



enables your IPC innovation

產品規格書

PRODUCTION SPECIFICATION

Model: FFX-2803

Name: Fixed 2D Barcode Scanner



Revision History

Date	Rev.	Contents
2025/11/26	V1.0	First release



1. Preface

FFX-2803 fixed area imager engineered to decode most of 1D, PDF and 2D barcodes. It's excellent for reading smart phone QR codes and barcodes also perfect performance for reading poorly printed barcodes on paper.

2. Electrical characteristics

- Input Voltage: DC 5V±5%
- Current: 90mA

3. Optical

Light source: Illumination White LED 9000K

Ambient light: 100,000 Lux

Image: 640 pixels (H) x 480 pixels (V) , Global Shutter

Scan Rate: 120FPS

Field of View: 60° (H) x 50°(V)

Resolution: 4mil Code 39

Print Contrast: 30% minimum reflective difference

4. Buzzer

The frequency, volume and activation period can be adjusted to accommodate application needs.

6. Reading capability

The reading capability test is performed on various standard barcodes under different environmental conditions to ensure satisfactory reading performance.

Code	Density	Distance
EAN 13	13mil	48 – 83mm
QR code	15 mil	35 – 125mm
QR code	20 mil	35 – 148mm
Data Matrix	10 mil	40 – 78mm
Data Matrix	20 mil	38 – 150mm

7. Environment

7.1 Temperature

- Operating: -20 °C~ 50°C
- Storage: -40 °C~ 70°C

7.2 Humidity

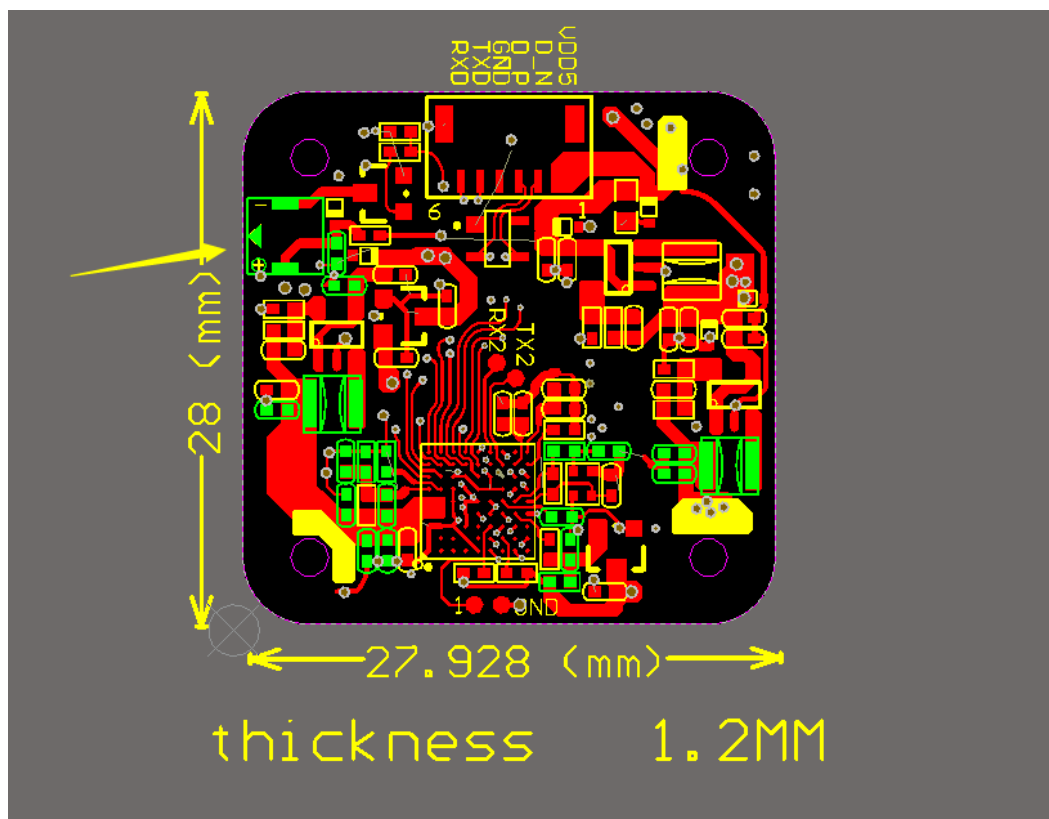
- Operating: 10 – 95% RH (non-condensing/non-freezing)
- Storage: 10% - 95% RH (non-condensing)

