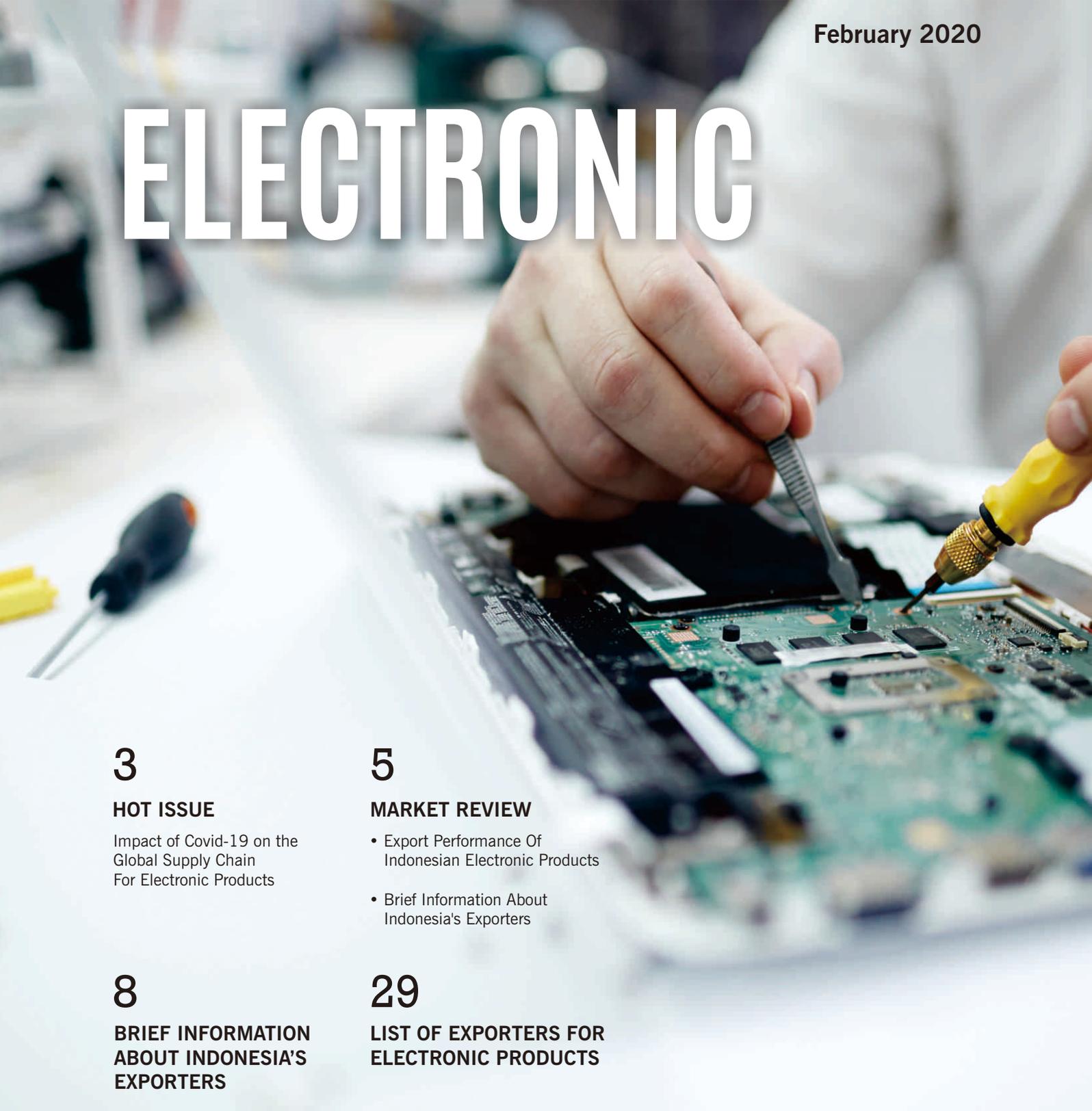


February 2020

ELECTRONIC



3

HOT ISSUE

Impact of Covid-19 on the
Global Supply Chain
For Electronic Products

5

MARKET REVIEW

- Export Performance Of
Indonesian Electronic Products
- Brief Information About
Indonesia's Exporters

8

**BRIEF INFORMATION
ABOUT INDONESIA'S
EXPORTERS**

29

**LIST OF EXPORTERS FOR
ELECTRONIC PRODUCTS**

EDITOR DESK

Dear Valued Readers,

In the middle of global economic uncertainty, trade war between U.S. and China and Covid-19 pandemic outbreak, have had a negative impact on the world supply chain, especially in Asia.

Some electronics companies have raw materials or inventory for production processes which only last for the next few months so with these conditions it can be predicted that global economy will experience recession.

Indonesia as a country that manufactures electronic products and also plays a role in supporting global supply chain will inevitably face Covid-19 pandemic effects. Although Indonesia exports in 2018 for electronic products reaches USD 10.3 billion with an average growth of 0.64% per year (from 2014-2018), it is predicted that this value will decline in 2020. The government of Indonesia through relevant Ministries or Institutions are formulating policies and taking actions to support Indonesian electronic industry in response to the Covid-19 pandemic.

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TABLE OF CONTENTS

3**HOT ISSUE**

Impact of Covid-19 on the Global Supply Chain for Electronic Products

5**MARKET REVIEW**

Export Performance of Indonesian Electronic Products

8**BRIEF INFORMATION ABOUT
INDONESIA'S EXPORTERS**

- PT Pudak Scientific
- PT Venturindo Jaya Batam
- Smart Electronic Lock
- PT Sanden Indonesia
- PT Star Metal Ware Industry
- PT Sat Nusapersada Tbk
- PT Solder Indonesia
- Arezda Purnama Loka

29**LIST OF EXPORTERS FOR
ELECTRONIC PRODUCTS**

1. Pudak Scientific, CV
2. Maspion, PT
3. PT Sanden Indonesia
4. Venturindo Jaya Batam, PT
5. Sharp Electronics Indonesia, PT
6. Star Metal Ware Industry, PT
7. Schneider Electric Manufacturing Batam, PT
8. Samsung Electronics Indonesia, PT

HOT ISSUE

Impact of Covid-19 on the Global Supply Chain For Electronic Products

On March 12, World Health Organization (WHO) announced that the Novel-Coronavirus outbreak occurred in China at the end of December 2019 has upgraded the alert status to pandemic. The WHO decision was based on a growing number of countries experiencing with Covid-19 outbreaks which has spread to 114 countries. Along with the increasing number of countries affected by Covid-19, the government of Indonesia already took several measures to prevent further spread of this virus.

In the middle of global economic uncertainty, Covid-19 pandemic has a shock effect on the global economy. Some world economists predict the possibility of deep recession due to virus outbreak.

A seminar held at the Indonesian Ministry of Trade in February, Director of the CORE (Center of Reform on Economics), Mr. Mohammad Faisal, said "the impact of Covid-19 already felt by Indonesian economy such as a decrease in production activity would reduce supply for raw materials or industrial aides to China, automotive production fell 32% from the

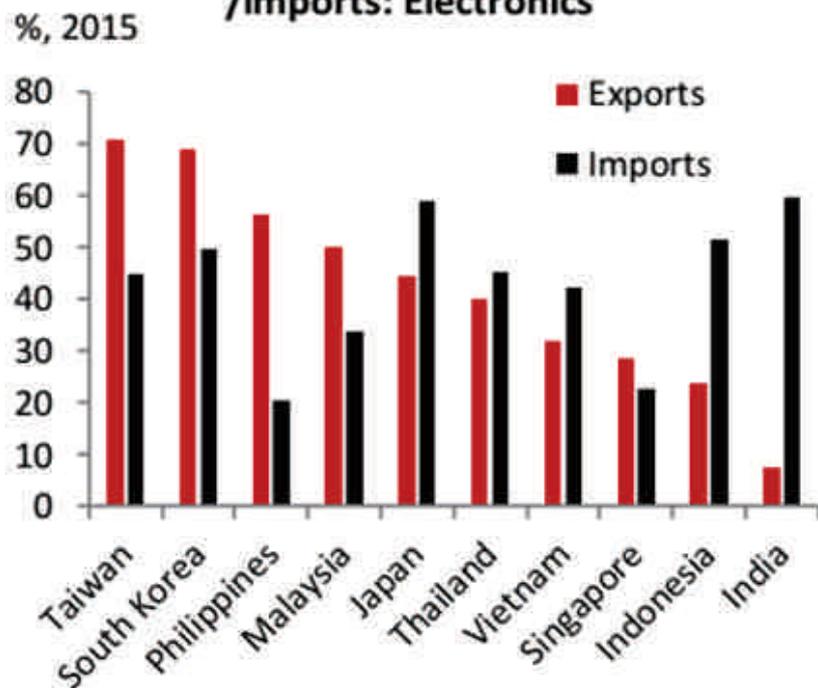
Q1 2020 target (HIS Markit), 11 of 31 Provinces stopped producing (2/3 of Chinese vehicle production), weakening Chinese domestic demand will also reduce imports of domestic consumer goods in China, thus suppressing Indonesia's exports to China".

The statement was also supported by Airlangga Hartanto, the Coordinating Minister for Economic Affairs, he stated that "the Covid-19 virus outbreak made the supply chain path for raw

materials for the world's industries cut by 30% because industrial raw material chain relies on China". Several areas in China that has already been affected by Covid-19 were Guangdong Province, Shenzhen City and Dongguan. China is well-known as the largest producer of cell phones, computers and important electronic products in the world today.

China plays an important role in the global manufacturing supply chain. China accounts for 30 to 40%

Share of China in intermediate goods exports /imports: Electronics



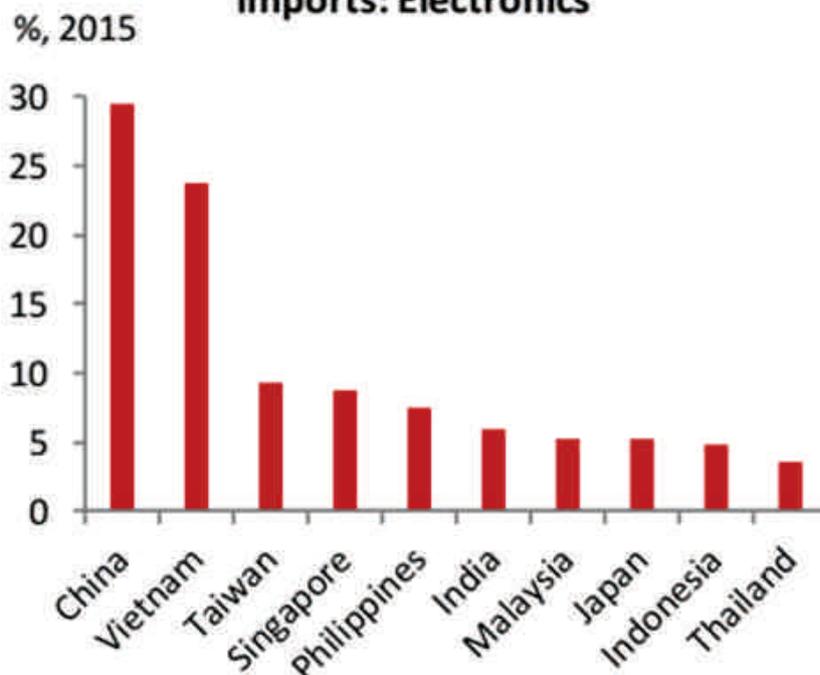
Sources: OECD TiVA database, DBS

of the overall world exports for textiles and footwear products, and 20% of the world's machinery and electrical equipment exports.

The role of China in the supply chain for electronic products is very important. Where half of Apple's 800 global production bases are located in China today. Furthermore, about 30 Chinese companies are on Apple's top 200 suppliers including those that produce speakers, screens, batteries, flat panels, and integrated circuit packaging.

Besides China, electronics producing countries which

Share of South Korea in intermediate goods imports: Electronics



Sources: OECD TiVA database, DBS

“

The statement was also supported by Airlangga Hartanto, the Coordinating Minister for Economic Affairs, he stated that "the Covid-19 virus outbreak made the supply chain path for raw materials for the world's industries cut by 30% because industrial raw material chain relies on China".

also affected by Covid-19 is South Korea, especially in the Daegu region and surrounding areas in Gyeongbuk Province. Gyeongbuk is the centre of factories for smartphones, TVs and other electronic products, such as Samsung and LG. China plays a role as a supplier for its electronic components

South Korea is a manufacturer of memory chips and display panels (LED). China and Vietnam rely on South Korea to supply this product for their domestic production. Based on South Korean statistical data, almost 30% of imported intermediate goods in China in electronics sector come

from South Korea, while Vietnam's only for 24%.

The electronics sector in Asia is severely affected by the Covid-19 virus outbreak in the short term, which also affects global supply chain and availability of materials for the production of electronic products. Demand for electronic products is expected to decline as people recently is more concerned about their health needs. World economists also predict, the impact of the Covid-19 pandemic will slowly recover by the end of 2020.

MARKET REVIEW

Export Performance of Indonesian Electronic Products

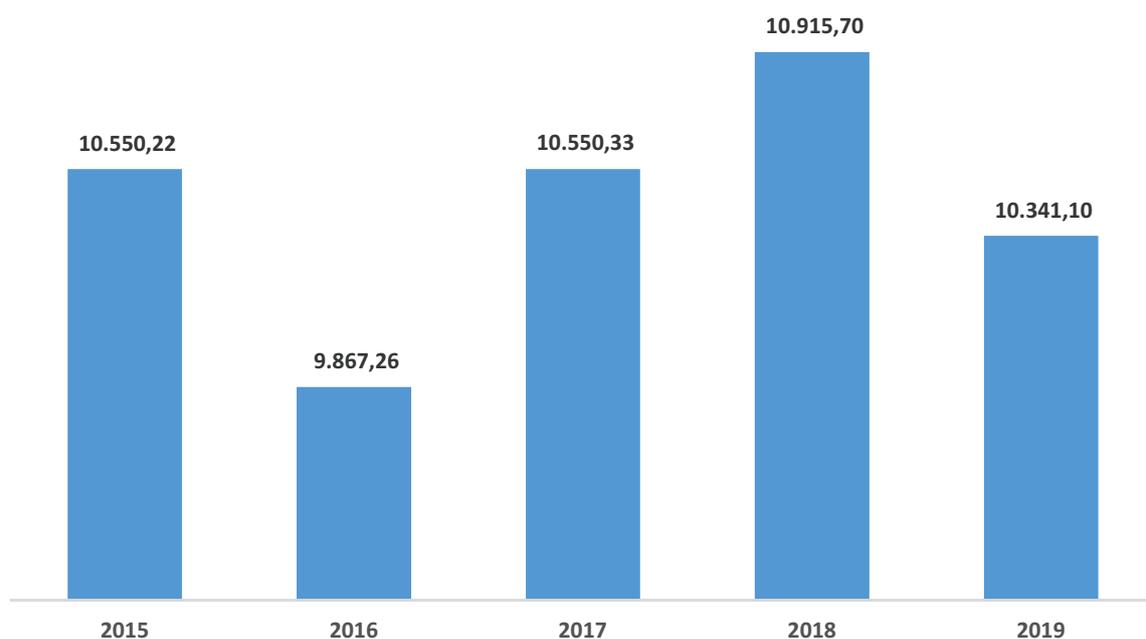
In 2019, export value of Indonesia's electronic products accounted for 6.67% of Indonesia's overall non-oil and gas exports to the world worth US \$ 10.3 billion. This value drop 5.26% compared to the export value of electronic products in 2018 worth US \$ 10.9 billion. While the export trend of Indonesian electronic products from 2015 to 2019 was recorded to have a positive trend with growing 0.61% per year, where in 2015 the export value reached US \$ 10.6 billion and continued to grow until

reached US \$ 10.3 billion.

The main export of electronics products based on 6 digit HS classification are (1) *Insulated electric conductors; ignition wiring sets and other wiring sets of a kind used in vehicles, aircraft or ships*, HS 854430 worth US \$ 923.4 million (8.93%); (2) *Printing, copying, and facsimile machines; machines which perform two or more of the functions of printing, copying or facsimile transmission*, HS 844331 worth US \$ 853.6 million (8.25%); (3) *Reception apparatus for television,*

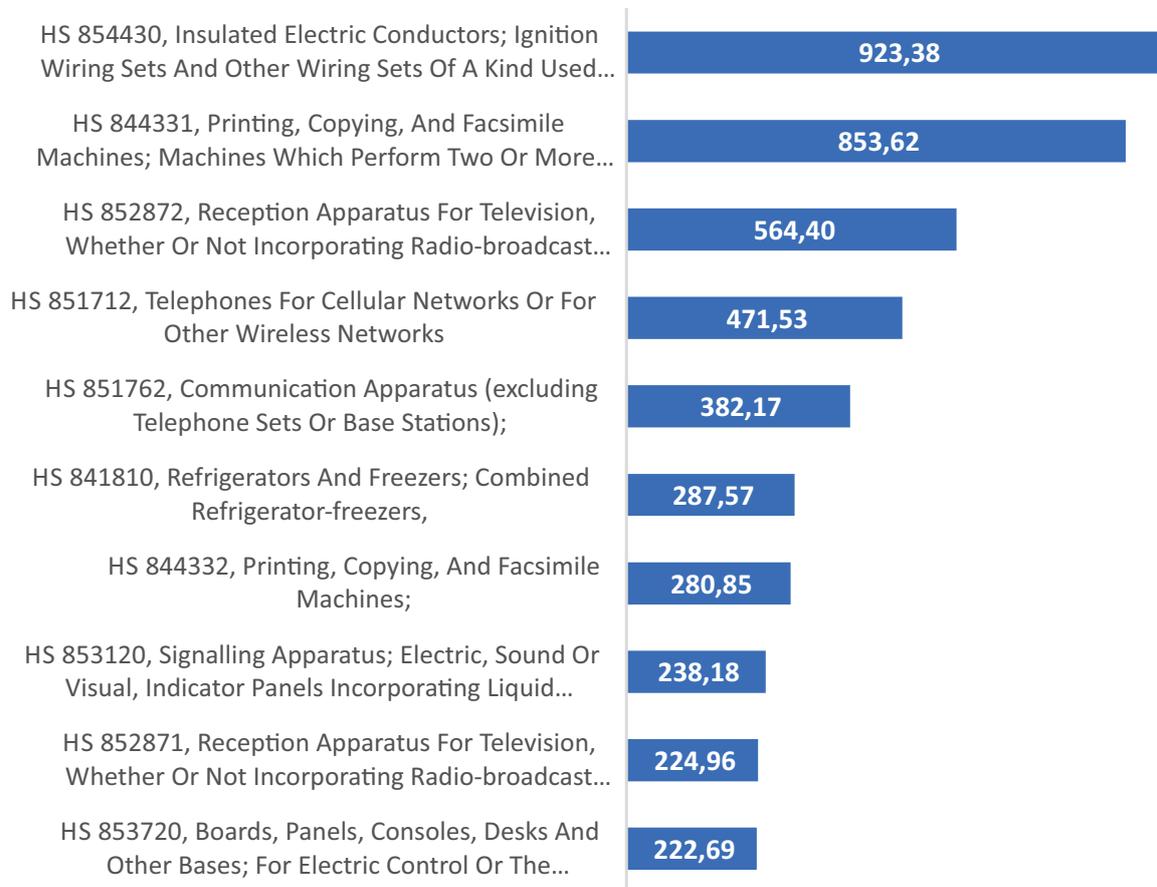
whether or not incorporating radio-broadcast receivers or sound or vide recording or reproducing apparatus, HS 852872, worth US \$ 564.4 million (5.46%); (4) *Telephone for cellular networks or for other wireless networks*, HS 851712 worth US \$ 471.5 million (4.56%); and (5) *Communication apparatus (excluding telephone sets or base stations); machines for the reception, conversion and transmission or regeneration of voice*, HS 851762 worth US \$ 382.2 million (3.70%).

Export of Indonesia Electronic Product to World
(2015 -2019) in USD Million



Source: Statistics Indonesia (processed by Dit. P2IE, Mar 2020)

Export of Indonesia Electronic Products to the World in 2019
(value is in USD Million)



Source: Statistics Indonesia (processed by Dit. P2IE, Mar 2020)

Indonesian government through its policy is encouraging exporters of electronic products to penetrate and expand the export market. One main goal is to penetrate to the U.S. market, in response to seize the opportunity of the effects of the trade war with China.

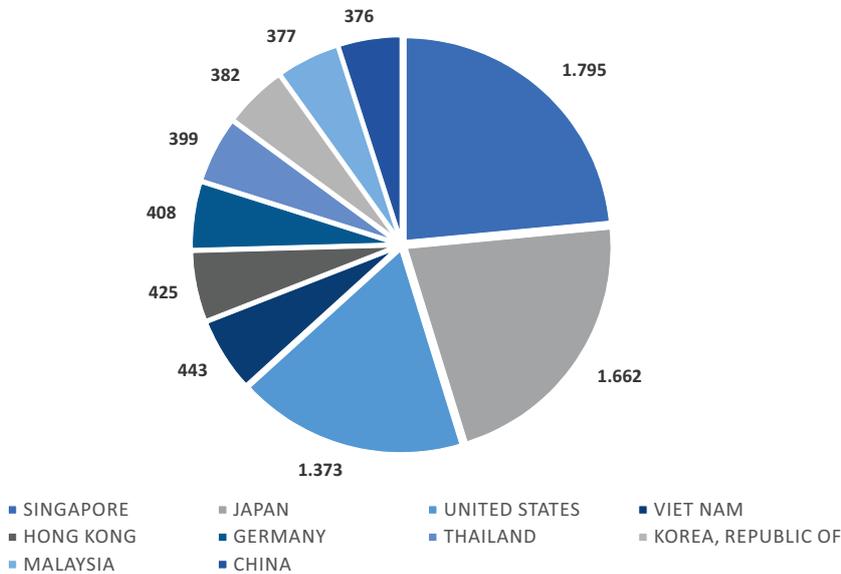
Based on Ministry of Industry's press release dated February 14, Director of the Electronics and Telematics Industry, R. Janu Suryanto

stated "the Government is determined to further boost national exports, especially from the industrial sector, which has so far made a major contribution for Indonesia's economy". The government of Indonesia has compiled a roadmap to drive Indonesia become 4.0, where the electronics industry is one of five manufacturing sectors that receive development priorities to be more competitive globally, especially in readiness to

enter the industrial era 4.0.

The five major trading partners for Indonesian electronic products in 2019 were (1) Singapore, worth US \$ 1,794 million (17.36%); (2) Japan, worth US \$ 1,662 million (16.07%); (3) the United States, worth US \$ 1,372 Million (13.27%); (4) Vietnam, with worth US \$ 443 million (4.29%); and (5) Hong Kong, worth US \$ 424 million (4.11%).

Export of Indonesia Electronic Products to World in 2019
(value is in USD Million)



Source: Statistics Indonesia (processed by Dit. P2IE, Mar 2020)



The current period Jan'19 - Jan'20, Riau Islands experienced a significant rising 160.05% or increase by US \$ 222 million compared with January 2019 worth only US \$ 138 million.

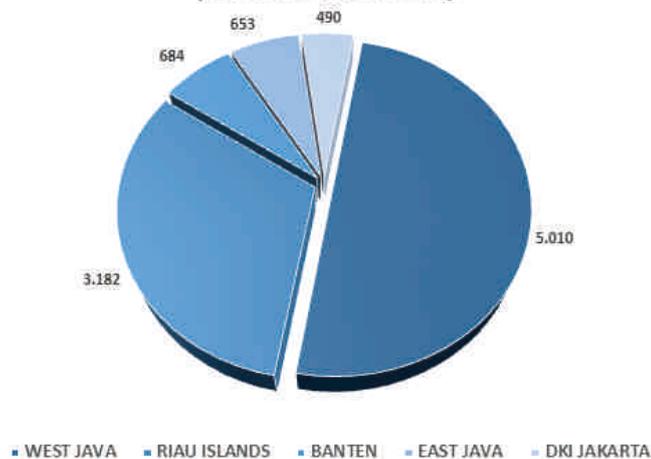
worth US \$ 58 million or growing 22.14%; and (5) South Korea, worth US \$ 24 Million or a growth of 6.76%. The province in Indonesia which has the highest export in 2019 was West Java with a value of US \$ 5.01 Billion. The export of electronic products in West Java represent 48.44% of the total national exports of Indonesian

electronic products to the world. Next is the Riau Islands with an export value of US \$ 3.18 billion, this value represents 30.77% of total national exports to the world.

The current period Jan'19-Jan'20, Riau Islands experienced a significant rising 160.05% or increase by US \$ 222 million compared with January 2019 worth only US \$ 138 million. West Java recorded a decline by 8.74%, dropped to US \$ 411.

PT. Adi Pratama Indonesia, Indonesia's electronic product company has successfully exported a CCTV camera manufacturer and DVR / NVR / UVR. This company located in Tangerang - Banten. It managed to get buyers from U.S. and furthermore plans to explore other potential countries such as Europe, Turkey, Iran, India, Brazil and Russia.

Indonesia Export of Electronic Products in 2019 by Province
(value is in USD Million)



Source: Statistics Indonesia (processed by Dit. P2IE, Mar 2020)

The highest increase or growth from 2018 to 2019, Indonesia's major trading partner countries for electronic products include (1) U.S. ,worth US \$ 196 Million or a growth of 16.69%; (2) Kazakhstan, worth US \$ 160 Million or grow by 564.57%; (3) Vietnam, worth US \$ 62 million or growing by 16.41%; (4) Philippines,

BRIEF INFORMATION ABOUT INDONESIA'S EXPORTERS

PT PUDAK SCIENTIFIC



- **Vision**

To become the regional leader in the field of manufacturing commercial Aerospace and High Precision Mechanical Components.

- **Mision**

To Provide manufacturing services of high precision components that conform to AS9100 Quality Management Standard, to upheld the highest level of customer satisfaction, to perform continuous improvement by improving the skill of human resources for the sole purpose of achieving company's goal.

Timeline

- **1979**

Our Parent company, Puduk Scientific which was establish in late 1970s, has been growing rapidly in the past several years due to the demands that we received

from Local and Overseas Customers. Basically, the main product lines of our business are educational equipments and teaching aids that are used in the educational sector. Our primary products cover Elementary Level, High School Level, and also Vocational Level.

The complexity of our products requires us to have many different disciplines so that we could manufacture various components out of Plastics, Composites, Metals, Woods, and even Glass.

Out of these components we assembled high quality products that have been used throughout the world for more than 25 years. In order to sustain the high level of productivity to deliver our products to the customer, we

have built our factory with a solid support from the Engineering Team.

- **2000**

With a solid background in Engineering Department, we started our CNC Division in 2000 to support the high productivity level of Puduk Scientific. Starting out small scale, with only 1 CNC Machining Center we started to built the Foundation of PT. Puduk Scientific. Initially, this machining center is only used to make Molds, Dies, and Jigs, however the speed and efficiency of the CNC Machine give us chance to venture into another area of Production.

With the increase in efficiency level, we have a chance to enter precision part machining as well. Thus we started to manufacture precision parts and

components for our internal use. A few months later with the increasing internal demand of small electrical components, we acquired a Swiss-Type CNC Auto Lathe. With this small incredible machine, we are able to manufacture small parts with very tight tolerances in high volume production level.

Throughout the years we bought several more Swiss-Type Auto Lathe Machines, to support our internal needs during peak demand of educational products. During the off-peak season, we are taking jobs from customers around the area to become a small Job Shop.

With the experience in operating Machining Center and Swiss-Type Auto Lathe Machines, we bought a simple 2-axis CNC Turning to help in producing precision pins and shaft for the plastic molds, and various other precision jobs. We are surprised by the productivity level of a single CNC Turning that can cover the job of several conventional lathe machines. Thus we are faced with another idle capacity that we started to actively looking for a subcontracting work with companies around Bandung.

