“Factory named by S.M.Kirova” JSC

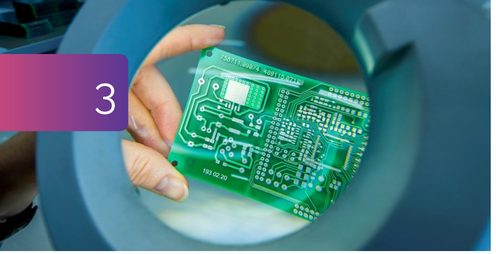
"NC "Kazakhstan Engineering” JSC

“Factory named by S.M.Kirova” JSC

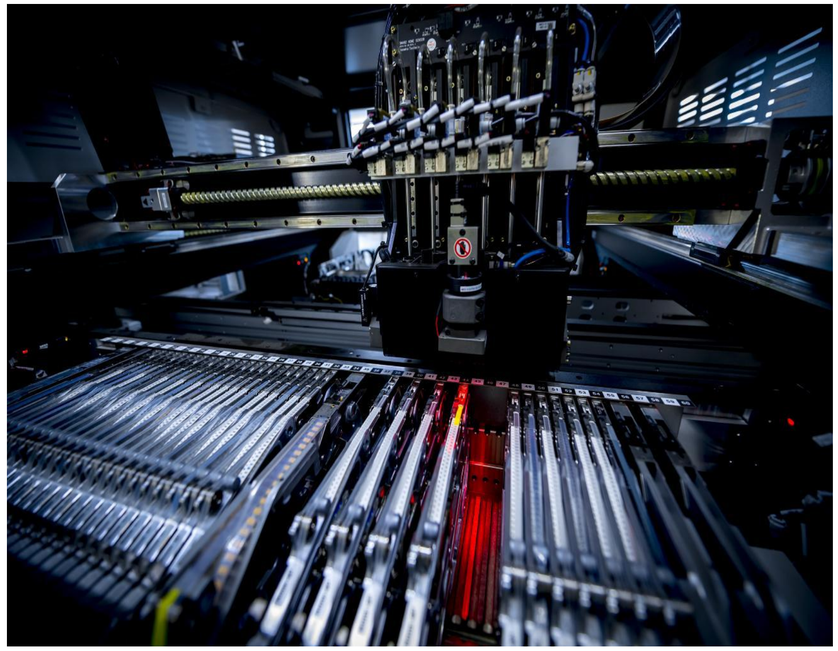
- **The main shareholder of the enterprise** is "National Company "Kazakhstan Engineering” JSC 99.6%.
- **Certificates of conformity to international standards:** quality management system ISO 9001:2015, occupational health and safety management system ISO 45001-2018, environmental
management ISO 14001-2016.
- **Basic production assets:**
  - Staff: more than 500 people;
  - Land 10.9052 ha, which are:
  - in ownership - 4.9458 ha;
  - in long-term lease – 5.9594 ha;
  - Buildings 20 units with an area of 7,386.3 m²;
  - Equipment 3 304 items

The Republic of Kazakhstan
150007, Petropavlovsk
Partizanskaya 48 st.
zik@zik.kz
www.zik.kz

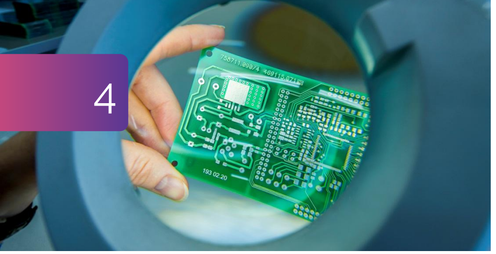
Founded in 1928



MAIN PROJECTS:



2011 – present – service maintenance of the equipment of "NC "KTZ" JSC;
2012 – 2015 – project on digitalization of television and radio broadcasting of Kazteleradio JSC;
2010 – present – modernization of mobile communication facilities of the Ministry of Defense of the Republic of Kazakhstan;
2015 – present – production of communication facilities for the needs of the Ministry of Defense of the Republic of Kazakhstan;
2020 – present – supply of Computer equipment to State bodies, sale to individuals through the marketplaces Kaspi.kz, Jusan market, Forte market, Omarket.kz, Alibaba.com, direct sales to companies.



PRODUCTION CAPABILITIES:

The Technical Department is engaged in the development of design and technical documentation, product design, development of manufacturing technology, design, testing and production support at the enterprise.

The Technical Department employs: design engineers, process engineers, metrologists, etc.

Employees of the Technical Department have issued 10 patents for industrial designs and utility models.

TECHNICAL DEPARTMENT

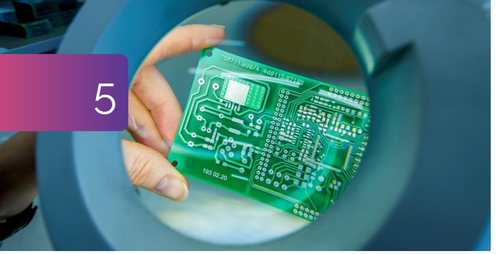
Design Bureau KB-1
Development and design of electrical circuits

Design Bureau KB-2
Development and design of structures and parts

Technology Bureau
Development and design of technological processes

Bureau of metrological measurements
Accredited calibration laboratory

Bureau of Technical Documentation
Central Technical Archive, Licensing and Certification, Multiplication Section



PRODUCTION CAPABILITIES:

On 18 620 m2 of production space there are

Mechanical workshop

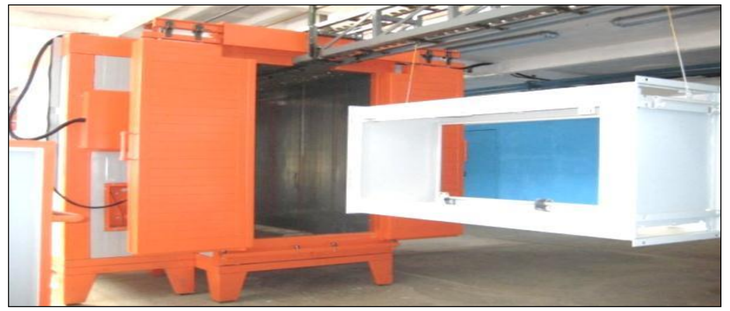
Number of machines and equipment - 180 units.
It consists of a blank section, a frame-stamping section and a metal cutting section

Assembly and assembly workshop

Number of machines and equipment - 35 units.
consists of a plastics section, an electroplating section, a printed circuit board manufacturing section and SMD assembly of elements, an assembly and assembly section, a winding section, a paint and varnish section, an adjustment and testing section

Pilot production area

Production and installation of communication equipment, renovation of KUNGs and antenna systems, complex installation of equipment and modernization of communication facilities

