



DONGGUAN

MANUFACTURING CENTER

of UNICAIR COMMUNICATION

2021 | April | 26 |

UNICAIR COMMUNICATION TECHNOLOGY LIMITED

公司简介

BRIEF INTRODUCTION

ABOUT US:

Dongguan Unicair Communication Technology Co., Ltd. was founded on August 18, 2014. It's a wholly-owned subsidiary of Unicair. In 2020, through the acquisition of the original team of SONIM China, the company established a ultra-rugged phone assembly line. At present, Unicair has a garden-style factory park, covering an area of more than 5,000 square meters, and a modern dust-free production workshop of 6,000 square meters, with more than 300 employees.

At present, Unicair mainly provides manufacturing services for high-end smart phones, rugged mobile phones and tablets, communication telecom servers and industrial computers, as well as set-top boxes and ETC products, including PCBA SMT mounting, function testing, finished product assembly, packaging & shipping and all series of complete electronic products manufacturing services.

公司简介

BRIEF INTRODUCTION

- ✓ **Staff:** All the assembly management and quality control staff have worked for SONIM over 10 years, and now they continue to work in Unicair for the end customers of SONIM, including three major operators in the United States, major operators in Canada and SoftBank in Japan.
- ✓ **Qualification & Certification:** Explosion-proof system certification IEXEC, CSA, UL110, ISO14001, ISO9001.
- ✓ **Reliability Testing Laboratory:** Complete mass production testing lab guarantees that can meet most operators' shipment verification requirements.

OUR CAPABILITY

企业荣誉与资质

COMPANY HONOURS



➤ Certifications Obtained: IATF16949,ISO9001,ISO14001,IECEX,CSA,CCC,UL110

主要合作伙伴

MAIN PARTNERS OF FACTORY



区域划分

FACTORY DIVISIONS

- ① SMT Workshop
- ② Testing Workshop
- ③ IPQC
- ④ Repair Area

FLOOR 1



- ① Assembly Workshop
- ② Packaging Workshop
- ③ OQC
- ④ Reliability Testing Lab

FLOOR 2



- ① Assembly Material Warehouse
- ② WIP Warehouse
- ③ Battery Warehouse
- ④ Chemical warehouse
- ⑤ IQC

FLOOR 3



PART 1

SMT WORKSHOP

SMT车间

SMT WORKSHOP

SMT Equipments



◀ Automated Optical Inspection

Automatic Printing
▼

Equipment Advantages

- The transmission speed is stable & reliable to ensure the flux is evenly coated.
- The production efficiency is 3-5 times of ordinary equipment.
- The product RTY rate is more than 99%.

▲ Multi-function SMT

High Speed SMT ▶



- Industry leading production equipment: **Panasonic NPM double track high speed SMT production line**
- Main SMT: 0201, 0.4 pitch CSP chips; High-precision SMT: 01005 chips, 0402 chips with capacity of 4.8M QFP.

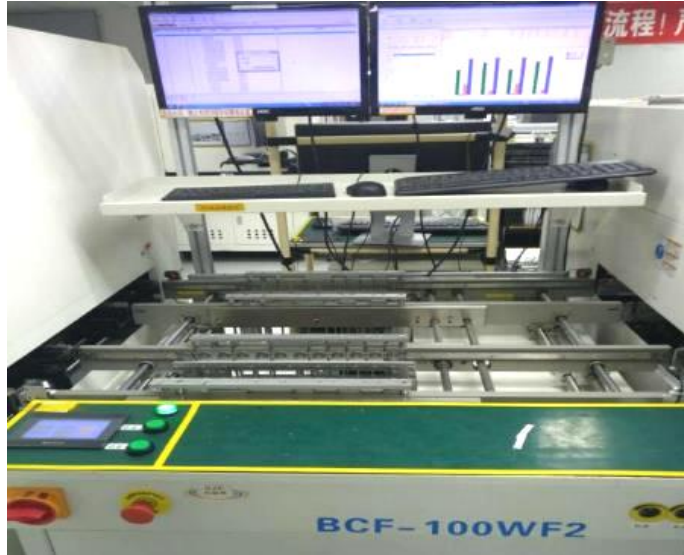
SMT车间

SMT WORKSHOP

SMT Equipments

Reflow Soldering POP Process Production Line

- 2 sets of POP process FEEDER, support components stacked up to 2-8 layers, with 20,000pcs monthly production capacity;
- Adopting the industry's most advanced nitrogen production process, using imported Heller reflow soldering equipment.