- **2005**

Starting from 2005 we actively began to search for potential customers, and we meet several companies that are interested to have a

subcontracting job with Puduk Scientific. And as the demand for precision job is increasing, we develop an integrated CNC Part Manufacturing Division to support many of our customers. During this time, we feel that we need to separate the management of Puduk Scientific and the CNC Part Manufacturing Division. Thus, we establish PT. Puduk Scientific to exclusively handle the business of the CNC Division.

- **2006**

In the past couple of years, PT. Puduk Scientific has grown rapidly to support our major customers, and we have invested in new machineries, quality management system and human resources. Since 2006 we acquired high precision turning centers, machining centers, and high precision measuring instruments and gauges. Currently, we have 17 CNC machines comprise of simple 2-axis up to highly complex Swiss Type CNC Turning Center.

- **2008**

In 2008 we receive certification of Quality Management System - ISO 9001:2000 for the scope of: "The Manufacture of Precision Metal Parts".

- **2012**

Puduk Scientific received NADCAP certification for

Aerospace Quality System (AQS Ac7004).

- **2013**

Puduk Scientific received AS9100 certification for Standard Quality Management System for Aerospace Industry.

- **Products**

Our CNC workshop area is located inside the Puduk Scientific factory compounds of 32,000 m² plant area in Bandung city. The Workshop itself is about 2000 m² and divided into 3 sections of Mould Making section specifically for Mould Making, Turning and Milling section for Part Machining and Quality Control (QC) Section.

“

With a solid background in Engineering Department, we started our CNC Division in 2000 to support the high productivity level of Puduk Scientific. Starting out small scale, with only 1 CNC Machining Center we started to built the Foundation of PT. Puduk Scientific

PT VENTURINDO JAYA BATAM



Venturindo Jaya Batam

The One Stop EMS Provider

Company Overview

PT Venturindo Jaya Batam (VJB) was established in 1993, with our main production area spanning 6,800 square metres or 68,000 square feet. We are an Electronics Manufacturing Services (EMS) company that provides a comprehensive "One-Stop" EMS solution, in preparation to fill an unmet need for the Multi-National Companies (MNC) both in Batam-Indonesia and the region. As we are located strategically in Batam, we strive to support these MNCs throughout their entire product lifecycle.

OUR COMPANY CORE COMPETENCIES:

- Innovative Manufacturing Process Re-Engineering & Improvements
- Continuous Improvement (KAIZEN) & Constant Upgrading in Production Processes and Manufacturing System
- Adopting Lean & Agile Manufacturing in All

Aspects of Business Operations

Today, with more than 15 years of contract manufacturing experiences and a workforce of over 1,000 people, VJB is an established and competent EMS company specialising in niche manufacturing segment in Batam, with the following certifications.

Certification:

- ISO 9001:2000 Edition Certification (BSEN)
- TUV Certification
- ISO 14001:1996 Edition Certification
- TS 16949 (Automotive) Certification
- SONY OEM Green Partnership Certification
- C A N O N Green Procurement Certification
- OHSAS 18001:2001 Edition Certification

Our customers include an array of well-known MNCs & Original Equipment Manufacturers (OEM), whom is emerging leaders in the

'Computers & Peripherals', 'Industrial & Automotive', 'Networking & Telecommunications' industries and the 'Consumer Electronics' markets, such as:

- MATSUSHITA GROUP OF COMPANIES
- TEAC
- SONY
- THOMSON
- NIDEC
- INNOMEDIA
- SIIX
- PATLITE
- MEISEI
- HITACHI

Our quality services and products are focused to allow a shorter time-to-global-market and at the same time reducing our customers' total cost.

MANUFACTURING TECHNOLOGIES COVERED:

- Surface Mounting Technology (SMT)
- Precision Plastic Moulding Die/Mould
- Flexible Flat Cables and Interconnects

- Precision Leveling Certification. Assembly
- Smart Locking Devices Assembly

MANUFACTURING CAPABILITIES:

- Rigid PCB/FPC SMT
- Auto PTH
- Box-Build
- Manual Assembly (MI)
- Clean Room Facilities
- Precision Electro-Mechanical Company Milestones

• 1993

Venturindo was originally known as PT. JM registered in Batam, Indonesia and subsequently in 1998 renamed and established PT. VJB registered in Jakarta. The Company was focusing on assembly for Flexible Printed Circuit (FPC) used for mobile handheld

• 1996

Expanded into SMT to manufacture Small Rigid PCB and thin Rigid PCB.

• 1997

Expanded into Precision Plastic Injection Moulding to manufacture components for Magnetic and Optical Computer Data Storage Drives E.g Floppy and CD drives.

• 1998

Expanded total production space to 35,000 sq. fts. and over 400 manpower.

• 2000

Obtained ISO 9002

• 2002

Embarked on complete Box-Built assembly product. Eg. Floppy Disk Drives box built

Assembly. Obtained ISO 14001 Certification.

Obtained UL, TUV, CSA certifications.

• 2003

Engaged in Highly Precision Mechanical Assembly (e.g. Optical Pick-up Head assembly for CD R/W and DVD R/W)

Lead-Free Manufacturing Processes Standardization completed.

Obtained ISO 9001:2000 edition Certification.

Awarded Sony OEM Green Partnership.

• 2004

Expanded to New Factory Building. The total production space increased to 68,000 sq. fts. and over 1,000 manpower.

Completed the Implementation of Production Standing Operation System.

Introduced Cell Production Lines System.

• 2006

Established CLEAN ROOM class 10K for Injection Moulding to produce Contact Lens Products and Class 100K for Digital Camera

Flash Lens.

• 2007

2 (two) PCT Patents were filed for FPC Manufacturing Process and Digital Measurement Equipment Attained CE, FCC and C-Tick from TUV & PSB for Digital measurement products

Expanded total manufacturing capacity in the region to over 100,000 sq. ft. and over 1,000 manpower 2 (two) Registered Designs filed for Digi-Pas® products.

• 2008

Obtained OHSAS 18001 Certification.

• 2010

Introduced the Ventura V-Flex® Whisker Controlled FFC.

• 2011

Awarded CANON Green Procurement Certificate.

• 2013

Manufacture of eGeeTouch Smart Electronic Padlocks.

• 2014

Manufacture of eGeeTouch Smart Luggage Lock Modules.

• 2016

Awarded TS 16949 Certification for the Automotive Industry.

Products

Electro Mechanical / Box build Assembly Division

In line with our pursuit for responsiveness to a highly changing manufacturing environment, our Assembly Production Lines have successfully moved on towards Standing Operation and Cell Production system since 2004. This substantially enhanced our comparative advantage and elevates our customers' confidence and assurance in relations to our abilities to deliver.

We work closely in collaboration with our customers to assist in giving recommendation for constant improvements for production process and design for

manufacturability, thus assisting our customers to save cost and increase their global competitiveness. In the process, our reward is confirmed customers' loyalty with long and fulfilling working relationship and support throughout the years. Our operators are multi-skilled and fully-trained by their leaders and supervisors to achieve maximum productivity in their respective production lines

Injection Moulding Division

Our Injection Moulding Division consists of 28 from 20 - 220 Ton Nissei and sumitomo machines installed

in Class 100k clean room and standard production environments to meet customer requirements. The division produces several millions pieces of precision engineered plastic and cosmetic parts every month. These engineering parts are manufactured at up to 5 microns accuracy. Quality is highly maintained on cosmetic parts also, whereby specifications are critical. Additional value-added services such as module assembly, spray painting, silkscreen/tempo printing are also provided in an attempt to provide a comprehensive 'One-Stop' (box Built) solution to our customers.



FDD



Emergency Luminaire



Signal Light



DVD Combo



LED



PCB Assembly



Digital Level



TDS Pen

Production Machines & Cleanroom Facility



QA & Precision Dimension Inspection



Surface Mounted Technology Division

With the close support from our SMT Division, VJB once again confirmed our ability to provide a One-Stop Solution box-built capability for our customers. Currently, we assemble millions of pieces of flexible PCB and small-sized thin rigid PCB every month.

Shielded FFC

Ventura V-Flex® Shielded FFC utilises coated metal foils

materials such as silver, aluminium or copper anti-oxidised tapes to be grounded or ungrounded with conductive adhesive to control EMI & ESD enhancing the performances of FFC when deployed in noisy operating environment.