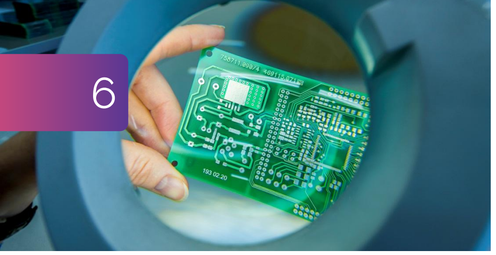


Tool workshop

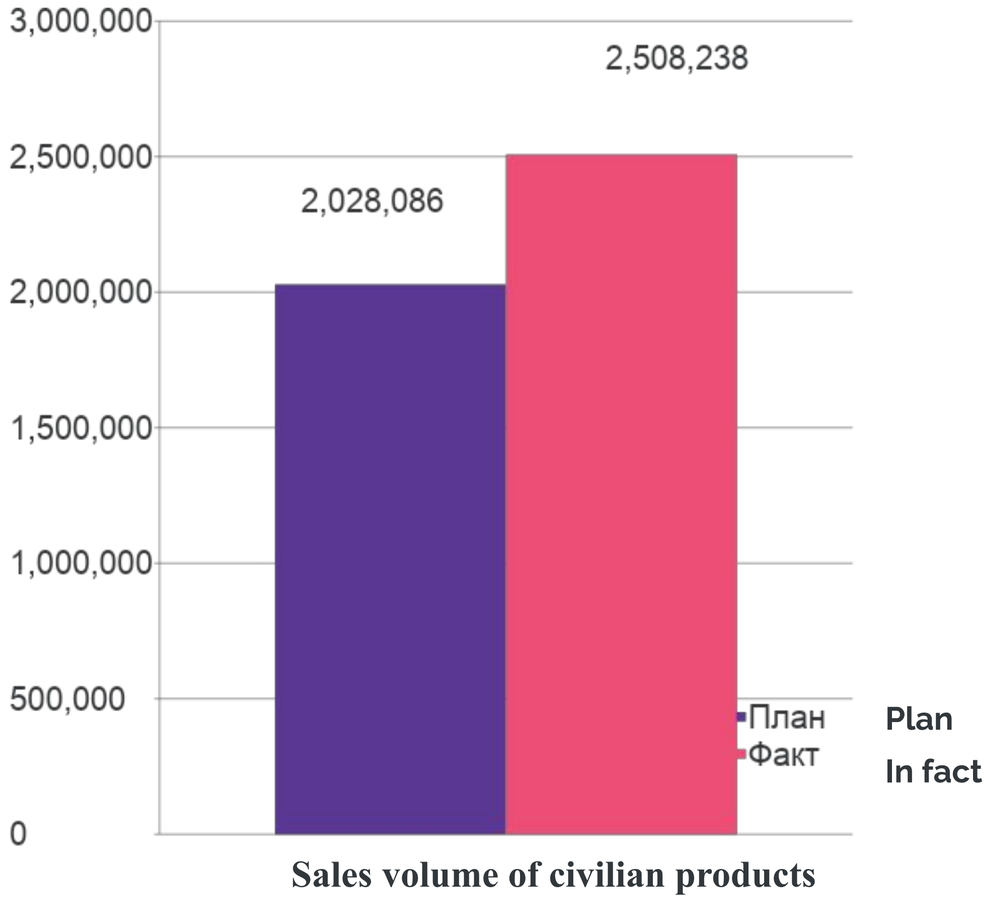
Number of machines and equipment - 80 units.
Tool preparation of production with the design and manufacture of tools: dies, molds, fixtures, etc.

Workshop of non-standard equipment

Number of machines and equipment - 77 units.
Equipped with the necessary equipment for the repair and manufacture of non-standard equipment for production (test stands)