8. Physical

8.1 Weight

- 40g (PCB only)

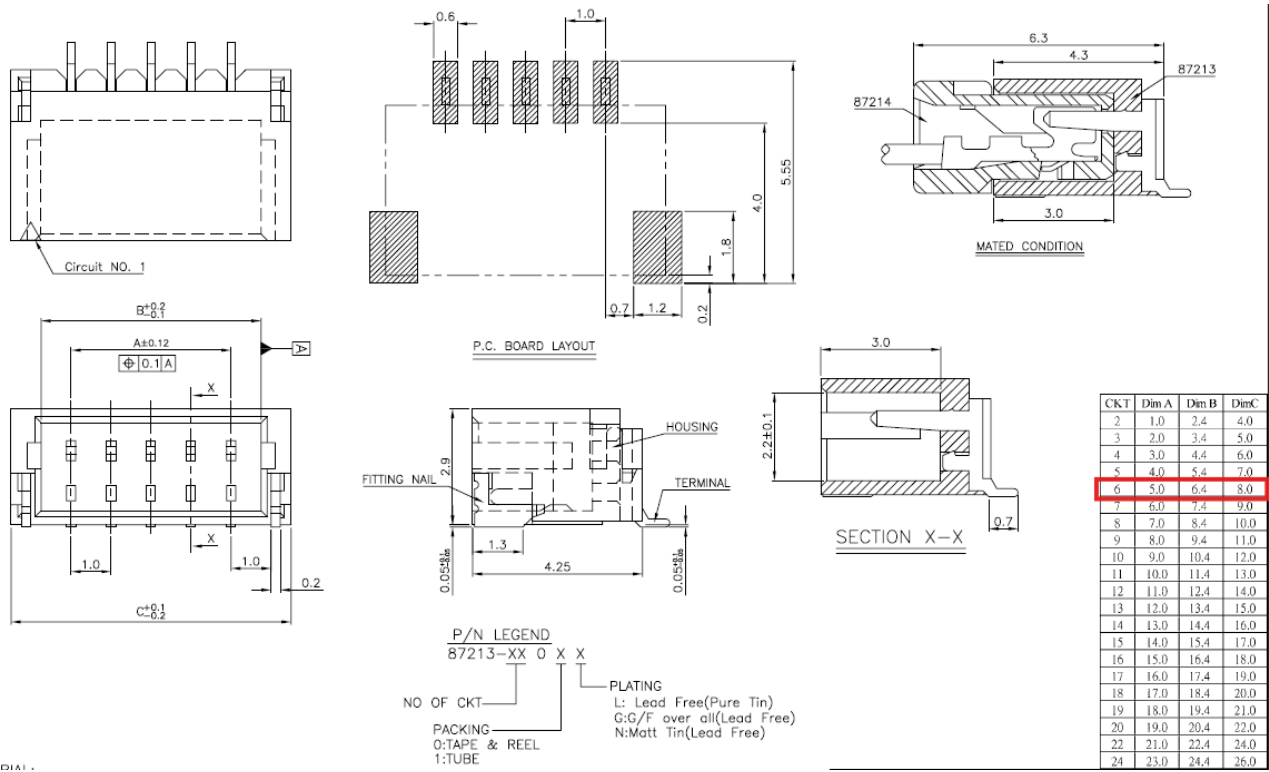
9. Outline draw



10. Pin Description

Pin Description			
Pin Number	Name	Pin Type	Function Description
1	VCC	Power	USB Power Supply +5.0V
2	D-	Data Pin	USB Data Transmission
3	D+	Data Pin	USB Data Transmission
4	GND	GND	System Ground
5	TX	TX	Transport
6	RX	RX	Receive

11. Connector Specification



ES:
MATERIAL: