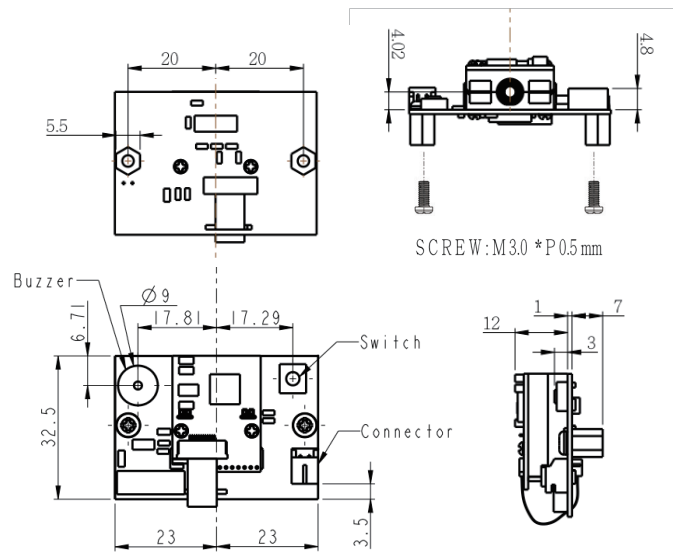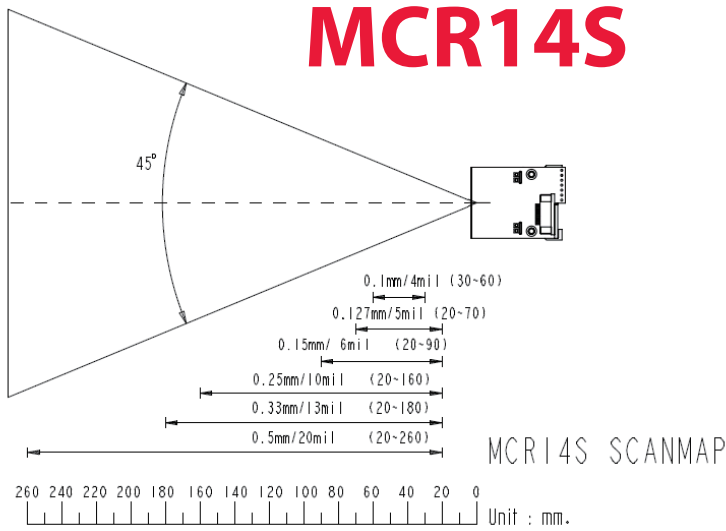# MCR14S

CCD Barcode Scanning Module

Introduction

MCR14S is a CMOS barcode decoding module. MCR14S decode board is powered by a fast processor and to decode a wide array of 1D barcodes. The decode board is compatible with Utility, a PC-based software for easy Configuration.

The MCR14S is designed with the industrial standard size, mounting options and output to facilitate integration into existing applications. The scanner module's miniature size makes MCR14S ideal for integration into data terminals and other small devices. MCR14S is supplied as an assembled module with a mounting bracket or as separate components for custom mounting. The MCR14S Scan Module is a perfect choice for your OEM design. It brings the benefits of bar code scanning to all types of OEM devices. Now kiosks, medical instruments, diagnostic equipment, lottery terminals, vending machines and countless other appliances can all be equipped with the leading-edge scanning technology and reliability.

Features

- Miniature size yet long-range CMOS bar code scanning module.
- Read major 1D bar codes, GS1 Databar linear and stacked bar codes.
- Support automatic detection and wake up scanner to read.
- Decoding distance up to 25cm (20mil/0.5mm@code39 pcs90%).
- Smart Detection, speed up to 100 scans per second

MCR14S

MCR14S SCANMAP

Unit : mm.

SCREW:M3.0＊P0.5mm

Buzzer
Switch
Connector

Specifications

● Physical Characteristics

Weight	
Body weight	Approx. 7g/0.25oz (w/o test board)
Material	ABS+ Glass Reinforced Plastic
Connector	FPC 12pin Pitch 0.5
Dimension(Module)	20.0 mm W x 11.5 mm H x 25.0 mm L

● Performance

Light Source	Visible Red light 632nm LED
Sensor	Linear CMOS Sensor
Processor Type	32-bit
Operating Freq.	8 MHz (Internal)
Scan Rate	Smart detection, up to 100 scans per second
Reading Distance	Up to 250mm@20mil/0.5mm, PCS90%
Print Contrast Ratio	25%
Resolution	4mil/0.1mm@PCS90%
Indicator	Beep
Reading Angle	Test Conditions: Code 39, 10mil/0.25mm, PCS90%
Pitch Angle	5°~60°(±5°)
Skew Tolerance	5°~60°(±5°)
Ambient Light	10,000 Lux Max.

● Electrical Characteristics

Interface	RS232	USB
Supply Voltage	DC+5V±5%	DC+5V±5%
Output Voltage (Typ.)	±9V±5%	+5V±5%
Current Draw		±10%
Power On (Typ.)	170mA	170mA
Stand by (Typ.)	50mA	50mA
Operation (Typ.)	150mA	150mA

● Environmental

Operating Temp.	0°C to 50°C (32°F to 122°F)
Storage Temp.	-20°C to 70°C (-4°F to 158°F)
Relative Humidity	20% to 95% (Non-condensing)

● Reliability

Life Time	
Light Source	40,000 hours
MTBF(Calculated)	50,000 hours
Thermal Shock	
High Temp.	60°C(140°F)
Low Temp.	-20°C (-4°F)
Cycle time	30 minutes for high temp., 30 minutes for low temp.
Cycles	24 cycles
Mechanical Shock	2000 G, 0.7ms, 3 axes

● Readable Symbologies

	Readable	Default Enable
All UPC/EAN/JAN	V	V
EAN128 Code	V	
Code 39	V	V
Code 39 Full ASCII	V	
Code32 / Italian Pharmacy	V	
Code 128	V	V
CODABAR/NW7	V	V
Interleave 25	V	V
Industrial 25	V	
MSI/PLESSEY	V	
Code 93	V	
China Postage	V	
GS1 DataBar	V	

Due to Champtek's / Scantech ID's continuing product improvement programs, specifications and features are subject to change