Advantages

- Improve Existing EMI & ESD performance of the FFC
- Highly customizable to meet various impedance design specification
- Conformance to various

High Speed Serial Data Link Standard e.g. USB 2.0 & 3.0

Applications

- Audio & Video Entertainment System
- Blue-Ray Player
- Optical Drive
- Game Consoles

Smartphone/Tablet & Laptop PC

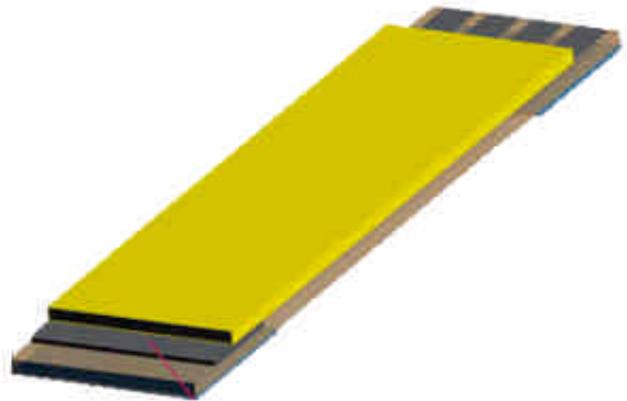
- Laser / Inkjet Printers/Scanner
- Mobile Devices utilizing serial I/O technologies
- Others

Rigid SMT Production line Facilities

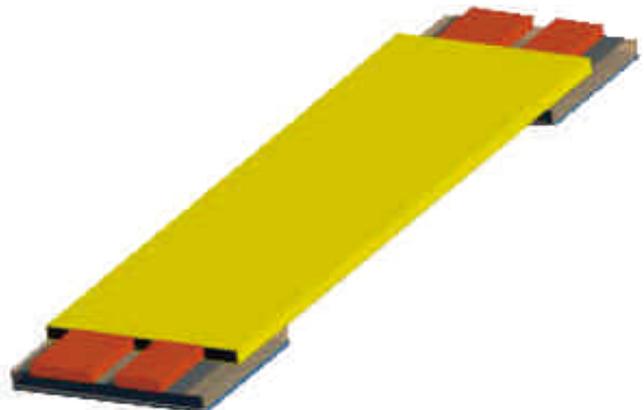


GND Type

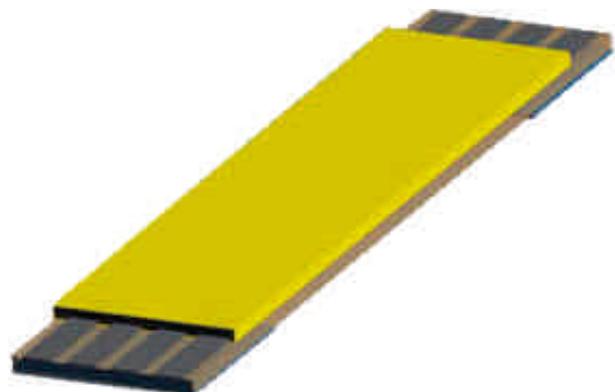
Noise received by shield material is guide through an FFC Signal line to the ground



Ground of the shield material is metal foil connected to an end



Low-Priced shield material using non-conductive adhesive without the need for grounding



SMART ELECTRONIC LOCK

Digi-Pas®

A division of DIGIPAS group

eGeeTouch® is a brand of DIGIPAS TECHNOLOGIES INC., an affiliated company of DigiPas Group with a history of over 20 years. We are a technology-intensive company based in California, USA with offices in Japan, UK, Germany and Singapore. The group is led by Dr Jim Li who attained a PhD from Cambridge University, UK and he owns over 40 patents in the field of advanced technology deployment to electronic devices and manufacturing processes.

Our R&D team comprises highly specialized professionals focusing on the development of core capabilities within the niched domain expertise of patented Intelligent Wireless Proximity/Remote-authorization Access Security Technologies and Smart Locking Devices.

This business division pioneers the development and manufacture of HIGH QUALITY, EASY TO USE, yet AFFORDABLE world's-first

smart locking devices and intelligent access security software with services that strategically seeks to replace those outdated conventional keyed locks and combination digit-wheel-dial locks in various shapes and forms.

These smartlocks resolve major security vulnerabilities of 'lock-picking' and 'key-bumping' inherent in conventional mechanical keyed locks. Its highly useful new features unmatched by any conventional mechanical padlock include:

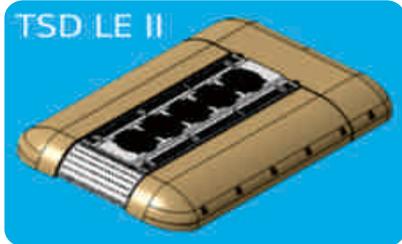
1. TRACEABILITY, with records on WHO, WHEN & WHERE each access made providing an audit trail (audit log) - a security-relevant chronological record, containing documentary evidence of sequences of access history, and;
2. R E M O T E AUTHORIZATION by administrator(s) via commercial version mobile app or web-based

intelligent access management software to assign, revoke/deny, notify, track access activities.

Unique world-pioneering and award-winning products of eGeeTouch® are tested and certified by TÜV SÜD, SGS to comply with CE, FCC, ASTM & RoHS. Our factories are ISO9001, ISO14001 & TS16949 certified and periodically audited by world's leading SGS accredited 3rd party independent certification body for traceability, environmental conformance, and work safety & health management. eGeeTouch® smart luggage lock has been tested to comply with Transport Security Administration (TSA) regulatory agency and in accordance with the International Air Transport Association (IATA) directive for implementing RFID luggage identification, towards an effective and efficient worldwide airport baggage handling system. eGeeTouch® smart luggage locks also comply with safety and security directives set by the International Civil Aviation

PT SANDEN INDONESIA

LIST OF PRODUCTS


ELECTRIC BUS AIR CONDITIONER (AC)
TSD - LE II
Bus AC electric Specifications

- Bus length: 10 - 12 m
- Outline : 3500 x 1920 x 260 mm
- Kcal/h : 32000
- Cooling capacity Kcal/h : 32000
- Compressor discharge rate : 74.4 cc/r
- Air flow : 6000 m3/h
- Noise dB: 66dB
- Power Consumption : 8.0 KW (80 HZ)
- Weight : 350 Kg
- Refrigerant : R407C


TSD - ME
Bus AC electric Specifications

- Bus length: 7 - 9 m
- Outline : 2800 x 1800 x 250 mm
- Kcal/h : 28000
- Cooling capacity Kcal/h : 26000
- Compressor discharge rate : 74.4 cc/r
- Air flow : 4500 m3/h
- Noise dB: 66dB
- Power Consumption : 6.5 KW (80 HZ)
- Weight : 250 Kg
- Refrigerant : R407C


Bus Air-Conditioning TSD - YA 65
Compressor Specifications

- Coach : 11 - 12 mm
- Cooling Capacity : 30.000 Kcal/h
- Length: 3.200 mm
- Width: 1.900 mm
- Height: 225 mm
- Weight: 200 kg
- Evaporator Air Flow: 5.600 m3/h
- Power Consumption (24 v) : 86 A
- Refrigerant: R134a
- Compressor Capacity: 655 cm3
- Passenger Capacity: 45 - 55 Person


TSD - YC 33
Compressor Specifications

- Coach : 7.0 - 7.6 mm
- Cooling Capacity : 18.000 Kcal/h
- Length: 2.490 mm
- Weight: 128 kg
- Evaporator Air Flow: 3.600 m3/h
- Power Consumption (24 v) : 43 A
- Refrigerant: R134a
- Compressor Capacity: 325 cm3
- Passenger Capacity: 25 - 30 Person


Freezer System
Product Name: SDFR250
Description:

Ambient @ 30°C Compressor speed @ 2,400 rpm

Specification:

- Cooling capacity : (0.0°C - 3.9 kW / 3,355 Kcal/h) (-20.0°C - 1.84 kW / 1,578 Kcal/h)
- Applicable temperature : -20.0°C
- Applicable volumetric : 8.0 - 13.0m3
- Applicable amount (R404a): 2.00 Kg

- Applicable voltage : 24v
- Current consumption : 30.6A @24V / 43.6A @12V

PT STAR METAL WARE INDUSTRY

PT Star Metal Ware Industry is a manufacturing company that was founded in 1972. In its early days, PT Star Metal Ware Industry produced petromax lamps, automatic lamps, electric irons and hand sprayers. As time went by, in 1980, PT Star Metal Ware Industry only focused its production on hand sprayers because

domestic and foreign market demand was quite high, considering that Indonesia is a fertile and prosperous agricultural country.

PT Star Metal Ware Industry has a strong commitment to faithfully continue and carry out its mission in agriculture and positions itself as one of the

keys in producing agricultural equipment in Indonesia that emphasizes value, quality, service and high commitment. Supported by an experienced management system and R&D team, make PT Star Metal Ware Industry a good manufacturing and supplier company.

PRODUCT:



Yoto 16 L Battery MP



Yoto 20 L Battery



ABC 16 L Battery-SF



Top Agri 16 L Battery SF



Power Sprayer
Yoto 20 L PS



Yoto 20 PS



PT SAT NUSAPERSADA Tbk

PT Sat Nusapersada Tbk began operations as a supplier of printed circuit board and mechanical parts assembly and a manufacture of electronic components. Triggered by our customer's demand and expansions, we branch out to wider scope of products and services offering a full turnkey solution.

As Indonesia's leading high technology electronics manufacturer, we at PT. Sat Nusapersada Tbk are proud to be the first and the only company listed at the Indonesia Stock Exchange in November 2007.

Our most advanced technology and robotics enable us to assemble and

manufacture state-of-the-art electronic products. We have been awarded certificates of ISO 9001, ISO 14001, Health, Safety, and Environment (SMK3) and various awards from our customers because of our consistent quality and excellent operational performance.

We are located in Batam Island of Indonesia which is very near Singapore. Batam Island is a hub for some of the global electronic manufacturers such as Sony, Panasonic, Kenwood, Epson and others. Our Company enjoys certain incentives from the government specifically in the areas of Value Added Tax and Duty Free import and

export for our products. Because of our proximity with some of our major customers, we can ship our products at the shortest possible cycle time.

