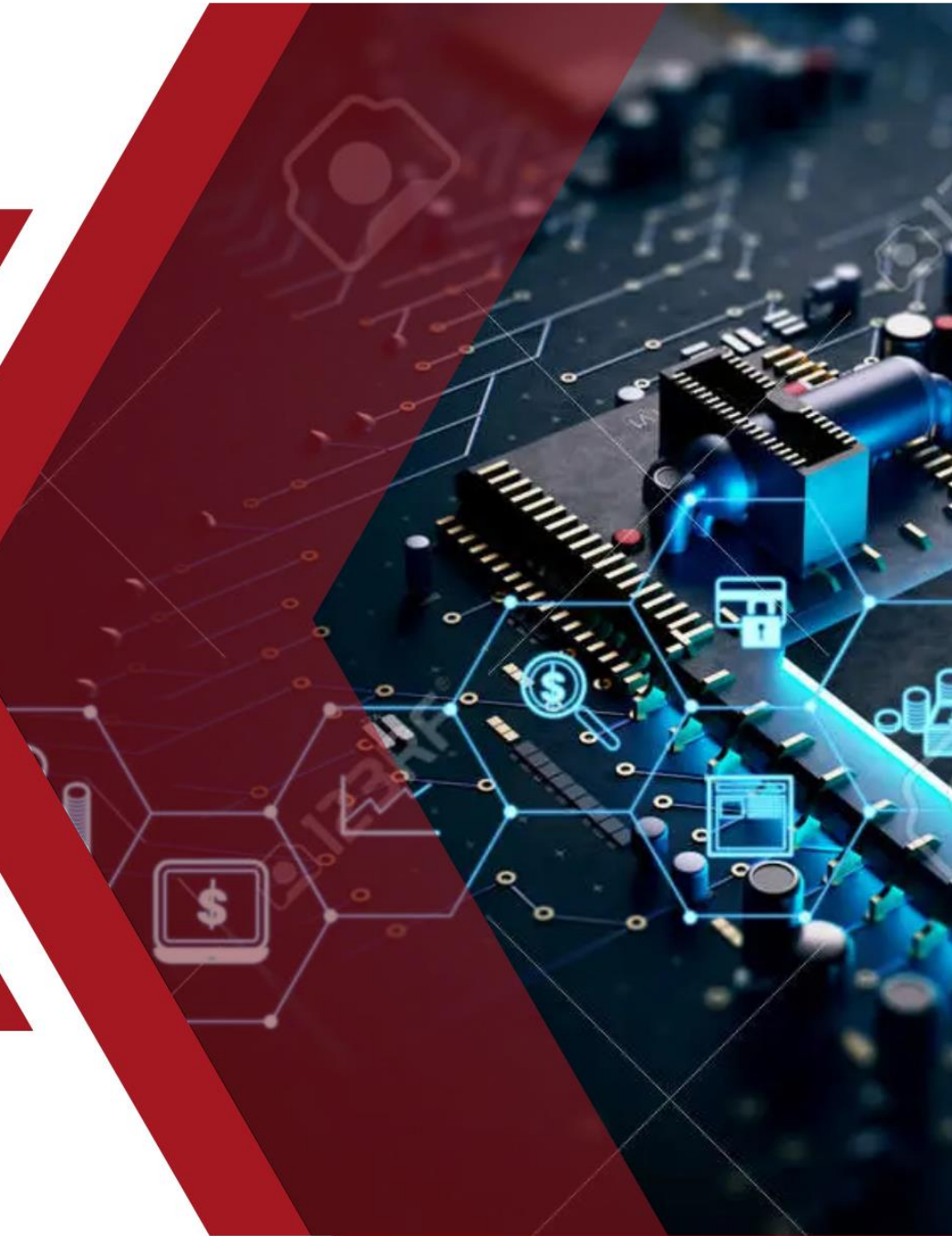




# V.L.K. TECHNO TRADE CO., LTD.

*Industrial Solutions*



[www.vlktechno.com](http://www.vlktechno.com)



