatible
Operating Freq.	29.4912 MHz
Scan Rate	90 scans/sec \pm 10%
Reading Distance	70mm@20mil/0.5mm, PCS90%
Width of Field	55mm
Print Contrast Ratio	PCS45%@4mil/0.1mm
Resolution	4mil/0.1mm@PCS90%
Reading Angle	<i>Test Conditions: Code 39, 10mi/0.25mm, PCS90%</i>
Pitch Angle	5°~70°(\pm 5°)
Skew Tolerance	5°~60°(\pm 5°)
Ambient Light	
Fluorescent lamp	5000 Lux Max.
Direct sun light	3000 Lux Max.

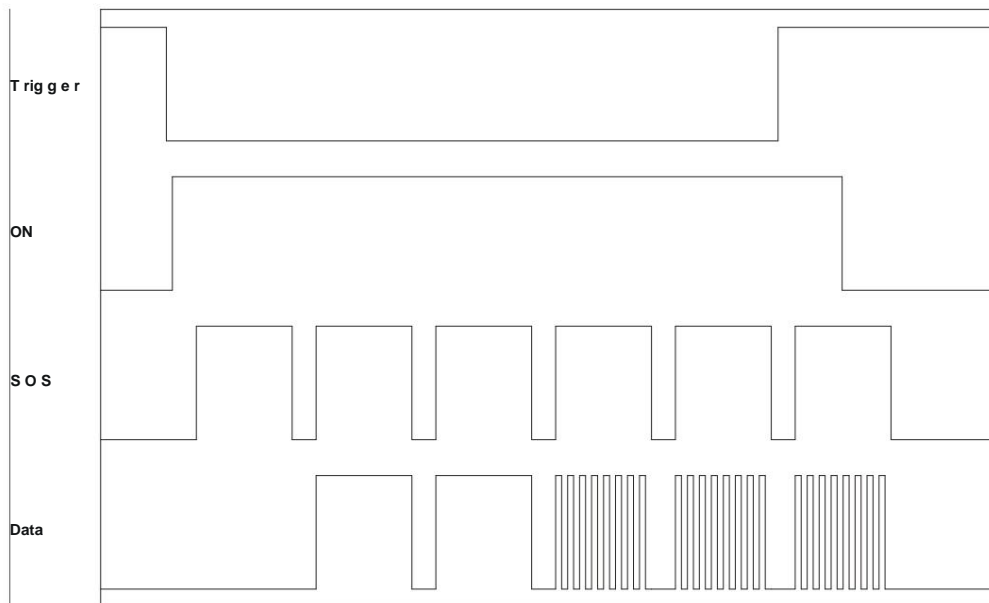


E. Functional Block Diagram

a) Circuit block diagram



b) Function waveform



F. Environmental Characteristics

Operating	0 oC to 50 oC (32 oF to 122 oF)
temperature Storage	-20 oC to 70 oC (-4 oF to 158 oF)
temperature Humidity	20% to 95% (Non-condensing)

G. Types of readable barcodes

	Readable	Default Enable
All UPC/EAN/JAN	IN	IN
EAN128 Code	IN	
Code 39	IN	IN
Code 39 Full ASCII	IN	
Code32 / Italian Pharmacy	IN	
Code 128	IN	IN
CODABAR/NW7	IN	IN
Interleave 25	IN	IN
Industrial 25	IN	
Matrix 25	IN	
MSI/PLESSEY	IN	
On site	IN	
Code 93	IN	
Code 11	IN	
China Postage	IN	
GS1 DataBar Omnidirectional	IN	
GS1 DataBar Limited	IN	
GS1 DataBar Expanded	IN	

H. RS232 Specifications

(a) RS-232 parameters

Communication standard RS-232C

Communication speed 600,1200,2400,4800,9600, 19200 (bps)