PT Sat Nusapersada Tbk has a working area of 33,000 square meters with 24-hour close security monitoring equipped with hundreds of CCTV and a group of well-trained security guards. We also empower the area with 8 MW electricity generator and professional firecontrol system. This is our commitment to guarantee continuous production. Currently, we have a total of eleven (11) sub-factories within the Batam Island.

PARENT COMPANY:

Company Name	: PT. SAT NUSAPERSADA Tbk
Ticker Symbol in IDX	: PTSN
Business	: Electronic Manufacturing Services (High Technology Electronic Manufacturer)
Date of Establishment	: June 1, 1990 in Batam, Indonesia
Listing Date in the Indonesia Stock Exchange	: November 8, 2007
Authorized Capital [Rp 738.000.000.000]	: 4,920,000,000 shares
Issued & Fully Paid [Rp 265,717,200,000]	: 1,771,448,000 shares
Nominal Par Value Per Share	: Rp 150
Head Office Address	: Jl. Pelita VI No. 99, Batam 29443, Indonesia

Company Name	: PT. SAT NUSAPERSADA Tbk
Ticker Symbol in IDX	: PTSN
Business	: Electronic Manufacturing Services (High Technology Electronic Manufacturer)
Date of Establishment	: June 1, 1990 in Batam, Indonesia
Listing Date in the Indonesia Stock Exchange	: November 8, 2007
Authorized Capital [Rp 738.000.000.000]	: 4,920,000,000 shares
Issued & Fully Paid [Rp 265,717,200,000]	: 1,771,448,000 shares
Nominal Par Value Per Share	: Rp 150
Head Office Address	: Jl. Pelita VI No. 99, Batam 29443, Indonesia

SUBSIDIARY COMPANY #1

Subsidiary	: PT. SM ENGINEERING
Address	: Lot 8 Citra Buana Center Park III, Jl. Engku Putri, Batam Center, Batam 29432, Indonesia
Place & Date of Establishment	: January 7, 2002, Batam, Indonesia
Business Type	: Metal Stamping for Electronics Industry
Company Ownership	: PT Sat Nusapersada Tbk 99.96% KENNY 0.04%

SUBSIDIARY COMPANY #2

Subsidiary	: PT. SNI Internasional
Address	: Jl. Pelita VI No. 99, Batam 29443, Indonesia
Place & Date of Establishment	: December 11, 2013, Batam, Indonesia
Business Type	: Management Consultation and Service Industry
Company Ownership	: PT Sat Nusapersada Tbk 99.98% PT SME 0.02%

SUBSIDIARY COMPANY #3

Subsidiary	: PT. Tata Sarana Nusapersada
Address	: Jalan Pelita VI No 99 Batam 29443
Place & Date of Establishment	: May 27, 2016, Batam, Indonesia
Business Type	: Industry, Trade and Service field
Company Ownership	: PT Sat Nusapersada Tbk 50.00% PT Tata Sarana Mandiri 50.00%

VISION

- Being a leading manufacturing company in the world that provides products, services and solutions that are integrated with world class quality in all aspects of operations and management.

MISSION

- To become a company that contributes in reducing national import figures.
- To become the production base for brand owner for the domestic as well as oversea markets.
- To become a company that has social responsibility and provide best value to the stakeholders.

LINE OF BUSINESS SURFACE MOUNT TECHNOLOGY



SMT DEPARTMENT

- Capable of mounting from small 0402 (01005) chip.
- Odd shape component 100x26mm.
- Micro BGA with 0.12 ball size on multi layer FPC.
- Placing accuracy up to 30 micron.
- Flip chip (C4 Process).
- Package to package mounting process.
- More than 20 years of manufacturing & assembling experience.
- Handles 0201 resistors, ball grid arrays (BGA), fine pitch devices up to 70mm².
- 24/7 production lines capable of handling high volume low complexity to low volume high complexity orders.
- Fast track prototyping to volume assembly.
- Quick change intelligent feeders.
- Fully automated in-line optical inspection.
- Lead-Free Surface Mount Technology.
- Capacity to populate usual PCB materials, plus-flexi, flexi rigid, aluminum & microwave substrates.
- Flexible production lines (ESD Class 2A & 3A Certified).
- N₂ reflow process capability.



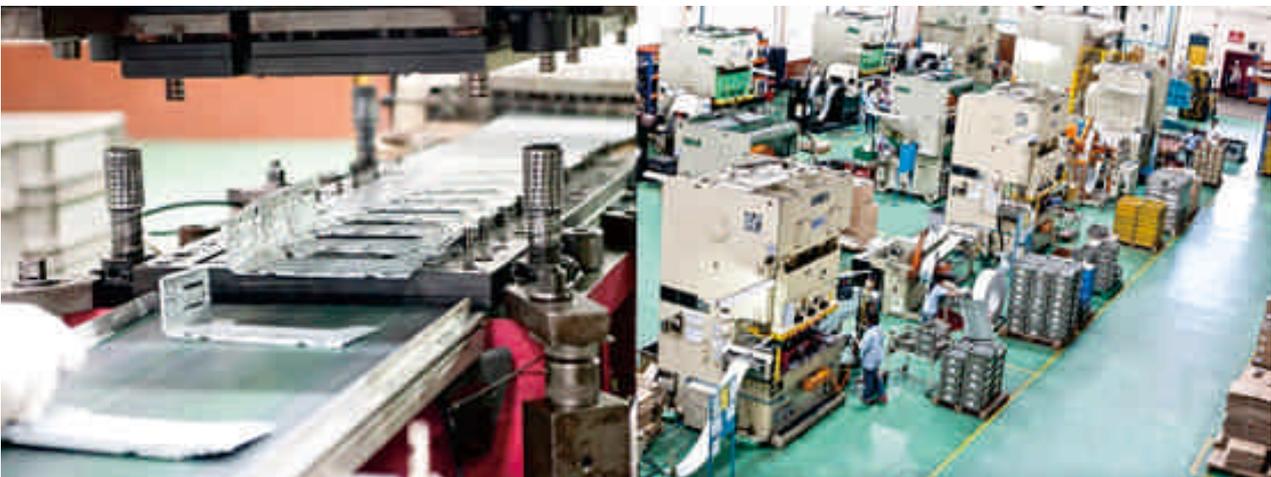
PLASTIC MOULDING

From precision plastic components to large plastic enclosures, we can meet both your plastics design and manufacturing requirements

in one convenient location. Fast design cycles for plastic parts and new tooling are possible thanks to our in-house 2D/3D design facility.

- Hydraulic + Electric Machines.

- 25t - 350t pressing pressure.
- Improved precision through CAD & CAM.
- High stroke count injection & insert molding.



METAL STAMPING

Metal stamping is an integral part of electronics manufacturing process. PT SM Engineering, a subsidiary of PTSN, producing metal components to provide a variety of product

requirement.

- Press pressure range from 45t-300t.
- Handling various types of material and finishing.
- In house tooling design and fabrication, tooling modification, service and maintenance.

- Microsoft Navision Enterprise Resource Plan.
- Die stamp up to 3mm in thickness.
- Continuous production improvement with inhouse automation innovation.

FINAL ASSEMBLY

As a fully integrated EMS, all our processes are aligned to work as one, from initial

concept through prototype and production to final assembly and testing. Whether it's PCB or final product and subsystems

assembly that you require, we can put all the pieces together to your specifications, packing and shipping them to the next stage in their journey.



KENWOOD (100-61302)

PIONEER (100-14002)



PANASONIC (100-61002)

PIONEER (100-14002)

PIONEER (100-14002)



4G LTE SMARTPHONE



SERVER RACKS

SONY PCB ASSEMBLY

ACCUMULATED ENGINEERING KNOW-HOW

Satnusa is well-known for its fully integrated high-

technology manufacturing solutions. linking PCB manufacture, plastic components and metal stamping together with our

final assembly lines. We deliver components, parts and assemblies for network equipment and computers, consumer electronics and

devices, multimedia peripheral and automotive electronic components.

AWARDS & CERTIFICATIONS

Since our first PCB production line was set up in 1990 we have recognized the importance of innovation to keep the customer firmly at the centre of our business focus. As the company has grown, we have continued to invest in innovation to stay ahead of our customers' requirements

Our roll-call of over 60 client awards for quality, partnership, zero defects, service excellence and cost delivery are a testament to our track record in bringing superior products to market on-time and at the right price.

List of our Certificates:

1. ISO 9001:2015
2. ISO 14001:2015
3. IATF 16949:2016
4. TL 9000:2016
5. SMK 3 / PP No. 50 Tahun 2012
6. OHSAS 18001:2007
7. ISO 26000:2010
8. ESD S20.20:2014
9. Sony GP Certificate



PT SOLDER INDONESIA

PT. Solder Indonesia is a private company established in 2007 in Bogor, Indonesia. Our Company Focuses on the tin solder and flux products according to customer needs and demand.

We produce electronic grade and industrial grade tin solders including for PCB applications assembly plumbing soldering, and tin plating. We can also provide various kinds of environmentally friendly solder flux.

All the lead-free solder products that we manufacture

have met RoHS requirements.

As an ISO 9001:2015 certified company, supported by comprehensive quality manual with addition personnel expertise in this field, our products pass many international standards and meet customer satisfaction through our internal laboratory facilities such as optical emission spectrometer and other support equipment to ensure all products meet the expected quality standards, and support from technical support team is ready to provide the best solution for your solder needs.