SMT测试车间

SMT TESTING WORKSHOP

AOI appearance full-inspection standard, intelligent multiple quality assurance

GOAL: Make sure SMT RTY $\geq 99\%$;

Ensure the production yield rate up to 99.98%.

- Production Line Equipments: Online SPI, AOI before reflow, AOI after reflow, imported HELLER reflow soldering, feeding error prevention system.
- Each station is equipped with monitoring equipment so as to supervise the operation of each station and prevent defective products.
- All SMT posts have voice prompts to prevent defective products caused by negligence during operation.

Appearance Inspection Equipments



维修组&IPQC

REPAIR & IPQC

SMT PCBA repairing & quality control



◀ Repair Area

FQA & PQA ▶



通用物料防错系统

MATERIAL ERROR PROOF SYSTEM

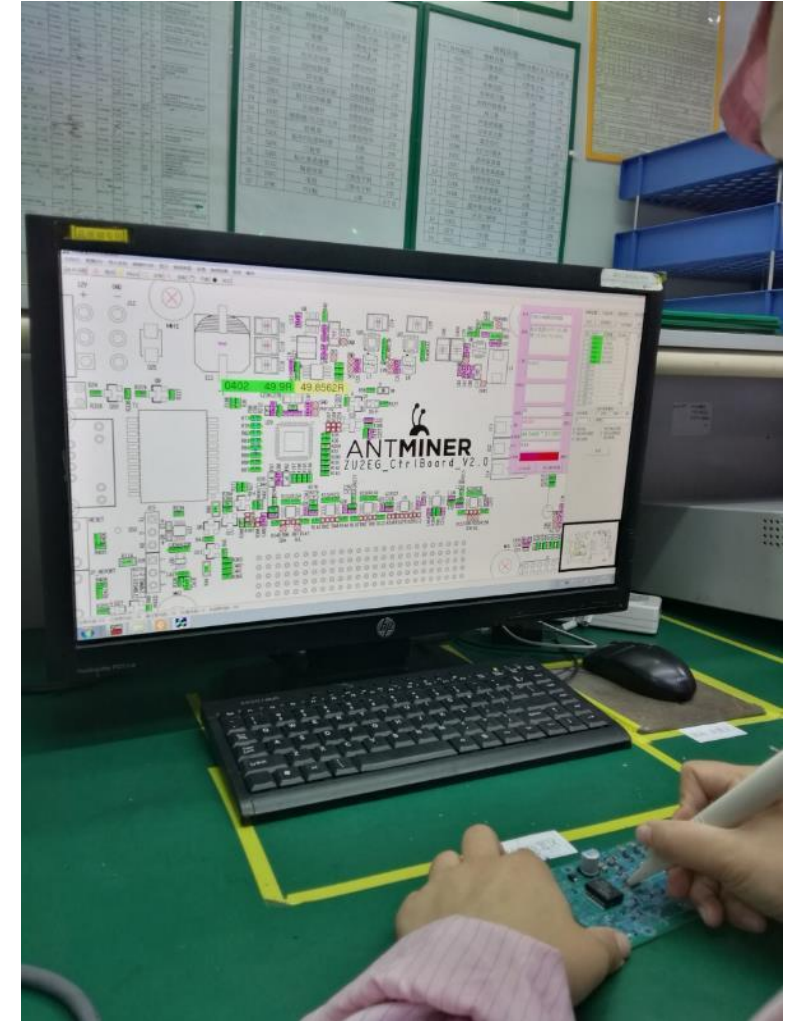


▶ SMT feeding error prevention system

- Standardize feeding process
- Ensure feeding material error free
- Reduce operator workload

SMT first article inspection system ▶

- Accurate positioning w/o omission
- Compare the measured values and voice prompts for test result PASS or FAIL.
- Inspection report output & save



实时生产监控系统

MANUFACTURING SUPERVISING SYSTEM

iLean Production System



- ✓ New intelligent lean production system, real-time production line operation monitoring
- ✓ Quick warning of abnormal, professional time-limited processing



