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mPOS

Product specification

DUALi Inc.

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Revision History

■ 2016.09.07 (Ver. 1.0) : First release

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1 Introduction

mPOS is Contact EMV Level 1 and RF EMV Level1, MSR support device. 128x64 Use oled(128x64) provides information to the user.

There is a KEYPAD for the key input, the state information from the user can be transmitted at the BuzzerUsing the battery is capable of charging the product.

To connect the charging and discharging or USB cable, AF does not work.RF ON when the power is always transmitted.

1.1 Product specification

ITEM	Specification	Note
CPU	MAX32550 ARM® Cortex® M3 Processor	
Operating frequency	Run at 108 MHz	
Working Memory	Internal SRAM: 256Kbyte 8KB AES Self-Encrypted SRAM	
Program Memory	Flash, 1Mbyte	
OS	None	
Communication	USB	
Serial Comm.	Keypad, Contact EMV	
Contact EMV L1	Protocol:T=0,T=1/ class A,B,C (5V, 3V, 1.8V)	
RF EMV L1	NXP RF IC, NFC, ISO14443	
DISPLAY	128x64 OLED (0.96inch)	
KeyPad	12EA	
MSR	Module	
Operating Powers	3.3V, 5V	

1.2 Contact IC Card Reader 사양

ITEM	Specification	Note
Protocol	T=0,T=1	
Class	class A,B,C (5V, 3V, 1.8V)	
Certification	EMV Level1	

2 Structure

2.1 Components Confirmation

- mPOS 1EA

2.2 Description

1) MAIN Board (mPOS MAIN)

- MAX32550 : Cortex M3 with 1MB flash and 256K+8K SRAM
- Secure SRAM : Internal 8KB SRAM
- EMV L1 Module : EMV L1 certification
- Host Communication : (FTDI UART)
- MSR Header : 2 Track MSR header
- Buzzer : Tone controllable buzzer
- Battery : Li-polymer, 560mAh
- LCD : 128X64 DOT, OLED, 0.96inch

2) RF Board

- RF : TYPE A Card Support

3 Exterior

3.1 Product exterior

3.2 Product dimension

- 175 * 59 * 39mm

4 Power & Interface Specification

4.1 Power Specification

- Battery 3.7V(560mA), USB 5V(Charge)
- Power usage: under 2W

4.2 Current consumption

- Default : 5V, under 200mA
- MAX : 5V, under 300mA (card read/write)

4.3 Communication Specification

- UART TTL 115200bps

5 Functions

5.1 Operation

- Temperature: -10 ~ 60 ℃
- Humidity : 30 ~ 90 % (relative humidity)

5.2 Storage

- Temperature: -20 ~ 80 ℃
- Humidity: 30 ~ 90 % (relative humidity)

6 Warning and Notice

- For indoor use only.
- This product is affected by an element like metal or Magnetism. So one has to take precautions.
- This device is not waterproof.
- Recommended to use apart from metallic devices to maximize RF reading performance.

7 Warranty & Service

‣ Warranty and Repair service

- DUALi Inc. warrants to the original consumer or other end user that this product, DE-631, is free from defects in materials and workmanship for a period of 1 year from the date of purchase.

※ **Note** Warranty/non-warranty repair fees do not include any shipping charges.

‣ The damages(defaults) prescribed below are NOT to be covered by warranty.

- User's misuse of part/component.
- Fault by the unqualified user's own intention of repairs.
- Product's inspection requirement.
- Adding certain functions or extension of system.
- Fault by User's misuse against the product's manual.

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8 Certifications

9 FCC STATEMENT

10 CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

11

12 NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

13 —— Reorient or relocate the receiving antenna.

14 —— Increase the separation between the equipment and receiver.

15 —— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

16 —— Consult the dealer or an experienced radio/TV technician for help.

*Please contact our service team for the technical/ sales supports.