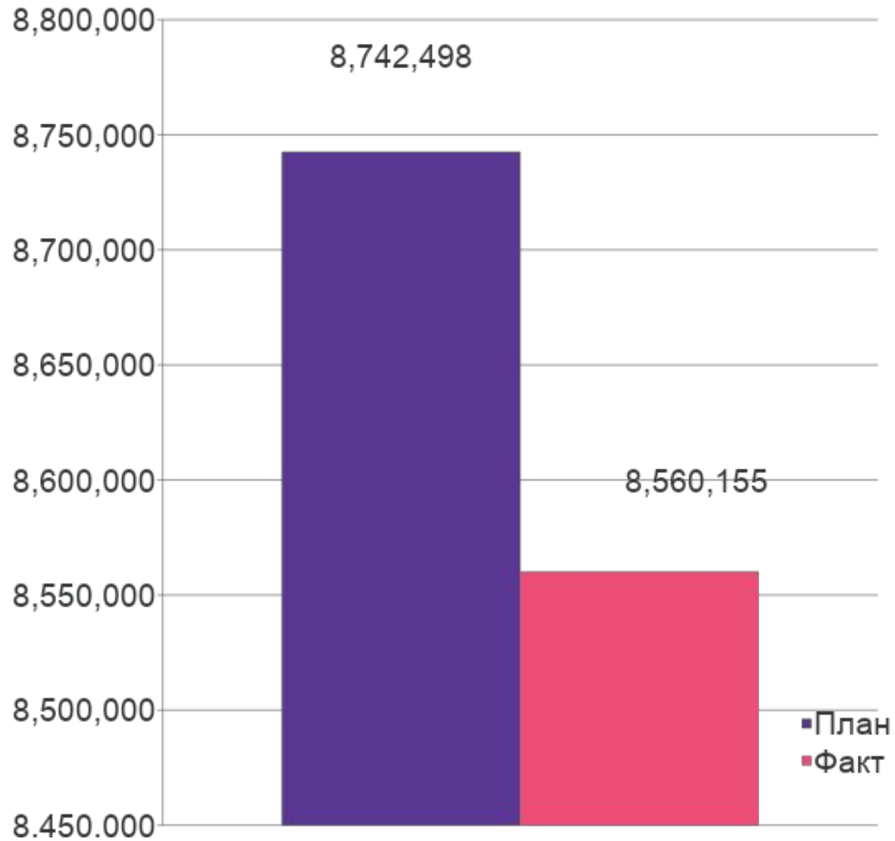
Sales volume data of “Factory named by S.M.Kirova” JSC



Plan

In fact

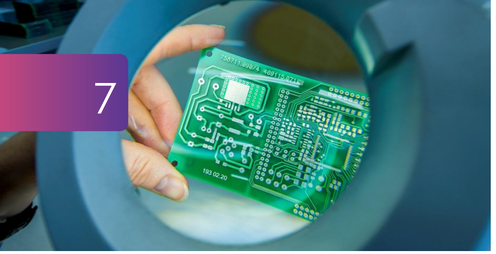
Sales volume of civilian products



Plan

In fact

Sales of special and dual-use products



Special Products

R-409MC Radio Relay Station

Used to organize radio trunks in the centimeter band, operating in continuous mode in special purpose networks at the strategic, business-strategic, and business control levels.

Dispatcher Communication Desk PSD-2

Designed for simplex hands-free telephone communication over two-wire lines.
Components:
Dispatcher communications console. External microphone headset.
Power cord

Firing range equipment kit (FSR)

Company Tactical Package (RTC)

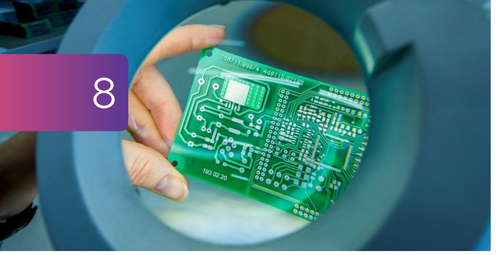
Range equipment

Designed to create an unprepared terrain target environment to train to quickly and accurately engage radio-controlled targets (moving, rotating, rising) with small arms in any weather conditions.

Range equipment is mobile, functional, simple and reliable, and of high quality, not inferior to similar products of foreign companies 。

“Factory named by S.M.Kirova” JSC is able to manufacture and supply the following range of equipment:
Rotating tactical devices
Command and firing range equipment
Catalogs for various purposes

Designed to create a remotely controlled target environment on the ground with lights and pyrotechnics to simulate small arms fire, as well as live enemy artillery and mortar fire during combat firing and tactical exercises, motorized infantry, tanks, airborne assault and reconnaissance forces.



Railroad Products

More than 100 products

UPV-1 intercom device

Designed to provide operational communication between dispatchers and workers on the line.
The unit is designed to be dust and moisture resistant, eliminating unauthorized access to the internal installation by unauthorized personnel.

Copper solder apron connector Type RESF-01/50

Designed for rail circuits in AC electric traction.

Connector Rules Steel CPC-6 type

Designed for rail chains in autonomous traction.

Block Condenser CBMSH

KBMSh-5 are used in track repeater circuits of overhead DC pulse rail circuits. KBMSh-6 are used for modernized decoding circuit of DC pulse auto-blocking.

Universal RVS-1 KZ Radio Station

Designed for operation of train (ORS), maintenance (RORS-L) and station (SRS) radio networks, as locomotive or fixed KB and VHF band radios in rail transport.

Integrated Locomotive Safety devices Uniform club-u/up

Its purpose is to ensure the traffic safety of locomotives and rolling stock (MCRS) and to prevent emergency and pre-emergency situations during train operation by forcing braking and stopping train operations.

Alarm System "KONVOI-P

An automated system for the protection of fixed and moving objects against unauthorized access, processes or phenomena of a criminal nature.
Its main purpose is to notify the protected objects of the possibility of unauthorized access.

Relay Box Unified SHRU-M

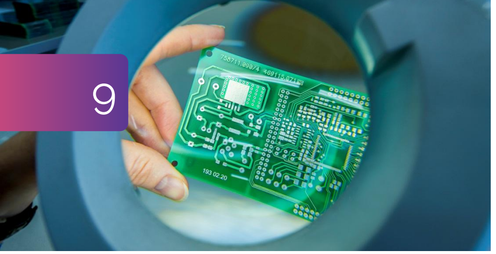
Designed to accommodate automatic interlocks, level crossing signals, electrical interlocks at points, signals and other devices used in rail transport

Battery cabinet SMB

Designed to accommodate batteries for automatic interlocking and level crossing signaling devices as a backup power source.

The SHMB cabinet is a pre-welded metal structure with two single-wing doors.

Contract amount ending in 2022 with 129,665 thousand tenge (excl. VAT)



Oil and gas products

Control Unit
Oil pumping machine
BUSHK-2M

Designed to control the operation of the motor according to a preset program, provide emergency protection for the motor, and automatically start the motor in the event of a mains voltage shock, and then recover.

Protection device
UZD-7NK motor

Designed to protect three-phase motors and to disconnect or prevent motor start-up in the event of a power supply or protected equipment failure.

Self-starting device US-1

Designed to automatically start the electric motors of pumping equipment and other devices in the event that a brief mains failure causes the electric motor to shut down.

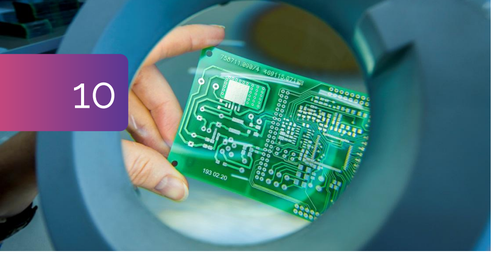
Protection devices
UZED-1 engine

Designed to protect the stator windings of motors operating with Class 0-6 magnetic starters and to display the cause of alarms when certain alarm conditions occur.

Protection device
UZD-11 electric motor

Designed to fully protect three-phase asynchronous motors, disconnecting or preventing the motor from being switched on when a fault is detected.

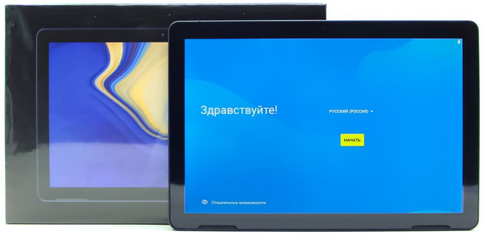
Contract amount ending in 2022 with 145,041 thousand tenge (excl. VAT)