ISO9001:2015 CERTIFIED



สมาคมสโมสรนักลงทุน  
Investor Club Association



THAILAND  
BOARD OF  
INVESTMENT



**CONTACT NUMBER**  
**+66-2-1500247-51**

Line@



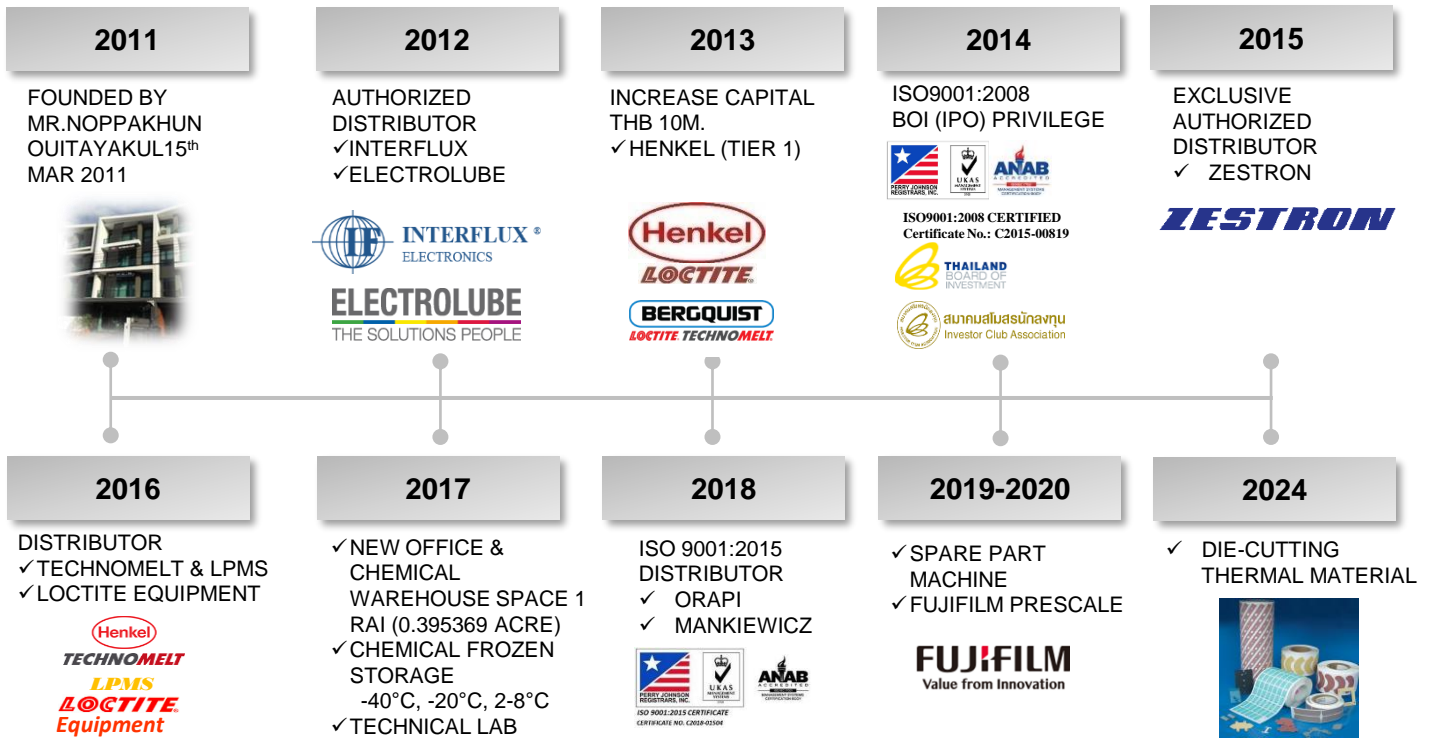
VLK Map



Website



# COMPANY HISTORY BOARD



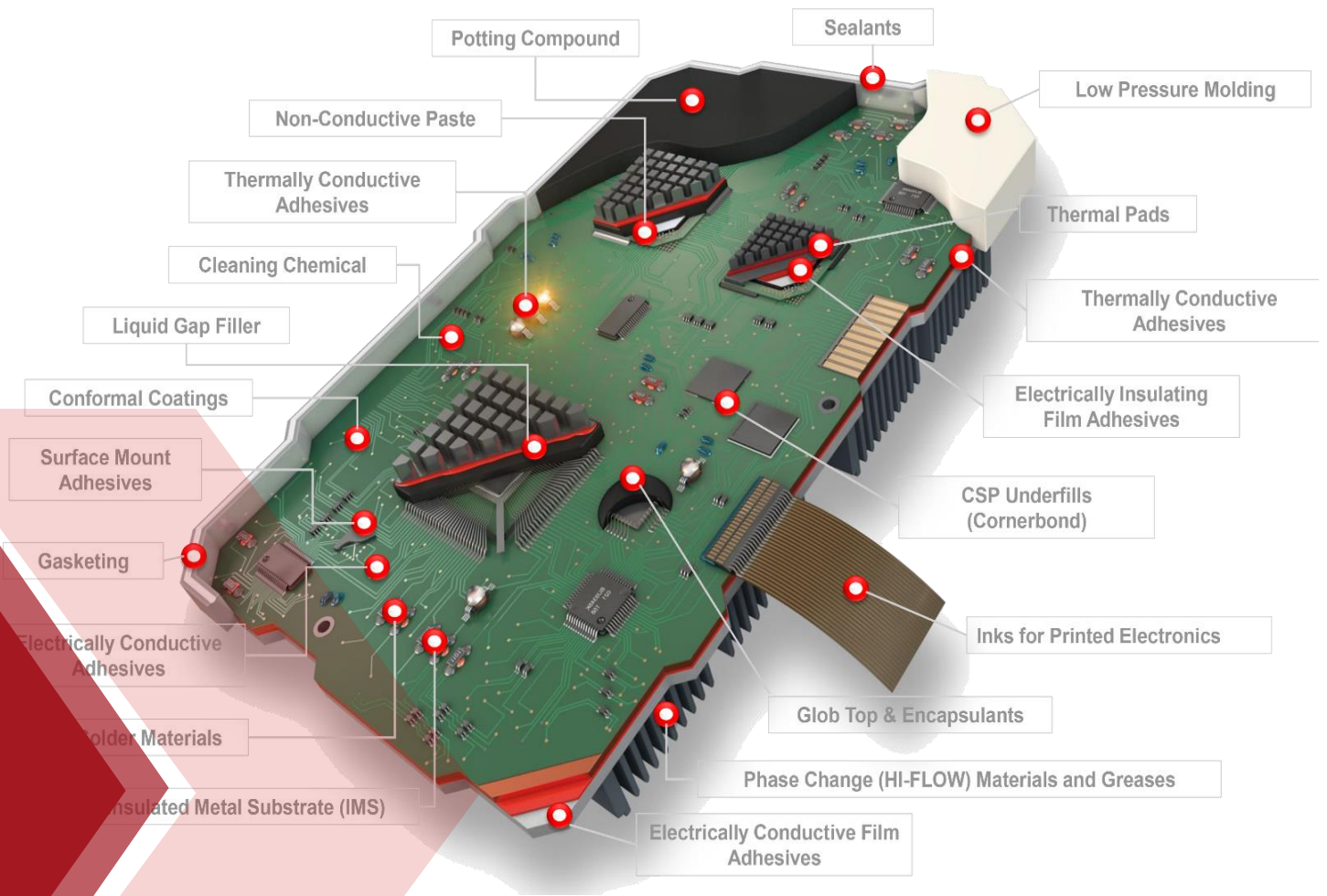
## OUR SERVICE

1. BUFFER STOCK
2. SOURCING
3. IMPORT DG LICENSE
4. FLEXIBLE & FAST DELIVERY
5. FREEZER STORAGE  
2-8°C / -20°C / -40°C
6. BOI PRIVILEGE
7. DOWNLOAD CHIPBONDER
8. DIE-CUTTING : THERMAL MATERIAL



# PRODUCT OVERVIEW

*Electronics Solutions*



# ELECTROLUBE

THE SOLUTIONS PEOPLE

<https://electrolube.com>



## MAKE IT WITH A GLOBAL SOLUTIONS PROVIDER.

ELECTROLUBE HAVE BEEN DEVELOPING SOLUTIONS TO ADVANCE ENGINEERING AND ENHANCE TECHNOLOGICAL PERFORMANCE, SINCE 1941. WITH OUR EXPANSIVE RANGE OF PRODUCTS AND A COMMITMENT TO PUSH THE BOUNDARIES, THERE IS NO END TO THE APPLICATIONS OF ELECTROCHEMICAL SOLUTIONS.

**CONFORMAL COATINGS**

**ELECTRONIC & GENERAL CLEANING**

**ENCAPSULATION RESINS**

**MAINTENANCE & SERVICE AIDS**

**THERMAL MANAGEMENT**

**CONTACT LUBRICANTS**

Electronic & General Purpose Cleaning

Conformal Coatings

Encapsulation Resins

Thermal Management Solutions

Contact Lubricants

Maintenance & Service Aids

✦ **AUTOMOTIVE**

✦ **MILITARY**

✦ **AEROSPACE**

✦ **TRANSPORT**

✦ **MARINE**

✦ **TELECOMMUNICATIONS**

✦ **MEDICAL**

✦ **CONSUMER ELECTRONICS**

✦ **INDUSTRIAL ELECTRONICS**

✦ **TRANSPORT**

✦ **UTILITIES**

✦ **SERVICE, REPAIR AND MAINTENANCE**

✦ **LED**



Bringing chemistry to electronics for over 42+ years.