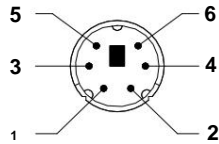
Data Format

start bit	1 bit	2 bits
data bits	7 bits	8 bits
Parity	None, Odd 1	Even , Space , Mark
stop bit	bit	2 bits

(b) Keyboard Interface

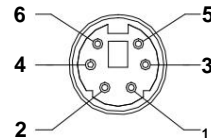
MiniDIN 6 MALE

Pin No.	Function
1	HOST DATA (D-)
2	HOST DATA (D+)
3	GND
4	GND
5	HOST CLK



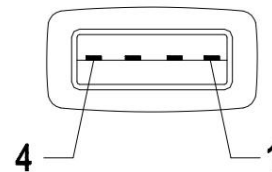
MiniDIN 6 FEMALE

Pin No.	Function
1	A KB DATA (D-)
2	A KB DATA (D+)
3	GND
4	GND
5	L KB CLK



(c) USB Interface

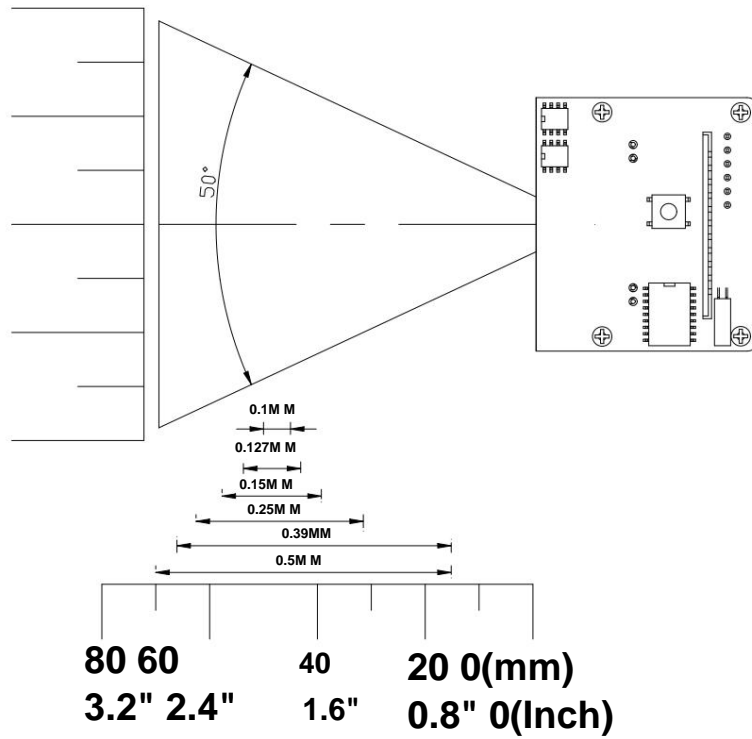
USB A Type Male Pin No.	Function
1	Vcc
2	D-
3	D+
4	GND



Decoder Data Output Connector

I. Field of View and Decoding Distance

40 1.6"
 8"
 20 0.8"
 40 1.6"



J. Reliability Parameters

Life Time

Light Source	40,000 hours
Trigger Switch	300,000 times
MTBF(Calculated)	80,000 hours

Thermal Shock

High Temp.	60 oC (140 oF)
Low Temp.	-20 oC (-4 oF)
Cycle Time	30 minutes for high temp. , 30 minutes for low temp.
Cycles Cable	24 cycles

Test

Mechanical Shock

Test	25,000 times minimum (30 times/min @ 500g/90 o)
Mechanical Shock	2000G, 0.7ms, 3 axes

K. Packing Instructions**size**

ï ÿ	7 cm X 12cm X 23 cm
outer	25 cm X 35 cm X 50 cm

box weight

Outer	6 Kg (Q'ty :20 pcs)
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box storage conditions

	-20 oC to 60 oC (-4 oF to 140 oF)
temperature humidity	20% to 95% (Non-condensing)