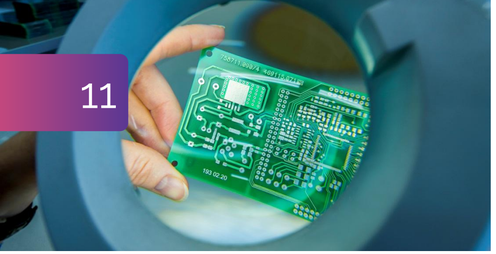
Computer equipment

ZIK W-1167S Laptop	
Processor	Intel® Core™ J-4115 1.8-2.5GHz/ 4 cores/ Кэш 4 Mb/ UHD 600
Storage	SSD 64 gb
RAM	LDDR4 8 gb 2400 MHz
Display	11.6”/ HD / 1366*768/ IPS
Interface	2*USB 3.1/USB Type-C/HDMI/Micro-SD/ Mini jack 3.5/LAN-interface/Wi-fi - 5GHz/Bluetooth 4.2

Tablet PC ZIK W-1027S EDU	
Size	243mm*164mm*10.1mm
Screen diagonal	10.6”
Screen resolution	800x1280 IPS 250cd/m2
Battery Type	Lithium-ion polymer
Battery Capacity	3.7B/5000
Processor	MT8168B Cortex-A53 Quad core /Frequency 2.0GHz
ROM	eMMC 16GB (up to 64GB)
Camera	Front/Back 2Mp
WIFI Modules	RTL8723BU ac/a/b/g/n + BT
Connectors	Type-C / Audio/microphone standard 3.5mm jack



Computer ZIK WORK PC-01 (HDD)	
Processor	Intel® Core™ i3-10100 3.6-4.2HGz/ 4 cores/ Cache 6 Mb/ Intel UHD Graphics 630
Motherboard	Gigabyte H510M H VGA&HDMI, LGA1200, slot M2
Storage	HDD 1 Tb
RAM	DDR4 8 Гб 2666 MGh
Display	23.8”/ FHD / 1920*1080/ IPS / Full HD
Equipment	System unit / monitor / keyboard / mouse



ZIK-SKUD Access Control and Management System

The ZIK-SCUD Access Control and Management System is a hardware and software system designed to prevent unauthorized access from outside and to differentiate access rights for staff in secure facilities and territories.

The system works in several directions:
Controlling the operation of barrier devices (electronic locks, turnstiles, barriers) installed on the main access roads;

Maintenance of event logs and user databases, data protection against unauthorized actions, in the form of encryption, and automatic and regular backups. Access to the server is via an encrypted secure connection, as is the case with all payment systems and applications with user data protection.

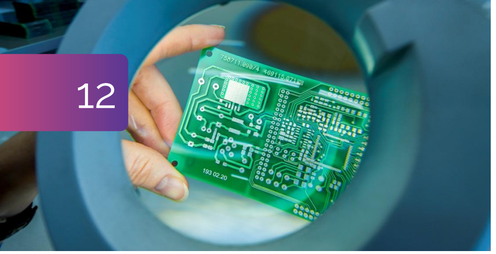
On-demand event reporting is provided on a template basis (time and attendance, event reports, logs of system activity and user actions).

The main feature of ZIK-SCUD is that it operates in a continuous mode with almost no human influence on it.

PRODUCT LOCALIZATION IS MORE THAN 50%

Advantages of the ZIK-SKUD:

- Simple interface and reliable operation;
- Reliable data storage (user authentication, data encryption, replication of storage media, automatic backup);
- Customer orientation (possibility to remove "redundant" modules and functions, adapting the interface to the end user);
- scalability (connection of multiple locks, turnstiles and kiosks), as well as further development (interface improvements, quarterly updates, face recognition module updates)
- Modern interface and user-friendliness, usability and long-term service support.



VHF radio VHF/UHF band "MEDEU-KD"

"MEDEU-KD" is a portable VHF radio for communication at the lower management level of the Armed Forces (soldiers - squads - platoons).

The terms of reference were developed in conjunction with the DS of the Armed Forces of the Republic of Kazakhstan. Tests carried out with the participation of various law enforcement agencies and the Ministry of Defense of the Republic of Kazakhstan showed good results and the potential of MEDEU-KD radio.

At present, the production of VHF radios has been established and there are plans to master the production of HF radios.