Product Quality Assurance & Test Management

- 1. Set test requirements & procedures according to customer & product requirements
- 2. Test jig preparation and test procedure setup
- 3. Test project debugging (Golden sample, sample)
- 4. Test SOP development and release
- 5. Tester training and test implementation
- 6. Test jig or test program optimization

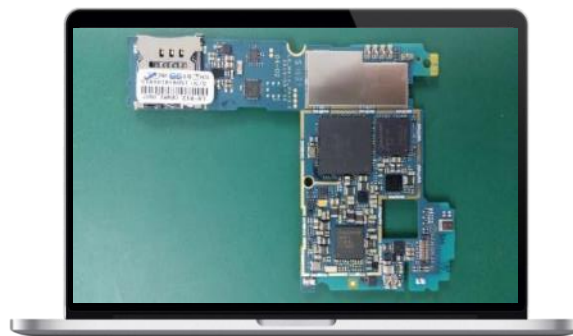
SMT产品展示

SMT PRODUCT DISPLAY

Precision Production | Lean Production | Superior Quality



Tablet PCBA



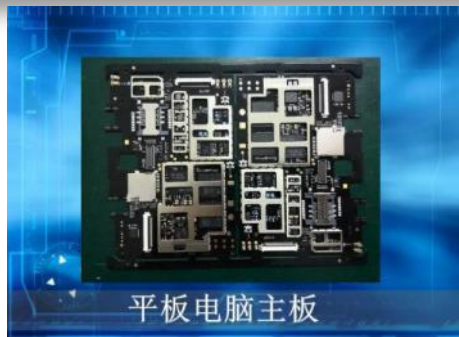
Smartphone PCBA



Feature phone PCBA



Mining Machine



PART 2

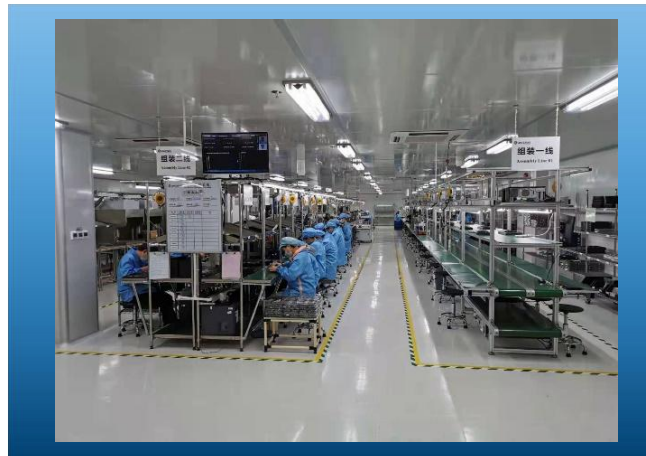
ASSEMBLY WORKSHOP

组装车间

ASSEMBLY WORKSHOP



➤ Set up 3 assembly lines, capacity up to 3000units/shift



硬件设施

HARDWARE EQUIPMENTS



Equipped with
numbers of
functional
testing, audio
testing
equipments

Equipped with
independent
10,000 grade
clean room



硬件设施

HARDWARE EQUIPMENTS

Equipped with automatic screw,
automatic film and other
automatic equipment; Assembly
automation rate is more than 30%,
effectively ensure the production
capacity and quality stability.

Click the picture to play ▶



包装车间

PACKAGING WORKSHOP

2 Packaging Lines

Equipped with automatic packing equipment;
Independent OQC inspection area, intelligent inspection record system



包装车间

PACKAGING WORKSHOP

Multi-model packaging quick switching ability, packaging capacity: 3K~4K/ shift



包装车间

PACKAGING WORKSHOP

Packaging and aging test facilities are fully equipped



- ✓ 1 self-sealing packing line
- ✓ 2 Aging test lines
- ✓ 1 constant temperature aging test line



可靠性实验室

REALIABILITY TESTING LAB

Testing Equipments



- ◆ **Environment Testing Equipments:** Temperature shock, constant temperature & humidity, salt spray, IPX8 waterproof, water boiling, etc.
- ◆ **Mechanical Strength Testing Equipments:** 2.5m drop test, 1.0/1.5m tumbling test, packaging drop test, vibration test, falling ball impact test, etc.
- ◆ **Durability Test Equipments:** Button life, clamshell life, I/O plugboard life, surface wear resistance, etc.
- ◆ **Other Test Equipments:** Pushing and pulling force, quadratic element measurement, etc.