### LMPA™

- LMPA™** Low melting point soldering
- RoHS** RoHS compliant

<b>Reflow soldering</b>	<b>Wave soldering</b>	<b>Dip soldering</b>
<b>Selective soldering</b>	<b>Pre-tinning</b>	
<b>For Ball Grid Arrays, J-lead &amp; Gull wing ICs</b>	<b>Increased mechanical reliability</b>	
<b>Reduced cost of production</b>	<b>Low voiding</b>	

### Soldering Flux

- Cl F Br** Absolutely halide-free
- RoHS** RoHS compliant

<b>Wave soldering</b>	<b>Selective soldering</b>	<b>Rework &amp; repair</b>
<b>Alc</b> Alcohol based flux	<b>H<sub>2</sub>O</b> Water based flux	
<b>CC+</b> High compatibility with conformal coating	<b>For soldering OSP</b>	
<b>No-residue</b>	<b>Absolutely rosin-free</b>	

### Solder Paste

- Available in lead-free alloys
- Pb** Available in lead-based alloys

<b>Reflow soldering</b>	<b>Rework &amp; repair</b>	<b>Vapor phase soldering</b>
<b>Solder paste jetting</b>	<b>Dispensing</b>	
<b>Low soldering temperatures</b>	<b>No Clean – no post cleaning needed</b>	
<b>Long stencil life, High stability</b>	<b>Suitable for Pin-in-Paste (PIP)</b>	

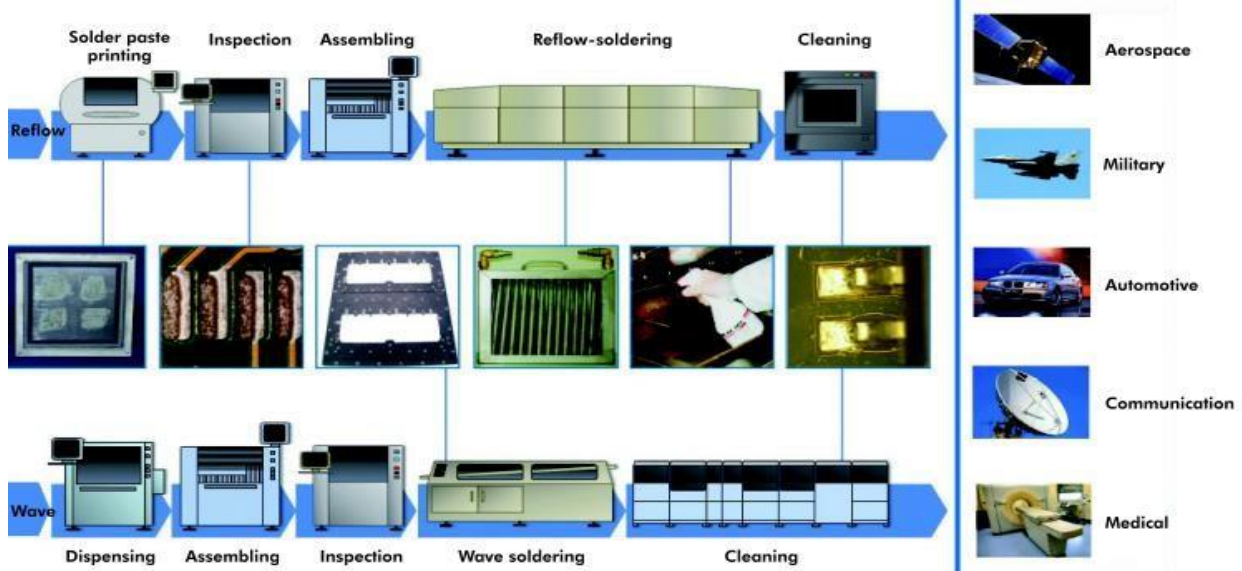
### Solder Wire

- Available in lead-free alloys
- Pb** Available in lead-based alloys

<b>Rework &amp; repair</b>	<b>Robot soldering</b>	<b>Hand soldering</b>
<b>Absolutely colophony free</b>	<b>Low residue</b>	
<b>Brushable residue</b>	<b>Absolutely halogen free</b>	

### Auxiliaries

	<b>Purge Conditioning gel</b>	<b>IF 930 Nozzle cleaner</b>	<b>ICSF Select6 Stand-alone fluxing system</b>	<b>Anti Oxidant pellets Deoxidation pellets</b>
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**ECO-FRIENDLY**  
SURFACE MOUNT TECHNOLOGY  
& THROUGH HOLE



**PCB DEFLUXING**  
CLEANING SOLUTIONS  
TO REMOVE FLUX  
RESIDUES

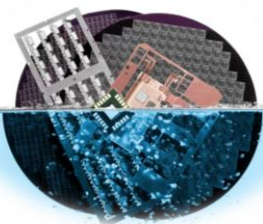


**STENCIL & MISPRINT**  
REMOVE SOLDER PASTE,  
FLUX & ADHESIVES



**MAINTENANCE**  
REMOVE BAKED-ON FLUX  
RESIDUE, ADHESIVES AND  
CONFORMAL COATING

**SEMICONDUCTOR CLEANING**  
POWER ELECTRONICS,  
ADV. PACKAGING, WAFER



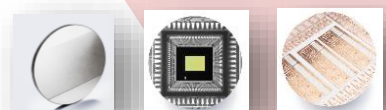
- ❖ EXCEPTIONAL COMPATIBILITY
- ❖ HIGH WIRE BOND YIELD & RELIABILITY
- ❖ IMPROVED PRODUCTIVITY

**POWER ELECTRONICS CLEANING**  
✓ POWER MODULES  
✓ LEADFRAMES  
✓ POWER LEDs

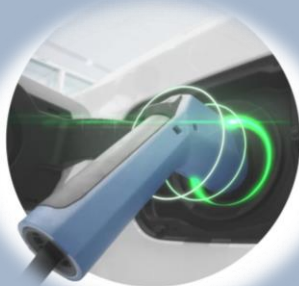
**WAFER CLEANING**  
✓ OUR SOLUTIONS REDUCE CARBON  
CONCENTRATIONS FROM 55% TO  
0.1%

**PACKAGE CLEANING**

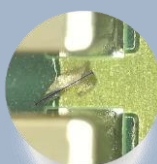
- ✓ FLIP CHIPS
- ✓ CMOS
- ✓ BGAs



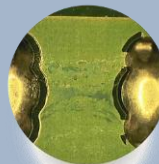
**RISK PREVENTION**  
HIGH VOLTAGE



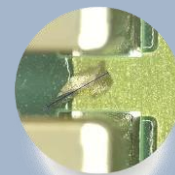
**E-MOBILITY & HIGH VOLTAGE**  
CLEANING SOLUTIONS  
TO REMOVE FLUX  
RESIDUES



PARTICLES ON  
ELECTRONIC  
ASSEMBLIES



LEAKAGE CURRENT  
AND CONDENSATION



CONFORMAL COATING:  
VALIDATION & ROUTINE  
TESTING

# SOLUTIONS ACROSS THE BOARD



## GLOBAL INNOVATION LEADER OF ELECTRONIC ASSEMBLY MATERIALS



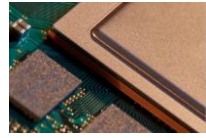
### CONSUMER ELECTRONICS : ADHESIVE SOLUTIONS FOR CONSUMER ELECTRONICS



SMART PHONE AND TABLET



WEARABLE DEVICES

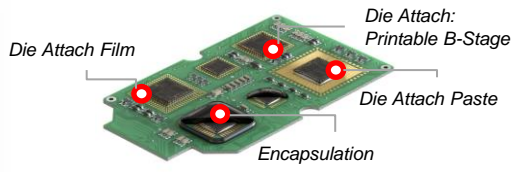
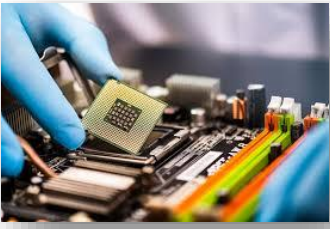