Our vision to become Indonesia's best solder manufacture in quality, reliability, and consistency measured by the level of customer satisfaction and sales, we design the products to fulfil our customer requirements under stringent quality control and we follow existing regulations. We also have been exporting to many countries in Asia, Africa, America and Europe. Solderindo Focuses on quality, competitive price, and top after-sales service.

PRODUCT:

Solder Wire

Solderindo cored solder wires are available in variety alloy with high efficiency flux. The special combination of proven activators and wetting properties guarantee the very best soldering quality in automatic and manual soldering process.



LEAD FREE SOLDER WIRE

Solderindo cored solder wires are available in variety alloy with high efficiency flux. The special combination of proven activators and wetting

properties guarantee the very best soldering quality in automatic and manual soldering process.

LEAD FREE CORED FLUX SOLDER WIRE					
Alloy Type	Alloy Composition		Diameter	Application Temperature °C	
SI100C	Sn R, Cu 0,7%, Ni, Ge		0,8mm - 1,6mm	360-390	
SAC305	Sn R, Ag 3%, Cu 0,5%				
Flux Type	Classification	Flux Content	Grade	Application	Features
NS-93HF	ROL0	3,0%	No Clean	PCBA Soldering	Halogen free, none splatter
NS-29LT	ROL1				Clear residue, none splatter
NS-30	ROL1				Fast wetting, none splatter, clear residue
NS-31	ROM1		RMA	None splatter, fast wetting	
WS-102	INH1		Water Soluble	Copper Tube	Residues are easy to clean with water
AC-99	INH1			Aluminum Soldering	Residues are easy to clean with water

LEAD FREE SOLID SOLDER WIRE		
Alloy Type	Alloy Composition	Diameter
SI100C	Sn R, Cu 0,7%, Ni, Ge	1,0mm - 5,0mm
SAC305	Sn R, Ag 3%, Cu 0,5%	

Leaded Solder Wire



Solderindo cored solder wires are available in variety alloy with high efficiency flux. The special combination of proven activators and wetting properties guarantee the very best soldering quality in automatic and manual soldering process

LEADED SOLDER WIRE			
Alloy Type	Alloy Composition	Diameter	Application Temperature °C
63/37	Sn 63%, Pb 37%	0.8mm - 1.6mm	250 - 270
60/40	Sn 60%, Pb 40%		

Flux Type	Classification	Flux Content	Grade	Application	Features
NS-29LT	RQL1	1,7%	No Clean	PCBA Soldering	Clear residue, none splatter
NS-31	RDM1		RMA		None splatter, fast wetting
NS-261	RDM1				None splatter, fast wetting
WS-102	INH1		Water Soluble	Copper Tube	Residues are easy to clean with water
AC-99	INH1			Aluminium Soldering	Residues are easy to clean with water

LEADED SOLID SOLDER WIRE		
Alloy Type	Alloy Composition	Diameter
60/40	Sn 60%, Pb 40%	1,0mm - 5,0mm
50/50	Sn 50%, Pb 50%	
40/60	Sn 40%, Pb 60%	
30/70	Sn 30%, Pb 70%	
15/85	Sn 15%, Pb 85%	

Solder Bar

Doped with optimum amount of antioxidant in special

manufacturing process could eliminate solder dross generated rapidly during soldering process. For wide range of electronic

application such as wave soldering application, and dipping solder.



SOLDER BAR				
Alloy Type	Category	Alloy Composition	Melting Point Temperature °C	Features
SI100C	Lead Free	Sn R, Cu 0.7%, Ni, Ge	227	Low Dross Solder Bar
SAC305		Sn R, Ag 3%, Cu 0.5%	216 - 228	
SAC0307		Sn R, Ag 0.3%, Cu 0.7%	217 - 219	
63/37	Leaded	Sn 63%, Pb 37%	183	
60/40		Sn 60%, Pb 40%	183 - 190	

Solder Paste

Solderindo produce Solder Paste for SMT process and repair. Consistency flux is the key to advance our solder paste formulation. With stringent processing controls we ensure its solder paste result never varies.

SOLDER PASTE					
Alloy Type	Category	Alloy Composition	Flux Type	Powder Type	Flux Content
SAC0307	Lead Free	Sn R, Ag 0.3%, Cu 0.7%	MG-21	Type 4	12%
SAC305		Sn R, Ag 3%, Cu 0.5%		Type 4	12%
SAC105		Sn R, Ag 1%, Cu 0.5%		Type 3 & Type 4	12%
SnBiAg		Sn 42%, Bi 57%, Ag 1%		Type 4	10%
SnBi		Sn 42%, Bi 58%		Type 4	10%
SnPb63	Leaded	Sn 63%, Pb 37%		Type 3	10%
SnPb622		Sn R, Ag 2%, Pb 36%		Type 3	10%

*available in 30grams & 500grams pot, 50grams syringe & 1Kg syringe package
*ask for MSDS for more details

MG-21 Features

- For high end printing application
- Excellent slump resistance
- Long tack performance
- Clear residue
- Fine solder
- Excellent wetting



Flux

Solderindo produce and supplies a complete range of fluxes. Consistently of soldering process is depend on flux quality. It must prepare the surface to be soldered for the actual soldering process as well promote wetting.



LIQUID FLUX						
Flux Type	Grade	Classification	Appearance	Color	Application	Packages
GR-808HF	Halogen Free	ROLD	Low Residue, Shiny Solder Surface	Clear	PCB Soldering fine pitch	1 liter, 5 liters, & 20 liters
GR-825HF	Halogen Free	ROLD	Shiny Solder Surface	Dark Amber	PEB Wave Soldering	
MR-825HF	Halogen Free	ROLD	Matte Solder Surface	Dark Amber	PCB Wave Soldering	
GR-302	RMA	RDL1	Medium Residue, Shiny Solder Surface	Dark Amber	Dipping Soldering	
WH-1055	No Clean	ORL1	Shiny Solder Surface	Clear	Copper Wire Tinning	
WH-2055WB	Water Base	ORL1	Shiny Solder Surface	Clear	Copper Wire Tinning	
WH-223	No Clean	RDL1	Low Residue, Shiny Solder Surface	Amber	Copper Wire Tinning	
PR-95	No Clean	ORL1	Shiny Solder Surface	Clear	PV Ribbon Soldering	
SS-2929	Water Soluble	INH1	Shiny Solder Surface	Dark Amber	Stainless Steel Soldering	
AX-39	Water Soluble	INH1	Low Residue	Yellowish	Aluminum Tinning	
AD-106	Water Soluble	IFH1	Low Residue	Yellowish	Dip Aluminum Tinning	

PASTE FLUX					
Flux Type	Grade	Flux Classification	Color	Application	Packages
PF-622	RMA	ROLD	Light Amber	PCBA Repair, BGA	10cc syringe, 100grams pot
PF-635			Clear		
Lolett	Petrolatum Jelly	INH1	Pale Brown	Tinning Solder, Repair	50, 100, 454, 500 grams pot
Plumbing Flux	Water Soluble	INH1	Pale Brown	Plumbing Soldering	50, 100, 454, 500 grams pot
Plumbing Flux			White	Plumbing Soldering	50, 100, 454, 500 grams pot

FLUX CLEANER					
Flux Type	Grade	Flux Classification	Color	Application	Packages
RF-695	Alcohol	ORLD	Clear	Residue Remover	1 liter, 20 liters, 200 liters
S-99					
S-95					
S-88					

OTHER ITEMS

- Tip Refresher
- Flux Pen

Tin Anode

Made from high quality and high purity tin manufactured in our own factory facility.



TIN ANODE		
Specification	Shape	
Sn 99.9%	Anode Bar, Ball, Nugget, Tin Shot	
500 ppm Pb Max		
Sn 99.99%	100 ppm Total Impurities Max	
Custom Tin Anode Shape by Request		



Lead Alloy

Made from high quality and high purity lead manufactured in our own factory facility. The process of

lead alloy have separated treatment from our Lead Free product to ensure no contamination. Lead alloy available in shape ingot, bar jumbo, wire, and other shape.

LEAD ALLOY		
Lead alloy type	Specification	Application
1/2 C	Pb-R / Cd (0.06 – 0.09%) / Sn (0.18 – 0.22%)	Cable sheathing
E	Pb-R / Sb (0.15 – 0.25%) / Sn (0.35 – 0.45%)	Cable sheathing
PbSb	Pb-R / Sb (1 up to 15%)	Accessories, bullet, and fishing tackle casting

AREZDA PURNAMA LOKA

Being established in 1983, Arezda is one of the few truly Indonesia national companies pioneering and leading in the local manufacture of EQUIPMENT & PARTS for industrial use.

OUR SCOPE OF PRODUCTION INCLUDES:

- Pressure Vessels,
- Extended Surface Tubing (Finned Tubes & Studded Tubes),
- Sealing Technology Products,
- Compressed Fiber Jointing Sheets,
- Seamless Tubes Ferrous & Nonferrous.

We thank all of our National and International Customers for their continued trust and loyal support in using our <INGI>® PRODUCTS.

<INGI>® Local Content/TKDN (Tingkatan Kandungan Dalam Negeri):

Here are

*Dirjen. MIGAS' Letters of Recommendation on the use of <INGI>® Products.