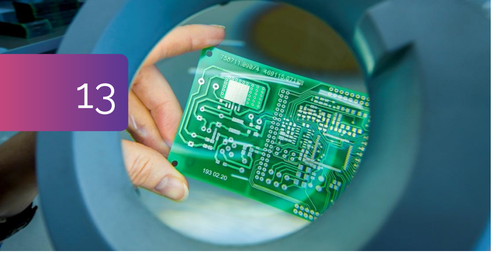
The prototype "MEDEU-KD" is manufactured on the equipment of “Factory named by S.M.Kirova” JSC.
All circuitry and software solutions are 100% developed at the “Factory named by S.M.Kirova” JSC.

VHF Radio
VHF/UHF band
"MEDEU-KD"

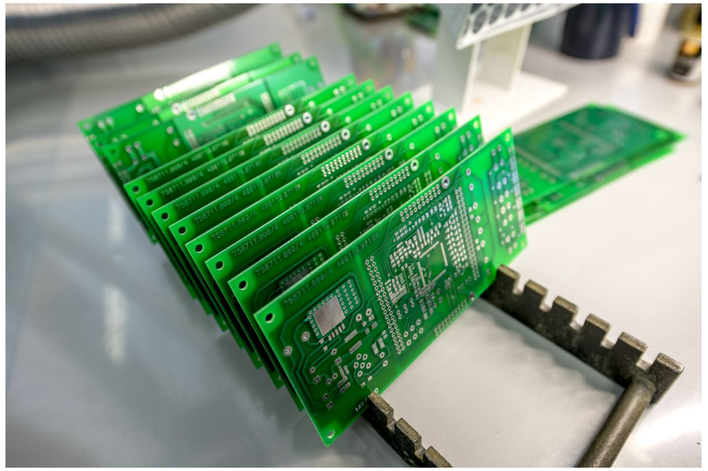
Features of the "MEDEU-KD" radio:

- Voice and data encryption using AES-256 block algorithm.
- Supports TCP/IP protocols for link (Ethernet), network (IPv4) and transport (TCP, UDP) layers.
- Advanced LFM modulation mode with integrated forward error correction for below-noise reception.
- Compact design with vandal, dust and water resistant aluminum housing

"MEDEU-KD" costs 30% less than recent analogs



Production line for multilayer printed circuit board and SMD assembly



The multilayer printed circuit board line allows the manufacture of 3 to 16 layers of printed circuit boards with class 5 accuracy.

Thickness of the workpiece to be machined.

The minimum thickness of the inner layer is 0.2 mm.

Minimum thickness of the plate is 0.5 mm, maximum thickness of the plate is 3.2 mm.

Minimum width of conductor/gap on the layer: 0.100/0.100mm.

The minimum diameter of the metallization holes is 0.2mm.

The maximum ratio of plate thickness to metallization hole diameter is 7:1.

The surface mounting line for SMD components allows surface mounting at a rate of up to 30,000 components per hour.

There is a mounting visual quality control for mounting, a reflow oven with 3-zone heating, and 10 workplaces equipped for mounting components.

In 2022, 15 contracts were signed for the supply of printed circuit boards in the amount of 162,469 thousand tenge (excluding VAT) for the production of 26,087 printed circuit boards.

Of these, 1 contract for the export of products to the Russian Federation amounted to 151,396 thousand tenge, excluding VAT, for the production of 24,012 printed diagrams.

For 2023, 3 contracts have been concluded in the amount of 14,442 thousand tenge, excluding VAT, for the production of 1,357 printed circuit boards.

Reasons for choosing “Factory named by S.M.Kirova” JSC

Human Resources

Over 500 skilled workers

A reliable and stable partner

The plant is a quasi-public sector enterprise

Financial Resources

Availability of funds available for projects

Long-term cooperation

Factory has sufficient experience in rapid deployment of service network

Payment Terms

Consider the payment terms that best suit the customer

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