STORAGE & GRAPHICS

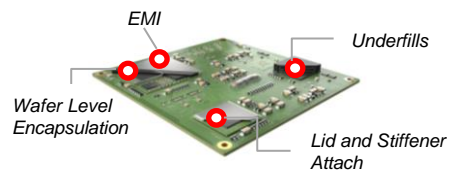


SMART HOME DEVICES

### SEMICONDUCTOR PACKAGING : INNOVATIVE MATERIALS FOR EVOLUTIONARY ELECTRONICS CAPABILITY



WIREBOND APPLICATIONS

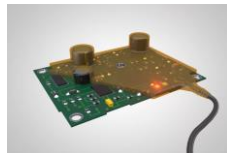


ADVANCED PACKING

### INDUSTRIAL & INFRASTRUCTURE : POWER, AUTOMATING AND CONNECTING THE WORLD



AEROSPACE ELECTRONICS



ELECTRONICS COMPONENTS



LED LIGHTING



DATA & TELECOM INFRASTRUCTURE

### SOLAR ENERGY : FACILITATING NEXT-GENERATION SOLAR TECHNOLOGIES WITH INNOVATIVE MATERIALS



POWER GENERATION AND CONVERSION



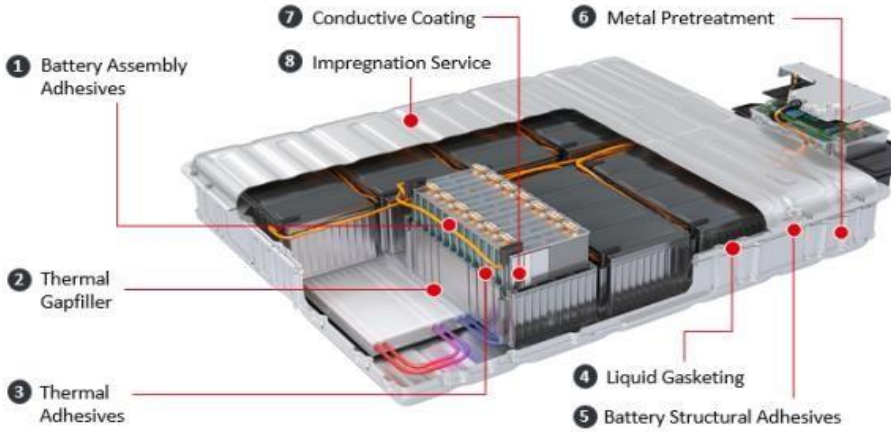
WIND ENERGY



ALTERNATIVE ENERGY POWER CONVERSION



# BERGQUIST THERMAL MANAGEMENT SOLUTIONS IN THESE INDUSTRIES



Thermal Materials



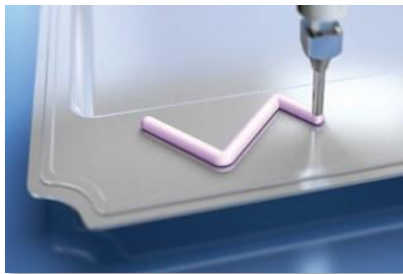
Thermal Substrates



Membrane Switches



Fans and Blowers



### THERMAL GAP FILLERS

THERMALLY CONDUCTIVE, LIQUID GAP FILLING MATERIALS



### THERMAL GAP PADS

DESIGNED TO FILL AIR GAPS AND ENHANCE THERMAL CONDUCTIVITY



### SIL PADS

ELECTRICALLY AND NON-ELECTRICALLY INSULATING



### THERMALLY CONDUCTIVE ADHESIVES

HIGH STRUCTURAL IN SEVERE ENVIRONMENTS



### PHASE CHANGE MATERIALS

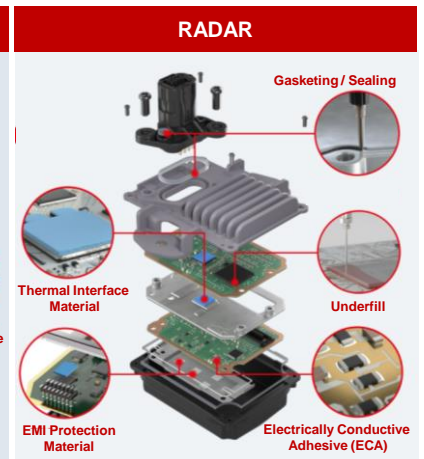
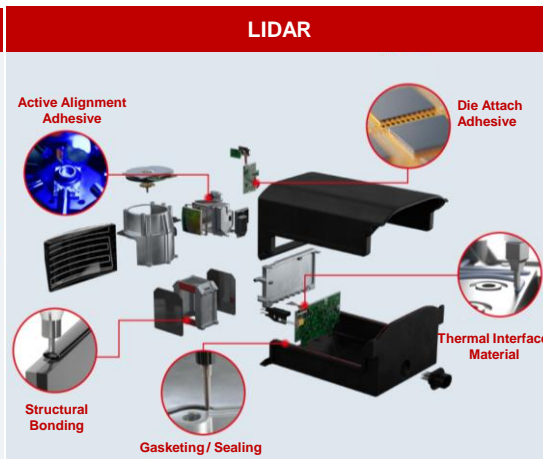
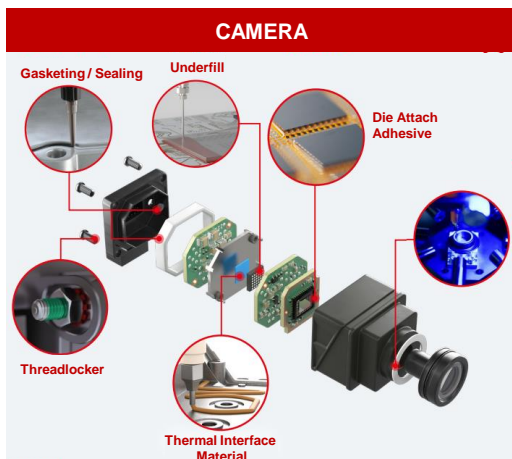
PRE-APPLIED, DRY MATERIAL WITH BETTER LONG-TERM THERMAL PERFORMANCE AND LESS MESS THAN GREASE