- Letter No . 855/396/DMB/1997 on the use of Heat Exchangers
- Letter No . 2422/396/DMB/1995 on

the use of Finned Tubes

- Letter No . 285/396/DMB/1991 on the use of Packing & Gaskets
- Letter No . 2759/19.07/DMB/2018 on the use of Jointing Gaskets & Seamless Tubes

CUSTOMERS

Customers of PT. AREZDA PURNAMA LOKA varies from local to foreign companies, private and government-owned to multinational companies. It covers following Industries:

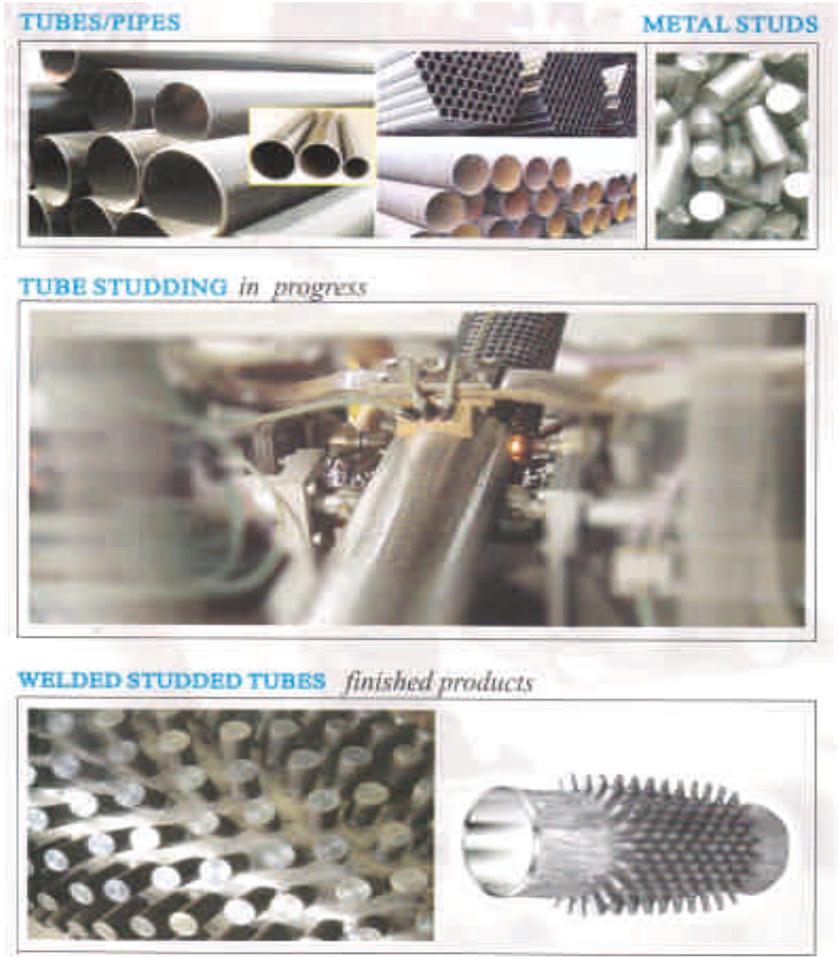
1. Pertamina State-Owned Oil & Gas Refineries
2. Local / Foreign Oil & Gas Companies (Onshore and Offshore)
3. Petrochemical Industries
4. Chemical Industries
5. Fertilizer Industries
6. Power Industries
7. Gas and Chemical Processing
8. Steel Plant
9. Heat Exchanger Industries
10. Engineering Industries
11. Cement Plants
12. Pharmaceutical Plants
13. Textile Industries
14. Sugar Plants
15. Other Process Industries

FACTORY

Occupying total area of approx. 50,000 square

meters and being fully equipped with all the necessary factory equipment, machinery, tooling and other special devices, Arezda as a FABRICATOR with all these complete production facilities is quite ready to serve the market and the wide diversity of customer needs in the METAL WORKING World.

We are ISO 9001:2015 Certified and ASME U-Stamp & R-Stamp Accredited company. We manufacture products conforming to ASTM, ASME, ANSI, API, DIN, JIS, BS, and other International Standards as per customer's needs and technical requirements with full documentation. Shell & Tube, Air-Cooled Heat Exchangers and Accessories of our Pressure Vessel Manufacturing Division in particular are manufactured in accordance with ASME Boiler & Pressure Vessel Code. Supported by 300s people in the organization, workmen with varied skills, technical know-how and special expertise, such as highly skilled and experienced engineers, qa/qc inspectors, certified welders, drafter, and all other staff in their respective functions, Arezda is ready to serve the customers. With recent up-to-date technologies and being



Manufacturing Division

3. SEALING TECHNOLOGY
Manufacturing Division

4. JOINTING SHEET
Manufacturing Division

5. SEAMLESS TUBE
Manufacturing Division
Our Factory covers outdoor and indoor warehouses large enough to put and store raw materials, semi finished and finished products around, and to make use of this spacious factory complex, we make special quite good stock of raw materials and semi finished products ahead of time to get the work done in time for quick and speedy delivery to customers.

coupled by our 35 years of experience since 1983, Arezda has all the expertise and experience in this field and the present Quality Management System assures you of our workmanship ever, and delivering Quality Products & Services.

Here are Arezda's 5 Manufacturing Divisions all of which are located at the same premises at one Factory Complex.

1. PRESSURE VESSELS
Manufacturing Division

2. EXTENDED SURFACE TUBING

Activities in our
<INGI>
PRESSURE VESSEL DIVISION

- AIR-COOLED HEAT EXCHANGERS**
- STEEL & TUBE HEAT EXCHANGERS**
 - Skeleton of Tube Bundle**
 - Drilling of Baffle**
 - Heat Exchanger Gaskets**
 - Straight-Tube Bundle**
 - U-Tube Bundle**

Hydrostatic Test

List of Exporters for Electronic Products

1. PUDAK SCIENTIFIC, CV

Jl. Pudak No. 2, Cipahit - Kel. Merdeka Kec. Sumur Bandung - 4011, Jawa Barat

Tel: (62-22) 7205615, 7231046, 7272755

Fax: (62-22) 7207252

Email: contact@pudak.com, andrea.aldris@pudak.com

Website: www.pudak.com

2. MASPION, PT

Jl. Kembang Jepun No. 38-40, Desa Sawotratap - Gedangan - 60162, Jawa Timur

Tel: (62-31) 3531445, 3541040, 3530333, 8531531, 853699

Fax: (62-31) 3533055, 3533218, 8532606

Email: export@maspion.com, ipo@maspion.com, info.hq@maspion.com, mspjkt@maspion.com

Website: www.maspion.com

3. PT SANDEN INDONESIA

Kawasan Industri Deltamas - KITIC, Kav. No. 7A & 8, Desa Nagasari, Serang Baru Bekasi, 17330

Tel: (+6221) 5055-5651

Email: marketing@sanden.co.id, gandauli@sanden.co.id

Website: <http://www.sanden.co.id/>

4. VENTURINDO JAYA BATAM, PT

SM Business Center Block B, Jl. Yos Sudarso - Batu Ampar - 29432, Kepulauan Riau

Tel: (62-778) 413175

Fax: (62-778) 413175

Email: hrdlwk@venturindo.com

Website: www.venturindo.com

5. SHARP ELECTRONICS INDONESIA, PT

Jl. Swadaya IV, Rawa Terate - Pulo Gadung - 13920, DKI Jakarta

Tel: (62-21) 4603925, 46824070, 4603930

Fax: (62-21) 4601703, 4601704

Email: rec_hrd@seid.sharp-world.com, nili_export-sharp@nittsu.com.hk

Website: www.sharp-indonesia.com

6. STAR METAL WARE INDUSTRY, PT

Jl. Kebayoran Lama Gg. Kemandoran V/11, Grogol Utara
Palmerah - 12210, DKI Jakarta

Tel: (62-21) 5483995, 5481225, 5332070

Fax: (62-21) 5481493

Email: ptstarmetal@gmail.com, pt.starmetal@gmail.com

Website: http://www.indosprayer.com

7. SCHNEIDER ELECTRIC MANUFACTURING BATAM, PT

Jl. Beringin Lot 04 - Lot 208 - Lot 01, BIP Muka Kuning - Kel. Muka Kuning Sungai Beduk -
29438, Kepulauan Riau

Tel: (62-770) 611133

Fax: (62-2770) 611134

Email: firdaus.1@sg.schneider-electric.com, Sahat.Sinaga@schneider-electric.com,
Hendra.Etha@schneider-electric.com, ferde.nandus@schneider-electric.com,
bambang-riyadi@schneider-electric.com

Website: www.schneider-electric.com

8. SAMSUNG ELECTRONICS INDONESIA, PT

Jl. Jababeka Raya Blok F No. 29 - 33, Cikarang Industrial Estate Kel. Harja Mekar
Kec. Cikarang Utara - 17530, Jawa Barat

Tel: (62-21) 89837144, 89837114 (Hunting), 89837112

Fax: (62-21) 8934274, 8934273, 8937939, 8935063

Email: rizki.j@samsung.com, henky12@samsung.com, komarudin@samsung.com,
nono@samsung.com, jitaekim@samsung.com, seung.han@samsung.com,
dj.shin@samsung.com, jaehoon.kwon@samsung.com, kanghyun.lee@samsung.com

Website: www.samsung.com/id

**Directorate General Of National Export Development
Ministry Of Trade Of Republic Of Indonesia**

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Tel./Fax.: +62 21 385 8171, E-mail: contact-pen@kemendag.go.id

 Ditjen Pengembangan Ekspor Nasional  [djpen.kemendag](https://www.instagram.com/djpen.kemendag)