仓库&IQC

WAREHOUSE & IQC



- **Warehouse Management**
- ✓ ERP/SAP material control system
- ✓ Constant temperature storage
- ✓ Anti-static & explosion-proof graded control
- ✓ Anti-error and anti-mixing lean management

➤ IQC inspection area

- ✓ Clean and tidy inspection environment
- ✓ Complete set of auxiliary testing equipments



PRODUCTION MANAGEMENT SYSTEM



品质管理系统

QUALITY MANAGEMENT SYSTEM

The screenshot displays the QMS interface, which includes a main menu, a search bar, and a table of inspection records. The table columns include ID, Lot No., Product Name, Inspection Type, and Status. A detailed view of an inspection record is shown on the right, including fields for Product Name, Lot No., and various inspection results.

Product Name: Sonim XP8000 BLK for NAM

Lot No.: 713497-001

Inspection Type: Incoming Inspection

Inspection Results:

Item	Result	OK	NG	Remarks
1. Dimension Inspection	Pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Function Inspection	Pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Other Inspection	Pass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Independent IQC&OQC recording system, key information tracking, inspection record inquiry

客户产品展示

PRODUCT DISPLAY

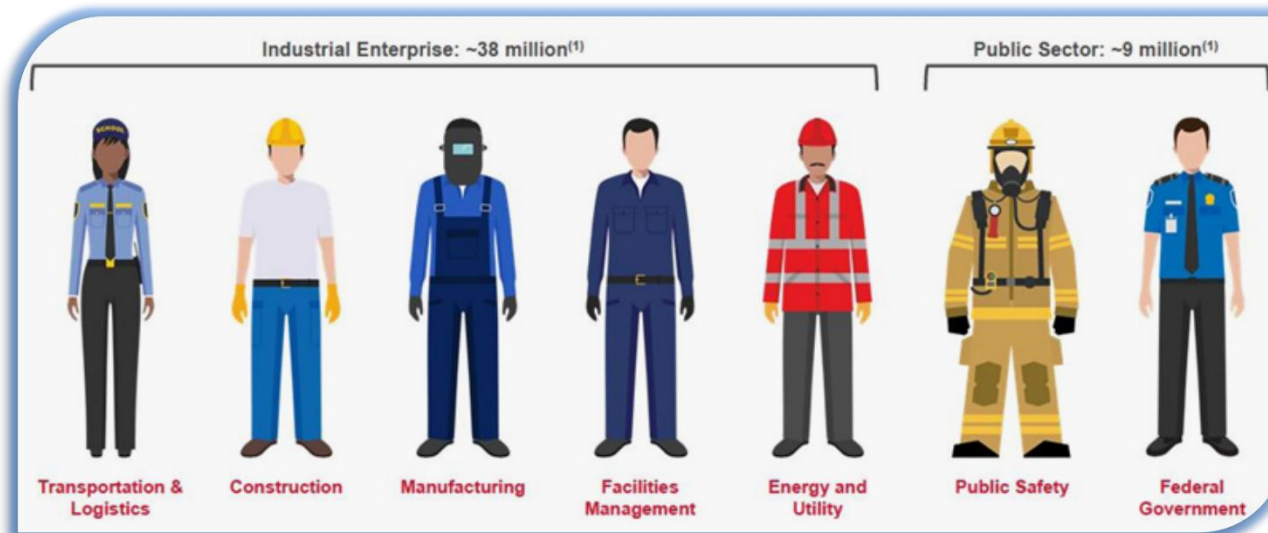


Product Feature

- MIL-STD-810H
- IP68 Dustproof waterproof, super large volume, ultra-long standby
- Suitable for extreme environments
- Anti-shock and vibration performance
- Chemical corrosion resistance.....

Suitable for >

- Logisticians
- Building worker
- Special manufacturing
- Equipment management
- Energy industry
- Public security.....





THANK YOU

Welcome to visit us!

Dongguan Unicair Communication Technology Co., Ltd.

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