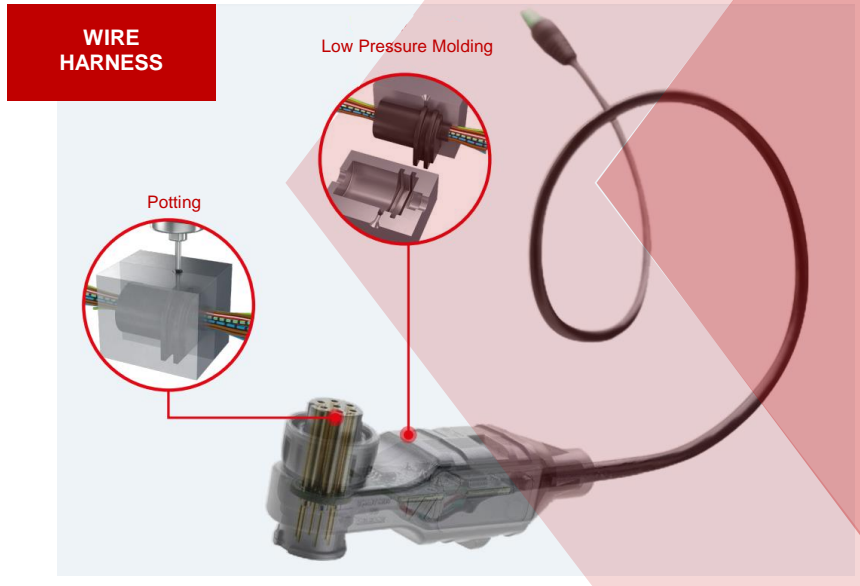
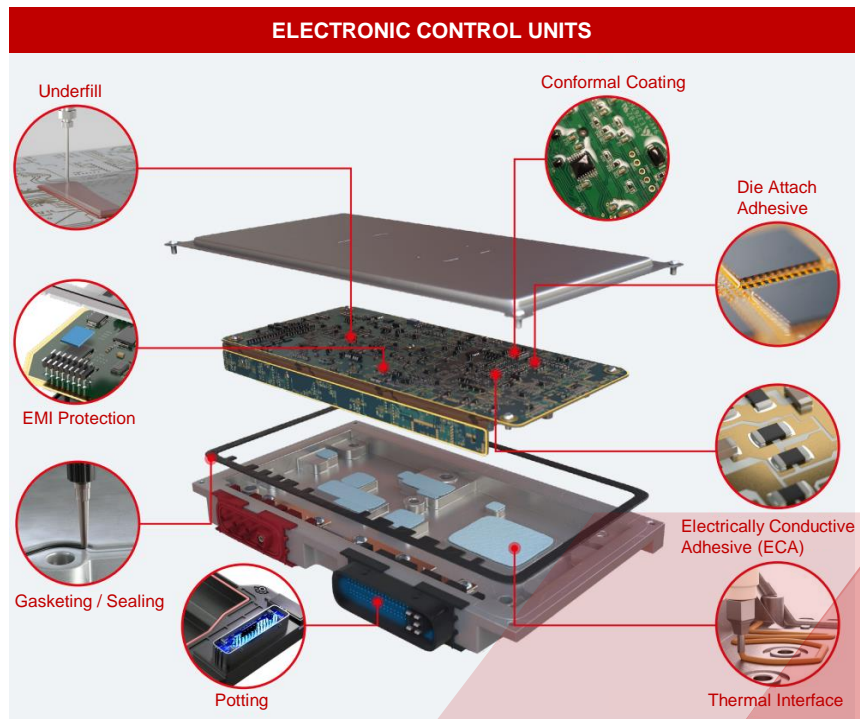
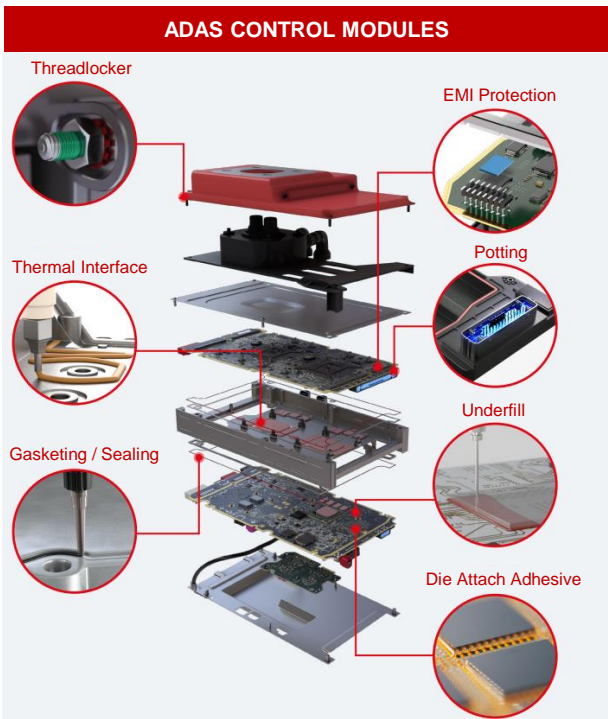
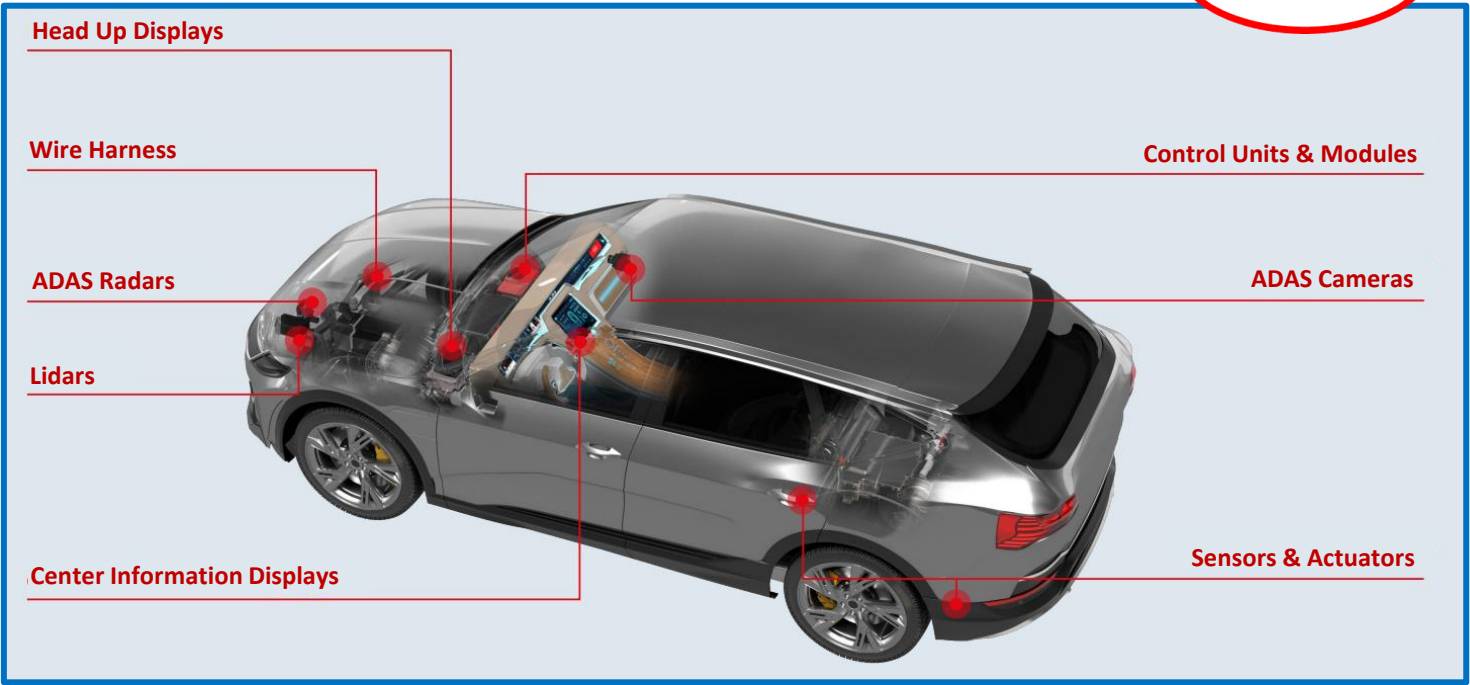
### THERMALLY CONDUCTIVE GREASE

ENSURING HIGH THERMAL TRANSFER ON AN INTERFACE,

## COMPREHENSIVE SOLUTIONS FOR AUTOMOTIVE ELECTRONIC COMPONENTS





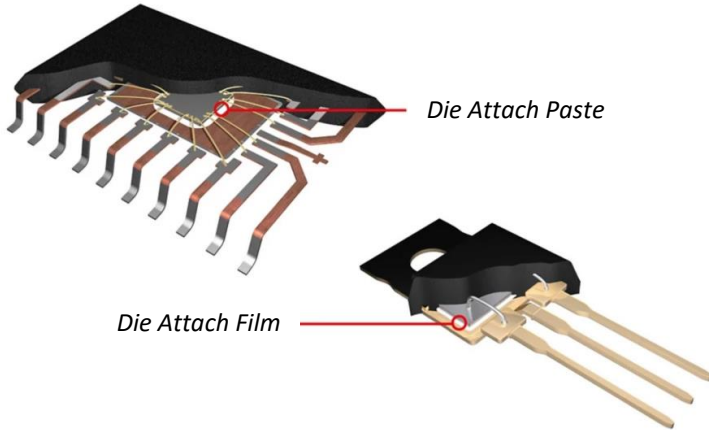




## LEADFRAME SOLUTIONS

### WIREBOND LEADFRAME SOLUTIONS :

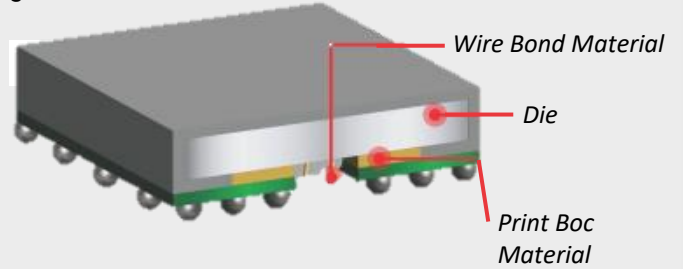
Adhesive electronic solutions for leadframe, laminate and smart card



## PRINTABLE BOC DIE ATTACH MATERIALS

Board-on-Chip (BoC) is a common chip-scale packing technique for memory devices, particularly DRAM. Because of the requirement for controlled tolerances and fine features, die attach materials must deliver key attributes like minimized die tilt, uniform bond line thickness, and little to no fillet formation.

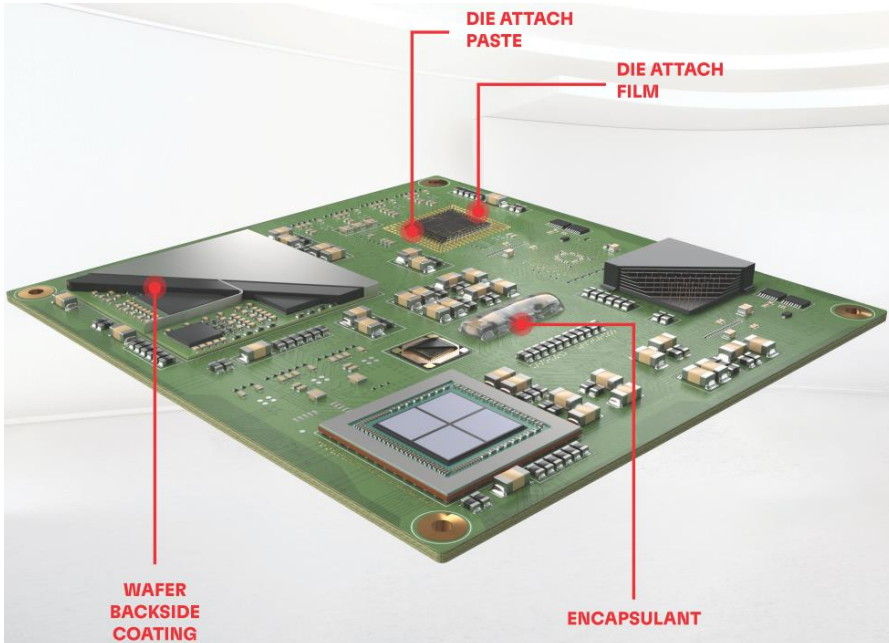
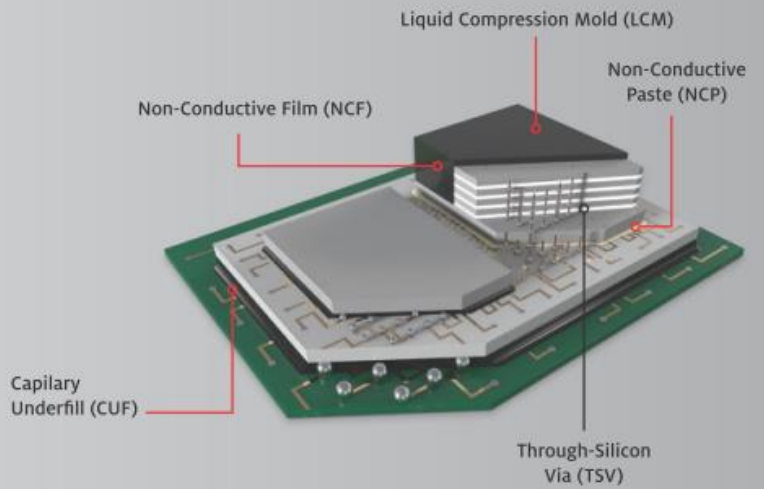
Henkel has perfected B-stage printable adhesives that align with mass production dynamics and enable fine feature designs.



## WAFER LEVEL ENCAPSULATION

### KEY BENEFITS OF HENKEL LCM

- Low viscosity for easy flow and better fill
- Better handling, no dust
- Ultra-low warpage, low CTE & low modulus for water handling & processing
- Low temperature and fast in-mold cure for increased UPH
- EU REACH compliant anhydride-free






## LAMINATE PACKAGING MATERIALS

In addition to Henkel's well-known Bismaleimide (BMI)-based adhesives, new advances in IC packaging materials have been developed to facilitate high performance for various package designs – from LGAs to large format SiPs and SoMs. Products are available in paste, liquid, and film mediums, offering processing flexibility and precision for the most demanding applications and manufacturing environments.

Easily measuring pressure, heat and UV light with film.

**FUJIFILM**  
Industrial

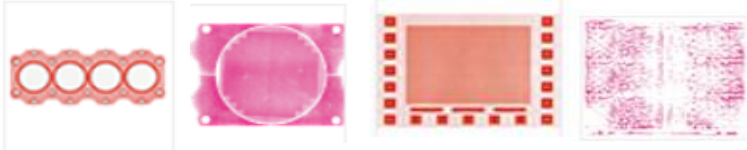
<p>Pressure measurement film <b>Prescale</b></p> <p><b>PRESCALE</b></p> <p>This is the only film in the world that measures pressure. Pressure and pressure distribution, which could not be visually observed in the past, can now be easily checked.</p> 	<p>Heat distribution measurement film <b>Thermoscale</b></p> <p><b>THERMOSCALE</b></p> <p>Measuring heat distribution—from points on a graph to entire surfaces. Thermoscale is a epoch-making new film that enables anyone to measure heat distribution easily by observing variations in density and hue.</p> 	<p>Ultraviolet light distribution measurement film <b>UVSCALE</b></p> <p><b>UVSCALE</b></p> <p>Visualizes UV light distribution by color density.</p> 
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“Prescale” is a film that could easily measure the distribution and the amount of pressure. It was created by using the Fujifilm’s advanced technology of coating a thin film and it visualizes the pressure distribution of the whole surface by changing its color to red according to the applied pressure. There are nine types of rolls so as to cover the wide range of pressure.

**Applications**

Automobile    Semiconductors    LCD    Printed circuit boards



**Pleated Cartridge Filter / Capsule Filter**



**Absolute Type**

- Polysulfone membrane
- Lineup of pore sizes from 0.03um~1.2um
- Lineup series :
- PSE-W, PSF, PSK, PSS03, PSE05, PSE-L, PSE-XL, PSE-UXL/SXL



**Capsule filter**

- Polysulfone membrane
- Pore size of 0.1~0.45um
- Lineup series :
- PSE Capsule



**Nominal Type**

- Polypropylene membrane
- Lineup of pore sizes from 0.4um~30um
- Lineup series :
- PPE, PPE-UXL

**SMT SPARE PARTS**

**Panasonic**

**JUKI**

**YAMAHA**

**FUJI**  
innovative spirit

**SAMSUNG**

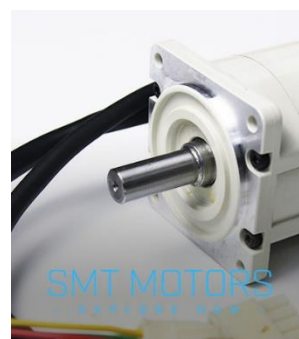
**SIEMENS**

**HITACHI**

**Assembleon**

**Universal Instruments**

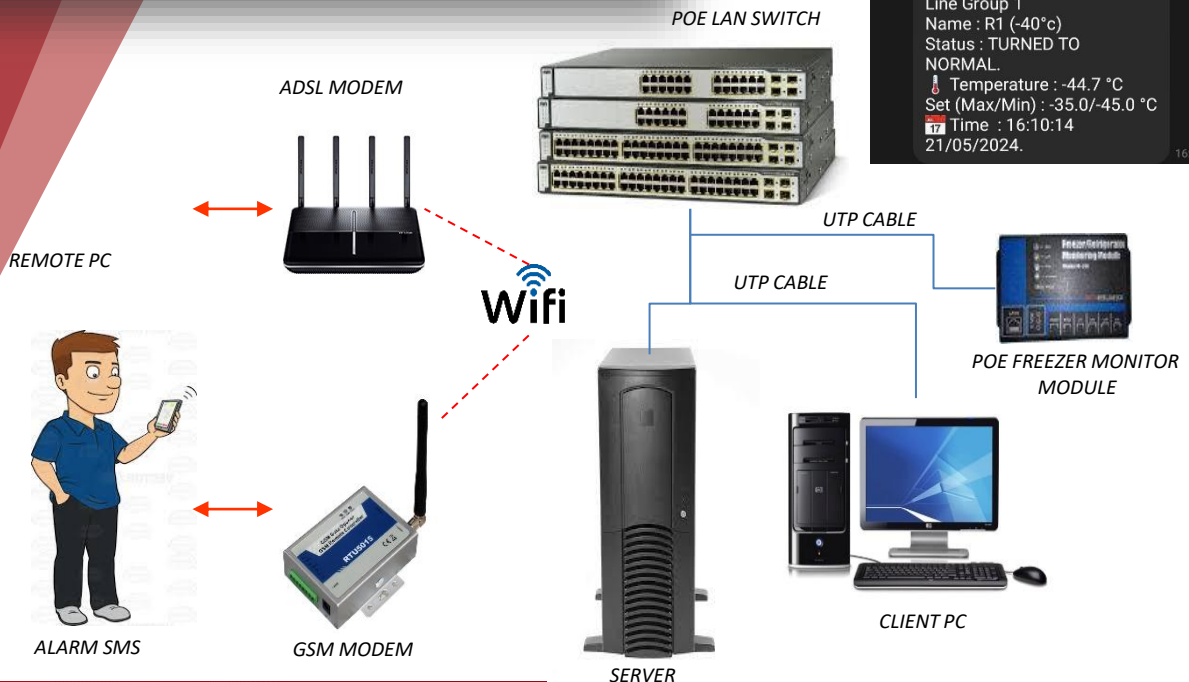
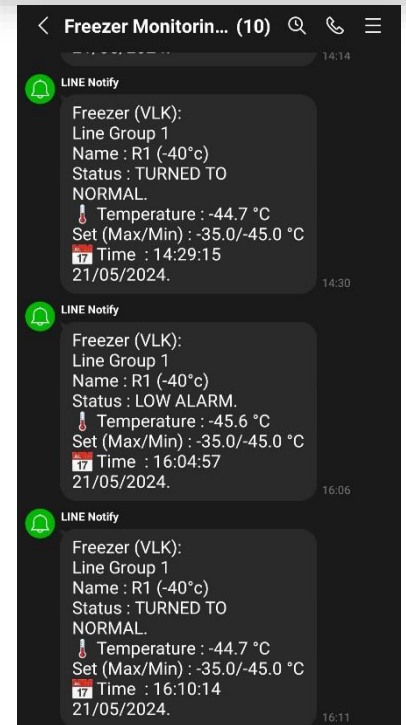
**DEK**



# V.L.K. WAREHOUSE & STORAGE SYSTEM

- AIR CONDITION CONTROL
- 25°C (± 3°C)
- OPEN AIR CONDITION 24 HOURS
- HUMIDITY 40-70
- FIFO CONTROL
- FLAMABLE STORAGE ROOM

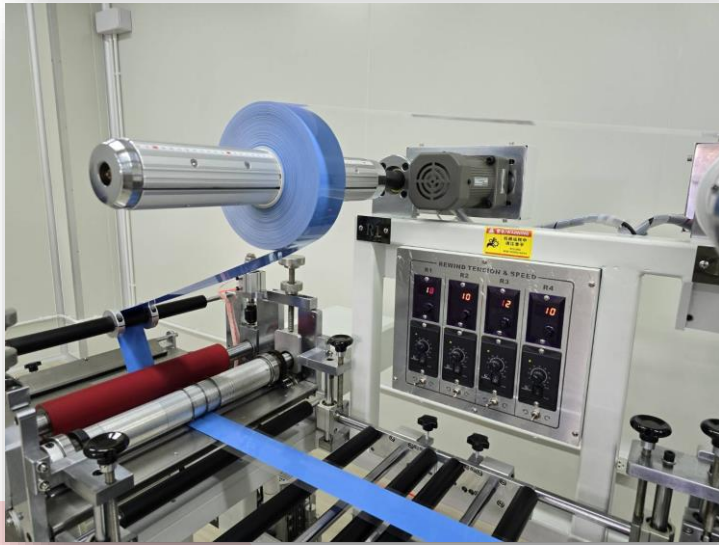
- BATTERY BACKUP
- GENERATOR
- ALARM SYSTEM (VOICE/SMS ALARM)
- TEMP DATA LOGGER : REAL TIME RECORD TEMP MONITORING.



## V.L.K. DIE-CUTTING

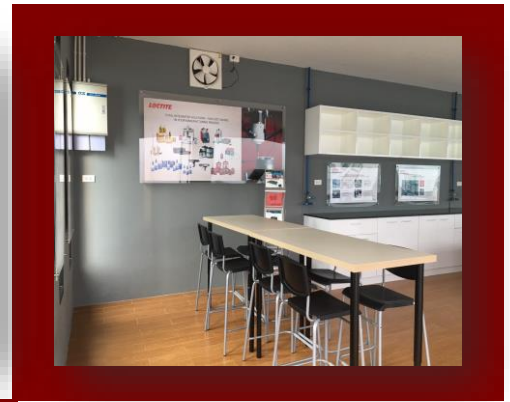
### TOTAL SOLUTION IN THERMAL MANAGEMENT

- Available in custom sheets and die-cut shapes.
- V.L.K.. stocks and sources a variety of materials for die cut thermal gap pads.



- ✓ We offer customized solutions to meet our customers' needs.
- ✓ We can make follow customer designed.

# V.L.K. TECHNICAL LAB



**TECHNICAL LAB  
FOR  
TEST**



**FREE  
SUPPORT**

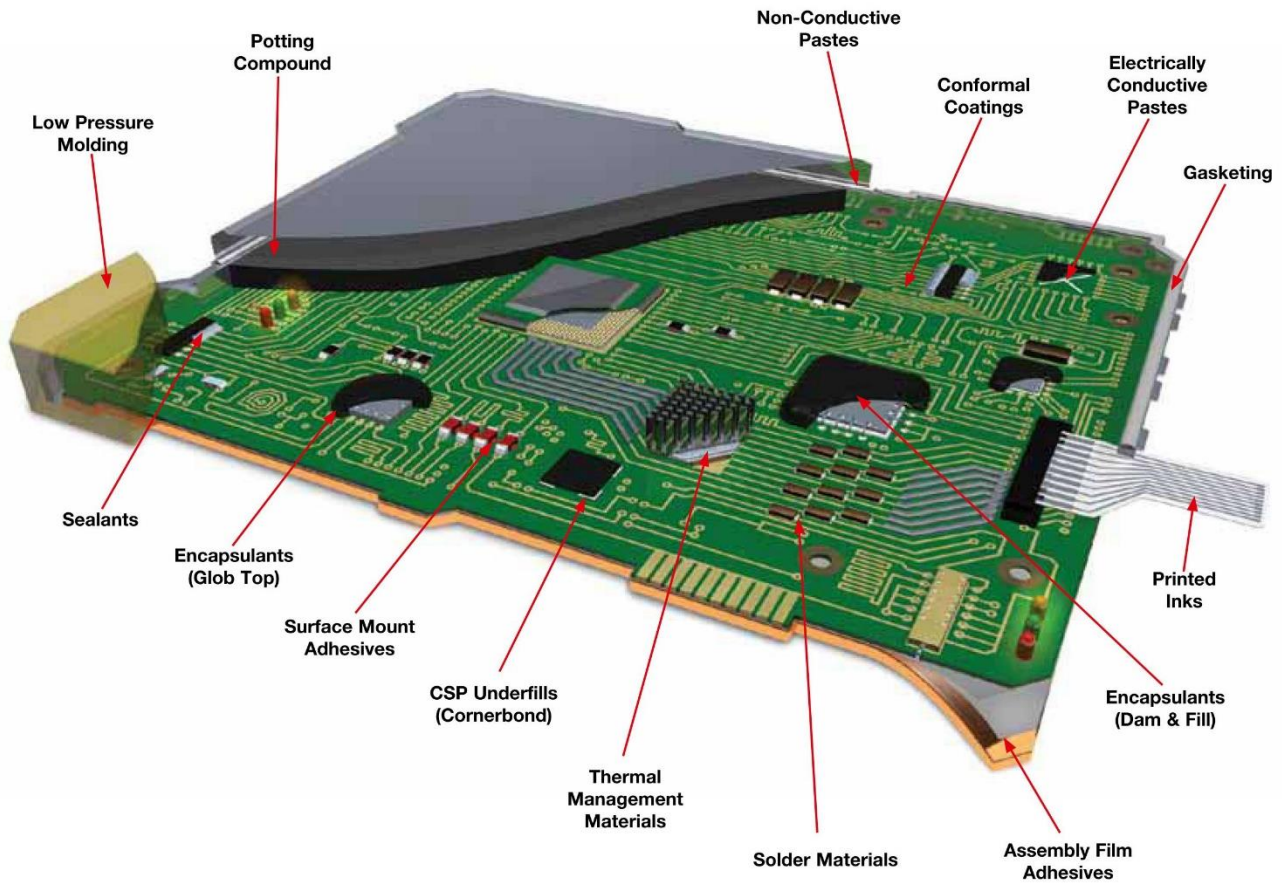
**DOWNLOAD ADHESIVE  
TO SERVE VARIOUS PACKAGE SIZE**





NOTED

A series of horizontal dotted lines spanning the width of the page, intended for handwritten notes.



Line@



VLK Map



Website



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36/7 Moo 13, Bungkumploy Sub-District,  
Lam Luk Ka District, Pathumthani 12150

**Telephone No. :** +66 2-150-0247-51

Fax : +66 2-150-0252

Mobile :+66 81-430-1551

**Contact us :**

sales@vlk.th.com

<https://www.vlktechno.com>

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@vlktechnotrade